Chef Attributes

About me!

RajeshKumarIN

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DevOps@RajeshKumar.XYZ

Goal for attributes

- Understand Attributes
- Write a recipe to create Unix User accounts
- Use attributes in a recipe
- Use attributes in a template

Example

- https://github.com/scmgalaxy/chef-repo

Where can we defined the attributes

Attributes are provided to the chef-client from the following locations:

- Nodes (collected by Ohai at the start of each chef-client run)
- Attribute files (in cookbooks)
- Recipes (in cookbooks)
- Environments
- Roles

Attribute Files

default['apache']['dir']   = '/etc/apache2'

default['apache']['listen_ports'] = ['80','443']

node.default['apache']['dir']   = '/etc/apache2'

node.default['apache']['listen_ports'] = ['80','443']

Where apache is your cookbook name.

Example

Default attribute in /attributes/default.rb
default['apache']['dir'] = '/etc/apache2'

Default attribute in node object in recipe
node.default['apache']['dir'] = '/etc/apache2'

Default attribute in /environments/environment_name.rb
default_attributes({ 'apache' => {'dir' => '/etc/apache2'}})
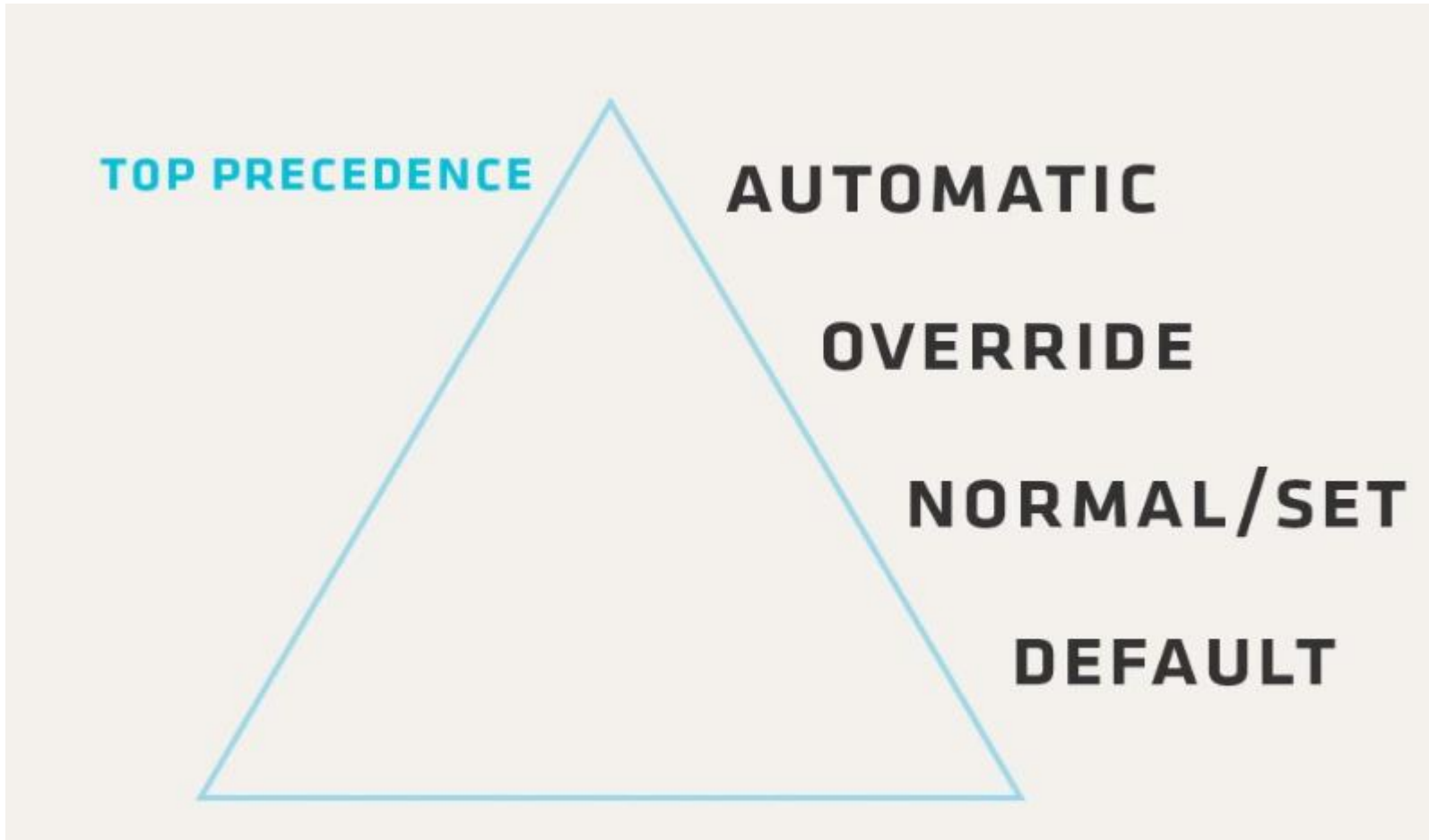
Default attribute in /roles/role_name.rb
default_attributes({ 'apache' => {'dir' => '/etc/apache2'}})

DONT

- Don't name an attribute something like [:apache2][:user], for example, unless you want to override that attribute's value.

Chef Attributes Precedence

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	Attribute Files	Node / Recipe	Environment	Role
default	1	2	3	4
force_default	5	6		
normal	7	8		
override	9	10	12	11
force_override	13	14		
automatic		15		

Automatic (Ohai)

node['platform']	node['hostname']
node['platform_version']	node['domain']
node['ipaddress']	node['recipes']
node['macaddress']	node['roles']
node['fqdn']	node['ohai_time']

Conditions with attributes

Using attribute?() in an attributes file:

if attribute?('ec2')

  # ... set stuff related to EC2

end

Using attribute?() in a recipe:

if node.attribute?('ec2')

  # ... do stuff on EC2 nodes

end

In Depth - Attributes are always applied by the chef-client in the following order:

A default attribute located in a cookbook attribute file

A default attribute located in a recipe

A default attribute located in an environment

A default attribute located in role

A force_default attribute located in a cookbook attribute file

A force_default attribute located in a recipe

A normal attribute located in a cookbook attribute file

A normal attribute located in a recipe

An override attribute located in a cookbook attribute file

An override attribute located in a recipe

An override attribute located in a role

An override attribute located in an environment

A force_override attribute located in a cookbook attribute file

A force_override attribute located in a recipe

An automatic attribute identified by Ohai at the start of the chef-client run

Sample Cookbooks for Attributes

- https://github.com/scmgalaxy/chef-repo