

# **TEMPLATES**

# **TOPICS**



- static vs dynamic files
- templates
- ERB Syntax

#### STATIC FILE

dev

stage

prod

server.dev.xml



server.stg.xml



server.prod.xml



memory = 128mb

port = 8081

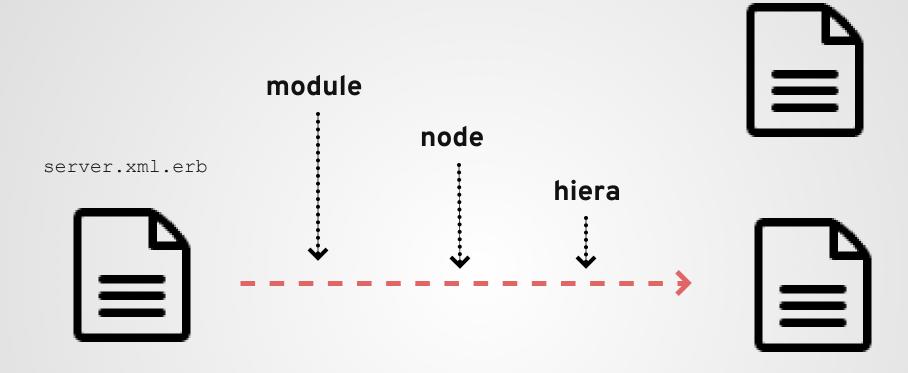
memory = 4gb

port = 8888

memory = 16gb

port = 8080

#### **TEMPLATE**





server.xml

# **ERB**

## **ERB = EMBEDDED RUBY**

### **ERUBIS**



- Contains text with dynamic ruby code
- uses tags to mark dynamic code

## **ERB TAGS**



# TEMPLATIZE TOMCAT CONFIGS

#### **STEPS**

- 1. Create a Template
- 2. Define Parameters
- 3. Update file resource to use template function

"we always start with the original configs.

Good point to start with s copy over the original config as is and start converting it into a template by replacing parameter values

Create file structure to store the templates

- Create a director modules/tomcat/templates
- Create a ERB template at modules/tomcat/templates/tomcat.conf.erb
- Copy over the contents of the original tomcat.conf. You could use the link below as a sample content



#### file: modules/tomcat/templates/tomcat.conf.erb

```
TOMCAT CFG LOADED="1"
JAVA HOME="/usr/lib/jvm/jre"
JAVA OPTS="-Xms64m -Xmx128m -XX:MaxPermSize=128M -Djava.security
CATALINA BASE="/usr/share/tomcat"
CATALINA HOME="/usr/share/tomcat"
JASPER HOME="/usr/share/tomcat"
CATALINA TMPDIR="/var/cache/tomcat/temp"
TOMCAT USER="tomcat"
SECURITY MANAGER="false"
SHUTDOWN WAIT="30"
SHUTDOWN VERBOSE="false"
CATALINA PID="/var/run/tomcat.pid"
```

```
TOMCAT_USER="tomcat"
SHUTDOWN_WAIT="30"
```

#### becomes

```
TOMCAT_USER="<%= @user %>"
SHUTDOWN_WAIT="<%= @shutdown_wait %>"
```

#### params.pp

```
$shutdown_wait = 30
```

#### **TEMPLATIZE**

- start replacing the values with template variables
- template variables are enclosed in the marker tags
- define the sane defaults in tomcat::params class



TIP: Its always useful to define the params first in params.pp before replacing the values in the template with ERB tags. That way, you would not have to go figure what were the default values, as once replaces, those values are gone. Its also easir to just copy over the params back as template variables.



#### **EXERCISE**

Update the following properties in tomcat.conf in the template, and define the defaults in params.pp

- TOMCAT\_CFG\_LOADED
- JAVA\_HOME
- xms
- xmx
- maxpermsize
- CATALINA\_BASE
- JASPER\_HOME
- CATALINA\_TMPDIR
- SECURITY\_MANAGER
- SHUTDOWN\_VERBOSE
- CATALINA\_PID



#### file: modules/tomcat/templates/tomcat.conf.erb

```
TOMCAT CFG LOADED=<%= @tomcat cfg loaded %>
JAVA HOME=<%= @java home %>
JAVA OPTS="-Xms<%= @xms %> -Xmx<%= @xmx %> -XX:MaxPermSize=<%= @n
CATALINA BASE=<%= @catalina base %>
CATALINA HOME=<%= @catalina home %>
JASPER HOME=<%= @jasper home %>
CATALINA TMPDIR=<%= @catalina tmpdir %>
TOMCAT USER=<%= @user %>
SECURITY MANAGER=<%= @security manager %>
SHUTDOWN WAIT=<%= @shutdown wait %>
SHUTDOWN VERBOSE=<%= @shutdown verbose %>
```



#### tomcat::params class

```
class tomcat::params {
  $color = 'white'
  $car = 'figo'
  $user = 'tomcat'
  $group = 'tomcat'
  $config path = '/etc/tomcat/tomcat.conf'
  $packages = [ 'tomcat', 'tomcat-webapps' ]
  $service name = 'tomcat'
  $service state = running
  $tomcat cfg loaded = "1"
  $java home = "/usr/lib/jvm/jre"
  $xms = "64m"
  \$xmx = "128m"
  $maxpermsize = "128M"
  $java opts = " -Djava.security.egd=file:/dev/./urandom"
  $catalina base = "/usr/share/tomcat"
  $catalina home = "/usr/share/tomcat"
  $jasper home = "/usr/share/tomcat"
  $catalina tmpdir = "/var/cache/tomcat/temp"
  $security manager = "false"
```



#### update file:

modules/tomcat/manifests/config.pp

#### **FROM**

```
source => 'puppet://modules/tomcat/tomcat.conf',
```

#### TO

```
content => template('tomcat/tomcat.conf.erb'),
```



file: modules/tomcat/manifests/config.pp

```
class tomcat::config inherits tomcat{
    file { $::tomcat::config_path:
        #source => 'puppet:///modules/tomcat/tomcat.conf',
        content => template('tomcat/tomcat.conf.erb'),
        owner => $::tomcat::user,
        group => $::tomcat::group,
        mode => '0644',
        notify => Service['tomcat']
    }
}
```



# **APPLY**