

Oracle Database in x64 Operation Systems

Introduction

This document intends to clarify the steps needed on installing Oracle Database Express in a x64 Operational Systems, configuring Indusoft connection and setting up the StADOSvr.ini file. This document also intends to clarify the steps needed on connecting to the Oracle Database Server and installing the Oracle client.

The procedure here described is not the only solution available, although is one verified by InduSoft.

Notice that Oracle Database can be installed normally in x86 Operational Systems. Even so it is necessary to setup StADOSvr.ini.

Initial Considerations

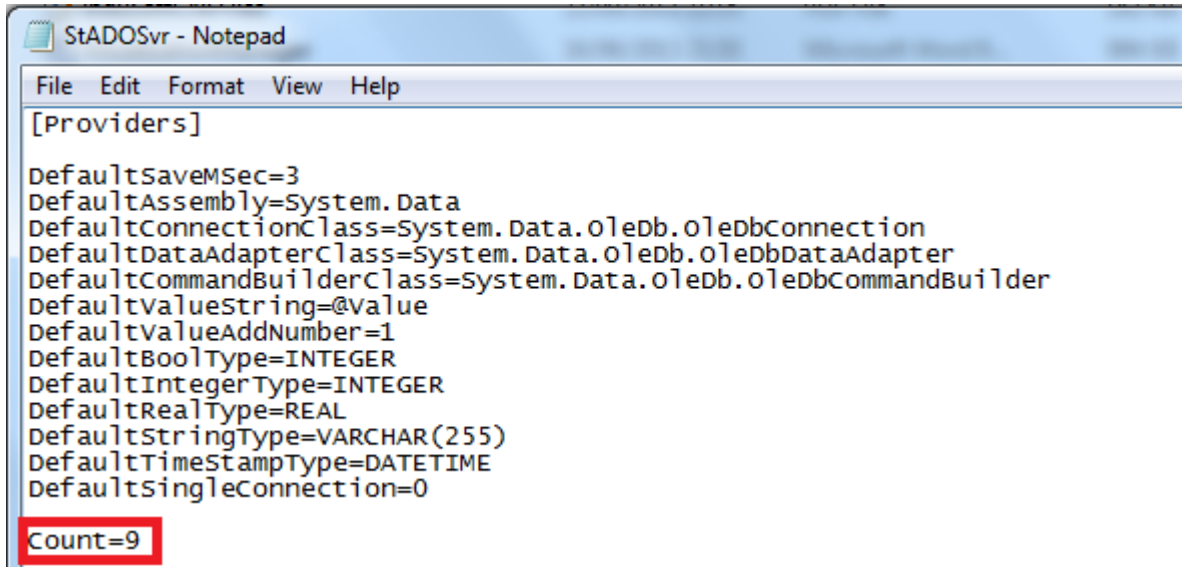
Besides InduSoft tools all external software kits here related are available free of charge and easily found on internet. The source websites are listed at the end of this document.

During this process, some entries of the original system registry will be changed. Therefore, make sure you have full administration privileges. It is also strongly recommended that the user creates a backup of the current registry in case something goes wrong.

Configuring the StADOSvr.ini

The steps described below will guide users to configure the StADOSvr.ini.

1. From a workstation with InduSoft Web Studio installed, run the Notepad as Administrator.
2. File->Open and select the StADOSvr.ini from the BIN folder of the installation directory (e.g. *C:\Program Files\InduSoft Web Studio v7.0\BIN\StADOSvr.ini*):
3. In Count, add one to the value configured. (e.g. *Count=8 to Count=9*);



```
StADOSvr - Notepad
File Edit Format View Help
[Providers]

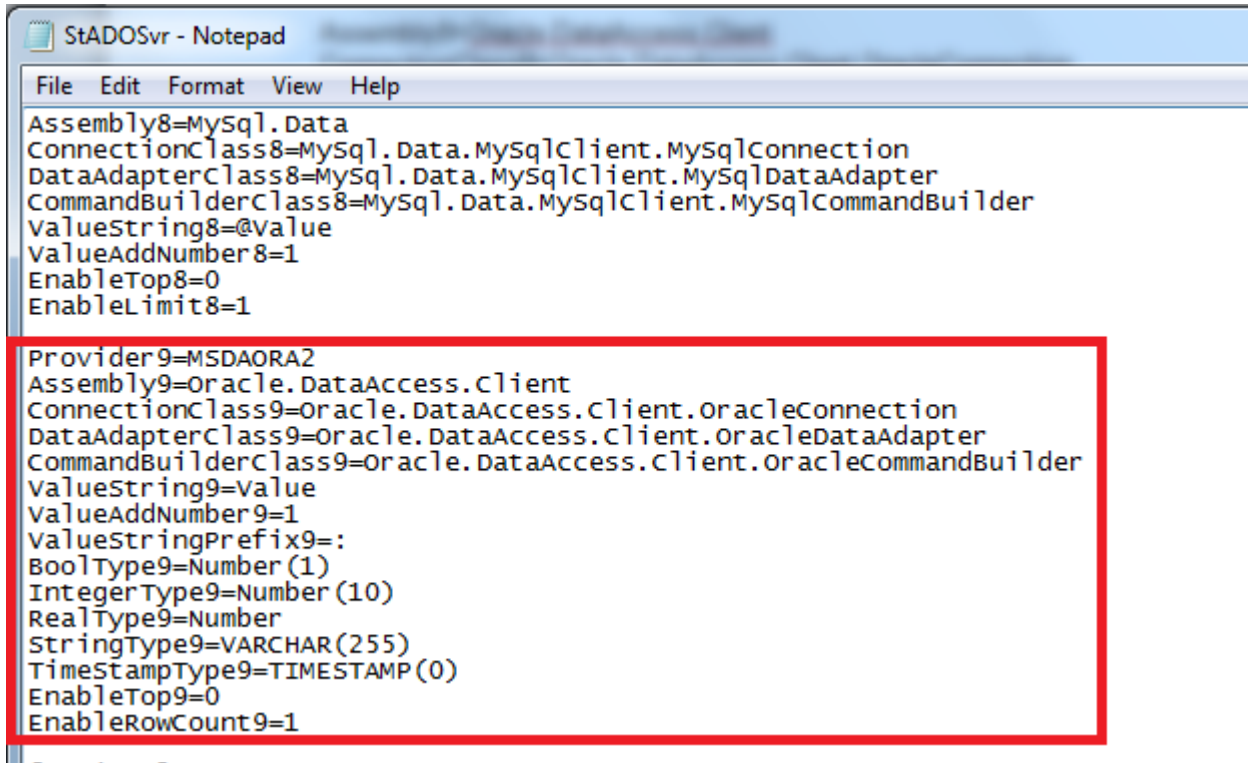
DefaultSaveMsec=3
DefaultAssembly=System.Data
DefaultConnectionClass=System.Data.OleDb.OleDbConnection
DefaultDataAdapterClass=System.Data.OleDb.OleDbDataAdapter
DefaultCommandBuilderClass=System.Data.OleDb.OleDbCommandBuilder
DefaultValueString=@value
DefaultValueAddNumber=1
DefaultBoolType=INTEGER
DefaultIntegerType=INTEGER
DefaultRealType=REAL
DefaultStringType=VARCHAR(255)
DefaultTimeStampType=DATETIME
DefaultSingleConnection=0

Count=9
```

4. After the last Provider, add the following one:

```
Assembly9=Oracle.DataAccess.Client
ConnectionClass9=Oracle.DataAccess.Client.OracleConnection
DataAdapterClass9=Oracle.DataAccess.Client.OracleDataAdapter
CommandBuilderClass9=Oracle.DataAccess.Client.OracleCommandBuilder
ValueString9=Value
ValueAddNumber9=1
ValueStringPrefix9=:
BoolType9=Number(1)
IntegerType9=Number(10)
RealType9=Number
StringType9=VARCHAR(255)
TimeStampType9=TIMESTAMP(0)
EnableTop9=0
EnableRowCount9=1
```

NOTE: The number in front of the parameters must be the same as the value configured in Count.



```
Assembly8=MySQL.Data
ConnectionClass8=MySQL.Data.MySQLClient.MySqlConnection
DataAdapterClass8=MySQL.Data.MySQLClient.MySQLDataAdapter
CommandBuilderClass8=MySQL.Data.MySQLClient.MySQLCommandBuilder
ValueString8=@value
ValueAddNumber8=1
EnableTop8=0
EnableLimit8=1

Provider9=MSDAORA2
Assembly9=Oracle.DataAccess.Client
ConnectionClass9=Oracle.DataAccess.Client.OracleConnection
DataAdapterClass9=Oracle.DataAccess.Client.OracleDataAdapter
CommandBuilderClass9=Oracle.DataAccess.Client.OracleCommandBuilder
ValueString9=value
ValueAddNumber9=1
ValueStringPrefix9=:
BoolType9=Number(1)
IntegerType9=Number(10)
RealType9=Number
StringType9=VARCHAR(255)
TimeStampType9=TIMESTAMP(0)
EnableTop9=0
EnableRowCount9=1
```

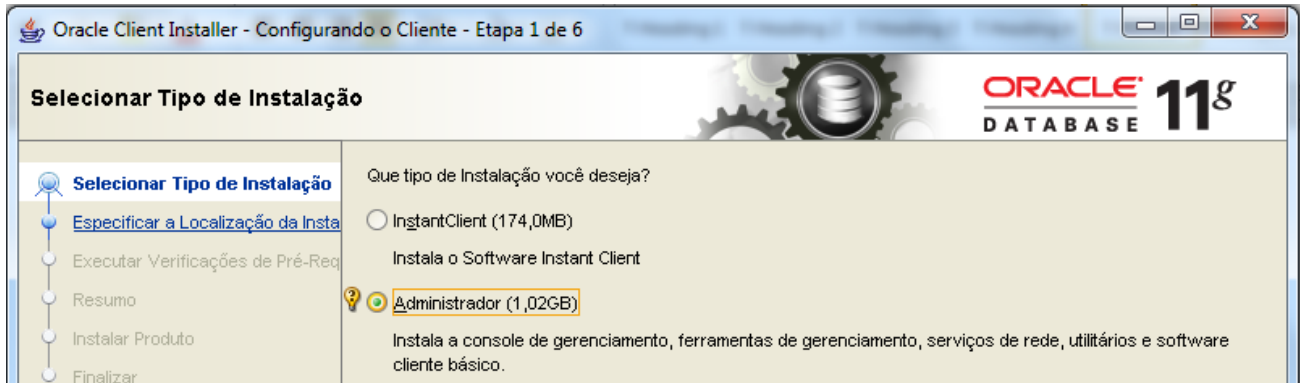
5. Save and close it.

Installing the Oracle Database Client

1. Download the Oracle Database Client x86 available in the following link:

<http://www.oracle.com/technetwork/database/enterprise-edition/downloads/112010-win32soft-098987.html>

2. Extract the files;
3. Run the setup.exe as Administrator;
4. Select the Administrator option;



5. Click in next;
6. In Oracle Base configure:
`C:\app\oracle`
7. In Software Localization configure:
`C:\app\oracle\product\11.2.0\client_1`
8. Click in next;
9. Follow the steps to install the software;
10. Copy the tnsnames.ora from the Oracle Server installation to the following path:
`C:\app\oracle\product\11.2.0\client_1\network\admin\`
11. Open the tnsnames.ora. In HOST, configure the IP of the server computer.

The screenshot shows a Notepad window titled "tnsnames - Notepad". The menu bar includes "File", "Edit", "Format", "View", and "Help". The text content is as follows:
tnsnames.ora Network Configuration File: E:\app\Administrator\product\11.2.0\dbf
Generated by oracle configuration tools.

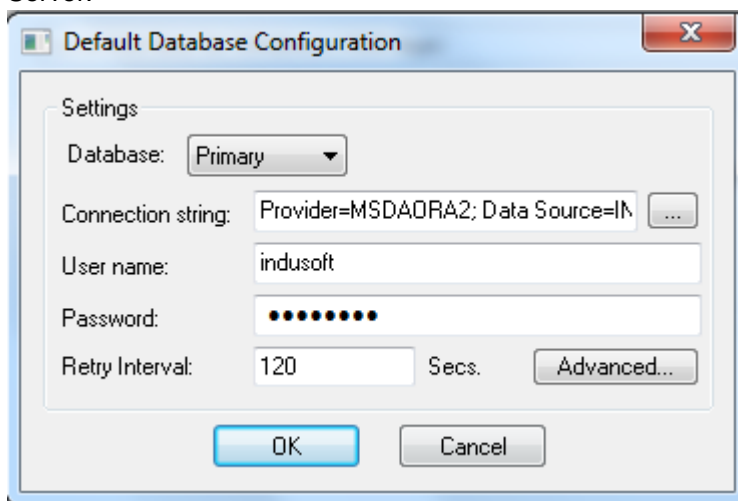
DBORACLE =
 (DESCRIPTION =
 (ADDRESS = (PROTOCOL = TCP)(HOST = 10.12.136.70)(PORT = 1521))
 (CONNECT_DATA =
 (SERVER = DEDICATED)
 (SERVICE_NAME = DBOracle)
)
)

ORACLR_CONNECTION_DATA =
 (DESCRIPTION =
 (ADDRESS_LIST =
 (ADDRESS = (PROTOCOL = IPC)(KEY = EXTPROC1521))
)
)

12. Reboot the computer;
13. Open the InduSoft Web Studio;
14. Click on the menu Ribbon->Project->Options->Default Database;
15. The connection string should be:

Provider=MSDAORA2; Data Source=DBNAME
(e.g. Provider=MSDAORA2; Data Source=INDUSOFT)

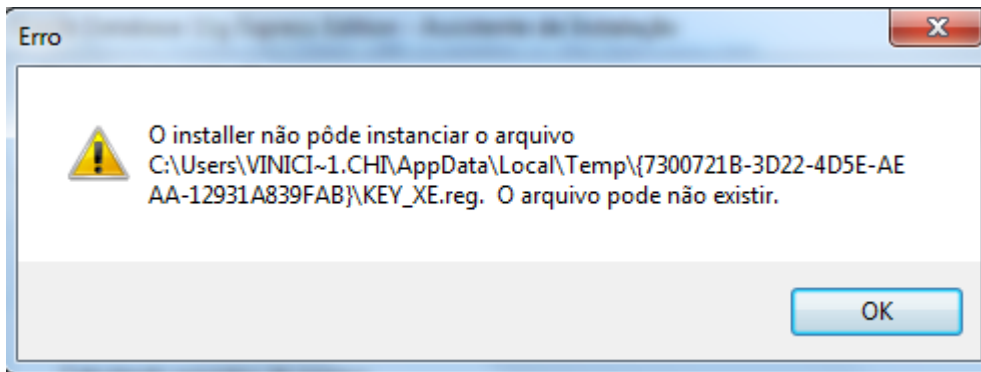
16. In Username and Password, configure it based on the Username and password of the Oracle Server.



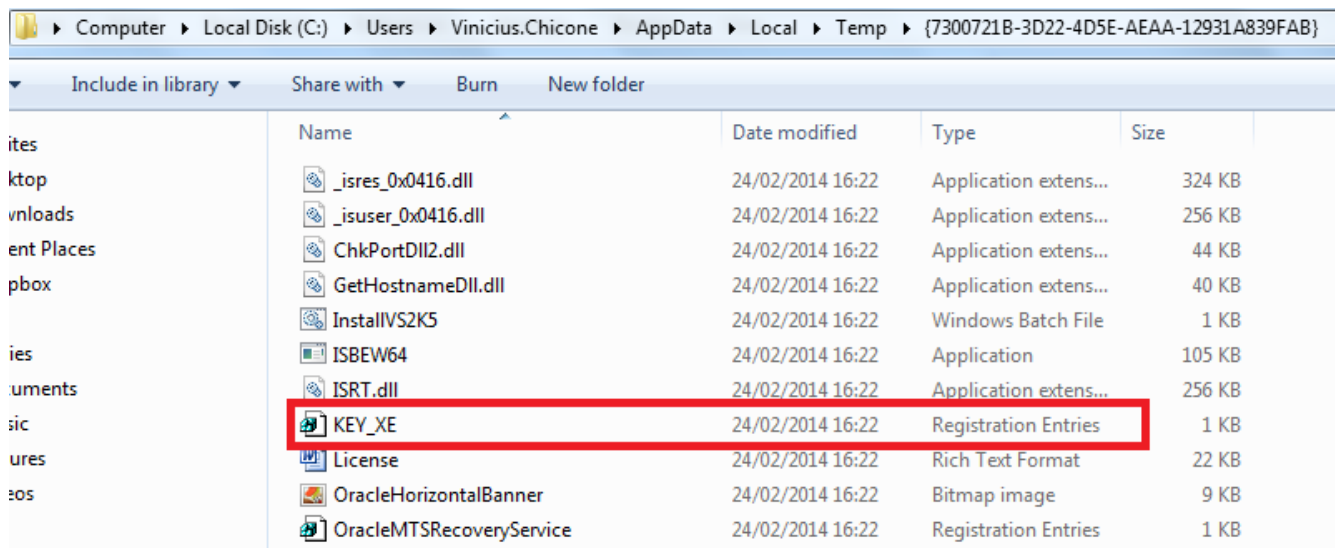
17. Click OK.

Installing the Oracle Database Express

1. Download the Oracle Database Client x86 available in the following link:
<http://www.oracle.com/technetwork/database/database-technologies/express-edition/downloads/index.html>
2. Extract the files;
3. Run the setup.exe as Administrator;
4. Specify a password to the Database;
5. During the installation, an error will occur because the Oracle Database Express is not certified to run in a X64 computer;

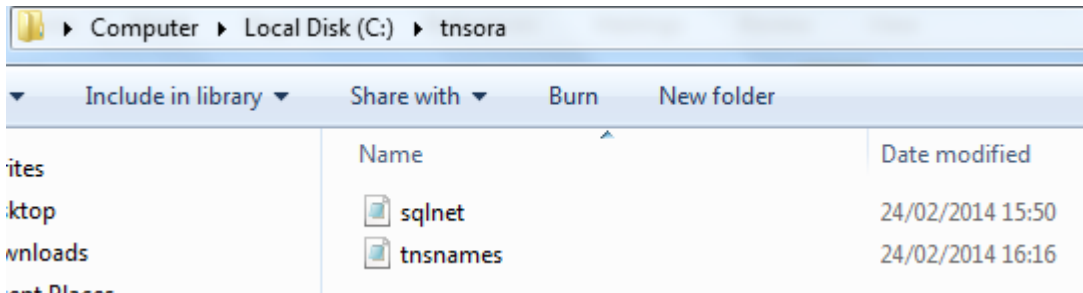


6. You can force the Oracle installation if you create the Key_XE.reg file according the next steps.
7. Open the path of the error, in this case:
“C:\Users\VINICI~1.CH\AppData\Local\Temp\{7300721B-3D22-4D5E-AEAA-12931A839FAB}\KEY.XE.reg”;
8. Create a copy of the OracleMTSRecoveryService.reg file in this folder;
9. Rename the file to: KEY_XE.reg;



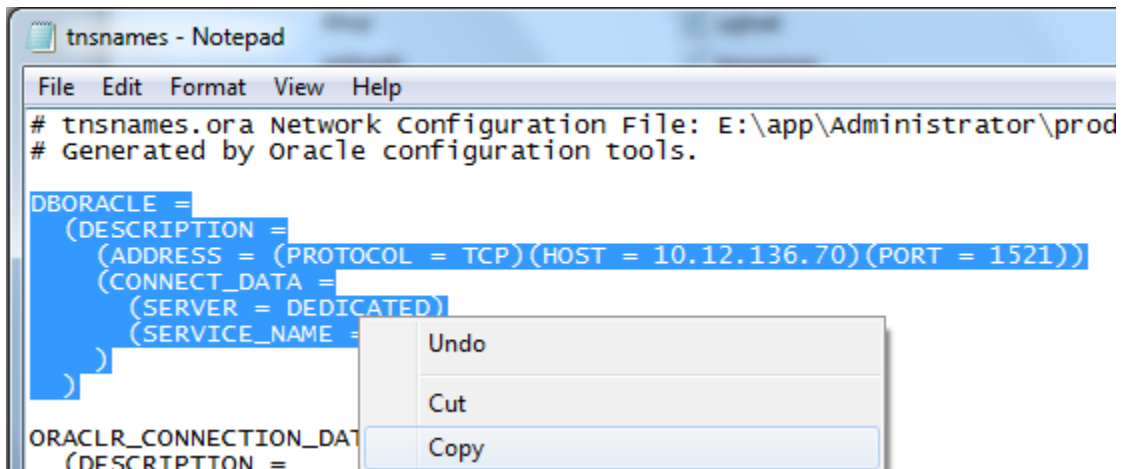
10. Click on the OK button in the error installation to continue;
11. Open the path of your client installation: C:\app\oracle\product\11.2.0\client_1 and copy the tnsnames.ora and sqlnet.ora;
12. Open the Local Disk Folder (C:);
13. Create a new folder tnsora;

14. Paste the files in this new folder;



15. Open the tnsnames.ora file;

16. Now you need to include the XE connection, so replicate the first configuration (DBORACLE connection) in the end of the file content;



17. Change the name and the Service_Name to XE and the HOST to localhost;

```
tnsnames - Notepad
File Edit Format View Help
# tnsnames.ora Network Configuration File: E:\app\Administrator\pro
# Generated by oracle configuration tools.

DBORACLE =
  (DESCRIPTION =
    (ADDRESS = (PROTOCOL = TCP)(HOST = 10.12.136.70)(PORT = 1521))
    (CONNECT_DATA =
      (SERVER = DEDICATED)
      (SERVICE_NAME = DBOracle)
    )
  )

ORACL_ CONNECTION_DATA =
  (DESCRIPTION =
    (ADDRESS_LIST =
      (ADDRESS = (PROTOCOL = IPC)(KEY = EXTPROC1521))
    )
    (CONNECT_DATA =
      (SID = CLRExtProc)
      (PRESENTATION = RO)
    )
  )

LISTENER_DBORACLE =
  (ADDRESS = (PROTOCOL = TCP)(HOST = localhost)(PORT = 1521))

XE =
  (DESCRIPTION =
    (ADDRESS = (PROTOCOL = TCP)(HOST = localhost)(PORT = 1521))
    (CONNECT_DATA =
      (SERVER = DEDICATED)
      (SERVICE_NAME = XE)
    )
  )
```

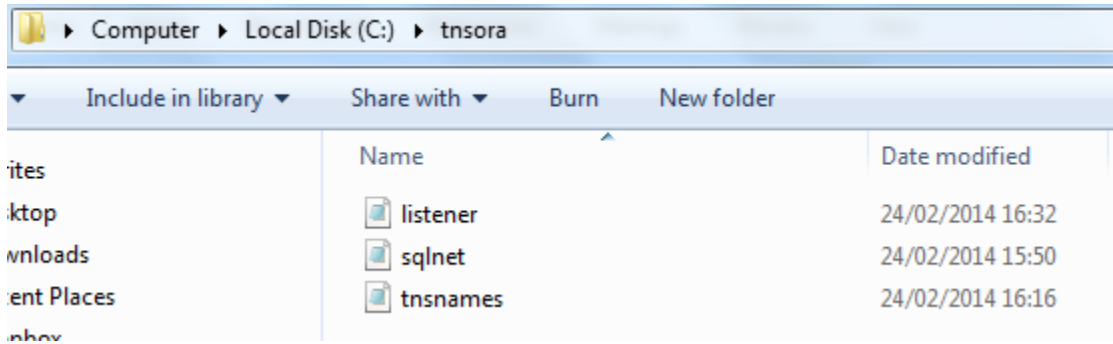
18. Save and close it.

19. Open the Oracle Express installation folder:

C:\oraclexe\app\oracle\product\11.2.0\server\network\ADMIN

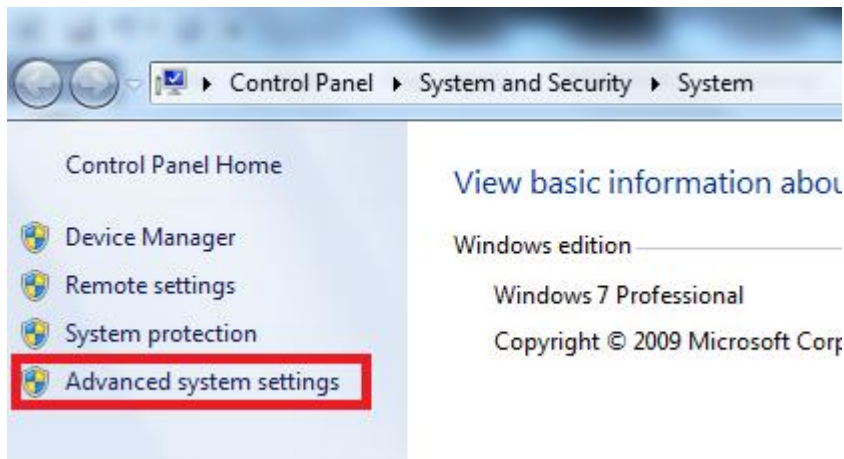
20. Copy the listener.ora file;

21. Paste it in the C:\tnsora\ folder;

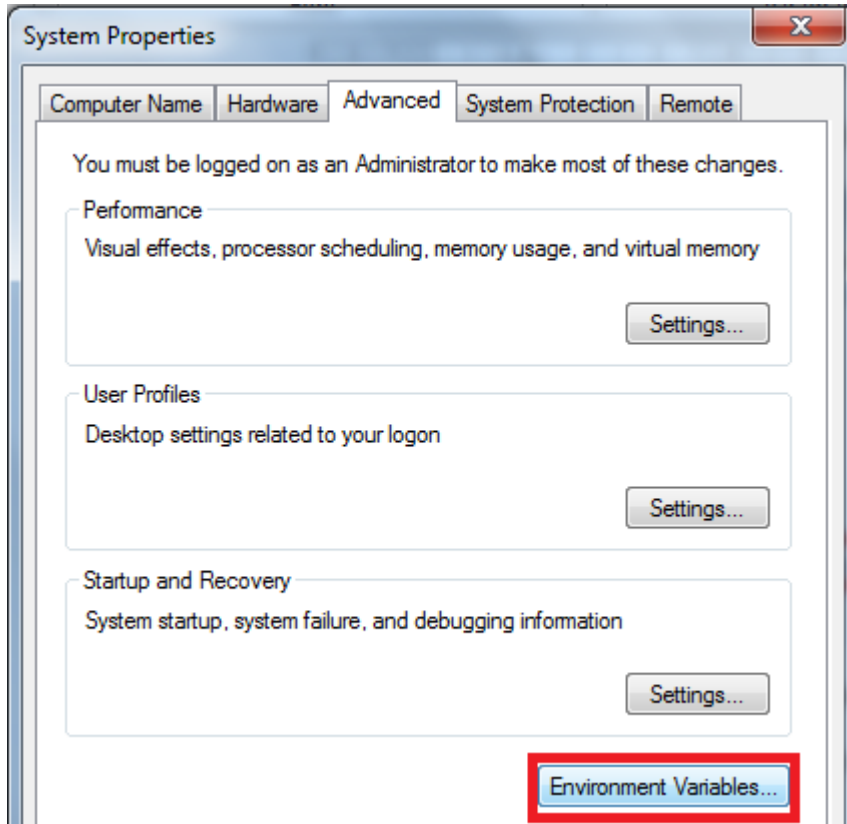


22. Open the Control Panel->System and Security->System;

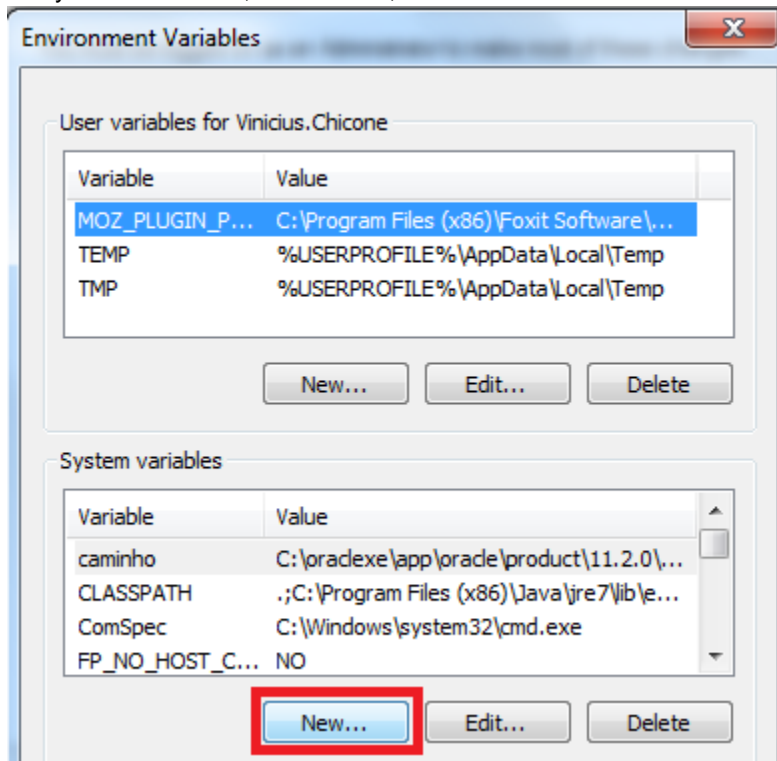
23. Select Advanced System Settings;



24. Select Environment Variables...;

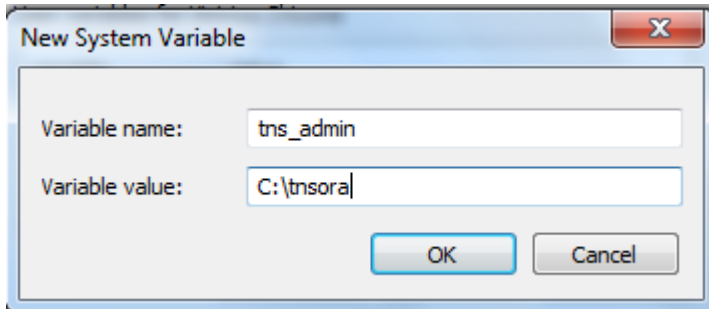


25. In System Variables, select New;



26. In Variable Name, configure: tns_admin;

27. In Variable Value, configure: C:\tnsora;



28. Click OK;

29. Reboot the computer;

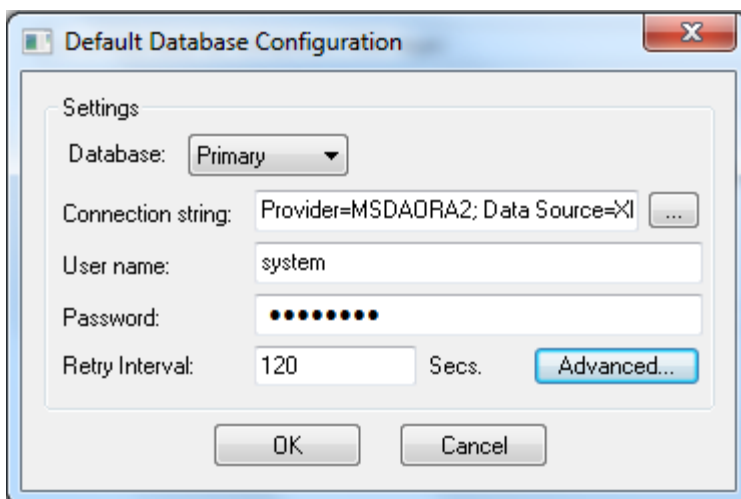
30. Open the InduSoft Web Studio;

31. Click on the menu Ribbon->Project->Options->Default Database;

32. The connection string is:

Provider=MSDAORA2; Data Source=XE

33. In Username configure system, and in Password configure the password configured in the Oracle Express installation;



34. Click OK.

Final Considerations

The procedure here described installs Oracle Express and Oracle Client to run in x64 Operational Systems. It has been successfully executed on three different Microsoft systems including Windows Server 2008 R2, Windows 7 and Windows 8.

Map of Revision

Revision	Author	Date	Comments
A	Vinícius Chicone	February 25, 2014	▪ Document creation