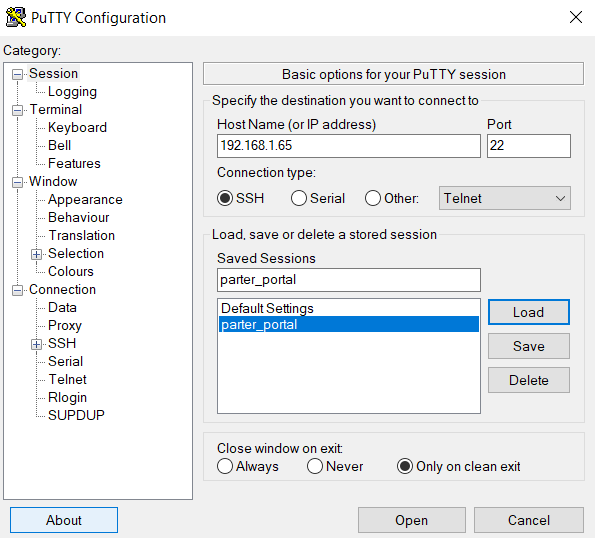
**[How to install java, mysql and tomcat bundle on Ubuntu](https://www.linuxcloudvps.com/blog/install-liferay-on-an-ubuntu-16-04-vps/)**

1. **First Connect to a VPN server.**
2. **Download putty from here :** [**https://www.putty.org/**](https://www.putty.org/)
3. Install [PuTTY](https://www.chiark.greenend.org.uk/~sgtatham/putty/latest.html) and open it.
4. specify the IP address for your site and click ‘open’ to initiate the connection. You can leave all options to default.



1. If this is the first time to connect to the server, you will have to accept its SSH certificate.
2. Specify root (if you have root access on your server) or your username and specify your password.

Text

Description automatically generatedNow we connected to proventeq server with the help of proventeq username, password & IP address.

1. **For the partner portal project create the new user to ubuntu server**
2. Create a new user account using the “adduser username” command. Don’t forget to replace username with the user name that you want to create:

proventeq@proventeq-server:~$ sudo adduser liferayadmin

Adding user `liferayadmin' ...

Adding new group `liferayadmin' (1002) ...

Adding new user `liferayadmin' (1002) with group `liferayadmin' ...

Creating home directory `/home/liferayadmin' ...

Copying files from `/etc/skel' ...

New password:

Retype new password:

passwd: password updated successfully

Changing the user information for liferayadmin

Enter the new value, or press ENTER for the default

Full Name []: liferayadmin

Room Number []:

Work Phone []:

Home Phone []:

Other []:

Is the information correct? [Y/n] y

1. Add the new user to the sudo group: By default, on Ubuntu systems, members of the group sudo are granted with sudo access. To add the created user to the sudo group use [**usermod**](https://linuxize.com/post/usermod-command-in-linux/) command:

proventeq@proventeq-server:~$sudo usermod -aG sudo liferayadmin

1. Test the sudo access: Switch to the newly created user using **su** command.

proventeq@proventeq-server:~$su - liferayadmin

Password:

liferayadmin@proventeq-server:~$ exit

logout

1. Username: liferayadmin

Password: Please ping for the password

1. **Install JAVA : Openjdk 11**

liferayadmin@proventeq-server:~$apt-get update

liferayadmin@proventeq-server:~$ sudo apt-get install openjdk-11-jdk

**Set Path of Java** :

liferayadmin@proventeq-server:~$ cd /usr/lib/jvm/java-11-openjdk-amd64

liferayadmin@proventeq-server:~$ export JAVA\_HOME=/usr/lib/jvm/java-11-openjdk-amd64

liferayadmin@proventeq-server:/usr/lib/jvm/java-11-openjdk-amd64**$** echo $JAVA\_HOME

**Output:** /usr/lib/jvm/java-11-openjdk-amd64

liferayadmin@proventeq-server:/usr/lib/jvm/java-11-openjdk-amd64**$**

export PATH=$PATH:$JAVA\_HOME/bin

liferayadmin@proventeq-server:/usr/lib/jvm/java-11-openjdk-amd64**$** echo $PATH

**Output : /usr/local/sbin:/usr/local/bin:/usr/sbin:/usr/bin:/sbin:/bin:/usr/games:/usr/local/games:/snap/bin:/usr/lib/jvm/java-11-openjdk-amd64/bin**

**Note: This is temporary solution.**

**Better to update the profile file of user - /.bashrc**

**This will be set the enviornment varible permanently.**

liferayadmin@proventeq-server:~$vi ~/.bashrc

**(open and type below command at the end of file)**

**export JAVA\_HOME=/usr/lib/jvm/java-11-openjdk-amd64**

**export PATH=$PATH:$JAVA\_HOME/bin**

liferayadmin@proventeq-server:~$ exit

logout

proventeq@proventeq-server:~$su - liferayadmin

Password:

liferayadmin@proventeq-server:~$ echo $PATH

/usr/local/sbin:/usr/local/bin:/usr/sbin:/usr/bin:/sbin:/bin:/usr/games:/usr/local/games:/snap/bin:/usr/lib/jvm/java-11-openjdk-amd64/bin

Note: Now the path is updated in PATH var.

liferayadmin@proventeq-server:~$ java -version

openjdk version "11.0.16" 2022-07-19

OpenJDK Runtime Environment (build 11.0.16+8-post-Ubuntu-0ubuntu122.04)

OpenJDK 64-Bit Server VM (build 11.0.16+8-post-Ubuntu-0ubuntu122.04, mixed mode, sharing)

liferayadmin@proventeq-server:~$

1. **Install MySQL:**

liferayadmin@proventeq-server:~$ sudo apt-get install mysql-server

[sudo] **password for liferayadmin**:

Reading package lists... Done

Building dependency tree... Done

Reading state information... Done

The following packages were automatically installed and are no longer required:

libflashrom1 libftdi1-2

Use 'sudo apt autoremove' to remove them.

Need to get 29.4 MB of archives.

After this operation, 242 MB of additional disk space will be used.

Do you want to continue? [Y/n] y

Get:1 [http://archive.ubuntu.com/ubuntu jammy/main](http://archive.ubuntu.com/ubuntu%20jammy/main) amd64 mysql-common all 5.8+1.0.8 [7,212 B]

Get:2 [http://archive.ubuntu.com/ubuntu jammy-updates/main](http://archive.ubuntu.com/ubuntu%20jammy-updates/main) amd64 mysql-client-core-8.0 amd64 8.0.31-0ubuntu0.22.04.1 [2,663 kB]

Get:3 [http://archive.ubuntu.com/ubuntu jammy-updates/main](http://archive.ubuntu.com/ubuntu%20jammy-updates/main) amd64 mysql-client-8.0 amd64 8.0.31-0ubuntu0.22.04.1 [22.7 kB]

Get:4 [http://archive.ubuntu.com/ubuntu jammy/main](http://archive.ubuntu.com/ubuntu%20jammy/main) amd64 libevent-pthreads-2.1-7 amd64 2.1.12-stable-1build3 [7,642 B]

emitting double-array: 100% |###########################################|

Scanning candidates...

Scanning processor microcode...

Scanning linux images...

The processor microcode seems to be up-to-date.

Restarting services...

Service restarts being deferred:

/etc/needrestart/restart.d/dbus.service

systemctl restart networkd-dispatcher.service

systemctl restart systemd-logind.service

systemctl restart unattended-upgrades.service

systemctl restart user@1000.service

No containers need to be restarted.

No user sessions are running outdated binaries.

No VM guests are running outdated hypervisor (qemu) binaries on this host.

liferayadmin@proventeq-server:~$ ls

#Now configure the mysql

liferayadmin@proventeq-server:~$ sudo mysql

Welcome to the MySQL monitor. Commands end with ; or \g.

Your MySQL connection id is 10

Server version: 8.0.31-0ubuntu0.22.04.1 (Ubuntu)

Type 'help;' or '\h' for help. Type '\c' to clear the current input statement.

mysql> **ALTER USER 'root'@'localhost' IDENTIFIED WITH mysql\_native\_password by 'Enter Password';**

Query OK, 0 rows affected (0.01 sec)

mysql> **exit**

Bye

liferayadmin@proventeq-server:~$ systemctl is-active mysql

**active**

liferayadmin@proventeq-server:~$ sudo mysql\_secure\_installation

Securing the MySQL server deployment

Connecting to MySQL using a blank password.

VALIDATE PASSWORD COMPONENT can be used to test passwords

and improve security. It checks the strength of password

and allows the users to set only those passwords which are

secure enough. Would you like to setup VALIDATE PASSWORD component?

Press y|Y for Yes, any other key for No**: y**

There are three levels of password validation policy:

LOW Length >= 8

MEDIUM Length >= 8, numeric, mixed case, and special characters

STRONG Length >= 8, numeric, mixed case, special characters and dictionary file

Please enter 0 = LOW, 1 = MEDIUM and 2 = STRONG: 2Please type the password for root here.

**Mysql server username: root**

**Mysql server password: please ping me for password**

**Verification of mysql installation**

Open the console & Connect to mysql server using below command :

$mysql -u root -p

1. **Install Tomcat Bundle:**
2. **Download link** : <https://sourceforge.net/projects/lportal/files/Liferay%20Portal/7.3.5%20GA6/>

liferayadmin@proventeq-server:~$wget <https://sourceforge.net/projects/lportal/files/Liferay%20Portal/7.3.5%20GA6/liferay-ce-portal-tomcat-7.3.5-ga6-20200930172312275.tar.gz>

liferayadmin@proventeq-server:~$tar -xvf liferay-ce-portal-tomcat-7.3.5-ga6-20200930172312275.tar.gz

liferayadmin@proventeq-server:~$cd liferay-ce-portal-7.3.5-ga6/

liferayadmin@proventeq-server:~$cd tomcat-9.0.37/bin/

liferayadmin@proventeq-server:~$./startup.sh ./catalina.sh run

liferayadmin@proventeq-server:~$ps -ef | grep tomcat

**New, we will create a new file portal-ext.properties to configure MySQL.**

 liferayadmin@proventeq-server:~$ cd liferay-ce-portal-7.3.5-ga6/

 liferayadmin@proventeq-server:~$ ls

 liferayadmin@proventeq-server:~$ vi portal-ext.properties

*jdbc.default.driverClassName=com.mysql.cj.jdbc.Driver*

*jdbc.default.url=jdbc:mysql://localhost/lportal?characterEncoding=UTF-8&dontTrackOpenResources=true&holdResultsOpenOverStatementClose=true&serverTimezone=GMT&useFastDateParsing=false&useUnicode=tru*

*jdbc.default.username=root*

*jdbc.default.password=*

1. **check tomcat logs -**

liferayadmin@proventeq-server:~$ **cd /home/liferayadmin/liferay-ce-portal-7.3.5-ga6/tomcat-9.0.37**

liferayadmin@proventeq-server:~/**liferay-ce-portal-7.3.5-ga6/tomcat-9.0.37$ ls**

bin BUILDING.txt conf CONTRIBUTING.md lib LICENSE logs NOTICE README.md RELEASE-NOTES RUNNING.txt temp webapps work

liferayadmin@proventeq-server:~/liferay-ce-portal-7.3.5-ga6/tomcat-9.0.37$ cd logs/

liferayadmin@proventeq-server:~/liferay-ce-portal-7.3.5-ga6/tomcat-9.0.37/logs$ **ls -ltr**

total 12

-rw-r----- 1 liferayadmin liferayadmin 0 Nov 6 20:53 manager.2022-11-06.log

-rw-r----- 1 liferayadmin liferayadmin 0 Nov 6 20:53 localhost.2022-11-06.log

-rw-r----- 1 liferayadmin liferayadmin 0 Nov 6 20:53 host-manager.2022-11-06.log

-rw-r----- 1 liferayadmin liferayadmin 242 Nov 6 20:53 catalina.2022-11-06.log

-rw-r----- 1 liferayadmin liferayadmin 5381 Nov 6 20:53 **catalina.out** (ltr is used check which file is updated last)

liferayadmin@proventeq-server:~/liferay-ce-portal-7.3.5-ga6/tomcat-9.0.37/logs$ vi catalina.out

1. **Ping Command: Used to check the connectivity from your source computer to the set of devices in the network.**

C:\Users\ShilpaPatkar>ping 192.168.1.65

Pinging 192.168.1.65 with 32 bytes of data:

Reply from 192.168.1.65: bytes=32 time=61ms TTL=63

Reply from 192.168.1.65: bytes=32 time=52ms TTL=63

Reply from 192.168.1.65: bytes=32 time=58ms TTL=63

Reply from 192.168.1.65: bytes=32 time=47ms TTL=63

Ping statistics for 192.168.1.65:

Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),

Approximate round trip times in milli-seconds:

Minimum = 47ms, Maximum = 61ms, Average = 54ms

1. **Access the tomcat default page from windows:** <http://192.168.1.65:8080/>