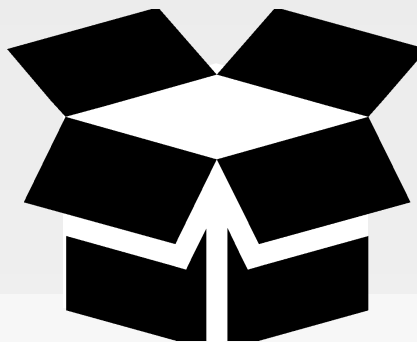


CONCEPT

chef-client

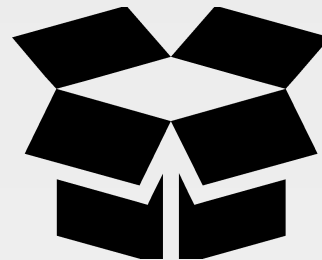


chef-client is an agent that runs locally on every node that is under management by Chef.

When a chef-client is run, it will perform all of the steps that are required to bring the node into the expected state.

https://docs.chef.io/chef_client.html

CONCEPT



--local-mode (or -z)

chef-client's default mode attempts to contact a Chef Server and ask it for the recipes to run for the given node.

We are overriding that behavior to have it work in a local mode.

GL: Apply the Setup Recipe



```
$ sudo chef-client --local-mode hello.rb
```

```
Starting Chef Client, version 12.5.1
resolving cookbooks for run list: []
Synchronizing Cookbooks:
Compiling Cookbooks...
[2016-02-19T13:08:13+00:00] WARN: Node ip-172-31-12-176.ec2.internal has an empty run list.
Converging 1 resources
Recipe: @recipe_files::/home/chef/moo.rb
  * yum_package[nano] action install
    - install version 3.03-8.e16 of package cowsay
Running handlers:
Running handlers complete
Chef Client finished, 1/1 resources updated in 38 seconds
```



Discussion

What would happen if the 'hello.txt' file contents were modified?



Test and Repair

What would happen if the file permissions (mode), owner, or group changed?

Have we defined a policy for these properties?

CONCEPT

Test and Repair



chef-client takes action only when it needs to.
Think of it as test and repair.

Chef looks at the current state of each resource
and takes action only when that resource is out of
policy.



Lab: The `file` Resource

- ☐ Read <https://docs.chef.io/resources.html>
- ☐ Discover the file resource's:
 - default action.
 - default values for `mode`, `owner`, and `group`.
- ☐ Update the `file` policy in "hello.rb" to:

The file named 'hello.txt' should be created with the content 'Hello, world!', mode '0644', owner is 'root', and group is 'root'.

Lab: The Updated file Resource

~ /hello.rb

```
file 'hello.txt' do
  content 'Hello, world!'
  mode '0644'
  owner 'root'
  group 'root'
  action :create
end
```

The default mode is set by the POSIX Access Control Lists.

The default owner is the current user (could change).

The default group is the POSIX group (if available).

The default action is to create (not necessary to define it).



Lab: The `file` Resource

✓ Read <https://docs.chef.io/resources.html>

✓ Discover the file resource's:

- default action.
- default values for `mode`, `owner`, and `group`.

✓ Update the `file` policy in "hello.rb" to:

The file named 'hello.txt' should be created with the content 'Hello, world!', mode '0644', owner is 'root', and group is 'root'.