

## PROJECT-4

### MASTER AND SLAVE CONFIGURATION

#### TASK – 1

Deploy wordpress web application on master – slave in jenkins

Slave – 5 (vamsi krishna)

#### Wordpress : What is WordPress?

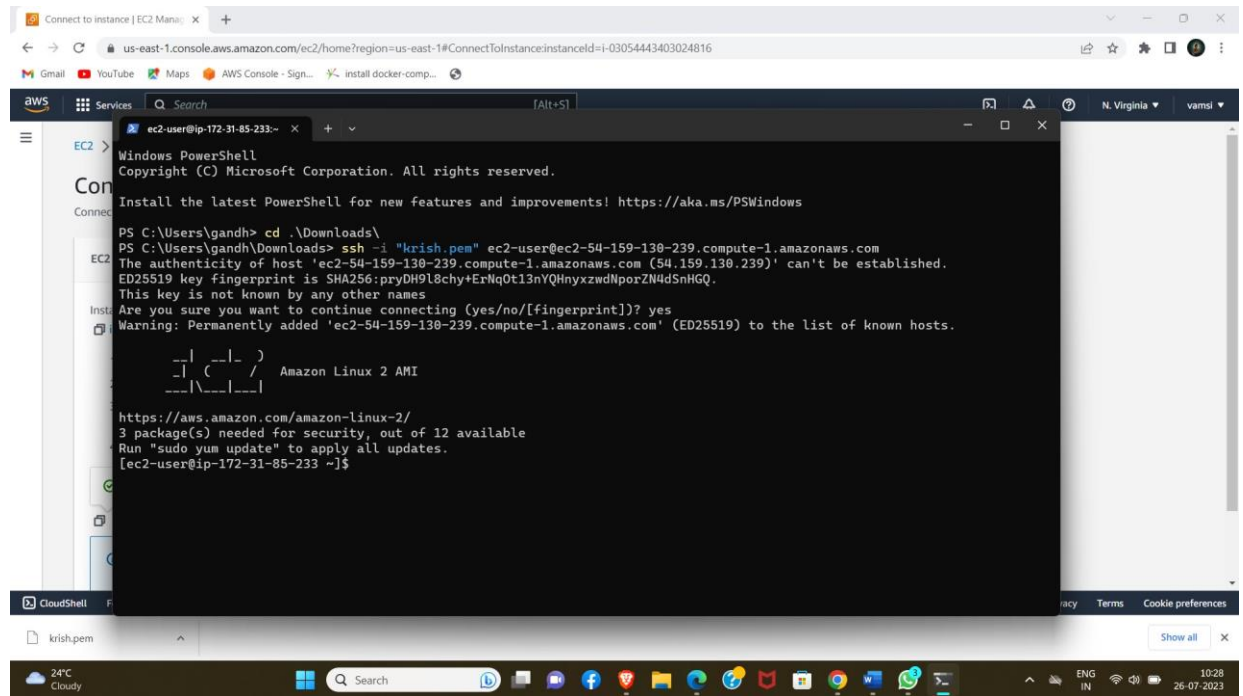
At its core, **WordPress is the simplest, most popular way to create your own website or blog.** In fact, WordPress powers [over 43.3%](#) of all the websites on the Internet. Yes – more than one in four websites that you visit are likely powered by WordPress.

On a slightly more technical level, WordPress is an open-source content management system licensed under GPLv2, which means that anyone can use or modify the WordPress software for free. A [content management system](#) is basically a tool that makes it easy to manage important aspects of your website – like content – without needing to know anything about programming.

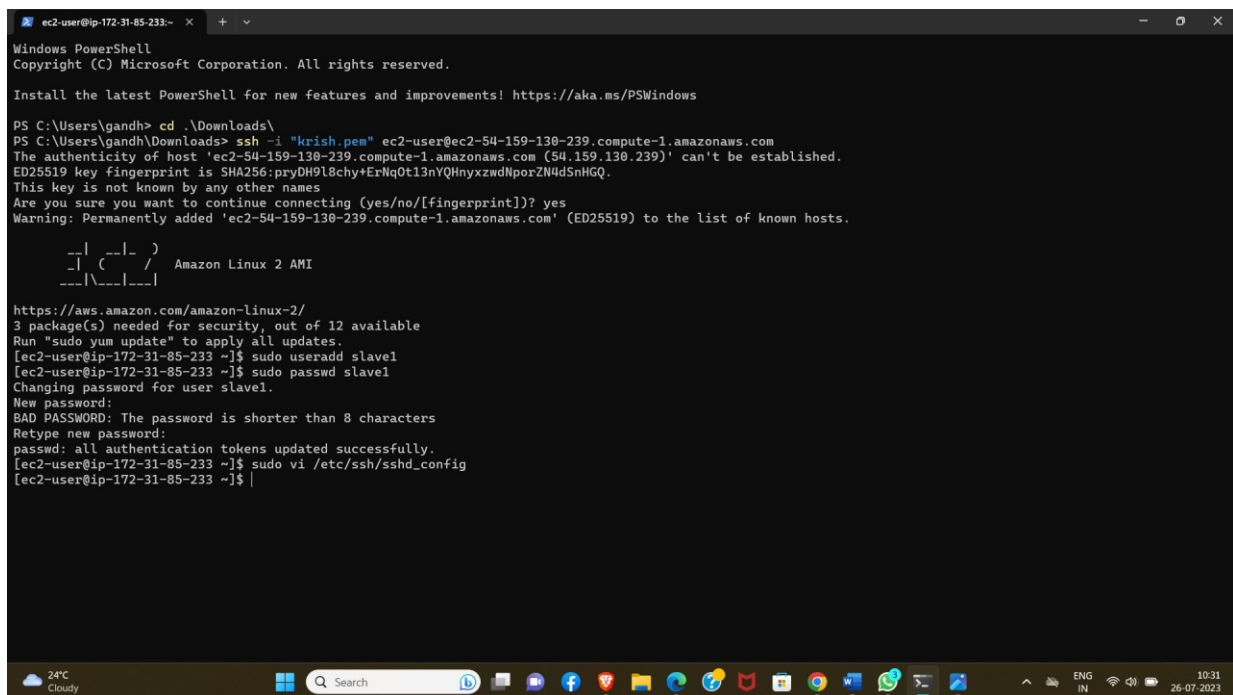
The end result is that WordPress makes building a website accessible to anyone – even people who aren't developers.

#### Step by step procedure:

- Create an EC2 instance for Jenkins Slavenode server and connect instance with ssh key.
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- Add user for slave using `useradd/passwd`



- And give permissions for passwd authentication

```
ec2-user@ip-10-0-0-12:~$ cat /etc/ssh/sshd_config
#LoginGraceTime 2m
#PermitRootLogin prohibit-password
#StrictModes yes
#MaxAuthTries 6
#MaxSessions 10

PubkeyAuthentication yes

# The default is to check both .ssh/authorized_keys and .ssh/authorized_keys2
# but this is overridden so installations will only check .ssh/authorized_keys
AuthorizedKeysFile .ssh/authorized_keys

#AuthorizedPrincipalsFile none

# For this to work you will also need host keys in /etc/ssh/ssh_known_hosts
#HostbasedAuthentication no
# Change to yes if you don't trust ~/.ssh/known_hosts for
# HostbasedAuthentication
#IgnoreUserKnownHosts no
# Don't read the user's ~/.rhosts and ~/.shosts files
#IgnoreRhosts yes

# Explicitly disable PasswordAuthentication. By presetting it, we
# avoid the cloud-init set_passwords module modifying sshd_config and
# restarting sshd in the default instance launch configuration.
PasswordAuthentication yes
#PermitEmptyPasswords no

# Change to no to disable s/key passwords
#KbdInteractiveAuthentication yes

# Kerberos options
#KerberosAuthentication no
#KerberosOrLocalPasswd yes
#KerberosTicketCleanup yes
#KerberosGetAFSToken no
-- INSERT --
```

- Edit the sudoers file to edit the file command is
- `sudo vi /etc/sudoers`
- `add tomcat (ALL) NOPASSWD:ALL`

```
ec2-user@ip-10-0-0-12:~$ cat /etc/sudoers
# Adding HOME to env_keep may enable a user to run unrestricted
# commands via sudo.
# Defaults    env_keep += "HOME"

Defaults    secure_path = /usr/local/sbin:/usr/local/bin:/usr/sbin:/usr/bin:/sbin:/bin:/var/lib/napd/snap/bin

## Next comes the main part: which users can run what software on
## which machines (the sudoers file can be shared between multiple
## systems).
## Syntax:
##
##      user    MACHINE=COMMANDS
##
## The COMMANDS section may have other options added to it.
##
## Allow root to run any commands anywhere
root    ALL=(ALL)    ALL
tomcat ALL=(ALL)    NOPASSWD: ALL
## Allows members of the 'sys' group to run networking, software,
## service management apps and more.
# %sys ALL = NETWORKING, SOFTWARE, SERVICES, STORAGE, DELEGATING, PROCESSES, LOCATE, DRIVERS

## Allows people in group wheel to run all commands
%wheel  ALL=(ALL)    ALL

## Same thing without a password
# %wheel    ALL=(ALL)    NOPASSWD: ALL

## Allows members of the users group to mount and unmount the
## cdrom as root
# %users    ALL=/sbin/mount /mnt/cdrom, /sbin/umount /mnt/cdrom

## Allows members of the users group to shutdown this system
# %users    localhost=/sbin/shutdown -h now

## Read drop-in files from /etc/sudoers.d (the # here does not mean a comment)
#includedir /etc/sudoers.d
"/etc/sudoers" [readonly] 120L, 4409B

101,34      Bot
```

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Add ssh for slave

```
sudo useradd jenkins-slave1
```

```
sudo su - jenkins-slave1
```

```
ssh-keygen -t rsa -N "" -f /home/jenkins-slave1/.ssh/id_rsa
```

```
cd .ssh
```

```
cat id_rsa.pub > authorized_keys
```

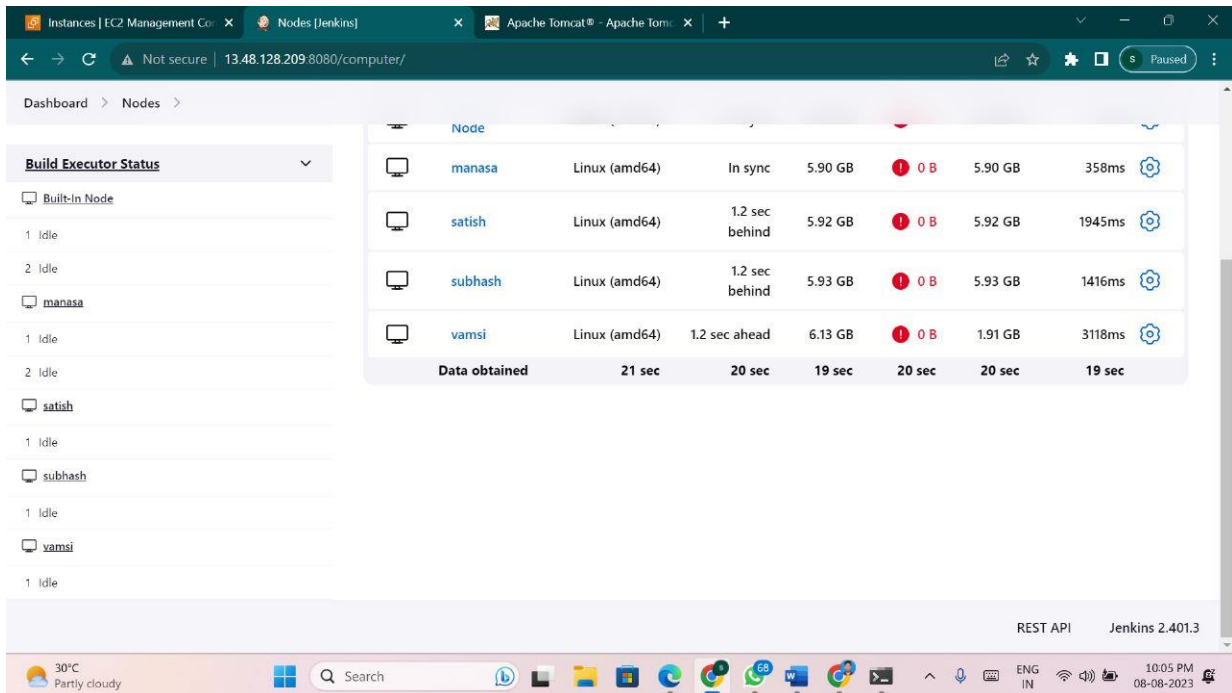
```
chmod 700 authorized_keys
```

```
ec2-user@ip-10-0-0-12~$ su: user tomcat does not exist or the user entry does not contain all the required fields
[ec2-user@ip-10-0-0-12 ~]$ sudo useradd tomcat
[ec2-user@ip-10-0-0-12 ~]$ sudo passwd tomcat
Changing password for user tomcat.
New password:
BAD PASSWORD: The password is shorter than 8 characters
Retype new password:
passwd: all authentication tokens updated successfully.
[ec2-user@ip-10-0-0-12 ~]$ sudo vi /etc/sudoers
[ec2-user@ip-10-0-0-12 ~]$ sudo vi /etc/ssh/sshd_config
[ec2-user@ip-10-0-0-12 ~]$ ssh-keygen -t rsa -N "" -f /home/tomcat/.ssh/id_rsa
Generating public/private rsa key pair.
Saving key "/home/tomcat/.ssh/id_rsa": Permission denied
[ec2-user@ip-10-0-0-12 ~]$ sudo su tomcat
[tomcat@ip-10-0-0-12 ec2-user]$ cd
[tomcat@ip-10-0-0-12 ~]$ ssh-keygen -t rsa -N "" -f /home/tomcat/.ssh/id_rsa
Generating public/private rsa key pair.
Created directory '/home/tomcat/.ssh'.
Your identification has been saved in /home/tomcat/.ssh/id_rsa
Your public key has been saved in /home/tomcat/.ssh/id_rsa.pub
The key fingerprint is:
SHA256:XLvNieJjT72qRr/mHXhu20mhAeci3xChcoZVjqcRQI4 tomcat@ip-10-0-0-12.ap-south-1.compute.internal
The key's randomart image is:
+--[RSA 3072]-----+
| ..*O+ |
| B + B |
| E + * |
| . * |
| . S O . |
| . O @ + . |
| . O * X . |
| . O = O + = . |
| . + + = + = . O |
+-----+
[tomcat@ip-10-0-0-12 ~]$ cd .ssh
[tomcat@ip-10-0-0-12 .ssh]$ cat id_rsa.pub > authorized_keys
[tomcat@ip-10-0-0-12 .ssh]$ chmod 700 authorized_keys
```

- Then connect to master you can give your public ip and user details on master



- Then connect to master



- And send the wordpress git repository and public ip and userdata commands for docker-compose for master
- Like <https://github.com/krishnanaidu99/my-dc.git>
- And give Commands for master like

```

sudo yum update -y
sudo amazon-linux-extras install docker
sudo yum install docker
sudo service docker start
sudo usermod -a -G docker ec2-user
sudo curl -L
https://github.com/docker/compose/releases/latest/download/docker-com
pose-$(uname -s)-$(uname -m) -o /usr/local/bin/docker-compose
sudo chmod +x /usr/local/bin/docker-compose
docker-compose version
sudo docker-compose up -d

```

- Master was deploy your project then you can browse the ip adress

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