

# Installing GUI on Ubuntu EC2 and Connecting via RDP

## STEP 1 — Launch Ubuntu EC2 Instance

1. AWS Console → EC2 → **Launch Instance**
2. AMI choose → **Ubuntu Server**
3. Instance type → **t2.micro/t3.micro (Free Tier)**
4. Key pair select/create
5. Security Group:
  - SSH → 22 → My IP
  - RDP → **3389** → My IP (Add this)

Launch instance.

The screenshot shows the AWS EC2 Instances page. On the left, there's a sidebar with navigation links like Dashboard, AWS Global View, Events, Instances (selected), Instance Types, Launch Templates, Spot Requests, Savings Plans, Reserved Instances, Dedicated Hosts, Capacity Reservations, Capacity Manager (New), Images (AMIs, AMI Catalog), and Elastic Block Store. The main content area has a heading 'Instances (1/1)'. It shows a table with one row for 'MYGUI' (Instance ID: i-0a22f73130e06cbc2, State: Running, Type: t3.micro). Below the table, there's a detailed view for the selected instance, showing its Public IPv4 address (ec2-13-201-131-204.ap-south-1.compute.amazonaws.com) and Private IPv4 addresses. There are tabs for Details, Status and alarms, Monitoring, Security, Networking, Storage, and Tags.

## STEP 2 — Connect to your EC2 via SSH

Windows Terminal / CMD me run karo:

```
ssh -i "john.pem" ubuntu@ec2-13-201-131-204.ap-south-1.compute.amazonaws.com
```

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```
ubuntu@ip-172-31-2-48:~ + - ×
System information as of Thu Nov 13 06:21:24 UTC 2025

System load: 0.0 Temperature: -273.1 C
Usage of /: 25.8% of 6.71GB Processes: 110
Memory usage: 24% Users logged in: 0
Swap usage: 0% IPv4 address for ens5: 172.31.2.48

Expanded Security Maintenance for Applications is not enabled.

0 updates can be applied immediately.

Enable ESM Apps to receive additional future security updates.
See https://ubuntu.com/esm or run: sudo pro status

The list of available updates is more than a week old.
To check for new updates run: sudo apt update

The programs included with the Ubuntu system are free software;
the exact distribution terms for each program are described in the
individual files in /usr/share/doc/*copyright.

Ubuntu comes with ABSOLUTELY NO WARRANTY, to the extent permitted by
applicable law.

To run a command as administrator (user "root"), use "sudo <command>".
See "man sudo_root" for details.

ubuntu@ip-172-31-2-48:~$
```

### STEP 3 — System Update

```
sudo apt update && sudo apt upgrade -y
```

```
ubuntu@ip-172-31-2-48:~ $ sudo apt update && sudo apt upgrade -y
Hit:1 http://ap-south-1.ec2.archive.ubuntu.com/ubuntu noble InRelease
Get:2 http://ap-south-1.ec2.archive.ubuntu.com/ubuntu noble-updates InRelease [126 kB]
Get:3 http://ap-south-1.ec2.archive.ubuntu.com/ubuntu noble-backports InRelease [126 kB]
Get:4 http://ap-south-1.ec2.archive.ubuntu.com/ubuntu noble/universe amd64 Packages [15.0 MB]
Get:5 http://security.ubuntu.com/ubuntu noble-security InRelease [126 kB]
Get:6 http://ap-south-1.ec2.archive.ubuntu.com/ubuntu noble/universe Translation-en [5982 kB]
Get:7 http://ap-south-1.ec2.archive.ubuntu.com/ubuntu noble/universe amd64 Components [3871 kB]
Get:8 http://ap-south-1.ec2.archive.ubuntu.com/ubuntu noble/universe amd64 c-n-f Metadata [301 kB]
Get:9 http://ap-south-1.ec2.archive.ubuntu.com/ubuntu noble/multiverse amd64 Packages [269 kB]
Get:10 http://ap-south-1.ec2.archive.ubuntu.com/ubuntu noble/multiverse Translation-en [118 kB]
Get:11 http://ap-south-1.ec2.archive.ubuntu.com/ubuntu noble/multiverse amd64 Components [35.0 kB]
Get:12 http://ap-south-1.ec2.archive.ubuntu.com/ubuntu/multiverse amd64 c-n-f Metadata [8328 B]
Get:13 http://ap-south-1.ec2.archive.ubuntu.com/ubuntu noble-updates/main amd64 Packages [1585 kB]
Get:14 http://ap-south-1.ec2.archive.ubuntu.com/ubuntu noble-updates/main Translation-en [299 kB]
Get:15 http://ap-south-1.ec2.archive.ubuntu.com/ubuntu noble-updates/main amd64 Components [175 kB]
Get:16 http://ap-south-1.ec2.archive.ubuntu.com/ubuntu noble-updates/main amd64 c-n-f Metadata [15.7 kB]
Get:17 http://ap-south-1.ec2.archive.ubuntu.com/ubuntu noble-updates/universe amd64 Packages [1498 kB]
Get:18 http://ap-south-1.ec2.archive.ubuntu.com/ubuntu noble-updates/universe Translation-en [303 kB]
Get:19 http://ap-south-1.ec2.archive.ubuntu.com/ubuntu noble-updates/universe amd64 Components [378 kB]
Get:20 http://ap-south-1.ec2.archive.ubuntu.com/ubuntu noble-updates/universe amd64 c-n-f Metadata [31.4 kB]
Get:21 http://ap-south-1.ec2.archive.ubuntu.com/ubuntu noble-updates/restricted amd64 Packages [2244 kB]
Get:22 http://ap-south-1.ec2.archive.ubuntu.com/ubuntu http://ap-south-1.ec2.archive.ubuntu.com/ubuntu Translation-en [509 kB]
Get:23 http://ap-south-1.ec2.archive.ubuntu.com/ubuntu Ctrl+Click to follow link amd64 Components [212 B]
Get:24 http://ap-south-1.ec2.archive.ubuntu.com/ubuntu noble-updates/multiverse amd64 Packages [30.3 kB]
Get:25 http://ap-south-1.ec2.archive.ubuntu.com/ubuntu noble-updates/multiverse Translation-en [5564 B]
Get:26 http://ap-south-1.ec2.archive.ubuntu.com/ubuntu noble-updates/multiverse amd64 Components [940 B]
Get:27 http://ap-south-1.ec2.archive.ubuntu.com/ubuntu noble-updates/multiverse amd64 c-n-f Metadata [484 B]
Get:28 http://ap-south-1.ec2.archive.ubuntu.com/ubuntu noble-backports/main amd64 Packages [40.4 kB]
```

### STEP 4 — Install Lightweight GUI (lxde)

(LXDE is a lightweight desktop environment (GUI) for Ubuntu.

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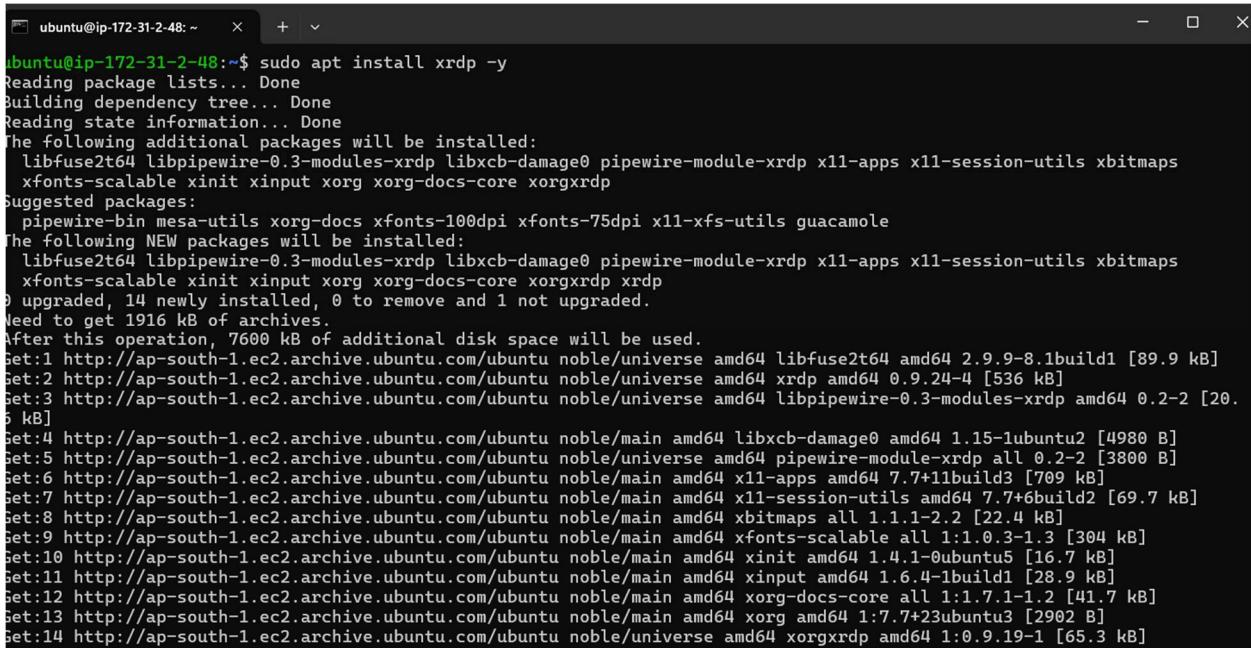
This command downloads and installs LXDE on your EC2 instance.)

```
sudo apt-get install lxde -y
```

### STEP 5 — Install XRDП (Remote Desktop server)

( XRDП is a tool that allows you to connect to your Ubuntu GUI using Remote Desktop (RDP) from Windows.)

```
sudo apt install xrdp -y
```



The screenshot shows a terminal window titled "ubuntu@ip-172-31-2-48:~". The command "sudo apt install xrdp -y" was run, and the output is displayed. The output shows the package being installed, dependencies, and upgrade information. The terminal window has a dark background with white text.

```
ubuntu@ip-172-31-2-48:~$ sudo apt install xrdp -y
Reading package lists... Done
Building dependency tree... Done
Reading state information... Done
The following additional packages will be installed:
  libfuse2t64 libpipewire-0.3-modules-xrdp libxcb-damage0 pipewire-module-xrdp x11-apps x11-session-utils xbitmaps
    xffonts-scalable xinit xinput xorg xorg-docs-core xorgxrdp
Suggested packages:
  pipewire-bin mesa-utils xorg-docs xffonts-100dpi xffonts-75dpi x11-xfs-utils guacamole
The following NEW packages will be installed:
  libfuse2t64 libpipewire-0.3-modules-xrdp libxcb-damage0 pipewire-module-xrdp x11-apps x11-session-utils xbitmaps
    xffonts-scalable xinit xinput xorg xorg-docs-core xorgxrdp xrdp
0 upgraded, 14 newly installed, 0 to remove and 1 not upgraded.
Need to get 1916 kB of archives.
After this operation, 7600 kB of additional disk space will be used.
Get:1 http://ap-south-1.ec2.archive.ubuntu.com/ubuntu noble/universe amd64 libfuse2t64 amd64 2.9.9-8.1build1 [89.9 kB]
Get:2 http://ap-south-1.ec2.archive.ubuntu.com/ubuntu noble/universe amd64 xrdp amd64 0.9.24-4 [536 kB]
Get:3 http://ap-south-1.ec2.archive.ubuntu.com/ubuntu noble/universe amd64 libpipewire-0.3-modules-xrdp amd64 0.2-2 [20.5 kB]
Get:4 http://ap-south-1.ec2.archive.ubuntu.com/ubuntu noble/main amd64 libxcb-damage0 amd64 1.15-1ubuntu2 [4980 B]
Get:5 http://ap-south-1.ec2.archive.ubuntu.com/ubuntu noble/universe amd64 pipewire-module-xrdp all 0.2-2 [3800 B]
Get:6 http://ap-south-1.ec2.archive.ubuntu.com/ubuntu noble/main amd64 x11-apps amd64 7.7+1build3 [769 kB]
Get:7 http://ap-south-1.ec2.archive.ubuntu.com/ubuntu noble/main amd64 x11-session-utils amd64 7.7+6build2 [69.7 kB]
Get:8 http://ap-south-1.ec2.archive.ubuntu.com/ubuntu noble/main amd64 xbitmaps all 1.1.1-2.2 [22.4 kB]
Get:9 http://ap-south-1.ec2.archive.ubuntu.com/ubuntu noble/main amd64 xffonts-scalable all 1:1.0.3-1.3 [304 kB]
Get:10 http://ap-south-1.ec2.archive.ubuntu.com/ubuntu noble/main amd64 xinit amd64 1.4.1-0ubuntu5 [16.7 kB]
Get:11 http://ap-south-1.ec2.archive.ubuntu.com/ubuntu noble/main amd64 xinput amd64 1.6.4-1build1 [28.9 kB]
Get:12 http://ap-south-1.ec2.archive.ubuntu.com/ubuntu noble/main amd64 xorg-docs-core all 1:1.7.1-1.2 [41.7 kB]
Get:13 http://ap-south-1.ec2.archive.ubuntu.com/ubuntu noble/main amd64 xorg amd64 1:7.7+23ubuntu3 [2902 B]
Get:14 http://ap-south-1.ec2.archive.ubuntu.com/ubuntu noble/universe amd64 xorgxrdp amd64 1:0.9.19-1 [65.3 kB]
```

### Enable XRDП service:

```
sudo systemctl enable xrdp
```

```
sudo systemctl start xrdp
```

### STEP 6 — Set LXDE as the default session

(This command creates a file named **.xsession** in your home directory.

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It writes **startlxde** inside that file.

This tells XRDP: “**When I connect with Remote Desktop, start the LXDE desktop.**”

Without this, you may get a **black screen** when connecting via RDP.)

```
echo "startlxde" > ~/.xsession
```

### **STEP 7 — Add XRDP to the ssl-cert group**

`sudo adduser xrdp ssl-cert` (XRDP needs this group to access SSL certificates so it can create secure RDP connections.)

`sudo systemctl restart xrdp` (Restarts XRDP so the changes take effect.)

### **STEP 8 : Configure User Password**

- Set a password for the default ubuntu user (used for RDP login):  
`sudo passwd ubuntu` (Enter and confirm a password (remember this)).

```
No VM guests are running outdated hypervisor (qemu) binaries on this host.
ubuntu@ip-172-31-2-48:~$ sudo systemctl enable xrdp
Synchronizing state of xrdp.service with SysV service script with /usr/lib/systemd/systemd-sysv-install.
Executing: /usr/lib/systemd/systemd-sysv-install enable xrdp
ubuntu@ip-172-31-2-48:~$ sudo systemctl start xrdp
ubuntu@ip-172-31-2-48:~$ sudo passwd ubuntu
New password:
Retype new password:
passwd: password updated successfully
ubuntu@ip-172-31-2-48:~$ S|
```

### **STEP 9: Make one directory and inside create one .txt file**

```
Expanded Security Maintenance for Applications is not enabled.  
0 updates can be applied immediately.  
13 additional security updates can be applied with ESM Apps.  
Learn more about enabling ESM Apps service at https://ubuntu.com/esm  
  
*** System restart required ***  
Last login: Thu Nov 13 13:01:38 2025 from 152.58.30.148  
ubuntu@ip-172-31-11-106:~$ mkdir azad  
ubuntu@ip-172-31-11-106:~$ cd azad  
ubuntu@ip-172-31-11-106:~/azad$ echo "i am azad chauhn">> info.txt  
ubuntu@ip-172-31-11-106:~/azad$
```

 **FINAL — Connect RDP**( When you successfully connect to the RDP you are able to see your directory and file )

Windows Remote Desktop me:

- Host: EC2 Public IP
- Username: **ubuntu**
- Password: it your created

Login → “LXDE session” open dashboard RDP.

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