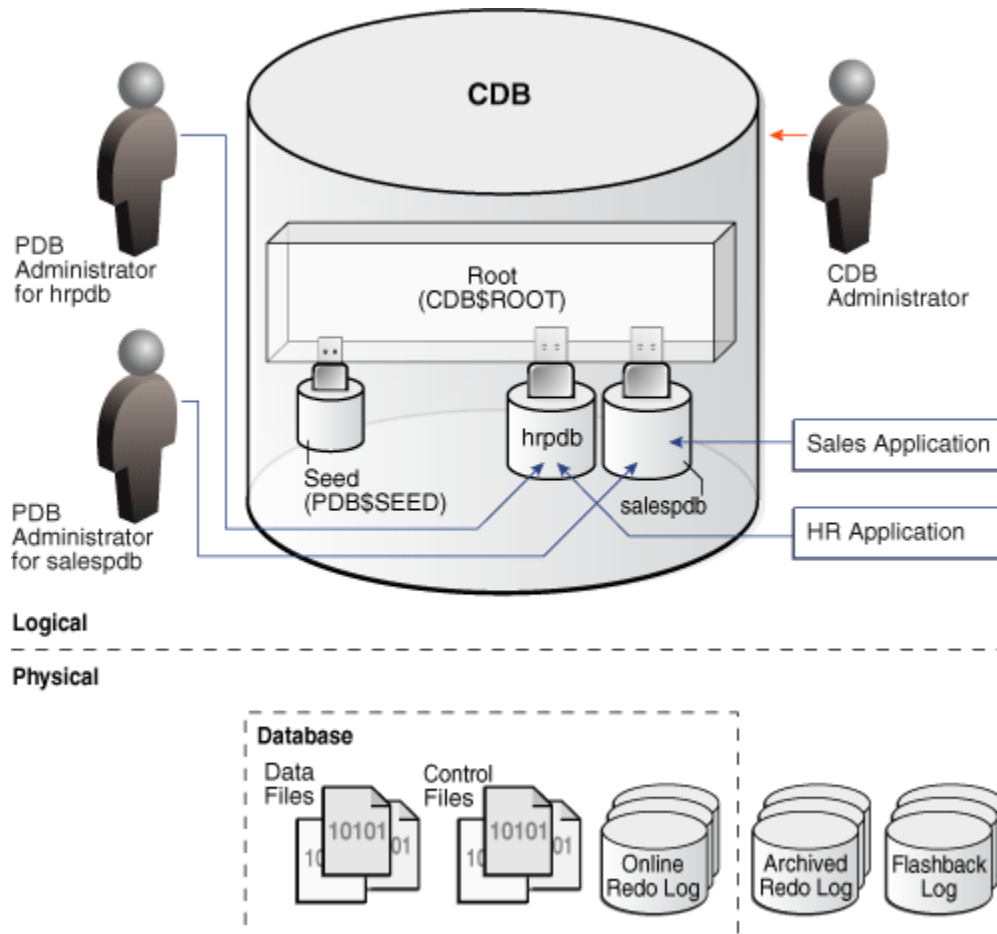


Creare USER Oracle 21c XE:

Observatie: Înainte de Oracle Database 12c, nicio bază de date Oracle nu era CDB. Containerul poate fi un PDB sau rădăcina. O bază de date container (CDB) este o bază de date unică care conține mai multe baze de date conectabile (PDB). Un PDB este o bază de date autonomă care poate fi creată, abandonată și mutată independent de alte PDB-uri din același CDB



1. Pentru Container Database (CDB):

- conexiunea implicita este la o baza CDB

```
SQL> conn system
```

```
Enter password:
```

```
Connected.
```

```
SQL> show con_name
```

```
CON_NAME
```

```
-----  
CDB$ROOT
```

Comenzi (obligatoriu C## ca prefix la user):

```
SQL> create user C##student identified by student;  
SQL> grant all privileges to C##student;
```

2. Pentru Pluggable Database (PDB):

A) Conectare cu CONNECT (sau SYS), implicit la CDB

```
SQL> conn  
Enter user-name: connect as sysdba  
Enter password:  
Connected.
```

Obs: (userul **connect** este practic user **SYS**)

B) Bazele de date PDB disponibile (a doua intereseaza):

```
SQL> show pdbs
```

CON_ID	CON_NAME	OPEN	MODE	RESTRICTED
2	PDB\$SEED	READ	ONLY	NO
3	XEPDB1	READ	WRITE	NO

C) Conexiunea implicita la CDB :

```
SQL> show con_name  
CON_NAME  
-----  
CDB$ROOT
```

D) Schimbare baza de date la PDB:

```
SQL> alter session set container=XEPDB1;
```

```
SQL> show con_name
```

```
CON_NAME  
-----  
XEPDB1
```

Comenzi creare nou user la noua baza implicita (PDB):

```
SQL> create user student identified by student;  
SQL> grant all privileges to student;
```

E) Conectare cu noul user:

- Se cauta cale pentru clientul consola **SQL Plus**
- Din CMD (consola cu linie de comanda), se lanseaza (spre exemplu, dar calea este functie de fiecare instalare Oracle) **sqlplus.exe**, cu parametrii (user/parola@localhost(IP):port/baza_PDB):

```
C:\app\ioan.filip\product\21c\dbhomeXE\bin\sqlplus student/student@0.0.0.0:1521/XEPDB1
```

```
C:\Windows\System32\cmd.exe - sqlplus student/student@0.0.0.0:1521/XEPDB1
Microsoft Windows [Version 10.0.19042.685]
(c) 2020 Microsoft Corporation. All rights reserved.

C:\Windows\System32>cd \

C:\>cd C:\app\ioan.filip\product\21c\dbhomeXE\bin

C:\app\ioan.filip\product\21c\dbhomeXE\bin>sqlplus student/student@0.0.0.0:1521/XEPDB1

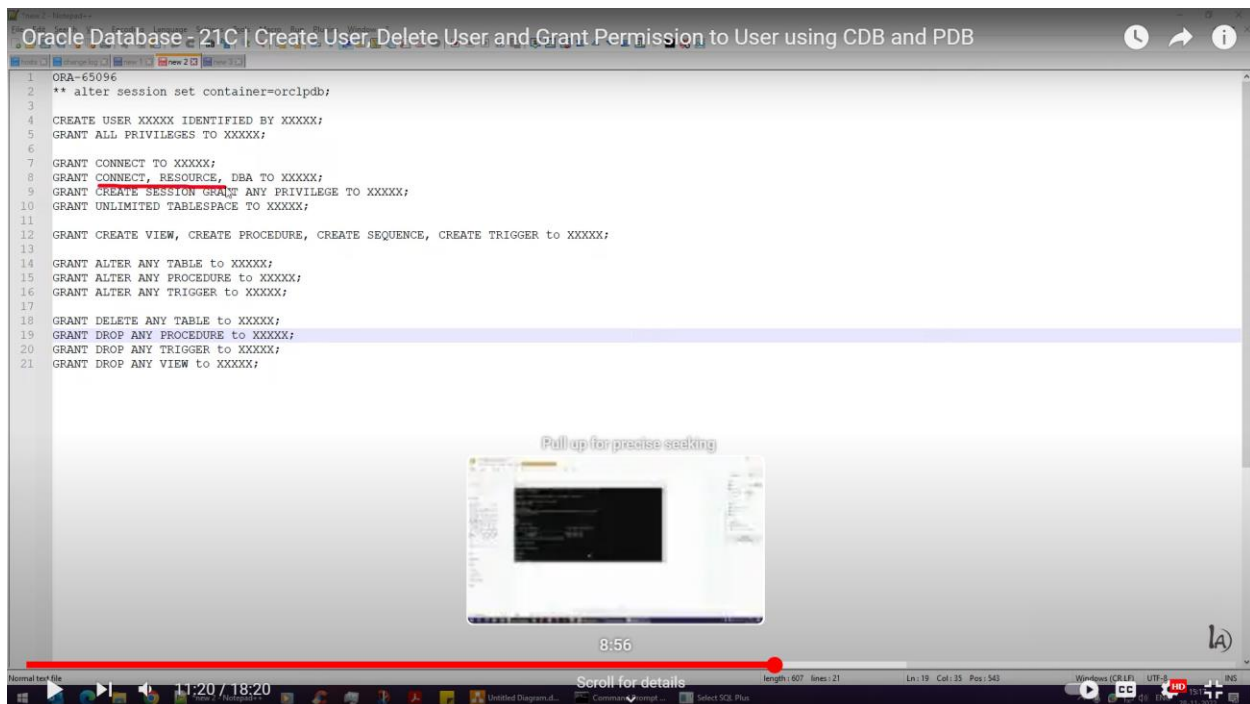
SQL*Plus: Release 21.0.0.0.0 - Production on Mon Apr 22 09:31:29 2024
Version 21.3.0.0.0

Copyright (c) 1982, 2021, Oracle. All rights reserved.

Connected to:
Oracle Database 21c Express Edition Release 21.0.0.0.0 - Production
Version 21.3.0.0.0

SQL> _
```

Exemple de alte drepturi/roluri care pot fi acordate:



The screenshot shows a video player window titled "Oracle Database - 21C | Create User, Delete User and Grant Permission to User using CDB and PDB". The video content displays a list of SQL statements for creating a user and granting various privileges. The statements are as follows:

```
1 ORA-65096
2 ** alter session set container=orclpdb;
3
4 CREATE USER XXXXX IDENTIFIED BY XXXXX;
5 GRANT ALL PRIVILEGES TO XXXXX;
6
7 GRANT CONNECT TO XXXXX;
8 GRANT CONNECT, RESOURCE, DBA TO XXXXX;
9 GRANT CREATE SESSION GRANT ANY PRIVILEGE TO XXXXX;
10 GRANT UNLIMITED TABLESPACE TO XXXXX;
11
12 GRANT CREATE VIEW, CREATE PROCEDURE, CREATE SEQUENCE, CREATE TRIGGER to XXXXX;
13
14 GRANT ALTER ANY TABLE to XXXXX;
15 GRANT ALTER ANY PROCEDURE to XXXXX;
16 GRANT ALTER ANY TRIGGER to XXXXX;
17
18 GRANT DELETE ANY TABLE to XXXXX;
19 GRANT DROP ANY PROCEDURE to XXXXX;
20 GRANT DROP ANY TRIGGER to XXXXX;
21 GRANT DROP ANY VIEW to XXXXX;
```

Se pot acorda toate privilegiile:

```
SQL> grant ALL PRIVILEGES to student;
```

Userul current:

```
SQL> select username from user_users;  
USERNAME
```

STUDENT

Alt mod de conectare direct din consola SQL Plus :

```
SQL> conn system/*****@0.0.0.0:1521/XEPDB1 as sysdba  
Connected.
```

```
SQL> create user student identified by student;  
SQL> grant all privileges to student;  
Grant succeeded.
```

Apoi:

```
SQL> conn student/student@0.0.0.0:1521/XEPDB1  
Connected.  
SQL>
```

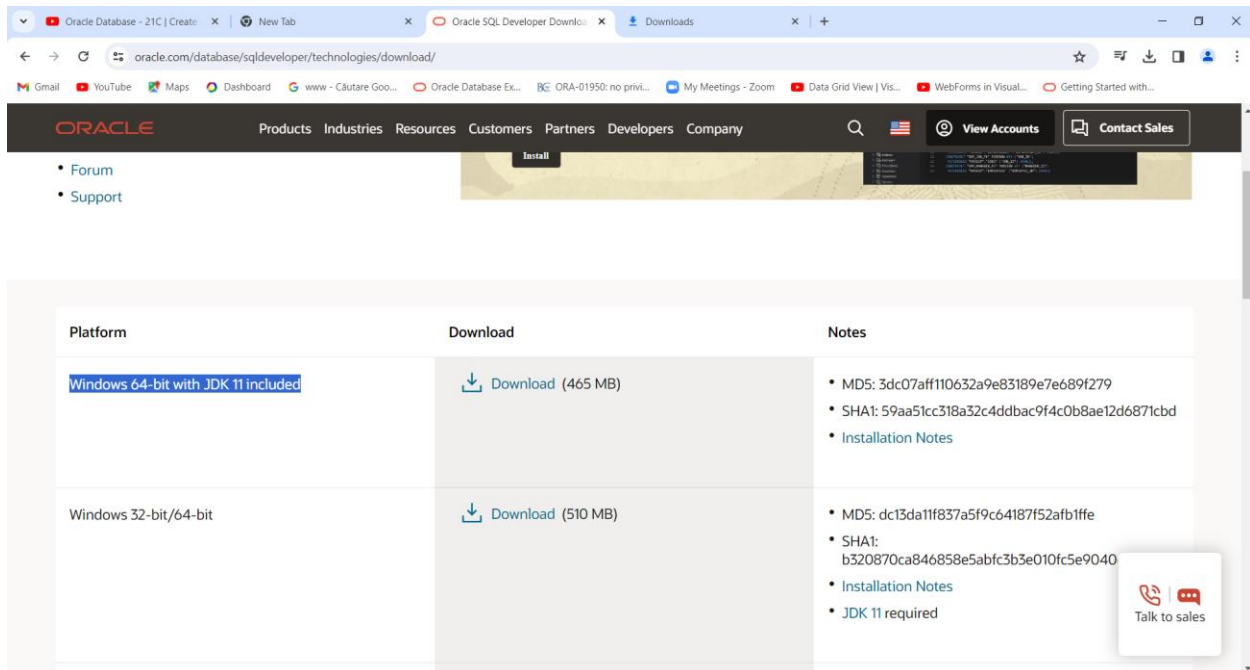
3. Utilizare Oracle SQL Developer

SQL Developer 23.1.1
Version 23.1.1.345.2114 - December 15, 2023

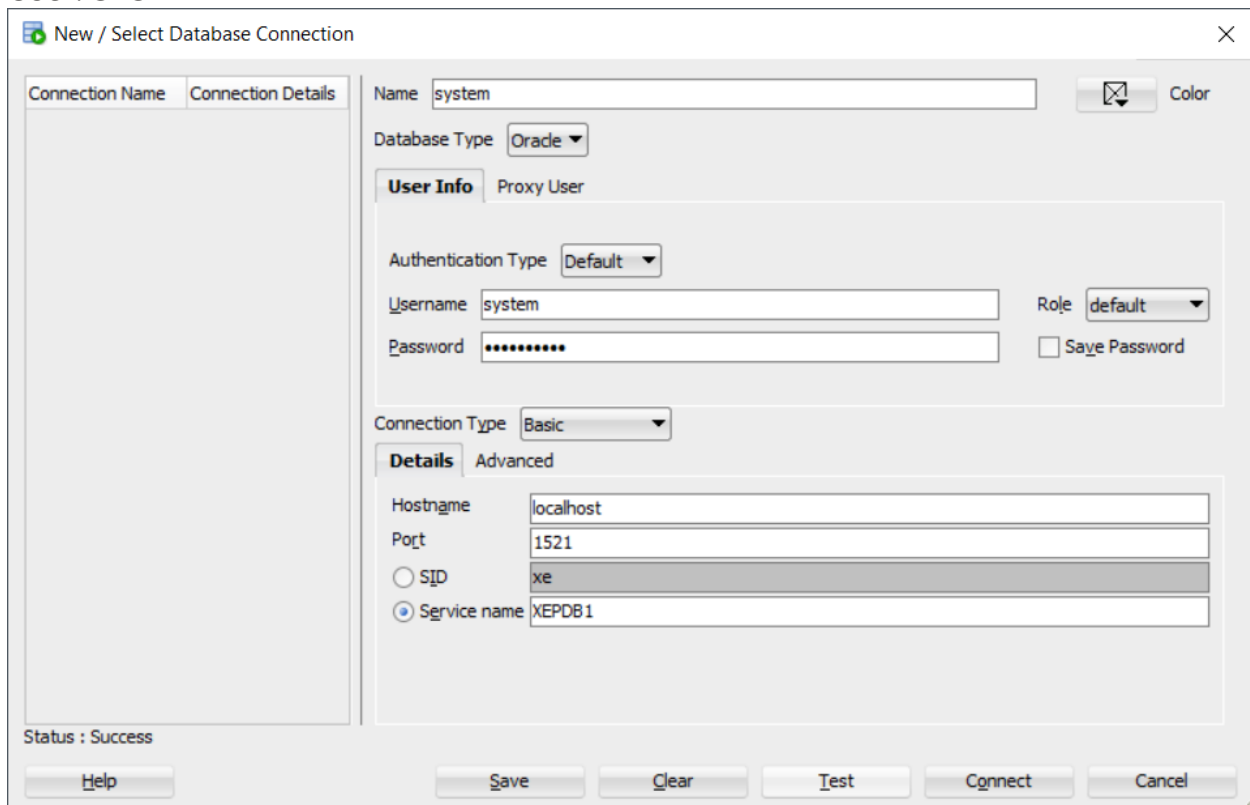
- [Release Notes](#)
- [Documentation](#)
- [Forum](#)
- [Support](#)

Platform	Download	Notes
Windows 64-bit with JDK 11 included	Download (465 MB)	<ul style="list-style-type: none">• MD5: 3dc07aff110632a9e83189e7e689f279• SHA1: 59aa51cc318a32c4ddb9f4c0b8ae12...

Recomandat versiune cu support Java: Windows 64-bit with JDK 11 included:

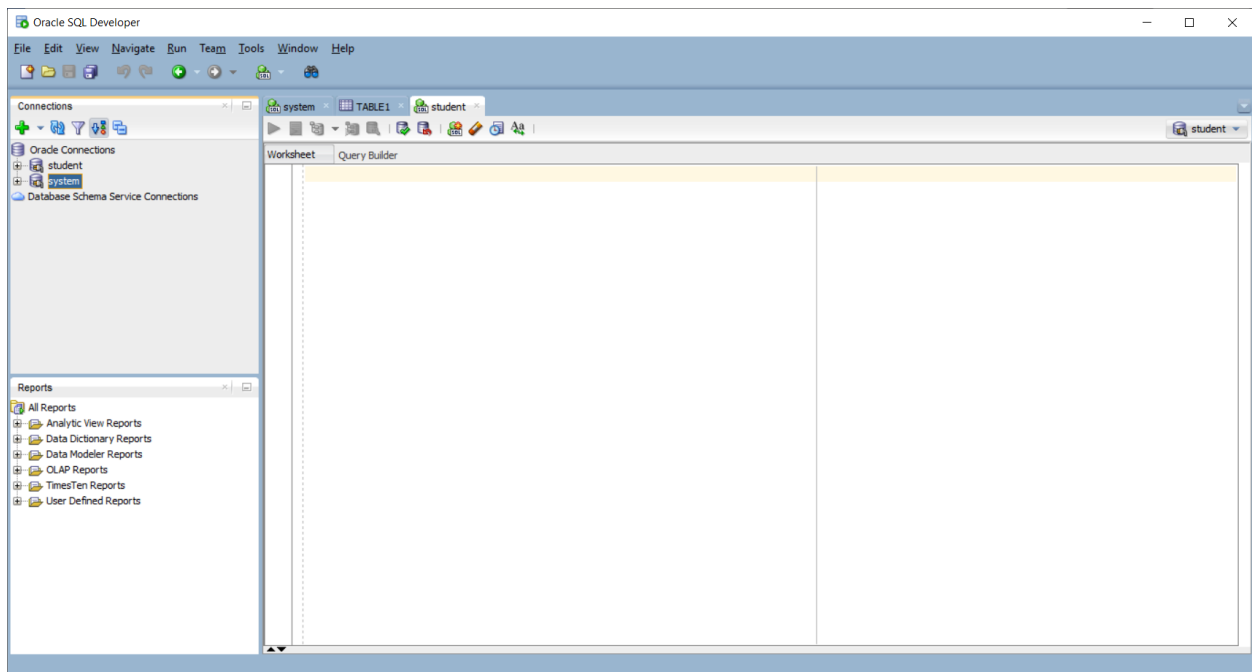
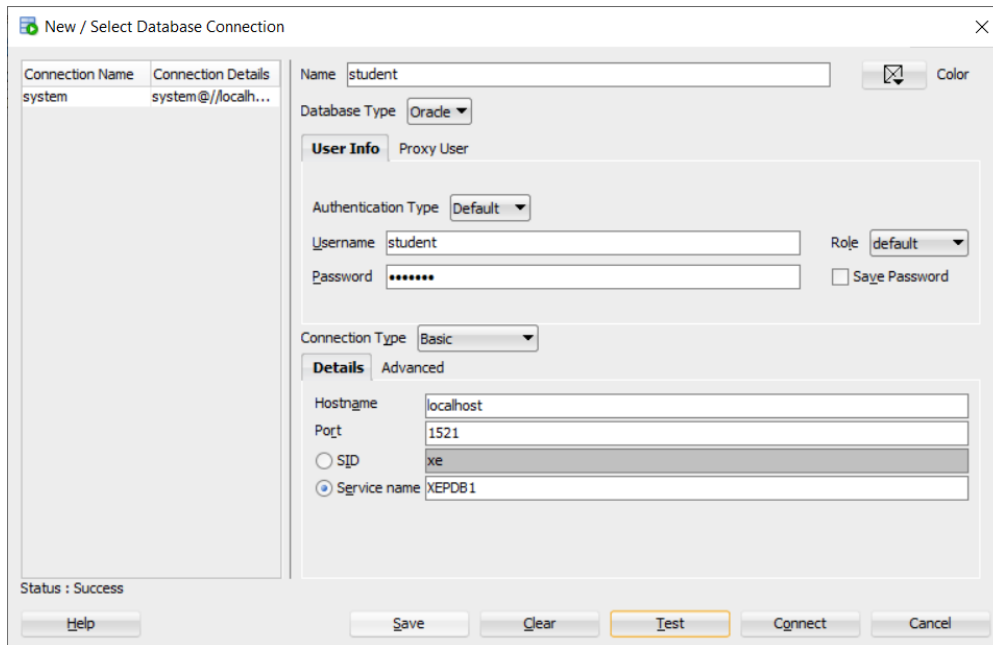


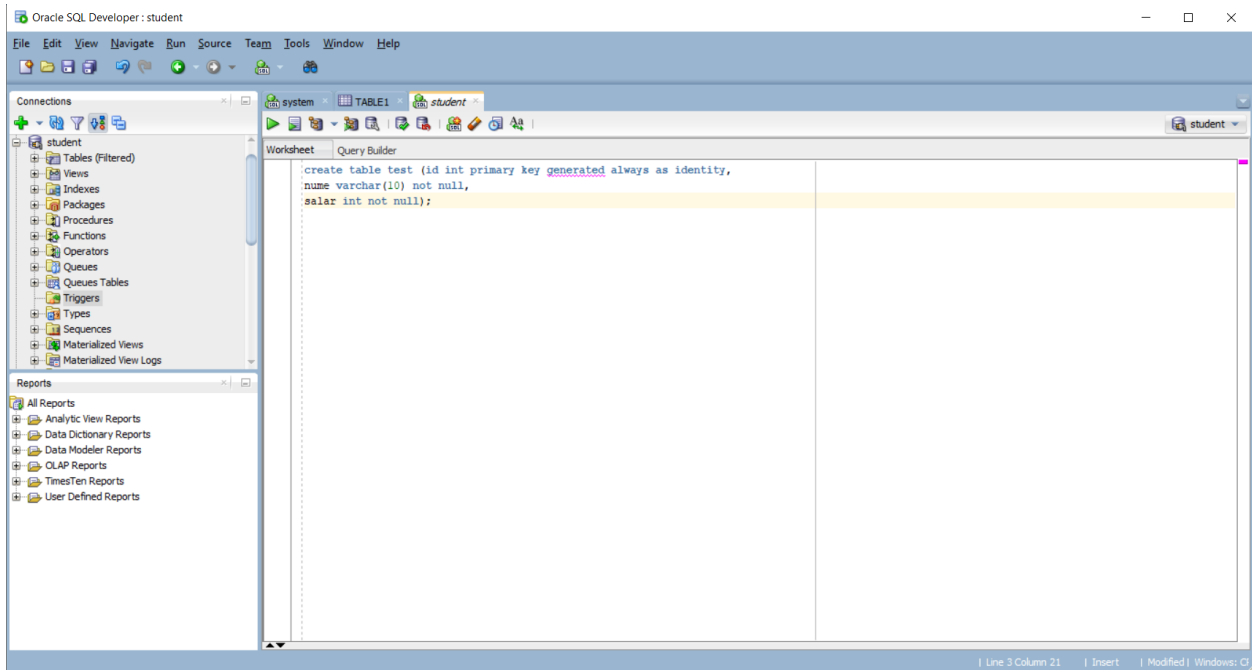
User: SYSTEM



- **Vezi parametrii (conectare la XEPDB1)**
- **Verificare: buton Test**
- **Conectare : buton Connect**

User: student

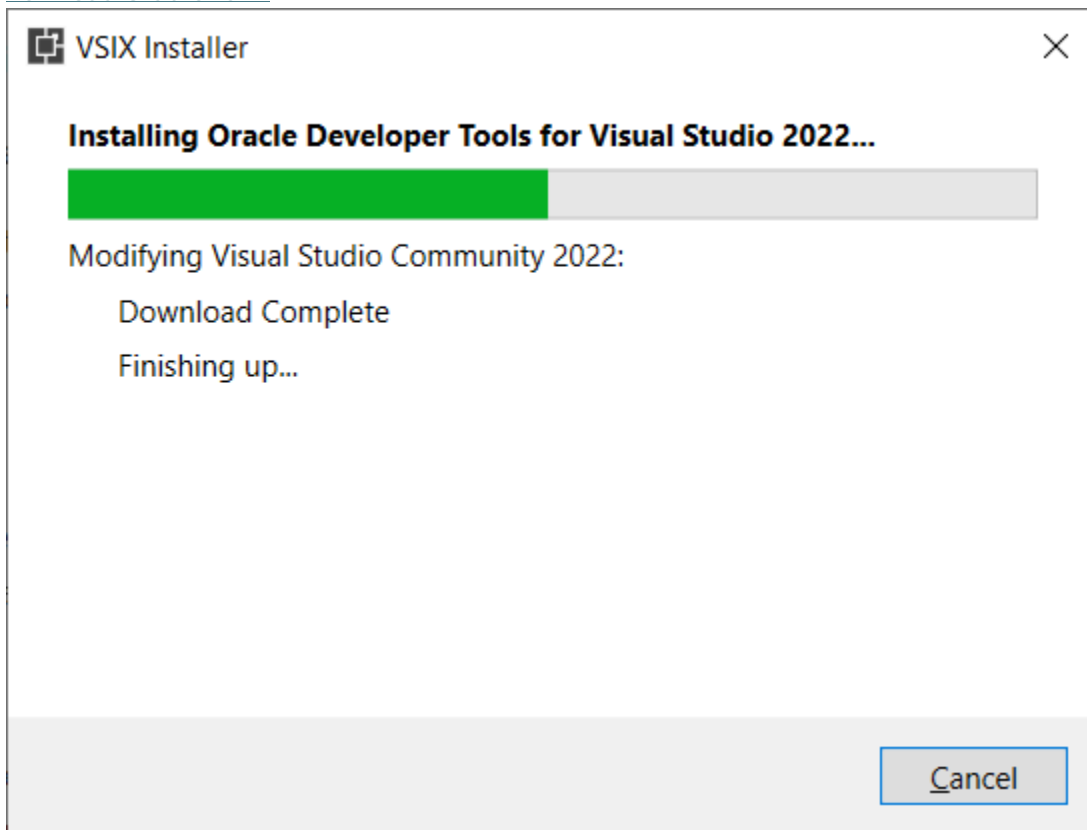


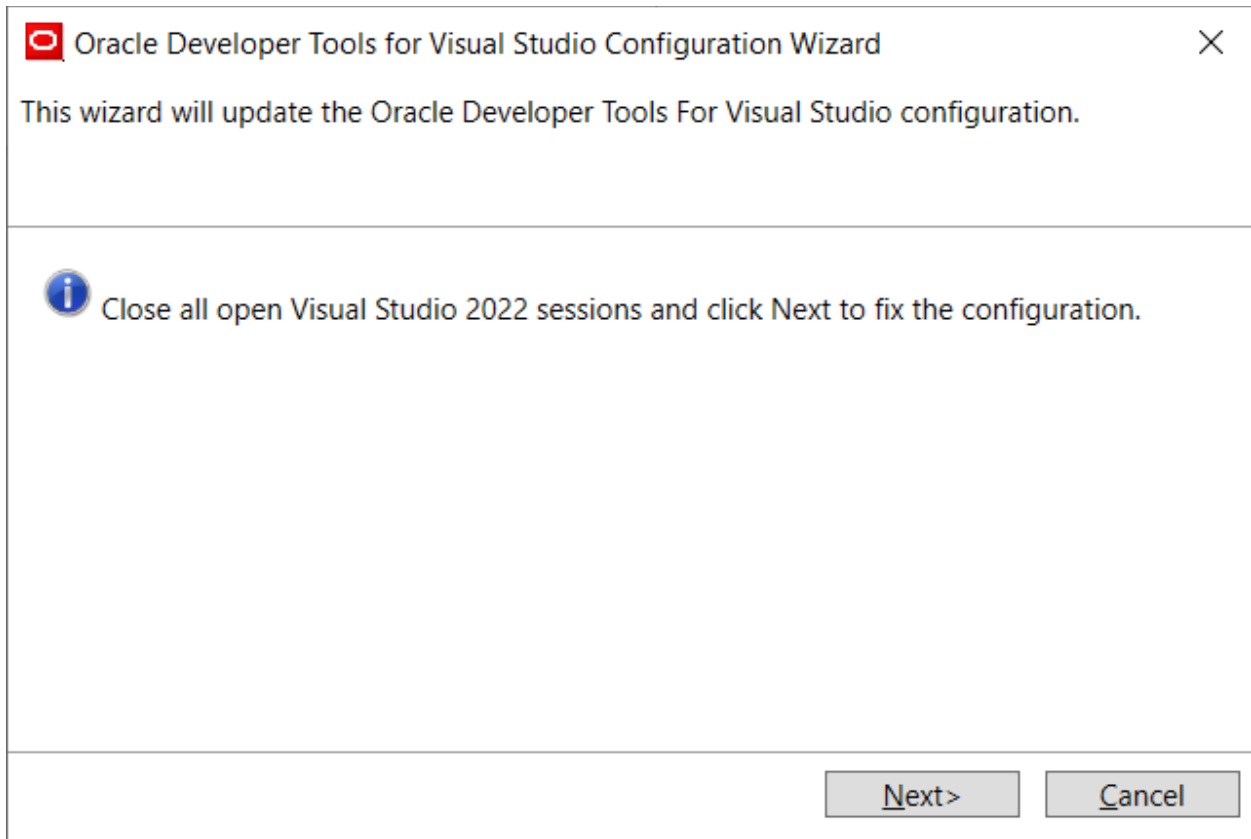


Visual Studio 2022

De instalat:

<https://marketplace.visualstudio.com/items?itemName=OracleCorporation.OracleDeveloperToolsForVisualStudio2022>

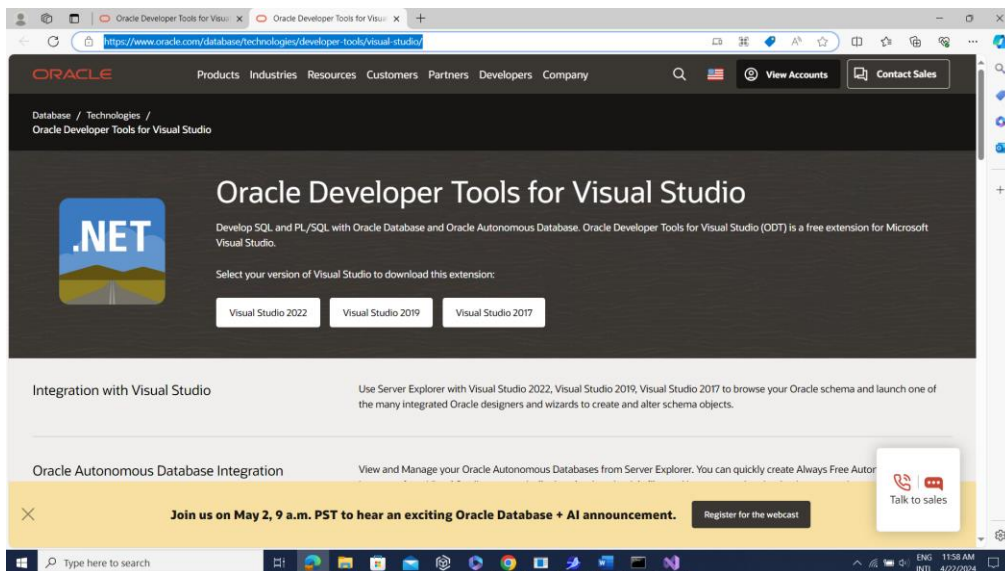




Sau poate si de aici (neverificat) : [Oracle Developer Tools for Visual Studio](https://www.oracle.com/database/technologies/developer-tools/visual-studio/)

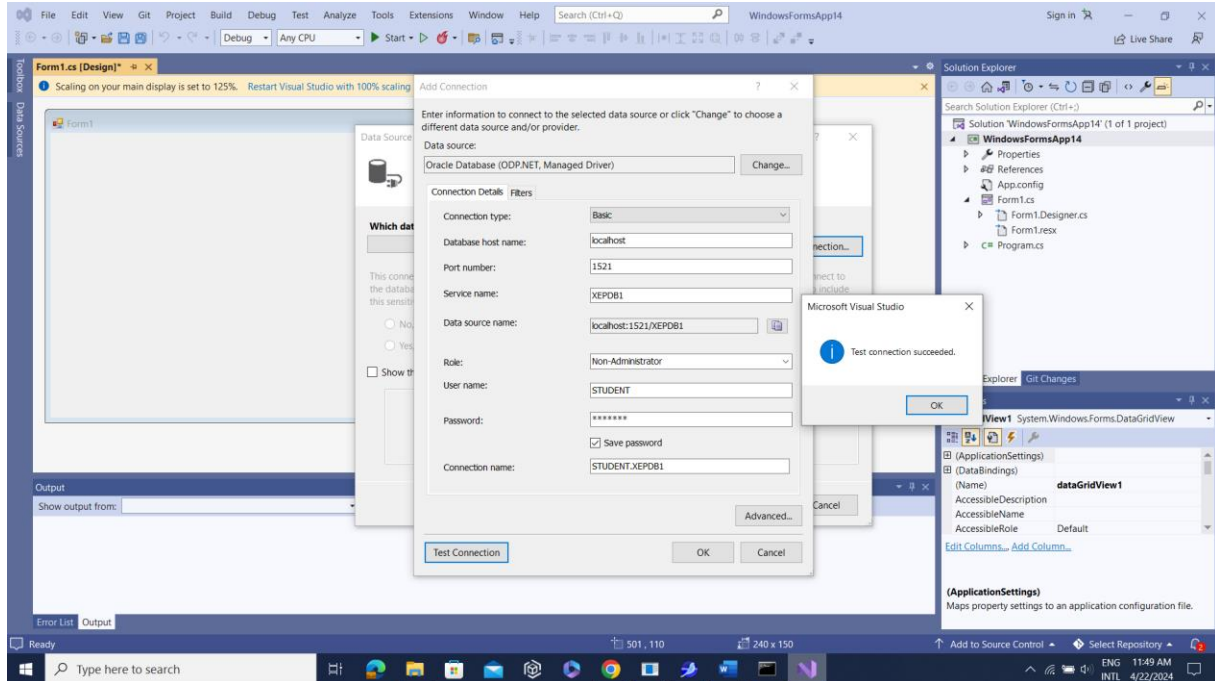
<https://www.oracle.com/database/technologies/developer-tools/visual-studio/>

Vezi figura:

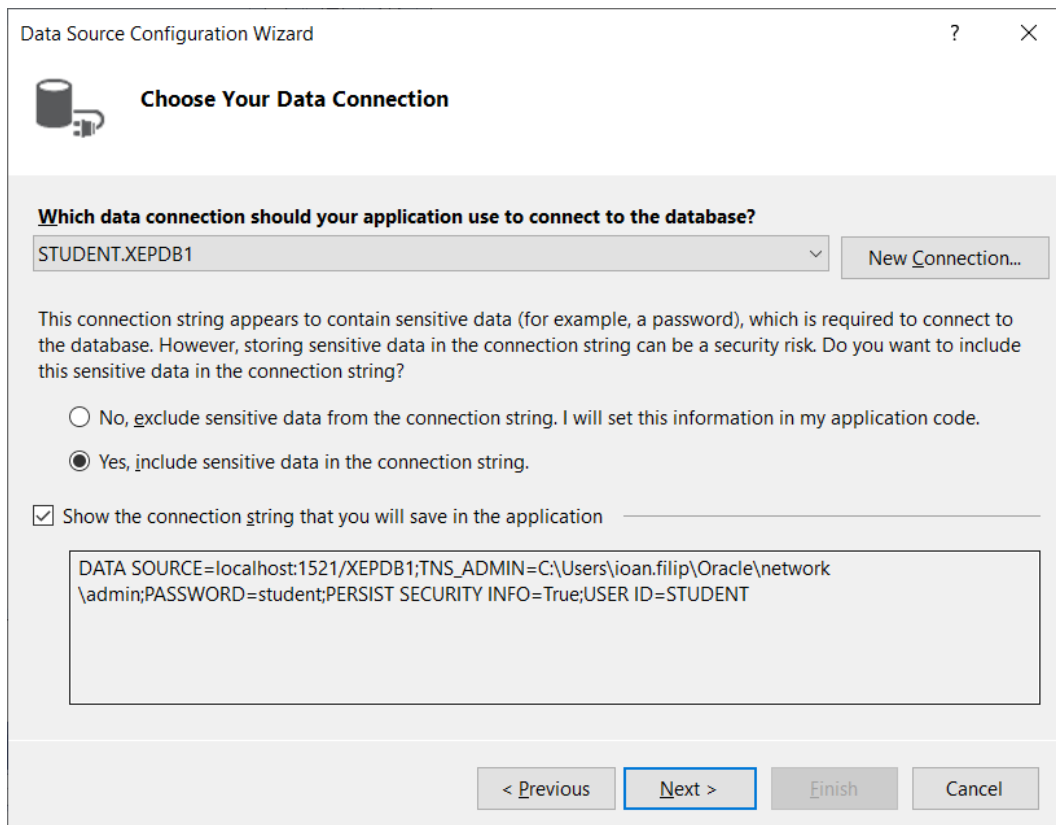


Vezi si : <https://www.youtube.com/watch?v=Osewbtbw0h8>

I. Utilizare ODT cu VS 2022- WINDOWS FORMS:



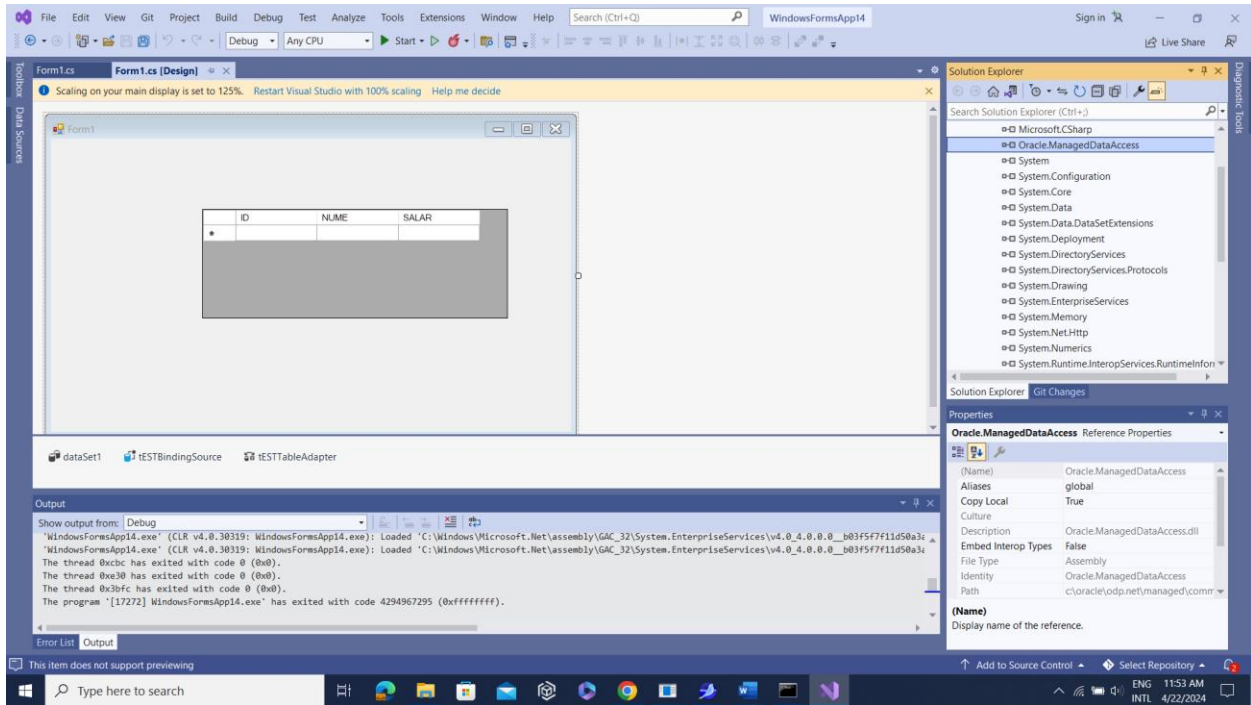
Conectare la baza de date Oracle **XEPDB1** cu user student



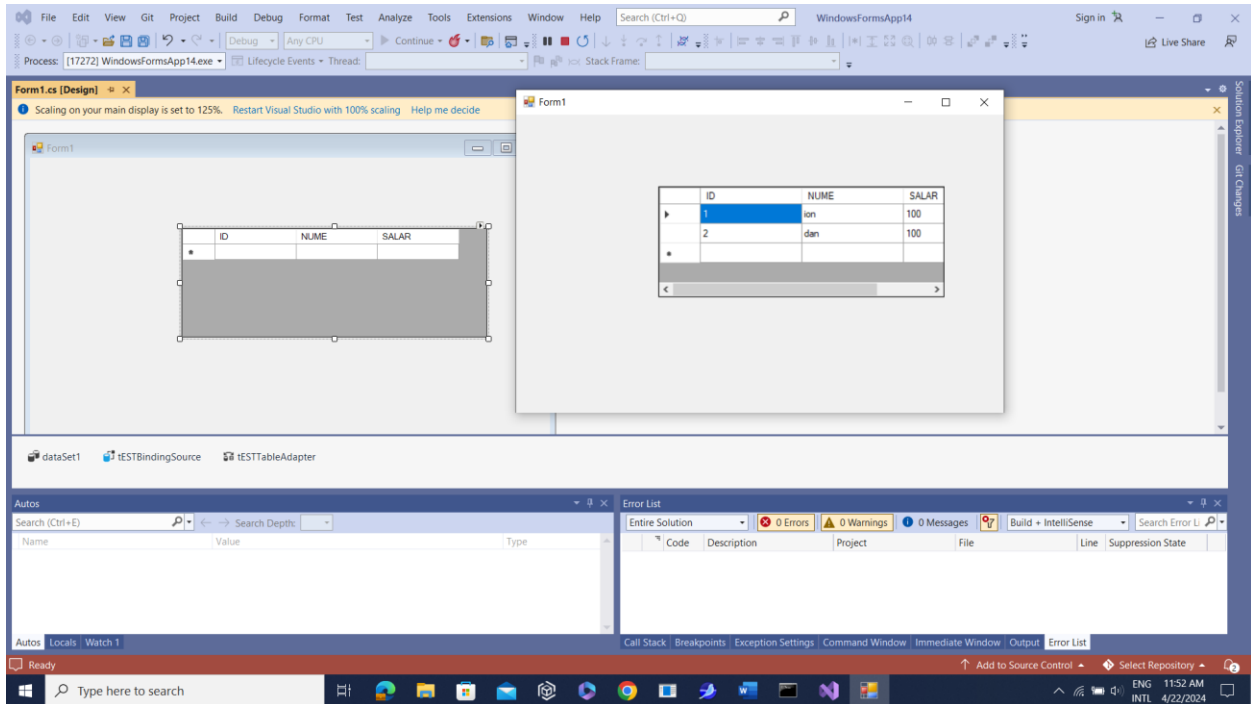
String conectare :

DATA

SOURCE=localhost:1521/XEPDB1;TNS_ADMIN=C:\Users\ioan.filip\Oracle\network\admin;PASSWORD=student;PERSIST SECURITY INFO=True;USER ID=STUDENT

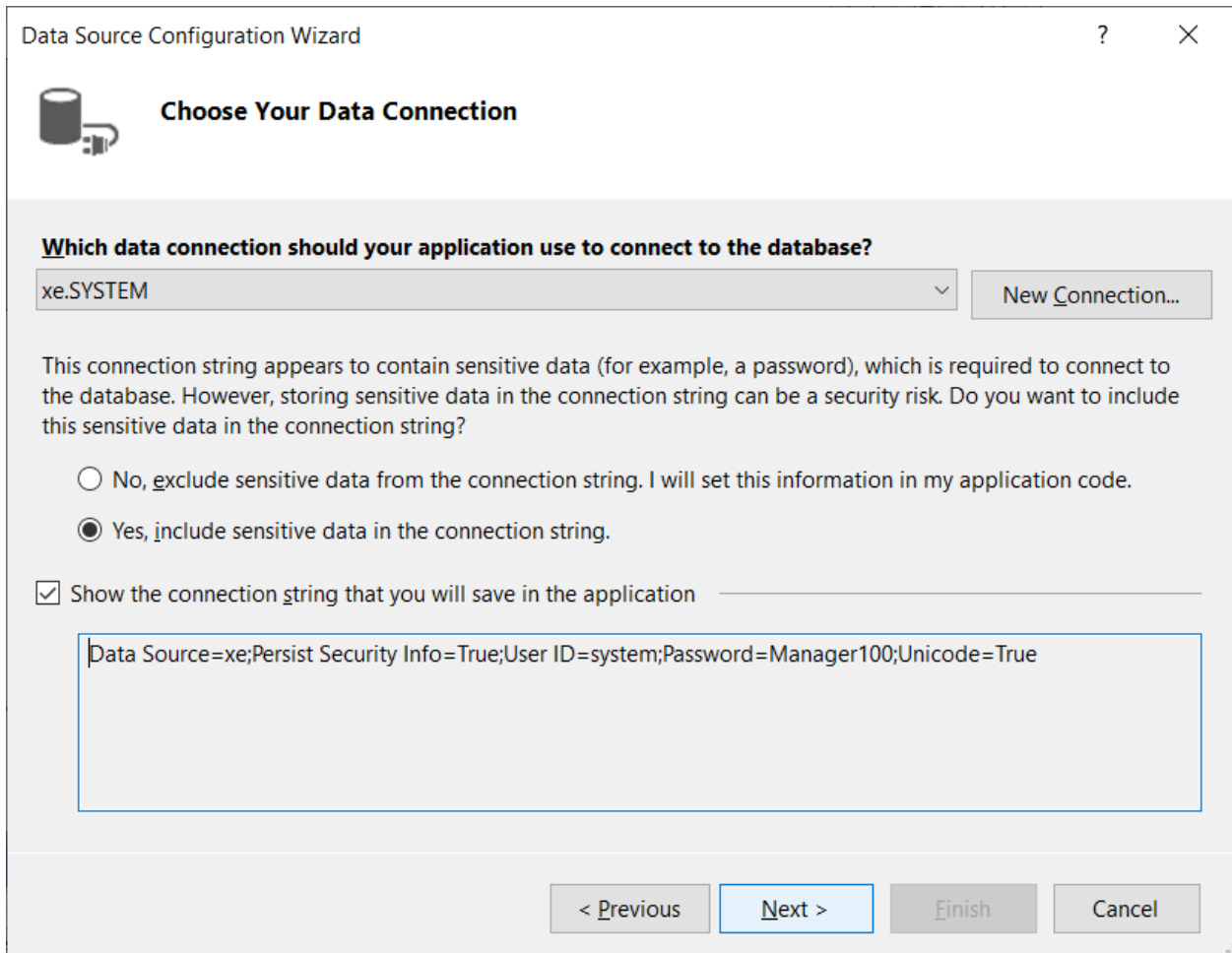
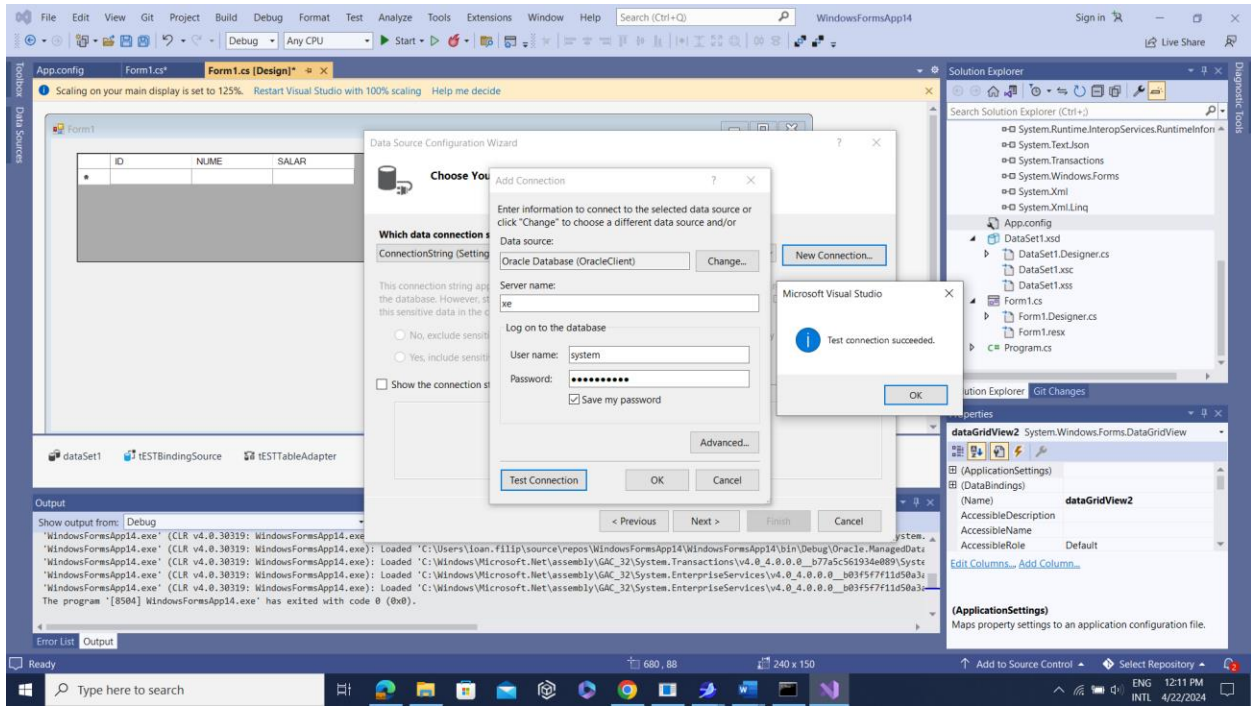


Biblioteca: **Oracle.ManagedDataAccess.Client**



Rulare

Cu vechiul provider Oracle Client deprecated (doar cu user system)- **DAR NU VAD TABELA!!!!**



Incercare pentru user C##student (pt conectare la baza de date CDB :

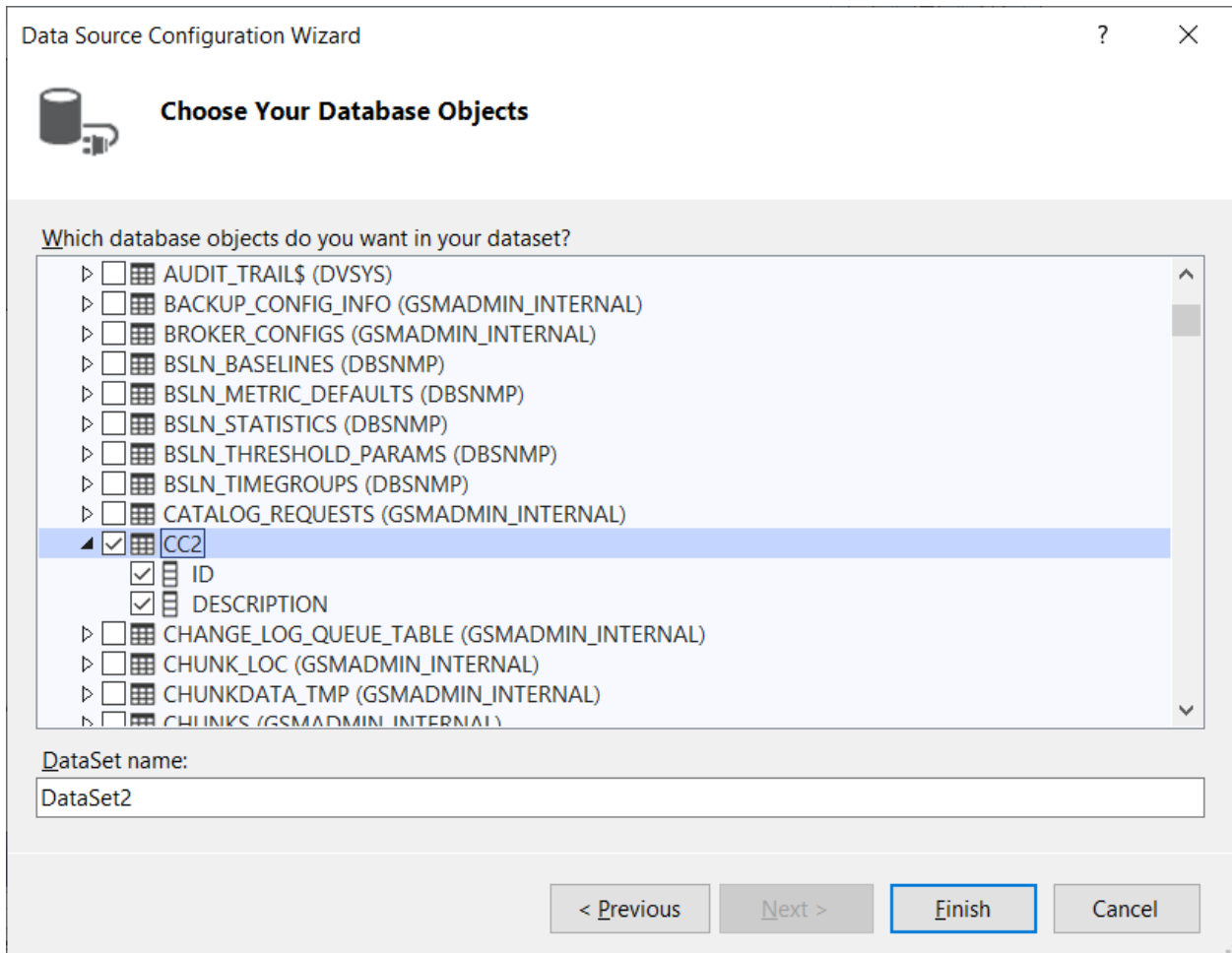
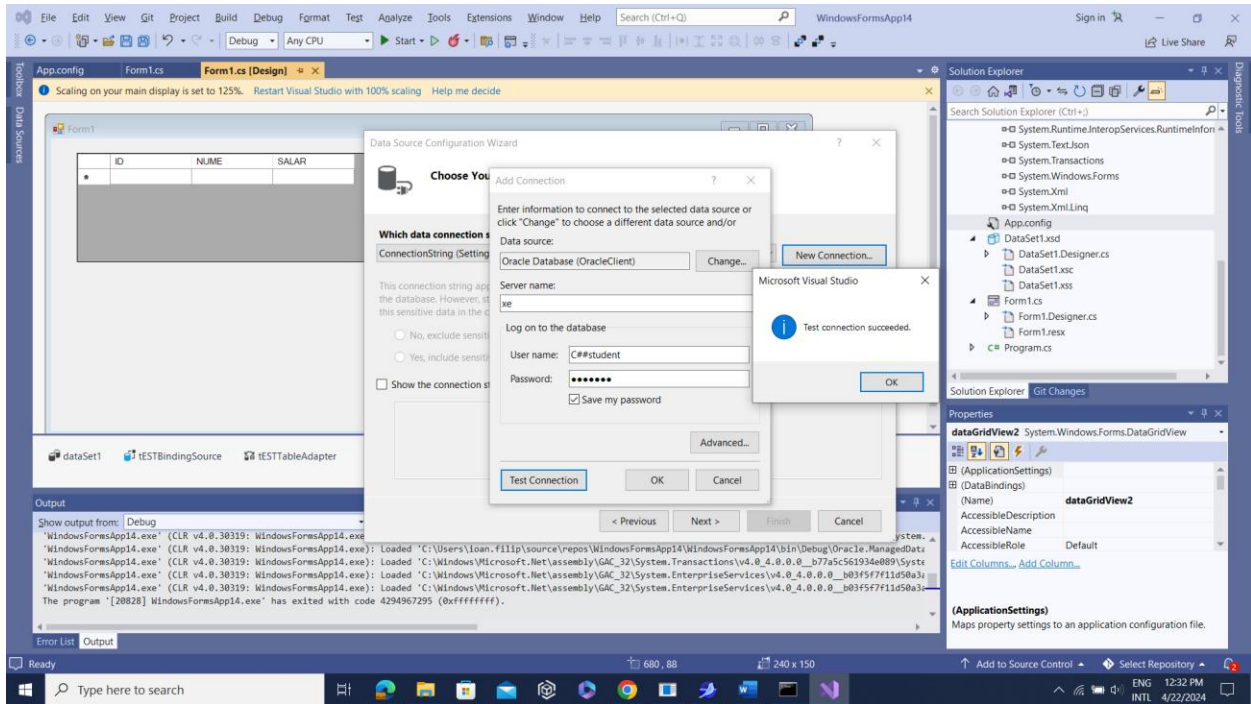
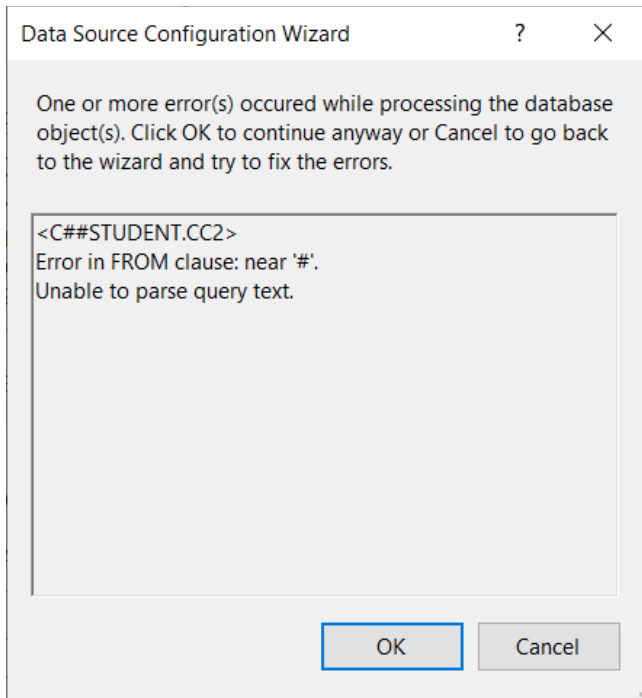


Tabela nou creata si accesata este CC2

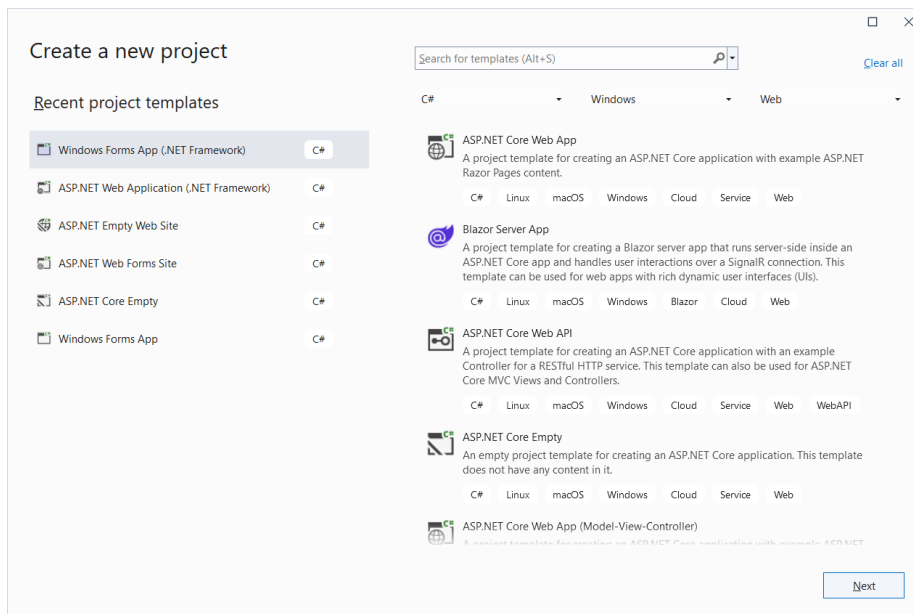


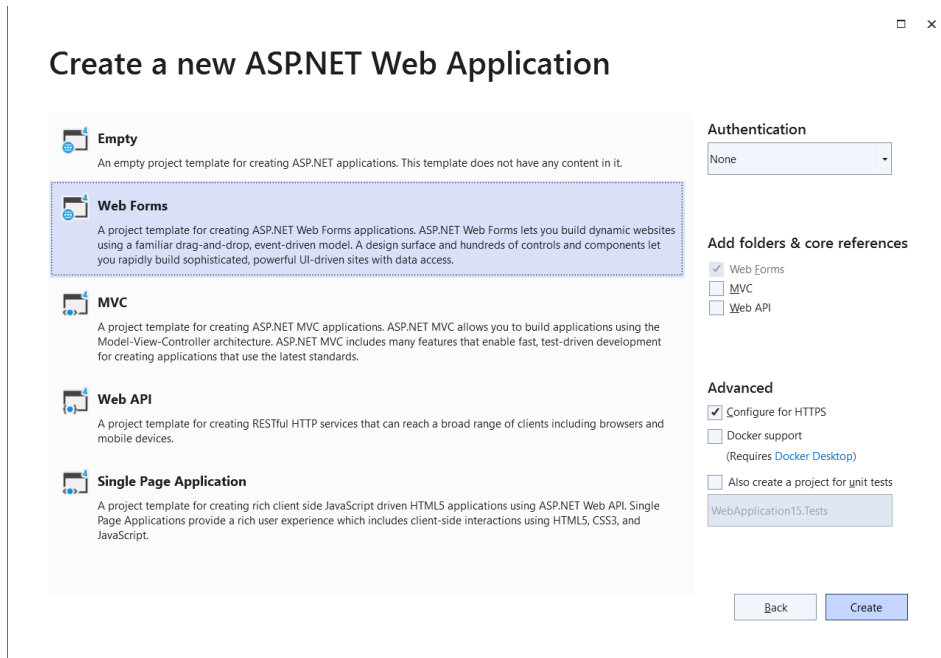
Caractere ## in nume user neacceptate !!!

Concluzie:

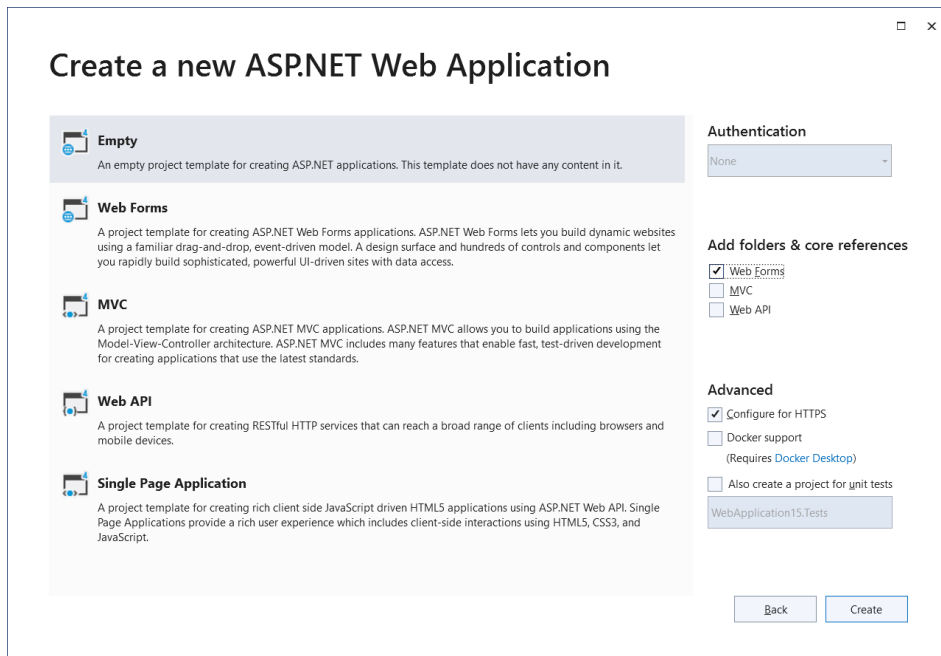
- User doar pt. baza de date PDB (fara ## in nume)
- Si cu ALL PRIVILEGES

II. Utilizare ODT cu VS 2022- WEB FORMS:





Sau



**a) MERGE DOAR CU COD (Add References in Solution!)
ODT - Doar cu baze de date PDB (spre exemplu, cu user student) !**

```
using System;
using System.Collections.Generic;
using System.Data;
using System.Linq;
using System.Reflection.Emit;
using System.Web;
using System.Web.UI;
using System.Web.UI.WebControls;
using Oracle.ManagedDataAccess;
using Oracle.ManagedDataAccess.Client;
```

```

namespace WebApplication20
{
    public partial class WebForm1 : System.Web.UI.Page
    {
        OracleConnection conn = new OracleConnection("DATA
SOURCE=localhost:1521/XEPDB1;TNS_ADMIN=C:\\Users\\ioan.filip\\Oracle\\network\\admin
;PASSWORD=student;PERSIST SECURITY INFO=True;USER ID=STUDENT");
        OracleDataAdapter da;
        OracleParameter p1, p2, p3;
        DataSet ds;
        String strSQL;

//Afisare
protected void Page_Load(object sender, EventArgs e)
{
    try
    {
        strSQL = "SELECT * FROM test";
        da = new OracleDataAdapter(strSQL, conn);
        ds = new DataSet();
        da.Fill(ds, "tabela");
        GridView1.DataSource = ds.Tables["tabela"].DefaultView;
        GridView1.DataBind();
    }
    catch (Exception ex)
    {
        Label1.Text = "error" + ex.ToString();
    }
}

//Aaugare
protected void Button1_Click(object sender, EventArgs e)
{
    try
    {
        conn.Open();
        string query = "INSERT INTO test values(322,'444',444)";
        OracleCommand cmd = new OracleCommand(query, conn);

        cmd.ExecuteNonQuery();
        conn.Close();
        Label1.Text = "OK- adaugat";
    }
    catch (Exception ex)
    {
        Label1.Text = "Eroare- date invalide "; // + ex.ToString();
    }
    finally
    {
        if (conn.State == ConnectionState.Open)
            conn.Close();
    }
}
}
}

```

- b) **Client Oracle (cel preinstalat in VD) - doar cu baze de date CDB (spre exemplu, cu user C##student)! Add references** System.Data.OracleClient.

Modificari in cod anterior :

```
...
//using Oracle.ManagedDataAccess.Client;
using System.Data.OracleClient;

. . .
//OracleConnection conn = new OracleConnection("DATA
SOURCE=localhost:1521/XEPDB1;TNS_ADMIN=C:\\Users\\ioan.filip\\Oracle\\netw
ork\\admin;PASSWORD=student;PERSIST SECURITY INFO=True;USER ID=STUDENT");

OracleConnection conn = new OracleConnection("Data Source=XE;Persist
Security Info=True;User ID=C##student;Password=student;Unicode=True");
. . .
```

Concluzie: WEB Forms doar cu cod C# (NU merge in mod DESIGN, cu generare de cod ASP.Net pentru controlul SqlDataSource)