



How to develop compatible code in Openbravo

4th October 2006

Revision 1.0



Visit us at www.openbravo.com



Introduction - Openbravo is a development platform on which the ERP has been constructed. It is possible to extend or modify the ERP's functions using the same development platform.

As it is explained in the [Technology overview](#) the development can be realized at two decreasing abstraction levels:

- Application dictionary: It is possible to modify or add new information for the entities (tables, columns, windows, processes, reports). In fact, 90% of Openbravo code is generated on the base of application dictionary information, therefore one could say that the most of the changes are carried out at this level.
- MVC code: Working at this level it is possible to carry out any changes using a powerful MVC development framework. Whenever a desired utility or a function is not adjustable with Openbravo MDD model, the development is realized at MVC level.

Openbravo regularly publishes new releases of the ERP in which new functions are added and the already existing ones are being corrected or modified.

Openbravo has an automatic installations update system that upgrades the installation with new developments of the new release. In order not to lose the realized installation developments (extensions, modifications or personalizations); while updating it is important to follow some development norms that are being explained in this document.

The Openbravo sources consist of:

- Database structure and metadata. Those are treated in an increasing mode (the changes between the releases are applied to the installation).
- MVC folders. Those are treated in a prioritized mode (the client's sources overwrite the general sources).

The main problem that may occur is the identifiers duplication. As soon as the revision process of the application dictionary is not finished, to avoid this problem it is necessary to follow some Openbravo development criteria:

- Particular development prefixes: "CUS_", "PD_", "US_", "ZZ_"
- Database structure:
 - ◆ Name the new tables adding the particular development prefixes. The columns of these tables can be named following the nomenclature



- standards (AD_Client_ID, IsActive, Name, Description, etc).
- ◆ Name the new columns of the existing tables adding the particular development prefixes.
 - ◆ Name the rest of the new database objects (procedures, triggers, etc.) adding the particular development prefixes.
- Metadata
 - ◆ the dictionary registers' IDs are generated by a sequence that establish the ranks in function of development origin, therefore the duplication of ID's should not occur.
 - ◆ dictionary's entities with unique names (table, window, process, reference, validation, etc.) should be named adding the particular development prefixes.
 - MVC folders
 - ◆ name the folders adding the particular development prefixes. It is recommended to do that in an independent package (i.e. org/openbravo/erpCommon/cus_myPackage).

Openbravo considers strategic the offer of a development platform that will allow the efficient share of applications. Soon Openbravo will publish a document about its development plans of that platform, which will enable database independence, import/export of applications and modules, definition of processes structured in meta data, and other characteristics.