



To Set a Network Repository Server on CentOS 7

To Set Up the Repository

- Here we are going to set in HTTP, so we need to install the httpd package first.

```
[root@linuxhelp ~]# yum install httpd -y
Loaded plugins: fastestmirror, langpacks
Loading mirror speeds from cached hostfile
* base: centos.excellmedia.net
* extras: centos.excellmedia.net
* updates: centos.excellmedia.net
Resolving Dependencies
--> Running transaction check
.
.
.
Installed:
  httpd.x86_64 0:2.4.6-40.el7.centos
Dependency Installed:
  apr.x86_64 0:1.4.8-3.el7      apr-util.x86_64 0:1.5.2-6.el7      httpd-tools.x86_64
0:2.4.6-40.el7.centos      mailcap.noarch 0:2.1.41-2.el7
Complete!
```

- Run the following command to create directory, for the repository server

```
[root@linuxhelp ~]# mkdir /var/www/html/centos
```

- Now initialize the database by installing createrepo

```
[root@linuxhelp ~]# yum install createrepo -y
Loaded plugins: fastestmirror, langpacks
Loading mirror speeds from cached hostfile
* base: centos.excellmedia.net
* extras: centos.excellmedia.net
* updates: centos.excellmedia.net
Resolving Dependencies
--> Running transaction check
.
.
.
Updated:
  createrepo.noarch 0:0.9.9-25.el7_2
Complete!
```

- Run the following command to start the database.

```
[root@linuxhelp ~]# createrepo /var/www/html/centos/
Saving Primary metadata
Saving file lists metadata
Saving other metadata
Generating sqlite DBs
Sqlite DBs complete
```

```
[root@linuxhelp ~]# ls -l /var/www/html/centos/
total 4
drwxr-xr-x. 2 root root 4096 Apr 27 17:44 repodata
[root@linuxhelp ~]# ls -l /var/www/html/centos/repodata/
total 28
-rw-r--r--. 1 root root 586 Apr 27 17:44
01a3b489a465bcac22a43492163df43451dc6ce47d27f66de289756b91635523-filelists.sqlite.bz2
-rw-r--r--. 1 root root 123 Apr 27 17:44
401dc19bda88c82c403423fb835844d64345f7e95f5b9835888189c03834cc93-filelists.xml.gz
```



```
-rw-r--r--. 1 root root 1131 Apr 27 17:44
5dc1e6e73c84803f059bb3065e684e56adfc289a7e398946574d79dac6643945-primary.sqlite.bz2
-rw-r--r--. 1 root root 123 Apr 27 17:44
6bf9672d0862e8ef8b8ff05a2fd0208a922b1f5978e6589d87944c88259cb670-other.xml.gz
-rw-r--r--. 1 root root 575 Apr 27 17:44
7c36572015e075add2b38b900837bcd8b8a504130ddff49b2351a7fc0affa3d4-other.sqlite.bz2
-rw-r--r--. 1 root root 134 Apr 27 17:44
dabe2ce5481d23de1f4f52bdcfee0f9af98316c9e0de2ce8123adeefa0dd08b9-primary.xml.gz
-rw-r--r--. 1 root root 2962 Apr 27 17:44 repomd.xml
```

To Upgrade the Repository

- To upgrade it via internet, go to the CentOS download mirror and choose any link.

<https://www.centos.org/download/mirrors/>

Now choose your Version. In my case its Version 7.

applications

Open the OS directory, choose the required architecture and copy the link to download to the newly created directory inside the server.

mirror list firefox web

Now use the rsync command to transfer the contents to newly created directory inside the server.

```
[root@linuxhelp ~]# rsync -avz rsync:mirror.fibergrid.in/centos/7/os/x86_64/ /var/www/html/centos/ -----
Fibergrid Open Source Projects Mirror Hyderabad, India ----- receiving incremental file list ./ .discinfo
.treeinfo . . EFI/BOOT/grubx64.efi EFI/BOOT/fonts/ EFI/BOOT/fonts/unicode.pf2 LiveOS/ LiveOS/squashfs.img Use the following
command to check the disk space after completing the download process. [root@linuxhelp ~]# du -sch /var/www/html/centos/*
4.0K /var/www/html/centos/CentOS_BuildTag 6.0M /var/www/html/centos/EFI 4.0K /var/www/html/centos/EULA 20K
/var/www/html/centos/GPL . . 4.0K /var/www/html/centos/RPM-GPG-KEY-CentOS-7 4.0K /var/www/html/centos/RPM-GPG-KEY-CentOS-
Testing-7 4.0K /var/www/html/centos/TRANS.TBL 4.0G total Repositories database needs to be updated. [root@linuxhelp ~]#
createrepo -update /var/www/html/centos/ Spawning worker 0 with 3538 pkgs Workers Finished Saving Primary metadata Saving
file lists metadata Saving other metadata Generating sqlite DBs Sqlite DBs complete Now start and enable the httpd service and
open the port for HTTP in firewall using the following commands. [root@linuxhelp ~]# systemctl start httpd [root@linuxhelp ~]#
systemctl enable httpd ln -s '/usr/lib/systemd/system/httpd.service' '/etc/systemd/system/multi-user.target.wants/httpd.service'
[root@linuxhelp ~]# systemctl status httpd httpd.service - The Apache HTTP Server Loaded: loaded
(/usr/lib/systemd/system/httpd.service; enabled) Active: active (running) since Wed 2016-04-27 18:44:24 IST; 3min 18s ago Docs:
man:httpd(8) man:apachectl(8) Main PID: 40790 (httpd) Status: "Total requests: 0; Current requests/sec: 0; Current traffic: 0 B/sec"
CGroup: /system.slice/httpd.service ??40790 /usr/sbin/httpd -DFOREGROUND ??40791 /usr/sbin/httpd -DFOREGROUND ??40792
/usr/sbin/httpd -DFOREGROUND ??40793 /usr/sbin/httpd -DFOREGROUND ??40794 /usr/sbin/httpd -DFOREGROUND ??40795
/usr/sbin/httpd -DFOREGROUND Apr 27 18:44:24 linuxhelp httpd[40790]: AH00557: httpd: apr_sockaddr_info_get() failed for
linuxhelp Apr 27 18:44:24 linuxhelp httpd[40790]: AH00558: httpd: Could not reliably determine the server's fully qualified domain
name, usi...message Apr 27 18:44:24 linuxhelp systemd[1]: Started The Apache HTTP Server. Hint: Some lines were ellipsized, use -
l to show in full. [root@linuxhelp ~]# firewall-cmd --permanent --add-service=http success [root@linuxhelp ~]# firewall-cmd --reload
success Use the browser to verify the contents in the directory. index To Configure the Client Machine In the /etc/yum.repos.d
directory add the configuration files as follows. [root@linuxhelp ~]# vim /etc/yum.repos.d/network.repo Add the following lines to
the configuration file. [Network] name=Network repo baseurl=http://192.168.5.88/centos enabled=1 gpgcheck=0 Then clean and
update the repository file. [root@linuxhelp ~]# yum clean all Loaded plugins: fastestmirror, langpacks Cleaning repos: network
Cleaning up everything Cleaning up list of fastest mirrors [root@linuxhelp ~]# yum update all Loaded plugins: fastestmirror,
langpacks network | 2.9 kB 00:00:00 network/primary_db | 2.7 MB 00:00:01 Determining fastest mirrors No Match for argument: all
No package all available. No packages marked for update [root@linuxhelp ~]# yum repolist all Loaded plugins: fastestmirror,
langpacks Loading mirror speeds from cached hostfile repo id repo name status network network repo enabled:3538 repolist: 3,538
The repo which is created is displayed in the above output. Now install any package to check the repository is working fine or not.
[root@linuxhelp ~]# yum install httpd -y Loaded plugins: fastestmirror, langpacks Loading mirror speeds from cached hostfile
Resolving Dependencies -> Running transaction check --> Package httpd.x86_64 0:2.4.6-17.el7.centos.1 will be installed . . .
Installed: httpd.x86_64 0:2.4.6-17.el7.centos.1 Dependency Installed: apr.x86_64 0:1.4.8-3.el7 apr-util.x86_64 0:1.5.2-6.el7 httpd-
tools.x86_64 0:2.4.6-17.el7.centos.1 mailcap.noarch 0:2.1.41-2.el7 Complete! The httpd package is installed from the server not
from the internet. To Keep the Repository up-to-date To keep the repositories up-to-date, set a cronjob by using rsync command to
keep synchronizing new packages from the CentOS mirror server. [root@linuxhelp ~]# crontab -e -u root no crontab for root - using
an empty one crontab: installing new crontab Now add the following entry to the crontab file and save it to set a cronjob at every
day morning 8:30 AM. 30 8 * * * rsync -avz rsync: http://mirror.fibergrid.in/centos/7/os/x86\_64/ /var/www/html/centos/
```