

## ORA-12560:TNS:protocol adapter error :

In my previous articles i have given the explanation of different types of errors like [ORA-01000 error](#),[ORA-03113 error](#),[ORA-01722 error](#) with examples and its probable solutions.In this article i will try to explain another most common error which will be searched 22 K times on google per month.As there are multiple type of errors like syntax errors,semantic errors,database connectivity error,Server Error.ORA-12560 error lies in connectivity error of oracle.To resolve this error user needs to check the connectivity of database with servers.There are some possible steps to resolve this error.

*“ORA-12560 will be searched approximately 22000 times on google per month.”*

```
SQL> connect po2/oracle
ERROR:
ORA-12560: TNS:protocol adapter error

Warning: You are no longer connected to ORACLE.
SQL>
```

## Why ORA-12560 error will come?

There are lot of types of errors like syntax errors,server errors,connectivity error.ORA-12560 is server connectivity error when user tries to connect the database.Most of the times when user installs oracle first time this error will occur.

### Situation :

#### First time installation

This error will occur mostly when user installs oracle first time and tries to connect it.When user tries to insert the username and password the following error come :

```
Enter password:
ERROR:  ORA-12560: TNS:protocol adapter error
```

This error will come if Listener is not up or problem in tnsnames or database is not up.After installation of oracle user needs to up all the services including listener.

## Resolution of the Error :

As i explained you this error pure connectivity error.When database tries to connect but it will not be able to get listener or services are not up then this error will come.To resolve this errors user needs to do some checkpoints and take corrective actions to resolve this error. Following are some checkpoint to resolve this error :

### Solution 1:

#### Check listener status

User needs to check the listener status. The listener should be up and running. For checking the listener status kindly execute **lsnrctl** status.

**Solution 2:**

**Check Oracle variables**

User needs to check \$ORACLE\_HOME and \$PATH variables.

**Solution 3 :**

**Check updated patches**

While connecting with SQL PLUS check that patches are updated one and if that are not updated then get the latest patch.

**Solution 4 :**

**Services are up and running.**

Check all services are up and running.

**Solution 5 :**

**Check permissions and network firewall**

Check all permissions as well as firewall settings

**Solution 6:**

**Check TNSNAMES entry**

User needs to check TNSNAMES entry.

**Solution 7:**

**ORACLE\_SID parameters**

User needs to check the ORACLE\_SID parameters set properly in registry.

These are above some possible solutions of this most common error. Hope everyone likes this article. Don't forget to share this article by clicking the share button below.