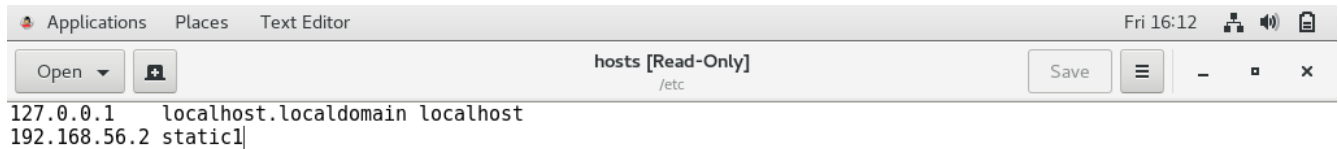


Listener Setup

This guide will setup the listener for our Database. The listener is used to allow remote connections to the Database. This is very important and needs to be configured properly in order to remotely connect through sqldeveloper.

1. Open 'etc/hosts' with a text editor. The first line contains an IP address and some generic names. The generic names are used so you can reference the server without having to use a IP address. Create a new entry by using your current IP address and give it a unique generic name. If your IP address is not static then you will have to change this value every time you log in.

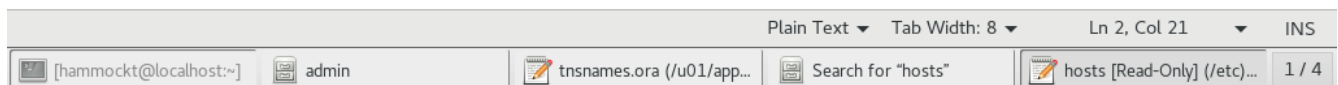


The screenshot shows a text editor window titled 'hosts [Read-Only] /etc'. The window contains the following text:

```
127.0.0.1    localhost.localdomain localhost
192.168.56.2 static1|
```

The cursor is positioned at the end of the second line, after 'static1|'. The window has a menu bar with 'Applications', 'Places', and 'Text Editor'. The status bar at the bottom shows 'Fri 16:12' and some system icons.

I

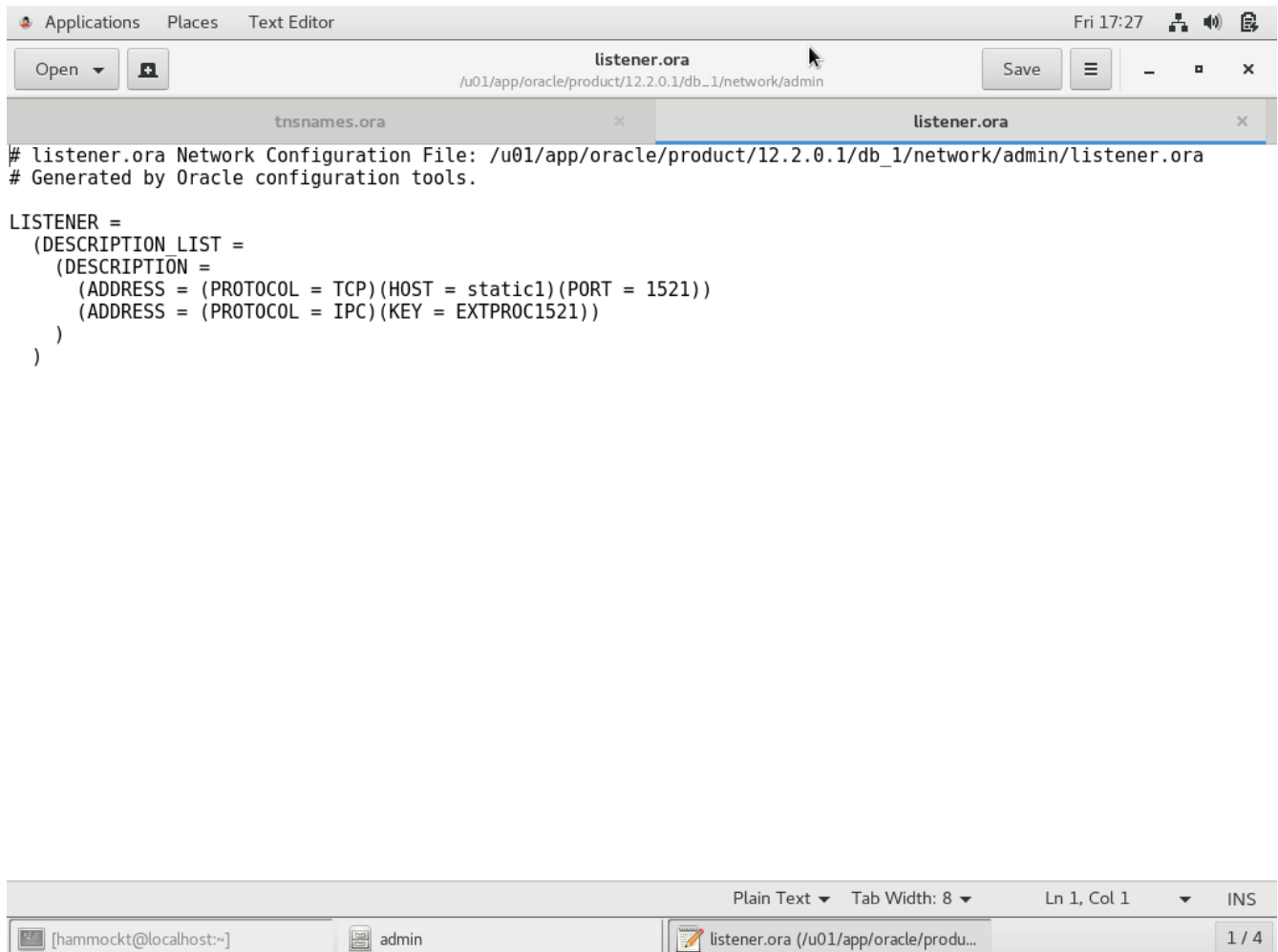


The screenshot shows a terminal window with the following content:

```
[hammockt@localhost:~] admin tnsnames.ora (/u01/app... Search for "hosts" hosts [Read-Only] (/etc...) 1 / 4
```

The terminal window has a menu bar with 'Plain Text', 'Tab Width: 8', 'Ln 2, Col 21', and 'INS'. The status bar at the bottom shows the current directory and file name.

2. Next we will configure the listener. We will need to modify 'listener.ora' which should be located under 'ORACLE_HOME/network/admin/'. Change host to the generic name that you made in the last step and make sure it is listening on port 1521.



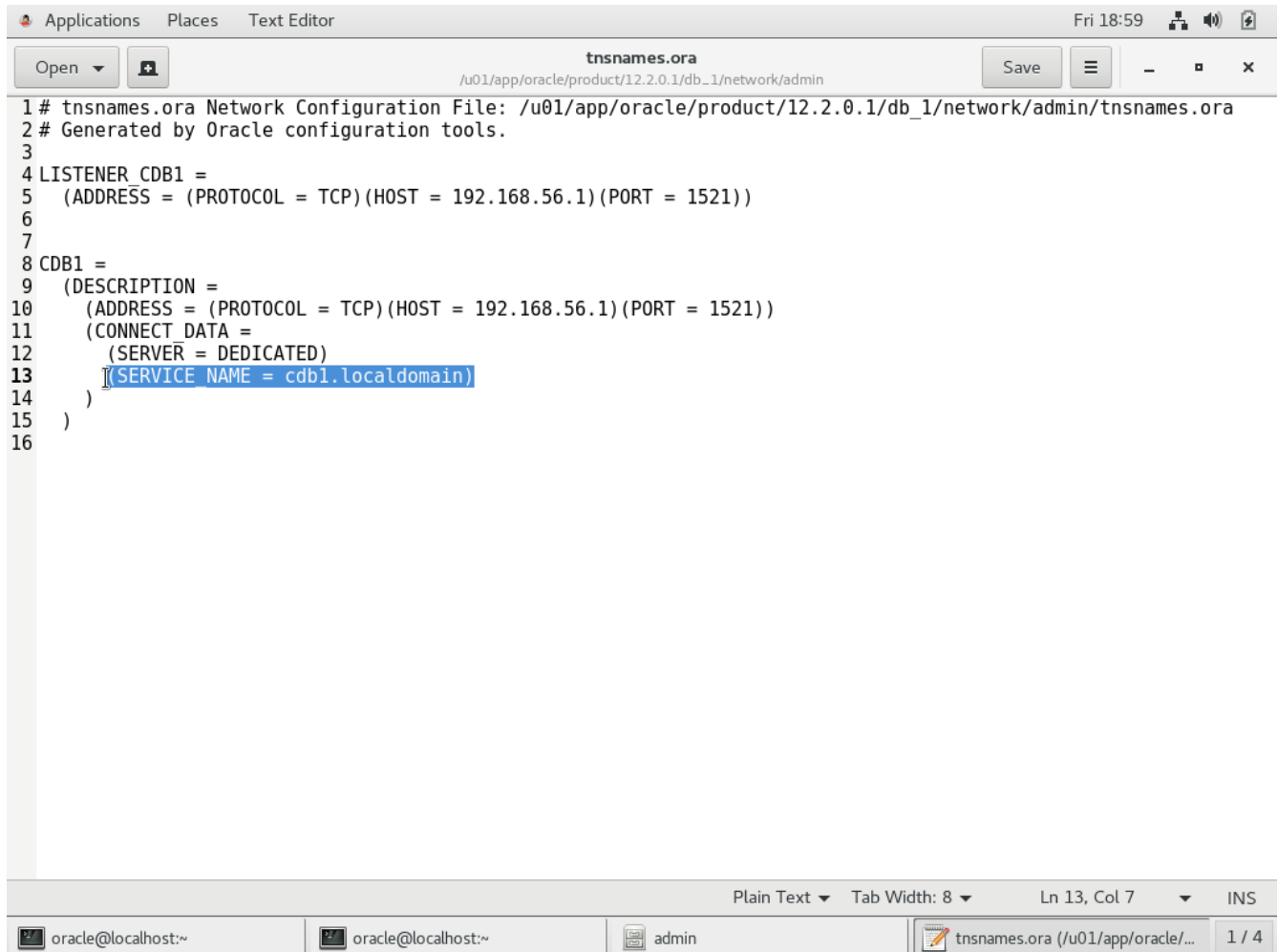
The image shows a text editor window with the file 'listener.ora' open. The file path is '/u01/app/oracle/product/12.2.0.1/db_1/network/admin'. The content of the file is as follows:

```
# listener.ora Network Configuration File: /u01/app/oracle/product/12.2.0.1/db_1/network/admin/listener.ora
# Generated by Oracle configuration tools.

LISTENER =
  (DESCRIPTION_LIST =
    (DESCRIPTION =
      (ADDRESS = (PROTOCOL = TCP)(HOST = static1)(PORT = 1521))
      (ADDRESS = (PROTOCOL = IPC)(KEY = EXTPROC1521))
    )
  )
```

Below the text editor, there is a terminal window showing the user 'hammockt@localhost:~' and the directory 'admin'. The terminal also shows the file 'listener.ora (/u01/app/oracle/produ...)' and the page number '1 / 4'.

3. In that same folder there is a file named “tnsnames.ora”. Inside of that file it contains the service name for our Database. Keep note of this because you will need this later when you are connecting using sqldeveloper. Also make sure to change the ‘HOST’ fields to the names or IP addresses of the host/computers that will connect to the Database (or the ones using sqldeveloper).



The screenshot shows a text editor window titled "tnsnames.ora" with the file path "/u01/app/oracle/product/12.2.0.1/db_1/network/admin". The file content is as follows:

```
1 # tnsnames.ora Network Configuration File: /u01/app/oracle/product/12.2.0.1/db_1/network/admin/tnsnames.ora
2 # Generated by Oracle configuration tools.
3
4 LISTENER CDB1 =
5   (ADDRESS = (PROTOCOL = TCP)(HOST = 192.168.56.1)(PORT = 1521))
6
7
8 CDB1 =
9   (DESCRIPTION =
10    (ADDRESS = (PROTOCOL = TCP)(HOST = 192.168.56.1)(PORT = 1521))
11    (CONNECT_DATA =
12     (SERVER = DEDICATED)
13     (SERVICE_NAME = cdb1.localdomain)
14   )
15 )
16
```

The text "(SERVICE_NAME = cdb1.localdomain)" on line 13 is highlighted in blue. The editor's status bar at the bottom indicates "Plain Text", "Tab Width: 8", "Ln 13, Col 7", and "INS". The taskbar at the very bottom shows three open windows: "oracle@localhost:~", "admin", and "tnsnames.ora (/u01/app/oracle/...) 1 / 4".