




COMP2241

Web Server Administration

LAB MANUL

 Book: Sams Teach Yourself PHP, MySQL and Apache All in One, 5th Edition


 Week2

 Chapters: 3

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 External Sources:

- <http://en.wikipedia.org/wiki/Wget>
- [http://wiki.vpslink.com/Linux_Command_Reference:_apt-get_\(Debian,_Ubuntu\)](http://wiki.vpslink.com/Linux_Command_Reference:_apt-get_(Debian,_Ubuntu))
- <http://www.thegeekstuff.com/2010/04/unix-tar-command-examples/>
- <http://www.codecoffee.com/tipsforlinux/articles/27.html>

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Configure Ubuntu Serve

- `wget` [🔗](#) `apt-get` [🔗](#) `tar` [🔗](#) configure , make and make install [🔗](#)

A. Preparation

- `sudo su` (when promoted enter root password)
- `apt-get update` (update software on your Ubuntu instance)
- `apt-get install build-essential` (install build tools c/c++ using gcc)

B. Download Apache source file

Section 1 (download an extract apache file)

- `cd /usr/local/lib` (directory to download required files to build Apache)
- `wget` <http://lib.gblearn.com/apache/httpd-2.4.10.tar.gz> (download file)
- `tar xvfz httpd-2.4.10.tar.gz` (Unpack the compressed file)

Section 2 (download APR to build Apache)

- `cd /usr/local/lib/httpd-2.4.10/src/lib/`
- `wget` <http://lib.gblearn.com/apache/apr/apr-1.5.1.tar.gz>
- `tar xvfz apr-1.5.1.tar.gz` (Unpack the compressed file)

Section 3 (download APR-UTIL to build Apache)

- `cd /usr/local/lib/httpd-2.4.10/src/lib/`
- `wget` <http://lib.gblearn.com/apache/apr/apr-util-1.5.3.tar.gz>
- `tar xvfz apr-util-1.5.3.tar.gz` (Unpack the compressed file)

Section 4 (download PCRE to build Apache)

- `cd /usr/local/lib/httpd-2.4.10/src/lib/`
- `wget` <http://lib.gblearn.com/apache/pcre/pcre-8.34.tar.gz>
- `tar xvfz pcre-8.34.tar.gz` (Unpack the compressed file)

C. Install dependencies

Install APR

- `cd /usr/local/lib/httpd-2.4.10/src/lib/apr-1.5.1/`
- `./configure`
- `make`
- `make install`

Install APR-UTIL

- `cd /usr/local/lib/httpd-2.4.10/src/lib/apr-util-1.5.3/`
- `./configure --with-apr=/usr/local/apr/bin/apr-1-config`
- `make`
- `make install`

Install PCRE

- `cd /usr/local/lib/httpd-2.4.10/src/lib/pcre-8.34/`
- `./configure --prefix=/usr/local/pcre`
- `make`
- `make install`

D. Install and Test Apache

Section 1(configuration, make and install)

- `cd /usr/local/lib/httpd-2.4.10/`
- `./configure --prefix=/usr/local/apache2 --with-pcre=/usr/local/pcre --enable-so`
- `make`
- `make install`

Section 2(start http server)

- `/usr/local/apache2/bin/apachectl start`
- `/usr/local/apache2/bin/apachectl restart`
- `/usr/local/apache2/bin/apachectl stop`
- `/usr/local/apache2/bin/apachectl start`

Section 3(Test HTTP local server - VMWare)

– ifconfig

```
root@ubuntu:/home/user# ifconfig
eth0      Link encap:Ethernet  HWaddr 00:0c:29:f9:c9:ca
          inet addr:192.168.6.128  Bcast:192.168.6.255  Mask:255.255.255.0
          inet6 addr: fe80::20c:29ff:fef9:c9ca/64 Scope:Link
          UP BROADCAST RUNNING MULTICAST  MTU:1500  Metric:1
          RX packets:23 errors:0 dropped:0 overruns:0 frame:0
          TX packets:24 errors:0 dropped:0 overruns:0 carrier:0
          collisions:0 txqueuelen:1000
          RX bytes:2602 (2.6 KB)  TX bytes:2432 (2.4 KB)
          Interrupt:19 Base address:0x2000

lo        Link encap:Local Loopback
          inet addr:127.0.0.1  Mask:255.0.0.0
          inet6 addr: ::1/128 Scope:Host
          UP LOOPBACK RUNNING  MTU:65536  Metric:1
          RX packets:0 errors:0 dropped:0 overruns:0 frame:0
          TX packets:0 errors:0 dropped:0 overruns:0 carrier:0
          collisions:0 txqueuelen:0
          RX bytes:0 (0.0 B)  TX bytes:0 (0.0 B)
```

– (open your browser and type the IP address)



It works!