

APL64: SQL System Functions

Using a Script in a Select or Delete Query

Summary

Sometimes, for clarity it is desirable to write an SQL Delete or Select query with multiple lines and include comments. The APL64 SQL system functions support such a multi-line script.

The SQL system function actions 'ExecDelete', 'ExecSelect', and 'ExecSelect&Get' support multi-line SQL scripts.

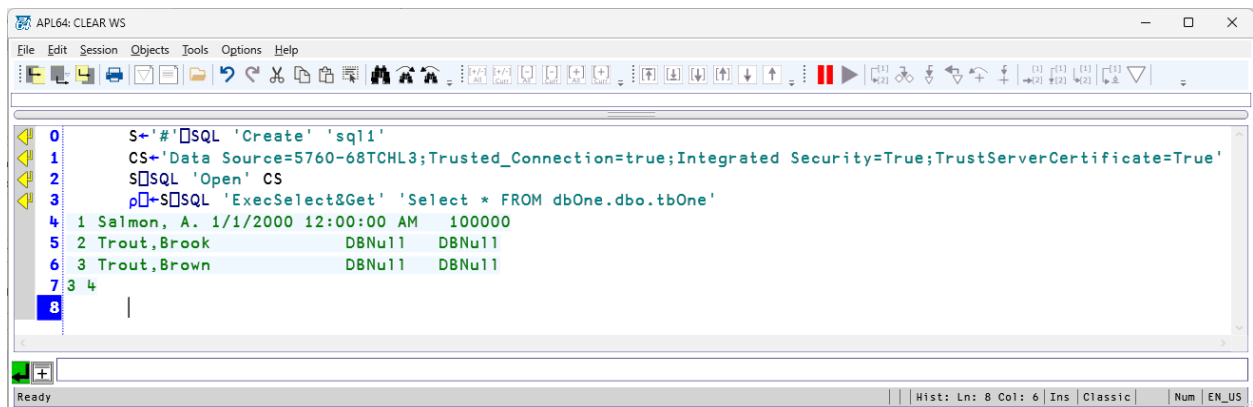
The APL64 SQL system functions include:

System Function	Database Type
☐ SQL	Microsoft SQL Server
☐ SQLite	SqLite
☐ SQLDB2	IBMDB2
☐ SQLMy	Oracle MyServer
☐ ODBC	Database with appropriate ODBC driver

Example

In this example a multi-line script is used to select a record set from a Microsoft SQL Server database.

The tbOne table in the database contains several records:



The screenshot shows the APL64 CLEAR WS interface. The script editor contains the following lines:

```
0 S+ '#SQL 'Create' 'sql1'  
1 CS+ 'Data Source=5760-68TCHL3;Trusted_Connection=true;Integrated Security=True;TrustServerCertificate=True'  
2 SSQL 'Open' CS  
3 pSQL 'ExecSelect&Get' 'Select * FROM dbOne.dbo.tbOne'  
4  
5 1 Salmon, A. 1/1/2000 12:00:00 AM 100000  
6 2 Trout,Brook DBNull DBNull  
7 3 Trout,Brown DBNull DBNull  
8 4  
9
```

The results pane shows the output of the script, which is a table with 4 rows and 3 columns. The first row is '1 Salmon, A. 1/1/2000 12:00:00 AM 100000'. The second row is '2 Trout,Brook DBNull DBNull'. The third row is '3 Trout,Brown DBNull DBNull'. The fourth row is '4'.

A multi-line script can be created to select a record based on user input:

- The script (Q) is within the APL64 programmer-designed function (SelectExample)
- The SQL script (Q) uses the APL64 line continuation structure: ««...»»
- The SQL script (Q) uses a value substitution identifier: {0}. Multiple value substitutions are supported
- SQL scripts can contain remarks prefixed by ‘—’
- When the script is used, the APL function right argument (Name) is provided to the ‘ExecSelet&Get’ action after the script (Q) on line [11] of the function

The screenshot shows the APL64 CLEAR WS editor with the following content:

```

0 rcdSet←SelectExample Name;CS;Q;rsn;S
1 S←#⎕SQL 'Create' 'sql1'
2 CS←'Data Source=5760-68TCHL3;Trusted_Connection=true;Integrated Security=True;TrustServerCertificate=True'
3 S⎕SQL 'Open' CS
4 Q←««
5 Select *
6 -- Comment1
7 FROM dbOne.dbo.tbOne
8 -- Comment1
9 WHERE [Name]='{0}'
10 »»
11 rcdSet←S ⎕SQL 'ExecSelect&Get' Q Name

```

Below the editor, the execution results are shown:

```

0      SelectExample 'Trout,Brook'
1 2 Trout,Brook DBNull DBNull
2

```

The status bar at the bottom indicates: Ready | Hist: Ln: 2 Col: 6 Ins | Classic | Num EN_US