

## 如何根据版本制作属于自己的 puppet yum 源

童鞋们在使用 puppetlabs yum 源安装 puppet 的时候，会被选则最新版的 puppet 版本进行安装，而在我们正在的生产环境的时候，并不需要最新版本，而是我们制定的一个版本，然后不同的版本依赖的包也不一样，这样种种的问题应该如何搞定呢，又应该如何制定自己的 yum 源呢。

以 RHEL5.7 为例

### 1、先将对应的光盘创建为本地源

```
[root@agent2 yum.repos.d]# cat base.repo
[rhel-base]
name=RHEL5.7 base
baseurl=file:///media/cdrom/Server
enabled=1
gpgcheck=0
priority=1
```

### 2、安装制作 yum 仓库的软件包和 yum-priorities 管理包

```
[root@agent2 yum.repos.d]# yum install createrepo yum-priorities
[root@agent2 yum.repos.d]# rpm -qa | egrep "createrepo|yum-priorities"
yum-priorities-1.1.16-16.el5
createrepo-0.4.11-3.el5
```

### 3、去 puppetlabs 官网 [yum.puppetlabs.com](http://yum.puppetlabs.com) 下载对应的 puppet 安装包到本地

```
[root@agent2 puppet]# wget http://yum.puppetlabs.com/el/57/products/x86_64/puppet-2.7.25-1.el5.noarch.rpm
[root@agent2 puppet]# wget http://yum.puppetlabs.com/el/57/products/x86_64/puppet-server-2.7.25-1.el5.noarch.rpm
[root@agent2 puppet]# wget http://yum.puppetlabs.com/el/57/products/x86_64/facter-1.7.4-1.el5.x86_64.rpm
[root@agent2 puppet]# ll
total 1272
-rw-r--r-- 1 root root 88979 Dec 18 2013 facter-1.7.4-1.el5.x86_64.rpm
-rw-r--r-- 1 root root 1175323 Jan 7 2014 puppet-2.7.25-1.el5.noarch.rpm
```

```
-rw-r--r-- 1 root root 25374 Jan 7 2014 puppet-server-2.7.25-1.el5.noarch.rpm
```

备注: rhel6 上没有 rubygems rpm 包, 需要在以下网址去下载

<http://rubyforge.org/projects/rubygems/>

## 4、本地制作 puppet 源

```
[root@agent2 puppet]# createrepo .
3/3 - puppet-2.7.25-1.el5.noarch.rpm
Saving Primary metadata
Saving file lists metadata
Saving other metadata
[root@agent2 puppet]# ll
total 1276
-rw-r--r-- 1 root root 88979 Dec 18 2013 facter-1.7.4-1.el5.x86_64.rpm
-rw-r--r-- 1 root root 1175323 Jan 7 2014 puppet-2.7.25-1.el5.noarch.rpm
-rw-r--r-- 1 root root 25374 Jan 7 2014 puppet-server-2.7.25-1.el5.noarch.rpm
drwxr-xr-x 2 root root 4096 Oct 2 10:43 repodata
```

## 5、编写 puppet 的 repo 文件

```
[root@agent2 yum.repos.d]# cat puppet.repo
[puppet]
name=puppet for rhel5.7
baseurl=file:///puppet
enabled=1
gpgcheck=0
priority=2 #设置优先级为本地光盘源之后
```

## 6、安装官方 puppetlabs 源

```
[root@agent2 ~]# wget yum.puppetlabs.com/el/57/products/x86_64/puppetlabs-release-5-7.noarch.rpm
[root@agent2 ~]# rpm -vih puppetlabs-release-5-7.noarch.rpm
[root@agent2 ~]# ll /etc/yum.repos.d/
total 16
-rw-r--r-- 1 root root 98 Oct 2 10:45 base.repo
-rw-r--r-- 1 root root 1250 Apr 13 06:41 puppetlabs.repo #由官方源安装而成
-rw-r--r-- 1 root root 90 Oct 2 10:44 puppet.repo
-rw-r--r-- 1 root root 67 Oct 2 10:37 redhat.repo
```

## 7、修改 puppetlabs 源优先级

```
[root@agent2 ~]# cat /etc/yum.repos.d/puppetlabs.repo
[puppetlabs-products]
name=Puppet Labs Products El 5 - $basearch
baseurl=http://yum.puppetlabs.com/el/5/products/$basearch
gpgkey=file:///etc/pki/rpm-gpg/RPM-GPG-KEY-puppetlabs
enabled=1
gpgcheck=1
priority=3 #设置优先级最低

[puppetlabs-deps]
name=Puppet Labs Dependencies El 5 - $basearch
baseurl=http://yum.puppetlabs.com/el/5/dependencies/$basearch
gpgkey=file:///etc/pki/rpm-gpg/RPM-GPG-KEY-puppetlabs
enabled=1
gpgcheck=1
priority=3 #设置优先级最低

[puppetlabs-devel]
name=Puppet Labs Devel El 5 - $basearch
baseurl=http://yum.puppetlabs.com/el/5/devel/$basearch
gpgkey=file:///etc/pki/rpm-gpg/RPM-GPG-KEY-puppetlabs
enabled=0
gpgcheck=1

[puppetlabs-products-source]
name=Puppet Labs Products El 5 - $basearch - Source
baseurl=http://yum.puppetlabs.com/el/5/products/SRPMS
gpgkey=file:///etc/pki/rpm-gpg/RPM-GPG-KEY-puppetlabs
failovermethod=priority
enabled=0
gpgcheck=1

[puppetlabs-deps-source]
name=Puppet Labs Source Dependencies El 5 - $basearch - Source
baseurl=http://yum.puppetlabs.com/el/5/dependencies/SRPMS
gpgkey=file:///etc/pki/rpm-gpg/RPM-GPG-KEY-puppetlabs
enabled=0
gpgcheck=1

[puppetlabs-devel-source]
name=Puppet Labs Devel El 5 - $basearch - Source
baseurl=http://yum.puppetlabs.com/el/5/devel/SRPMS
```

```
gpgkey=file:///etc/pki/rpm-gpg/RPM-GPG-KEY-puppetlabs
enabled=0
gpgcheck=1
```

## 8、修改 yum 保存下载的安装包为本地缓存

```
[main]
cachedir=/var/cache/yum
keepcache=1 #设置保存下载的软件缓存
debuglevel=2
logfile=/var/log/yum.log
distroverpkg=redhat-release
tolerant=1
exactarch=1
obsoletes=1
gpgcheck=1
plugins=1

# Note: yum-RHN-plugin doesn't honor this.
metadata_expire=1h

# Default.
# installonly_limit = 3

# PUT YOUR REPOS HERE OR IN separate files named file.repo
# in /etc/yum.repos.d
```

## 9、安装 puppet 软件

yum 会按照制定的优先级去搜索，由于自定义 puppet 源比官方源优先级高，所以会优先选择自定义的 puppet 源中的安装包版本

```
[root@agent2 ~]# yum clean all
Loaded plugins: priorities, product-id, security, subscription-manager
Updating Red Hat repositories.
Cleaning up Everything

[root@agent2 ~]# yum install puppet
Loaded plugins: priorities, product-id, security, subscription-manager
Updating Red Hat repositories.
puppet
| 951 B    00:00
```

```
puppet/primary
| 1.7 kB    00:00
puppet
3/3
puppetlabs-deps
| 1.9 kB    00:00
puppetlabs-deps/primary_db
| 43 kB     00:00
puppetlabs-products
| 1.9 kB     00:00
puppetlabs-products/primary_db
| 95 kB     00:03
rhel-base
| 1.5 kB     00:00
rhel-base/primary
| 913 kB    00:00
rhel-base
3261/3261
157 packages excluded due to repository priority protections
Setting up Install Process
Resolving Dependencies
--> Running transaction check
---> Package puppet.noarch 0:2.7.25-1.el5 set to be updated
--> Processing Dependency: facter < 1:2.0 for package: puppet
--> Processing Dependency: ruby(abi) >= 1.8 for package: puppet
--> Processing Dependency: facter >= 1.5 for package: puppet
--> Processing Dependency: ruby >= 1.8.5 for package: puppet
--> Processing Dependency: ruby-shadow for package: puppet
--> Processing Dependency: /usr/bin/ruby for package: puppet
--> Processing Dependency: ruby-augeas for package: puppet
--> Processing Dependency: libselinux-ruby for package: puppet
--> Running transaction check
---> Package facter.x86_64 1:1.7.4-1.el5 set to be updated
---> Package libselinux-ruby.x86_64 0:1.33.4-5.7.el5 set to be updated
---> Package ruby.x86_64 0:1.8.5-19.el5_6.1 set to be updated
---> Package ruby-augeas.x86_64 0:0.4.1-2.el5 set to be updated
--> Processing Dependency: augeas-libs >= 0.8.0 for package: ruby-augeas
--> Processing Dependency: libaugeas.so.0(AUGEAS_0.8.0)(64bit) for package: ruby-augeas
--> Processing Dependency: libaugeas.so.0(AUGEAS_0.11.0)(64bit) for package: ruby-augeas
--> Processing Dependency: libaugeas.so.0(AUGEAS_0.10.0)(64bit) for package: ruby-augeas
```

```
--> Processing Dependency: libaugeas.so.0(AUGEAS_0.1.0)(64bit) for package: ruby-augeas
--> Processing Dependency: libaugeas.so.0(AUGEAS_0.12.0)(64bit) for package: ruby-augeas
--> Processing Dependency: libaugeas.so.0()(64bit) for package: ruby-augeas
---> Package ruby-libs.x86_64 0:1.8.5-19.el5_6.1 set to be updated
---> Package ruby-shadow.x86_64 0:1.4.1-8.el5 set to be updated
--> Running transaction check
---> Package augeas-libs.x86_64 0:0.10.0-4.el5 set to be updated
--> Finished Dependency Resolution
```

Dependencies Resolved

```
=====
=====
Package                Arch                Version
Repository              Size
=====
=====
```

Installing:

```
puppet                noarch                2.7.25-1.el5
puppet                1.1 M
```

Installing for dependencies:

```
augeas-libs           x86_64                0.10.0-4.el5
puppetlabs-deps        376 k
facter                x86_64                1:1.7.4-1.el5
puppet                 87 k
libselinux-ruby        x86_64                1.33.4-5.7.el5
rhel-base              61 k
ruby                  x86_64                1.8.5-19.el5_6.1
rhel-base              276 k
ruby-augeas           x86_64                0.4.1-2.el5
puppetlabs-deps        22 k
ruby-libs              x86_64                1.8.5-19.el5_6.1
rhel-base              1.6 M
ruby-shadow            x86_64                1.4.1-8.el5
puppetlabs-deps        10 k
```

Transaction Summary

```
=====
=====
Install      8 Package(s)
Upgrade      0 Package(s)
```

```
Total download size: 3.6 M
Is this ok [y/N]: y
Downloading Packages:
(1/8): ruby-shadow-1.4.1-8.el5.x86_64.rpm
| 10 kB    00:00
(2/8): ruby-augeas-0.4.1-2.el5.x86_64.rpm
| 22 kB    00:00
(4/8): augeas-libs-0.10.0-4.el5.x86_64.rpm
| 376 kB   00:03
-----
-----
Total
823 kB/s | 3.6 MB    00:04
warning: rpmts_HdrFromFdno: Header V3 RSA/SHA1 signature: NOKEY, key ID 4bd6ec30
puppetlabs-deps/gpgkey
| 1.7 kB    00:00
Importing GPG key 0x4BD6EC30 "Puppet Labs Release Key (Puppet Labs Release Key)
<info@puppetlabs.com>" from /etc/pki/rpm-gpg/RPM-GPG-KEY-puppetlabs
Is this ok [y/N]: y
Running rpm_check_debug
Running Transaction Test
Finished Transaction Test
Transaction Test Succeeded
Running Transaction
  Installing      : ruby-libs
1/8
  Installing      : ruby
2/8
  Installing      : ruby-shadow
3/8
  Installing      : augeas-libs
4/8
  Installing      : ruby-augeas
5/8
  Installing      : libselinux-ruby
6/8
  Installing      : facter
7/8
  Installing      : puppet
8/8
duration: 668(ms)
Installed products updated.

Installed:
```

```
puppet.noarch 0:2.7.25-1.el5

Dependency Installed:
  augeas-libs.x86_64 0:0.10.0-4.el5      facter.x86_64 1:1.7.4-1.el5
  libselinux-ruby.x86_64 0:1.33.4-5.7.el5
  ruby.x86_64 0:1.8.5-19.el5_6.1        ruby-augeas.x86_64 0:0.4.1-2.el5    ruby-
  libs.x86_64 0:1.8.5-19.el5_6.1
  ruby-shadow.x86_64 0:1.4.1-8.el5

Complete!
```

## 10、复制 yum 缓存下来的安装包至之前创建的 puppet 本地源，然后更新 repo 即可

---

```
[root@agent2 ~]# tree /var/cache/yum/puppetlabs-deps/packages/
/var/cache/yum/puppetlabs-deps/packages/
|-- augeas-libs-0.10.0-4.el5.x86_64.rpm
|-- ruby-augeas-0.4.1-2.el5.x86_64.rpm
`-- ruby-shadow-1.4.1-8.el5.x86_64.rpm

0 directories, 3 files

[root@agent2 ~]# createrepo --update /puppet/
6/6 - packages/ruby-augeas-0.4.1-2.el5.x86_64.rpm
Saving Primary metadata
Saving file lists metadata
Saving other metadata
```

通过以上操作基本上可以搞定本地 yum 源！

如果你懒得弄，可直接去以下网址 下载作者已经做好的 yum 源，包含了很多很难找的 rpm 包，非常方便。 <http://kisspuppet.com/2013/12/05/puppetrepopak/>

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为了能够和大家更好的交流和学习 Puppet，本人 2014 年又新开辟了微信公众号进行交流学习，目前已经有 300 多人同时收听，喜欢 Puppet 的大神们可自行加入哦。



如果你有好的有关 Puppet 的咨询也可以给我投稿，投稿邮箱：  
[admin@kisspuppet.com](mailto:admin@kisspuppet.com)

微信公众号：“**puppet2014**”，可搜索加入，也可以扫描以下二维码

