DIGITAL TALENT SCHOLARSHIP 2019

Big Data Analytics

TERBUKA UNTUK DISABILITAS

BREAK YOUR LIMITS !

digitalent.kominfo.go.id
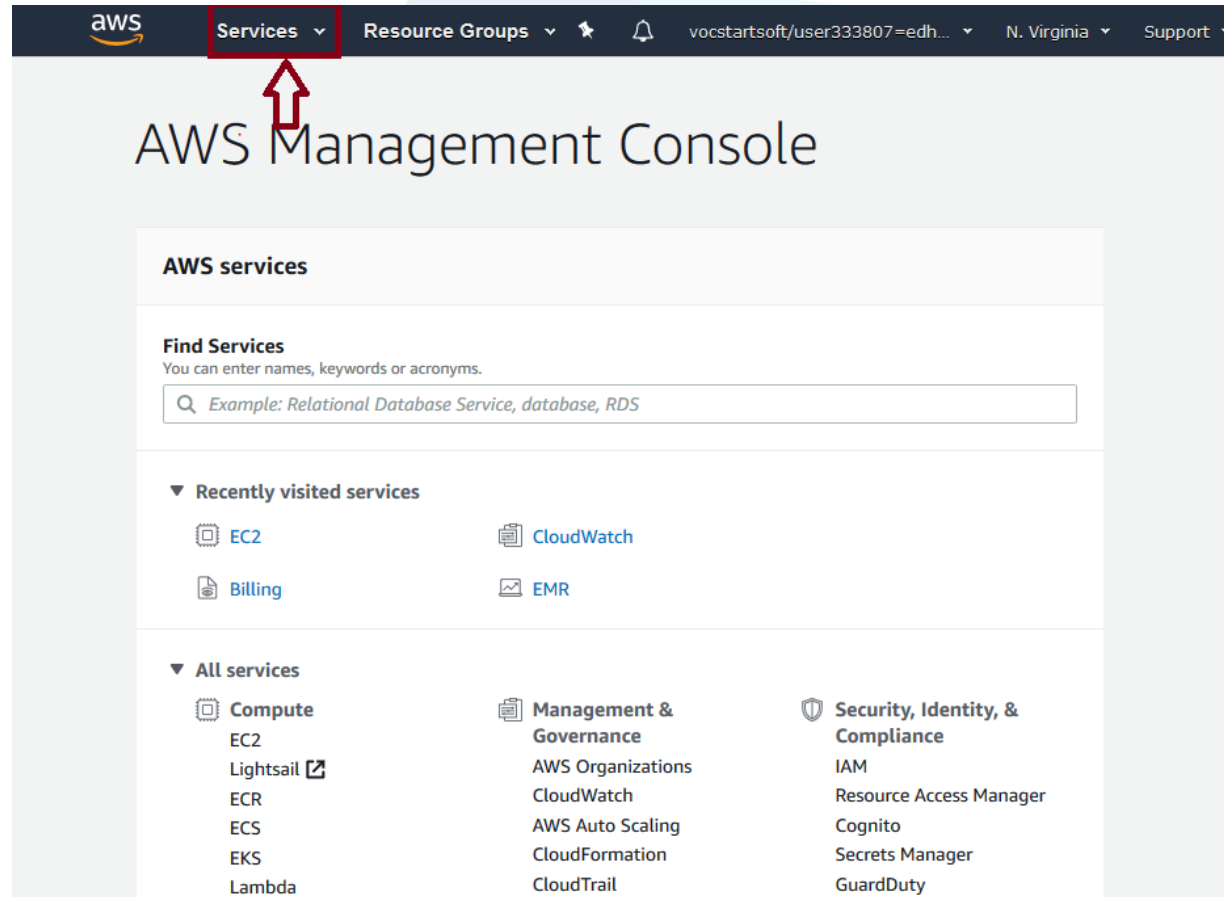
AWS Cloud Tutorial

EC2 Instance

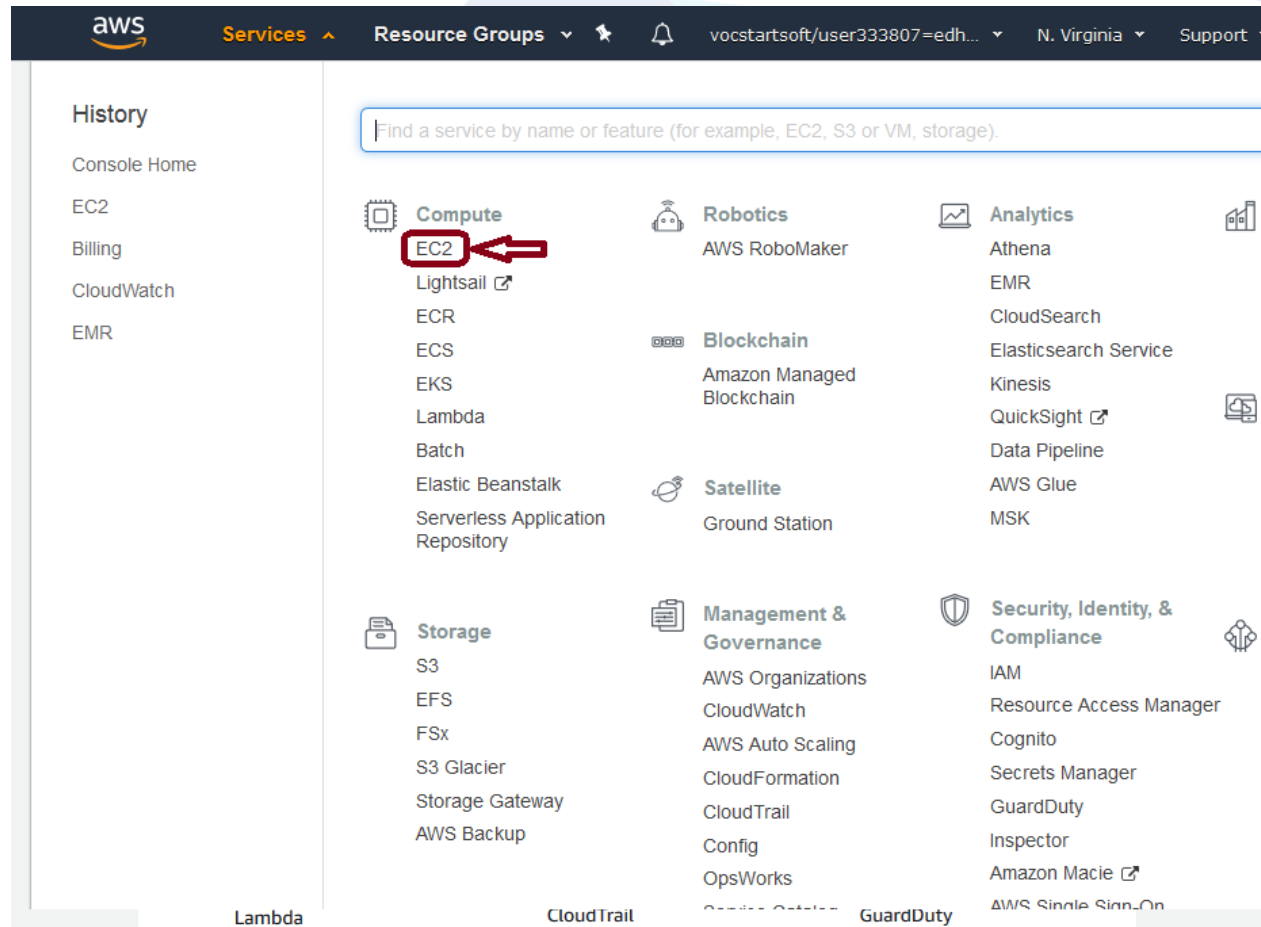# Pembuatan Instance EC2 AWS

Big Data

EC2 AWS

Pilih Menu Service

- Pilih Menu Service Pada AWS Console

Pilih EC2 Service

- Pilih EC2 service pada Bagian Compute

Pilih Menu Instance

- Pilih Menu Instance Pada Instances

Pilih Launch Instance

Pilih OS

- Pilih OS yang anda inginkan (Dalam Tutorial ini Ubuntu Server 16.04 LTS)

Pilih Instance Type

- Pilih Instance Type yang diinginkan (dalam tutorial ini adalah t2.micro)

Currently selected: t2.micro (Variable ECUs, 1 vCPUs, 2.5 GHz, Intel Xeon Family, 1 GiB memory, EBS only)

	Family	Type	vCPUs (i)	Memory (GiB)	Instance Storage (GB) (i)	EBS-Optimized Available (i)	Network Performance (i)
☐	General purpose	t2.nano	1	0.5	EBS only	-	Low to Moderate
☑	General purpose	t2.micro Free tier eligible	1	1	EBS only	-	Low to Moderate
☐	General purpose	t2.small	1	2	EBS only	-	Low to Moderate
☐	General purpose	t2.medium	2	4	EBS only	-	Low to Moderate
☐	General purpose	t2.large	2	8	EBS only	-	Low to Moderate
☐	General purpose	t2.xlarge	4	16	EBS only	-	Moderate
☐	General purpose	t2.2xlarge	8	32	EBS only	-	Moderate
☐	General purpose	t3a.nano	2	0.5	EBS only	Yes	Up to 5 Gigabit
☐	General purpose	t3a.micro	2	1	EBS only	Yes	Up to 5 Gigabit
☐	General purpose	t3a.small	2	2	EBS only	Yes	Up to 5 Gigabit
☐	General purpose	t3a.medium	2	4	EBS only	Yes	Up to 5 Gigabit

Cancel   Previous   Review and Launch   Next: Configure Instance Details

Konfigurasi Instance

- Konfigurasi Instance sesuai kebutuhan (dalam tutorial ini adalah konfigurasi default)

Step 3: Configure Instance Details

Configure the instance to suit your requirements. You can launch multiple instances from the same AMI, request Spot instances to take advantage of the lower pricing, assign an access management role to the instance, and more.

Number of instances	1 — Launch into Auto Scaling Group
Purchasing option	☐ Request Spot instances
Network	vpc-07086a7d (default) — Create new VPC
Subnet	No preference (default subnet in any Availability Zon) — Create new subnet
Auto-assign Public IP	Use subnet setting (Enable)
Placement group	☐ Add instance to placement group
Capacity Reservation	Open — Create new Capacity Reservation
IAM role	None — Create new IAM role
Shutdown behavior	Stop
Enable termination protection	☐ Protect against accidental termination
Monitoring	☐ Enable CloudWatch detailed monitoring. Additional charges apply.
Tenancy	Shared - Run a shared hardware instance. Additional charges will apply for dedicated tenancy.
Elastic Inference	☐ Add an Elastic Inference accelerator. Additional charges apply.
T2/T3 Unlimited	☐ Enable. Additional charges may apply

Cancel   Previous   Review and Launch   **Next: Add Storage**

Menambahkan Storage

- Tambahkan storage sesuai kebutuhan (dalam tutorial ini adalah konfigurasi default)

Step 4: Add Storage

Your instance will be launched with the following storage device settings. You can attach additional EBS volumes and instance store volumes to your instance, or edit the settings of the root volume. You can also attach additional EBS volumes after launching an instance, but not instance store volumes. Learn more about storage options in Amazon EC2.

Volume Type ⓘ	Device ⓘ	Snapshot ⓘ	Size (GiB) ⓘ	Volume Type ⓘ	IOPS ⓘ	Throughput (MB/s) ⓘ	Delete on Termination ⓘ	Enc
Root	/dev/sda1	snap-0e384451033d3767e	8	General Purpose S ⌄	100 / 3000	N/A	☑	Not

Add New Volume

Free tier eligible customers can get up to 30 GB of EBS General Purpose (SSD) or Magnetic storage. Learn more about free usage tier eligibility and usage restrictions.

Cancel   Previous   Review and Launch   Next: Add Tags

Menambahkan Tag

- Tambahkan Tag (dalam tutorial ini tidak ditambahkan)

Konfigurasi Security Group

- Konfigurasikan sesuai kebutuhan.
- Open port (Hadoop):
  - 8020
  - 50010
  - 50020
  - 9000
- (Spark):
  - 7077
  - 8080

Step 6: Configure Security Group

A security group is a set of firewall rules that control the traffic for your instance. On this page, you can add rules to allow specific traffic to reach your instance. For example, if you want to set up a web server and allow Internet traffic to reach your instance, add rules that allow unrestricted access to the HTTP and HTTPS ports. You can create a new security group or select from an existing one below. Learn more about Amazon EC2 security groups.

Assign a security group: ● Create a **new** security group
○ Select an **existing** security group

Security group name: launch-wizard-1

Description: launch-wizard-1 created 2019-06-26T18:38:22.118+07:00

Type ⓘ	Protocol ⓘ	Port Range ⓘ	Source ⓘ		Description ⓘ
SSH	TCP	22	Custom	0.0.0.0/0	e.g. SSH for Admi

Add Rule

⚠ Warning
Rules with source of 0.0.0.0/0 allow all IP addresses to access your instance. We recommend setting security group rules to allow access from known IP addresses only.

Cancel   Previous   **Review and Launch**

Review Instance

- Review Instance anda dan re-konfigurasi sesuai kebutuhan

Key Pair

- Buat dan unduh private key untuk mengakses instance

Launch Instance

Select an existing key pair or create a new key pair ✕

A key pair consists of a **public key** that AWS stores, and a **private key file** that you store. Together, they allow you to connect to your instance securely. For Windows AMIs, the private key file is required to obtain the password used to log into your instance. For Linux AMIs, the private key file allows you to securely SSH into your instance.

Note: The selected key pair will be added to the set of keys authorized for this instance. Learn more about removing existing key pairs from a public AMI.

Create a new key pair ⌄

Key pair name

digitalent

Download Key Pair

💬 You have to download the **private key file** (*.pem file) before you can continue. **Store it in a secure and accessible location.** You will not be able to download the file again after it's created.

Cancel **Launch Instances**

View Instance

Launch Status

✅ **Your instances are now launching**
The following instance launches have been initiated: i-0f0471df57f30de5f   View launch log

ℹ️ **Get notified of estimated charges**
Create billing alerts to get an email notification when estimated charges on your AWS bill exceed an amount you define (for example, if you exceed the free usage tier).

How to connect to your instances

Your instances are launching, and it may take a few minutes until they are in the **running** state, when they will be ready for you to use. Usage hours on your new instances will start immediately and continue to accrue until you stop or terminate your instances.

Click **View Instances** to monitor your instances' status. Once your instances are in the **running** state, you can **connect** to them from the Instances screen. Find out how to connect to your instances.

▼ Here are some helpful resources to get you started

- How to connect to your Linux instance
- Learn about AWS Free Usage Tier
- Amazon EC2: User Guide
- Amazon EC2: Discussion Forum

While your instances are launching you can also

Create status check alarms to be notified when these instances fail status checks. (Additional charges may apply)
Create and attach additional EBS volumes (Additional charges may apply)
Manage security groups

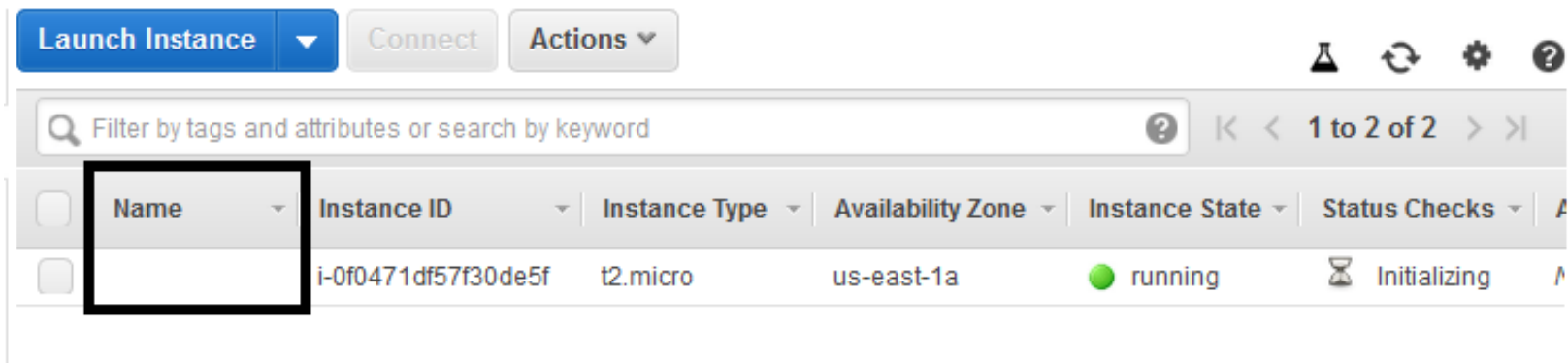**View Instances**

Pilih Menu Service

- Beri nama instance anda

Akses EC2 Instance

Big Data

EC2 AWS

Requirement

- Windows
    - Putty : https://www.putty.org/
    - WinSCP : https://winscp.net/eng/download.php
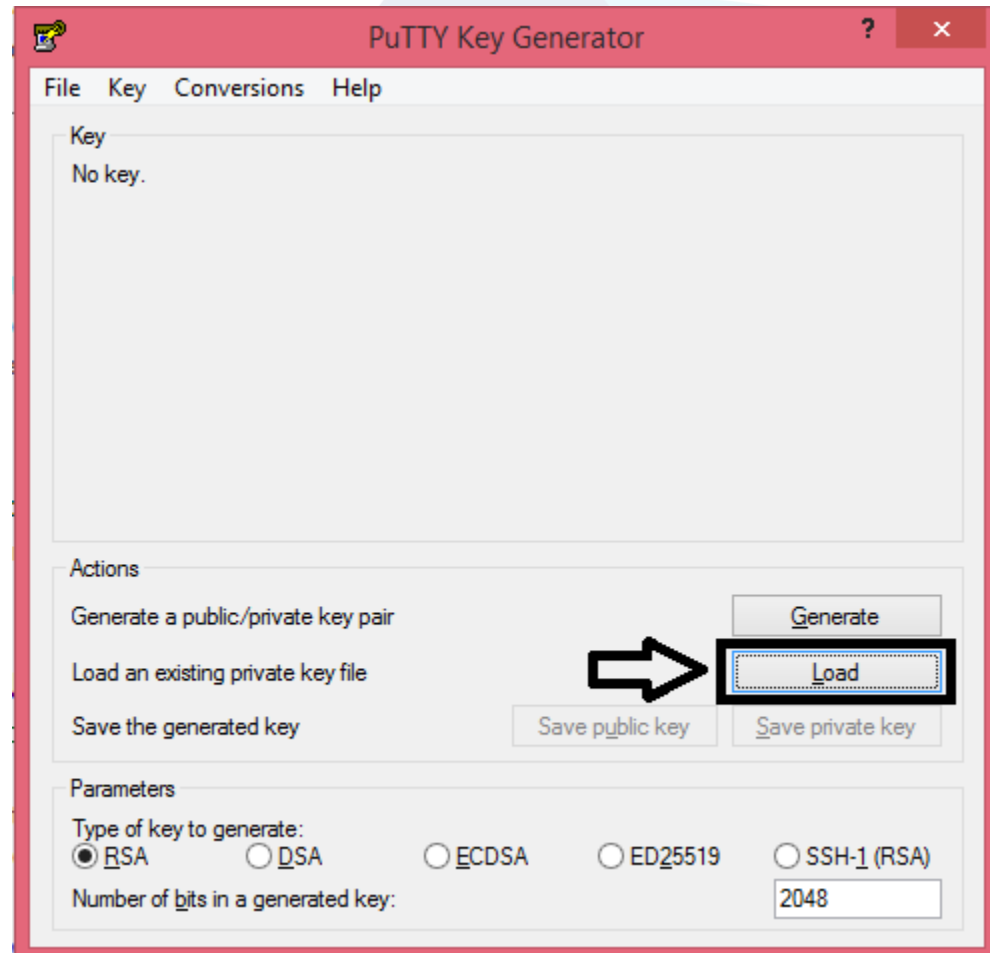   - Pirant lunak lainnya.
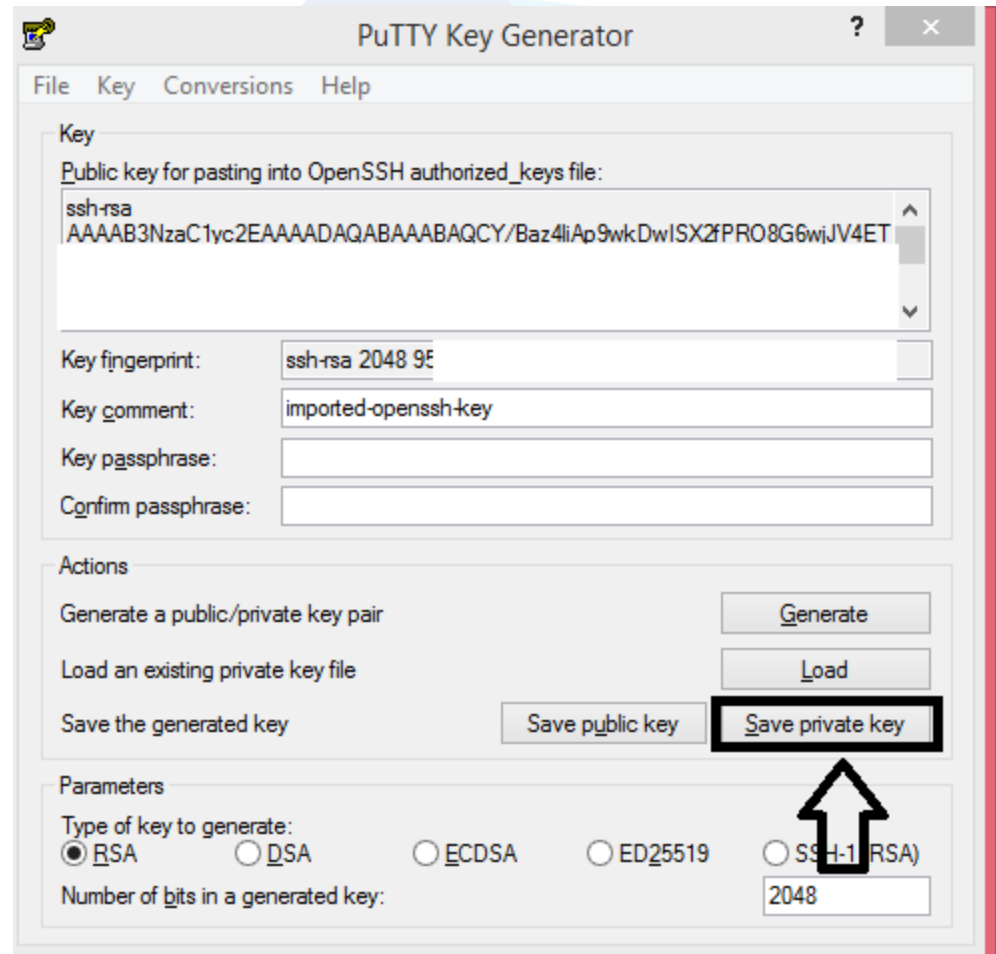- Linux
    - SSH Client.

Akses EC2 Instance (Konversi Key)

Big Data

EC2 AWS

Konversi Key (PuttyGen)

- Load .pem key yang diunduh sebelumnya.

Konversi Key (PuttyGen)

- Simpan .ppk key.

Akses EC2 Instance (Putty)

Big Data

EC2 AWS

Akses EC2 (Putty)

- Masukkan Hostname atau IP
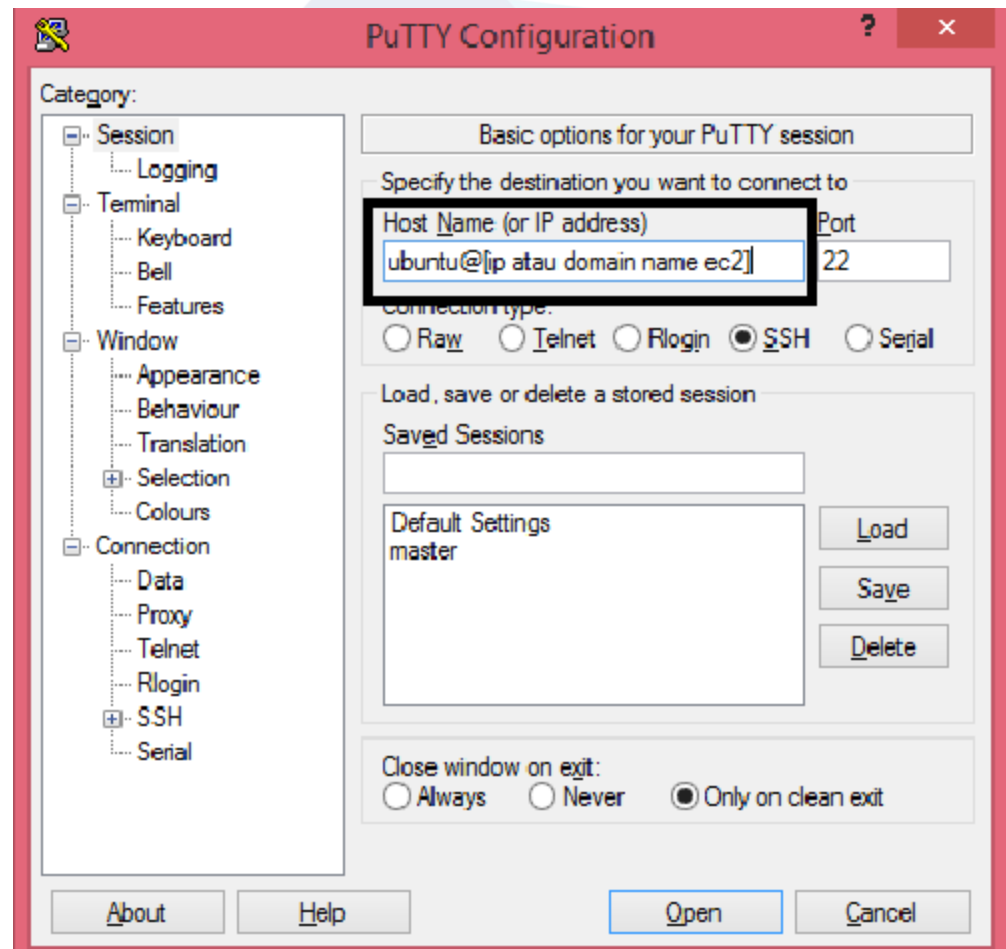
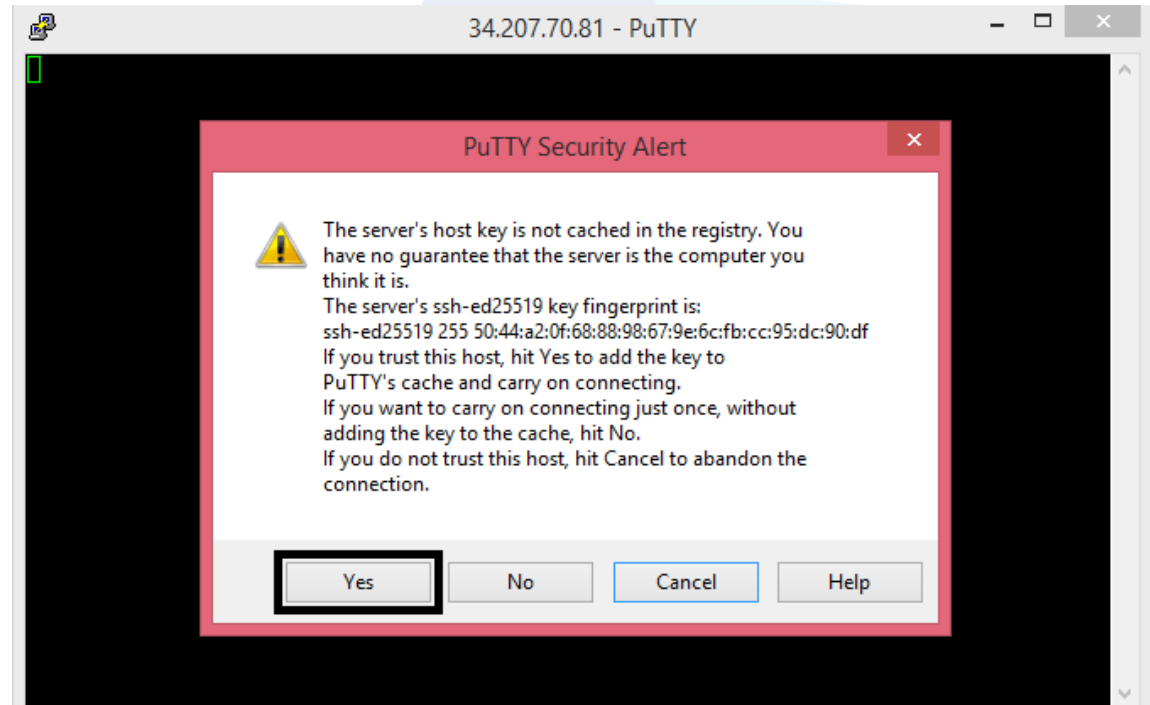# Akses EC2 (Putty)

- Pada category SSH/Auth masukkan .ppk key.
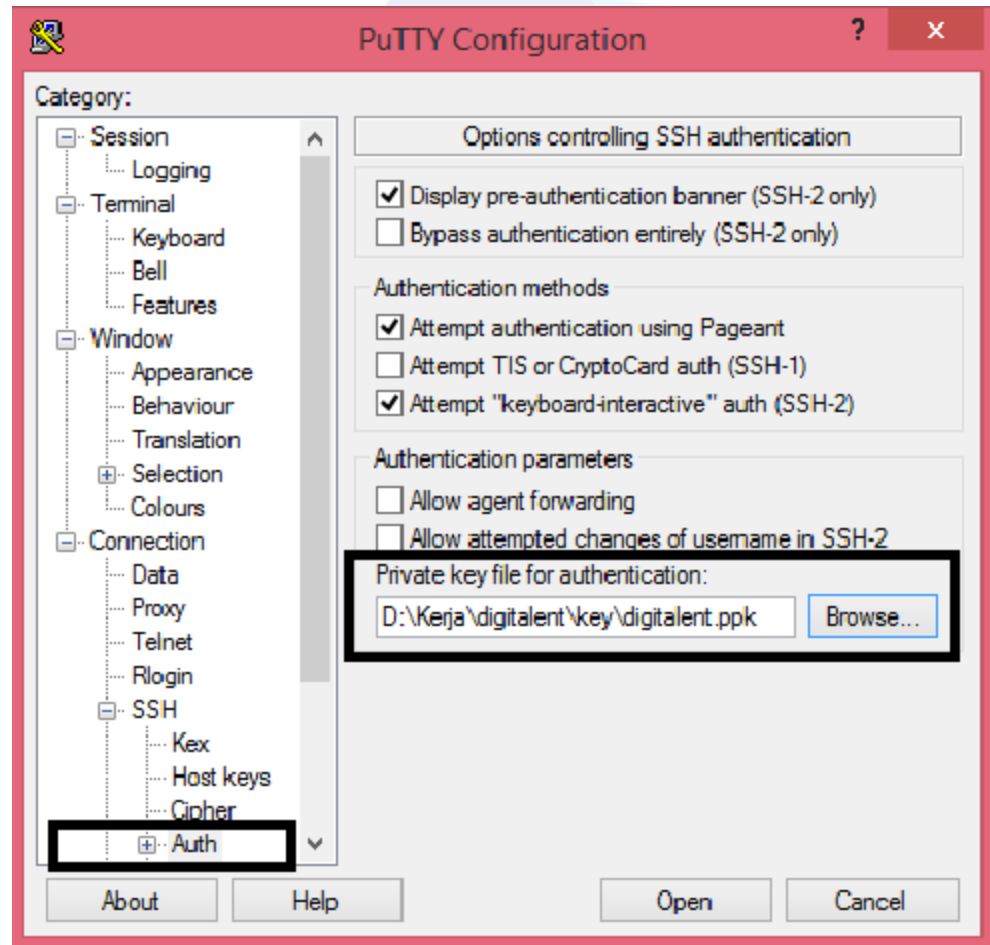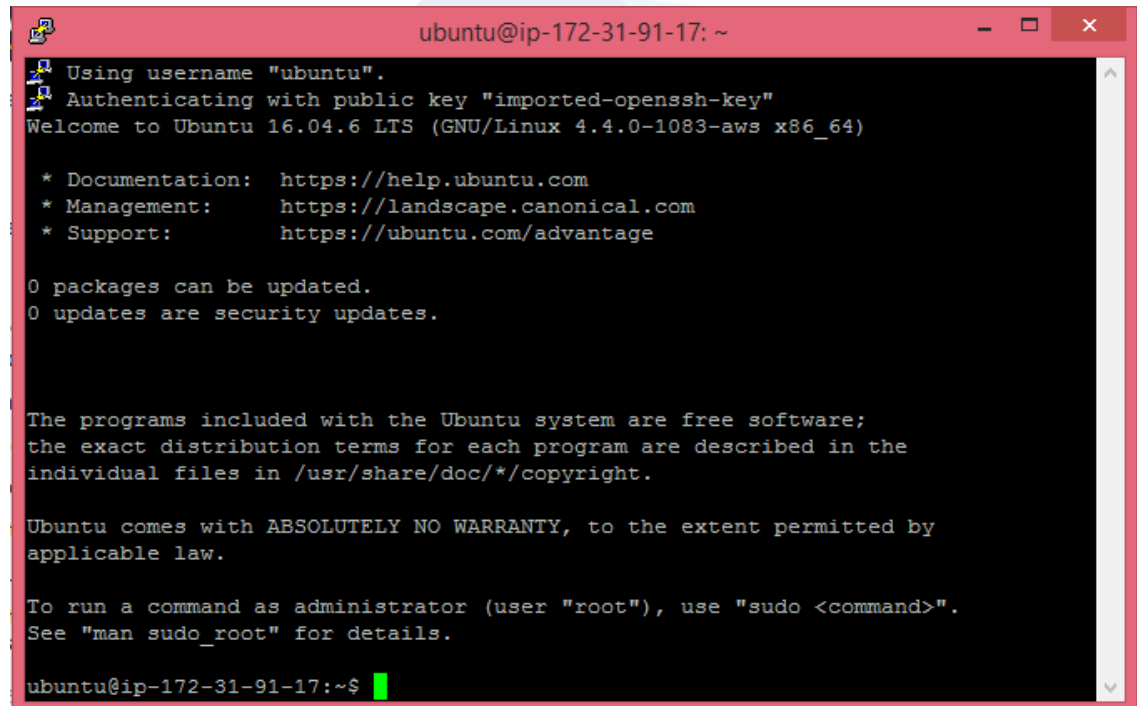
Akses EC2 (Putty)

- Klik pada button open.
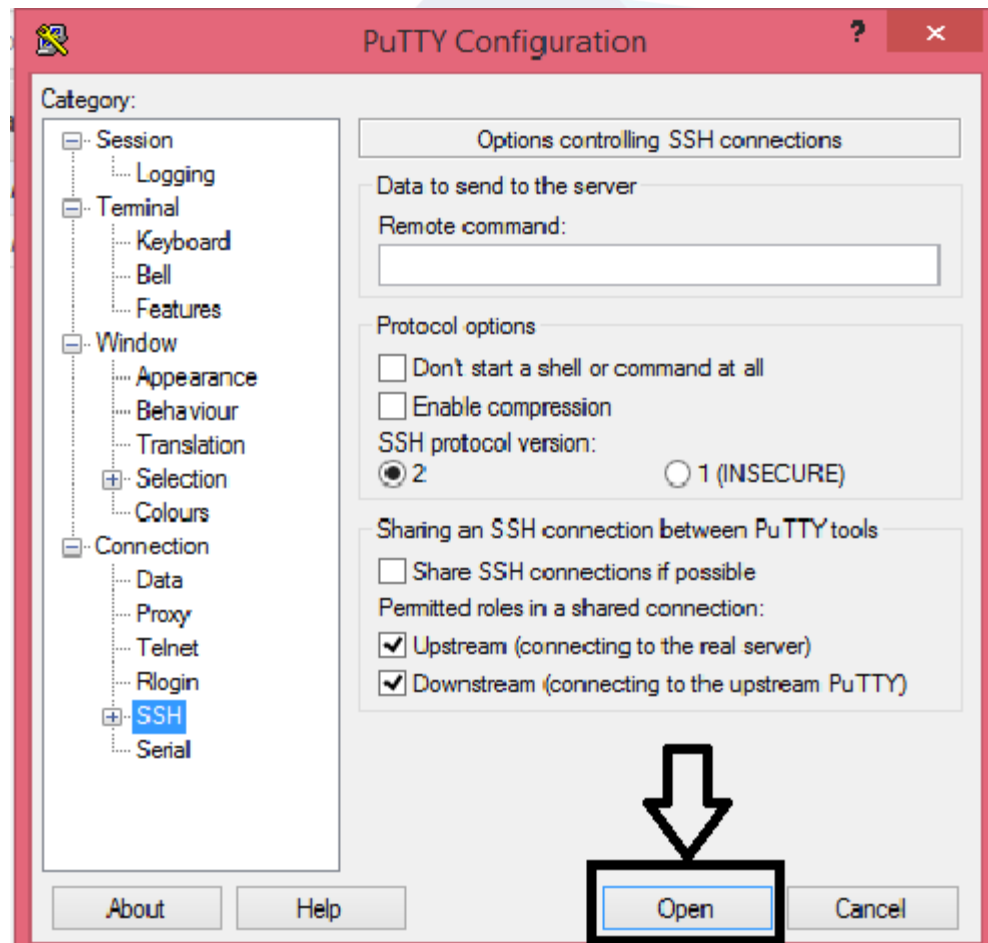
Akses EC2 (Putty)

- Klik button Yes.

Akses EC2 (Putty)

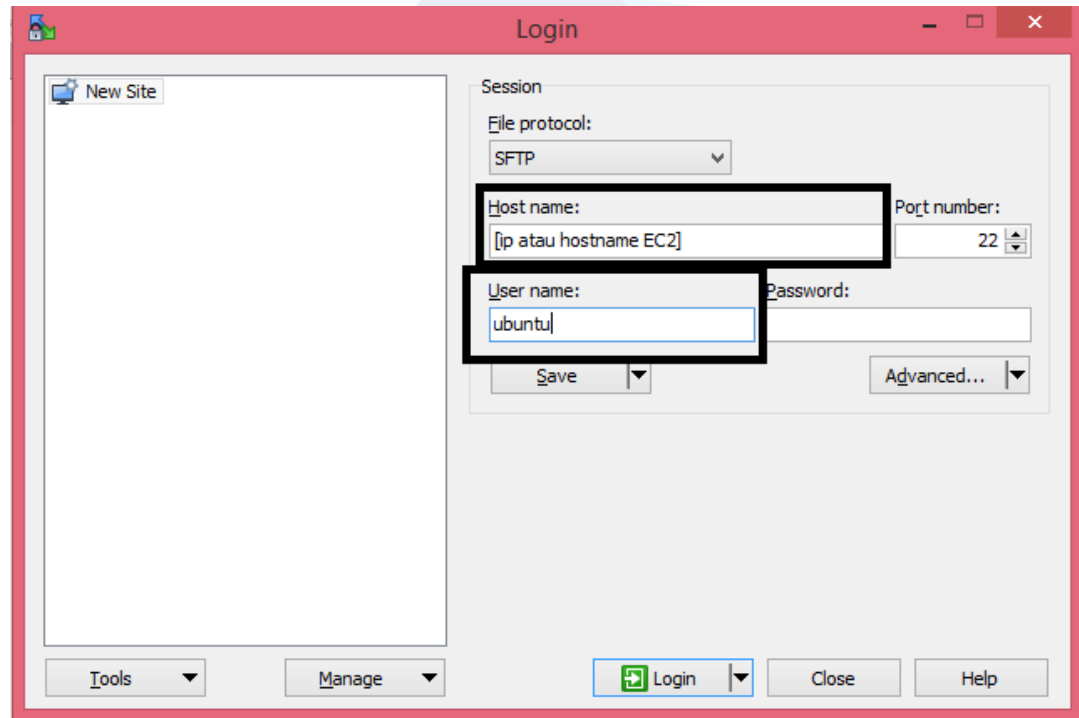- Koneksi Terbuka ke EC2 Instance.
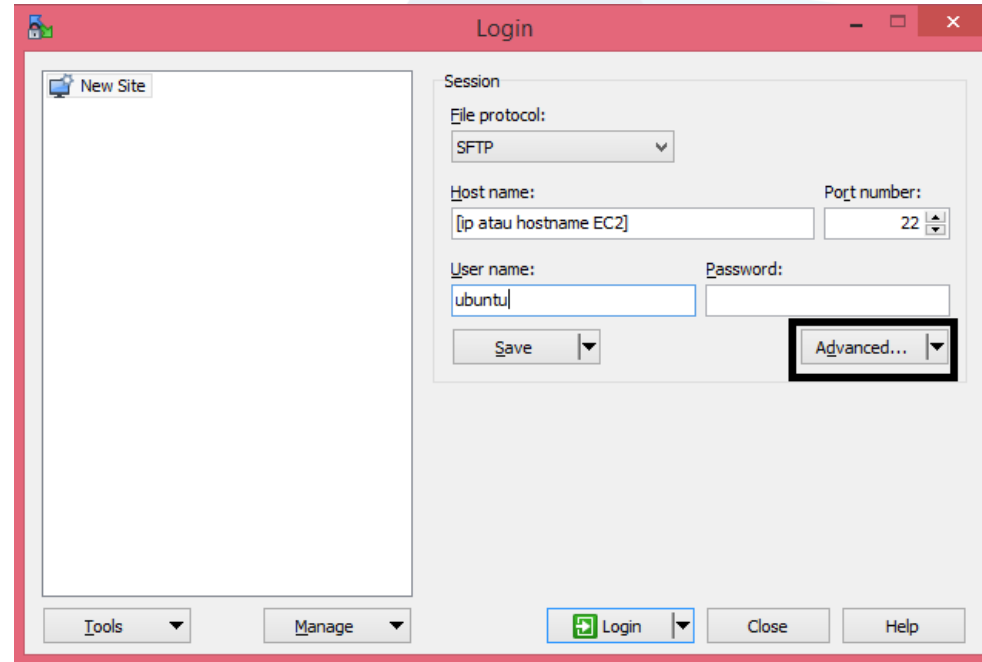
Akses EC2 Instance (WinSCP)

Big Data

EC2 AWS

Akses EC2 (WinSCP)

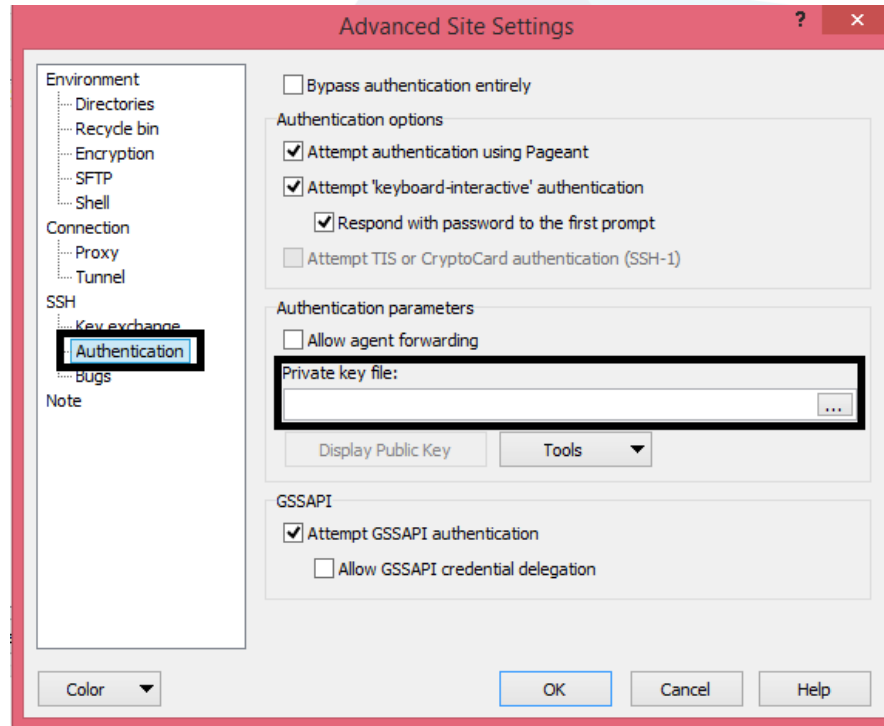- Masukkan HostName dan Username.
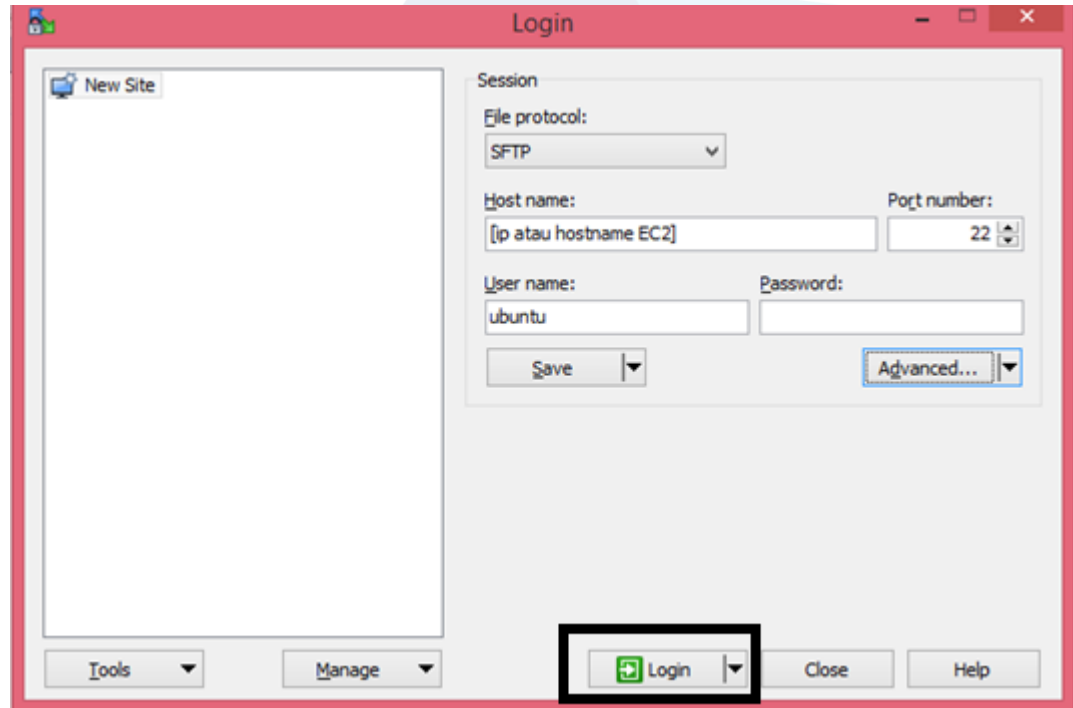
Akses EC2 (WinSCP)

- Pilih menu Advanced.

Akses EC2 (WinSCP)

- Pada kategori SSH/Auth.., masukkan .ppk key
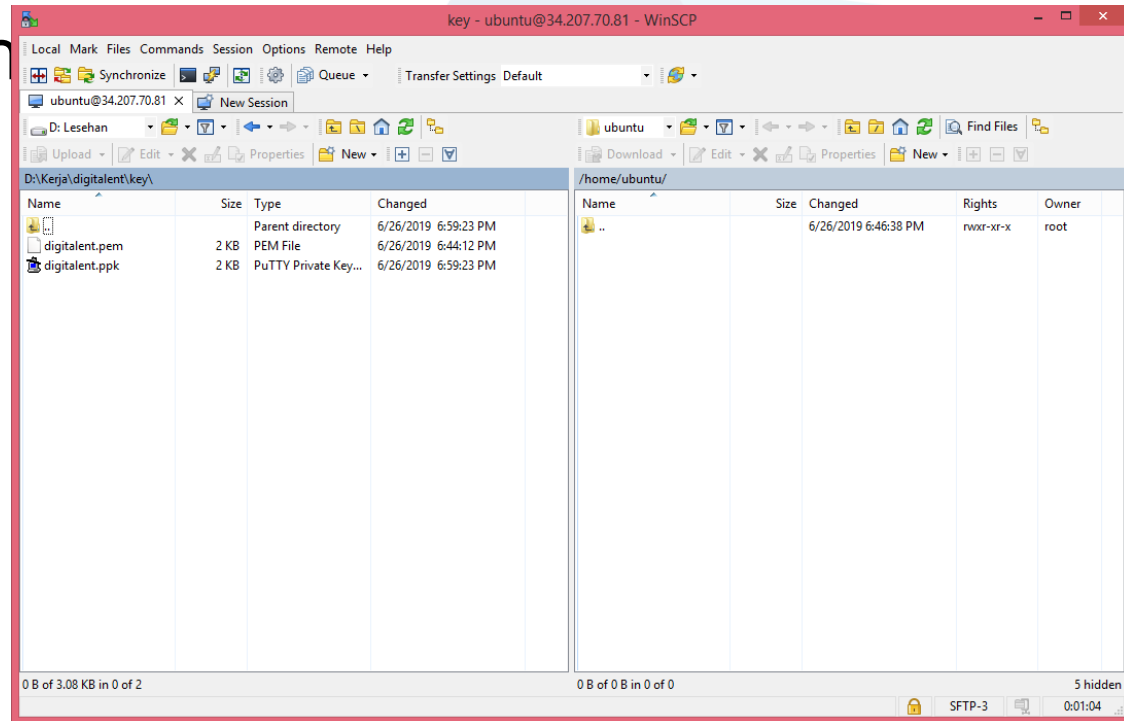
Akses EC2 (WinSCP)

- Klik button login.

Akses EC2 (WinSCP)

- Koneksi telah terbentuk.

IKUTI KAMI

DIGITAL TALENT SCHOLARSHIP

- digitalent.kominfo
- digitalent.kominfo
- DTS_kominfo
- Digital Talent Scholarship 2019

Pusat Pengembangan Profesi dan Sertifikasi
Badan Penelitian dan Pengembangan SDM
Kementerian Komunikasi dan Informatika
Jl. Medan Merdeka Barat No. 9
(Gd. Belakang Lt. 4 - 5)
Jakarta Pusat, 10110

TERBUKA UNTUK DISABILITAS

BREAK YOUR LIMITS !