

# Linux 各种yum源配置详解

yum是Yellow dog Updater, Modified 的简称，是杜克大学为了提高RPM 软件包安装性而开发的一种软件包管理器。yum 的用途是用于一个仓库(repository),管理一部分甚至是一个distribution 的应用程序相互关系，根据计算出来的软件依赖关系进行相关的升级、安装、删除等等操作，减少了Linux 用户一直头痛的dependencies的问题。这一点上，yum和apt 相同。apt 原为Debian 的deb 类型软件管理而使用，但现在也能用于RedHat 门下的rpm了。

yum 主要功能就是更方便的添加/删除/更新RPM 包，自动解决包的依赖性问题，便于管理大量系统的更新问题。

yum 可以同时配置多个资源库(Repository)，简洁的配置文件(/etc/yum.conf)，自动增加或删除rpm 包时遇到的依赖性问题的，保持与RPM 数据库的一致性。

## (一) yum的安装与卸载

1、查看该系统是否安装yum:

```
1 [root@localhost ~]# rpm -qa|grep yum
2 yum-3.2.29-69.el6.centos.noarch
3 yum-metadata-parser-1.1.2-16.el6.x86_64
4 yum-plugin-fastestmirror-1.1.30-30.el6.noarch
```

2、这表示已安装，如果没有安装的话，可以使用系统自带的ISO包来进行安装，一下操作为：

```
1 [root@localhost ~]# mount /dev/cdrom /mnt
2 [root@localhost ~]# cd /mnt/Packages/ | ls rpm yum*
3 --rpm-r--r-- 3 root root 1019540 Feb 24 2013 yum-3.2.29-40.el6.centos.noarch.rpm
4 --rpm-r--r-- 3 root root 27222 Jun 26 2011 yum-metadata-parser-1.1.2-16.el6.x86_64.r
5 --rpm-r--r-- 3 root root 28220 Jun 25 2012 yum-plugin-fastestmirror-1.1.30-14.el6.x86_64.r
6 rpm-14vh yum-3.2.29-40.el6.centos.noarch.rpm yum-metadata-parser-1.1.2-16.el6.x86_64.r
7 [root@localhost ~]# rpm -v
```

3、卸载的步骤为：

```
1 [root@localhost ~]# rpm -e yum-3.2.29-40.el6.centos.noarch.rpm | yum-metadata-parser-1.
2 [root@localhost ~]# rpm -qa|grep yum
```

## (二) yum的配置文件的详解

yum 的配置文件分为两部分：main 和repository

- main部分定义了全局配置选项，整个yum 配置文件应该只有一个main，常位于/etc/yum.conf 中。
- repository部分定义了每个服务器的具体配置，可以有一到多个。常位于/etc/yum.repo.d 目录下的各文件中。

```
1 [root@localhost ~]# cat /etc/yum.conf
2 [main]
3 cachedir=/var/cache/yum
4 //yum 缓存的目录，yum 在此存储下载的rpm 包和数据库，默认设置为/var/cache/yum
5 keepcache=1 //安装完成后是否保留软件包，0为不保留（默认为0），1为保留
6 debuglevel=2 //Debug 信息输出等级，范围为0-10，缺省为2
7 logfile=/var/log/yum.log //yum 日志文件位置，用户可以看到/var/log/yum.log 文件去查询过去所做的更新。
8 pkgpolicy=newest //包的政策，一共有两个选项，newest 和last，这个作用是如果你设置了多个repository，而同一
9 //指定一个软件包，yum 会根据这个包判断你的发行版本，默认是redhat-release，也可以是安装的
10 //有1和0两个选项，表示yum 是否容忍命令行发生与软件包有关的错误，比如你要安装1,2,3三个包，
11 exactarch=1 //有1和0两个选项，设置为1，则yum 只会安装和系统架构匹配的软件包，例如，yum 不会将i686的软
12 retires=6 //网络链接发生错误后的重试次数，如果设为0，则会无限重试，为6，则安装失败后，允许更新陈旧的RPM
13 //这是一个接发文件的参数，具体请参考yum(8)，简单的说就是相当于upgrade，允许更新陈旧的RPM
14 plugins=1 //是否启用插件，默认为允许，0表示不允许，我们一般会使用yum-fastestmirror这个插件。
15 bugtracker=http://bugs.centos.org/set_project.php?project_id=1&ref=http://bugs.ce # Note: yum-RHn-plugin doesn't honor this.
16 # Metadata expiration limit = 5
17 # PUT YOUR REPOS HERE OR IN separate files named file.repo
18 # in /etc/yum.repos.d
```

除了上述之外，还有一些可以添加的选项，如：

```
excludelinux* //排除某些软件在升级名单之外，可以用通配符，列表中各个项目要用空格隔开，这个对于安装了诸如美
化包，中文补丁的服务器特别有用。
ggpgcheck=1 //有1和0两个选项，分别代表你是否是否进行gpg(GNU Private Guard) 校验，以确定rpm 包的来源是有效和
安全的，这个选项如果设置在[main]部分，则对每个repository 都有效，默认为0。
```

## (三) 配置本地的yum源

1、挂载安装光盘或ISO镜像

```
1 [root@localhost ~]# mount /dev/cdrom /mnt/
2 count=block device /dev/sr0 is write-protected, mounting read-only
3 mount: /dev/sr0 already mounted or /mnt/ busy
4 mount: according to mtab, /dev/sr0 is already mounted on /mnt
5 [root@localhost ~]# ll /mnt/
6 total 82
7 -r--r--r-- 1 root root 14 Nov 29 2013 CentOS_BuildTag
8 dr-xr-xr-x 3 root root 2048 Nov 29 2013 EFI
9 -r--r--r-- 1 root root 212 Nov 28 2013 EULA
10 -r--r--r-- 1 root root 18009 Nov 28 2013 GPL
11 dr-xr-xr-x 3 root root 2048 Nov 29 2013 Images
12 dr-xr-xr-x 2 root root 2048 Nov 29 2013 isoLinux
13 dr-xr-xr-x 2 root root 40960 Nov 29 2013 Packages
14 -r--r--r-- 1 root root 1354 Nov 28 2013 RELEASE-NOTES-en-US.html
15 dr-xr-xr-x 2 root root 4096 Nov 29 2013 repodata
16 -r--r--r-- 1 root root 1706 Nov 28 2013 RPM-GPG-KEY-CentOS-6
17 -r--r--r-- 1 root root 1730 Nov 28 2013 RPM-GPG-KEY-CentOS-Debug-6
18 -r--r--r-- 1 root root 1730 Nov 28 2013 RPM-GPG-KEY-CentOS-Security-6
19 -r--r--r-- 1 root root 1734 Nov 28 2013 RPM-GPG-KEY-CentOS-Testing-6
20 -r--r--r-- 1 root root 3380 Nov 29 2013 TRANS.TBL
```

2、配置本地的yum源：

```
1 [root@localhost ~]# cd /etc/yum.repos.d/
2 [root@localhost ~]# ll
3 total 24
4 -rw-r--r-- 1 root root 1991 Aug 4 00:13 CentOS-Base.repo
5 -rw-r--r-- 1 root root 647 Aug 4 00:13 CentOS-Debuginfo.repo
6 -rw-r--r-- 1 root root 289 Aug 4 00:13 CentOS-fasttrack.repo
7 -rw-r--r-- 1 root root 630 Aug 4 00:13 CentOS-Media.repo
8 -rw-r--r-- 1 root root 6259 Aug 4 00:13 CentOS-Vault.repo
9 [root@localhost yum.repos.d]# vim CentOS-Media.repo
10 # CentOS-Media.repo
11 #
12 # This repo can be used with mounted DVD media, verify the mount point for
13 # CentOS-6. You can use this repo and yum to install items directly off the
14 # DVD ISO that we release.
15 #
16 # To use this repo, put in your DVD and use it with the other repos too:
17 # yum --enablerepo=c6-media [command]
18 #
19 # or for ONLY the media repo, do this:
20 #
21 # yum --disablerepo=* --enablerepo=c6-media [command]
22 [c6-media]
23 name=CentOS-$releasever - Media
24 baseurl=file:///mnt/Packages/ #####改成挂载的地址
25 file:///media/cdrom/
26 file:///media/cdrecorder/
27 gpgcheck=1
28 enabled=1 #####启用本地的yum源
29 gpgkey=file:///etc/pki/rpm-gpg/RPM-GPG-KEY-CentOS-6
30 INSERT --
```

3、禁用默认的yum网络源，否则会在网络中查找合适的包，改名后直接从本地源进行读取

```
1 [root@localhost yum.repos.d]# mv CentOS-Base.repo CentOS-Base.repo.bak
2 [root@localhost yum.repos.d]#
```

4、执行yum源更新命令：

```
1 [root@localhost ~]# yum clean all
2 Loaded plugins: fastestmirror
3 Cleaning repos: base c6-media extras updates
4 Cleaning up Everything
5 Cleaning up list of fastest mirrors
6 [root@localhost ~]# yum makecache
7 Loaded plugins: fastestmirror
8 Determining fastest mirrors
9 * base: mirrors.bttnet.net
10 * c6-media:
11 * updates: mirrors.nuswf.edu.cn
12 base
13 base/gpgkey
14 base/filelists_db
15 base/primary_db
16 base/other_db
17 [root@localhost ~]# yum update
18 Loaded plugins: fastestmirror
19 Setting up Update Process
20 Loading mirror speeds from cached hostfile
21 * base: mirrors.bttnet.net
22 * c6-media:
23 * extras: mirrors.bttnet.net
24 * updates: mirrors.nuswf.edu.cn
25 [root@localhost ~]#
```

## 备注：关于repo 文件的格式

所有repository 服务器设置都应该遵循如下格式：

```
[serverid]
name=Some name for this server
baseurl=uri://path/to/repository/
```

- serverid 是用于区别各个不同的repository，必须有一个独一无二的名；
- name 是对repository 的描述，支持像\$releasever \$basearch 这样的变量；
- baseurl 是服务器设置中最重要的一部分，只有设置正确，才能从上面获取软件。它的格式是：

```
uri://serverid/path/to/repository/
uri://server2/path/to/repository/
```

其中uri 支持的协议有 http:// ftp:// file:// 三种，baseurl 后可以跟多个url，你可以自己改为速度比较快的镜像站，但baseurl 只能有一个，也就是说不像如下格式：

```
baseurl=uri://server1/path/to/repository/
baseurl=uri://server2/path/to/repository/
baseurl=uri://server3/path/to/repository/
```

其中url 指向的目标必须是这个repository header 目录的下一级，它支持像\$releasever \$basearch 这样的变量。

url 之后可以加上多个选项，如ggpgcheck、exclude、ReleaseMethod 等，比如：

```
[updates+release]
name=Fedora Core $releasever - $basearch - Released
baseurl=http://download.fedoraproject.org/pub/fedora/linux/releases/$releasever/$basearch
http://fed22.rpmfind.net/linux/fedora/core/updates/$releasever/$basearch
```

```
gpgcheck=1
exclude=+aimlib
exclude=+aimlib
excludemethodpriority
```

## (四) 配置国内yum源

系统默认进行了全局配置选项，速度较慢，如何使用国内的yum源，以国内网眼的163yum源为例：

```
1 [root@localhost ~]# cd /etc/yum.repos.d/
2 [root@localhost ~]# wget http://mirrors.163.com/.help/CentOS6-Base-163.repo
```

2、备份并替换repo文件

```
1 [root@localhost ~]# mv CentOS-Base.repo CentOS-Base.repo.bak
2 [root@localhost ~]# mv CentOS6-Base-163.repo CentOS-Base.repo
```

3、执行yum源更新命令

```
1 [root@localhost ~]# yum clean all
2 root@localhost ~]# yum makecache
3 [root@localhost ~]# yum update
```

4、导入GPG KEY

yum 可以使用ggpg 对包进行校验，确保下载包的完整性，所以我们先要到每个repository 站点找到ggp key(由于我们使用的是163 的，可以在163官网下下然然后导入即可，下图)，一般都会放在首页的醒目位置，一些名字诸如RPM-GPG-KEY-CentOS-5 之类的纯文本文件，把它们下载下来，然后使用rpm -import RPM-GPG-KEY-CentOS-6 命令将key 导入



```
1 [root@localhost yum.repos.d]# wget http://mirrors.163.com/centos/RPM-GPG-KEY-CentOS-6
2 -2015-12-24 13:59:16-- http://mirrors.163.com/centos/RPM-GPG-KEY-CentOS-6
3 Resolving mirrors.163.com... 123.58.173.105, 123.58.173.186
4 Connecting to mirrors.163.com [123.58.173.105]: 80... connected.
5 HTTP request sent, awaiting response... 200 OK
6 Length: 1706 (1.7K) [application/octet-stream]
7 Saving to: "/RPM-GPG-KEY-CentOS-6"
8 [123.58.173.105:80] 100% [193.1.193.67] 100%
9 2015-12-24 13:59:23 (118 MB/s) - "RPM-GPG-KEY-CentOS-6" saved [1706/1706]
10 [root@localhost yum.repos.d]# rpm --import RPM-GPG-KEY-CentOS-6
11 [root@localhost yum.repos.d]#
```

或者直接把该文件复制到/etc/pki/rpm-gpg 目录下即可

```
1 [root@localhost yum.repos.d]# cp RPM-GPG-KEY-CentOS-6 /etc/pki/rpm-gpg/
```

备注：以下是相关的配置文件的解释

```
1 [root@localhost yum.repos.d]# more CentOS-Base.repo
2 # CentOS-Base.repo
3 #
4 # The mirror system uses the connecting IP address of the client and the
5 # update statstic of each mirror to choose the mirrors that are updated to and
6 # geographically close to the client. You should use this for CentOS updates
7 # unless you are manually picking other mirrors.
8 #
9 # If the mirrorlist does not work for you, as a fall back you can try the
10 # baselinked baseurl= line instead.
11 #
12 [base]
13 name=CentOS-$releasever - Base - 163.com
14 baseurl=http://mirrors.163.com/centos/$releasever/$basearch/
15 mirrorlist=http://mirrorlist.centos.org/?release=$releasever&arch=$basearch&repo=base
16 gpgcheck=1
17 gpgkey=http://mirror.centos.org/centos/RPM-GPG-KEY-CentOS-6
18 [updates]
19 name=CentOS-$releasever - Updates - 163.com
20 baseurl=http://mirrors.163.com/centos/$releasever/updates/$basearch/
21 mirrorlist=http://mirrorlist.centos.org/?release=$releasever&arch=$basearch&repo=updates
22 gpgkey=http://mirror.centos.org/centos/RPM-GPG-KEY-CentOS-6
23 #additional packages that may be useful
24 [extras]
25 name=CentOS-$releasever - Extras - 163.com
26 baseurl=http://mirrors.163.com/centos/$releasever/extras/$basearch/
27 mirrorlist=http://mirrorlist.centos.org/?release=$releasever&arch=$basearch&repo=extras
28 gpgcheck=1
29 gpgkey=http://mirror.centos.org/centos/RPM-GPG-KEY-CentOS-6
30 #additional packages that extend functionality of existing packages
31 [centosplus]
32 name=CentOS-$releasever - Plus - 163.com
33 baseurl=http://mirrors.163.com/centos/$releasever/centosplus/$basearch/
34 mirrorlist=http://mirrorlist.centos.org/?release=$releasever&arch=$basearch&repo=centosplus
35 gpgcheck=1
36 gpgkey=http://mirror.centos.org/centos/RPM-GPG-KEY-CentOS-6
37 #contrib - packages by CentOS Users
38 [contrib]
39 name=CentOS-$releasever - Contrib - 163.com
40 baseurl=http://mirrors.163.com/centos/$releasever/contrib/$basearch/
41 mirrorlist=http://mirrorlist.centos.org/?release=$releasever&arch=$basearch&repo=contrib
42 gpgcheck=1
43 enabled=0
44 gpgkey=http://mirror.centos.org/centos/RPM-GPG-KEY-CentOS-6
```

- \$releasever：代表发行版的版本，从[main]部分的distroverpkg 获取，如果没有，则根据redhat-release包进行判断。
- \$arch：cpu体系，如i686.athlon等
- \$basearch：cpu的基本体系组，如i686和athlon同属i386，alpha和alphaev6同属alpha。

其他国内yum源列表如下：

- 企业内网：
- 搜狐开源镜像站：<http://mirrors.sohu.com/>
- 网易开源镜像站：<http://mirrors.163.com/>

- 2、大学教学：
- 北京理工大学：<http://mirror.bit.edu.cn/> (IPv4 only)
- <http://mirror.bnu.edu.cn/> (IPv6 only)
- 北京交通大学：<http://mirror.bjtu.edu.cn/> (IPv4 only)
- <http://mirror6.bjtu.edu.cn/> (IPv6 only)
- <http://debian.bjtu.edu.cn/> (IPv4+IPv6)

- 兰州大学：<http://mirror.lzu.edu.cn/>
- 厦门大学：<http://mirrors.xmu.edu.cn/>
- 清华大学：<http://mirrors.tuna.tsinghua.edu.cn/> (IPv4+IPv6)
- <http://mirrors6.tuna.tsinghua.edu.cn/> (IPv6 only)
- <http://mirrors4.tuna.tsinghua.edu.cn/> (IPv4 only)

- 天盾大学：<http://mirror.tju.edu.cn/>
- 中国科学技术大学：<http://mirrors.ustc.edu.cn/> (IPv4+IPv6)
- <http://mirrors6.ustc.edu.cn/>

- 东北大学：<http://mirror.neu.edu.cn/> (IPv4 only)
- <http://mirror.neu6.edu.cn/> (IPv6 only)

电子科技大学：<http://ubuntu.uestc.edu.cn/>

## (五) 使用第三方软件库

Centos/RHEL默认yum的软件仓库非常有限，仅仅限于发行版本那张纸里面的常规包和一些软件包的更新，利用RpmForge，可以增加非常多的第三方rpm软件包。RpmForge现在已经有超过10000种的Centos的软件包，被Centos社区认为是最安全也是最稳定的第三方软件库。

1、安装yum-priorities插件

这个插件是用来设置yum在调用软件源时的顺序的，因为官方提供的软件源，都是比较稳定和推荐使用的，因此，官方源的顺序要高于第三方的顺序，如何保证这个顺序，就需要安装yum-priorities这个插件了。

```
1 [root@localhost yum.repos.d]# yum install yum-priorities
2 Loaded plugins: fastestmirror
3 Setting up Install Process
4 Loading mirror speeds from cached hostfile
5 Resolving Dependencies
6 --> Running transaction check
7 ---> Package yum-plugin-priorities.noarch 0:1.1.30-0.el6 will be installed
8 ---> Finished Dependency Resolution
9 Dependencies Resolved
10
11 =====
12 Package Arch Version Repository
13 Installing:
14 yum-plugin-priorities noarch 1.1.30-0.el6 base
15 Transaction Summary
16 =====
17 Install 1 Package(s)
18 Total download size: 25 k
19 Installed size: 28 k
20 Is this ok [y/N]: y
21 Downloading Packages:
22 yum-plugin-priorities-1.1.30-0.el6.noarch.rpm | 25 kB
23 Running rpm_check_debug
24 Running Transaction Test
25 Transaction Test Succeeded
26 Running Transaction
27 Installing : yum-plugin-priorities-1.1.30-0.el6.noarch
28 Verifying : yum-plugin-priorities-1.1.30-0.el6.noarch
29 Complete!
30 yum-plugin-priorities.noarch 0:1.1.30-0.el6
31 Complete!
32 [root@localhost yum.repos.d]#
```

2、安装yum-priorities 插件后需要设置/etc/yum.repos.d/ 目录下的.repo相关文件（如CentOS-Base.repo），在这些文件中插入顺序指令@: priority=N (N为1到99的正整数，数值越小越优先)

一般配置[base],[addons],[updates],[extras]的priority=1,[CentOSplus],[contrib]的priority=2，其他第三方的软件源为：priority=N (推荐N>10)

以CentOS-Base.repo 为例：

```
[base]
name=CentOS-$releasever - Base - 163.com
mirrorlist=http://mirrorlist.centos.org/?release=$releasever&arch=$basearch&repo=base
baseurl=http://ftp.ustc.edu.cn/centos/$releasever/os/$basearch/
gpgcheck=1
gpgkey=file:///etc/pki/rpm-gpg/RPM-GPG-KEY-CentOS-6
priority=1
```

3、下载与安装相应rpmforge的rpm文件包

# wget <http://pkgs.repoforge.org/rpmforge-release/rpmforge-release-0.5.2-2.el5.rf.i386.rpm>

```
1 [root@localhost yum.repos.d]# wget http://pkgs.repoforge.org/rpmforge-release/rpmforge-release-0.5.2-2.el5.rf.i386.rpm
2 Resolving tree.repoforge.org... 78.46.17.228
3 Connecting to tree.repoforge.org [78.46.17.228]: 80... connected.
4 HTTP request sent, awaiting response... 301 Moved Permanently
5 Location: http://apt.sw.be/redhat/el5/en/i386/rpmforge/RPMS/rpmforge-release-0.5.2-2.el5.rf.i386.rpm
6 Resolving apt.sw.be... 193.1.193.67
7 Connecting to apt.sw.be [193.1.193.67]: 80... connected.
8 HTTP request sent, awaiting response... 200 OK
9 Length: 12680 (12K) [application/x-redhat-package-manager]
10 Saving to: "/rpmforge-release-0.5.2-2.el5.rf.i386.rpm"
11 [193.1.193.67:80] 100% [12.680 MB/s]
12 2015-12-24 14:28:26 (400 MB/s) - "rpmforge-release-0.5.2-2.el5.rf.i386.rpm" saved [12680/12680]
13 [root@localhost yum.repos.d]# ll
14 total 48
15 -rw-r--r-- 1 root root 2017 Dec 24 14:21 CentOS-Base.repo
16 -rw-r--r-- 1 root root 18268 Dec 24 14:51 device-mapper-event-1.02.79-8.el6.x86_64.rpm
17 -rw-r--r-- 1 root root 647 Aug 4 00:13 CentOS-Debuginfo.repo
18 -rw-r--r-- 1 root root 289 Aug 4 00:13 CentOS-Fasttrack.repo
19 -rw-r--r-- 1 root root 641 Dec 24 14:22 CentOS-Media.repo
20 -rw-r--r-- 1 root root 6259 Aug 4 00:13 CentOS-Vault.repo
21 -rw-r--r-- 1 root root 12680 Nov 13 2010 rpmforge-release-0.5.2-2.el5.rf.i386.rpm
22 -rw-r--r-- 1 root root 1706 Jul 10 2011 RPM-GPG-KEY-CentOS-6
```

4、安装DAG的GPG Key

```
# rpm -import http://apt.sw.be/RPM-GPG-KEY.dag.txt
1 [root@localhost yum.repos.d]# rpm --import http://apt.sw.be/RPM-GPG-KEY.dag.txt
2 [root@localhost yum.repos.d]#
```

5、验证rpmforge的rpm文件包

```
# rpm -K rpmforge-release-0.5.2-2.el5.rf.*.rpm
1 [root@localhost yum.repos.d]# rpm -K rpmforge-release-0.5.2-2.el5.rf.i386.rpm
2 rpmforge-release-0.5.2-2.el5.rf.i386.rpm: (sha1) dsa sha1 md5 gpg OK
3 [root@localhost yum.repos.d]#
```

6、安装rpmforge的rpm文件包

```
# rpm -i rpmforge-release-0.5.2-2.el5.rf.i386.rpm
1 [root@localhost yum.repos.d]# rpm -i rpmforge-release-0.5.2-2.el5.rf.i386.rpm
2 [root@localhost yum.repos.d]#
```

7、设置/etc/yum.repos.d/rpmforge.repo文件中需要的选项

```
1 [root@localhost yum.repos.d]# cat /etc/yum.repos.d/rpmforge.repo
2 ## Name: RPMforge RPM Repository for RHEL 5 - dag
3 baseurl=http://rpmforge.net/
4 [rpmforge]
5 name = RHEL $releasever - RPMforge.net - $basearch/rpmforge
6 mirrorlist = http://apt.sw.be/redhat/el5/en/$basearch/rpmforge
7 mirrorlist = file:///etc/yum.repos.d/mirrors-rpmforge
8 enabled=1
9 protect = 0
10 gpgkey = file:///etc/pki/rpm-gpg/RPM-GPG-KEY-rpmforge-dag
11 gpgcheck = 1
12 [rpmforge-testing]
13 name = RHEL $releasever - RPMforge.net - testing
14 baseurl = http://apt.sw.be/redhat/el5/en/$basearch/testing
15 mirrorlist = http://apt.sw.be/redhat/el5/en/mirrors-rpmforge-testing
16 mirrorlist = file:///etc/yum.repos.d/mirrors-rpmforge-testing
17 enabled = 0
18 protect = 0
19 gpgkey = file:///etc/pki/rpm-gpg/RPM-GPG-KEY-rpmforge-dag
20 gpgcheck = 1
21 [root@localhost yum.repos.d]#
```

8、测试安装

```
# yum install http
1 [root@localhost yum.repos.d]# yum install http
2 Loaded plugins: fastestmirror, priorities
3 Setting up Install Process
4 Loading mirror speeds from cached hostfile
5 * rpmforge: ftp.riken.jp
6 rpmforge/primary_db
7 Resolving Dependencies
8 --> Running transaction check
9 ---> Package http.x86_64 0:1.0.3-1.el5.rf will be installed
10 --> Finished Dependency Resolution
11 Dependencies Resolved
12
13 =====
14 Package Arch Version Repository
15 Installing:
16 http.x86_64 x86_64 1.0.3-1.el5.rf rpmforge
17 Transaction Summary
18 =====
19 Install 1 Package(s)
20 Total download size: 97 k
21 Installed size: 207 k
22 Is this ok [y/N]: y
23 Downloading Packages:
24 http-1.0.3-1.el5.rf.x86_64.rpm | 97 kB
25 Running rpm_check_debug
26 Running Transaction Test
27 Transaction Test Succeeded
28 Running Transaction
29 Warning: RPMDB altered outside of yum.
30 Installing : http-1.0.3-1.el5.rf.x86_64
31 Verifying : http-1.0.3-1.el5.rf.x86_64
32 Installed:
33 http.x86_64 0:1.0.3-1.el5.rf
34 Complete!
35 [root@localhost yum.repos.d]#
```

## (六) yum自建仓库

1、准备材料：N个rpm包，比如我把CENTOS安装镜像中的Packages目录复制制到指定的目录

```
1 [root@localhost Packages]# mkdir /home/repo/
2 [root@localhost Packages]# cp de* /home/repo/
3 [root@localhost Packages]# ll /home/repo/
4 total 3284
5 -r--r--r-- 1 root root 168376 Dec 24 14:51 device-mapper-1.02.79-8.el6.x86_64.rpm
6 -r--r--r-- 1 root root 118268 Dec 24 14:51 device-mapper-event-1.02.79-8.el6.x86_64.rpm
7 -r--r--r-- 1 root root 199876 Dec 24 14:51 device-mapper-event-libs-1.02.79-8.el6.x86_64.rpm
8 -r--r--r-- 1 root root 118840 Dec 24 14:51 device-mapper-multipath-0.4.9-72.el6.x86_64.rpm
9 -r--r--r-- 1 root root 184716 Dec 24 14:51 device-mapper-multipath-libs-0.4.9-72.el6.x86_64.rpm
10 -r--r--r-- 1 root root 2444328 Dec 24 14:51 device-mapper-persistent-data-0.2.8-2.el6.x86_64.rpm
11 [root@localhost Packages]#
```

2、安装createrepo

```
1 [root@localhost yum.repos.d]# yum createrepo -o /home/repo/ /home/repo/
```

3、使用createrepo命令创建yum仓库

```
1 [root@localhost Packages]# createrepo -o /home/repo/ /home/repo/ #####-o用于指定repository的目录
2 Spawning worker 0 with 7 pkgs
3 Workers Finished
4 Gathering worker results
5 Saving Primary metadata
6 Saving file list metadata
7 Saving other metadata
8 Generating sqlite DBs
9 Sqlite DBs complete
10 [root@localhost Packages]# ll /home/repo/
11 total 3288
12 -r--r--r-- 1 root root 168376 Dec 24 14:51 device-mapper-1.02.79-8.el6.x86_64.rpm
13 -r--r--r-- 1 root root 118268 Dec 24 14:51 device-mapper-event-1.02.79-8.el6.x86_64.rpm
14 -r--r--r-- 1 root root 118840 Dec 24 14:51 device-mapper-event-libs-1.02.79-8.el6.x86_64.rpm
15 -r--r--r-- 1 root root 199876 Dec 24 14:51 device-mapper-event-libs-1.02.79-8.el6.x86_64.rpm
16 -r--r--r-- 1 root root 118840 Dec 24 14:51 device-mapper-multipath-0.4.9-72.el6.x86_64.rpm
17 -r--r--r-- 1 root root 184716 Dec 24 14:51 device-mapper-multipath-libs-0.4.9-72.el6.x86_64.rpm
18 -r--r--r-- 1 root root 2444328 Dec 24 14:51 device-mapper-persistent-data-0.2.8-2.el6.x86_64.rpm
19 -r--r--r-- 2 root root 4096 Dec 24 14:55 repodata
20 [root@localhost Packages]#
```

3、使用yum创建yum repo文件

```
1 [root@localhost yum.repos.d]# vim CentOS-Myl.repo
2 [local]
3 baseurl=http://192.168.1.100/#####指定yum源名
4 baseurl=file:///home/repo/#####指定URL或使用file:///指定本地路径，注意“/”的数量；
5 gpgcheck=0#####不验证来源及package的完整性（由于是本地的文件）
6 enabled=1#####启用此yum源
```

4、清除缓存，并重新构建yum缓存

```
1 [root@localhost yum.repos.d]# yum clean all #####清除yum缓存
2 Loaded plugins: fastestmirror, priorities
3 Cleaning repos: base extras local rpmforge updates
4 Cleaning up Everything
5 Cleaning up list of fastest mirrors
6 Determining fastest mirrors
7 * rpmforge: mirror-ftp-telecom.ftp.net
8 base
9 base/primary_db
10 extras
11 extras/primary_db
12 rpmforge
13 rpmforge/primary_db
14 updates
15 updates/primary_db
16 repo id
17 repo name
18 CentOS-6 - Base - 163.com
19 CentOS-6 - Extras - 163.com
20 local
21 rpmforge
22 rpmforge-testing
23 rpmforge-testing
24 rpmforge-testing
25 rpmforge-testing
26 rpmforge-testing
27 rpmforge-testing
28 rpmforge-testing
29 rpmforge-testing
30 rpmforge-testing
31 rpmforge-testing
32 rpmforge-testing
33 rpmforge-testing
34 rpmforge-testing
35 rpmforge-testing
36 rpmforge-testing
37 rpmforge-testing
38 rpmforge-testing
39 rpmforge-testing
40 rpmforge-testing
41 rpmforge-testing
42 rpmforge-testing
43 rpmforge-testing
44 rpmforge-testing
45 rpmforge-testing
46 rpmforge-testing
47 rpmforge-testing
48 rpmforge-testing
49 rpmforge-testing
50 rpmforge-testing
51 rpmforge-testing
52 rpmforge-testing
53 rpmforge-testing
54 rpmforge-testing
55 rpmforge-testing
56 rpmforge-testing
57 rpmforge-testing
58 rpmforge-testing
59 rpmforge-testing
60 rpmforge-testing
61 rpmforge-testing
62 rpmforge-testing
63 rpmforge-testing
64 rpmforge-testing
65 rpmforge-testing
66 rpmforge-testing
67 rpmforge-testing
68 rpmforge-testing
69 rpmforge-testing
70 rpmforge-testing
71 rpmforge-testing
72 rpmforge-testing
73 rpmforge-testing
74 rpmforge-testing
75 rpmforge-testing
76 rpmforge-testing
77 rpmforge-testing
78 rpmforge-testing
79 rpmforge-testing
80 rpmforge-testing
81 rpmforge-testing
82 rpmforge-testing
83 rpmforge-testing
84 rpmforge-testing
85 rpmforge-testing
86 rpmforge-testing
87 rpmforge-testing
88 rpmforge-testing
89 rpmforge-testing
90 rpmforge-testing
91 rpmforge-testing
92 rpmforge-testing
93 rpmforge-testing
94 rpmforge-testing
95 rpmforge-testing
96 rpmforge-testing
97 rpmforge-testing
98 rpmforge-testing
99 rpmforge-testing
100 rpmforge-testing
```

备注：yum 常用的操作：