## Basics of PHP - OCI function oci\_commit

From CS 325, you should remember that the SQL command:

commit;

...is supposed to make the current databse state PERMANENT. SQL provides this, along with rollback;, to support TRANSACTIONS, logical units of work, completely done or completely NOT done.

You should also remember that Oracle sqlplus does some auto-commits on your behalf:

- whenever the database structure changes, and
- when you log out "properly" from sqlplus.

So, if you haven't explicitly typed **commit**; before exiting your **sqlplus** session, the assumption is that you want that session's changes to be committed.

## QUESTION, then: on the application tier, WHEN should changes be committed?

Java's JDBC (Java Database Connectivity) library assumes that each individual change is to be autocommitted unless you indicate otherwise. But this assumption means you cannot use **rollback** to undo multiple changes that may have been made by a transaction-in-progress if it runs into problems.

With OCI, it appears that this is determined by the second argument to **oci\_execute**. When you use **OCI\_DEFAULT** as **oci\_execute**'s second argument,, this specifies to **NOT** auto-commit after each individual change, but to instead wait for a commit to be explicitly requested. This is a better choice for supporting transaction integrity.

OCI provides a function **oci\_commit** to make this explicit commit request. It expects a connection object, and has the side-effect of requesting that a commit be done. For example:

So: if you have a PHP document using OCI, and it requests any SQL actions that change the database (such as an **insert**, **update**, or **delete**), **that PHP document should call oci\_commit** once it believes the current logical transaction is successfully completed and reasonable to commit.

Oh, and if you forget? Then that PHP document's changes are NOT committed to the database...!

(And, OCI also provides a function **oci\_rollback**, that also expects a connection object, and has the side-effect of requesting that a rollback be done to the last previous committed state.)