VBA Code Documentation – Upload SQL – RCL Library Change Document

This is in development and will upload the changes made in the worksheet to the Objectives, Risks, and Controls tables in the SQL Server Database.

Public dataWS As Worksheet

Public dataIndexWS As Worksheet

Public objWS As Worksheet

Public riskWS As Worksheet

Public contWS As Worksheet

Uploading changes made to the Objectives table in SQL

Sub uploadObjectives()

Dim i As Integer

Dim j As Integer

Dim SQLstr As String

Dim colCount As Long

Set dataWS = Sheets("Data Tab")

Set dataIndexWS = Sheets("Data Tab Index")

Set objWS = Sheets("Objectives")

Set riskWS = Sheets("Risks")

Set contWS = Sheets("Controls")

i = 0

Do While objWS.Cells(11 + i, 1) <> ""

SQLstr = "use ERMDB go "

If objWS.Cells(11 + i + 1, WorksheetFunction.Match("Delete Objective", objWS.Range("A10:AZ10"), 0)) = "Yes" Then

'delete record

If Left(objWS.Cells(11 + i, 1), 1) = "N" Then

'do nothing - user added new objective and then wanted to delete it so don't upload it.

Else

SQLstr = SQLstr & "delete from Objectives\_Test where Objectives\_Primary\_Key = " \_

& Right(objWS.Cells(11 + i, 1), Len(objWS.Cells(11 + i, 1)) - 1)

'UploadERMDB (SQLsrt)

MsgBox SQLstr

End If

ElseIf Left(objWS.Cells(11 + i, 1), 1) = "N" Then

'insert new record

SQLstr = SQLstr & "insert into Objectives\_Test ("

j = 1

Do While objWS.Cells(10, j) <> "Delete Objective"

SQLstr = SQLstr & objWS.Cells(8, j).Value & ", "

j = j + 1

Loop

SQLstr = Left(SQLstr, Len(SQLstr) - 2)

SQLstr = SQLstr & ") values ("

j = 1

Do While objWS.Cells(10, j) <> "Delete Objective"

If objWS.Cells(11 + i + 1, j) = "" Then

SQLstr = SQLstr & "null, "

Else

If Left(objWS.Cells(7, j).Value, 3) = "var" Or Left(objWS.Cells(7, j).Value, 3) = "nva" Then

SQLstr = SQLstr & "'" & TextClean(objWS.Cells(11 + i + 1, j).Value) & "', "

ElseIf Left(objWS.Cells(7, j).Value, 3) = "dat" Then

SQLstr = SQLstr & "'" & objWS.Cells(11 + i + 1, j).Value & "', "

Else:

SQLstr = SQLstr & TextClean(objWS.Cells(11 + i + 1, j).Value) & ", "

End If

End If

j = j + 1

Loop

SQLstr = Left(SQLstr, Len(SQLstr) - 2)

SQLstr = SQLstr & ")"

'Upload(SQLstr)

MsgBox SQLstr

Else

'update existing record if there are any changed values

colCount = WorksheetFunction.CountA(objWS.Range("10:10")) - 1

If WorksheetFunction.CountA(objWS.Range("A" & 11 + i + 1 & ":" & \_

Col\_Letter(colCount) & 11 + i + 1)) > 0 Then

SQLstr = SQLstr & "update Objectives\_Test set "

j = 1

Do While objWS.Cells(10, j) <> ""

If objWS.Cells(11 + i + 1, j) = "" Then

'no change for this field so skip it

Else

If Left(objWS.Cells(7, j).Value, 3) = "var" Or Left(objWS.Cells(7, j).Value, 3) = "nva" Then

SQLstr = SQLstr & objWS.Cells(8, j).Value & " = '" & TextClean(objWS.Cells(11 + i + 1, j).Value) & "', "

ElseIf Left(Update.Cells(9 + j, 3).Value, 3) = "dat" Then

SQLstr = SQLstr & objWS.Cells(8, j).Value & " = '" & objWS.Cells(11 + i + 1, j).Value & "', "

Else:

SQLstr = SQLstr & objWS.Cells(8, j).Value & " = " & TextClean(objWS.Cells(11 + i + 1, j).Value) & ", "

End If

End If

j = j + 1

Loop

SQLstr = Left(SQLstr, Len(SQLstr) - 2)

SQLstr = SQLstr & " ) where Objectives\_Primary\_Key = " & Right(objWS.Cells(11 + i, 1), \_

Len(objWS.Cells(11 + i, 1)) - 1)

'UploadERMDB(SQLstr)

MsgBox SQLstr

End If

End If

i = i + 2

Loop

SQLstr = "User ERMDB go update [ERMDB].[dbo].[Objectives\_Test] set " \_

& " Objective\_ID = 'O' + ltrim(STR([ERMDB].[dbo].[Objectives\_Test].[Objectives\_Primary\_Key])) " \_

& " where Objective\_ID like 'null%' "

'Upload(SQLstr)

MsgBox SQLstr

End Sub

Uploading changes made in the worksheet to the Risks table. Will be the same procedure as objectives, only complicated by more columns. The Insert, Update, Delete procedure will be the same.

Sub uploadRisks()

End Sub

Uploading changes made in the worksheet to the Controls table. Will be the same procedure as Risks, only complicated by more columns. The Insert, Update, Delete procedure will be the same.

Sub uploadControls()

End Sub

This goes through and cleans the text by escaping values so the SQL query runs correctly.

Public Function TextClean(ByVal strSource As String) As String

Dim i As Integer

Dim strResult As String

For i = 1 To Len(strSource)

Select Case Asc(Mid(strSource, i, 1))

Case 39

'If char is single quote then double it to escape the text for SQL

strResult = strResult & Mid(strSource, i, 1) & Mid(strSource, i, 1)

Case Else ', 65 To 90, 97 To 122: 'include 32 if you want to include space

strResult = strResult & Mid(strSource, i, 1)

End Select

Next

TextClean = strResult

End Function