

TASK 5

Secure File Transfer

Task: Configure SSH for secure remote access to a server. Using SCP, transfer a file from your local machine to the remote server. Document the steps involved, including setting up SSH keys for authentication and using SCP for the transfer.

For Connecting to remote server:

1. Install openssh-client:

```
venis@venis-VirtualBox:~/DevOps$ sudo apt install openssh-client
[sudo] password for venis:
Reading package lists... Done
Building dependency tree... Done
Reading state information... Done
openssh-client is already the newest version (1:8.9p1-3ubuntu0.6).
openssh-client set to manually installed.
0 upgraded, 0 newly installed, 0 to remove and 61 not upgraded.
```

2. Generate the ssh key:

```
venis@venis-VirtualBox:~/DevOps$ sudo ssh-keygen
Generating public/private rsa key pair.
Enter file in which to save the key (/root/.ssh/id_rsa): sshkey
Enter passphrase (empty for no passphrase):
Enter same passphrase again:
Your identification has been saved in sshkey
Your public key has been saved in sshkey.pub
The key fingerprint is:
SHA256:cZ0oqAG+ktwakQln6WZS/d4L6V7cdBwbmDDIDqbjyPA root@venis-VirtualBox
The key's randomart image is:
+---[RSA 3072]-----+
|      . .o          |
|    oo o  +  +      |
|o =o.o  o * o       |
|+*=  o.. o o  +     |
|+O=.. o S .  +      |
|o*Eo . + o .        |
|O+..  + + .         |
|. o   . o .          |
|.   .o .             |
+---[SHA256]-----+
```

3. Connect to the remote server:

```
venis@venis-VirtualBox:~/DevOps$ sudo ssh venis@127.0.0.1
The authenticity of host '127.0.0.1 (127.0.0.1)' can't be established.
ED25519 key fingerprint is SHA256:J4sxH+sFYEsExUiPxIG2xpcgVU1PijlEL7b1k8UWRDI.
This key is not known by any other names
Are you sure you want to continue connecting (yes/no/[fingerprint])? yes
Warning: Permanently added '127.0.0.1' (ED25519) to the list of known hosts.
venis@127.0.0.1's password:
Welcome to Ubuntu 22.04.3 LTS (GNU/Linux 6.2.0-39-generic x86_64)

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

Expanded Security Maintenance for Applications is not enabled.

61 updates can be applied immediately.
5 of these updates are standard security updates.
To see these additional updates run: apt list --upgradable

Enable ESM Apps to receive additional future security updates.
See https://ubuntu.com/esm or run: sudo pro status

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applicable law.
```

