Client server architecture for web application

```
cse@cse-HP-Pro-3090-MT: ~
File  Edit  View  Search  Terminal  Help
cse@cse-HP-Pro-3090-MT:~$ sudo apt update
```



```
younis@younis-VirtualBox:~$ sudo apt-cache search tomcat
[sudo] password for younis:
resource-agents - Cluster Resource Agents
libapache-mod-jk-doc - Documentation of libapache2-mod-jk package
libapache2-mod-jk - Apache 2 connector for the Tomcat Java servlet engine
libjnlp-servlet-java - simple and convenient packaging format for JNLP applications
liblogback-java - flexible logging library for Java
liblogback-java-doc - flexible logging library for Java - documentation
libnetty-tcnative-java - Tomcat native fork for Netty
libnetty-tcnative-jni - Tomcat native fork for Netty (JNI library)
libsolr-java - Enterprise search server based on Lucene - Java libraries
libspring-instrument-java - modular Java/J2EE application framework - Instrumentation
libtcnative-1 - Tomcat native library using the Apache Portable Runtime
libtomcat9-embed-java - Apache Tomcat 9 - Servlet and JSP engine -- embed libraries
libtomcat9-java - Apache Tomcat 9 - Servlet and JSP engine -- core libraries
libtomcatjss-java - JSSE implementation using JSS for Tomcat
nagios-plugins-contrib - Plugins for nagios compatible monitoring systems
python3-ajpy - Python module to craft AJP requests
solr-common - Enterprise search server based on Lucene3 - common files
solr-jetty - Enterprise search server based on Lucene3 - Jetty integration
solr-tomcat - Enterprise search server based on Lucene3 - Tomcat integration
tomcat9 - Apache Tomcat 9 - Servlet and JSP engine
tomcat9-admin - Apache Tomcat 9 - Servlet and JSP engine -- admin web applications
tomcat9-common - Apache Tomcat 9 - Servlet and JSP engine -- common files
tomcat9-docs - Apache Tomcat 9 - Servlet and JSP engine -- documentation
tomcat9-examples - Apache Tomcat 9 - Servlet and JSP engine -- example web applications
tomcat9-user - Apache Tomcat 9 - Servlet and JSP engine -- tools to create user instances
yasat - simple stupid audit tool
younis@younis-VirtualBox:~$
```



```
younis@younis-VirtualBox:~$ sudo apt install tomcat9 tomcat9-admin
Reading package lists... Done
Building dependency tree
Reading state information... Done
The following additional packages will be installed:
  ca-certificates-java default-jre-headless java-common libapr1 libeclipse-jdt-core-java libtcnative-1 libtomcat9-java
  openjdk-11-jre-headless tomcat9-common
Suggested packages:
  default-jre fonts-dejavu-extra fonts-ipafont-gothic fonts-ipafont-mincho fonts-wqy-microhei | fonts-wqy-zenhei tomcat9-docs
  tomcat9-examples tomcat9-user
The following NEW packages will be installed:
  ca-certificates-java default-jre-headless java-common libapr1 libeclipse-jdt-core-java libtcnative-1 libtomcat9-java
  openjdk-11-jre-headless tomcat9 tomcat9-admin tomcat9-common
0 upgraded, 11 newly installed, 0 to remove and 1 not upgraded.
Need to get 49.8 MB of archives.
After this operation, 186 MB of additional disk space will be used.
Do you want to continue? [Y/n]
```

$ ss -ltn


```
younis@younis-VirtualBox:~$ ss -ltn
State      Recv-Q     Send-Q         Local Address:Port          Peer Address:Port      Process
LISTEN     0          4096           127.0.0.53%lo:53            0.0.0.0:*
LISTEN     0          5              127.0.0.1:631               0.0.0.0:*
LISTEN     0          100            *:8080                      *:*
LISTEN     0          5              [::1]:631                   [::]:*
younis@younis-VirtualBox:~$
```
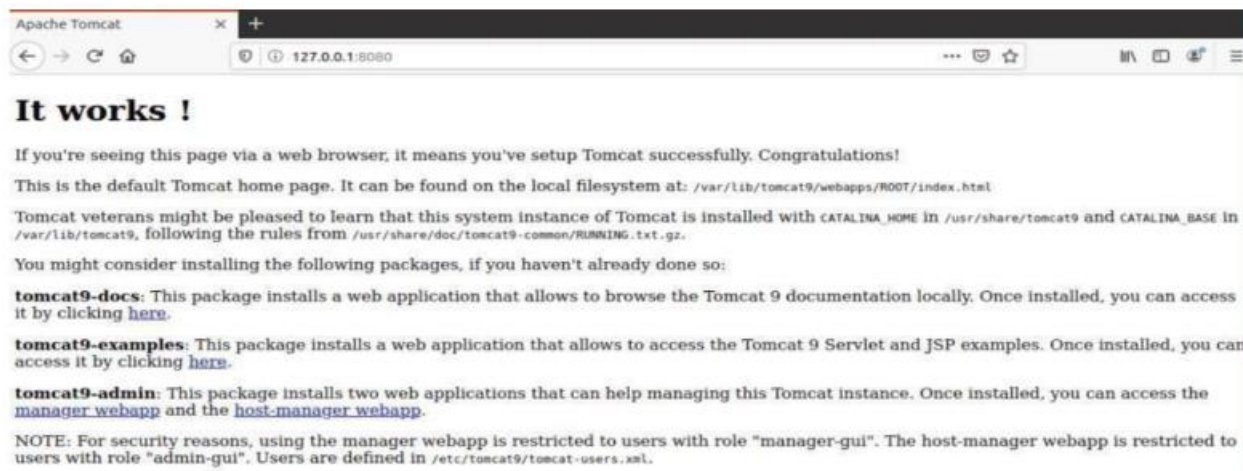
$ sudo systemctl disable tomcat9


```
younis@younis-VirtualBox:~$ sudo systemctl enable tomcat9
younis@younis-VirtualBox:~$ sudo systemctl disable tomcat9
Removed /etc/systemd/system/multi-user.target.wants/tomcat9.service.
younis@younis-VirtualBox:~$
```

$ sudo ufw allow from any to any port 8080 proto tcp

```
younis@younis-VirtualBox:~$ sudo ufw allow from any to any port 8080 proto tcp
Rules updated
Rules updated (v6)
younis@younis-VirtualBox:~$
```

example@example: ~/Downloads

File Edit View Search Terminal Help

```
example@example:~$ cd /home/example/Downloads
example@example:~/Downloads$
```

Apache Tomcat

127.0.0.1:8080

It works !

If you're seeing this page via a web browser, it means you've setup Tomcat successfully. Congratulations!

This is the default Tomcat home page. It can be found on the local filesystem at: /var/lib/tomcat9/webapps/ROOT/index.html

Tomcat veterans might be pleased to learn that this system instance of Tomcat is installed with CATALINA_HOME in /usr/share/tomcat9 and CATALINA_BASE in /var/lib/tomcat9, following the rules from /usr/share/doc/tomcat9-common/RUNNING.txt.gz.

You might consider installing the following packages, if you haven't already done so:

tomcat9-docs: This package installs a web application that allows to browse the Tomcat 9 documentation locally. Once installed, you can access it by clicking here.

tomcat9-examples: This package installs a web application that allows to access the Tomcat 9 Servlet and JSP examples. Once installed, you can access it by clicking here.

tomcat9-admin: This package installs two web applications that can help managing this Tomcat instance. Once installed, you can access the manager webapp and the host-manager webapp.

NOTE: For security reasons, using the manager webapp is restricted to users with role "manager-gui". The host-manager webapp is restricted to users with role "admin-gui". Users are defined in /etc/tomcat9/tomcat-users.xml.

XAMPP Apache + MariaDB + PHP + Perl

What is XAMPP?

XAMPP is the most popular PHP development environment

XAMPP is a completely free, easy to install Apache distribution containing MariaDB, PHP, and Perl. The XAMPP open source package has been set up to be incredibly easy to install and to use.
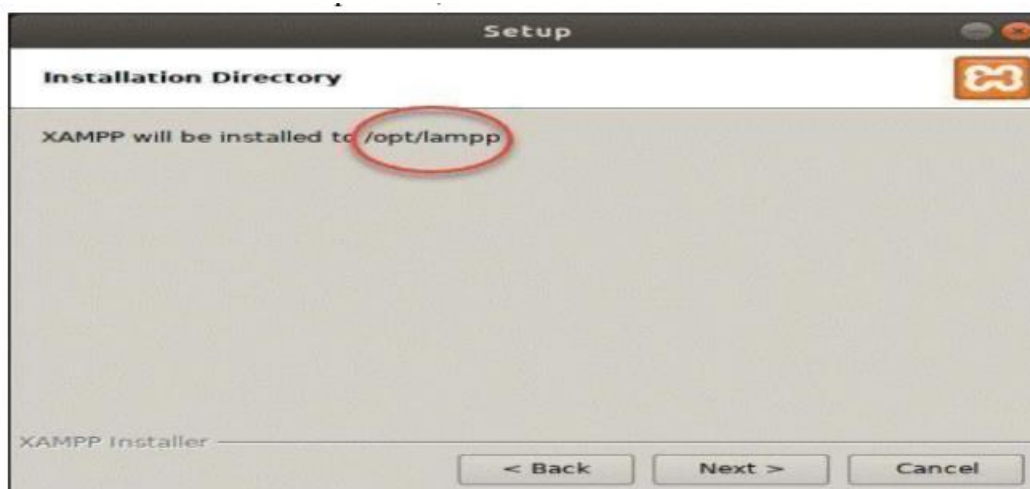
Introduction to XAMPP

Download
Click here for other versions

XAMPP for Windows
7.4.1 (PHP 7.4.1)

XAMPP for Linux
7.4.1 (PHP 7.4.1)
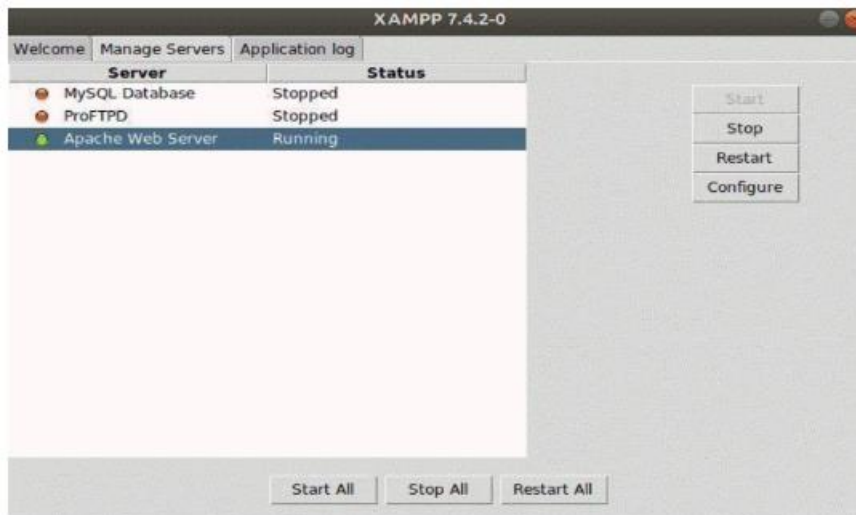
XAMPP for OS X
7.4.1 (PHP 7.4.1)

```
dejan@dejan-VirtualBox:~/Downloads$ sudo chmod 755 xampp-linux-x64-7.4.2-0-installer.run
dejan@dejan-VirtualBox:~/Downloads$ ls -l xampp-linux-x64-7.4.2-0-installer.run
-rwxr-xr-x 1 dejan dejan 158498068 Feb  6 14:47 xampp-linux-x64-7.4.2-0-installer.run
dejan@dejan-VirtualBox:~/Downloads$
```

```
dejan@dejan-VirtualBox:~$ cd /home/dejan/Downloads
dejan@dejan-VirtualBox:~/Downloads$ sudo ./xampp-linux-7.4.2-0-installer.run
```

Setup

Select Components

Select the components you want to install; clear the components you do not want to install. Click Next when you are ready to continue.

☒ XAMPP Core Files
☒ XAMPP Developer Files

Click on a component to get a detailed description

XAMPP Installer

[< Back] [Next >] [Cancel]

Setup

Bitnami for XAMPP

Bitnami for XAMPP provides free installers that can install Drupal, Joomla!, WordPress and many other popular open source apps on top of your existing XAMPP installation.

https://bitnami.com/xampp

Learn more about Bitnami for XAMPP ☒

XAMPP Installer

[< Back] [Next >] [Cancel]

Setup

Ready to Install

Setup is now ready to begin installing XAMPP on your computer.

XAMPP Installer

[< Back] [Next >] [Cancel]