

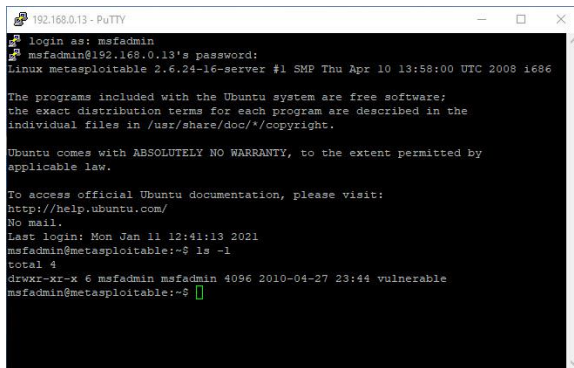
Application Layer Remote Communication Protocols

- Telnet
- Secure Shell (SSH)
- Remote Desktop Protocol (RDP)

Telnet

Port: 23 Transport Layer Protocol: TCP

- Legacy protocol used to “insecurely” connect to a remote host
 - Data is transferred in clear text, so it’s considered insecure
 - Largely replaced by SSH
- Today it’s primarily used to access managed network devices, such as routers via a serial connection
- Use TCP Port 23 by default

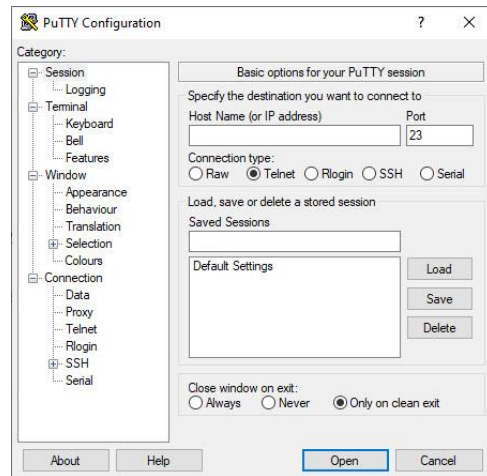


```
192.168.0.13 - PuTTY
login as: msfadmin
msfadmin@192.168.0.13's password:
Linux metasploitable 2.6.24-16-server #1 SMP Thu Apr 10 13:58:00 UTC 2008 i686

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.

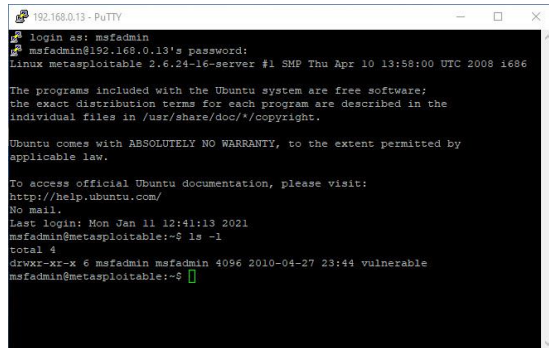
To access official Ubuntu documentation, please visit:
http://help.ubuntu.com/
No mail.
Last login: Mon Jan 11 12:41:13 2021
msfadmin@metasploitable:~$ ls -l
total 4
drwxr-xr-x 6 msfadmin msfadmin 4096 2010-04-27 23:44 vulnerable
msfadmin@metasploitable:~$
```



Secure Shell (SSH)

Port: 22 Transport Layer Protocol: TCP

- A cryptographic protocol that's used to securely connect to a remote host
 - Utilizes a terminal console
 - Typically Unix and Linux Machines, but also available on Windows and Mac OS
- Encrypts data with public key infrastructure (PKI), making it secure
 - Considered secure replacement for Telnet
- Uses TCP port 22 by default

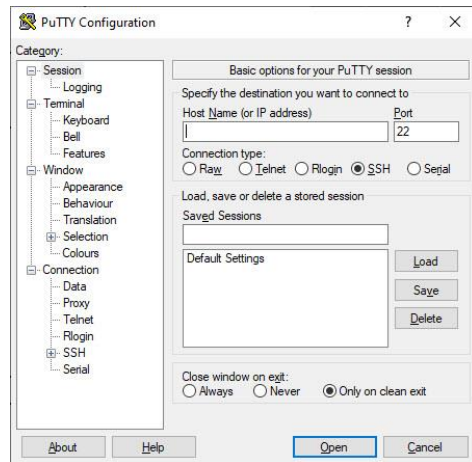


```
192.168.0.13 - PuTTY
login as: msfadmin
msfadmin@192.168.0.13's password:
Linux metasploitable 2.6.24-16-server #1 SMP Thu Apr 10 13:58:00 UTC 2008 i686

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.

To access official Ubuntu documentation, please visit:
http://help.ubuntu.com/
No mail.
Last login: Mon Jan 11 12:41:13 2021
msfadmin@metasploitable:~$ ls -l
total 4
-rwxr-xr-x 6 msfadmin msfadmin 4096 2010-04-27 23:44 vulnerable
msfadmin@metasploitable:~$
```



Remote Desktop Protocol (RDP)

Port: 3389 Transport Layer Protocol: TCP

- A Microsoft protocol that allows users to remotely connect to, view, and control a remote computer from a Windows desktop.
- Built into the Microsoft operating system.
- Uses TCP port 3389 by default

