

ZF

Parameterized TableAdapater ODP.NET Bug

For Oracle

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REVISIONS

Revision Level Sections Revised

Date

1.1	Added 2 for Script Names Added 2.7 for Error Screen	28Mar21
1.0	Initial Version	28Mar21

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1 Introduction

Parameterized TableAdapter QueryBuilder in Visual Studio ODP.NET has bug in the SQL SELECT statement.

1.1 Purpose

This document is to help explain all the steps needed to recreate the Query Builder ODP.NET SQL Statement Bug within ODAC for Visual Studio.

1.2 Reference Documents

1.3 Assumptions

1.4 Conventions

1.5 Acronyms

SCR	Software Change Request
OIL	Open Issue List
SCN	System Change Number [Oracle]

2 Development Database Architecture and Content

Following are the configuration related to Database Server environment.

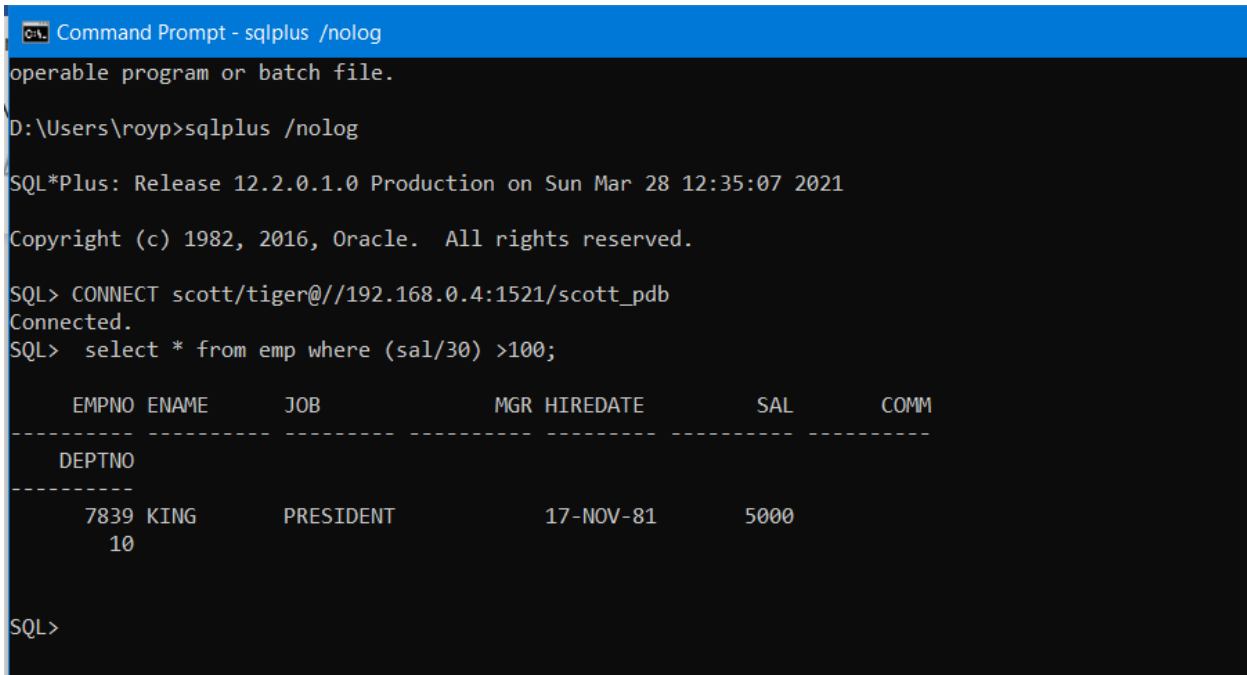
2.1 SCOTT Schema Sample Database

SCOTT Schema is created using the following scripts:

https://livesql.oracle.com/apex/livesql/file/content_O5AEB2HE08PYEPTGCFLZU9YCV.html

<https://github.com/oracle/dotnet-db-samples/blob/master/schemas/scott.sql>

Response for an example SQL statement from SCOTT Schema is shown below:



```
Command Prompt - sqlplus /nolog
operable program or batch file.

D:\Users\royp>sqlplus /nolog

SQL*Plus: Release 12.2.0.1.0 Production on Sun Mar 28 12:35:07 2021

Copyright (c) 1982, 2016, Oracle. All rights reserved.

SQL> CONNECT scott/tiger@//192.168.0.4:1521/scott_pdb
Connected.
SQL> select * from emp where (sal/30) >100;

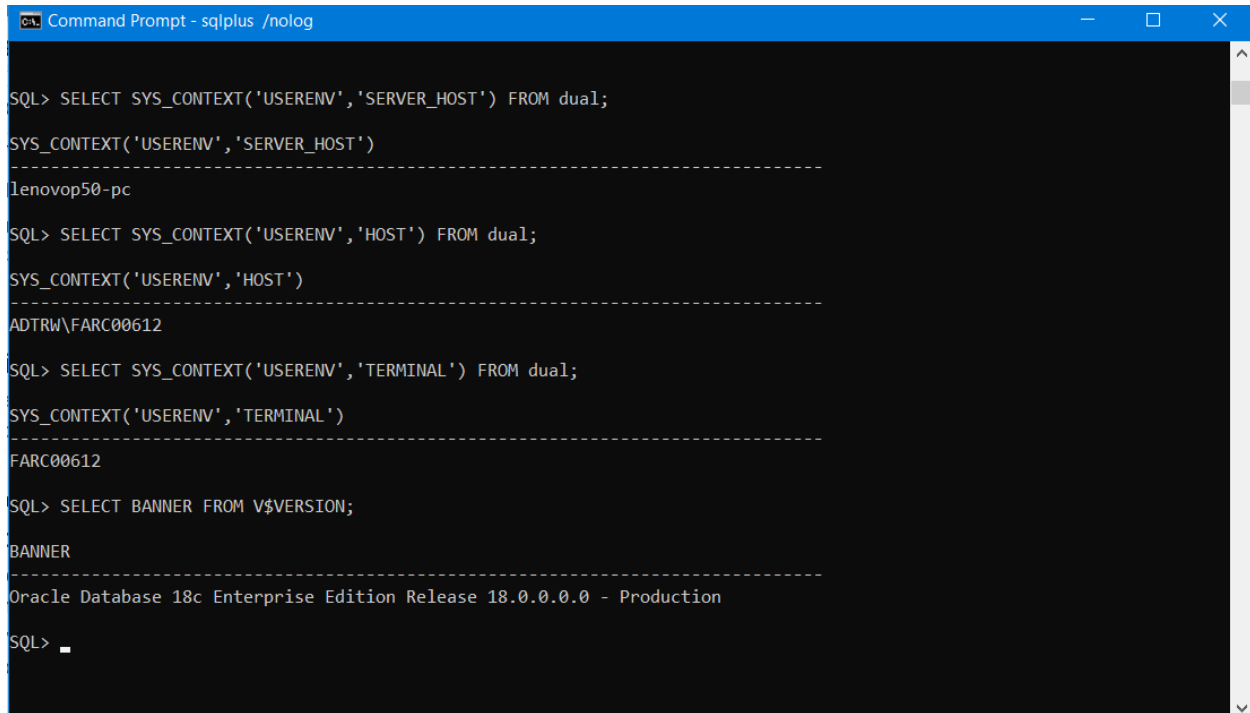
  EMPNO ENAME      JOB              MGR HIREDATE          SAL        COMM
-----
  DEPTNO
-----
    7839 KING        PRESIDENT        17-NOV-81          5000
    10

SQL>
```

Figure 2.1-1

2.2 Database Server Version Information

Database Server Machine and Software Version information is shown below Figure 2.2-1 for reference purpose.

SELECT BANNER FROM V\$VERSION;

```
Command Prompt - sqlplus /nolog

SQL> SELECT SYS_CONTEXT('USERENV','SERVER_HOST') FROM dual;

SYS_CONTEXT('USERENV','SERVER_HOST')
-----
lenovop50-pc

SQL> SELECT SYS_CONTEXT('USERENV','HOST') FROM dual;

SYS_CONTEXT('USERENV','HOST')
-----
ADTRW\FARC00612

SQL> SELECT SYS_CONTEXT('USERENV','TERMINAL') FROM dual;

SYS_CONTEXT('USERENV','TERMINAL')
-----
FARC00612

SQL> SELECT BANNER FROM V$VERSION;

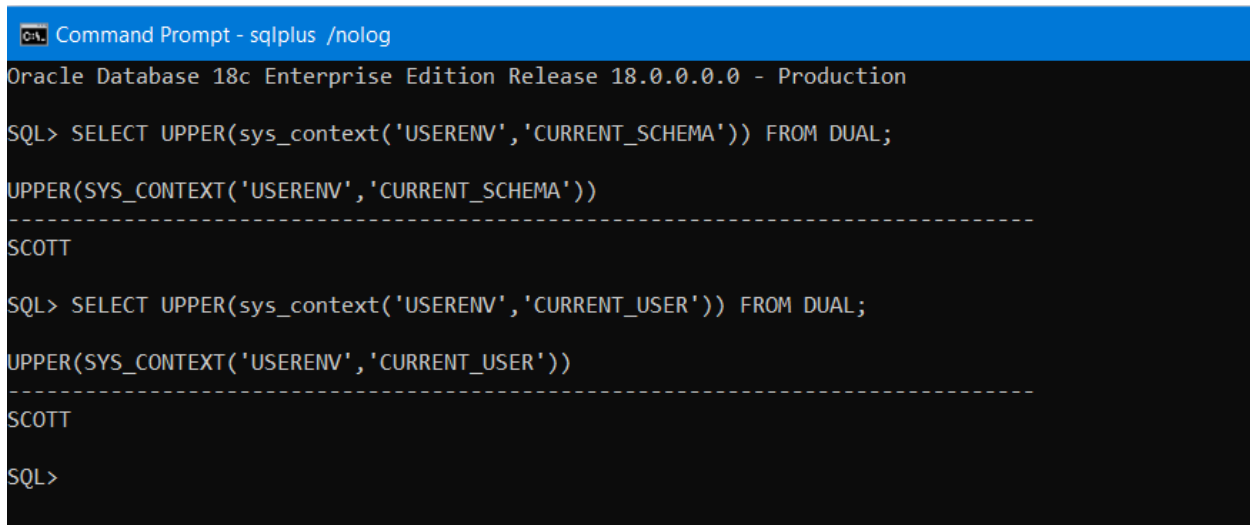
BANNER
-----
Oracle Database 18c Enterprise Edition Release 18.0.0.0.0 - Production

SQL> _
```

Figure 2.2-1

2.3 Database Server Login Information

Database Server Login Session information is shown below Figure 2.3-1 for reference purpose.



```
Command Prompt - sqlplus /nolog

Oracle Database 18c Enterprise Edition Release 18.0.0.0.0 - Production

SQL> SELECT UPPER(sys_context('USERENV','CURRENT_SCHEMA')) FROM DUAL;

UPPER(SYS_CONTEXT('USERENV','CURRENT_SCHEMA'))
-----
SCOTT

SQL> SELECT UPPER(sys_context('USERENV','CURRENT_USER')) FROM DUAL;

UPPER(SYS_CONTEXT('USERENV','CURRENT_USER'))
-----
SCOTT

SQL>
```

Figure 2.3-1

2.4 Working TableAdapter In Visual Studio DataSet Designer

SQL Statement to test TableAdapter working without Parameter using Visual Studio Dataset Designer within development SCOTT database as defined in Section 2.1.

```
SELECT      SCOTT.EMP.ENAME, SCOTT.DEPT.DNAME, SCOTT.EMP.JOB,
SCOTT.EMP.EMPNO, SCOTT.EMP.HIREDATE, SCOTT.DEPT.LOC
FROM        SCOTT.EMP INNER JOIN
            SCOTT.DEPT ON SCOTT.EMP.DEPTNO = SCOTT.DEPT.DEPTNO
ORDER BY SCOTT.EMP.ENAME
```

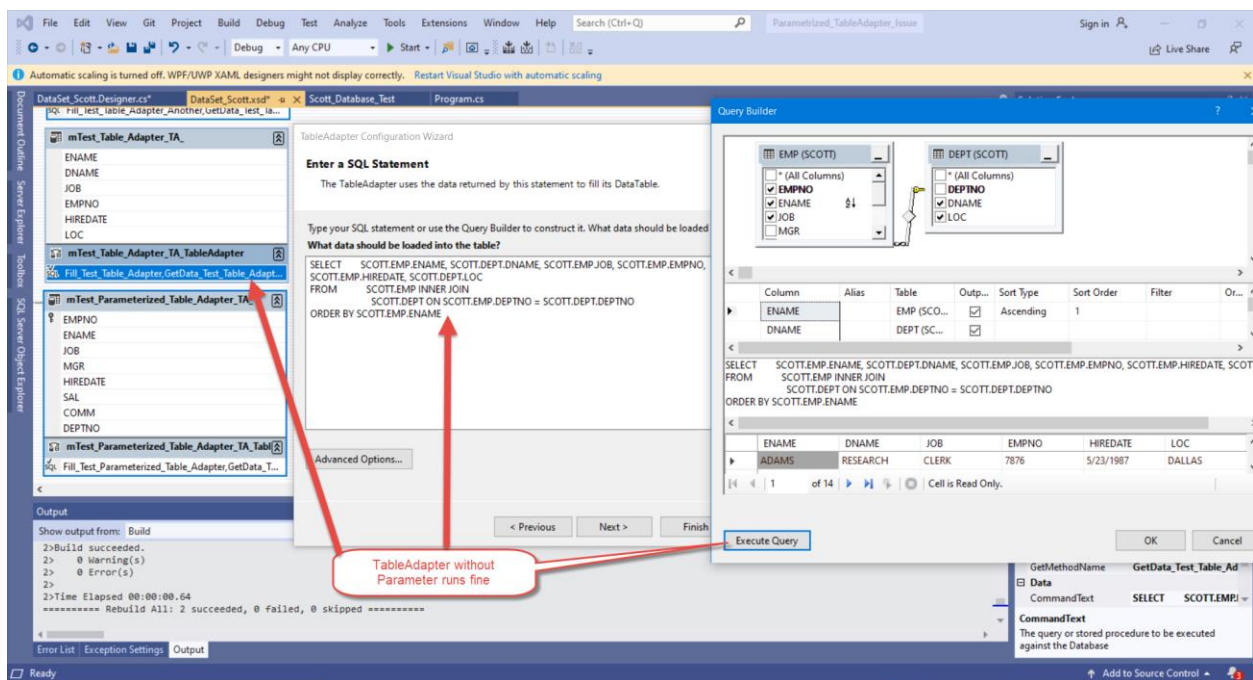


Figure 2.4-1

2.5 Parameterized TableAdapter Query Builder Error

SQL Statement to test Parameterized TableAdapter Query Builder from Visual Studio Dataset Designer failing within development SCOTT database as defined in Section 2.1.

Shown below the Error Message from Visual Studio Dataset Designer when the Query Builder executes.

SELECT EMPNO, ENAME, JOB, MGR, HIREDATE, SAL, COMM, DEPTNO
 FROM SCOTT.EMP
 WHERE (SAL / 30 > :BRACKET)

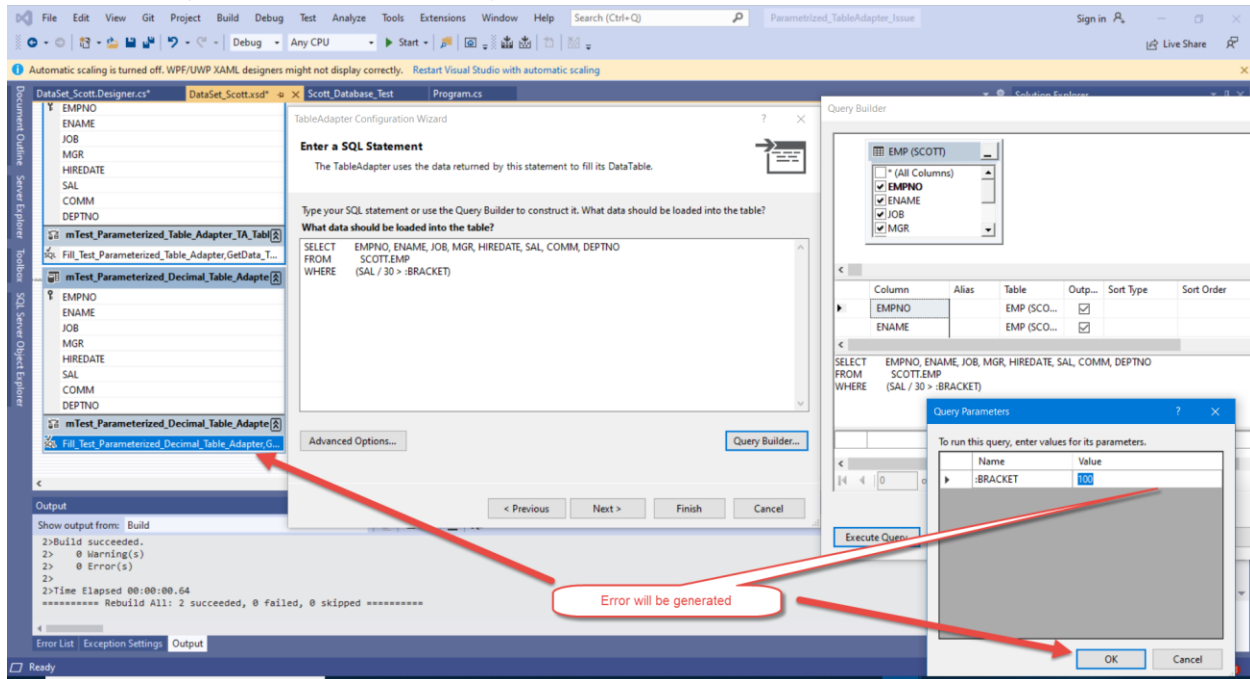


Figure 2.5-1

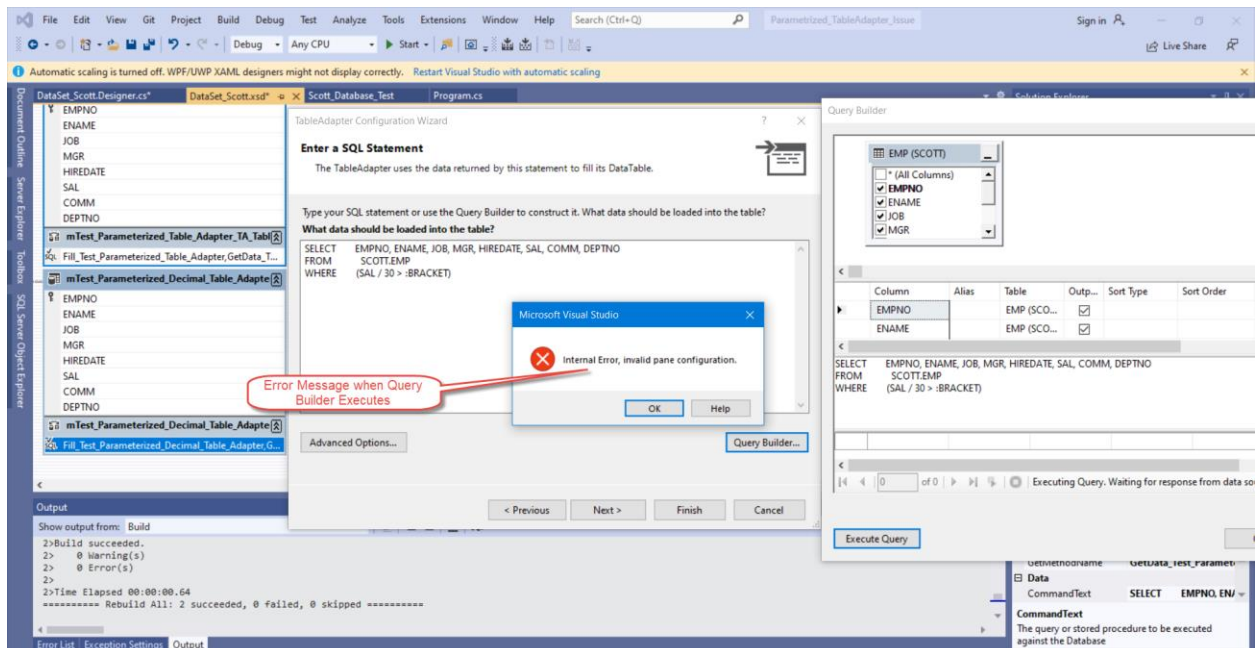


Figure 2.5-2

Shown below the Parameter Type information within Visual Studio Dataset Designer when the Query Builder executes as reference.

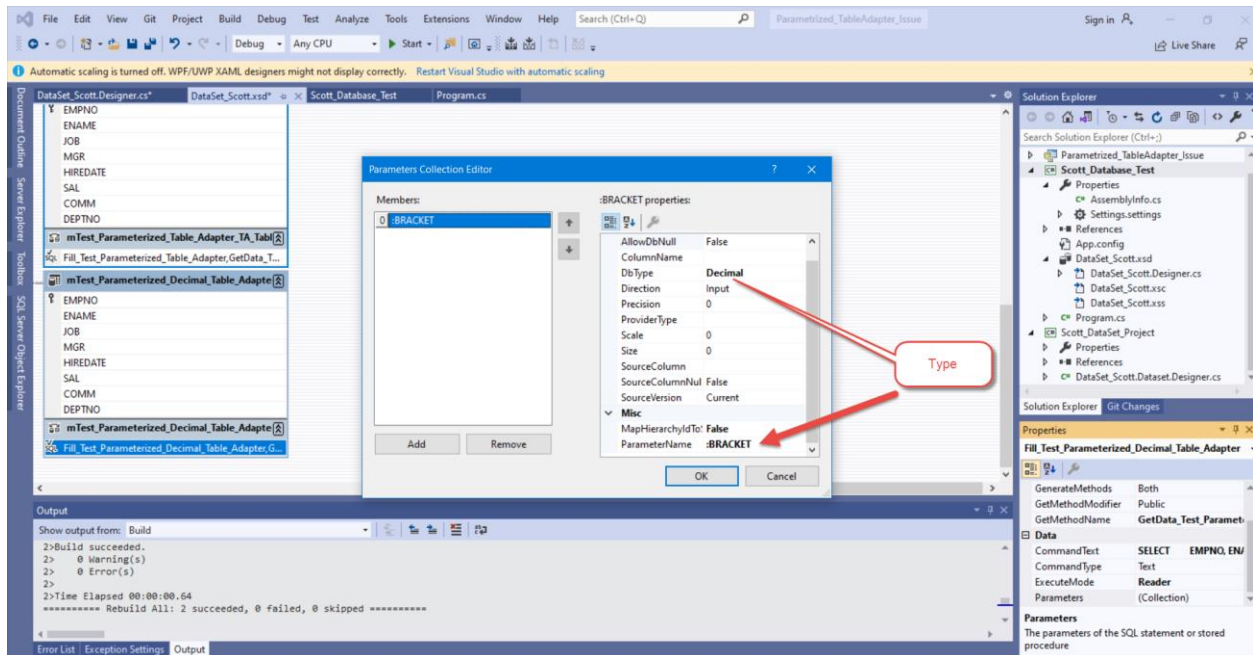


Figure 2.5-3

But for the same Parameterized TableAdapter, “Preview Data” feature is working as shown below:

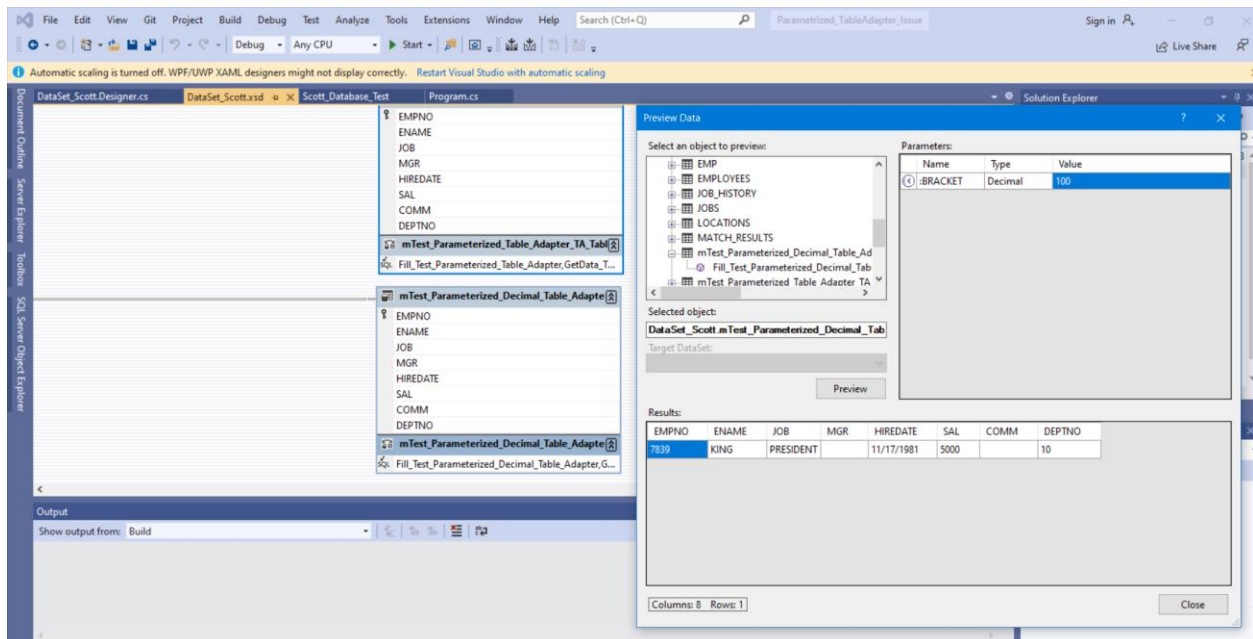


Figure 2.5-4

2.6 Visual Studio ODP.NET Extension Information

Version information of ODP.NET Extension within Visual Studio is shown below.

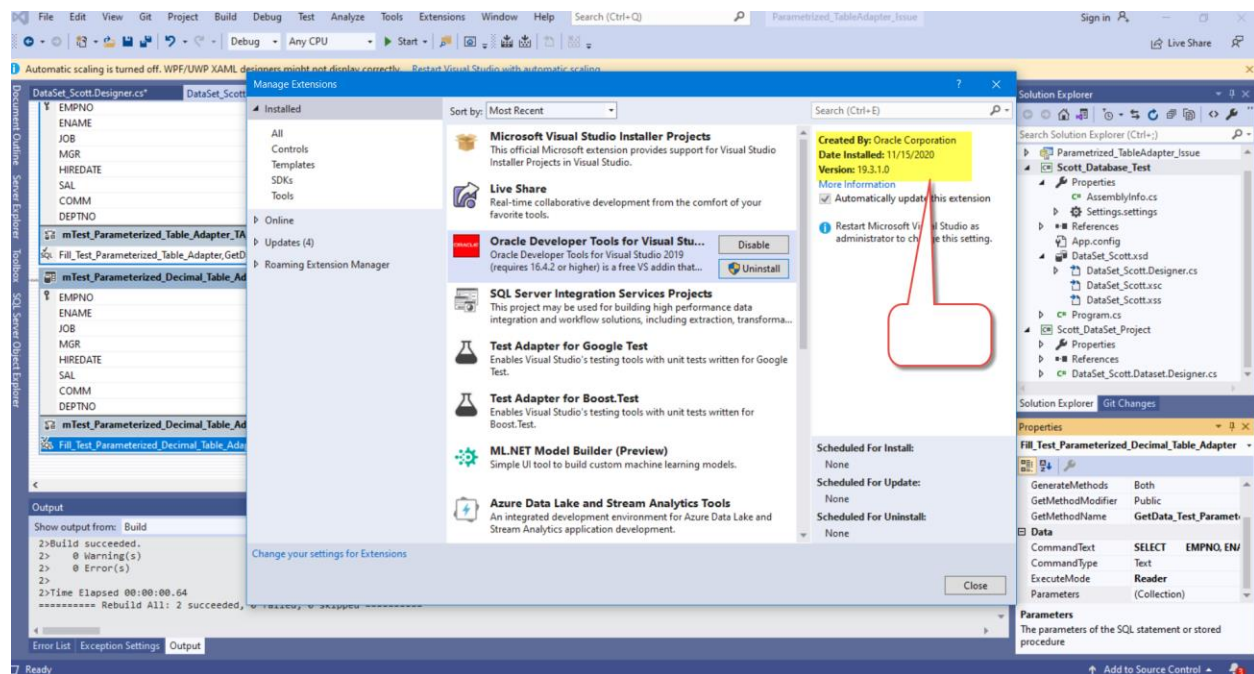


Figure 2.6-1

2.7 Visual Studio Version Information

Version information of Visual Studio Environment is shown below.

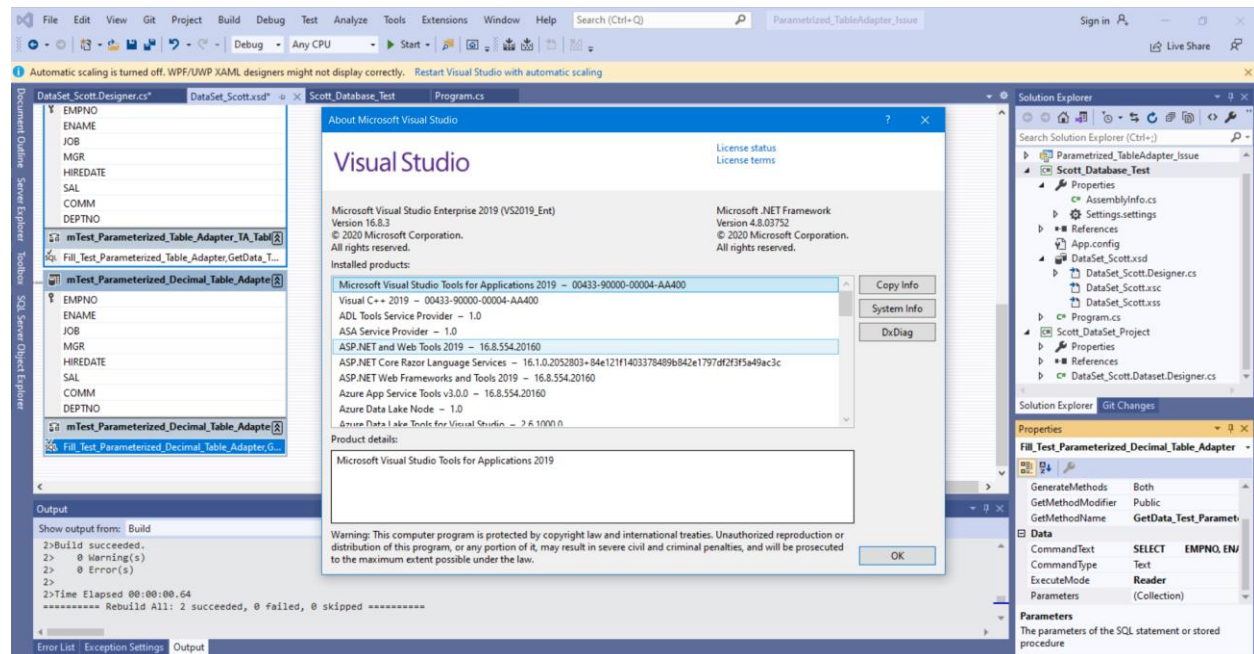


Figure 2.7-1

3 Visual Studio Sample Project Solution

Attached is the complete source code for Visual Studio Solution as a reference.

3.1 ConnectionString Parameter

End user need to customize the Visual Studio Project Solution for Database Server information as shown below:

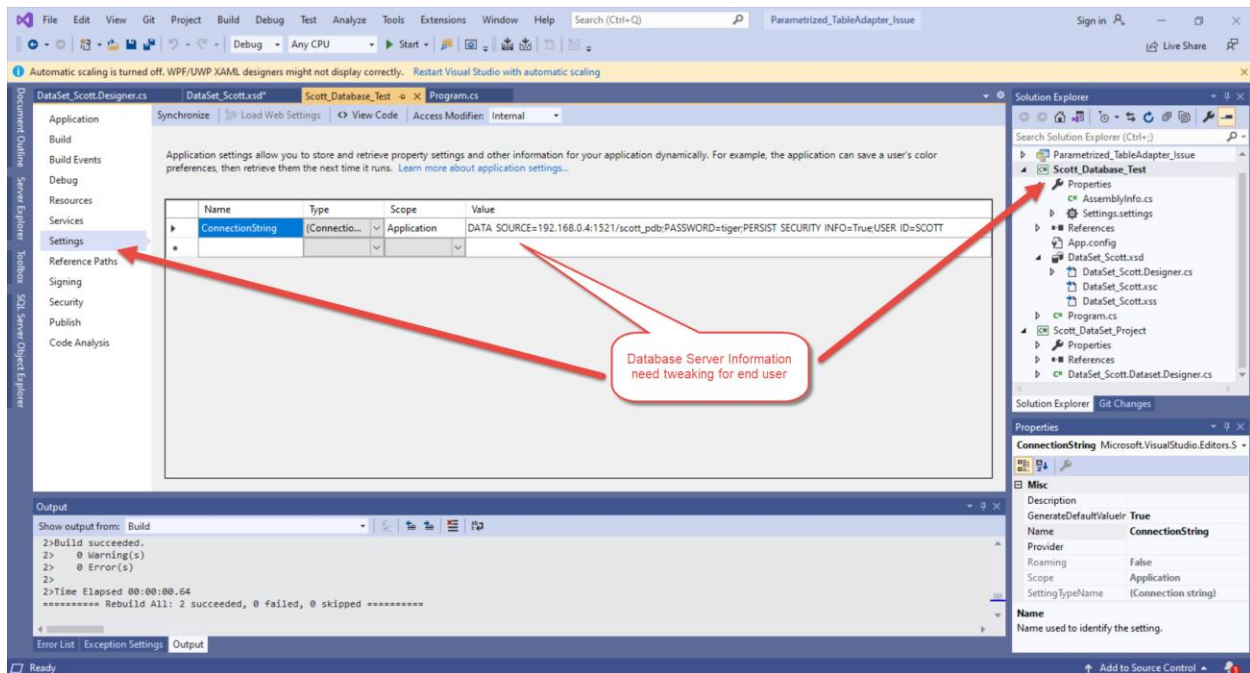


Figure 3.1-1