how to solve this error "ssh: connect to host 10.248.0.90 port 22: Connection timed out " on Ubuntu 22.04 ?

To resolve the "ssh: connect to host 10.248.0.90 port 22: Connection timed out" error on Ubuntu 22.04, you can follow these steps:

**1. Verify Server Availability**

* **Ping the Server:**

bash

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ping 10.248.0.90

* + If the ping fails, the server might be down or unreachable due to network issues.

**2. Check SSH Service on the Server**

* If you have alternative access to the server (e.g., physical access or another network interface), ensure the SSH service is running:

bash

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sudo systemctl status ssh

* If the SSH service is not running, start it:

bash

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sudo systemctl start ssh

**3. Firewall Configuration**

* **On the Server:**
  + Ensure that the firewall is not blocking port 22:

bash

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sudo ufw status

* + If port 22 is not open, allow it:

bash

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sudo ufw allow 22/tcp

* + For iptables, allow SSH traffic with:

bash

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sudo iptables -A INPUT -p tcp --dport 22 -j ACCEPT

**4. Netsshrework Issues**

* **Traceroute the Server:**

bash

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traceroute 10.248.0.90

* + This helps identify where the connection is being blocked or dropped.
* **Check Network Configuration:**
  + Ensure that there are no issues with routing, subnets, or gateway configurations.

**5. Check SSH Configuration**

* **Verify the Correct IP Address and Port:**
  + Ensure that 10.248.0.90 is the correct IP address.
  + Confirm that the SSH service is listening on port 22 (or another port if configured differently):

bash

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sudo grep Port /etc/ssh/sshd\_config

* If SSH is listening on a different port, specify that port when connecting:

bash

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ssh -p [port\_number] user@10.248.0.90

**6. IP Address Restrictions**

* **Check Access Restrictions:**
  + Review /etc/hosts.allow and /etc/hosts.deny for any restrictions that might prevent your IP from accessing the server.
  + Ensure that there are no restrictive rules in the SSH configuration file (/etc/ssh/sshd\_config), such as AllowUsers or AllowGroups.

**7. Server Restart (If Necessary)**

* If you can access the server through other means, consider restarting the network service or the server itself to resolve any lingering network issues:

bash

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sudo systemctl restart networking

sudo reboot

**8. Test Connection from Another Machine**

* Try connecting to the server from a different machine or network to rule out any issues with your current system or network.

By systematically going through these steps, you should be able to identify and resolve the issue causing the "Connection timed out" error when trying to SSH into the server.

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