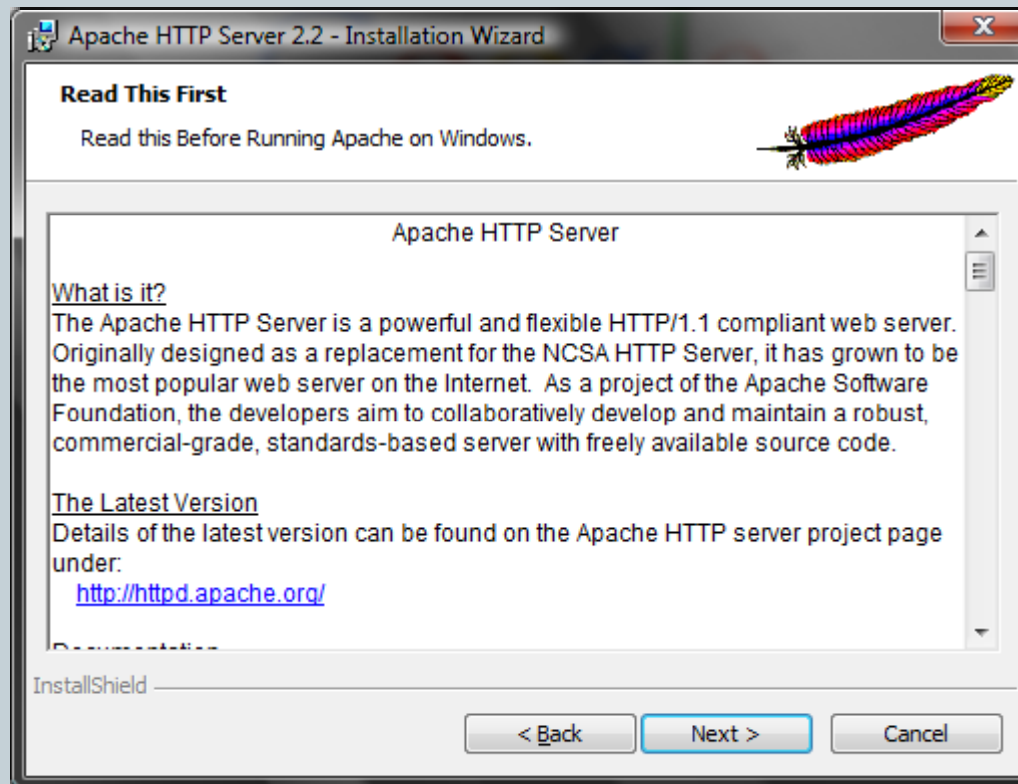


Installing Apache HTTP Server 2.2.11

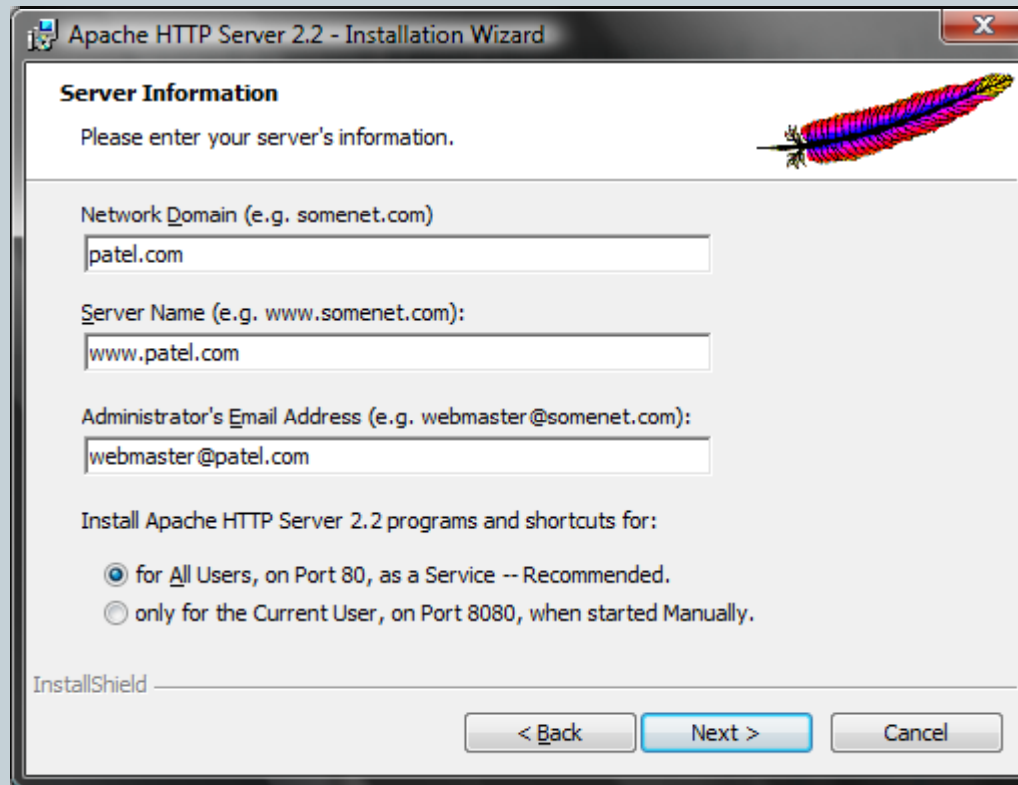


OMAR C. PATEL
ITEC 2336 (18286)
PROFESSOR RON VISEH
MAY 4, 2009

First read the documentation then click Next.



After registering a domain, put in your domain name, server name, and email address.



The image shows a screenshot of the 'Apache HTTP Server 2.2 - Installation Wizard' window. The window title is 'Apache HTTP Server 2.2 - Installation Wizard' and it has a close button (X) in the top right corner. The main content area is titled 'Server Information' and contains the instruction 'Please enter your server's information.' followed by a decorative feather graphic. There are three text input fields: 'Network Domain (e.g. somenet.com)' with 'patel.com' entered, 'Server Name (e.g. www.somenet.com):' with 'www.patel.com' entered, and 'Administrator's Email Address (e.g. webmaster@somenet.com):' with 'webmaster@patel.com' entered. Below these fields, there is a section for installation options: 'Install Apache HTTP Server 2.2 programs and shortcuts for:' followed by two radio button options: 'for All Users, on Port 80, as a Service -- Recommended.' (which is selected) and 'only for the Current User, on Port 8080, when started Manually.' At the bottom left, there is an 'InstallShield' logo. At the bottom right, there are three buttons: '< Back', 'Next >', and 'Cancel'.

Server Information

Please enter your server's information.

Network Domain (e.g. somenet.com)
patel.com

Server Name (e.g. www.somenet.com):
www.patel.com

Administrator's Email Address (e.g. webmaster@somenet.com):
webmaster@patel.com

Install Apache HTTP Server 2.2 programs and shortcuts for:

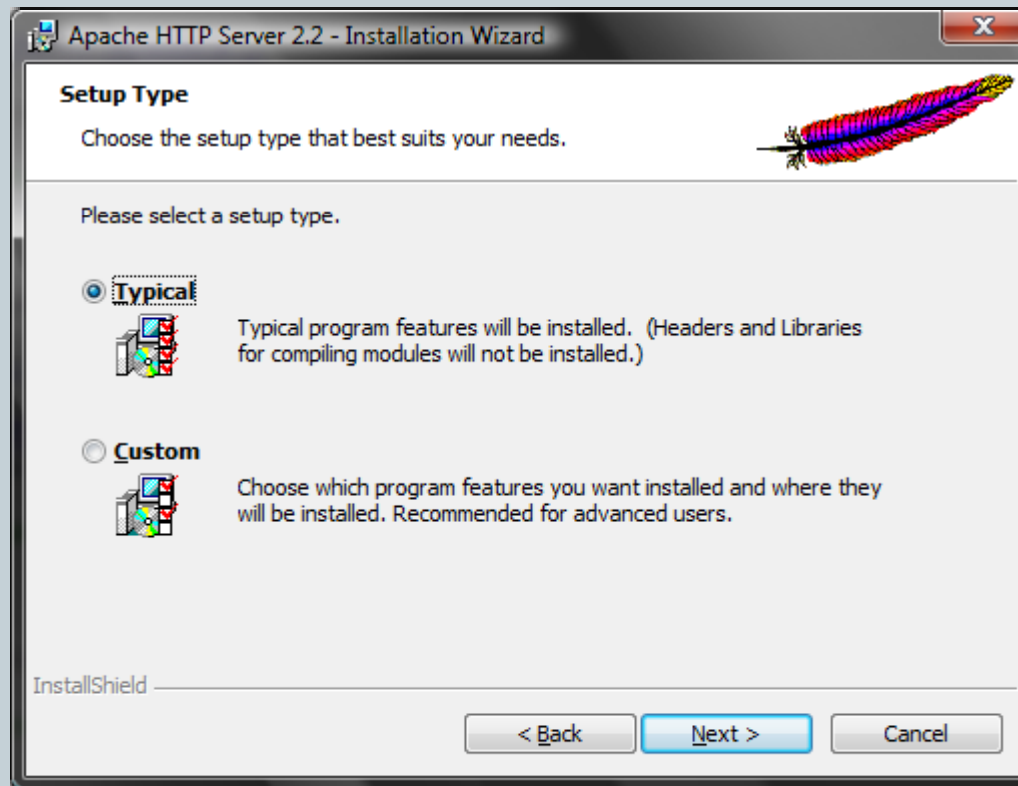
for All Users, on Port 80, as a Service -- Recommended.

only for the Current User, on Port 8080, when started Manually.

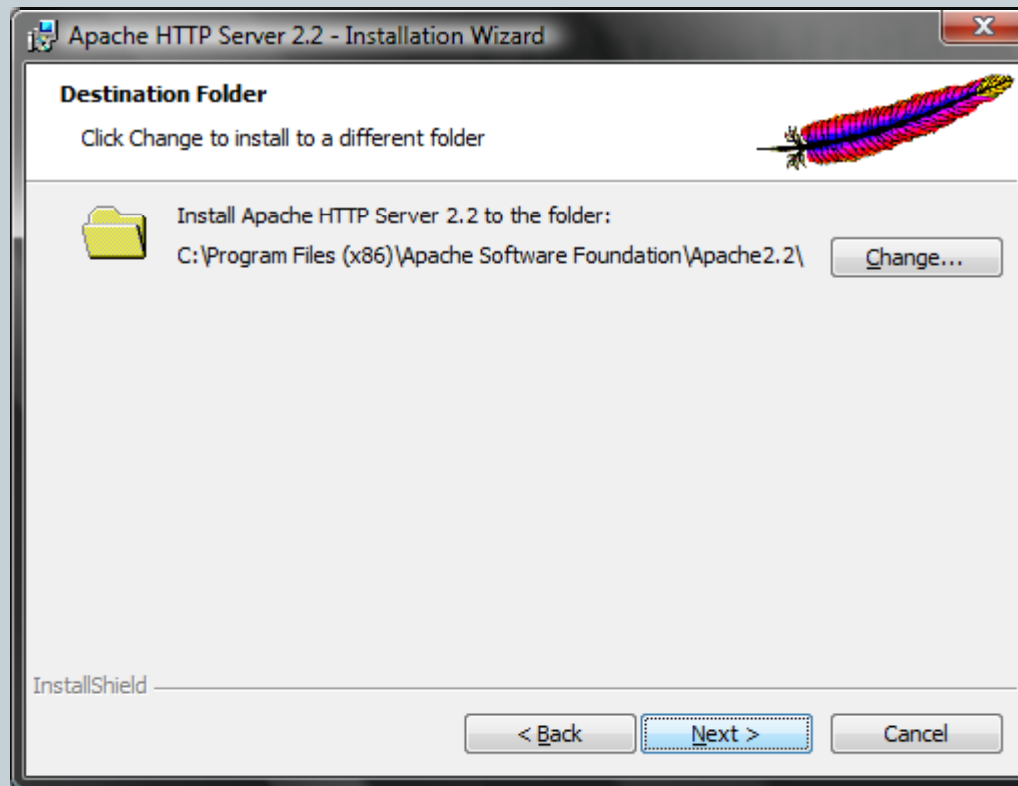
InstallShield

< Back Next > Cancel

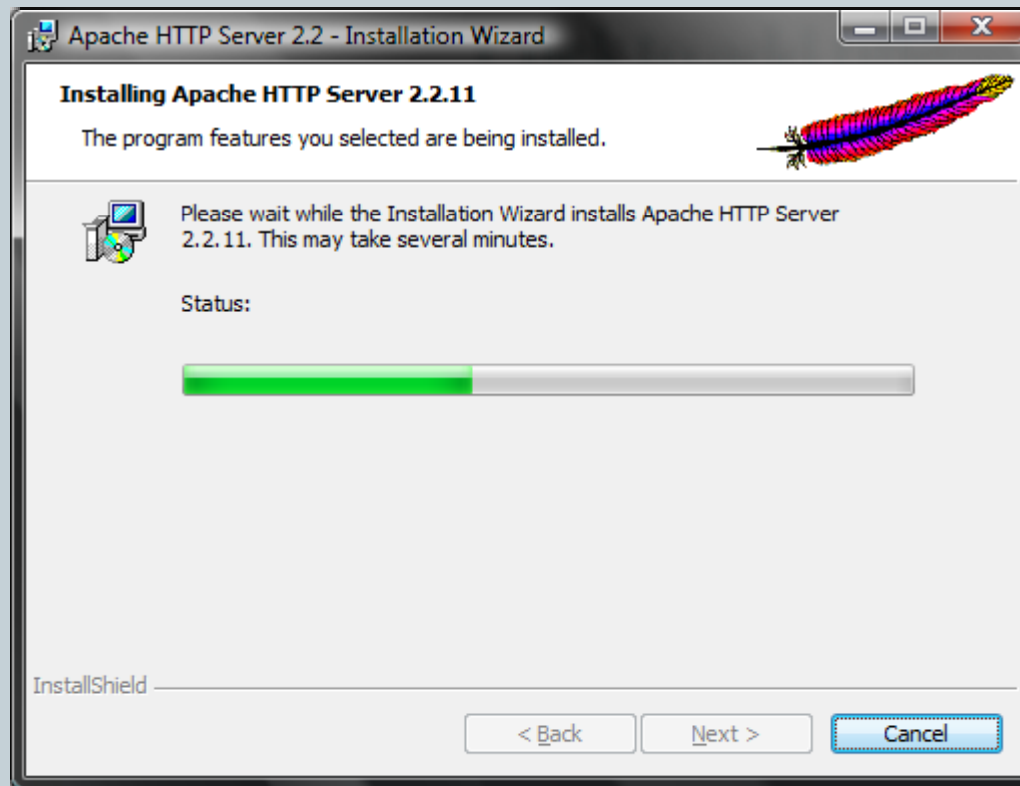
The typical setup is sufficient, since no module compiling is necessary for a windows installation.



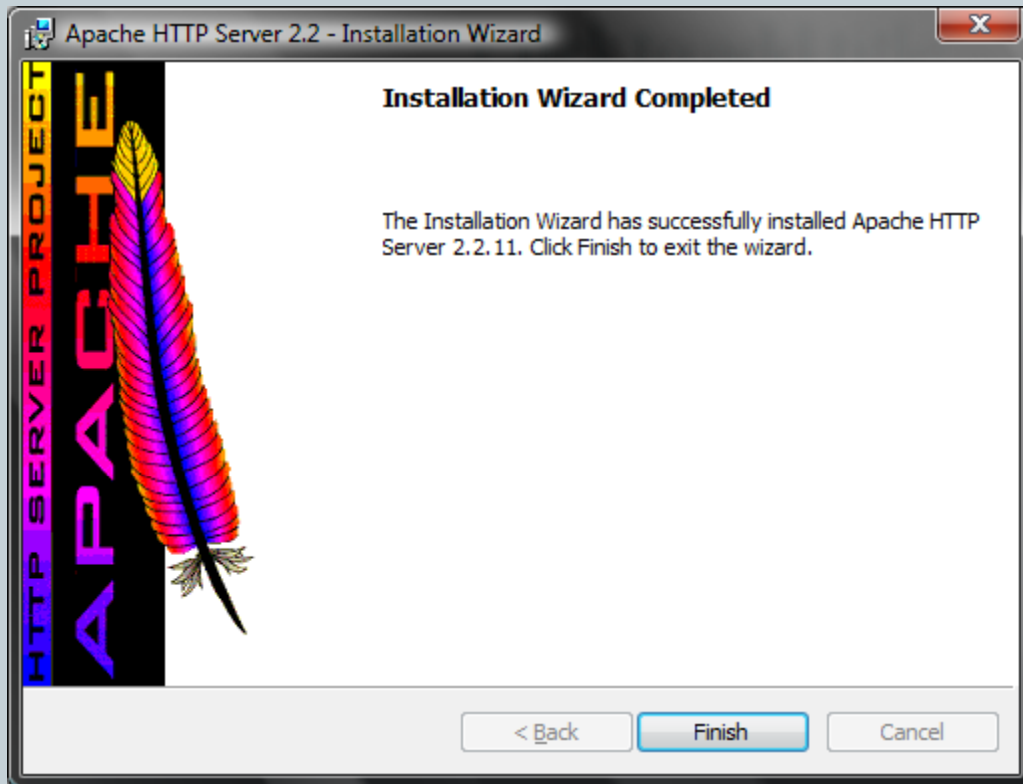
Select the install directory and begin the installation.



The install process will begin.



When the install is finished, this screen will show and the monitor will show near the clock.



Configuring Apache HTTP Server 2.2.11



OMAR C. PATEL

Open the http.conf file in the conf folder of the install directory. It will look like this.

A screenshot of a Notepad window titled "httpd.conf - Notepad". The window displays the content of the http.conf file, which is a configuration file for the Apache HTTP server. The text is as follows:

```
File Edit Format View Help
#
# This is the main Apache HTTP server configuration file. It contains the
# configuration directives that give the server its instructions.
# See <URL:http://httpd.apache.org/docs/2.2> for detailed information.
# In particular, see
# <URL:http://httpd.apache.org/docs/2.2/mod/directives.html>
# for a discussion of each configuration directive.
#
# Do NOT simply read the instructions in here without understanding
# what they do. They're here only as hints or reminders. If you are unsure
# consult the online docs. You have been warned.
#
# Configuration and logfile names: If the filenames you specify for many
# of the server's control files begin with "/" (or "drive:/" for win32), the
# server will use that explicit path. If the filenames do *not* begin
# with "/", the value of ServerRoot is prepended -- so "logs/foo.log"
# with ServerRoot set to "C:/Program Files (x86)/Apache Software Foundation/Apache2.2" will be interpreted by the
# server as "C:/Program Files (x86)/Apache Software Foundation/Apache2.2/logs/foo.log".
#
# NOTE: where filenames are specified, you must use forward slashes
# instead of backslashes (e.g., "c:/apache" instead of "c:\apache").
# If a drive letter is omitted, the drive on which httpd.exe is located
# will be used by default. It is recommended that you always supply
# an explicit drive letter in absolute paths to avoid confusion.
#
# ServerRoot: The top of the directory tree under which the server's
# configuration, error, and log files are kept.
#
# Do not add a slash at the end of the directory path. If you point
# ServerRoot at a non-local disk, be sure to point the LockFile directive
# at a local disk. If you wish to share the same ServerRoot for multiple
# httpd daemons, you will need to change at least LockFile and PidFile.
```

The default directory is the htdocs folder in the install directory.



```
httpd.conf - Notepad
File Edit Format View Help
#
# ServerName gives the name and port that the server uses to identify itself.
# This can often be determined automatically, but we recommend you specify
# it explicitly to prevent problems during startup.
#
# If your host doesn't have a registered DNS name, enter its IP address here.
#
#ServerName www.patel.com:80
#
# DocumentRoot: The directory out of which you will serve your
# documents. By default, all requests are taken from this directory, but
# symbolic links and aliases may be used to point to other locations.
#
DocumentRoot "C:/Program Files (x86)/Apache Software Foundation/Apache2.2/htdocs"
#
# Each directory to which Apache has access can be configured with respect
# to which services and features are allowed and/or disabled in that
# directory (and its subdirectories).
#
# First, we configure the "default" to be a very restrictive set of
# features.
#
<Directory />
    Options FollowSymLinks
    AllowOverride None
    Order deny,allow
    Deny from all
</Directory>
#
# Note that from this point forward you must specifically allow
```

Change the DocumentRoot to wherever you want the root of the server to be (where the files are).

A screenshot of a Notepad window titled 'httpd.conf - Notepad'. The window contains the following text:

```
File Edit Format View Help
#
#ServerName www.patel.com:80
#
# DocumentRoot: The directory out of which you will serve your
# documents. By default, all requests are taken from this directory, but
# symbolic links and aliases may be used to point to other locations.
#
DocumentRoot "D:\\"
#
# Each directory to which Apache has access can be configured with respect
# to which services and features are allowed and/or disabled in that
# directory (and its subdirectories).
#
# First, we configure the "default" to be a very restrictive set of
# features.
#
<Directory />
    Options FollowSymLinks
    AllowOverride None
    Order deny,allow
    Deny from all
</Directory>
#
# Note that from this point forward you must specifically allow
# particular features to be enabled - so if something's not working as
# you might expect, make sure that you have specifically enabled it
# below.
#
#
```

Change the second set of tabs to the same directory as what DocumentRoot is.



```
httpd.conf - Notepad
File Edit Format View Help
# symbolic links and aliases may be used to point to other locations.
#
DocumentRoot "D:\"

#
# Each directory to which Apache has access can be configured with respect
# to which services and features are allowed and/or disabled in that
# directory (and its subdirectories).
#
# First, we configure the "default" to be a very restrictive set of
# features.
#
<Directory />
    Options FollowSymLinks
    AllowOverride None
    Order deny,allow
    Deny from all
</Directory>

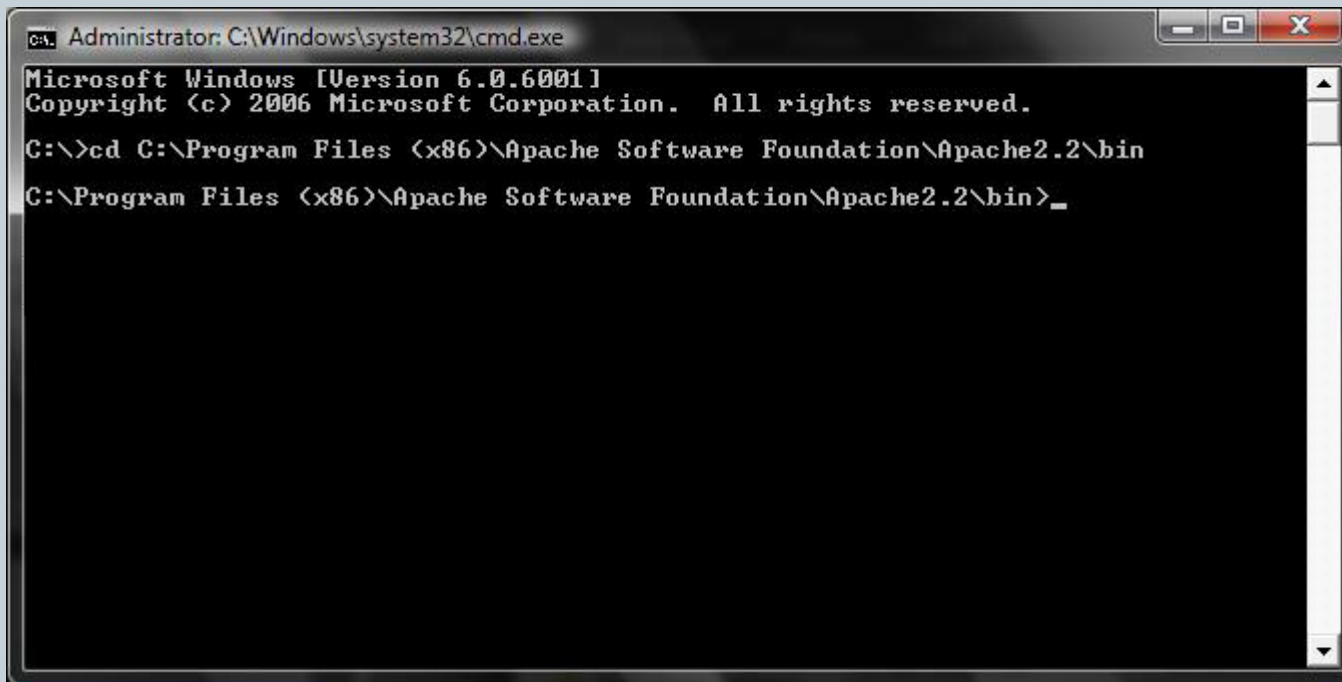
#
# Note that from this point forward you must specifically allow
# particular features to be enabled - so if something's not working as
# you might expect, make sure that you have specifically enabled it
# below.
#
#
# This should be changed to whatever you set DocumentRoot to.
#
<Directory "D\">
    #
    # Possible values for the Options directive are "None", "All",
    # or any combination of:
```

Configuring security on Apache HTTP Server 2.2.11



OMAR C. PATEL

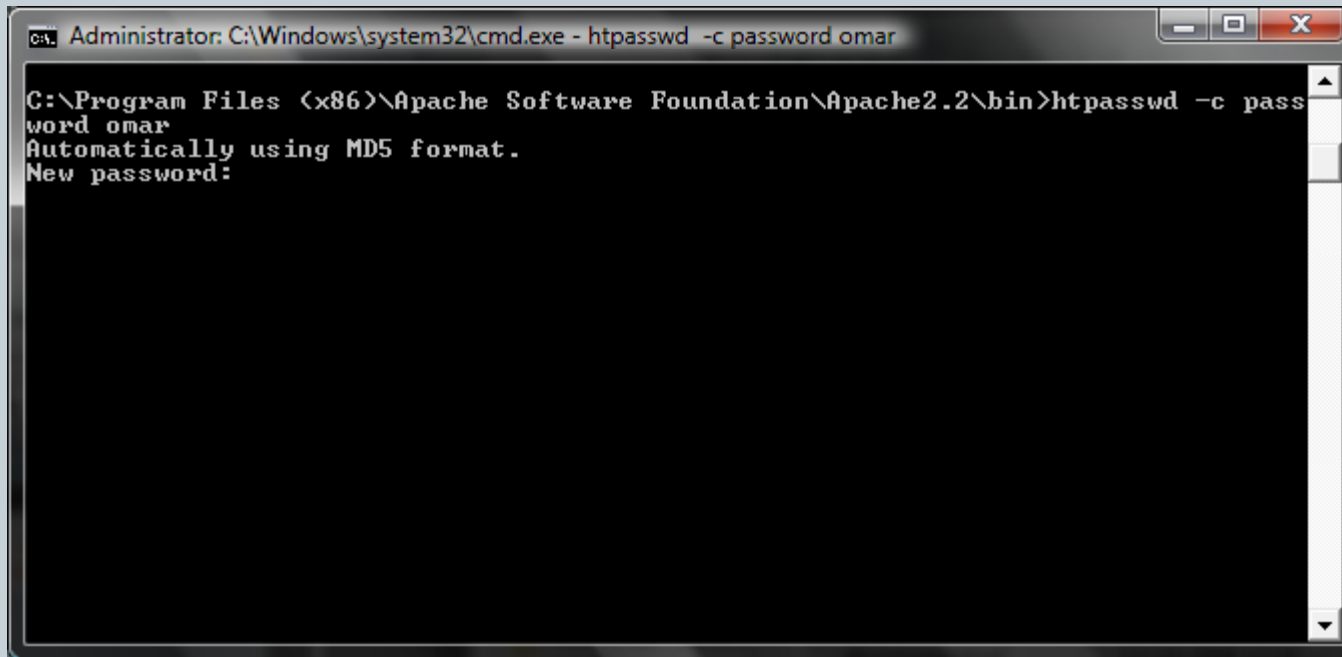
Open a command prompt (Start + Run >> cmd).
Change the directory to the install directory\bin.

A screenshot of a Windows command prompt window. The title bar reads "Administrator: C:\Windows\system32\cmd.exe". The window content shows the following text:

```
Microsoft Windows [Version 6.0.60011]  
Copyright (c) 2006 Microsoft Corporation. All rights reserved.  
C:\>cd C:\Program Files (x86)\Apache Software Foundation\Apache2.2\bin  
C:\Program Files (x86)\Apache Software Foundation\Apache2.2\bin>_
```

The cursor is positioned at the end of the second line, ready for the next command.

Type “htpasswd –c ‘passwordfile’ ‘username’”.



```
C:\Program Files (x86)\Apache Software Foundation\Apache2.2\bin>htpasswd -c password omar
Automatically using MD5 format.
New password:
```

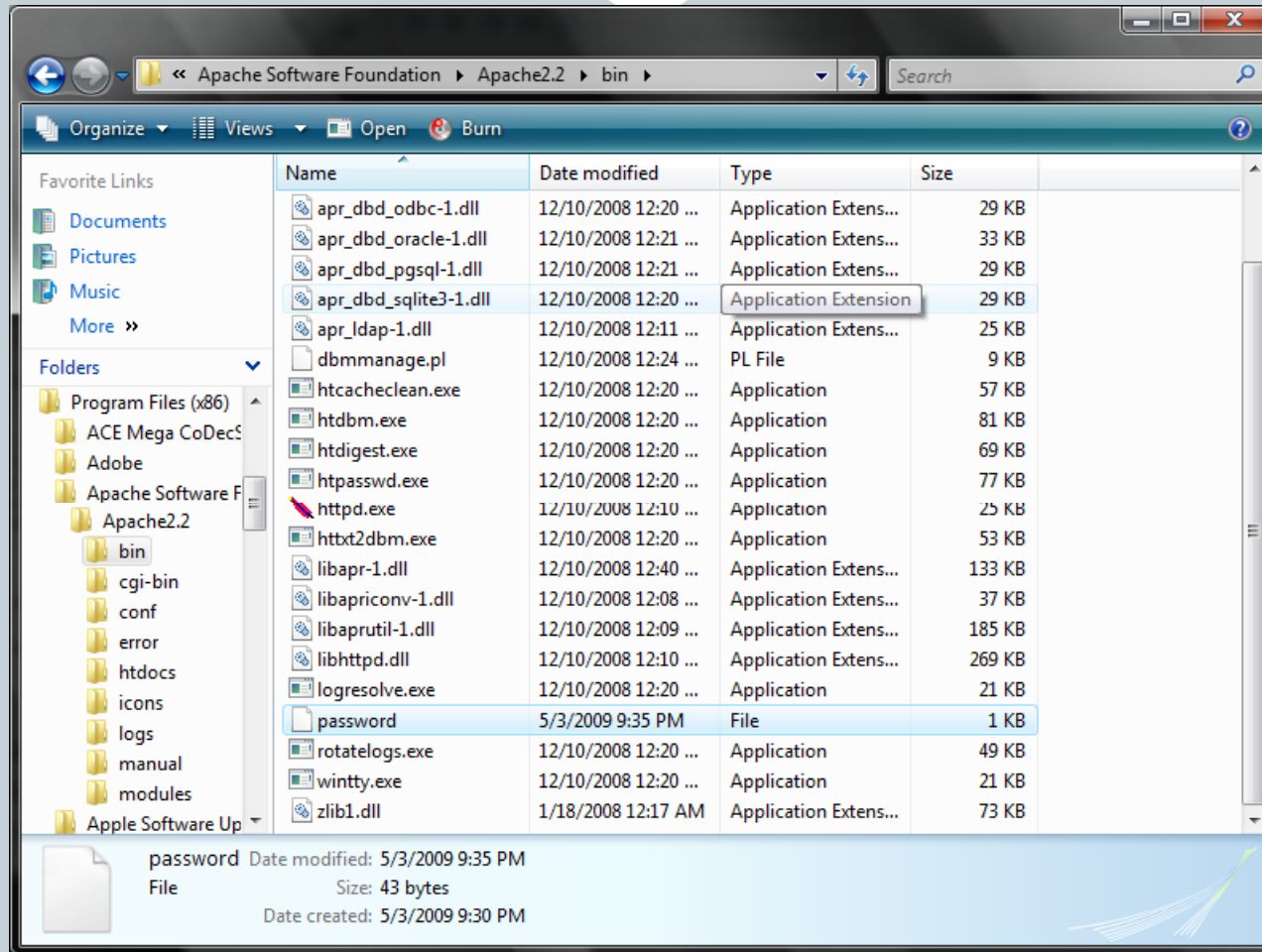
For this, we named the password file “password” and the username “omar”. It will then prompt you for the password and ask you to re-type it. Make sure you type it correctly since it will not show you what you typed.

It will then tell you that it has added the password.

A screenshot of a Windows command prompt window. The title bar reads "Administrator: C:\Windows\system32\cmd.exe". The command prompt shows the following text:

```
C:\Program Files (x86)\Apache Software Foundation\Apache2.2\bin>htpasswd -c password omar  
Automatically using MD5 format.  
New password: *****  
Re-type new password: *****  
Adding password for user omar  
  
C:\Program Files (x86)\Apache Software Foundation\Apache2.2\bin>
```

The extension-less password file will then be added to the same folder, copy the file into the DocumentRoot directory.



Put a “#” sign in front of everything in the first Directory tag,



```
httpd.conf - Notepad
File Edit Format View Help
# symbolic links and aliases may be used to point to other locations.
#
DocumentRoot "D:\"

#
# Each directory to which Apache has access can be configured with respect
# to which services and features are allowed and/or disabled in that
# directory (and its subdirectories).
#
# First, we configure the "default" to be a very restrictive set of
# features.
#
<Directory />
# Options FollowSymLinks
# AllowOverride None
# Order deny,allow
# Deny from all
</Directory>

#
# Note that from this point forward you must specifically allow
# particular features to be enabled - so if something's not working as
# you might expect, make sure that you have specifically enabled it
# below.
#
#
# This should be changed to whatever you set DocumentRoot to.
#
<Directory "D\">
#
# Possible values for the Options directive are "None", "All",
# or any combination of:
```

Type the highlighted lines of code before the code that is already there.

A screenshot of a Notepad window titled "httpd.conf - Notepad". The window contains Apache configuration code. A section within a <Directory /> block is highlighted in blue. The highlighted code is:

```
AuthType Basic
AuthName "Please enter your password."
AuthUserFile D:\password
Require user omar
```

The rest of the code in the window is:

```
#
# DocumentRoot: The directory out of which you will serve your
# documents. By default, all requests are taken from this directory, but
# symbolic links and aliases may be used to point to other locations.
#
DocumentRoot "D:\"

#
# Each directory to which Apache has access can be configured with respect
# to which services and features are allowed and/or disabled in that
# directory (and its subdirectories).
#
# First, we configure the "default" to be a very restrictive set of
# features.
#
<Directory />
AuthType Basic
AuthName "Please enter your password."
AuthUserFile D:\password
Require user omar

# Options FollowsSymLinks
# AllowOverride None
# Order deny,allow
# Deny from all
</Directory>

#
# Note that from this point forward you must specifically allow
# particular features to be enabled - so if something's not working as
# you might expect, make sure that you have specifically enabled it
# below.
#
```

Notes on Previous Slide

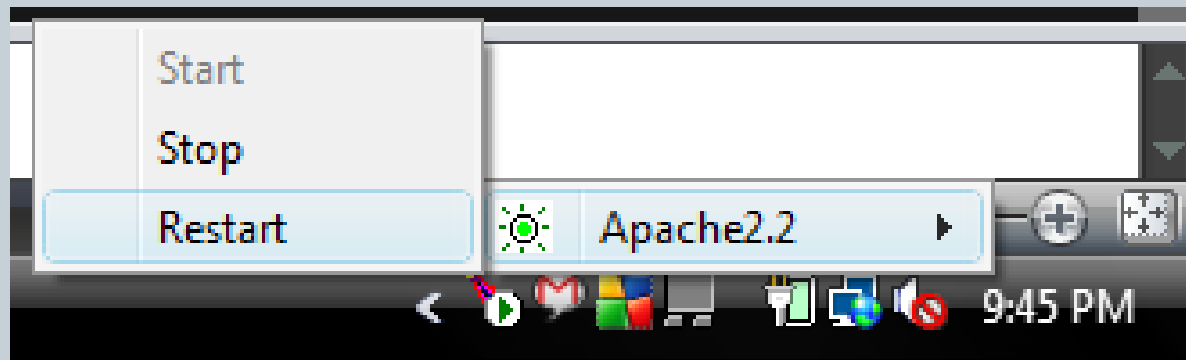


AuthType Basic is the type of authentication the server is using. This particular example uses basic authentication, one user, one password. Apache also supports group policies and the use of `.htaccess` files for requiring authentication for certain directories.

AuthName is the message that will be displayed when the user is prompted for a password, the message can be changed to whatever you like as long as it is in quotes.

AuthUserFile is the directory of the password file you created earlier. `Require user` is where you specify what user is allowed, again this can be multiple users depending on how you make your password file.

After saving the file, restart the server. You can use the icon next to the clock to do this.



Questions or Comments



- If you have any questions about any of the steps in this tutorial or would like to send a comment, follow the email link below.

- ocpatel@uh.edu