



USING SERVICE LINKED ROLE FOR EC2

1. In this lab you are going to make an EC2 instance based on Linux.
2. After the instance is launched you need to Login to the instance then you need to install Python, pip and boto3.
3. First you need to update the Linux machine.
Sudo apt-get update
4. Now you need to install python
Sudo apt-get install python3.11

```
ubuntu@ip-172-31-39-223:~$ sudo apt-get install python3.11
```

5. Now you need to install the pip tool.

Sudo apt-get install python3-pip

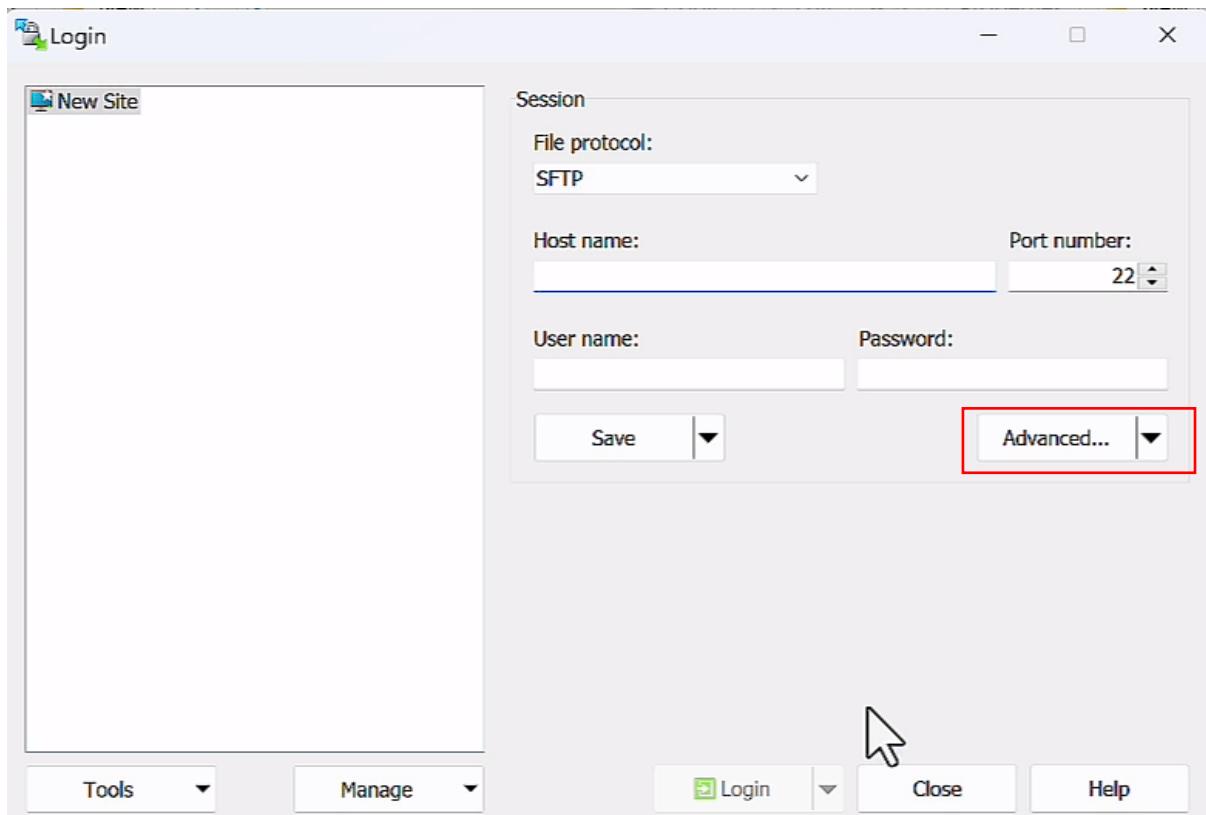
```
ubuntu@ip-172-31-39-223:~$ sudo apt-get install python3-pip
```

6. This time you will use pip tool to install boto3.

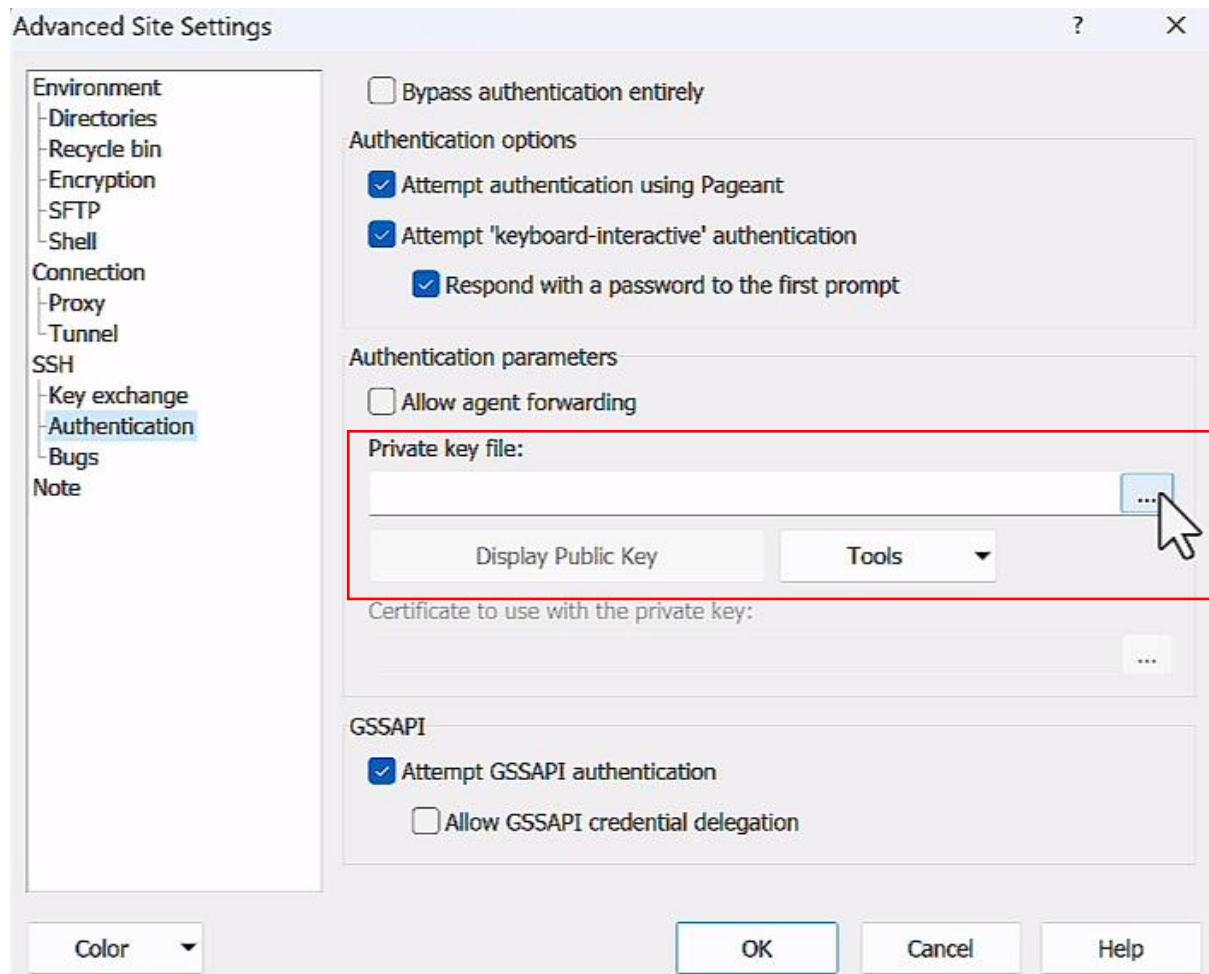
Pip install boto3

```
ubuntu@ip-172-31-39-223:~$ pip install boto3
```

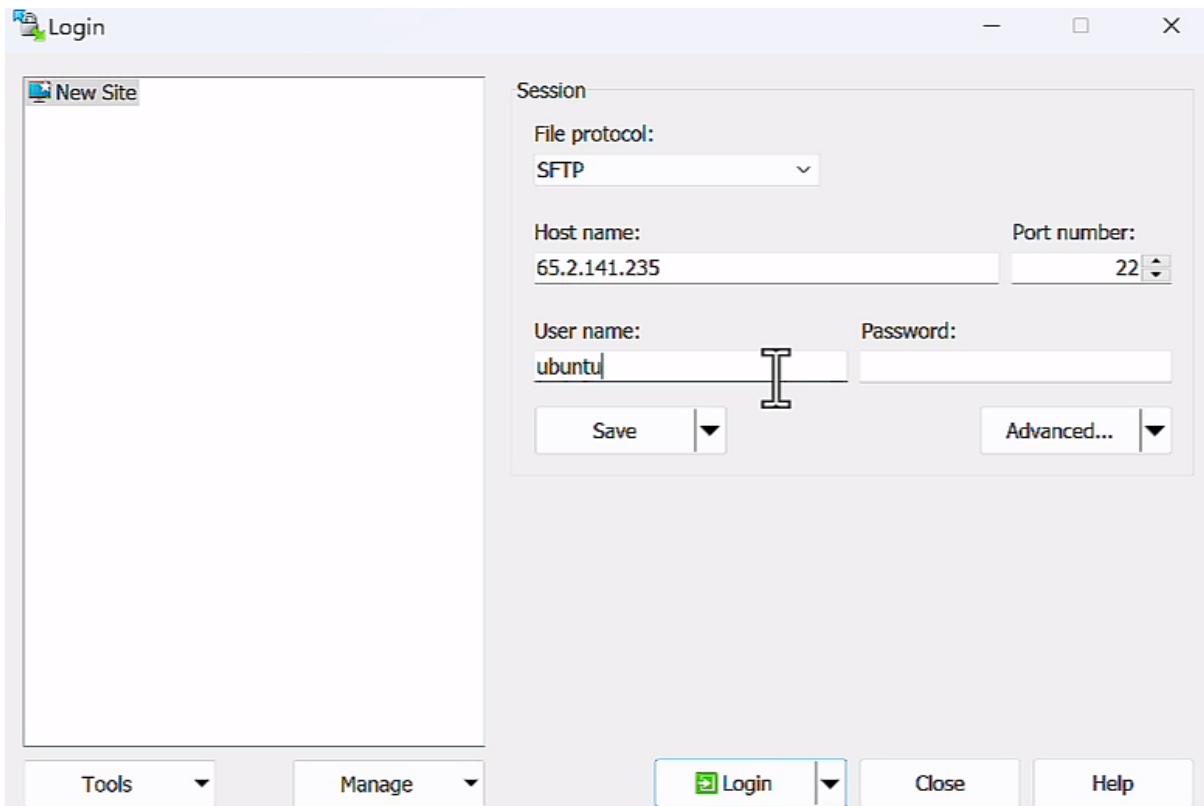
7. Now you need to download a free tool called Win SCP. This tool will help you to transfer your files from your local system to Linux server.
8. So, when you are in the Win SCP tool. You need to first give your private key like you give that in Putty.
9. Click on advanced



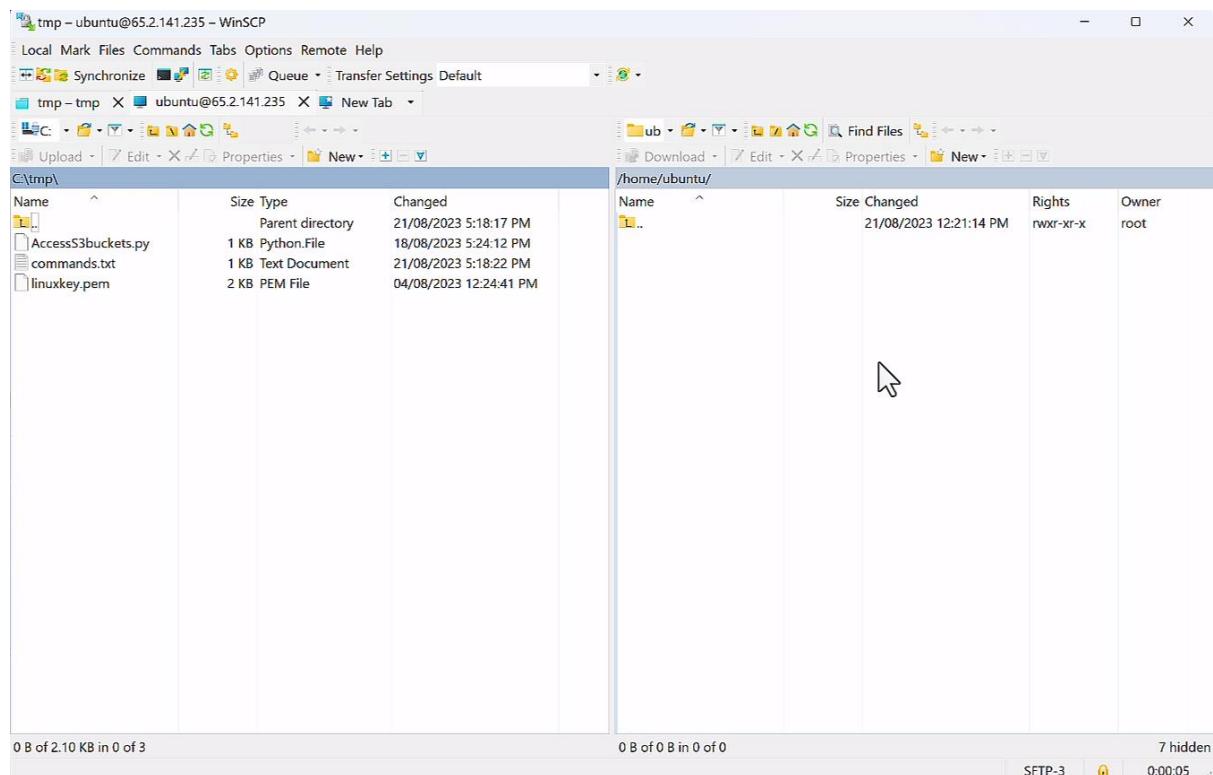
10. In the advanced settings, you need to browse for your private key. Then upload it and click on OK.



11. Now in the log in section you need to give your public IP address and the user is ubuntu.
12. Then click on Login.



13. You can see here that the right-hand side is your ubuntu machine.



14. Now you just need to drag and drop your file and it will be copied.

Name	Type	Size	Changed	Rights	Owner
..	Parent directory		21/08/2023 5:18:17 PM		
AccessS3buckets.py	Python.File	1 KB	18/08/2023 5:24:12 PM	rwx-r-x-X	root
commands.txt	Text Document	1 KB	21/08/2023 5:18:22 PM	rw-rw-r--	ubuntu
linuxkey.pem	PEM File	2 KB	04/08/2023 12:24:41 PM		

Name	Size	Changed	Rights	Owner
..		21/08/2023 12:21:14 PM		
AccessS3buckets.py	1 KB	18/08/2023 5:24:12 PM	rw-rw-r--	ubuntu

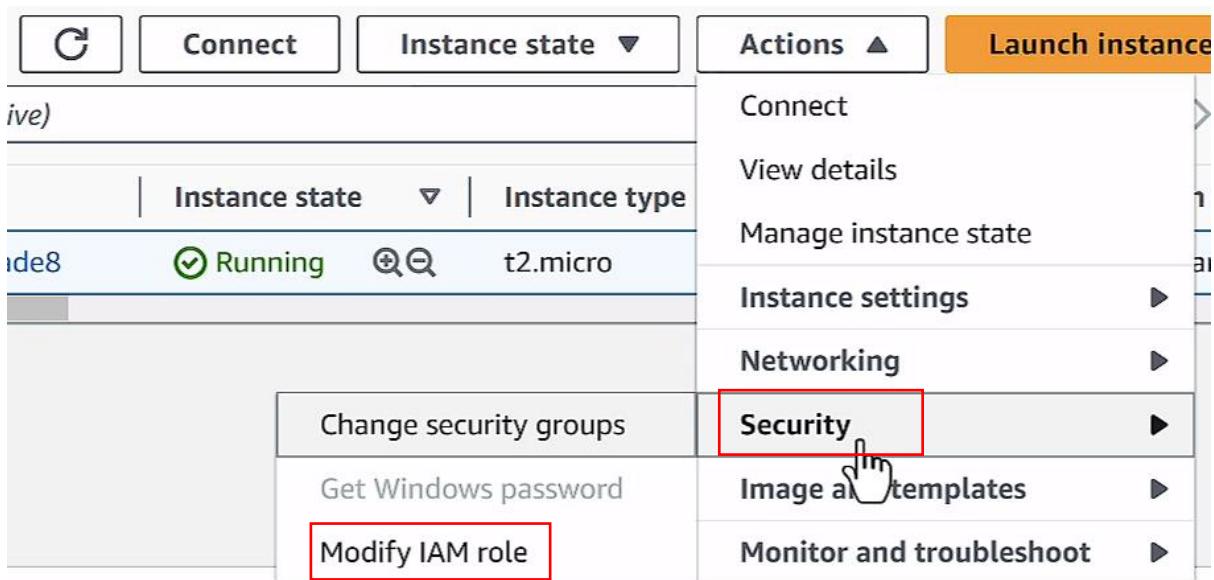
15. Now go back to the instance and list what is in it. There you will see the file that you copied just now.

```
ubuntu@ip-172-31-39-223:~$ ls
AccessS3buckets.py
```

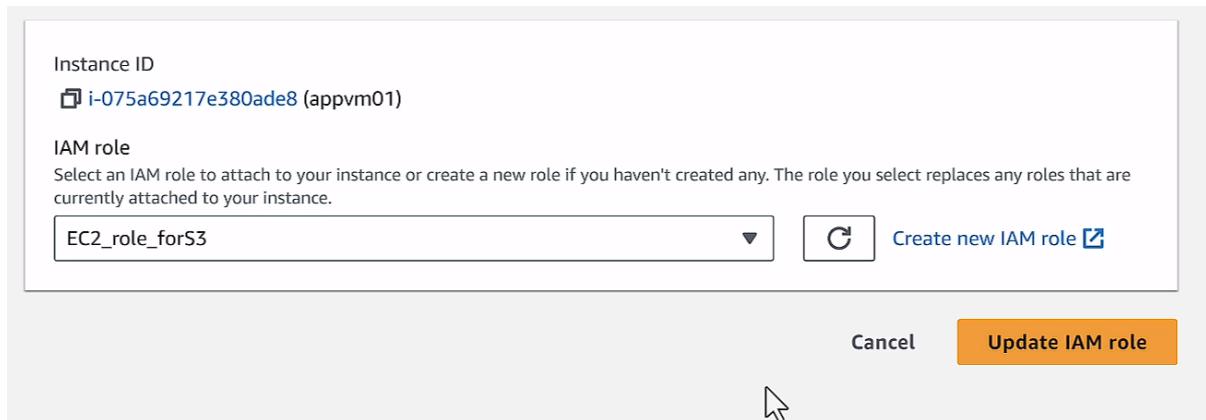
16. Now if you will try to access your bucket using python you will see that is giving you an error.
 17. That it was unable to locate the credentials. It is because there is no permission that was given to it to access the buckets.

```
ubuntu@ip-172-31-39-223:~$ python3 AccessS3buckets.py
botocore.exceptions.NoCredentialsError: Unable to locate credentials
ubuntu@ip-172-31-39-223:~$
```

18. Now you need to create a new role and attach the S3 policy that you created earlier. The S3 policy should have the appropriate permission to give access to your instance to access the buckets.
 19. Once you have created the role. Now it's time to attach it with the instance.
 20. For that go back to EC2 and select your instance.
 21. After selecting your instance click on actions then security. Now click on modify IAM role.



22. Now choose the role that you just created and click on update IAM role.



23. If you go back to the instance and run the command again you will see that it is showing you the buckets.

```
ubuntu@ip-172-31-39-223:~$ python3 AccessS3buckets.py
appbucket8000
appbucket9000
ubuntu@ip-172-31-39-223:~$
```