

The Insert Query: Writing SQL from inside ASP

Here's how to write the Insert query that we'll use on the Edit User page.

We're going to evolve it. It's complicated.

1. The insert query *looks* like this:

```
insert into tableUsers (dbUsername, dbFirstName, dbPhoneNumber )
values ('rconescu', 'Ron', '123-456-7890')
```

In other words, when we've finished using ASP to create the query, the database should receive a string that looks like the above.

2. We're going to insert about 10 variables — one for each field on the Edit User page. This will make the insert statement much wider than a screen or a piece of paper. So I recommend using white space to help you debug it:

```
insert into tableUsers
(
    dbUsername,
    dbPassword,
    dbFirstName,
    dbLastName
)
values
(
    'rconescu',
    'whatever',
    'Ron',
    'Conescu'
)
```

3. To make it work from within ASP, we have to place that query into an ASP string:

```
insertQuery = _
" insert into tableUsers      " & _
" (                            " & _
"   dbUsername,              " & _
"   dbPassword,              " & _
"   dbFirstName,            " & _
"   dbLastName               " & _
" )                            " & _
" values                       " & _
" (                            " & _
"   'rconescu',              " & _
"   'whatever',              " & _
"   'Ron',                    " & _
"   'Conescu'                 " & _
" )                            "
```

4. Now insert the variables you got from the user interface:

```
insertQuery = _
" insert into tableUsers      " & _
" (                            " & _
"   dbUsername,              " & _
"   dbPassword,              " & _
"   dbFirstName,            " & _
"   dbLastName               " & _
" )                            " & _
" values                       " & _
" (                            " & _
"   '" & midUsername          " & "' , " & _
"   '" & midPassword          " & "' , " & _
"   '" & midFirstName         " & "' , " & _
"   '" & midLastName          " & "'   " & _
" )                            "
```

5. If you find all those single-quotes and double-quotes hard to debug, you might try this: declare ASP variables for the single-quotation mark and the comma.

```

quote = "'"
comma = ","

insertQuery = _
    " insert into tableUsers                " & _
    " (                                     " & _
    "     dbUsername,                       " & _
    "     dbPassword,                       " & _
    "     dbFirstName,                     " & _
    "     dbLastName                        " & _
    " )                                     " & _
    " values                                " & _
    " (                                     " & _
    "     quote & midUsername               & quote & comma & _
    "     quote & midPassword               & quote & comma & _
    "     quote & midFirstName              & quote & comma & _
    "     quote & midLastName               & quote                & _
    " )                                     "

```

Either version 4 or version 5 will work correctly.

Things to watch out for:

- Keep your ' 's (in SQL) and " "s (in ASP) paired up.
- Don't forget the commas at the end of each line in the `insert` and `values` clauses (in SQL), except the last line in both clauses.
- Don't forget the `_` (in ASP) at the end of every line except the last one.
- Make sure that all your variables are defined the way you want them to be. Watch out for spelling and case-sensitivity.
- Remember that you may get a variety of weird error messages. They probably derive from one of the above issues.

Writing and Testing the Query

I recommend: start by inserting only 2 variables. That gives you all the complexity of the code we'll actually write, but it's much easier to fix:

```
1  quote = "'"
2  comma = ","
3
4  insertQuery = _
5      " insert into tableUsers          " & _
6      " (                               " & _
7      "     dbUsername,                 " & _
8      "     dbPassword                   " & _
9      " )                               " & _
10     " values                           " & _
11     " (                                 " & _
12         quote & midUsername           & quote & comma & _
13         quote & midPassword           & quote           & _
14     " )                               "
```

Once you have that, the rest should be easier — you're just copying and pasting lines 7 and 12, replacing the column names and variable names as needed.