



Short Interview questions on connecting to AWS EC2 Instance

1. How do you connect to a Linux EC2 instance using SSH?
 - .pem key, username, and public IP.
2. How do you connect to a Windows EC2 instance?
 - RDP file download, decrypt Windows password using private key.)

Retrieve Default Windows Administrator Password



Password Decryption Successful

The password for instance i-0f2e63dede7eb478e (KernelTalks) was successfully decrypted.



Password change recommended

We recommend that you change your default password. Note: If a default password is changed, it cannot be retrieved through this tool. It's important that you change your password to one that you will remember.

You can connect remotely using this information:

Public DNS ec2-54-197-39-23.compute-1.amazonaws.com

User name Administrator

Password Foo\$L4?rWkB

3. What are the prerequisites before connecting to an EC2 instance?
 - Security Group allowing SSH (port 22) or RDP (port 3389), instance must have a public IP or Elastic IP.
4. What happens if you lose the .pem key file?
 - Losing .pem file means:

- You can't SSH into the server.
- AWS doesn't allow re-downloading the same .pem.
- **Ways to recover access:**
 - **Create a new key pair** in AWS.
 - **Stop the instance**, detach its root volume.
 - **Attach volume to another instance** (as secondary).
 - **Mount and modify** .ssh/authorized_keys, add the new public key.
 - **Detach and reattach** volume to original instance.
 - **Start the instance** and connect using the new .pem file.
- **Alternative (if AMI is backed up):**
 - **Create a new instance** using a backup AMI with a new key pair.

5. Can you SSH into an EC2 instance without a public IP? How?

- Yes, you can SSH without a public IP.
- **Ways to connect:**



- **Via Bastion Host (Jump Server):**
 - Public IP on Bastion.
 - SSH into Bastion, then SSH into private EC2.
 - **Using AWS Systems Manager (SSM):**
 - Instance must have SSM agent installed.
 - Attach proper IAM role.
 - No public IP needed.
 - Use "Session Manager" in AWS console or AWS CLI.
 - **Through VPN or Direct Connect:**
 - Private EC2 reachable over internal network.
 - SSH works if within same network.
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6. **How would you connect to an EC2 instance in a private subnet?**

- Through a Bastion Host in the public subnet or AWS Systems Manager Session Manager.

7. **What tools other than SSH or RDP can you use to connect/manage EC2 instances?**

- AWS Systems Manager Session Manager, EC2 Instance Connect for Linux.

8. **How can you improve the security of EC2 connection methods?**

- Use **key-based authentication** instead of passwords.
- **Rotate key pairs regularly.**
- **Disable root login via SSH.**
- Use a **Bastion Host** with limited IP access.
- Use **AWS Systems Manager (SSM)** to avoid SSH altogether.
- **Restrict SSH access using Security Groups** (only trusted IPs).
- **Enable multi-factor authentication (MFA)** for IAM users. (Google Authenticator changes the code every 30 seconds.

This is based on the **TOTP (Time-based One-Time Password)** algorithm, which uses a shared secret key and the current time (in 30-second intervals) to generate a new 6-digit code.)

- **Keep the OS and software up to date.**
- **Monitor logs** and set up **CloudTrail + GuardDuty** for alerts.

Which port must be open in the Security Group to connect to a Linux EC2 instance via SSH?

- A) 21
- B) 22
- C) 80
- D) 3389

Correct Answer: B

What file format is used for the private key when connecting to an EC2 instance using SSH?

- A) .rdp
- B) .key
- C) .pem
- D) .ppk

Correct Answer: C

Which method is used to connect to a Windows EC2 instance?

- A) SSH via port 22
- B) SCP
- C) RDP via port 3389
- D) EC2 Instance Connect

Correct Answer: C

You are unable to SSH into your EC2 instance. Which of the following is NOT a likely reason?

- A) Security Group doesn't allow port 22
- B) Incorrect key pair used
- C) Public IP is missing
- D) IAM role not attached to instance

Correct Answer: D