

Puppet Master & Agent Demo

Puppet master & puppet agent in docker

- Create a puppet master docker container with puppet repository
- Create a puppet agent docker container with puppet repository
- Install puppet master & puppet agent
- Authenticate puppet agent
- Configure a puppet resource

Run two docker containers – master & Agent

- `docker pull devopsil/puppet`
- Master –
 - `docker run --name puppetmaster -it devopsil/puppet /bin/bash`
- Agent
 - `docker run --name puppetagent -it devopsil/puppet /bin/bash`

Configure hostnames

```
vi /etc/sysconfig/network
```

update for master & agent

```
HOSTNAME=master.demo.com
```

```
HOSTNAME=agent.demo.com
```

Update the hosts file

- For Master /etc/hosts

172.17.0.2 master.demo.com 51e7833e8e28

172.17.0.3 agent.demo.com

- For Agent /etc/hosts

172.17.0.2 master.demo.com

172.17.0.3 agent.demo.com 62f27fa9e512

- Test the communication

ping master.demo.com --- From the Agent

ping agent.demo.com --- From Master

Install puppet-server & Agent

- Master

```
yum install -y puppet puppet-server facter
```

Agent

```
yum install -y puppet facter
```

Update Puppet Master & Agent configuration

Master :

```
vi /etc/puppet/puppet.conf
```

```
certname = master.demo.com
```

Agent :

```
vi /etc/puppet/puppet.conf
```

```
server = master.demo.com
```

Starting the Puppet Master

- Master
 - `service puppetmaster start`
 - `Service puppetmaster status`

Authenticating the Agent from Master

- Verification whether agent is seeking cert
 - `puppet agent --test --server=master.demo.com --waitforcert=50`
- Authenticate the agent
 - `puppet cert sign ${agent}.demo.com`

Creating the manifest file

```
cd /etc/puppet/manifests
```

```
vi site.pp
```

```
file { ['/var/tmp/testfile': ensure => "present",  
      owner => "root",  
      group => "root",  
      mode => "664",  
      content => "This is a test file created using puppet.",  
}
```

On Puppet Agent

- Puppet agent --test

Installing Apache2 webserver

- # Install Apache (httpd for RHEL/CentOS)
package { 'httpd':
 ensure => installed,
}

Ensure Apache service is running and enabled on boot
- service { 'httpd':
 ensure => running,
 enable => true,
 hasrestart => true,
 require => Package['httpd']
} # Deploy a custom index.html file

Installing Apache2 webserver

```
file { '/var/www/html/index.html':  
  ensure => file,  
  owner  => 'root',  
  group  => 'root',  
  mode   => '0644',  
  content => "<h1>Welcome! Apache is managed by  
Puppet.</h1>\n",  
  require => Package['httpd'],  
}
```