# yum网络源的搭建

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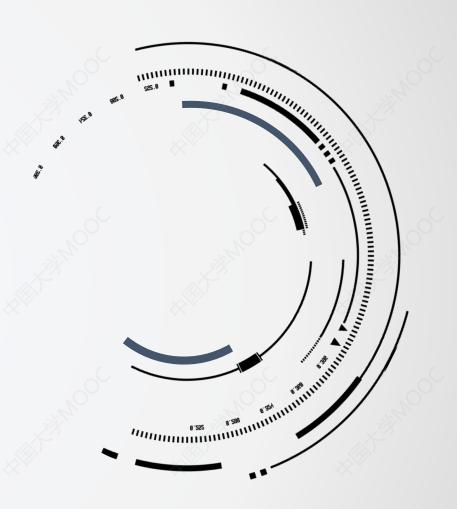
### 任务引入

yum在线安装软件: 联网!



yum网络源!







# 网络源的简介

常州信息敬業技術学院

yum本地源:只有本机可用

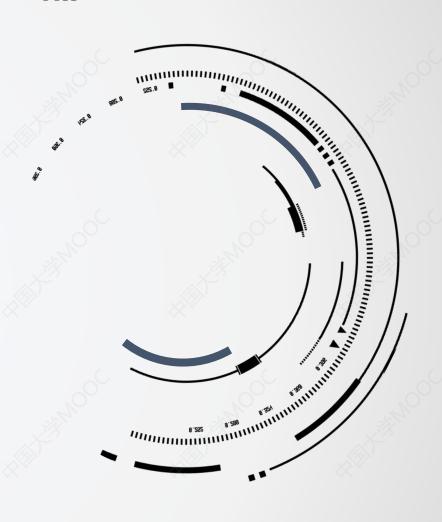
yum网络源:只要联网的Linux操作系统服务器都可使用

◆ 确保: 联网!

◆ 默认配置文件: CentOS-Base.repo

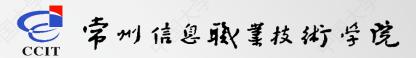
◆ 常用的国内yum网络源:

阿里云yum源、网易163yum源、清华大学yum源、中科大yum源。





### 网络源搭建步骤



搭建yum网络源,主要步骤:

1. 联网测试

2. 修改yum网络源配置文件

3. 测试验证



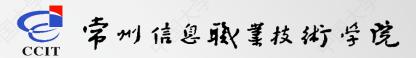


```
[root@ccit ~]# ping www.baidu.com
PING www.a.shifen.com (180.101.49.12) 56(84) bytes of data.
64 bytes from 180.101.49.12 (180.101.49.12): icmp_seq=1 ttl=128 time=7.54 ms
64 bytes from 180.101.49.12 (180.101.49.12): icmp_seq=2 ttl=128 time=7.92 ms
64 bytes from 180.101.49.12 (180.101.49.12): icmp_seq=3 ttl=128 time=7.55 ms
64 bytes from 180.101.49.12 (180.101.49.12): icmp_seq=4 ttl=128 time=6.74 ms
^C
--- www.a.shifen.com ping statistics ---
4 packets transmitted, 4 received, 0% packet loss, time 3005ms
rtt min/avg/max/mdev = 6.741/7.440/7.924/0.444 ms
```

ping百度,确认是否处于<mark>联网</mark>状态!



### 修改yum网络源配置文件



yum网络源配置文件修改,主要有两种常用方式:

- wget下载yum网络源配置文件,替代原yum网络源配置文件CentOS-Base.repo。
  - 1. 安装wget工具: yum install wget
  - 2. wget命令用于下载文件, 其语法格式为: wget [选项] [URL]
- 下载网易163的yum源配置文件: wget <a href="http://mirrors.163.com/.help/CentOS7-Base-163.repo">http://mirrors.163.com/.help/CentOS7-Base-163.repo</a>
- 下载网易163的yum源配置文件,将该文件保存到指定目录并重新命名:
- wget -O /etc/yum.repos.d/CentOS-Base.repo http://mirrors.163.com/.help/CentOS7-Base-163.repo
  - 2 手动修改yum网络源配置文件。



# 使用wget下载repo文件



1. 将/etc/yum.repos.d目录下的CentOS-Base.repo文件移动或重命名

```
[root@ccit yum.repos.d]# ll
total 32
-rw-r--r-. 1 root root 1664 Apr 29 2018 CentOS-Base.repo
-rw-r--r-. 1 root root 1309 Apr 29 2018 CentOS-CR.repo
-rw-r--r-. 1 root root 649 Apr 29 2018 CentOS-Debuginfo.repo
-rw-r--r. 1 root root 314 Apr 29 2018 Cent0S-fasttrack.repo
-rw-r--r-- 1 root root 630 Nov 2 12:40 CentOS-Media.repo
-rw-r--r. 1 root root 1331 Apr 29 2018 CentOS-Sources.repo
-rw-r--r-- 1 root root 4768 Apr 29 2018 CentOS-Vault.repo
[root@ccit yum.repos.d]# mv CentOS-Base.repo CentOS-Base.repo.bak
[root@ccit yum.repos.d]# ll
total 32
-rw-r--r-. 1 root root 1664 Apr 29 2018 CentOS-Base.repo.bak
-rw-r--r-. 1 root root 1309 Apr 29 2018 CentOS-CR.repo
-rw-r--r-. 1 root root 649 Apr 29 2018 CentOS-Debuginfo.repo
-rw-r--r. 1 root root 314 Apr 29 2018 CentOS-fasttrack.repo
-rw-r--r-- 1 root root 630 Nov 2 12:40 CentOS-Media.repo
-rw-r--r. 1 root root 1331 Apr 29 2018 CentOS-Sources.repo
-rw-r--r--. 1 root root 4768 Apr 29 2018 Cent0S-Vault.repo
```



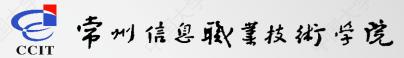
# 使用wget下载repo文件



#### 2. 以阿里云yum源为例



# 查看repo文件

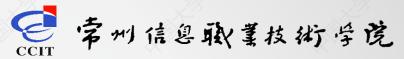


#### 3. 查看yum网络源配置文件

```
[base]
name=CentOS-$releasever - Base - mirrors.aliyun.com
failovermethod=priority
baseurl=http://mirrors.aliyun.com/centos/$releasever/os/$basearch/
        http://mirrors.aliyuncs.com/centos/$releasever/os/$basearch/
        http://mirrors.cloud.aliyuncs.com/centos/$releasever/os/$basearch/
gpgcheck=1
gpgkey=http://mirrors.aliyun.com/centos/RPM-GPG-KEY-CentOS-7
#released updates
[updates]
name=CentOS-$releasever - Updates - mirrors.aliyun.com
failovermethod=priority
baseurl=http://mirrors.aliyun.com/centos/$releasever/updates/$basearch/
        http://mirrors.aliyuncs.com/centos/$releasever/updates/$basearch/
        http://mirrors.cloud.aliyuncs.com/centos/$releasever/updates/$basearch/
gpgcheck=1
gpgkey=http://mirrors.aliyun.com/centos/RPM-GPG-KEY-CentOS-7
```



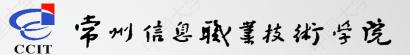
### 手动修改yum网络源配置文件











#### 1. 使用yum repolist命令查看现在使用的yum源列表

[root@ccit yum.repos.d]# yum repolist

Loaded plugins: fastestmirror

Loading mirror speeds from cached hostfile

\* base: mirrors.aliyun.com \* extras: mirrors.aliyun.com \* updates: mirrors.aliyun.com

repo ia repo name

status !base/7/x86\_64 CentOS-7 - Base - mirrors.aliyun.com 10,072 !extras/7/x86\_64 CentOS-7 - Extras - mirrors.aliyun.com 448 !updates/7/x86\_64 CentOS-7 - Updates - mirrors.aliyun.com 778

repolist:  $11,2\overline{9}8$ 



# 测试验证



2. 使用yum install命令,尝试安装一个软件,看是否能安装成功

[root@ccit yum.repos.d]# yum -y install epel-release

Running transaction

Installing : epel-release-7-11.noarch
Verifying : epel-release-7-11.noarch

Installed:

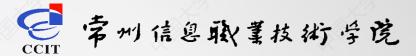
epel-release.noarch 0:7-11

#### Complete!

注意: yum安装前,

- 1. 执行yum clean all, 清除所有缓存(以免受之前yum源的影响)!
- 2. 执行yum makecache, 生成缓存 (此命令可选, 提高软件安装速度)。





# 操作演示

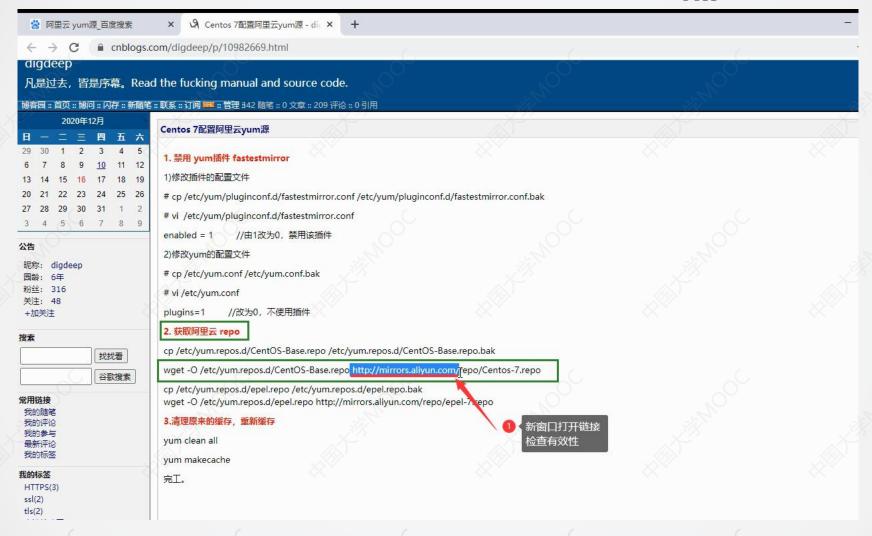










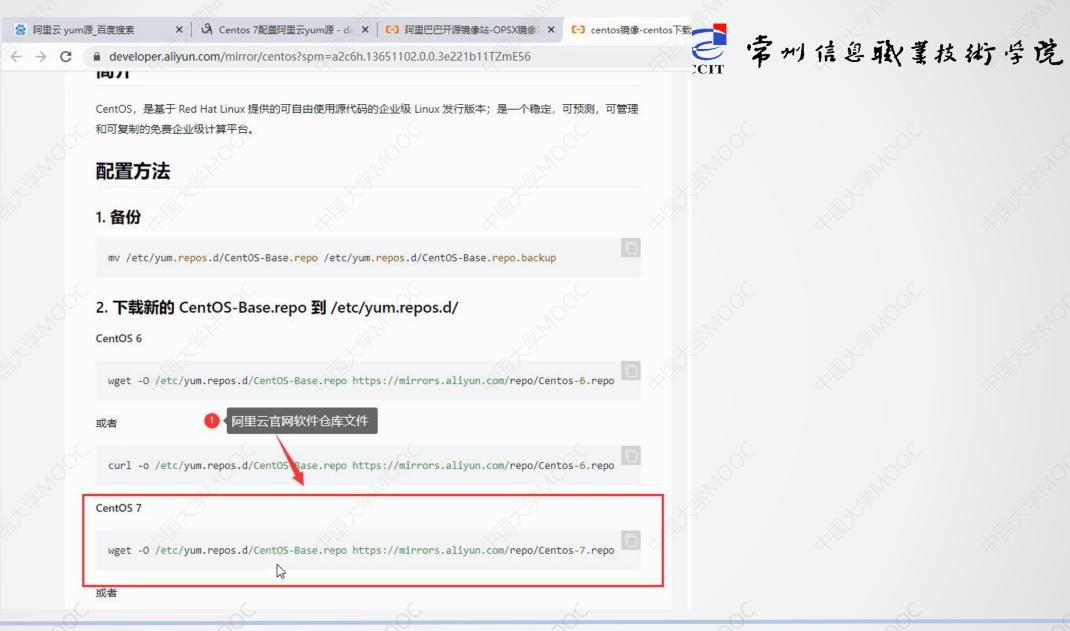


















wget -0 /etc/yum.repos.d/CentOS-Base.repo https://mirrors.aliyun.com/repo/Centos-7.repo



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CentOS 7

或者

```
[root@ccit ~]# ping www.baidu.com
PING www.a.shifen.com (180.101.49.11) 56(84) bytes of data.
64 bytes from 180.101.49.11 (180.101.49.11): icmp seq=1 ttl=128 time=8.41 ms
64 bytes from 180.101.49.11 (180.101.49.11): icmp_seq=2 ttl=128 time=7.37 ms
64 bytes from 180.101.49.11 (180.101.49.11): icmp_seq=3 ttl=128 time=8.02 ms
--- www.a.shifen.com ping statistics ---
3 packets transmitted, 3 received, 0% packet loss, time 2004ms
rtt min/avg/max/mdev = 7.378/7.936/8.410/0.431 ms
[root@ccit ~]# cd /etc/yum.repos.d/ ① 进入软件仓库配置文件目录
[root@ccit yum.repos.d]# ll
total 32
-rw-r--r-. 1 root root 1664 Apr 29 2018 CentOS-Base.repo
-rw-r--r--. 1 root root 1309 Apr 29 2018 Cent0S-CR.repo
-rw-r--r-. 1 root root 649 Apr 29 2018 CentOS-Debuginfo.repo
-rw-r--r-. 1 root root 314 Apr 29 2018 CentOS-fasttrack.repo
-rw-r--r-- 1 root root 630 Nov 2 12:40 CentOS-Media.repo
-rw-r--r--. 1 root root 1331 Apr 29 2018 CentOS-Sources.repo
-rw-r--r-. 1 root root 4768 Apr 29 2018 CentOS-Vault.repo
[root@ccit yum.repos.d]# mv CentOS-Base.repo CentOS-Base.repo.bak
[root@ccit yum.repos.d]#
```



```
-rw-r--r-. 1 root root 1309 Apr 29 2018 CentOS-CR.repo
-rw-r--r-. 1 root root 649 Apr 29 2018 CentOS-Debuginfo.repo
-rw-r--r-. 1 root root 314 Apr 29 2018 CentOS-fasttrack.repo
-rw-r--r-. 1 root root 630 Nov 2 12:40 CentOS-Media.repo
-rw-r--r-. 1 root root 1331 Apr 29 2018 CentOS-Sources.repo
-rw-r--r-. 1 root root 4768 Apr 29 2018 CentOS-Vault.repo
[root@ccit yum.repos.d]# wget -0 /etc/yum.repos.d/CentOS-Base.repo https://mirrors.aliyun.com/rep
os-7.repo
--2020-12-16 22:20:13-- https://mirrors.aliyun.com/repo/Centos-7.repo
Resolving mirrors.aliyun (con载y um网络源文件 aliyun.com)... 61.147.223.243, 58.223.210.226, 58.215.158.2
Connecting to mirrors.aliyun.com (mirrors.aliyun.com) 61.147.223.243 :443... connected.
HTTP request sent, awaiting response... 200 OK
Length: 2523 (2.5K) [application/octet-stream]
Saving to: '/etc/yum.repos.d/CentOS-Base.repo'
                                                                               --.-K/s
                                                                                         in Os
2020-12-16 22:20:13 (318 MB/s) - ' /etc/yum.repos.d/CentOS-Base.repo'
                                                                     saved [2523/2523]
[root@ccit yum.repos.d]#
仅将文本发送到当前洗项卡
```

已连接 192.168.200.100:22。

```
Connecting to mirrors.aliyun.com (mirrors.aliyun.com) | 61.147.223.243 | :443... connected.
HTTP request sent, awaiting response... 200 OK
Length: 2523 (2.5K) [application/octet-stream]
Saving to: '/etc/yum.repos.d/CentOS-Base.repo'
                                                                                --.-K/s
                                                                                         in Os
2020-12-16 22:20:13 (318 MB/s) - ' /etc/yum.repos.d/CentOS-Base.repo' saved [2523/2523]
[root@ccit yum.repos.d]# ll
total 36
                                                                已经下载CentOS-Base文件
-rw-r--r-. 1 root root 2523 Jun 16 2018 CentOS-Base.repo
-rw-r--r-. 1 root root 1664 Apr 29 2018 CentOS-Base.repo.bak
-rw-r--r-. 1 root root 1309 Apr 29 2018 CentOS-CR.repo
-rw-r--r-. 1 root root 649 Apr 29 2018 CentOS-Debuginfo.repo
-rw-r--r-. 1 root root 314 Apr 29 2018 CentOS-fasttrack.repo
-rw-r--r-. 1 root root 630 Nov 2 12:40 CentOS-Media.repo
-rw-r--r-. 1 root root 1331 Apr 29 2018 CentOS-Sources.repo
-rw-r--r-. 1 root root 4768 Apr 29 2018 CentOS-Vault.repo
[root@ccit yum.repos.d]# vi CentOS-Base.repo
```

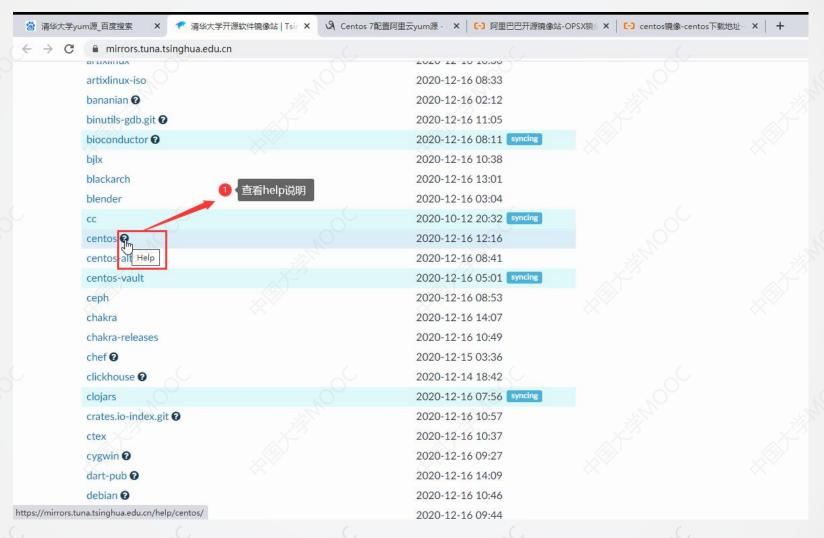
仅将文本发送到当前洗顶-



```
# CentOS-Base.repo
# The mirror system uses the connecting IP address of the client and the
# update status of each mirror to pick mirrors that are updated to and
# geographically close to the client. You should use this for CentOS updates
# unless you are manually picking other mirrors.
# If the mirrorlist= does not work for you, as a fall back you can try the
# remarked out baseurl= line instead.
                                  baseurl地址已指向阿里云地址
[base]
name=CentOS-$releasever - Base - mirrors.aliyun.com
failovermethod=priority
baseurl=http://mirrors.aliyun.com/centos/$releasever/os/$basearch/
        http://mirrors.aliyuncs.com/centos/$releasever/os/$basearch/
        http://mirrors.cloud.aliyuncs.com/centos/$releasever/os/$basearch/
apacheck=1
gpgkey=http://mirrors.aliyun.com/centos/RPM-GPG-KEY-CentOS-7
```





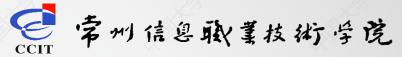
















```
gpgkey=file:///etc/pki/rpm-gpg/RPM-GPG-KEY-CentOS-7
#additional packages that may be useful
                    【添加#,表示注释
[extras]
name=CentOS-$releasever - Extras
#mirrorlist=http://mirrorlist.centos.org/?release=$releasever&arch=$basearch&repo=extras&infra=$i
baseurl=http://mirror.centos.org/centos/$releasever/extras/$basearch/
gpgcheck=1
gpgkey=file:///etc/pki/rpm-gpg/RPM-GPG-KEY-CentOS-7
#additional pickages that extend functionality of existing packages
[centosplus]
               2 删除#,表示启用该链接
name=CentOS-$releasever - Plus
#mirrorlist=http://mirrorlist.centos.org/?release=$releasever&arch=$basearch&repo=centosplus&infr
ra
baseurl=http://mirror.centos.org/centos/$releasever/centosplus/$basearch/
apacheck=1
enabled=0
gpgkey=file:///etc/pki/rpm-gpg/RPM-GPG-KEY-CentOS-7
                                                                     把源文件中所有mirrors.centos.org
                                                                     替换为mirrors.tuna.tsinghua.edu.cn
:1,$s/mirror.centos.org/mirrors.tuna.tsinghua.edu.cn
```





```
-rw-r--r-. 1 root root 1664 Apr 29 2018 CentOS-Base.repo.bak
-rw-r--r--. 1 root root 1309 Apr 29 2018 CentOS-CR.repo
-rw-r--r-. 1 root root 649 Apr 29 2018 CentOS-Debuginfo.repo
-rw-r--r-. 1 root root 314 Apr 29 2018 CentOS-fasttrack.repo
-rw-r--r-. 1 root root 630 Nov 2 12:40 CentOS-Media.repo
-rw-r--r--. 1 root root 1331 Apr 29 2018 CentOS-Sources.repo
-rw-r--r-. 1 root root 4768 Apr 29 2018 CentOS-Vault.repo
[root@ccit yum.repos.d]# vi CentOS-Base.repo
[root@ccit yum.repos.d]# cp CentOS-Base.repo.bak CentOS-Base.repo
[root@ccit yum.repos.d]# ll
total 36
-rw-r--r-. 1 root root 1664 Apr 29 2018 CentOS-Base.repo.bak
-rw-r--r-. 1 root root 1309 Apr 29 2018 CentOS-CR.repo
-rw-r--r-. 1 root root 649 Apr 29 2018 CentOS-Debuginfo.repo
-rw-r--r-- 1 root root 314 Apr 29
                               2018 CentOS-fasttrack.repo
-rw-r--r-- 1 root root 630 Nov 2 12:40 CentOS-Media.repo
-rw-r--r-. 1 root root 1331 Apr 29 2018 CentOS-Sources.repo
-rw-r--r--. 1 root root 4768 Apr 29 2018 CentOS-Vault.repo
[root@ccit yum.repos.d]#
```



```
■ <u>1</u> ccit
gpgkey=file:///etc/pki/rpm-gpg/RPM-GPG-KEY-CentOS-7
#additional packages that may be useful
[extras]
name=CentOS-$releasever - Extras
#mirrorlist=http://mirrorlist.centos.org/?release=$releasever&arch=$basearch&repo=extras&infra=$i
baseurl=http://mirrors.tuna.tsinghua.edu.cn/centos/$releasever/extras/$basearch/
qpqcheck=1
gpgkey=file:///etc/pki/rpm-gpg/RPM-GPG-KEY-CentOS-7
#additional packages that extend functionality of existing packages
[centosplus]
name=CentOS-$releasever - Plus
#mirrorlist=http://mirrorlist.centos.org/?release=$releasever&arch=$basearch&repo=centosplus&infr
baseurl=http://mirrors.tuna.tsinghua.edu.cn/centos/$releasever/centosplus/$basearch/
gpgcheck=1
enabled=0
gpgkey=file:///etc/pki/rpm-gpg/RPM-GPG-KEY-CentOS-7
                                找到4个对应的地方已替换
4 substitutions on 4 lines
```



```
[base]
name=CentOS-$releasever - Base tsinghua
#mirrorlist=http://mirrorlist.centos.org/?release=$releasever&arch=$basearch&repo=os&infra=$infra
baseurl=http://mirrors.tuna.tsinghua.edu.cn/centos/$releasever/os/$basearch/
gpgcheck=1
gpgkey=file:///etc/pki/rpm-gpg/RPM-GPG-KEY-CentOS-7
#released updates
[updates]
name=CentOS-$releasever - Updates | tsinghua
#mirrorlist=http://mirrorlist.centos.org/?release=$releasever&arch=$basearch&repo=updates&infra=$
baseurl=http://mirrors.tuna.tsinghua.edu.cn/centos/$releasever/updates/$basearch/
gpgcheck=1
gpgkey=file:///etc/pki/rpm-gpg/RPM-GPG-KEY-CentOS-7
#additional packages that may be useful
[extras]
name=CentOS-$releasever - Extras
#mirrorlist=http://mirrorlist.centos.org/?release=$releasever&arch=$basearch&repo=extras&infra=$i
baseurl=http://mirrors.tuna.tsinghua.edu.cn/centos/$releasever/extras/$basearch/
-- INSERT --
```

仅将文本发送到当前选项卡

已连接 192.168.200.100:22。



-rw-r--r-. 1 root root 314 Apr 29 2018 CentOS-fasttrack.repo -rw-r--r-. 1 root root 630 Nov 2 12:40 CentOS-Media.repo -rw-r--r-. 1 root root 1331 Apr 29 2018 CentOS-Sources.repo -rw-r--r-. 1 root root 4768 Apr 29 2018 CentOS-Vault.repo [root@ccit yum.repos.d]# vi CentOS-Base.repo 角认为清华大学yun派 [root@ccit yum.repos.d]#\_yum repolist **1** 列出yum源列表 Loaded plugins: fastestmirror Loading mirror speeds from cached hostfile repo id repo name !base/7/x86 64 CentOS-7 - Base tsinghua !extras/7/x86 64 CentOS-7 - Extras tsinghua !updates/7/x86 64 CentOS-7 - Updates tsinghua repolist: 11,298 [root@ccit yum.repos.d]# yum clean all 63 Loaded plugins: fastestmirror Cleaning repos: base extras updates Cleaning up everything Maybe you want: rm -rf /var/cache/yum, to also free up space taken by orphaned data from disabled moved repos Cleaning up list of fastest mirrors [root@ccit yum.repos.d]# yum makecache

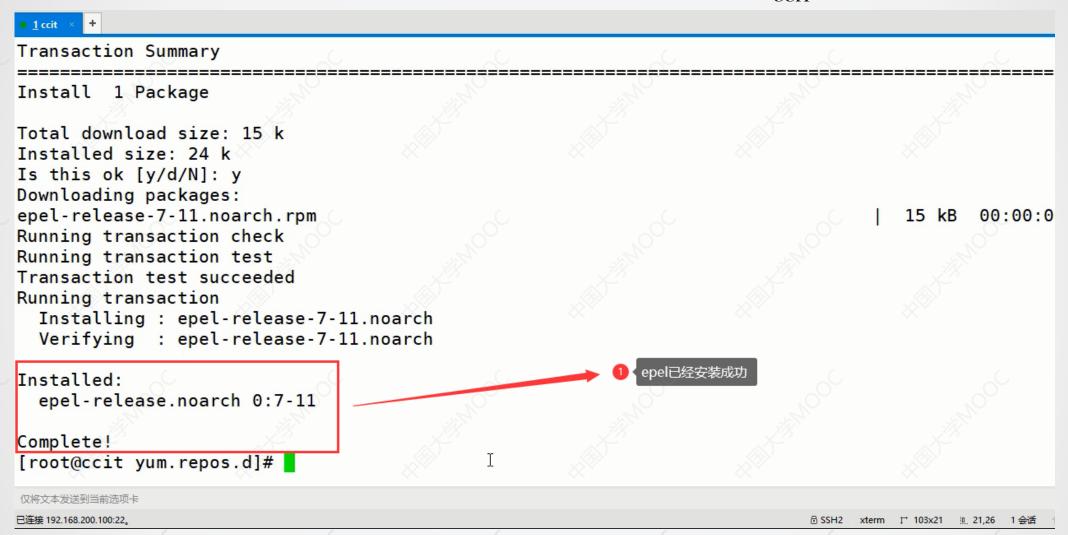




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• 1 ccit × +						
base				.	3.6 kB	00:00:0
extras				j	2.9 kB	00:00:0
updates				i O	2.9 kB	00:00:0
(1/10): base/7/	x86_64/group_gz				153 kB	00:00:0
	x86_64/primary_db			i X <sup>y</sup>	6.1 MB	00:00:0
(3/10): base/7/				į į	2.6 MB	00:00:0
	7/x86_64/primary_db			i X	222 kB	00:00:0
	7/x86_64/filelists_db	)		į	224 kB	00:00:0
	7/x86 64/other db			ĺ	134 kB	00:00:0
(7/10): base/7/	x86 64/filelists db			. C. İ	7.2 MB	00:00:0
(8/10): updates,	/7/x86_64/filelists_d	lb O		j	2.1 MB	00:00:0
	/7/x86 64/primary db				3.7 MB	00:00:0
(10/10): updates	s/7/x86 64/other db	_ 3%`		<i>39</i> 6	226 kB	00:00:0
Metadata Cache (	Created ① 《缓存已创题					
[root@ccit yum.	repos.d]# yum install	epel-release	② 安装yum扩展源			
Loaded plugins:	fastestmirror					
Loading mirror	speeds from cached ho	stfile				
Resolving Depend	dencies					
> Running tran	nsaction check					
> Package epe	el-release.noarch 0:7	'-11 will be i	nstalled			
-7/2		// I				
仅将文本发送到当前选项卡						
已连接 192.168.200.100:22。				⊕ SSH2 xterm	↑ 103x21 in.	21,1 1 会活

Linux基础人





# 感谢您的观看!

