Retail Shelf Planner Planogram Database

Starting with release 2010, Retail Shelf Planner offers the ability to store planograms in a relational database. This approach is especially interesting for clients with a large number of planograms and those who want to integrate the planogramming process and planogram information with other internal systems and processes.

Advantages

When the planograms are stored in a centralized relational database, one can:

- ✓ Easily use planogram data to improve efficiencies in processes such as printing shelf labels.
- ✓ Feed order and/or inventory systems with information about assortments and shelf stock.
- ✓ Quickly update product attributes across a series of planograms.
- ✓ List/delist products automatically, minimizing the amount of manual labor.
- ✓ Access planograms and planogram data through an Internet/Intranet site.
- ✓ …

Specialist Implementation

While storing planograms in a central repository as a relational database is very powerful, it can also lead to unwanted situations when the implementation isn't done correctly. It is therefore very important that the implementation is done by a team built up from Retail Shelf Planner-specialist(s), internal IT-staff and people from the merchandising team with the right business knowledge.

RSP Planogram Database – Technical

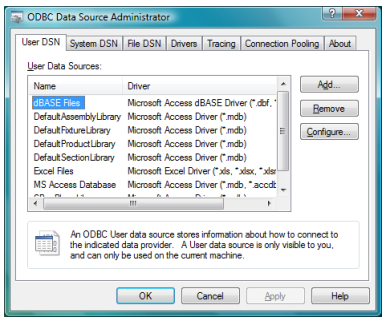
Databases supported

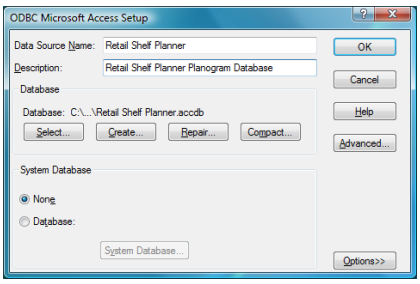
Retail Shelf Planner 2010 has been tested against the following databases:

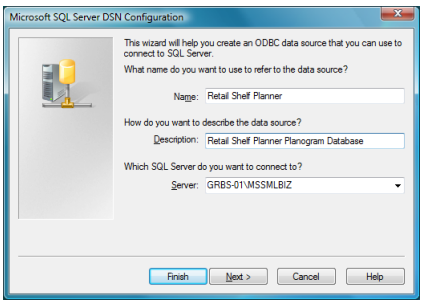
- ✓ Microsoft SQL Server 2005
- ✓ Microsoft Access 2003
- ✓ Microsoft Access 2007

Accessing the database

Retail Shelf Planner accesses the database through an ODBC DSN. The software checks if a DSN with the name "Retail Shelf Planner" exists.



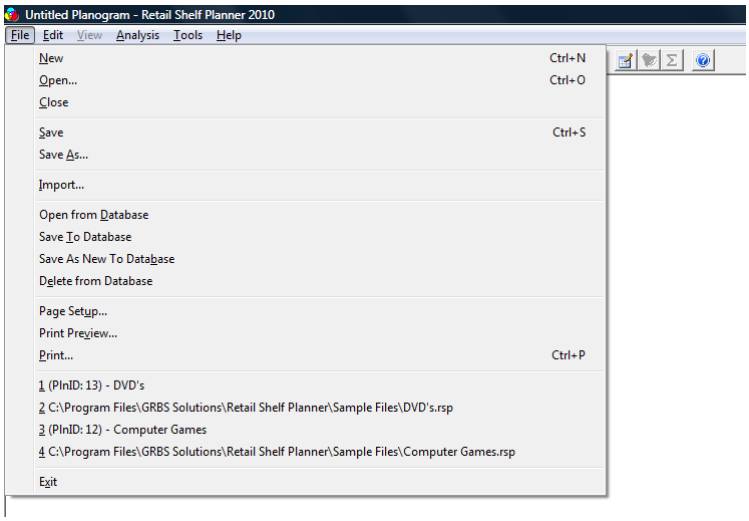




Menus

If Retail Shelf Planner finds a DSN with the name "Retail Shelf Planner", the menu-items to access the planogram database appear automatically in the File menu.

The unique planogram identifier from the database (pln_id) is used in combination with the Section name in the Most-Recently-Used menu entries, so that also planograms from the database can be accessed quickly.



RSP Planogram Database – Technical, continued

Database Schema

The planogram database has a series of tables that have a set structure:

Table	Stores
RSP_Section	Data for the Sections
RSP_SectionComponent	Data for the Section Components
RSP_Shelf	Data for the Shelves, Pegboards and Hanging Bars
RSP_ProductTemp	Data for the Products, but only temporarily !
RSP_Position	Data for the Positions
RSP_PositionComponent	Data for the Position Components
RSP_PageSetup	Data for the Page Setups
RSP_SupplyChainModel	Data for the Supply Chain Models

The structure of these tables (table names, field names, field types) should **not** be altered, as Retail Shelf Planner will no longer be able to communicate with the database. The only change that is possible is to increase the length of the string-fields to support longer texts if that is really needed.

However, to allow for more efficient maintenance of product attributes that are common across planograms (e.g. name and dimensions), Retail Shelf Planner splits the product data into two tables:

Table	Stores
RSP_ProductStatic	Product data that is static across the planograms
RSP_ProductPlanogram	Product data that is planogram specific

The structure of these tables can be adapted to the client's specific business environment. This applies to which fields are included in which table, as well as optionally renaming the fields to be more suitable for internal BI/Analysis-tools, etc.

During the save-process, all product data initially is saved into the RSP_ProductTemp table. Once that's done, Retail Shelf Planner calls a series of Stored Procedures to split the data into generic (or static) data and planogram specific data.

Stored Procedures	Stores
RSP_DeleteFromProductStatic	First all product records for product that were in the planogram are deleted from the RSP_Product Static table
RSP_InsertProductStatic	Next all static product data from the planogram is inserted into the RSP_ProductStatic table.
RSP_InsertProductPlanogram	In the third step, all planogram specific product data is inserted into the RSP_ProductPlanogram table.
RSP_DeleteProductTemp	Last, all data is removed from the RSP_ProductTemp table.

It's important that all these steps are executed properly, as incorrect execution will lead to loss and/or corruption of the planogram data in the database.

When loading a planogram from the database, the static and planogram specific product data for the planogram need to be combined in a single product-object. For this purpose Retail Shelf Planner uses the RSP_Product view. This view should include all non-calculated product fields using the RSP fieldnames. (See the Product Import Excel template in reporting for a list of all these fields and fieldnames.)

View	Purpose
RSP_Product	Data for the Sections

RSP Planogram Database – Technical, continued

Saving planograms to the database

When the planogram is saved to the database for the first time, a unique planogram identifier (PLN_ID) is generated automatically. Subsequent saves will be done using the same id, effectively replacing the existing planogram. With a Save As New To Database, the original planogram remains in the database and the planogram in memory is saved using a new id. The following rules apply:

Planogram in memory	Save To Database	Save As New To Database
- has not been saved before	New pln_id is generated	New pln_id is generated
- was loaded from a file	New pln_id is generated	New pln_id is generated
- was loaded from the database	Saved using existing pln_id	New pln_id is generated

Technically the save is done in a "Transaction". Only after the whole saving process has been completed successfully, the changes are committed to the database. In case of an error or other problem, the database-system performs a "roll-back" so that the data in the database will not be corrupted.

Multiuser environment

Once the planogram is loaded from the database the connection with the database is closed. No "planogram locking" or "usage counter" techniques are applied. Technically this means that multiple users can load the same planogram, make changes and store these changes to the database. Only the last saved version of the planogram will be in the database.

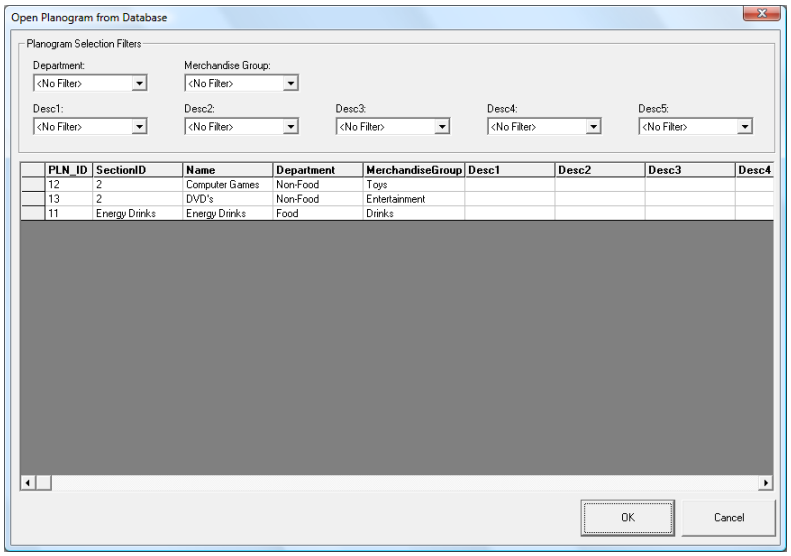
RSP Planogram Database – Usage

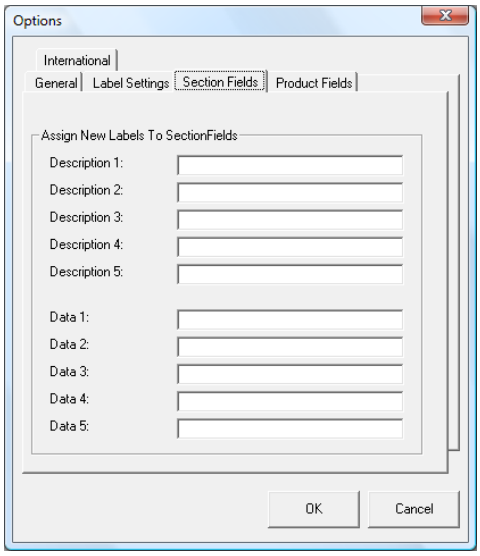
Loading Planograms from the database

The dialog below is displayed when a user wants to load a planogram from the database. It lists all planograms, sorted first by Section ID and next by Name and lastly by PLN_ID.

Using the drop-down lists, the list of planograms can be filtered on various criteria. When more than criterion is used, the list displays only those planograms where all of the criteria apply.

The labels above the Desc1 through Desc5 drop-down lists can be renamed in the Tools-Options dialog.





Deleting Planograms from the database

The dialog below is displayed when a user wants to load a planogram from the database. It lists all planograms, sorted first by Section ID and next by Name and lastly by PLN_ID.

Using the checkboxes on the left, the user can select one or more planograms that have to be deleted. Before deleting, Retail Shelf Planner will ask for a confirmation from the user.