

# Apache Virtual Hosting Lab

## Hosting web site by Created User

To host web site Apache server in a Linux machine by the Created user, we should create the user account.

```
rcjay@rcjay-virtual-machine: ~$ sudo adduser cohdse182f005 --home /home/nibm/ --disabled-password --shell /bin/bash
[sudo] password for rcjay:
Warning: The home dir /home/nibm/ you specified already exists.
Adding user `cohdse182f005' ...
Adding new group `cohdse182f005' (1002) ...
Adding new user `cohdse182f005' (1002) with group `cohdse182f005' ...
The home directory `/home/nibm/' already exists. Not copying from `/etc/skel'.
adduser: Warning: The home directory `/home/nibm/' does not belong to the user you are currently creating.
Changing the user information for cohdse182f005
Enter the new value, or press ENTER for the default
  Full Name []:
  Room Number []:
  Work Phone []:
  Home Phone []:
  Other []:
Is the information correct? [Y/n] y
rcjay@rcjay-virtual-machine: ~$
```

**\*\*In the above command we create user called “cohdse182f005” and the home directory is “/home/nibm/” and disabled the user password and default shell is “/bin/bash”**

Then we create directory for hosting web file and grant privileges to created user

```
rcjay@rcjay-virtual-machine: ~$ sudo mkdir -p /home/nibm/nibm.lk/public_html
[sudo] password for rcjay:
rcjay@rcjay-virtual-machine: ~$ chown -R cohdse182f005:cohdse182f005 /home/nibm/nibm.lk
chown: changing ownership of '/home/nibm/nibm.lk/public_html': Operation not permitted
chown: changing ownership of '/home/nibm/nibm.lk': Operation not permitted
rcjay@rcjay-virtual-machine: ~$ sudo chmod -R 755 /home/nibm/nibm.lk
rcjay@rcjay-virtual-machine: ~$
```

After that we install apache2, sql-server and php

```
cohdse182f-005@ubuntu: ~  
File Edit View Search Terminal Help  
cohdse182f-005@ubuntu:~$ sudo apt-get install php mysql-server
```

After that Create a copy of “/etc/apache2/sites-available/000-default.conf” as nibm.lk.conf in /etc/apache2/sites-available/

```
rcjay@rcjay-virtual-machine: ~  
File Edit View Search Terminal Help  
rcjay@rcjay-virtual-machine:/etc/apache2/sites-available$ sudo cp 000-default.conf nibm.lk.conf
```

Make the below changes to “/etc/apache2/sites-available/nibm.lk.conf”

```
rcjay@rcjay-virtual-machine:~$ sudo vim /etc/apache2/sites-available/nibm.lk.conf  
[sudo] password for rcjay:
```

```
rcjay@rcjay-virtual-machine: ~  
File Edit View Search Terminal Help  
VirtualHost *:80>  
# The ServerName directive sets the request scheme, hostname and port that  
# the server uses to identify itself. This is used when creating  
# redirection URLs. In the context of virtual hosts, the ServerName  
# specifies what hostname must appear in the request's Host: header to  
# match this virtual host. For the default virtual host (this file) this  
# value is not decisive as it is used as a last resort host regardless.  
# However, you must set it for any further virtual host explicitly.  
#ServerName www.example.com  
  
ServerName www.nibm.lk  
ServerAdmin admin@nibm.lk  
DocumentRoot /home/nibm/nibm.lk/public_html  
  
<Directory /home/nibm/nibm.lk/public_html>  
Options Indexes FollowSymLinks  
AllowOverride None  
Require all granted  
</Directory>  
  
# Available loglevels: trace8, ..., trace1, debug, info, notice, warn,  
# error, crit, alert, emerg.  
# It is also possible to configure the loglevel for particular  
# modules, e.g.  
#LogLevel info ssl:warn  
  
ErrorLog ${APACHE_LOG_DIR}/nibm/nibm.lk/error.log  
CustomLog ${APACHE_LOG_DIR}/nibm/nibm.lk/access.log combined  
  
# For most configuration files from conf-available/, which are  
# enabled or disabled at a global level, it is possible to  
1,1 Top
```

## Creating Log Directory and change permission

Then create the log directory for nibm.lk as `/var/log/apache2/nibm/nibm.lk/`  
 apache's main log directory is `/var/log/apache2`

```
rcjay@rcjay-virtual-machine: ~  
File Edit View Search Terminal Help  
rcjay@rcjay-virtual-machine:~$ sudo mkdir -p /var/log/apache2/nibm/nibm.log
```

```
rcjay@rcjay-virtual-machine: ~$ sudo chown cohdse182f005:cohdse182f005 /var/log/apache2/nibm/nibm.log
```

## Hosting the web page

Create the /home/nibm/nibm.lk/public\_html/index.php with below content.

```
rcjay@rcjay-virtual-machine: ~  
File Edit View Search Terminal Help  
rcjay@rcjay-virtual-machine:~$ vim /home/nibm/nibm.lk/public_html/index.php
```

```
rcjay@rcjay-virtual-machine: ~  
File Edit View Search Terminal Help  
<html>  
    <b><head>  
        <title><?php echo "NIBM"?></title>  
    </head>  
    <b><body>  
        <h1><?php echo "This is the test page of nibm.lk"?></h1>  
    </body>  
</html>
```

"/home/nibm/nibm.lk/public\_html/index.php" [readonly] 10L, 203C

## Enable Site

```
rcjay@rcjay-virtual-machine: ~$ a2ensite nibm.lk
```

## Check configurations

```
rcjay@rcjay-virtual-machine: ~  
File Edit View Search Terminal Help  
rcjay@rcjay-virtual-machine:~$ apachectl configtest  
AH00558: apache2: Could not reliably determine the server's fully qualified domain name, using 127.0.1.1. Set  
the 'ServerName' directive globally to suppress this message  
Syntax OK
```

## Add a hostname to ip mapping into the hosts file

Add the below entry to `/etc/hosts` file

```
rcjay@rcjay-virtual-machine: ~$ sudo vim /etc/hosts
```

[illegible]

browse nibm.lk using a web browser

