

Accessing Chef-Infra Server And Chef Automate

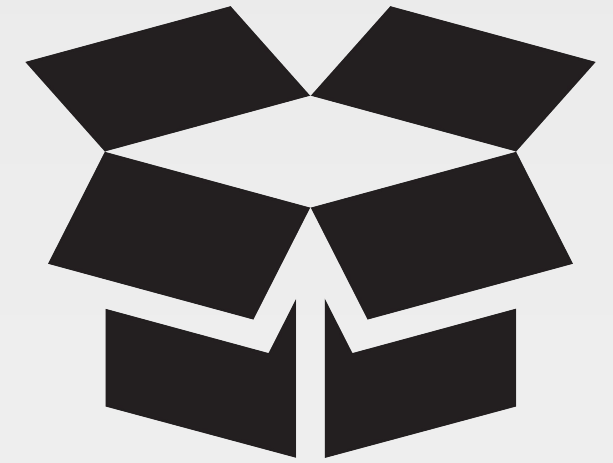
Get to Know the Benefits

Objectives

After completing this module, you should be able to:

- ❑ Connect your local workstation (laptop) to a Chef Server
- ❑ Login to the Chef Automate UI
- ❑ View your Organization under Chef Infra Server integrated with Chef Automate UI

CONCEPT



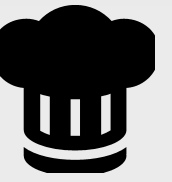
Chef Automate

Chef Automate is an enterprise platform that allows developers, operations and security engineers to collaborate effortlessly on delivering application & infrastructure changes at the speed of business.

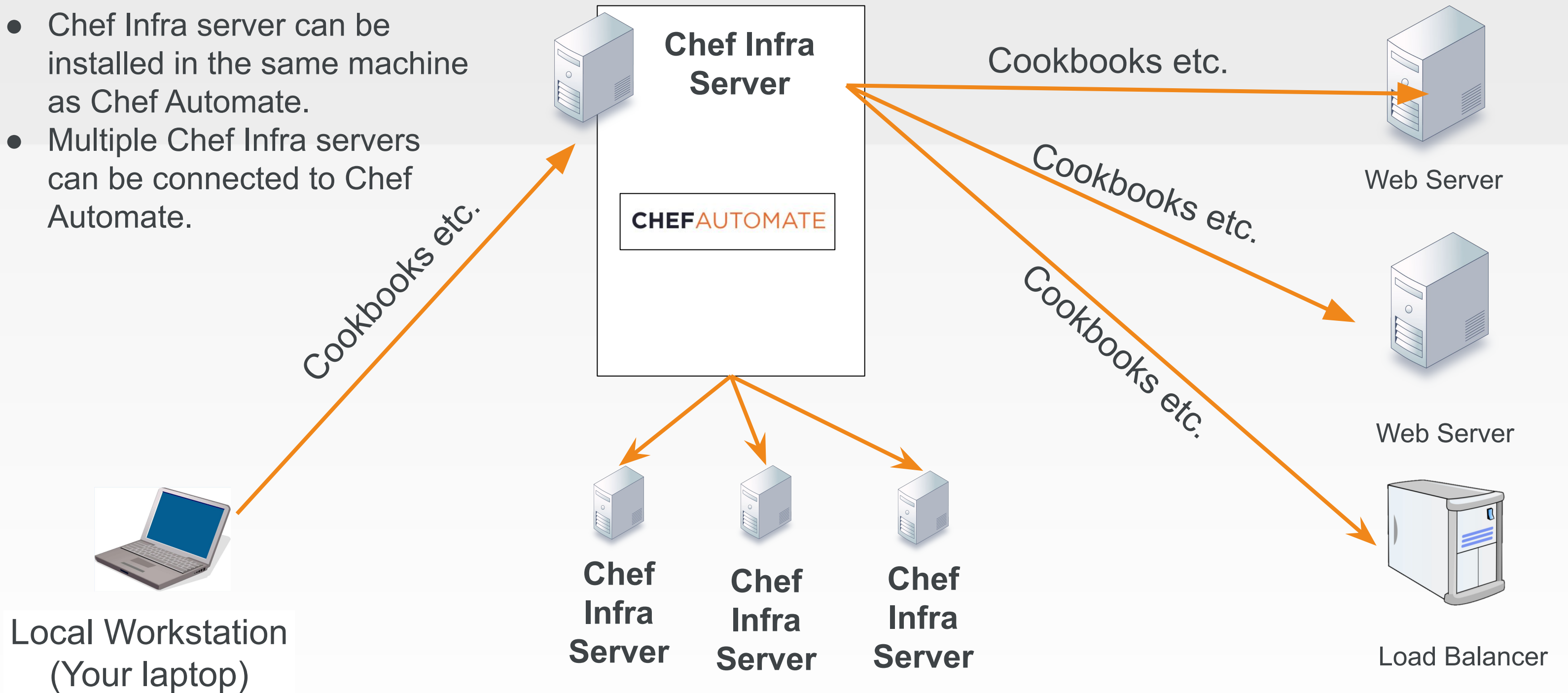
A Single Source of Truth for All Environments.

<https://www.chef.io/products/chef-automate>

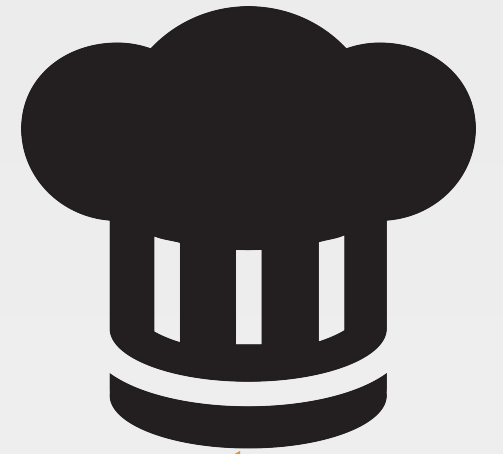
The Chef Infra Server and Chef Automate



- Chef Infra server can be installed in the same machine as Chef Automate.
- Multiple Chef Infra servers can be connected to Chef Automate.



EXERCISE



GL: Chef Infra Server and Chef Automate

Configuring and connecting workstation with the Chef Infra Server and Chef Automate

Objective:

- ☐ Create a client.pem file in the ~/.chef directory
- ☐ Create a directory named “chef-repo” on your workstation
- ☐ Configure the 'knife' command
- ☐ Verify successful communication with Chef Server
- ☐ Login to the Chef Automate UI server and Verify Organization details.

GL: Copy studentXX.pem to ~/.chef



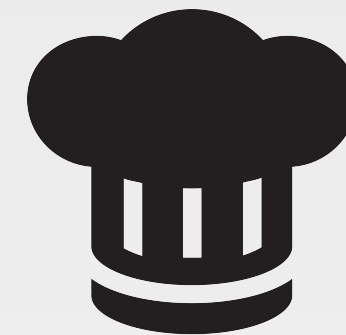
```
> mkdir ~/.chef  
> vi ~/.chef/studentXX.pem  
> ls
```

studentXX.pem

NOTE :

- Ask Instructor for key and save key file at ~/.chef

EXERCISE



GL: Chef Infra Server and Chef Automate

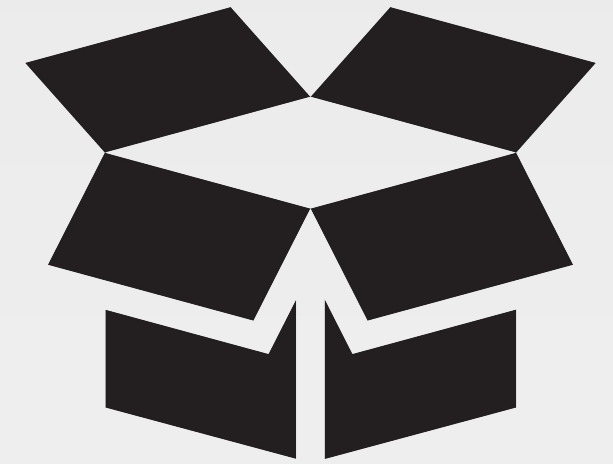
Configuring and connecting workstation with the Chef Infra Server and Chef Automate

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CONCEPT

Chef-Repo



chef-repo is a directory on your workstation that stores everything you need to define your infrastructure with Chef Infra:

- Cookbooks (including recipes, attributes, custom resources, libraries, and templates)
- Data bags
- PolicyFiles

The chef-repo directory should be synchronized with a version control system, such as git. All of the data in the chef-repo should be treated like source code.

https://docs.chef.io/chef_repo/

GL: Make a directory named “chef-repo”



```
> $ chef generate repo chef-repo
```

```
Generating Chef Infra repo chef-repo
```

```
- Ensuring correct Chef Infra repo file content
```

```
Your new Chef Infra repo is ready!
```

Note

Ensure that the path to the chef-repo does not have a space in it. Examples:

Mac: /home/<username>/chef-repo

Windows: C:\Users\<username>\chef-repo

GL: Verify the “chef-repo” directory

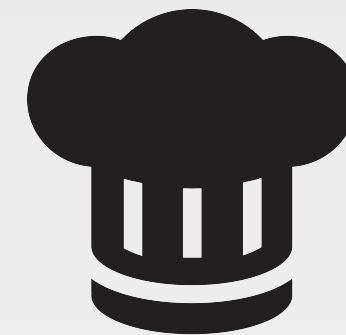


```
> $ cd ~  
> $ ls
```

```
drwx-----+ 5 XXXXXXXX staff 160 Jul 6 11:57 Pictures  
drwxr-xr-x+ 4 XXXXXXXX staff 128 Jul 6 11:38 Public  
drwxr-xr-x+ 7 XXXXXXXX staff 224 Sep 10 01:08 Trainings  
drwxr-xr-x+ 8 XXXXXXXX staff 256 Aug 5 00:49 chef-repo  
-rw-r--r---+ 1 XXXXXXXX staff 216 Aug 1 12:45 footer.css
```

NOTE: Participant with windows workstation use command “dir”

EXERCISE



GL: Chef Infra Server and Chef Automate

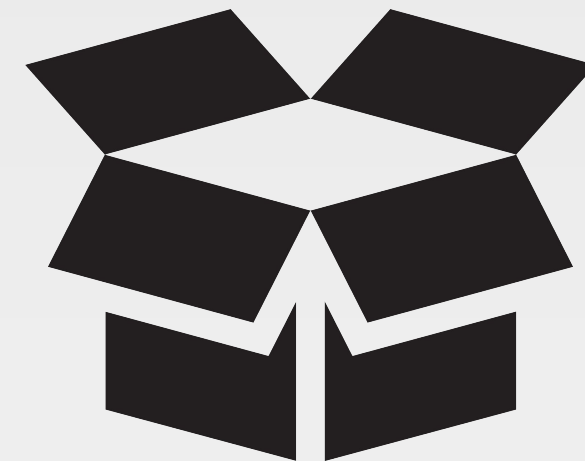
Configuring and connecting workstation with the Chef Infra Server and Chef Automate

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CONCEPT

Knife



knife is a command-line tool that provides an interface between a local chef-repo and the Chef Infra Server. knife helps users to manage:

- Nodes
- Cookbooks and recipes
- Policyfiles, and Data Bags
- The installation of Chef Infra Client onto nodes (bootstrapping)
- Searching of indexed data on the Chef Infra Server

<https://docs.chef.io/workstation/knife/>

GL: Configure Knife



```
> cd ~
```

```
> knife configure init-config
```

```
Please enter the chef server URL:
```

```
[https://WIN-NJ5007IAJNR.ec2.internal/organizations/myorg]
```

```
https://ec2-54-234-111-3.compute-1.amazonaws.com/organizations/studentXX
```

```
Please enter an existing username or clientname for the API: [Administrator]
```

```
studentXX
```

```
*****
```

```
You must place your client key in:
```

```
C:/Users/Administrator/.chef/client.pem
```

```
Before running commands with Knife
```

```
*****
```

```
Knife configuration file written to C:/Users/Administrator/.chef/credentials
```

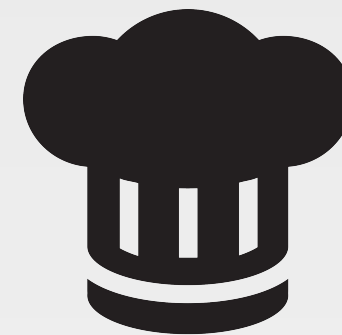
GL: Validating Knife configuration



```
> cd ~/.chef  
> cat credentials
```

```
[default]  
client_name      = 'studentXX'  
client_key       = 'C:/Users/Administrator/.chef/studentXX.pem'  
chef_server_url =  
'https://ec2-54-234-111-3.compute-1.amazonaws.com/organizations/studentXX'
```

EXERCISE



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GL: Verification of connection



```
> knife ssl fetch
```

```
WARNING: Certificates from ec2-54-234-111-3.compute-1.amazonaws.com will be  
fetched and placed in your trusted_cert  
directory (C:\Users\Administrator\.chef\trusted_certs).
```

```
Knife has no means to verify these are the correct certificates. You  
should
```

```
verify the authenticity of these certificates after downloading.
```

```
Adding certificate for ec2-54-234-111-3_compute-1_aws_com in  
C:\Users\Administrator\.chef\trusted_certs/ec2-54-234-111-3_compute-1_aws_  
com.crt
```


GL: Verification of connection



```
> knife ssl check
```

```
Connecting to host ec2-54-234-111-3.compute-1.amazonaws.com:443
```

```
Successfully verified certificates from  
'ec2-54-234-111-3.compute-1.amazonaws.com'
```

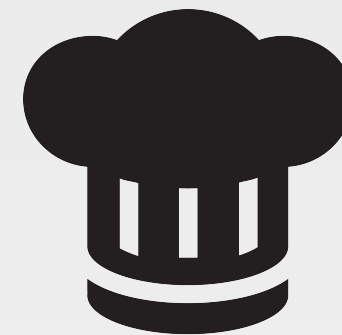
GL: Verification of connection



```
> knife client list
```

```
studentXX-validator
```

EXERCISE



GL: Chef Infra Server and Chef Automate

Configuring and connecting workstation with the Chef Infra Server and Chef Automate

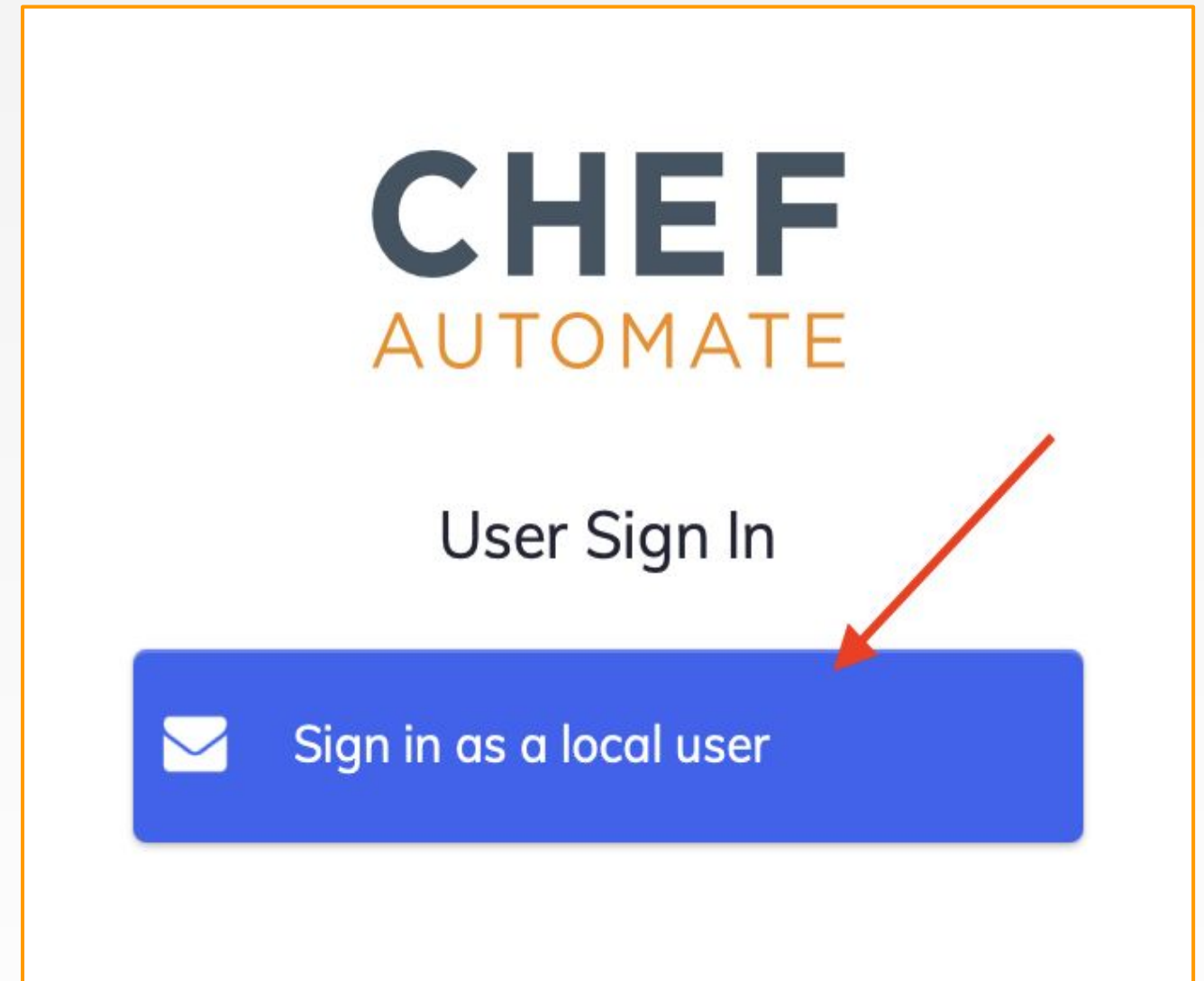
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Login and validate: Chef Automate WebGUI

Steps

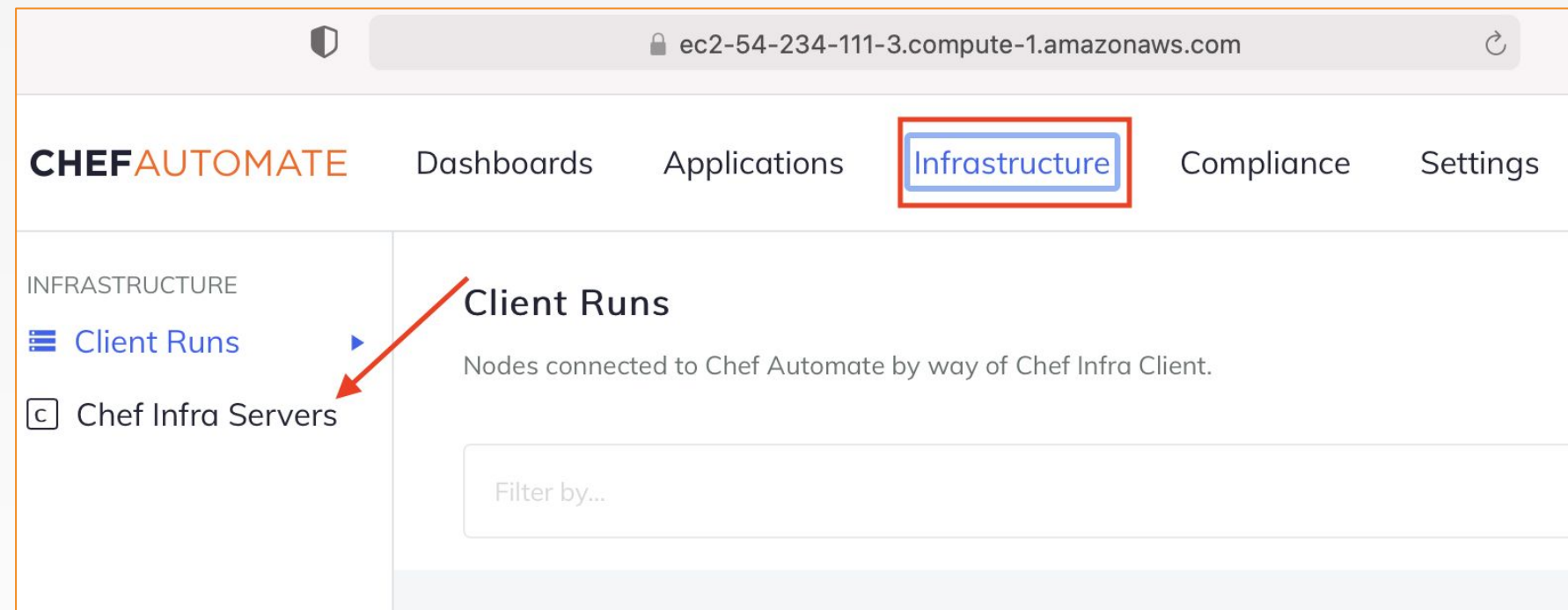
1. Sign In to Chef Automate server.
2. Click on Infrastructure tab and Go to Chef Infra Servers (Under Left Navigation Panel)
3. Click on Listed Chef Infra Server - 'cheftraining'
4. Click on the organization - 'studentxx'
5. Go to Clients tab to view client list.



Login and access Chef Automate UI

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Chef Infra Servers			
Manage Chef Infra Servers with Chef Automate.			
Name	FQDN	IP Address	Number Of Orgs
cheftraining	ec2-54-234-111-3.compute-1.amazonaws.com	54.234.111.3	30

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[Chef Infra Servers](#) > cheftraining

cheftraining

FQDN

ec2-54-234-111-3.compute-1.amazonaws.com

IP Address

54.234.111.3

Orgs

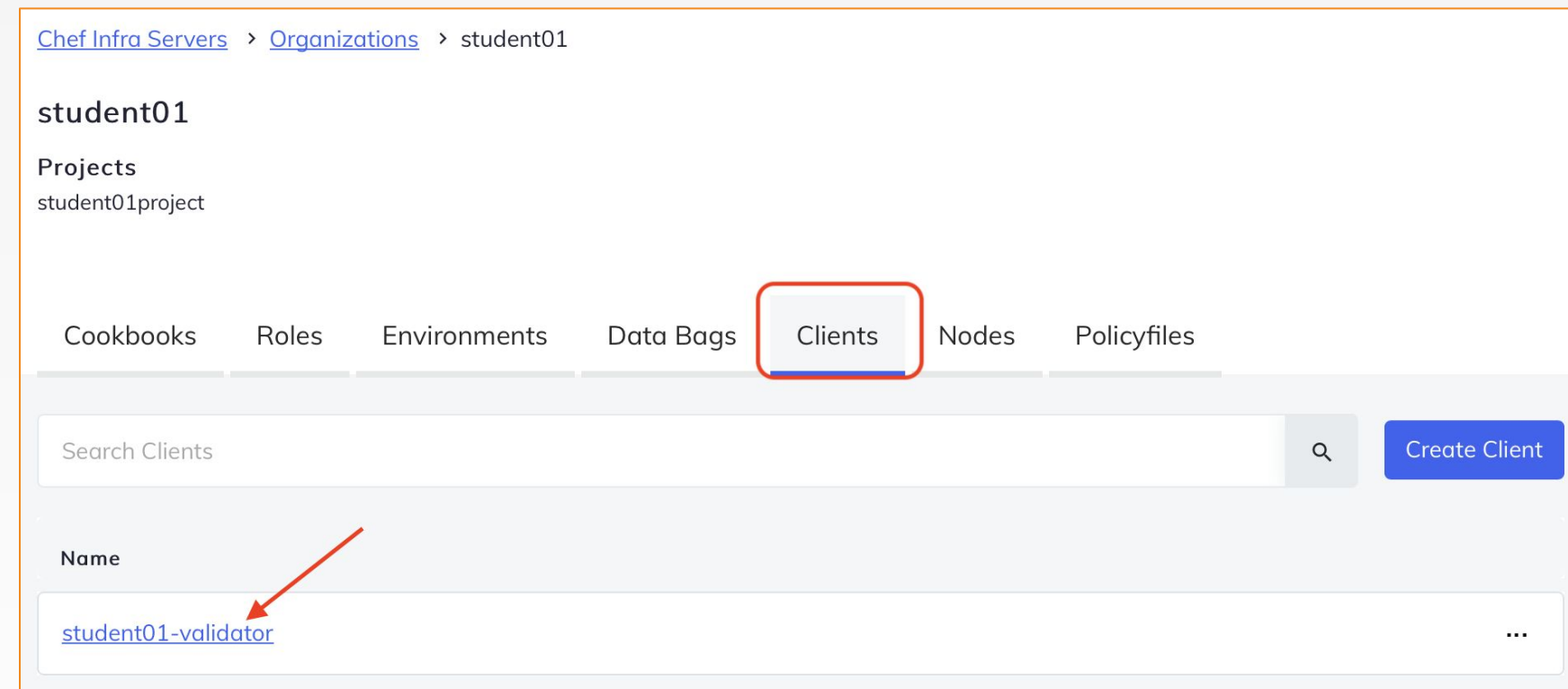
Details

Name	Admin	Projects
student01	student01	student01project

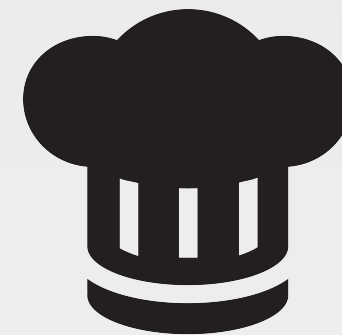
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Q&A

What questions can we answer for you?



CHEF™