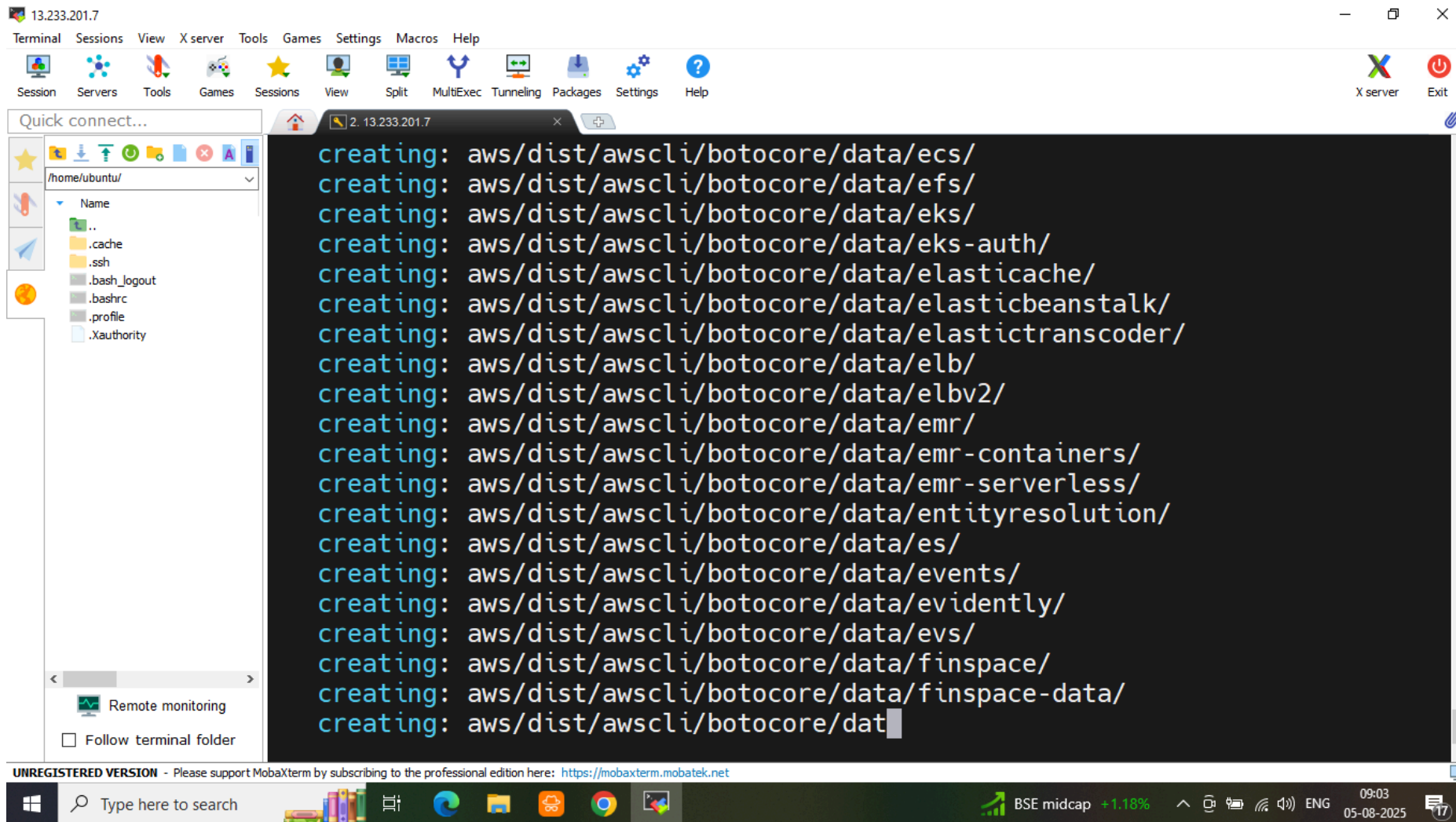


1. Launch the New EC2 instance and Installing AWS CLI

Command:

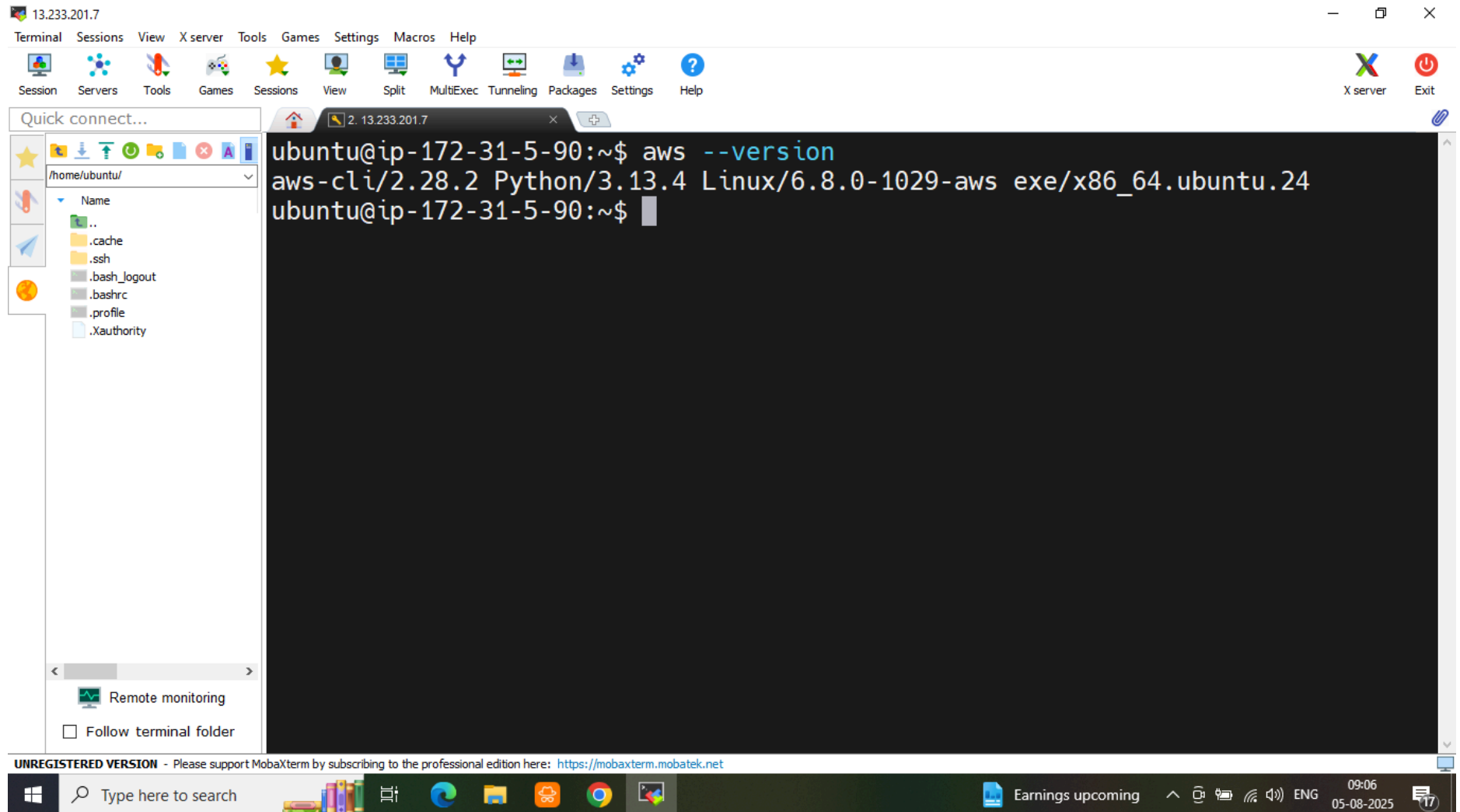
```
sudo apt update  
sudo apt install unzip
```

```
curl "https://awscli.amazonaws.com/awscli-exe-linux-x86_64.zip" -o "awscliv2.zip"  
unzip awscliv2.zip  
sudo ./aws/install
```



2. Verify the installation

Command: `aws --version`



The screenshot shows a MobaXterm terminal window titled '13.233.201.7'. The terminal displays the command `aws --version` and its output: `aws-cli/2.28.2 Python/3.13.4 Linux/6.8.0-1029-aws exe/x86_64.ubuntu.24`. The left sidebar shows a file explorer for the user's home directory, listing files like `.cache`, `.ssh`, `.bash_logout`, `.bashrc`, `.profile`, and `.Xauthority`. The bottom status bar indicates 'UNREGISTERED VERSION' and provides a link to the professional edition.

```
ubuntu@ip-172-31-5-90:~$ aws --version
aws-cli/2.28.2 Python/3.13.4 Linux/6.8.0-1029-aws exe/x86_64.ubuntu.24
ubuntu@ip-172-31-5-90:~$
```

3. Install CLI for Amazon EKS

for ARM systems, set ARCH to: `arm64`, `armv6` or `armv7`

ARCH=amd64

PLATFORM=\$(uname -s)_\$ARCH

curl -sLO "https://github.com/eksctl-io/eksctl/releases/latest/download/eksctl_\${PLATFORM}.tar.gz"

(Optional) Verify checksum

curl -sL "https://github.com/eksctl-io/eksctl/releases/latest/download/eksctl_checksums.txt" | grep \$PLATFORM | sha256sum --check

tar -xzf eksctl_\${PLATFORM}.tar.gz -C /tmp && rm eksctl_\${PLATFORM}.tar.gz

sudo install -m 0755 /tmp/eksctl /usr/local/bin && rm /tmp/eksctl

13.233.201.7

Terminal Sessions View X server Tools Games Settings Macros Help

Session Servers Tools Games Sessions View Split MultiExec Tunneling Packages Settings Help

Quick connect...

2. 13.233.201.7

ubuntu@ip-172-31-5-90:~\$ # for ARM systems, set ARCH to: `arm64`, `armv6` or `armv7`
ARCH=amd64
PLATFORM=\$(uname -s)_\$ARCH

curl -sLO "https://github.com/eksctl-io/eksctl/releases/latest/download/eksctl_\$PLATFORM.tar.gz"

(Optional) Verify checksum
curl -sL "https://github.com/eksctl-io/eksctl/releases/latest/download/eksctl_checksums.txt" | grep \$PLATFORM | sha256sum --check

tar -xzf eksctl_\$PLATFORM.tar.gz -C /tmp && rm eksctl_\$PLATFORM.tar.gz

sudo install -m 0755 /tmp/eksctl /usr/local/bin && rm /tmp/eksctl
eksctl_Linux_amd64.tar.gz: OK
ubuntu@ip-172-31-5-90:~\$

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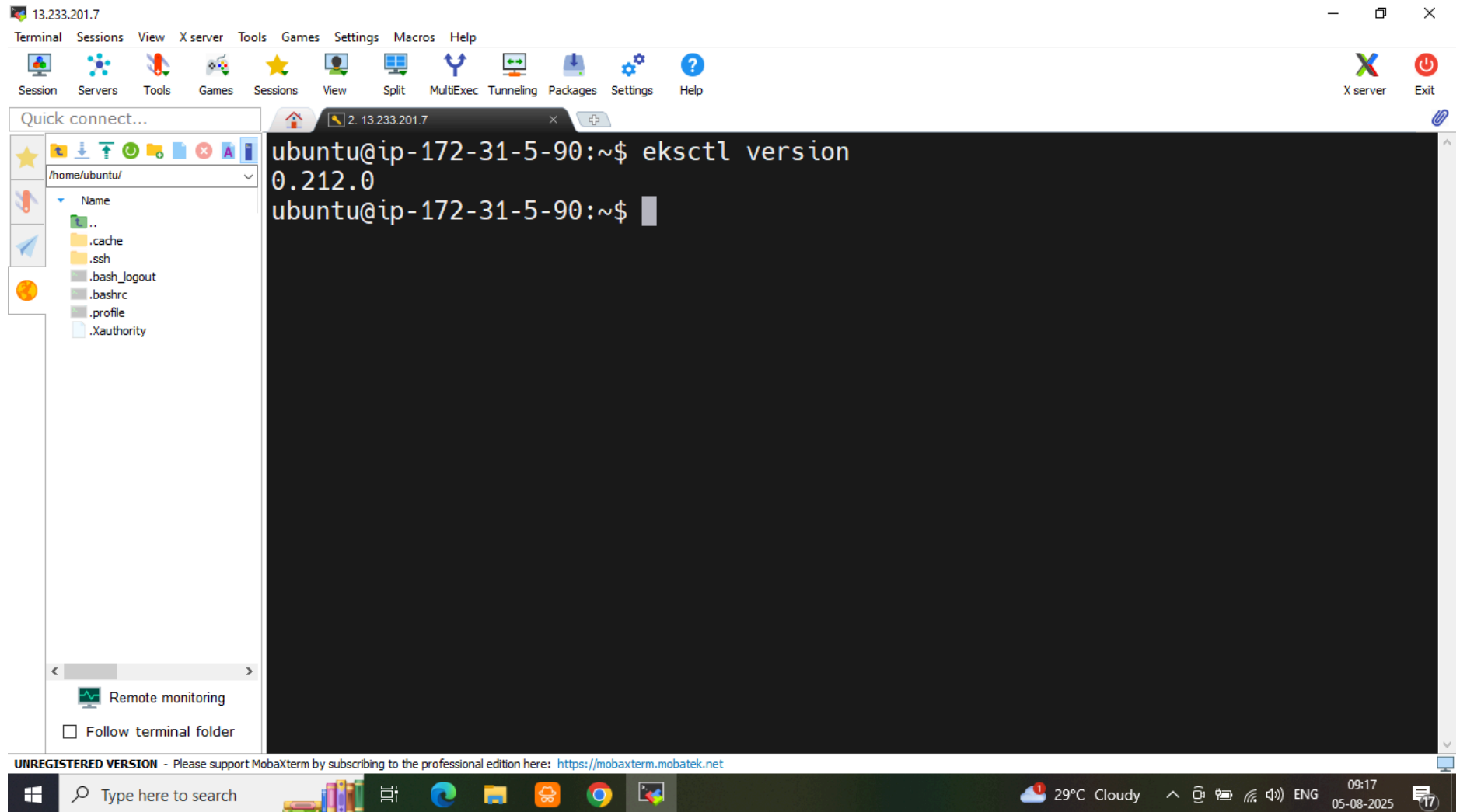
Type here to search

BSE smlcap +0.76%

09:13
05-08-2025

4. Verify eksctl installation

Command: eksctl version



5. Installing Kubectl

Command:

```
sudo apt-get update
```

```
# apt-transport-https may be a dummy package; if so, you can skip that package
```

```
sudo apt-get install -y apt-transport-https ca-certificates curl gnupg
```

13.233.201.7

Terminal Sessions View X server Tools Games Settings Macros Help

Session Servers Tools Games Sessions View Split MultiExec Tunneling Packages Settings Help

Quick connect...

2. 13.233.201.7

/home/ubuntu/

- Name
 - ..
 - .cache
 - .ssh
 - .bash_logout
 - .bashrc
 - .profile
 - .Xauthority

Remote monitoring

☐ Follow terminal folder

```
ubuntu@ip-172-31-5-90:~$ sudo apt-get update
# apt-transport-https may be a dummy package; if so, you can skip that package

sudo apt-get install -y apt-transport-https ca-certificates curl gnupg
Hit:1 http://ap-south-1.ec2.archive.ubuntu.com/ubuntu noble InRelease
Hit:2 http://ap-south-1.ec2.archive.ubuntu.com/ubuntu noble-updates InRelease
Hit:3 http://ap-south-1.ec2.archive.ubuntu.com/ubuntu noble-backports InRelease
Hit:4 http://security.ubuntu.com/ubuntu noble-security InRelease
Reading package lists... 68%
```

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Type here to search

29°C Cloudy 09:22 05-08-2025

Command:

If the folder `/etc/apt/keyrings` does not exist, it should be created before the curl command, read the note below.

```
# sudo mkdir -p -m 755 /etc/apt/keyrings
```

```
curl -fsSL https://pkgs.k8s.io/core:/stable:/v1.33/deb/Release.key | sudo gpg --dearmor -o  
/etc/apt/keyrings/kubernetes-apt-keyring.gpg
```

```
sudo chmod 644 /etc/apt/keyrings/kubernetes-apt-keyring.gpg # allow unprivileged APT programs to read this  
keyring
```

```
echo 'deb [signed-by=/etc/apt/keyrings/kubernetes-apt-keyring.gpg]  
https://pkgs.k8s.io/core:/stable:/v1.33/deb/ /' | sudo tee /etc/apt/sources.list.d/kubernetes.list
```

```
sudo chmod 644 /etc/apt/sources.list.d/kubernetes.list # helps tools such as command-not-found to work  
correctly
```

13.233.201.7

Terminal Sessions View X server Tools Games Settings Macros Help

Session Servers Tools Games Sessions View Split MultiExec Tunneling Packages Settings Help

Quick connect...

/home/ubuntu/

- Name
 - ..
 - .cache
 - .ssh
 - .bash_logout
 - .bashrc
 - .profile
 - .Xauthority

Remote monitoring

☐ Follow terminal folder

```
ubuntu@ip-172-31-5-90:~$ # If the folder `/etc/apt/keyrings` does not exist, it should be created before the curl command, read the note below.
# sudo mkdir -p -m 755 /etc/apt/keyrings
curl -fsSL https://pkgs.k8s.io/core:/stable:/v1.33/deb/Release.key | sudo gpg
--dearmor -o /etc/apt/keyrings/kubernetes-apt-keyring.gpg
sudo chmod 644 /etc/apt/keyrings/kubernetes-apt-keyring.gpg # allow unprivileg
ed APT programs to read this keyring
ubuntu@ip-172-31-5-90:~$ echo 'deb [signed-by=/etc/apt/keyrings/kubernetes-apt
-keyring.gpg] https://pkgs.k8s.io/core:/stable:/v1.33/deb/ /' | sudo tee /etc/
apt/sources.list.d/kubernetes.list
sudo chmod 644 /etc/apt/sources.list.d/kubernetes.list # helps tools such as
command-not-found to work correctly
deb [signed-by=/etc/apt/keyrings/kubernetes-apt-keyring.gpg] https://pkgs.k8s.
io/core:/stable:/v1.33/deb/ /
ubuntu@ip-172-31-5-90:~$
```

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Type here to search

29°C Cloudy 09:25 05-08-2025

6. Command:

```
sudo apt-get update
```

```
sudo apt-get install -y kubectl
```

13.233.201.7

Terminal Sessions View X server Tools Games Settings Macros Help

Session Servers Tools Games Sessions View Split MultiExec Tunneling Packages Settings Help

— □ ×

X server Exit

Quick connect...

★ /home/ubuntu/

▼ Name
..
.cache
.ssh
.bash_logout
.bashrc
.profile
.Xauthority

< >

☒ Remote monitoring

☐ Follow terminal folder

```
ubuntu@ip-172-31-5-90:~$ sudo apt-get update
sudo apt-get install -y kubectl
Hit:1 http://ap-south-1.ec2.archive.ubuntu.com/ubuntu noble InRelease
Hit:2 http://ap-south-1.ec2.archive.ubuntu.com/ubuntu noble-updates InRelease
Hit:3 http://ap-south-1.ec2.archive.ubuntu.com/ubuntu noble-backports InRelease
Get:4 https://prod-cdn.packages.k8s.io/repositories/isv:/kubernetes:/core:/stable:/v1.33/deb InRelease [1186 B]
Get:5 http://security.ubuntu.com/ubuntu noble-security InRelease [126 kB]
Get:6 https://prod-cdn.packages.k8s.io/repositories/isv:/kubernetes:/core:/stable:/v1.33/deb Packages [6400 B]
0% [5 InRelease 64.9 kB/126 kB 51%]
```

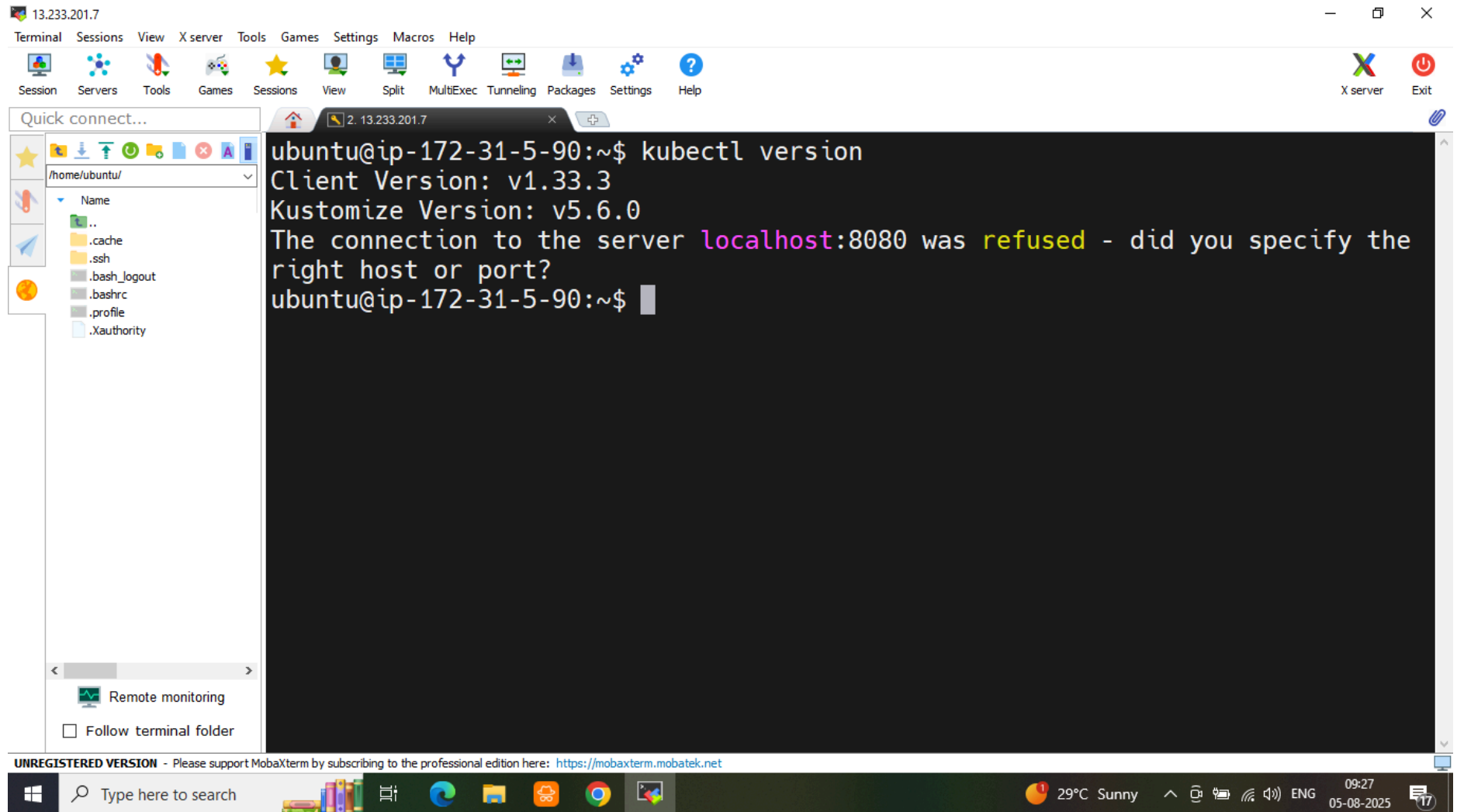
UNREGISTERED VERSION - Please support MobaXterm by subscribing to the professional edition here: <https://mobaxterm.mobatek.net>

Windows Type here to search



29°C Cloudy 09:26 05-08-2025 ENG

7. Verify the kubectl installation



The screenshot shows a MobaXterm terminal window with the title bar '13.233.201.7'. The menu bar includes Terminal, Sessions, View, X server, Tools, Games, Settings, Macros, and Help. The toolbar contains icons for Session, Servers, Tools, Games, Sessions, View, Split, MultiExec, Tunneling, Packages, Settings, and Help. The left sidebar shows a 'Quick connect...' search bar and a file tree for '/home/ubuntu/' with folders like .cache, .ssh, .bash_logout, .bashrc, .profile, and .Xauthority. The terminal pane shows the command 'kubectl version' and its output: 'Client Version: v1.33.3', 'Kustomize Version: v5.6.0', and an error message 'The connection to the server localhost:8080 was refused - did you specify the right host or port?'. The bottom status bar indicates 'UNREGISTERED VERSION' and provides a link to the professional edition.

```
ubuntu@ip-172-31-5-90:~$ kubectl version
Client Version: v1.33.3
Kustomize Version: v5.6.0
The connection to the server localhost:8080 was refused - did you specify the
right host or port?
ubuntu@ip-172-31-5-90:~$
```

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8. AWS Configuration

Creating Access key ID in AWS Console [**IAM > Security Credentials**]

us-east-1.console.aws.amazon.com/iam/home?region=ap-south-1#/security_credentials/access-key-wizard

aws

Search

[Alt+S]

Global

Account ID: 8725-1526-5854

Azariah

IAM > Security credentials > Create access key

Access key created

This is the only time that the secret access key can be viewed or downloaded. You cannot recover it later. However, you can create a new access key any time.

Alternatives to root user access keys

Retrieve access key

Info

Step 2

Retrieve access key

Access key

AKIA4WJPWMU7B5E3QM7C

Secret access key

***** Show

Access key best practices

- Never store your access key in plain text, in a code repository, or in code.
- Disable or delete access key when no longer needed.
- Enable least-privilege permissions.
- Rotate access keys regularly.

For more details about managing access keys, see the [best practices for managing AWS access keys](#).

CloudShell Feedback

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Type here to search

26°C

Partly sunny

07:17

07-08-2025

9. Configure AWS in EC2 Server

The screenshot shows a MobaXterm window titled "13.201.4.66". The interface includes a menu bar (Terminal, Sessions, View, X server, Tools, Games, Settings, Macros, Help), a toolbar with icons for Session, Servers, Tools, Games, Sessions, View, Split, MultiExec, Tunneling, Packages, Settings, and Help, and a sidebar with a "Quick connect..." search bar and a file explorer showing the directory structure of the remote host. The terminal window displays the command `aws configure` and the prompt `AWS Access Key ID [None]:`. The file explorer shows the following files and directories: `..`, `.cache`, `.ssh`, `aws`, `.bash_history`, `.bash_logout`, `.bashrc`, `.profile`, `.sudo_as_admin_successful`, `.Xauthority`, and `awscli2.zip`. The bottom status bar indicates the software is an "UNREGISTERED VERSION" and provides a link to the professional edition. The Windows taskbar at the bottom shows the system clock as 07:18 on 07-08-2025, along with weather and network status.

13.201.4.66

Terminal Sessions View X server Tools Games Settings Macros Help

Session Servers Tools Games Sessions View Split MultiExec Tunneling Packages Settings Help

Quick connect...

2. 13.201.4.66

ubuntu@ip-172-31-5-90:~\$ aws configure

AWS Access Key ID [None]:

..

.cache

.ssh

aws

.bash_history

.bash_logout

.bashrc

.profile

.sudo_as_admin_successful

.Xauthority

awscli2.zip

Remote monitoring

Follow terminal folder

UNREGISTERED VERSION - Please support MobaXterm by subscribing to the professional edition here: <https://mobaxterm.mobatek.net>

Type here to search

26°C Partly sunny

07:18

07-08-2025

13.201.4.66

Terminal Sessions View X server Tools Games Settings Macros Help

Session Servers Tools Games Sessions View Split MultiExec Tunneling Packages Settings Help

Quick connect...

/home/ubuntu/

- Name
- ..
- .cache
- .ssh
- aws
- .bash_history
- .bash_logout
- .bashrc
- .profile
- .sudo_as_admin_successful
- .Xauthority
- awscli2.zip

Remote monitoring

☐ Follow terminal folder

```
ubuntu@ip-172-31-5-90:~$ aws configure
AWS Access Key ID [None]: AKIA4WJPMU7B5E3QM7C
AWS Secret Access Key [None]: KdTP5ELhb8ugBTaHL0M1VrN22Tm5EmwRn04FjVNr
Default region name [None]: ap-south-1
Default output format [None]:
ubuntu@ip-172-31-5-90:~$
```

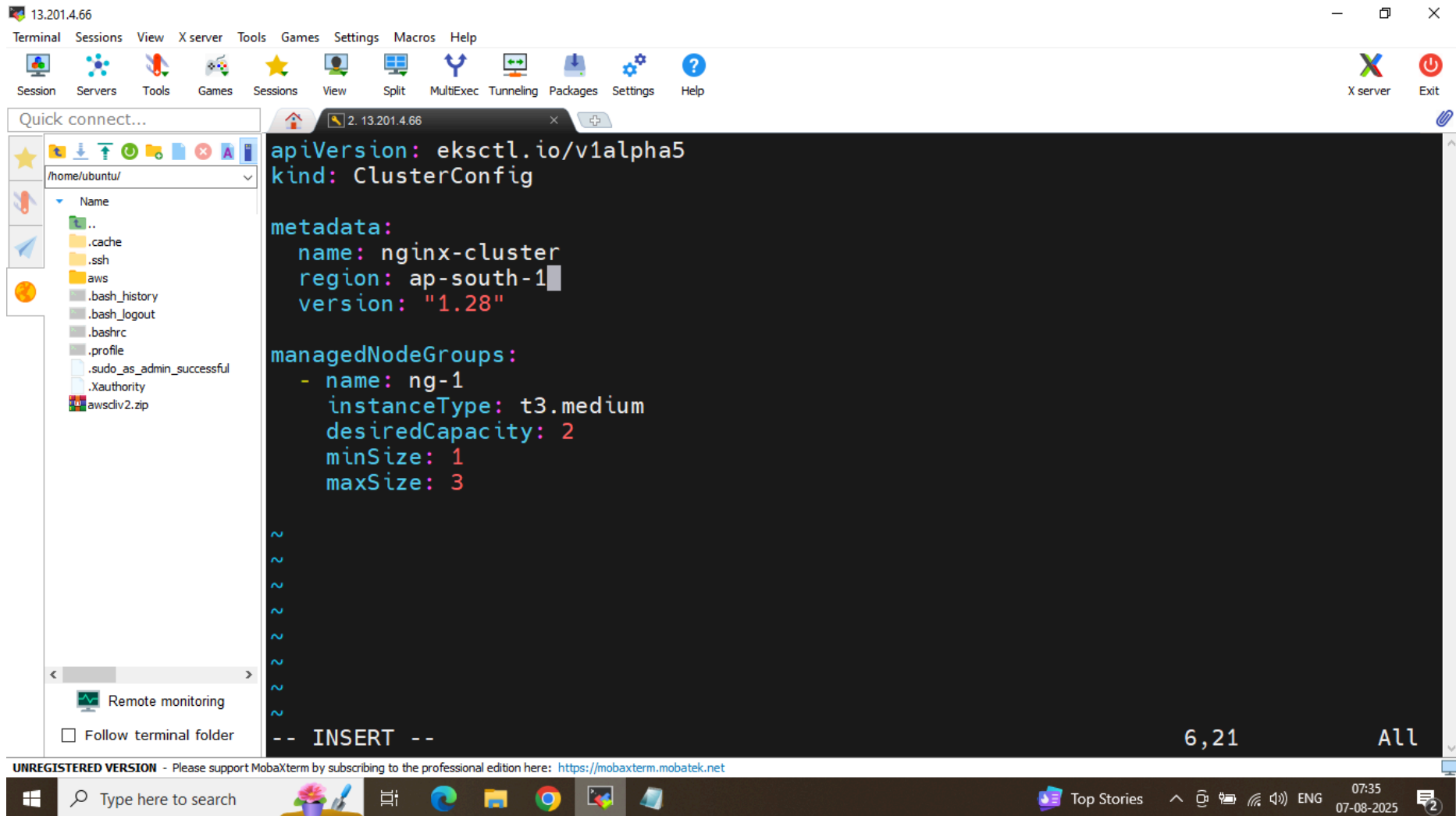
UNREGISTERED VERSION - Please support MobaXterm by subscribing to the professional edition here: <https://mobaxterm.mobatek.net>

Type here to search

RBI rate pause: 3 sma...

07:20
07-08-2025

10. Creating EKS cluster using yaml file **create-cluster.yaml**



The screenshot shows the MobaXterm application window. The title bar indicates the connection is to 13.201.4.66. The menu bar includes Terminal, Sessions, View, X server, Tools, Games, Settings, Macros, and Help. The toolbar contains icons for Session, Servers, Tools, Games, Sessions, View, Split, MultiExec, Tunneling, Packages, Settings, and Help. On the right side of the toolbar are X server and Exit buttons. A 'Quick connect...' panel on the left shows a file explorer for /home/ubuntu/ with various files and folders listed, including .cache, .ssh, aws, .bash_history, .bash_logout, .bashrc, .profile, .sudo_as_admin_successful, .Xauthority, and awscrtv2.zip. The main terminal area displays the following YAML content:

```
apiVersion: eksctl.io/v1alpha5
kind: ClusterConfig

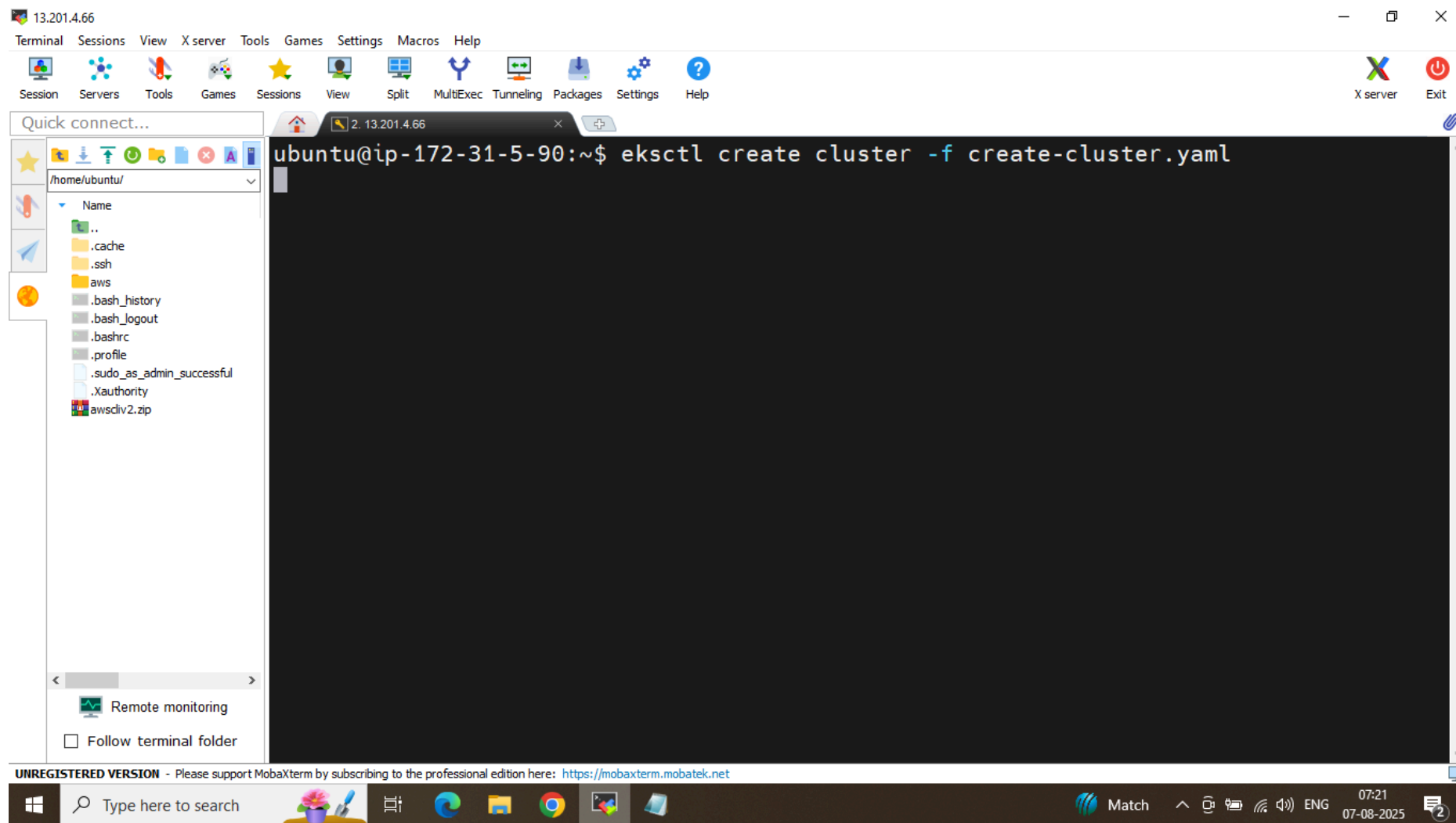
metadata:
  name: nginx-cluster
  region: ap-south-1
  version: "1.28"

managedNodeGroups:
- name: ng-1
  instanceType: t3.medium
  desiredCapacity: 2
  minSize: 1
  maxSize: 3

~
~
~
~
~
~
~
~
-- INSERT --
```

The terminal status bar at the bottom shows '6,21' and 'All'. At the very bottom of the window, a message reads: 'UNREGISTERED VERSION - Please support MobaXterm by subscribing to the professional edition here: <https://mobaxterm.mobatek.net>'. The Windows taskbar at the bottom includes the Start button, a search bar, and icons for various applications, with the system clock showing 07:35 on 07-08-2025.

11. Execute the command : **eksctl create cluster -f create-cluster.yaml**



13.201.4.66

Terminal Sessions View X server Tools Games Settings Macros Help

Session Servers Tools Games Sessions View Split MultiExec Tunneling Packages Settings Help

Quick connect...

/home/ubuntu/

- Name
 - ..
 - .cache
 - .ssh
 - aws
 - .bash_history
 - .bash_logout
 - .bashrc
 - .profile
 - .sudo_as_admin_successful
 - .Xauthority
 - awscli2.zip

Remote monitoring

☐ Follow terminal folder

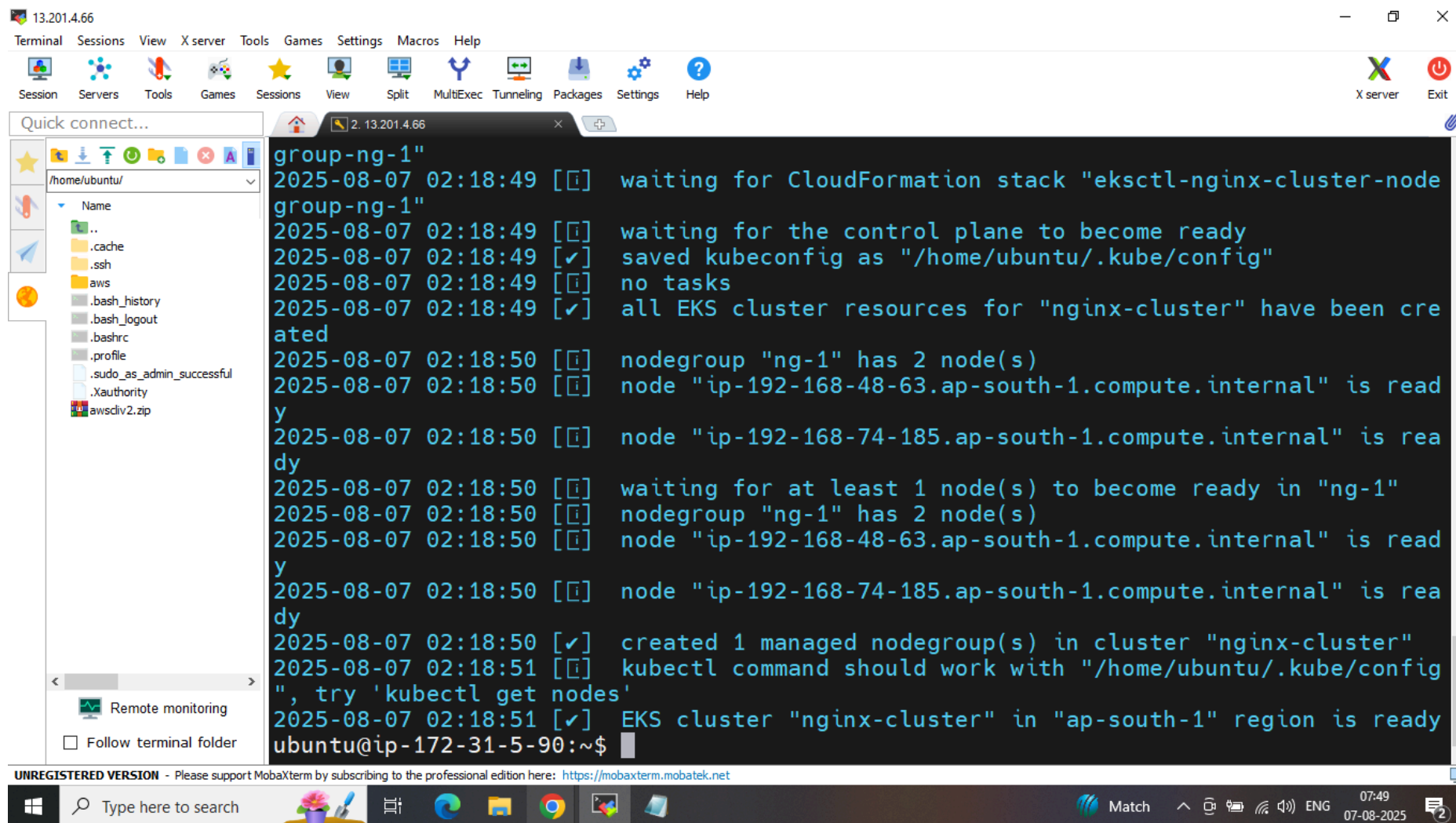
```
2025-08-07 02:12:39 [i] waiting for CloudFormation stack "eksctl-nginx-cluster-cluster"
2025-08-07 02:13:39 [i] waiting for CloudFormation stack "eksctl-nginx-cluster-cluster"
2025-08-07 02:13:40 [i] creating addon: metrics-server
2025-08-07 02:13:40 [i] successfully created addon: metrics-server
2025-08-07 02:13:41 [!] recommended policies were found for "vpc-cni" addon, but since OIDC is disabled on the cluster, eksctl cannot configure the requested permissions; the recommended way to provide IAM permissions for "vpc-cni" addon is via pod identity associations; after addon creation is completed, add all recommended policies to the config file, under `addon.PodIdentityAssociations`, and run `eksctl update addon`
2025-08-07 02:13:41 [i] creating addon: vpc-cni
2025-08-07 02:13:41 [i] successfully created addon: vpc-cni
2025-08-07 02:13:41 [i] creating addon: kube-proxy
2025-08-07 02:13:41 [i] successfully created addon: kube-proxy
2025-08-07 02:13:42 [i] creating addon: coredns
2025-08-07 02:13:42 [i] successfully created addon: coredns
2025-08-07 02:15:42 [i] building managed nodegroup stack "eksctl-nginx-cluster-nodegroup-ng-1"
2025-08-07 02:15:42 [i] deploying stack "eksctl-nginx-cluster-nodegroup-ng-1"
2025-08-07 02:15:42 [i] waiting for CloudFormation stack "eksctl-nginx-cluster-nodegroup-ng-1"
```

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Type here to search

27°C Partly sunny 07:45 07-08-2025

12. Cluster Created Successfully



The screenshot shows the MobaXterm application window with a terminal session. The terminal displays the output of the `kubectl` commands used to create and verify the EKS cluster. The output indicates that the cluster "nginx-cluster" in the "ap-south-1" region is ready, with two nodes in the "ng-1" nodegroup.

```
group-ng-1"
2025-08-07 02:18:49 [i] waiting for CloudFormation stack "eksctl-nginx-cluster-node
group-ng-1"
2025-08-07 02:18:49 [i] waiting for the control plane to become ready
2025-08-07 02:18:49 [✓] saved kubeconfig as "/home/ubuntu/.kube/config"
2025-08-07 02:18:49 [i] no tasks
2025-08-07 02:18:49 [✓] all EKS cluster resources for "nginx-cluster" have been cre
ated
2025-08-07 02:18:50 [i] nodegroup "ng-1" has 2 node(s)
2025-08-07 02:18:50 [i] node "ip-192-168-48-63.ap-south-1.compute.internal" is read
y
2025-08-07 02:18:50 [i] node "ip-192-168-74-185.ap-south-1.compute.internal" is rea
dy
2025-08-07 02:18:50 [i] waiting for at least 1 node(s) to become ready in "ng-1"
2025-08-07 02:18:50 [i] nodegroup "ng-1" has 2 node(s)
2025-08-07 02:18:50 [i] node "ip-192-168-48-63.ap-south-1.compute.internal" is read
y
2025-08-07 02:18:50 [i] node "ip-192-168-74-185.ap-south-1.compute.internal" is rea
dy
2025-08-07 02:18:50 [✓] created 1 managed nodegroup(s) in cluster "nginx-cluster"
2025-08-07 02:18:51 [i] kubectl command should work with "/home/ubuntu/.kube/config
", try 'kubectl get nodes'
2025-08-07 02:18:51 [✓] EKS cluster "nginx-cluster" in "ap-south-1" region is ready
ubuntu@ip-172-31-5-90:~$
```

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GUVI

Kubernetes Task-2 - C

Home - Google Drive

Instances | EC2 | ap-s

aws access key id - G

Manage access keys f

ap-south-1.console.aws.amazon.com/ec2/home?region=ap-south-1#Instances:v=3;\$case=tags:true%5C,client:false;\$regex=tags:false%5C,client:false

aws

Search

[Alt+S]

Asia Pacific (Mumbai)

Account ID: 8725-1526-5854

Azariah

EC2 > Instances

Instances (3) Info

Last updated less than a minute ago

Connect

Instance state

Actions

Launch instances

Find Instance by attribute or tag (case-sensitive)

Running

< 1 >

	Name	Instance ID	Instance state	Instance type	Status check	Alarm statu
<input type="checkbox"/>	nginx-cluster-ng-1-Node	i-04a55401872fa85f9	Running	t3.medium	3/3 checks passec	View alarm
<input type="checkbox"/>	k8s-server	i-0ae2d2b845093b6c0	Running	t2.micro	2/2 checks passec	View alarm
<input type="checkbox"/>	nginx-cluster-ng-1-Node	i-06dc9e8944f6c98d5	Running	t3.medium	3/3 checks passec	View alarm

Select an instance

CloudShell Feedback

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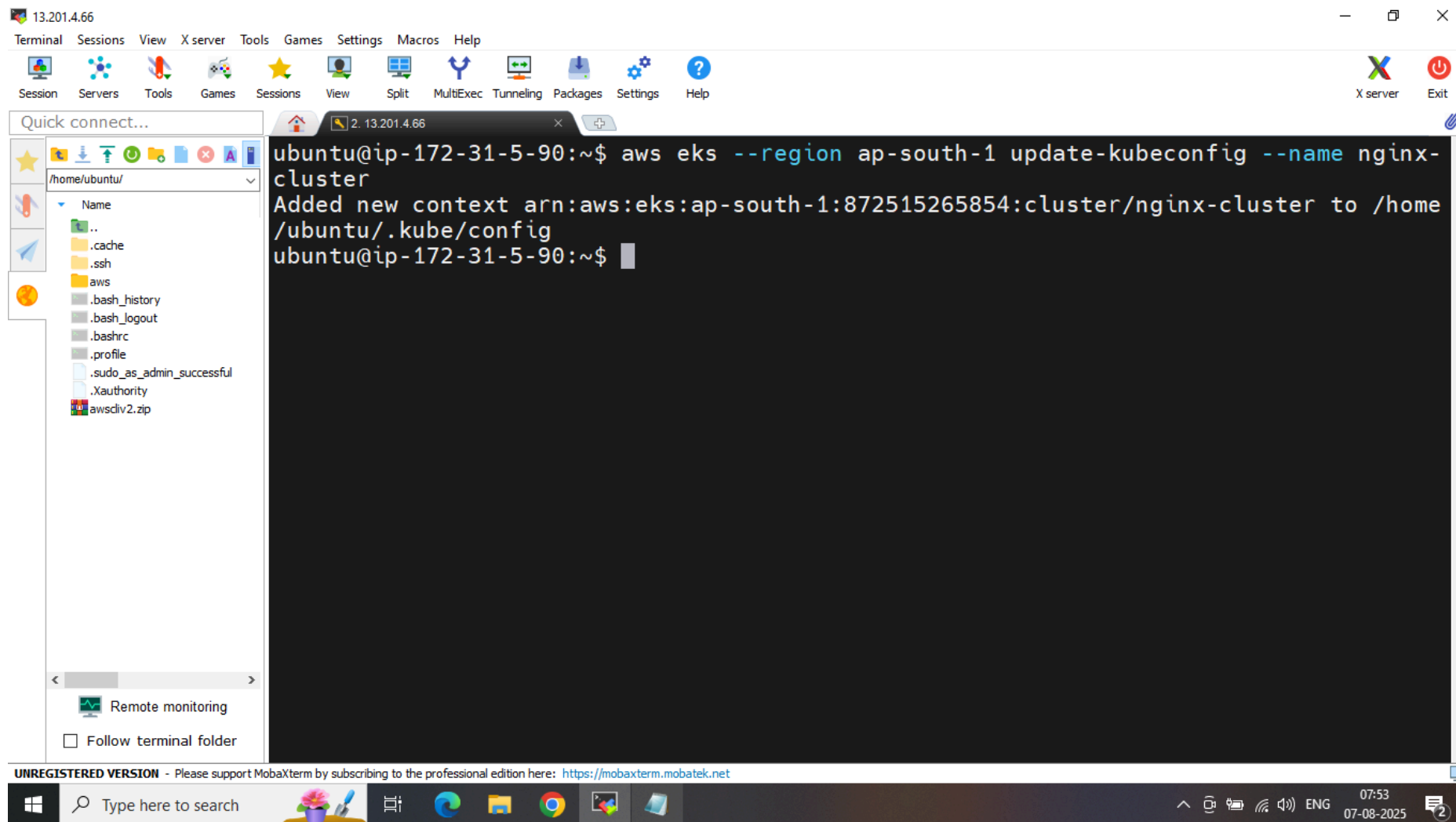
Type here to search

Ant Group to exit Ete...

07:51 07-08-2025

13. Configure kubectl

Command: `aws eks --region ap-south-1 update-kubeconfig --name nginx-cluster`



13.201.4.66

TerminalSessionsViewX serverToolsGamesSettingsMacrosHelp

SessionServersToolsGamesSessionsViewSplitMultiExecTunnelingPackagesSettingsHelp

X serverExit

Quick connect...

Star

Home

Terminal

File Explorer

Remote monitoring

/home/ubuntu/

Name

...

.cache

.ssh

aws

.bash_history

.bash_logout

.bashrc

.profile

.sudo_as_admin_successful

.Xauthority

awscli-v2.zip

Remote monitoring

Follow terminal folder

2. 13.201.4.66

ubuntu@ip-172-31-5-90:~\$ kubectl get nodes

NAME	STATUS	ROLES	AGE	VERSION
ip-192-168-48-63.ap-south-1.compute.internal	Ready	<none>	8m23s	v1.28.15-e
ks-3abbec1				
ip-192-168-74-185.ap-south-1.compute.internal	Ready	<none>	8m23s	v1.28.15-e
ks-3abbec1				

ubuntu@ip-172-31-5-90:~\$

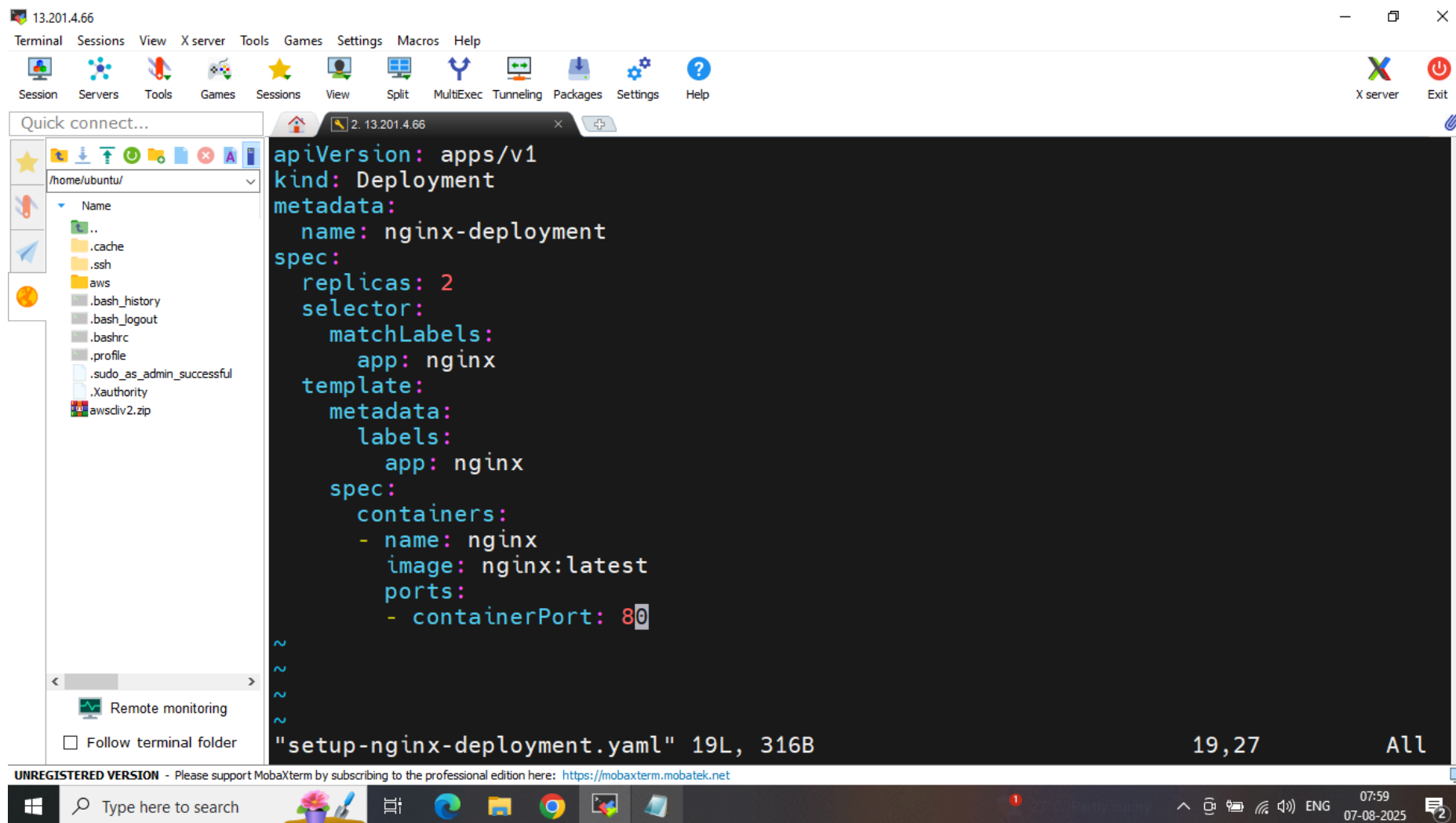
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Windows Start Search

Taskbar Icons

System Tray

14. Setting up nginx deployment [setup-nginx-deployment.yaml]



The screenshot shows the MobaXterm application window. The title bar indicates the connection is to 13.201.4.66. The menu bar includes Terminal, Sessions, View, X server, Tools, Games, Settings, Macros, and Help. The toolbar contains icons for Session, Servers, Tools, Games, Sessions, View, Split, MultiExec, Tunneling, Packages, Settings, and Help. On the right side of the toolbar are X server and Exit buttons. A 'Quick connect...' search bar is located above the file explorer. The file explorer on the left shows the directory /home/ubuntu/ with a list of files and folders including ., .cache, .ssh, aws, .bash_history, .bash_logout, .bashrc, .profile, .sudo_as_admin_successful, .Xauthority, and awscli2.zip. Below the file explorer are options for 'Remote monitoring' and 'Follow terminal folder'. The main terminal area displays the content of the setup-nginx-deployment.yaml file in a dark theme with syntax highlighting. The status bar at the bottom of the terminal shows the file path, line and column counts, and the current selection. The Windows taskbar at the very bottom includes the Start button, a search bar, and several application icons.

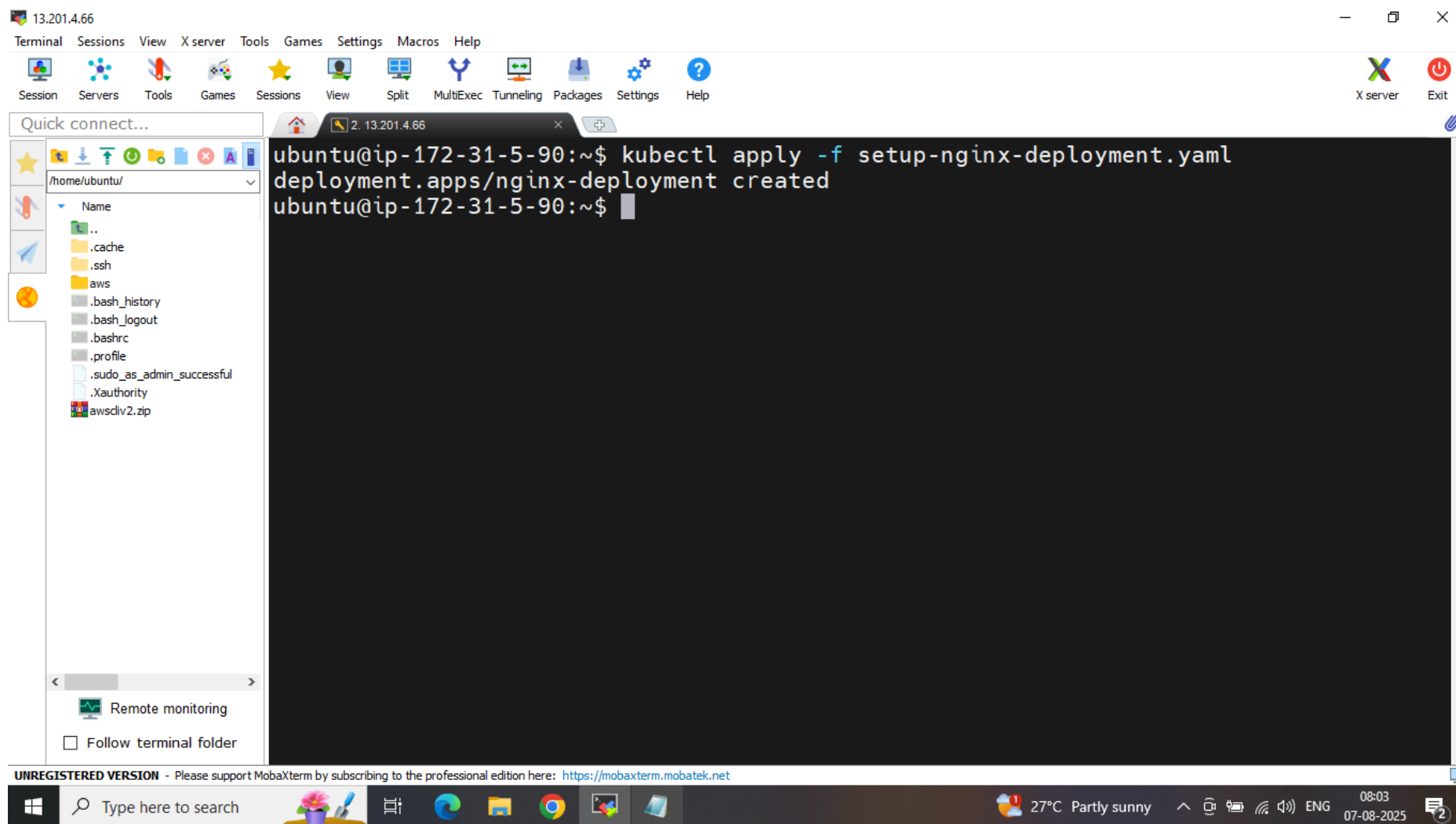
```
apiVersion: apps/v1
kind: Deployment
metadata:
  name: nginx-deployment
spec:
  replicas: 2
  selector:
    matchLabels:
      app: nginx
  template:
    metadata:
      labels:
        app: nginx
    spec:
      containers:
      - name: nginx
        image: nginx:latest
        ports:
        - containerPort: 80
```

"setup-nginx-deployment.yaml" 19L, 316B 19,27 All

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15. Creating Deployment

Execute command: `kubectl apply -f setup-nginx-deployment.yaml`



16. Setting up Service

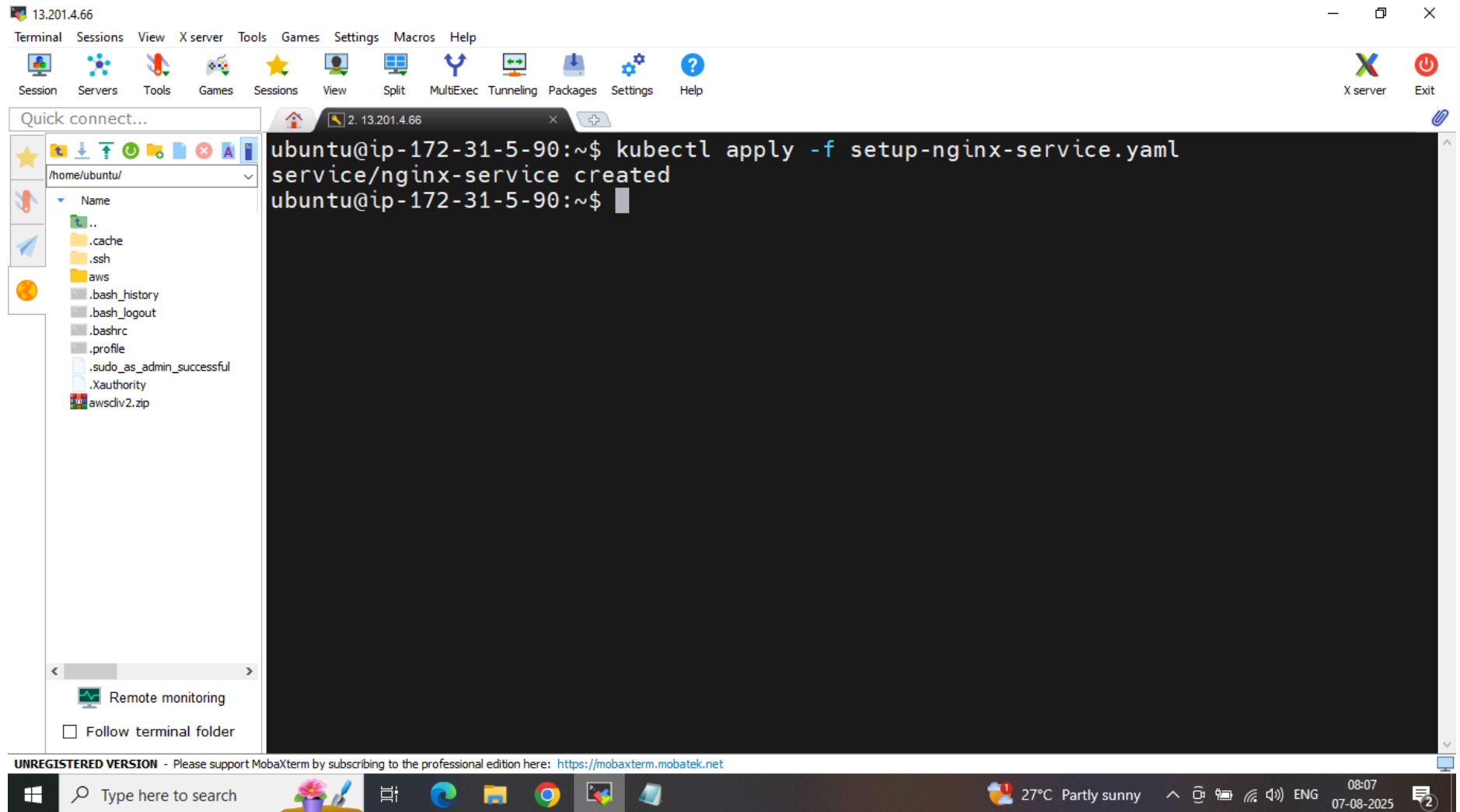
The screenshot shows the MobaXterm application window. The title bar indicates the connection is to 13.201.4.66. The menu bar includes Terminal, Sessions, View, X server, Tools, Games, Settings, Macros, and Help. The toolbar contains icons for Session, Servers, Tools, Games, Sessions, View, Split, MultiExec, Tunneling, Packages, Settings, and Help. On the right side of the toolbar are X server and Exit buttons. A 'Quick connect...' panel on the left shows a file explorer for /home/ubuntu/ with various files and folders listed, including .cache, .ssh, aws, .bash_history, .bash_logout, .bashrc, .profile, .sudo_as_admin_successful, .Xauthority, and awscdiv2.zip. Below the file explorer is a 'Remote monitoring' checkbox and a 'Follow terminal folder' checkbox. The main terminal area displays the content of a file named 'setup-nginx-service.yaml'. The content is as follows:

```
apiVersion: v1
kind: Service
metadata:
  name: nginx-service
spec:
  selector:
    app: nginx
  ports:
    - protocol: TCP
      port: 80
      targetPort: 80
  type: LoadBalancer
```

At the bottom of the terminal, a status bar shows the file name and size: "setup-nginx-service.yaml" 12L, 180B. To the right of this, it shows the cursor position 12,20 and the text 'All'. The bottom of the screen shows the Windows taskbar with the search bar, task view, and several application icons. The system tray on the right shows the date and time as 08:05 on 07-08-2025, along with weather information (27°C Partly sunny) and system icons.

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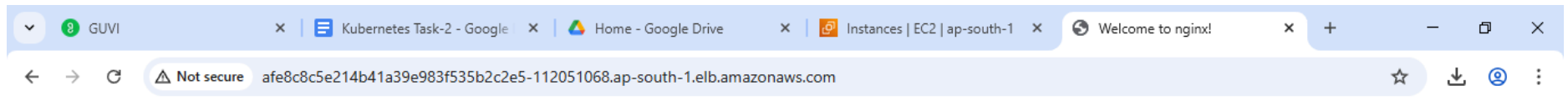
17. Apply service **Command:** `kubectl apply -f setup-nginx-service.yaml`



18. Access created service from Browser

Command: `kubectl get svc nginx-service -w`

`afe8c8c5e214b41a39e983f535b2c2e5-112051068.ap-south-1.elb.amazonaws.com`



Welcome to nginx!

If you see this page, the nginx web server is successfully installed and working. Further configuration is required.

For online documentation and support please refer to nginx.org.
Commercial support is available at nginx.com.

Thank you for using nginx.



19. Removing resources

The screenshot shows the MobaXterm application window. The title bar indicates the version is 13.201.4.66. The menu bar includes Terminal, Sessions, View, X server, Tools, Games, Settings, Macros, and Help. The toolbar contains icons for Session, Servers, Tools, Games, Sessions, View, Split, MultiExec, Tunneling, Packages, Settings, and Help. On the right side of the toolbar are X server and Exit buttons. A 'Quick connect...' search bar is present. Below it, a 'Reconnect SSH-browser' button is visible. The left sidebar shows 'User sessions' with two entries: '13.201.4.66' and 'WSL-Ubuntu'. The main terminal pane shows a session with the IP address '2. 13.201.4.66'. The terminal output is as follows:

```
ubuntu@ip-172-31-5-90:~$ ls
aws          create-cluster.yaml  setup-nginx-deployment.yaml
awscli v2.zip k8sym1              setup-nginx-service.yaml
ubuntu@ip-172-31-5-90:~$ kubectl delete -f setup-nginx-service.yaml
service "nginx-service" deleted
```

At the bottom of the window, a banner reads: 'UNREGISTERED VERSION - Please support MobaXterm by subscribing to the professional edition here: <https://mobaxterm.mobatek.net>'. The Windows taskbar at the very bottom shows the search bar, task view, and several open applications. The system tray on the right displays the weather as '28°C Partly sunny', the time as '09:16', and the date as '07-08-2025'.

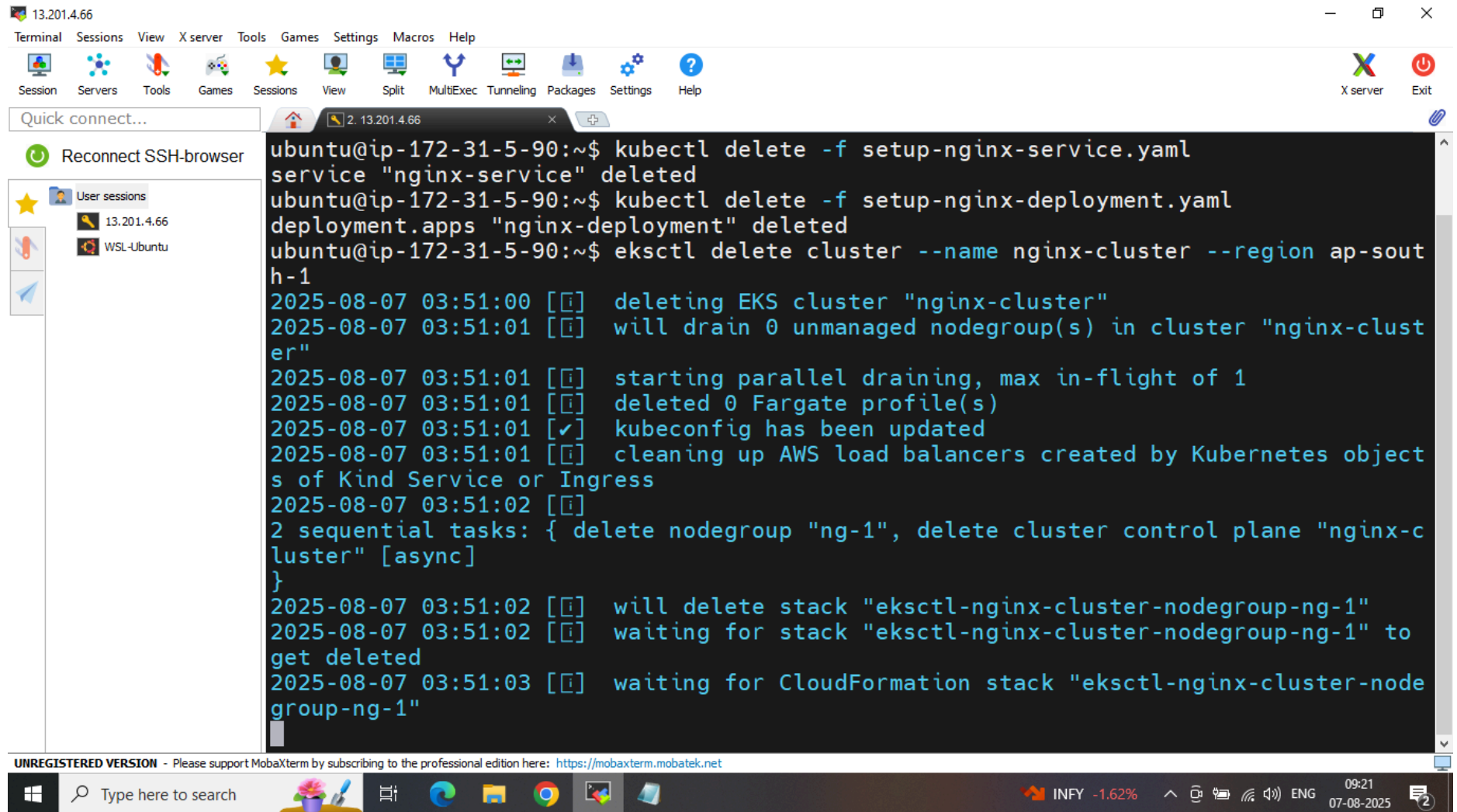
20. Delete deployment

The screenshot shows the MobaXterm application window. The title bar indicates the connection is to 13.201.4.66. The menu bar includes Terminal, Sessions, View, X server, Tools, Games, Settings, Macros, and Help. The toolbar contains icons for Session, Servers, Tools, Games, Sessions, View, Split, MultiExec, Tunneling, Packages, Settings, and Help. On the left sidebar, there is a 'Quick connect...' field, a 'Reconnect SSH-browser' button, and a 'User sessions' list containing '13.201.4.66' and 'WSL-Ubuntu'. The main terminal pane shows the following commands and output:

```
ubuntu@ip-172-31-5-90:~$ ls
aws          create-cluster.yaml  setup-nginx-deployment.yaml
awscli v2.zip k8sym1              setup-nginx-service.yaml
ubuntu@ip-172-31-5-90:~$ kubectl delete -f setup-nginx-service.yaml
service "nginx-service" deleted
ubuntu@ip-172-31-5-90:~$ kubectl delete -f setup-nginx-deployment.yaml
deployment.apps "nginx-deployment" deleted
ubuntu@ip-172-31-5-90:~$
```

At the bottom of the window, a status bar displays 'UNREGISTERED VERSION - Please support MobaXterm by subscribing to the professional edition here: <https://mobaxterm.mobatek.net>'. The Windows taskbar at the very bottom shows the search bar, task view, and several open applications, along with system tray information: 29°C Sunny, 09:18, 07-08-2025, and ENG.

21. Deleting cluster



The screenshot shows a MobaXterm window with a terminal session on a remote host. The terminal displays the following commands and output:

```
ubuntu@ip-172-31-5-90:~$ kubectl delete -f setup-nginx-service.yaml
service "nginx-service" deleted
ubuntu@ip-172-31-5-90:~$ kubectl delete -f setup-nginx-deployment.yaml
deployment.apps "nginx-deployment" deleted
ubuntu@ip-172-31-5-90:~$ eksctl delete cluster --name nginx-cluster --region ap-south-1
2025-08-07 03:51:00 [i] deleting EKS cluster "nginx-cluster"
2025-08-07 03:51:01 [i] will drain 0 unmanaged nodegroup(s) in cluster "nginx-cluster"
2025-08-07 03:51:01 [i] starting parallel draining, max in-flight of 1
2025-08-07 03:51:01 [i] deleted 0 Fargate profile(s)
2025-08-07 03:51:01 [✓] kubeconfig has been updated
2025-08-07 03:51:01 [i] cleaning up AWS load balancers created by Kubernetes objects of Kind Service or Ingress
2025-08-07 03:51:02 [i] 2 sequential tasks: { delete nodegroup "ng-1", delete cluster control plane "nginx-cluster" [async] }
2025-08-07 03:51:02 [i] will delete stack "eksctl-nginx-cluster-nodegroup-ng-1"
2025-08-07 03:51:02 [i] waiting for stack "eksctl-nginx-cluster-nodegroup-ng-1" to get deleted
2025-08-07 03:51:03 [i] waiting for CloudFormation stack "eksctl-nginx-cluster-nodegroup-ng-1"
```

The MobaXterm interface includes a top menu bar (Terminal, Sessions, View, X server, Tools, Games, Settings, Macros, Help), a toolbar with icons for Session, Servers, Tools, Games, Sessions, View, Split, MultiExec, Tunneling, Packages, Settings, and Help, and a sidebar with a 'Quick connect...' field and a 'Reconnect SSH-browser' button. The sidebar also shows 'User sessions' with entries for '13.201.4.66' and 'WSL-Ubuntu'. The bottom status bar indicates 'UNREGISTERED VERSION' and provides a link to the professional edition.

13.201.4.66

Terminal Sessions View X server Tools Games Settings Macros Help

Session Servers Tools Games Sessions View Split MultiExec Tunneling Packages Settings Help

Quick connect...

Reconnect SSH-browser

User sessions

- 13.201.4.66
- WSL-Ubuntu

```
2025-08-07 03:51:02 [i] will delete stack "eksctl-nginx-cluster-nodegroup-ng-1"
2025-08-07 03:51:02 [i] waiting for stack "eksctl-nginx-cluster-nodegroup-ng-1" to
get deleted
2025-08-07 03:51:03 [i] waiting for CloudFormation stack "eksctl-nginx-cluster-node
group-ng-1"
2025-08-07 03:51:33 [i] waiting for CloudFormation stack "eksctl-nginx-cluster-node
group-ng-1"
2025-08-07 03:52:20 [i] waiting for CloudFormation stack "eksctl-nginx-cluster-node
group-ng-1"
2025-08-07 03:53:38 [i] waiting for CloudFormation stack "eksctl-nginx-cluster-node
group-ng-1"
2025-08-07 03:54:42 [i] waiting for CloudFormation stack "eksctl-nginx-cluster-node
group-ng-1"
2025-08-07 03:55:57 [i] waiting for CloudFormation stack "eksctl-nginx-cluster-node
group-ng-1"
2025-08-07 03:57:08 [i] waiting for CloudFormation stack "eksctl-nginx-cluster-node
group-ng-1"
2025-08-07 03:58:20 [i] waiting for CloudFormation stack "eksctl-nginx-cluster-node
group-ng-1"
2025-08-07 04:00:17 [i] waiting for CloudFormation stack "eksctl-nginx-cluster-node
group-ng-1"
2025-08-07 04:00:17 [i] will delete stack "eksctl-nginx-cluster-cluster"
2025-08-07 04:00:17 [✓] all cluster resources were deleted
ubuntu@ip-172-31-5-90:~$
```

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Type here to search

All flights of US-base...

09:30
07-08-2025