

# Defined Resources

The problem

# Virtual Host Example

- File['/var/www/<sitename>/index.html']
- File['/var/www/<sitename>']
- File['/etc/httpd/conf.d/<sitename>.conf']

# Virtual Host Example

```
file { '/var/www/sites/www.elmo.com/index.html' :  
    ensure => file,  
    owner  => 'apache',  
    group  => 'apache',  
    mode   => '0644',  
}
```

```
file { '/var/www/sites/www.elmo.com' :  
    ensure => directory,  
    owner  => 'apache',  
    group  => 'apache',  
}
```

```
file { '/etc/httpd/conf.d/www.elmo.com.conf' :  
    ensure  => file,  
    content => template('apache/vhost.erb'),  
}
```

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- What happens when you want to manage 20 vhosts
- $3 \times 20 = 60$  resources!!

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    ensure => file,  
    owner  => 'apache',  
    group  => 'apache',  
    mode   => '0644',  
}  
  
file { '/var/www/sites/www.elmo.com':  
    ensure => directory,  
    owner  => 'apache',  
    group  => 'apache',  
}  
  
file { '/etc/httpd/conf.d/www.elmo.com.conf':  
    ensure => file,  
    content => template('apache/vhost.erb'),  
}  
  
file { '/var/www/sites/www.elmo.com/index.html':  
    ensure => file,  
    owner  => 'apache',  
    group  => 'apache',  
    mode   => '0644',  
}  
  
file { '/var/www/sites/www.elmo.com':  
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    owner  => 'apache',  
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    ensure => file,  
    owner  => 'apache',  
    group  => 'apache',  
    mode   => '0644',  
}  
  
file { '/var/www/sites/www.elmo.com':  
    ensure => directory,  
    owner  => 'apache',  
    group  => 'apache',  
}
```

Too much code

Unmaintainable

# What about errors?

```
file { '/var/www/sites/www.elmo.com/index.html' :  
  ensure => file,  
  owner   => 'apache',  
  group   => 'apache',  
  mode    => '0644',  
}
```

```
file { '/var/www/sites/www.bozo.com/index.html' :  
  ensure => file,  
  owner   => 'apache',  
  group   => 'apache',  
  mode    => '0755',  
}
```



# Remember:

- Puppet is **declarative** not **imperative**
- You cannot use a forloop

# What are you **actually** trying to do?

- Define what a virtualhost is
- A way to 'stamp' out multiple vhosts
- A repeatable way
- No duplication

# Defining a vhost

A vhost is:

- A file called `/var/www/<sitename>`
- A file called `/var/www/<sitename>/index.html`
- A file called `/etc/httpd/conf.d/<sitename.conf>`

# Declaring a vhost

I want:

- A vhost for `www.elmo.com`
- A vhost for `www.bozo.com`
- A vhost for `www.moo.com`

# Defined Resources

The solution!