

Challenge - Write a cookbook to serve your content over https

- * Install mod_ssl
- * Apache (httpd) should restart after mod_ssl is installed

Write a cookbook to serve your content over https

Create cookbook

```
$ knife cookbook create rsapps-mod_ssl
```

Write a cookbook to serve your content over https

Write recipe

~/cookbooks/rsapps-mod_ssl/recipes/default.rb

```
service "httpd" do
  supports :restart => true, :status => true
end

package "mod_ssl" do
  action :install
  notifies :restart, resources(:service => "httpd"), :delayed
end
```

Write a cookbook to serve your content over https

Edit `~/cookbooks/rsapps-mod_ssl/metadata.rb`

Upload to chef server

```
$ knife cookbook upload rsapps-mod_ssl
```

Write a cookbook to serve your content over https

Assign recipe to node

```
[laptop]$ knife node run_list add chef-client-# recipe[rsapps-mod_ssl]
```

Run chef-client

```
[chef-client]$ chef-client
```

...

Chef Run complete in 30.148105 seconds

Running report handlers

Report handlers complete

Write a cookbook to serve your content over https

Test your web server via https

Fire up the browser, go to `https://a.b.c.d`

Finished!

Challenge - Write a cookbook to configure a SMTP server

- * Install Postfix
- * The default main.cf and master.cf are available at <http://50.56.177.12/postfix/> to make templates
- * Practice using attributes:
 - * Accept traffic on all interfaces ("inet_interfaces = all" in /etc/postfix/main.cf)
 - * Have Postfix accept mail on port 587 (Uncomment the submission line in /etc/postfix/master.cf)
- * Practice using data bags:
 - * Restrict Postfix to your laptop's public IP ("mynetworks = a.b.c.d" in /etc/postfix/main.cf)
- * Postfix should be running after a chef-client run and after a server reboot
- * Postfix should restart after configuration files are altered

Write a cookbook to configure a SMTP server

Create cookbook and download config files

```
$ knife cookbook create rsapps-postfix
```

```
$ wget -P ~/cookbooks/rsapps-postfix/templates/default http://50.56.177.12/postfix/main.cf.erb
```

```
$ wget -P ~/cookbooks/rsapps-postfix/templates/default http://50.56.177.12/postfix/master.cf.erb
```

Write a cookbook to configure a SMTP server

Make attributes file

~/cookbooks/rsapps-postfix/attributes/default.rb

```
default[:postfix][:enable_587] = true  
default[:postfix][:inet_interfaces] = "all"
```

Write a cookbook to configure a SMTP server

Make data bag

~/data_bags/postfix/network.json

```
{  
  "id": "network",  
  "mynetworks": "74.205.24.229"  
}
```

Write a cookbook to configure a SMTP server

Write recipe

~/cookbooks/rsapps-postfix/recipes/default.rb

```
package "postfix" do
  action :install
end

service "postfix" do
  supports :restart => true, :status => true, :reload => true
  action :enable
end

template "/etc/postfix/master.cf" do
  source "master.cf.erb"
  action :create
  notifies :restart, resources(:service => "postfix"), :delayed
end
```

Write a cookbook to configure a SMTP server

Write recipe (cont)

~/cookbooks/rsapps-postfix/recipes/default.rb

```
...

template "/etc/postfix/main.cf" do
  source "main.cf.erb"
  action :create
  notifies :restart, resources(:service => "postfix"), :delayed
  variables({
    :mynetworks => data_bag_item("postfix", "network")["mynetworks"]
  })
end

service "postfix" do
  action :start
end
```

Write a cookbook to configure a SMTP server

Make templates out of config files

~/cookbooks/rsapps-postfix/templates/default/master.cf.erb

```
<% if node[:postfix][:enable_587] == true -%>
submission inet n      -      n      -      -      smtpd
<% else -%>
#submission inet n      -      n      -      -      smtpd
<% end -%>
```

Write a cookbook to configure a SMTP server

Make templates out of config files

```
~/cookbooks/rsapps-postfix/templates/default/main.cf.erb
```

```
inet_interfaces = <%= node[:postfix][:inet_interfaces] %>
```

```
mynetworks = <%= @mynetworks %>
```

Write a cookbook to configure a SMTP server

Edit `~/cookbooks/rsapps-postfix/metadata.rb`

Upload to chef server

```
$ knife cookbook upload rsapps-postfix
```

```
$ knife data bag create postfix
```

```
$ knife data bag from file postfix ~/data_bags/postfix/network.json
```


Write a cookbook to configure a SMTP server

Assign recipe to node

```
[laptop]$ knife node run_list add chef-client-# recipe[rsapps-postfix]
```

Run chef-client

```
[chef-client]$ chef-client
```

...

Chef Run complete in 30.148105 seconds

Running report handlers

Report handlers complete

Write a cookbook to configure a SMTP server

Test your smtp server

```
[laptop]$ telnet a.b.c.d 587
> ehlo laptop
> mail from:<me@example.com>
> rcpt to:<me@mailtrust.com>
> data
> From: Me
> Subject: Test
>
> First email!
>
> .
> quit
```