Moving files into & out of an AWS EC2 Instance – Windows

You can transfer files into and out of a Linux EC2 instance from a local computer running Windows by either of these methods:

- **WinSCP** provides a graphical interface (GUI) that allows you to drag and drop files between your local computer and your AWS instance. This is similar to using Windows File Explorer.
- **PuTTY Secure Copy** is run from the Windows Command Prompt.

Processing using an EC2 instance requires that you move the files to be processed to the instance, and then remove the products created before the instance is terminated.

Overview of the steps in this recipe:

A. Prerequisites
B. Find your EC2 instance Public DN
C. Transferring files using WinSCP
D. Transferring files using PuTTY Secure Copy

A) Prerequisites

a. You must have an AWS account. If you don't have an account, click HERE to create one.
   Note: You will need to provide credit card information for your new account.
b. You will need to create and launch a Linux EC2 instance to connect to. Instructions for this are found in the recipe titled "Create a Basic Elastic Cloud Compute (EC2) Instance."
c. **WinSCP** installed
d. **PuTTY** SSH client installed
   i. You must have created a PuTTY Private Key (.ppk) file as described in the recipe titled "Connect to an AWS EC2 Instance – Windows & PuTTY." The .ppk file will be used in Sections C and D.

B) Find Your EC2 Instance Public DNS

1. Open the AWS “Instances” window in the EC2 Management Console (**1**).
    a. The **Public DNS** of your EC2 instance displayed in this window (**2**) will be used in Sections C and D.

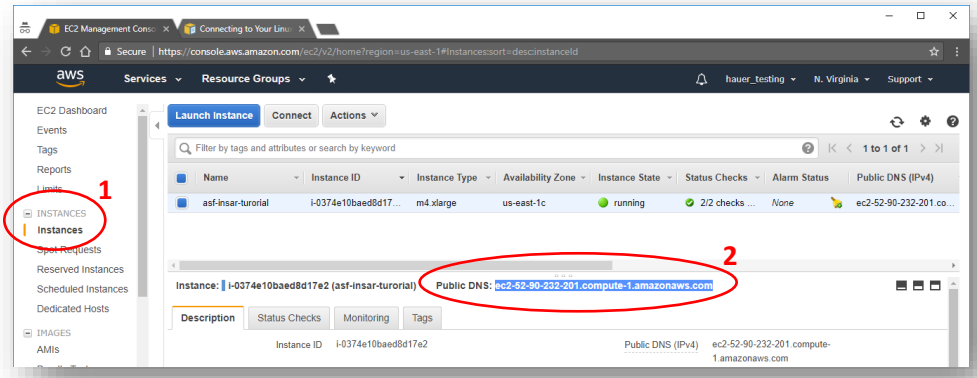


Figure 1

C) Transferring Files Using **WinSCP**

1. Download and install **WinSCP.** https://winscp.net/eng/download.php
    a. Click on *Installation package* (Fig. 2) and then use the default installation options.

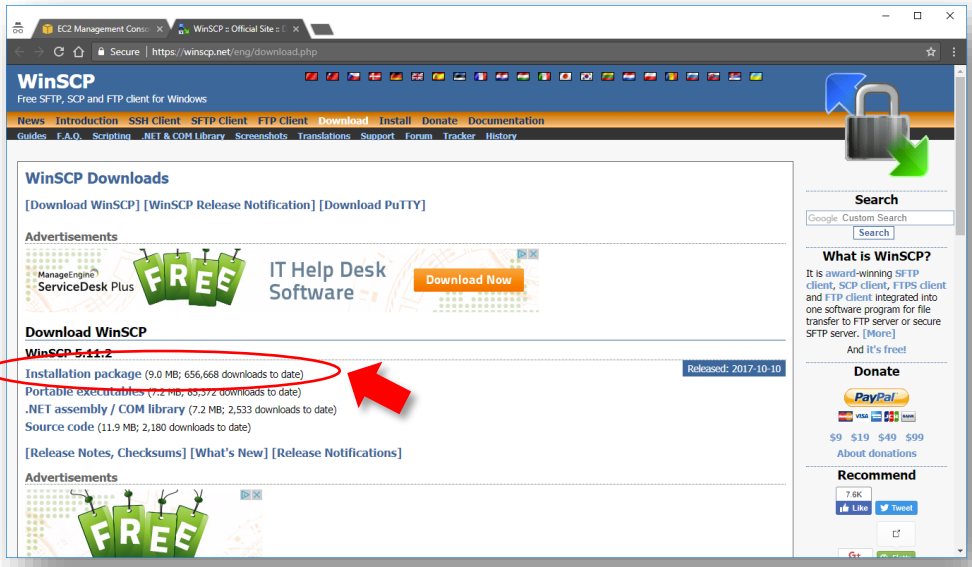


Figure 2

3. Start WinSCP by clicking on the Desktop icon 
4. WinSCP *Login* window (Fig. 3)
   a. Click on *New Site* (**1**).
   b. In the *Host name* box (**2**), enter the **Public DNS** displayed in your EC2 Management Console Instances window.
   c. In the *User name* box (**3**), type **ubuntu.**
   d. Click on the **Advanced** button.

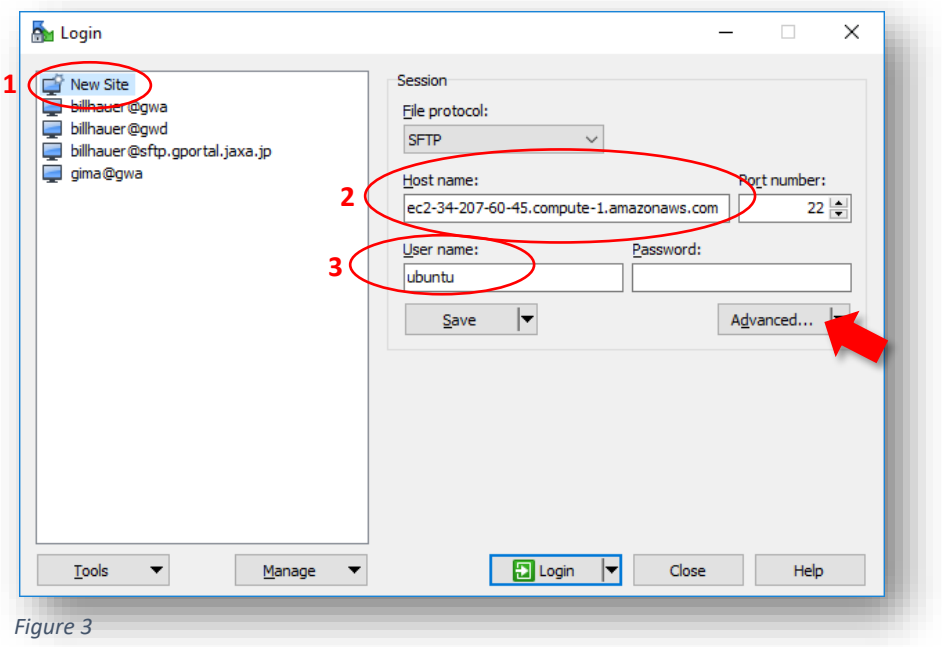


Figure 3

5. *Advanced Site Settings* window
   a. Under *SSH* (1), click on *Authentication* (2)
   b. Under *Private key file* (3), click on the [...] button and navigate to the folder where your *PuTTY Private Key (.ppk)* file is located
      i. Select the *.ppk* file
   c. Click on the **OK** button to close the *Advanced Site Settings* window

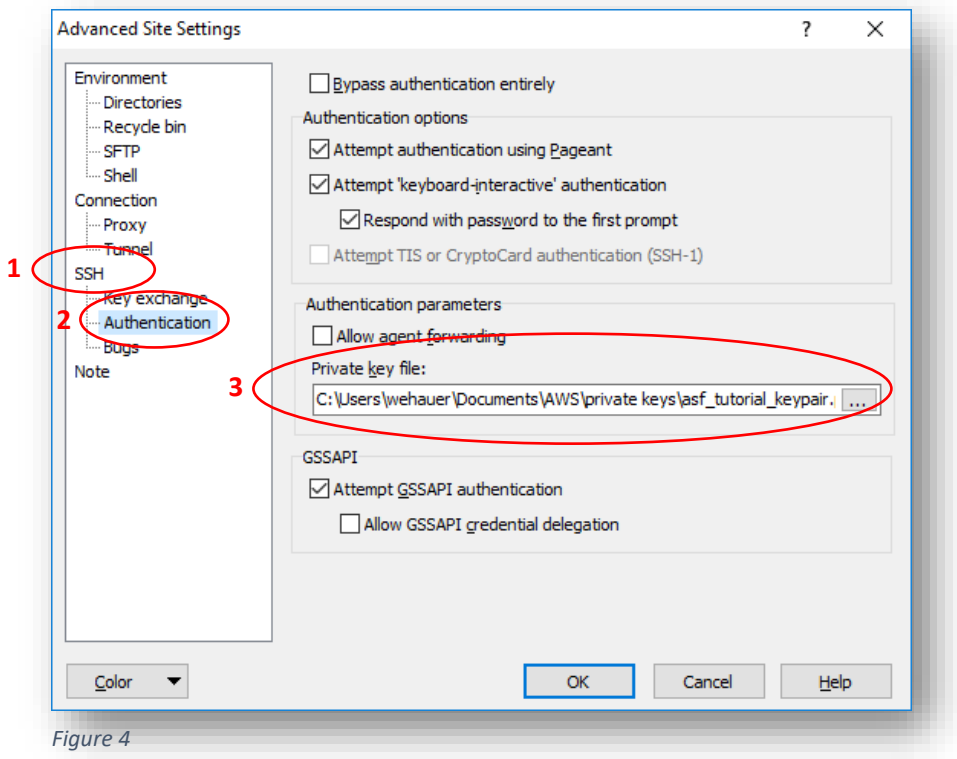


Figure 4

If you want to save your settings to use again later, click on the <**Save**> button in the WinSCP *Login* window and name the settings.

Note: If you stop your EC2 instance and restart it, a new Public DNS will be assigned. You will need to copy and paste this into the WinSCP *Host name* box before you can connect.

6. Click the <**Login**> button (Fig. 5).

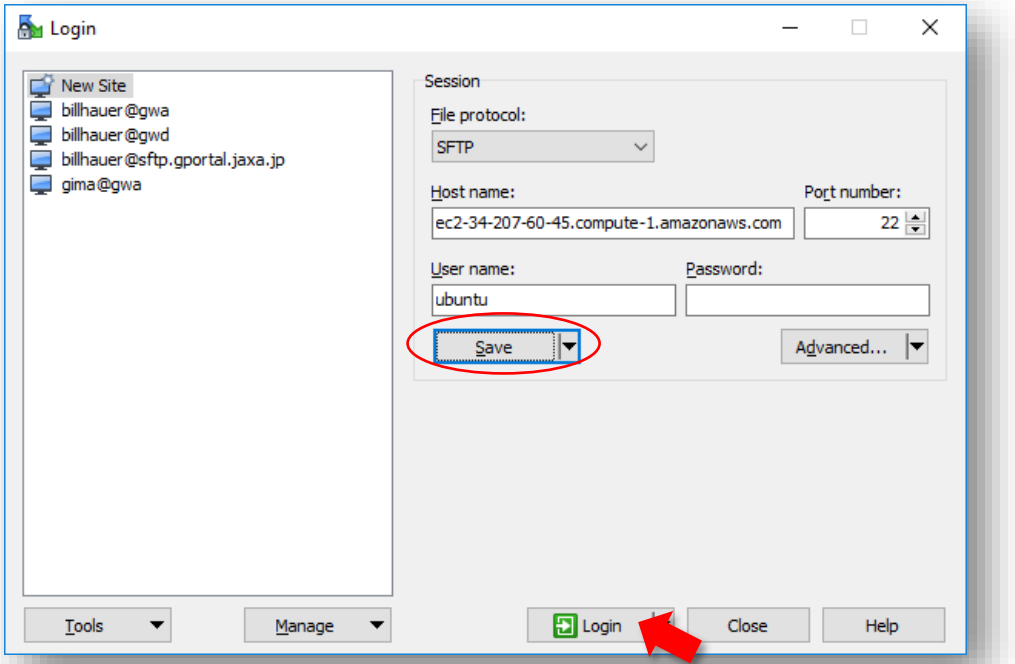


Figure 5

7 The first time you connect to your instance, you will be asked about connecting to an unknown server.

a Click the **Yes** button to continue (Fig 6).

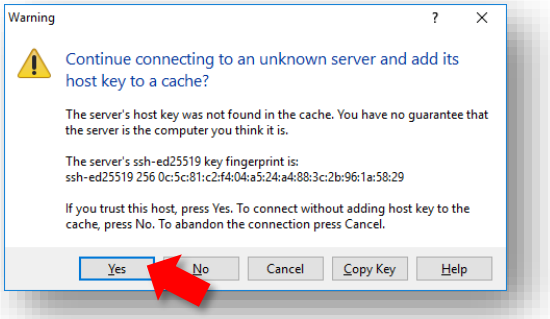


Figure 6

8. After you have connected, the left pane of the window will display the file contents of your computer and the right pane displays the contents of your EC2 instance (Fig. 7).

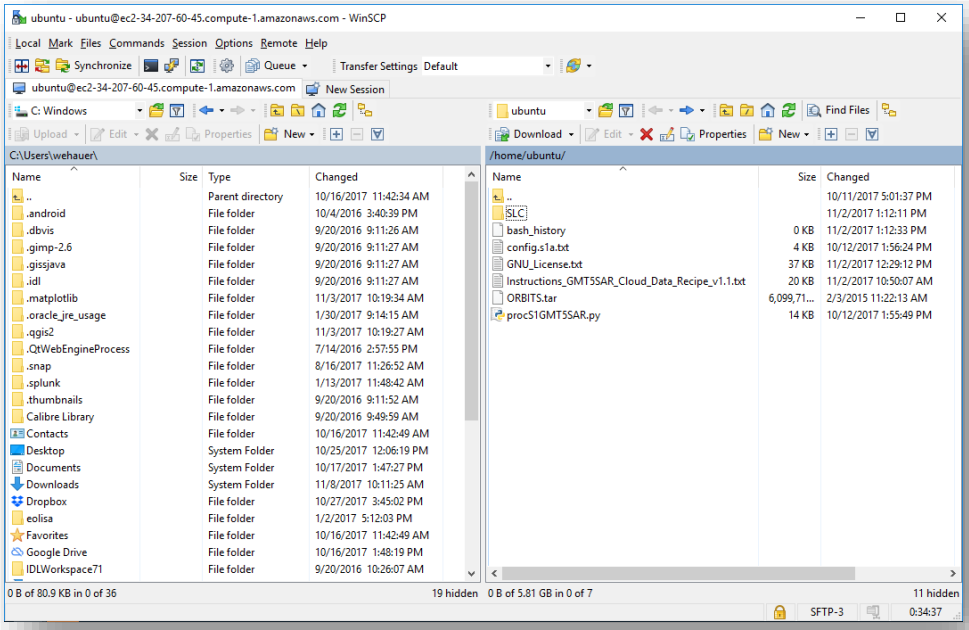


Figure 7

9. Drag and drop files from your computer into your EC2 instance to process. When processing is complete, drag and drop the products from EC2 to your computer.

> ***Important***: Files must be transferred from your EC2 instance to your computer before you terminate the instance!

D) Transferring Files Using **PuTTY Secure Copy** (PSCP)

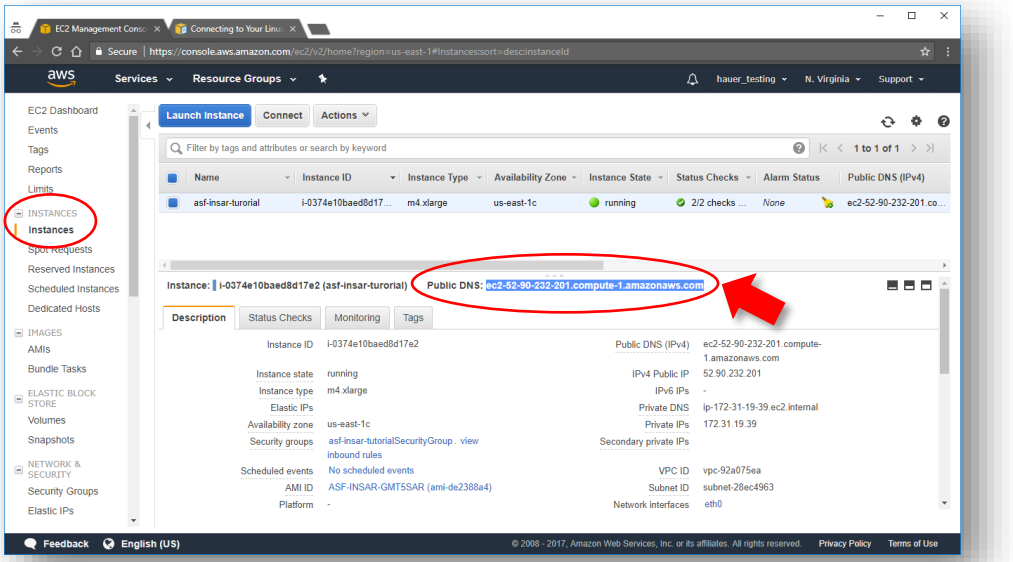


Figure 8

1. Open a Windows *Command Prompt* window
   - **Windows 10** (scroll down for *Windows 7*)
     a. Click on the **Start** button  at the extreme left of the Taskbar.
     b. Scroll down the list of Apps to the *Windows System* folder.
     c. Expand the folder and click on *Command Prompt* (Fig. 9).

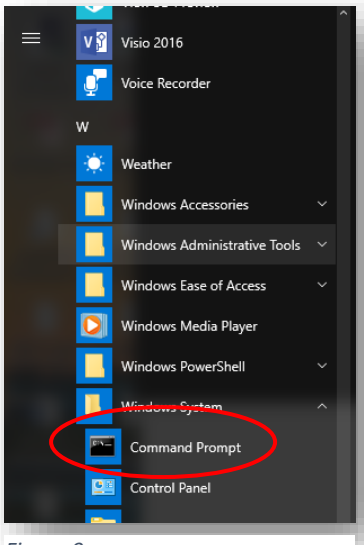


Figure 9

     d. Or, click the **Start** button and type **cmd**.
        i. Select *Command Prompt* from the search results.
     e. The *Command Prompt* window will open (Fig. 10).

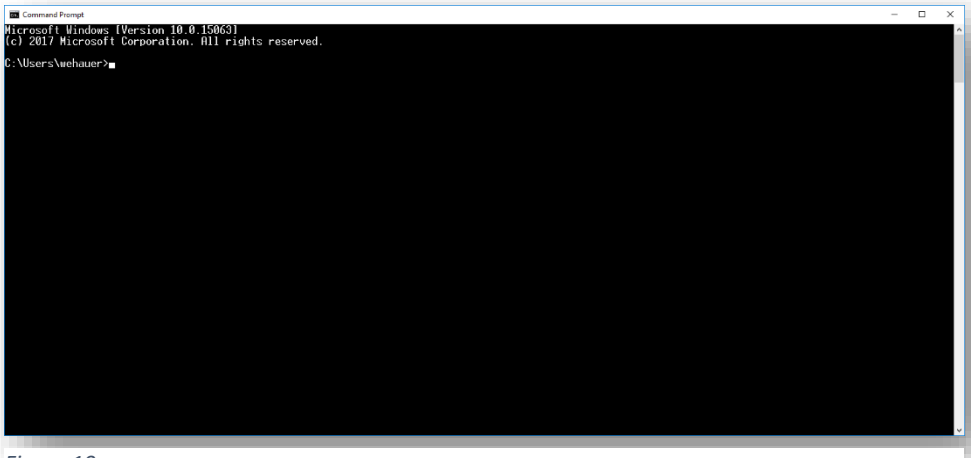
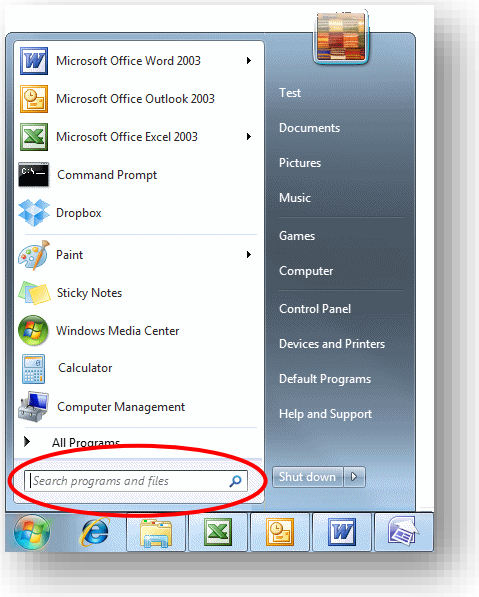


Figure 10

- **Windows 7**

  a. Click on the **Start** button  at the left of the Taskbar.
  b. In the *Search programs and files* box, type **cmd**.
     i. Select *Command Prompt* from the search results.



  c. The *Command Prompt* window will open (Fig. 10).

Note: When using PSCP to transfer files between your computer and your EC2 instance, your *PuTTY Private Key (.ppk)* file must be in the folder you are working in, or you must provide a path in the PSCP command to the folder the file is located in.

For example, if *AWSkey.ppk* file is stored in a folder named *keys*, include the path `C:\Users\username\keys\AWSkey.ppk` in the PSCP command.

Copy a file ***into*** your EC2 instance

2. At the Windows command prompt type (*notice where spaces are placed*):

```
C:\> pscp -i yourkey.ppk yourfilename ubuntu@public_DNS:/home/ubuntu/
```

Example: To move the file S1A_EW_GRD.zip from your Windows *Downloads* folder to the */home/ubuntu* directory of your EC2 instance.

a. Use Windows File Explorer to move your *awskey.ppk* file to your *Downloads* folder, or provide a path to the folder your .ppk file is located in.

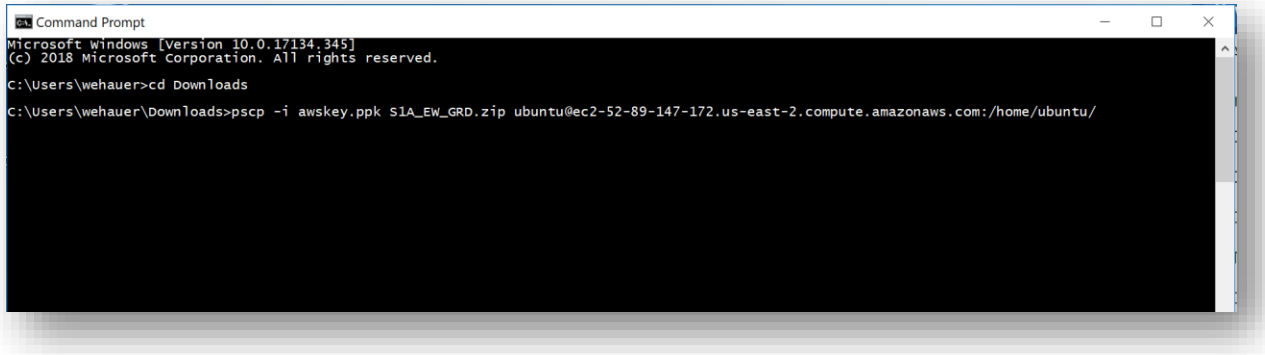
b. At the Windows command prompt, navigate to your *Downloads* folder using the change directory (**cd**) command:

`C:\Users\current_user>cd Downloads` and press <**Enter**>

c. At the command prompt, type the PSCP command, which includes your *.ppk* filename (and path if necessary), the name of the file you want to transfer, the *Public DNS* of your EC2 instance, and the path to a folder in your instance:

```
C:\> pscp -i awskey.ppk S1A_EW_GRD.zip ubuntu@ec2-52-89-147-172.us-east-
2.compute.amazonaws.com:/home/ubuntu/
```

Command syntax (brackets indicate optional paths to your *.ppk* file and the file you want to move *if they are not in the folder you are in*):




```
C:\> pscp -i C:\<path>\yourkey.ppk C:\<path>\yourfilename
ubuntu@public_DNS:/home/ubuntu
```

Copy a file ***out of*** your EC2 instance

3. At the Windows command prompt:

```
C:\> pscp -i yourkey.ppk ubuntu@publicDNS:/home/ubuntu/yourfilename
C:\[local_destination_path]\[folder]
```

   a. Note that the .ppk file must be in the folder you run the command from, or you must include the path to the file in your PSCP command.

> If you don't include a local destination path and folder in the command, the file will download into the folder the command is run from. In this case, the command syntax would be:
>
> `C:\> pscp -i C:\[path]\yourkey.ppk ubuntu@publicDNS:/home/ubuntu/[folder]/filename`

Example: Move a product generated from an application out of your EC2 instance *PRODUCT* directory to the *Data* folder on your Windows computer.

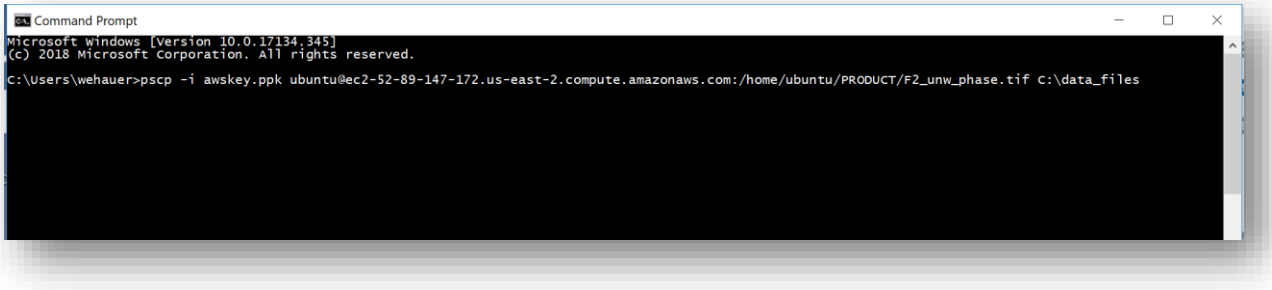
   b. Use Windows File Explorer to move a copy of my *awskey.ppk* file to your *Data* folder, or provide a path to the folder your .ppk file is located in.

   c. At the Windows command prompt, navigate to your *Data* folder using the change directory (**cd**) command:

      `C:\> cd Data` and press <**Enter**>

   d. At the command prompt, type the PSCP command, which includes your .ppk filename, the Public DNS of your EC2 instance, and the name of the file you want to transfer.

```
C:\> pscp -i awskey.ppk ubuntu@ec2-52-89-147-172.us-east-
2.compute.amazonaws.com:/home/ubuntu/PRODUCT/F2_unw_phase.tif C:\data_files
```



Command syntax (brackets indicate optional paths to your *.ppk* file and the file on your EC2 instance):

```
C:\> pscp -i C:\[path]\yourkey.ppk
ubuntu@public_DNS:/home/ubuntu/[path]/yourfilename C:\[local_destination_path]
```

> ***Important***: Files must be transferred from your EC2 instance to your computer before you terminate the instance!