

# puppet 기술정보

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# centos에서 puppet 설치하기

## 구성정보

1. Master machine
  1. ip : 192.168.10.10 / master.localdomain / Centos6
2. Agent machine
  1. ip : 192.168.10.100 / agent.localdomain / Centos6

## 공통작업

1. 리포지터리 추가

```
$> rpm -Uvh http://yum.puppetlabs.com/puppetlabs-release-el-6.noarch.rpm
Retrieving http://yum.puppetlabs.com/puppetlabs-release-el-6.noarch.rpm
warning: /var/tmp/rpm-tmp.Ze6mXg: Header V4 RSA/SHA1 Signature, key ID 4bd6ec30: NOKEY
Preparing... ##### [100%]
package puppetlabs-release-6-11.noarch is already installed
```

## 서버 구성하기

1. 마스터서버 작업하기1. 패키지 설치

```
[root@master ~]# yum install puppet-server -y
=====
Package           Arch    Version      Repository      Size
=====
Installing:
puppet-server     noarch  3.8.2-1.el6  puppetlabs-products 24 k
Installing for dependencies:
augeas-libs       x86_64  1.0.0-10.el6 base             314 k
compat-readline5  x86_64  5.2-17.1.el6 base             130 k
facter            x86_64  1:2.4.4-1.el6 puppetlabs-products 99 k
hiera             noarch  1.3.4-1.el6  puppetlabs-products 23 k
libselinux-ruby   x86_64  2.0.94-5.8.el6 base             100 k
puppet            noarch  3.8.2-1.el6  puppetlabs-products 1.6 M
ruby              x86_64  1.8.7.374-4.el6_6 base             538 k
ruby-augeas       x86_64  0.4.1-3.el6  puppetlabs-deps 21 k
ruby-irb          x86_64  1.8.7.374-4.el6_6 base             317 k
ruby-libs         x86_64  1.8.7.374-4.el6_6 base             1.7 M
ruby-rdoc         x86_64  1.8.7.374-4.el6_6 base             381 k
ruby-shadow       x86_64  1:2.2.0-2.el6 puppetlabs-deps 13 k
rubygem-json      x86_64  1.5.5-3.el6  puppetlabs-deps 763 k
rubygems          noarch  1.3.7-5.el6  base             207 k

Transaction Summary
=====
Install 15 Package(s)
```

1. config 수정하기

```
[root@master ~]# vi /etc/puppet/puppet.conf
[main]
# The Puppet log directory.
# The default value is '$vardir/log'.
logdir = /var/log/puppet

# Where Puppet PID files are kept.
# The default value is '$vardir/run'.
rundir = /var/run/puppet

# Where SSL certificates are kept.
# The default value is '$confdir/ssl'.
```

```
ssldir = $vardir/ssl
moduledir = /etc/puppet/modules
```

[agent]

```
# The file in which puppetd stores a list of the classes
# associated with the retrieved configuration. Can be loaded in
# the separate ``puppet`` executable using the ``--loadclasses``
# option.
# The default value is '$confdir/classes.txt'.
classfile = $vardir/classes.txt
```

```
# Where puppetd caches the local configuration. An
# extension indicating the cache format is added automatically.
# The default value is '$confdir/localconfig'.
localconfig = $vardir/localconfig
```

[master]

```
certname = master.localdomain
moduledir 경로추가, certname = master.localdomain에 master호스트네임 기재
```

## 2. 패키지 업그레이드

```
[root@master ~]# puppet resource package puppet-server ensure=latest
package { 'puppet-server':
  ensure => '3.8.2-1.el6',
}
```

## 3. 서비스 시작

```
[root@master ~]# /etc/init.d/puppetmaster start
Starting puppetmaster: [ OK ]
```

## 4. 포트상태 확인

```
[root@master ~]# netstat -antp | grep LISTEN
tcp    0  0  0.0.0.0:8140          0.0.0.0:*           LISTEN  1127/ruby
tcp    0  0  0.0.0.0:22           0.0.0.0:*           LISTEN  878/sshd
tcp    0  0  0.0.0.0:125          0.0.0.0:*           LISTEN  897/sendmail
tcp    0  0  0.0.0.0:22           0.0.0.0:*           LISTEN  878/sshd
* tcp/8140번 포트가 오픈되어 있는지 확인.
```

## 2. Agent 작업하기1. 패키지 설치

```
[root@agent ~]# yum install puppet -y
```

```
=====
Package           Arch      Version      Repository      Size
=====
Installing:
puppet            noarch    3.8.2-1.el6  puppetlabs-products  1.6 M
Installing for dependencies:
augeas-libs       x86_64    1.0.0-10.el6 base             314 k
compat-readline5   x86_64    5.2-17.1.el6 base             130 k
facter            x86_64    1.2.4.4-1.el6 puppetlabs-products  99 k
hiera             noarch    1.3.4-1.el6  puppetlabs-products  23 k
libselinux-ruby    x86_64    2.0.94-5.8.el6 base             100 k
ruby              x86_64    1.8.7.374-4.el6_6 base             538 k
ruby-augeas        x86_64    0.4.1-3.el6  puppetlabs-deps     21 k
ruby-irb           x86_64    1.8.7.374-4.el6_6 base             317 k
ruby-libs          x86_64    1.8.7.374-4.el6_6 base             1.7 M
ruby-rdoc          x86_64    1.8.7.374-4.el6_6 base             381 k
ruby-shadow        x86_64    1:2.2.0-2.el6 puppetlabs-deps     13 k
rubygem-json       x86_64    1.5.5-3.el6  puppetlabs-deps     763 k
rubygems           noarch    1.3.7-5.el6  base              207 k

Transaction Summary
=====
Install  14 Package(s)
```

## 1. 설정파일 수정

```
[root@agent ~]# vi /etc/puppet/puppet.conf
[main]
# The Puppet log directory.
# The default value is '$vardir/log'.
logdir = /var/log/puppet

# Where Puppet PID files are kept.
# The default value is '$vardir/run'.
rundir = /var/run/puppet

# Where SSL certificates are kept.
# The default value is '$confdir/ssl'.
ssldir = $vardir/ssl

[agent]
# The file in which puppetd stores a list of the classes
# associated with the retrieved configuration. Can be loaded in
# the separate ``puppet`` executable using the ``--loadclasses``
# option.
# The default value is '$confdir/classes.txt'.
classfile = $vardir/classes.txt

# Where puppetd caches the local configuration. An
# extension indicating the cache format is added automatically.
# The default value is '$confdir/localconfig'.
localconfig = $vardir/localconfig
certname=agent.localdomain
runinterval = 60
certname = 에이전트 호스트네임 추가, runinterval은 업데이트 주기(초단위)로 설정하면 됨.

[root@agent ~]# vi /etc/sysconfig/puppet

# The puppetmaster server
PUPPET_SERVER=master.localdomain

# If you wish to specify the port to connect to do so here
#PUPPET_PORT=8140

# Where to log to. Specify syslog to send log messages to the system log.
PUPPET_LOG=/var/log/puppet/puppet.log

# You may specify other parameters to the puppet client here
#PUPPET_EXTRA_OPTS=--waitforcert=500
PUPPET_SERVER에 마스터 서버 호스트네임 입력
PUPPET_LOG에 에이전트 로그파일 파일명 입력
```

## 2. 서비스 시작

```
[root@agent ~]# /etc/init.d/puppet start
Starting puppet agent:                [ OK ]
[root@agent ~]# ps -ef | grep puppet
root  1072  1 3 16:03 ?        00:00:00 /usr/bin/ruby /usr/bin/puppet agent --server=master.localdomain --
logdest=/var/log/puppet/puppet.log
* 프로세스 실행확인하면 됨
```

# 서버 연동하기

## 1. 마스터서버에서 인증작업하기

### 1. 인증이 필요한 클라이언트 확인

```
[root@master ~]# puppet cert --sign --list
"agent.localdomain" (SHA256) 52:0D:EF:51:BB:50:99:FE:BC:6D:2F:33:CC:A9:43:73:3B:1C:C6:A1:D6:4C:D2:13:DE:AA:75:E9:7E:D2:2A:E5
* 도메인 옆에 +기호가 붙어있으면 인증이 완료된 에이전트입니다.
```

## 2. 에이전트 인증작업 수행

```
[root@master ~]# puppet cert --sign agent.localdomain
Notice: Signed certificate request for agent.localdomain
Notice: Removing file Puppet::SSL::CertificateRequest agent.localdomain at '/var/lib/puppet/ssl/ca/requests/agent.localdomain.pem'
```

## 3. 인증완료여부 확인

```
[root@master ~]# puppet cert --sign --all --list
+ "agent.localdomain" (SHA256) 9C:18:CA:26:73:CA:65:96:85:07:B1:F4:B7:A3:2C:43:FA:EE:63:3C:A7:A3:6C:CD:A2:51:5B:81:D2:E5:2D:3F
도메인 옆에 +기호가 생기면 완료.
```

연동이 잘 되었는지 테스트.

## 4. 아래 경로에서 파일생성

```
[root@master ~]# cat /etc/puppet/manifests/site.pp
file {
  '/tmp/hello' :
    owner => root,
    group => root,
    mode => 444,
    content => "Hello Puppet
by Machine\n";
}
```

\* /tmp/hello 파일이 생성되는데, 생성시 root의 사용자와 그룹으로 지정하여 생성하고  
퍼미션은 444(read)생성하되, 텍스트 데이터는 Hello Puppet라는 데이터로 저장

## 5. puppet 적용하기

```
[root@master ~]# puppet apply /etc/puppet/manifests/site.pp
Notice: Compiled catalog for master in environment production in 0.17 seconds
Notice: /Stage[main]/Main/File[/tmp/hello]/content: content changed '{md5}723c9d4525cebf11f4e6171740b15abd' to
'{md5}7b1d27a85c9ebf03075ee2150fb4d770'
Notice: Finished catalog run in 0.09 seconds
에이전트)
/tmp/hello파일이 생성되었는지 확인
```

## 2. Agent 작업하기

```
[root@agent ~]# ls -l /tmp/hello
-r--r--r-- 1 root root 25 Sep 14 16:11 /tmp/hello
[root@agent ~]# cat /tmp/hello
Hello Puppet
by Machine
```

- /tmp/hello파일이 생성되었는지 확인

## Reference

- [https://docs.puppetlabs.com/guides/install\\_puppet/install\\_el.html?\\_ga=1.81661140.2146970350.1440482857//](https://docs.puppetlabs.com/guides/install_puppet/install_el.html?_ga=1.81661140.2146970350.1440482857//)
- <http://ora-sysdba.tistory.com/entry/Infra-%EC%84%9C%EB%B2%84%EA%B4%80%EB%A6%AC%EC%9D%98-%ED%9A%A8%EC%9C%A8%ED%99%94-Puppet-%EC%84%A4%EC%B9%98//>

# puppet 에이전트 설정값 확인

puppet agent 설정값 확인하고 싶을때

```
$> puppet agent --configprint all
```