Linux-Users-Management

1. **To add a new user to the system:**
   Use adduser command and the name of the user you wish to create.
   sudo adduser john
2. **To Switch the new user:**
   sudo su john
3. **To Connect server via john user:**
   a. First we want to create a ".ssh" folder in users home
      cd ~
      mkdir .ssh
   b. Change the file permissions of the .ssh directory to 700 (this means only the file owner can read, write, or open the directory).
      chmod 700 .ssh
   c. Create a file named "authorized_keys" in the .ssh directory.
      touch .ssh/authorized_keys
   d. Change the file permissions of the authorized_keys file to 600 (this means only the file owner can read or write to the file)
      chmod 600 .ssh/authorized_keys
   e. Generate a new key-pair in your local computer by using following command.
      ssh-keygen -f john
   f. When you create a key-pair it will generates two keys Public Key and private key, public key is for you to login the server and private key is deployed in *.ssh/authorized_keys*
   g. Save that public key in *.ssh/authorized_keys* file
   h. Now try to login to the john user with john private key(Open git bash where you generated key-pairs).
      ssh -i john john@public-ip/public-dns
4. **Assigning sudo permissions to John User:**
   a. Login as ec2-user and switch to root
      sudo su
   b. Add "john user" to sudoers list by using following command
      visudo
   c. Go to the end of the file and paste the below content.
      john ALL=(ALL)NOPASSWD:ALL

   d. Now john user also got sudo permissions like ec2-user.
5. **Enabling password login to the ec2-user.**
   a. First you want to generate the new password for the john user.to create use following command.
      sudo passwd ec2-user
   b. Update the PasswordAuthentication parameter in the /etc/ssh/sshd_config file:
      passwordAuthentication yes

c. Restart the SSH service by using following command
   service sshd restart
d. Now you can able to login via password
   ssh ec2-user@public-ip
   Note: Password authentication is not more secure than private key authentication so maximum cases avoid this.
e. In feature if you want to remove the password for ec2-user use following command
   passwd -d ec2-user
f. After you want to update the /etc/ssh/sshd_config file and *passwordAuthentication no* and restart the sshd service.
   service sshd restart

6. **Enabling Password less authentication between two servers:**
   a. To achieve this you want to generate “rsa” key in your local computer, use following command to generate.
      ssh-keygen -t rsa
   b. It generates to keys for you one is “id_rsa” and “id_rsa.pub”
   c. Copy the content which is present in “id_rsa.pub” and paste it in target machine authorized_keys file which is present in *{user_home}/.ssh/authorized_keys*
   d. Now you can able to login to the target server without password.
      ssh ec2-user@public-ip
7. **Recovery Of AWS Linux instance Key Pair:**
   A. Suppose You created an instance with new key pair named as “ec2key.pem”, after some days you missed that key pair but you want to access the instance. To achieve this follow below steps.
   B. First you create the New Instance in same availability zone where the missing key pair instance present in, with new key pair. Ex: “oregon.pem”
   C. After that stop the old instance and detach the volume and attach the that volume to the new instance.
   D. Next login the new instance check “lsblk” command whether it is attached or not.
   E. Next create a new directory in root folder in new instance with name “recovery”
      a. Ex: mkdir /recovery
   F. Next mount the old volume to the “recovery” directory.
      a. Ex: sudo mount /dev/xvdf1 /recovery
   G. Next copy the public key of the new instance which is present in “/home/ec2-user/.ssh/authorised_keys”
   H. And paste in old volume “.ssh” folder which is present in “/recovery/home/ec2-user/.ssh/authorised_keys”
   I. After that stop the new instance and detach the old volume from new instance and attach to the old instance.
      a. Note: While attaching you want to attach as a root volume but not EBS volume.
   J. Next you can login to the old instance with new key pair, that was created for the new instance.