

Re: Handling locked db tables...

Source: <http://coding.derkeiler.com/Archive/Python/comp.lang.python/2008-02/msg02672.html>

- *From:* "M.-A. Lemburg" <mal@xxxxxxxxxx>
 - *Date:* Wed, 20 Feb 2008 17:05:18 +0100
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On 2008-02-20 16:24, breal wrote:

I have a db table that holds a list of ports. There is a column `in_use` that is used as a flag for whether the port is currently in use. When choosing a port the table is read and the first available port with `in_use = 0` is used, updated to `in_use = 1`, used, then updated to `in_use = 0`. I am using MySQLdb and want to make sure I am locking the table when doing reads, writes, updates since there will be several instances of my program looking for available ports simultaneously.

When I run a "lock table mytable read" I can do all of my transactions. But, when another cursor then tries to do the read I get an error unless the first process has been completed... unlocking the tables. How is this handled generally?

This is normal database locking behavior. If you do an update to a table from one process, the updated row is locked until the transaction is committed.

If another process wants to access that row (even if only indirectly, e.g. a select that does a query which includes the data from the locked row), that process reports a database lock or times out until the lock is removed by the first process.

The reason is simple: you don't want the second process to report wrong data, since there's still a chance the first process might roll back the transaction.

Most modern database allow row-level locking. I'm not sure whether MySQL supports this. SQLite, for example, only support table locking.

—

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