

Database Localization Architectures

There are 5 different localization architectures for localizing databases in Multilizer 2009.



The following tables will show how the original content looks like (in black) and what and where Multilizer writes (in green).

- In the samples the original (native) language of the content is English and the translation is in Spanish.
- The default language codes used by Multilizer and by the examples below is ISO language code.
- Multilizer database scanner allows the usage of user-specified language codes, if needed.

Replace localization

Before localization		After localization																	
<table border="1"> <thead> <tr> <th colspan="2">MyTable</th> </tr> <tr> <th>id</th> <th>text</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>First row</td> </tr> <tr> <td>2</td> <td>Second row</td> </tr> </tbody> </table>		MyTable		id	text	1	First row	2	Second row	<table border="1"> <thead> <tr> <th colspan="2">MyTable</th> </tr> <tr> <th>id</th> <th>text</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>Primera</td> </tr> <tr> <td>2</td> <td>Segunda</td> </tr> </tbody> </table>		MyTable		id	text	1	Primera	2	Segunda
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1	Primera																		
2	Segunda																		

In replace localization the original data is overwritten. Don't use this localization architecture unless you have a very clear vision of its strengths over other architectures explained below.

Single-table localization

Before localization			After localization																																									
<table border="1"> <thead> <tr> <th colspan="3">MyTable</th> </tr> <tr> <th>id</th> <th>langid</th> <th>text</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>en</td> <td>First row</td> </tr> <tr> <td>2</td> <td>en</td> <td>Second row</td> </tr> <tr> <td>3</td> <td>en</td> <td>Third row</td> </tr> </tbody> </table>			MyTable			id	langid	text	1	en	First row	2	en	Second row	3	en	Third row	<table border="1"> <thead> <tr> <th colspan="3">MyTable</th> </tr> <tr> <th>id</th> <th>langid</th> <th>text</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>en</td> <td>First row</td> </tr> <tr> <td>1</td> <td>es</td> <td>Primera</td> </tr> <tr> <td>2</td> <td>en</td> <td>Second row</td> </tr> <tr> <td>2</td> <td>es</td> <td>Segunda</td> </tr> <tr> <td>3</td> <td>en</td> <td>Third row</td> </tr> <tr> <td>3</td> <td>es</td> <td>Tercera</td> </tr> </tbody> </table>			MyTable			id	langid	text	1	en	First row	1	es	Primera	2	en	Second row	2	es	Segunda	3	en	Third row	3	es	Tercera
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In single-table localization the localized content is written to the same table as original data. The "language of the record" is defined by langid (or any user specified text field). This localization architecture makes maintenance easier, as adding a new target language doesn't yield modifications in the database structure.

Field localization

Before localization			After localization		
MyTable			MyTable		
id	text	text_es	id	text	text_es
1	First row		1	First row	Primera
2	Second row		2	Second row	Segunda
3	Third row		3	Third row	Tercera

In field localization the localized content is written to different field in the same table as the original text.

Notes:

- text_es field is not created by Multilizer but it must exist
- Adding a new target language requires the user to create a new field

Table localization

Before localization		After localization	
MyTable	MyTable_es	MyTable	MyTable_es
id	text	id	text
1	First row	1	Primera
2	Second row	2	Segunda

In table localization the localized content is written to different tables than the original text.

Notes:

- MyTable_es is not created by Multilizer but it must exist.
- Adding a new target language requires the user to create a new table.

Database cloning

This architecture applies only to MS Access databases.

The original database is only read and for each target language a separate database file (.mdb) is created.