Paramiko:

Paramiko modules 🡪 **Used to work with remote servers**

**SSH V2 (Windows/Linux) 🡪**

A screenshot of a computer program

AI-generated content may be incorrect.

Local Server Remote Server

Windows Windows

Windows Linux

Linux Linux

Linux Windows

Create two Linux RHEL :

1st Server:

Ssh

2nd Server:

Ssh

<https://stackoverflow.com/questions/67559170/paramiko-ssh-command-execution-failing-with-valueerror-digital-envelope-routi>

Copy script

#!/bin/python

import paramiko

ssh = paramiko.SSHClient()

ssh.set\_missing\_host\_key\_policy(paramiko.AutoAddPolicy())

ssh.connect(hostname='ip-172-31-46-12.ec2.internal',username='ec2-user',password='DevOps321',port=22)

#ssh.connect(hostname='3.81.122.99',username='ec2-user',key\_filename='/home/ec2-user/.ssh/id\_rsa',port=22)

#stdin, stdout, stderr = ssh.exec\_command('whoami')

#stdin, stdout, stderr = ssh.exec\_command('uptime')

stdin, stdout, stderr = ssh.exec\_command('free -m')

print("The output is: ")

print(stdout.readlines())

print("THe error is: ")

print(stderr.readlines())

$ pip install paramiko

OUTPUT:

$ python 1.py

The output is:

[' total used free shared buff/cache available\n', 'Mem: 709 235 121 0 447 474\n', 'Swap: 2047 23 2024\n']

THe error is:

[]

2nd Program:

ssh-keygen -t rsa -b 4096

in first server and copy the .pub in 2nd Server

-🡪 /home/ec2-user/.ssh/ authorized\_keys

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print(stdout.readlines())

print("THe error is: ")

print(stderr.readlines())

OUTPUT:

$ python 1.py

The output is:

['ec2-user\n']

THe error is:

[]

3rd Program:

Transfer Files:

import paramiko

ssh = paramiko.SSHClient()

ssh.set\_missing\_host\_key\_policy(paramiko.AutoAddPolicy())

ssh.connect(hostname='54.165.97.91',username='ec2-user',password='paramiko123',port=22)

sftp\_client=ssh.open\_sftp()

#sftp\_client.get('/home/ec2-user/paramiko\_download.txt','paramiko\_downloaded\_file.txt')

#sftp\_client.chdir("/home/ec2-user")

#print(sftp\_client.getcwd())

#sftp\_client.get('demo.txt','C:\\Users\\Automation\\Desktop\\download\_file.txt')

sftp\_client.put("transfer\_files.py",'/home/ec2-user/transfer\_files.py')

sftp\_client.close()

ssh.close()

A computer screen with text on it

AI-generated content may be incorrect.

$ ls

1.py 2.py transfer\_files.py

$ python 2.py

And verify the 2nd Linux Terminal

A computer screen with text and images

AI-generated content may be incorrect.