

# Setting Locks on Rows in MSSQL Database (Currentlty Unsolvable Problem and Trying)

---

*Source:* <http://coding.derkeiler.com/Archive/PHP/alt.php/2006-03/msg00060.html>

---

- *From:* "keyvez" <[keyvez@xxxxxxxx](mailto:keyvez@xxxxxxxx)>
  - *Date:* 3 Mar 2006 16:41:38 -0800
- 

Hi,

I have a page where many teachers and school staff members can login and update student records. For simplicity, let's assume that the page has three fields, the students name, phone no. and email address.

A Sample Record

Name=Justin

Phone=728-245-3596

Email=timber@xxxxxxxx

Problem Scenario

Jane, a teacher, logs in to update the students phone no. which was entered wrongly. She wants to make it 718-245-3596 instead of 728-245-3596. She opens the page at 10:55 AM and sees that the current state of the record is as follows

Name=Justin

Phone=728-245-3596

Email=timber@xxxxxxxx

Mike, a staff member got Justin's correct email address from his parents and wants to update that to his record and hence opens the record update screen at 10:56 AM, a minute after Jane had opened it. He sees the record just as Jane saw it

Name=Justin

Phone=728-245-3596

Email=timber@xxxxxxxx

Jane updates the phone no. and changes it to 718-245-3596 at 10:57 AM and after the page is loading she sees that Justin's record has been updated and the new record is

Name=Justin

Phone=718-245-3596

Email=timber@xxxxxxxx

## Setting Locks on Rows in MSSQL Database (Currently Unsolvable Problem and Trying)

(note: the Phone no. was 728-245-3596 and has changed to 718-245-3596)

Mike updates the record and changes the email address to timberlake@xxxxxxxxxxxxx After he has made his updates the page loads again and he sees the final record as follows

Name=Justin  
Phone=728-245-3596  
Email=timberlake@xxxxxxxxxxxxx

(note: the updates made by Jane are overwritten)

I know there are many ways of solving this, but I want to solve this by using locking features provided by MSSQL, that way as long as the locks exist on the row no one can change that row even by logging onto Enterprise Manager as system admin and issuing an update command.

### How I am trying to Solve the Problem

I am beginning a transaction from PHP and setting a lock on a record when a user clicks the edit button. Then the user spends some random time before he or she changes the text box and clicks the update button. I then commit the transaction I started when the user clicked edit.

### Fact 1:

Transactions in MSSQL are Connection-dependent, if the Connection is ended before the Transaction is committed, MSSQL automatically Rolls-back the Transaction.

### Fact 2:

There is no way in PHP where I can start a persistent ms sql connection and ensure that I will get the same connection when I issue the mssql\_pconnect command again in the next page.

(If you have doubts read this:

<http://www.php.net/manual/en/features.persistent-connections.php>)

### Problem:

Once I lock the rows and the script ends without committing the transactions, the rows remain locked until a commit transaction command is sent from THE SAME connection or that connection is closed.

Because of Fact 1, I cannot commit transactions in just about any connection and because of Fact 2 I may not be able to use the same connection again.

### Question:

Is there a way in PHP or SQL to lock and unlock rows without having to

## Setting Locks on Rows in MSSQL Database (Currentlty Unsolvable Problem and Trying)

depend on transactions or connections.

Also, I know that I can add a lock column to every table and set it to true when the record is opened for editing or have a table where entries for all locked rows are made, however, this allows anyone who can get alternate access to the database to update rows locked by these methods.

I've used the COM class to connect to ADO dlls, the new PDO classes, adodb libraries and odbc drivers to try and achieve this, but with no avail.

If someone has been successful in doing this through MSSQL locking rowlock or some other method of locking, I would greatly appreciate any help.

Gaurav Misra

.