

μWeb - Feature #851

Record classes should have hooks for verification before saving

2012-06-06 19:27 - Elmer de Looff

Status:	Closed	Start date:	2012-06-06
Priority:	Normal	Due date:	
Assignee:	Elmer de Looff	% Done:	100%
Category:	Model	Estimated time:	0.00 hour
Target version:	μWeb beta release	Spent time:	6.50 hours
Description Record classes on the model should have hooks to: <ul style="list-style-type: none">• Verify the record data is valid for insertion into the database• Convert data from and to database-safe values, different from Python runtime use			
Related issues: Related to μWeb - Feature #840: Model documentation updates New 2012-05-31			

Associated revisions

Revision 238:ea565870604a - 2012-06-06 19:47 - Elmer de Looff

Updated the uWeb database model to provide hooks before and after creation and saving, and upon loading from the database. This resolves #851.

Revision 239:09ce69c7f119 - 2012-06-06 20:16 - Elmer de Looff

Fixed a small number of inconsistencies and errors. Moved relational oriented function calls away from BaseRecord to Record and MongoRecord separately. This refs #851.

History

#1 - 2012-06-06 19:48 - Elmer de Looff

- Status changed from *New* to *Resolved*
- % Done changed from 0 to 70

Applied in changeset [ea565870604a](#).

#2 - 2012-06-06 19:52 - Elmer de Looff

- Status changed from *Resolved* to *Closed*
- % Done changed from 70 to 100

This has been implemented and confirmed to work. MongoRecord and VersionedRecord now also do not write to the database when no changes have occurred. This reduces the potential number of database actions.

#3 - 2012-06-06 20:27 - Elmer de Looff

The provided hooks are:

- **_PreCreate** will run before a record is inserted into the database using the Create method.
- **_PostCreate** will run after a record is inserted into the database using the Create method.
- **_PreSave** will run when the Save method is used, right before the database is updated. This method will **only** trigger if changes have been made.
- **_PostSave** will run after the database has been updated (through the Save method. This method will **only** trigger if changes have been made.

N.B.: For subclasses of Record, the above methods will be called inside the database transaction. The currently open cursor will be provided for the methods to query the database with, as opening new transactions is not possible. MongoRecord will not be provided a cursor instance (but will not have the transaction limitation).

Additionally, there is the **_PostInit** method, which will run after an object is initialized. This means that objects loaded from the database can be

transformed by `_PostInit`. This method **will not** run for Record instantiated through `Create` (use `_PreCreate` for those). This method is *not* part of a transaction, and will therefor *not* get a cursor instance provided.