puppet 기술정보

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 configuratiion.  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    0 127.0.0.1:25          0.0.0.0:*            LISTEN    897/sendmail
tcp    0    0 :::22                 :::*                 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 configuratiion.  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 실핵확인하면 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 에이전트 입니다.
```

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 Pupplet
by Machine\n";
 }
```

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

5. **pupplet 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 Pupplet
by Machine
```

- /tmp/hello파일이 생성되었는지 확인

Reference

- *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
```