



DEPARTMENT OF COMPUTER SCIENCE

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| Expt. No. | Name : <u>Piyush Pandurang Burate</u> Class : <u>TYCS</u> Roll No. : <u>523</u> |
| Date | Title of Experiment : <u>SSH Server : Password Authentication.</u> |
| | Sub titles : Assignment/ Problem Solution, Flow chart/Algorithm, Problem Listing, Input Screen, Output Screen, Comments (If any) |
| | <u>Aim :-</u> SSH server : Password Authentication Configure SSH server to manage a server from the remote computer, SSH Client : (Ubuntu and Window) |
| | <u>Theory :-</u> |
| | <ul style="list-style-type: none">• SSH server -<ul style="list-style-type: none">- Open SSH is a freely available version of the secure shell (SSH) protocol family of tools for remotely controlling or transferring files between computers- Traditional tools used to accomplish these functions, such as TelNet or RCP are insecure and transmit the users password in cleartext when used.- Open SSH provides a server demon and client tools to facilitate secure, encrypted remote control and file transfer operations, effectively replacing the legacy tools. |
| Remark | |
| Signature | |

• How SSH works ?

- To establish an SSH connection, we need 2 primary components : a client and a host, which can be a server, domain name, IP address and more.
- We require a SSH client to connect with another computer or server.
- The client uses the specified host information to establish the connection, if the provided credential verified, it will establish an encrypted connections.
- The server (Host) contains an SSH process that is ready to take a request for the client connection through a TCP/IP port.
- Once the client initiates a connection, the host responds with necessary information and exchange the credentials.

SSH Server : Password Authentication

```
root@ubuntu-VirtualBox:~# apt-get -y install openssh-client
```

```
Reading package lists... Done
```

```
Building dependency tree
```

```
Reading state information... Done
```

```
...
```

```
Preparing to unpack .../openssh-client_1%3a7.2p2-4ubuntu2.10_i386.deb ...
```

```
Unpacking openssh-client (1:7.2p2-4ubuntu2.10) ...
```

```
Processing triggers for man-db (2.7.5-1) ...
```

```
Setting up openssh-client (1:7.2p2-4ubuntu2.10) ...
```

```
root@ubuntu-VirtualBox:~# sudo nano /etc/ssh/sshd_config
```

```
# line 28: change to no
```

```
PermitRootLogin no
```

```
root@ubuntu-VirtualBox:~# systemctl restart ssh
```

Putty Configuration



Category:

- Session
 - Logging
- Terminal
 - Keyboard
 - Bell
 - Features
- Window
 - Appearance
 - Behaviour
 - Translation
 - Selection
 - Colours
- Connection
 - Data
 - Proxy
 - SSH
 - Serial
 - Telnet
 - Rlogin
 - SUPDUP

Basic options for your PuTTY session

Specify the destination you want to connect to

| Host Name (or IP address) | Port |
|---------------------------|------|
| 192.168.56.101 | 22 |

Connection type:

☒ SSH ☐ Serial ☐ Other: Telnet

Load, save or delete a stored session

Saved Sessions

Default Settings

Load

Save

Delete

Close window on exit:

☐ Always ☐ Never ☒ Only on clean exit

About

Open

Cancel

login as: root

root@192.168.56.101's password:

Welcome to Ubuntu 16.04.4 LTS (GNU/Linux 4.13.0-36-generic i686)

root@ubuntu-VirtualBox: ~

login as: root
root@192.168.56.101's password:
Welcome to Ubuntu 16.04.4 LTS (GNU/Linux 4.13.0-36-generic i686)

- * Documentation: <https://help.ubuntu.com>
- * Management: <https://landscape.canonical.com>
- * Support: <https://ubuntu.com/advantage>

573 packages can be updated.
457 updates are security updates.

New release '18.04.6 LTS' available.
Run 'do-release-upgrade' to upgrade to it.

The programs included with the Ubuntu system are free software;
the exact distribution terms for each program are described in the
individual files in /usr/share/doc/*/copyright.

Ubuntu comes with ABSOLUTELY NO WARRANTY, to the extent permitted by
applicable law.

/dev/pts/17
No command '-mesg' found, did you mean: