

## TSQL - Update a column based on the value of a TSQL variable.

Synopsis: You need to update a column based on the value of a TSQL variable.

Let's say you have a variable named @p\_Type that can a value of "Voice", "Email", or "SMS" and you need to update a column based on the value of this variable. Using multiple IF-BEGIN-END statements could eventually become hard to read or debug as the possible values of the @p\_Type grows. Although there are many ways to accomplish this; here is a relatively low code efficient method that I frequently use to accomplish this.

### Example Implementation

Assuming you have a table named Messages with the fields "messageid", "voicefield", "emailfield", and "smsfield", you can write and update statement like this:

```
declare @p_type varchar(10) = 'Voice'; -- the value of the @p_type variable as input
declare @newvalue nvarchar(100) = 'Updated Value'; -- the new value to set
declare @messageid int = 1; -- the id of the record to update

-- update statement using case to conditionally set the field
update [dbo].[messages]
set
    [voicefield] = case when @p_type = 'Voice' then @newvalue else [voicefield] end,
    [emailfield] = case when @p_type = 'Email' then @newvalue else [emailfield] end,
    [smsfield] = case when @p_type = 'SMS' then @newvalue else [smsfield] end
where [messageid] = @messageid;
```

### Putting it all together as a stored procedure

```
use [yourdatabase]
go

drop procedure if exists [dbo].[UpdateMessageField]
go

set ansi_nulls on
go

set quoted_identifier on
go

create procedure [dbo].[UpdateMessageField]

    @p_type varchar(10),
    @newvalue nvarchar(100),
    @messageid int

as

-- update statement using case to conditionally set the field
update [dbo].[messages]
set
    [voicefield] = case when @p_type = 'Voice' then @newvalue else [voicefield] end,
```

```
[emailfield] = case when @p_type = 'Email' then @newvalue else [emailfield] end,  
[smsfield] = case when @p_type = 'SMS' then @newvalue else [smsfield] end  
where [messageid] = @messageid;
```

```
go
```

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