

Oracle® Retail Macro Space Management
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Send Us Your Comments

Oracle Retail Macro Space Management, Store Planning User Guide, Release 13.3

Oracle welcomes customers' comments and suggestions on the quality and usefulness of this document.

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- Are the implementation steps correct and complete?
- Did you understand the context of the procedures?
- Did you find any errors in the information?
- Does the structure of the information help you with your tasks?
- Do you need different information or graphics? If so, where, and in what format?
- Are the examples correct? Do you need more examples?

If you find any errors or have any other suggestions for improvement, then please tell us your name, the name of the company who has licensed our products, the title and part number of the documentation and the chapter, section, and page number (if available).

Note: Before sending us your comments, you might like to check that you have the latest version of the document and if any concerns are already addressed. To do this, access the Online Documentation available on the Oracle Technology Network Web site. It contains the most current Documentation Library plus all documents revised or released recently.

Send your comments to us using the electronic mail address: retail-doc_us@oracle.com
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If you need assistance with Oracle software, then please contact your support representative or Oracle Support Services.

If you require training or instruction in using Oracle software, then please contact your Oracle local office and inquire about our Oracle University offerings. A list of Oracle offices is available on our Web site at www.oracle.com.

Preface

Audience

This User Guide is for users and administrators of Oracle Retail Macro Space Management. This includes merchandisers, buyers, business analysts, and administrative personnel.

Documentation Accessibility

For information about Oracle's commitment to accessibility, visit the Oracle Accessibility Program website at <http://www.oracle.com/pls/topic/lookup?ctx=acc&id=docacc>.

Access to Oracle Support

Oracle customers have access to electronic support through My Oracle Support. For information, visit <http://www.oracle.com/pls/topic/lookup?ctx=acc&id=info> or visit <http://www.oracle.com/pls/topic/lookup?ctx=acc&id=trs> if you are hearing impaired.

Related Documents

For more information, see the following documents in the Oracle Retail Macro Space Management Release 13.3 documentation set:

- *Oracle Retail Macro Space Management Administration User Guide*
- *Oracle Retail Macro Space Management Administration Module Online Help*
- *Oracle Retail Macro Space Management Configuration User Guide*
- *Oracle Retail Macro Space Management Configuration Module Online Help*
- *Oracle Retail Macro Space Management Data Importer User Guide*
- *Oracle Retail Macro space Management Data Importer Online Help*
- *Oracle Retail Macro Space Management Fixture Studio User Guide*
- *Oracle Retail Macro Space Management Fixture Studio Online Help*
- *Oracle Retail Macro Space Management Product Studio User Guide*
- *Oracle Retail Macro Space Management Product Studio Online Help*
- *Oracle Retail Macro Space Management Store Planning User Guide*
- *Oracle Retail Macro Space Management Report Designer User Guide*
- *Oracle Retail Macro Space Management Report Designer Online Help*

- *Oracle Retail Macro Space Management Release Notes*
- *Oracle Retail Macro Space Planning Install Guide*
- *Oracle Retail Macro Space Planning License Information*
- *Oracle Retail Macro Space Planning Security Guide*

For more information on In-Store Space Collaboration see the following documents in the Oracle Retail In-Store Space Collaboration Release 13.3 documentation set:

-
- *Oracle Retail In-Store Space Collaboration Release Notes*
 - *Oracle Retail In-Store Space Collaboration User Guide*
 - *Oracle Retail In-Store Space Collaboration Online Help*

Customer Support

To contact Oracle Customer Support, access My Oracle Support at the following URL:

<https://support.oracle.com>

When contacting Customer Support, please provide the following:

- Product version and program/module name
- Functional and technical description of the problem (include business impact)
- Detailed step-by-step instructions to re-create
- Exact error message received
- Screen shots of each step you take

Review Patch Documentation

When you install the application for the first time, you install either a base release (for example, 13.3) or a later patch release (for example, 13.3.1). If you are installing the base release or additional patch releases, read the documentation for all releases that have occurred since the base release before you begin installation. Documentation for patch releases can contain critical information related to the base release, as well as information about code changes since the base release.

Oracle Retail Documentation on the Oracle Technology Network

Documentation is packaged with each Oracle Retail product release. Oracle Retail product documentation is also available on the following Web site:

http://www.oracle.com/technology/documentation/oracle_retail.html

(Data Model documents are not available through Oracle Technology Network. These documents are packaged with released code, or you can obtain them through My Oracle Support.)

Documentation should be available on this Web site within a month after a product release.

Conventions

Navigate: This is a navigate statement. It tells you how to get to the start of the procedure and ends with a screen shot of the starting point and the statement “the Window Name window opens.”

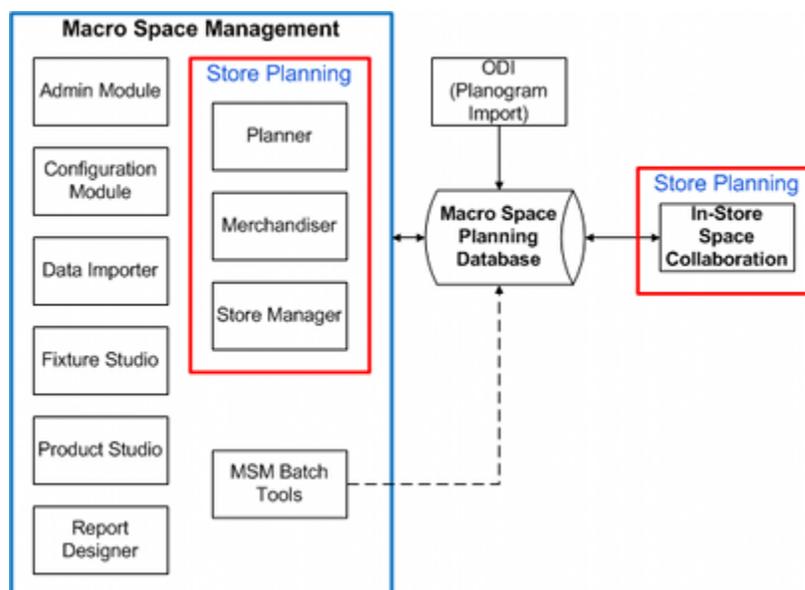
This is a code sample

It is used to display examples of code

Overview of Macro Space Planning

Overview of Macro Space Planning

The Macro Space Planning Application (which includes the Planner and Merchandiser modules) is described in the diagram below.



Macro Space Planning

Macro Space Planning consists of two applications sharing a common database: **Macro Space Management** and **In-Store Space Collaboration**. Macro Space Management is intended for use at headquarters and has functionality not replicated in In-Store Space Collaboration. In-Store Space Collaboration is designed to be portable and can be used (via the Internet) at stores within a retail organization.

Macro Space Management

Macro Space Management consists of two sorts of modules: store planning modules and support modules.

1. Store Planning Modules

Store Planning can be carried out in Planner (AutoCAD environment) or Merchandiser (Virtual Reality environment). Store Manager, used to administer the store hierarchy, can be accessed from either Planner or Merchandiser.

2. Support Modules

The support modules are used for three main purposes: to configure Macro Space Management, to configure the varying libraries of information and to operate batch processes.

- Configuring Macro Space Management is carried out using the Administration module for global changes and the Configuration module for local, user specific changes.

- Libraries of information maintained include the fixture and gondola libraries (Fixture Studio), product library (Product Studio) and the planogram library (planogram design within the Merchandiser module).
- Batch tools include Data importer (for bulk import of data) and Report Designer (configuring planogram reports for bulk output)

In-Store Space Collaboration

In-Store Space Collaboration uses a common database with Macro Space Management. ISSC is more portable than MSM and is often deployed to stores to allow store managers to be come involved in the store planning process. It can also be used to ensure compliance with store plans.

Differences between Planner and Merchandiser Modules

Although the Planner and Merchandiser modules can both be used to develop floor plans, they have different capabilities. In general Planner is used for 'Macro' planning, while Merchandiser can be used for 'Micro' planning. The differences between the modules are briefly outlined below.

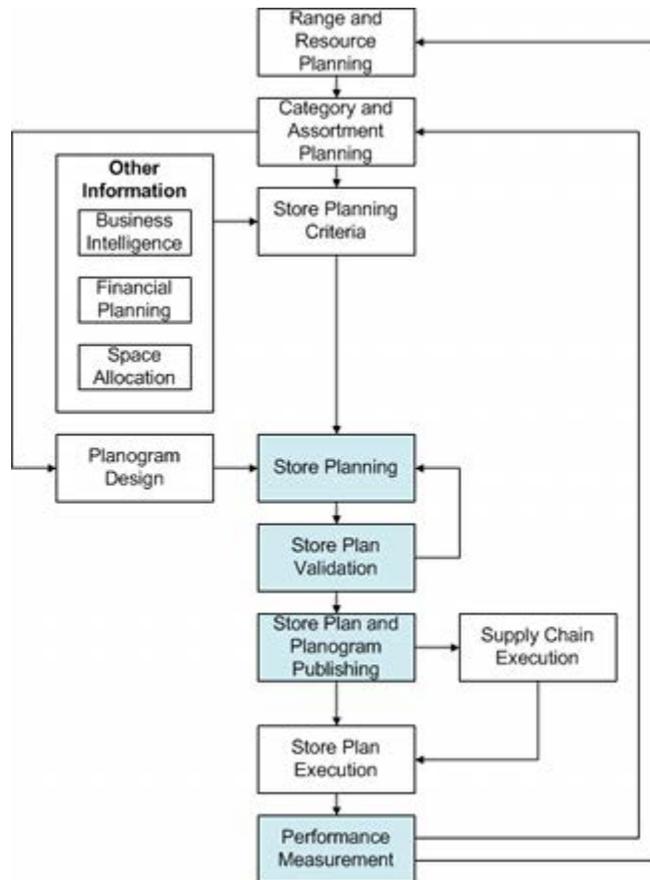
	Planner	Merchandiser
Zones	<ul style="list-style-type: none"> • Can be added, edited and deleted. 	<ul style="list-style-type: none"> • Can be viewed 'read only'
Fixtures and Gondolas	<ul style="list-style-type: none"> • Can be accurately positioned using standard AutoCAD functionality. • Shelves generally not shown • Position of signage shown, but no text/images available. 	<ul style="list-style-type: none"> • Can be positioned accurately, but not as easily as in Planner. • Can work with additional detail for equipment - shelves and pegs for instance. • Can see writing/images on signage
Products	<ul style="list-style-type: none"> • Can only be displayed as placeholders - no information on quantity or position given. 	<ul style="list-style-type: none"> • Can be shown as display styles on fixtures or shelves - giving full information on quantity and position. • Can be associated with images - giving a photo-realistic appearance.
Planograms	<ul style="list-style-type: none"> • Can only be seen as placeholders - with no information available on quantity or position of shelves or merchandise. 	<ul style="list-style-type: none"> • Planograms can be seen with full detail including position and quantity of shelves and merchandise.
Key Performance Indicators	<ul style="list-style-type: none"> • Can be used for zones and fixtures. 	<ul style="list-style-type: none"> • Can be used for zones, fixtures, shelves and products.
Annotation	<ul style="list-style-type: none"> • Fully configurable annotation. 	<ul style="list-style-type: none"> • Basic text labelling.

	Planner	Merchandiser
Floor Plans	<ul style="list-style-type: none"> Can be prepared for printing with fixtures toggled to 2D form, specified annotation and title blocks. 	<ul style="list-style-type: none"> Snapshots can be taken, but no formal way of outputting floor plans exists.

Retail Operations and the Planner and Merchandiser Modules

Note: The information below is intended for general guidance and should not be interpreted as being a recommended solution.

This section of help gives a high level overview of store planning and how it integrates into the rest of the retail planning process.



Note: Boxes coded in blue are Macro Space Planning operations.

The stages in the retail planning process are broadly as follows:

Range and Resource Planning

This is strategic planning and would include such items as identifying the ranges of products to be placed in the store, staff and service levels, etc. As a general procedure, this would have retail chain wide implications and not be restricted to a single store.

Category and Assortment Planning

Again done at a strategic level, this is the process of breaking down the product ranges into more specific categories then optimizing the products to be offered in each category.

Store Planning Criteria

Following on from the Category and Assortment Planning is the need to set criteria for how the store is to be planned. This may well be a guidance document based on information from sources such as:

- Business Intelligence - for example from syndicated data, market basket analysis or loyalty card programs.
- Financial Planning - criteria on the product mix required to meet profitability criteria.
- Space Allocation - sub-dividing the available space in the store into areas for each department and category.

Planogram Design

Planogram design will also have been carried out, often based on information from category management combined with guidelines on visual merchandising.

Store Planning

Store planning (more generally called floor planning) can then commence based on the supplied criteria. The planograms placed should meet those criteria.

Store Plan Validation

Once planned, the store plan must be validated against a number of criteria. These include:

- Whether planograms have been placed on appropriate fixtures
- Whether the planogram adjacencies will maximise (for example) impulse buying
- Whether financial performance criteria will be met.

If failures occur during validation, the validation process must be halted and the store plan revised.

Store and Planogram Publishing

After the store plan has been validated, the store plan and its associated planograms can be published. This is the signal for the execution processes to commence.

Supply Chain Execution

In order to execute the store plan, equipment, merchandise, signage and promotional material will be required. These requirements must be put into the supply chain in time for the goods to be delivered to site.

Store Plan Execution

At an appropriate date, the store plan has to be put into effect. Using store labor or sub contractors, equipment, merchandise and signage must be placed or changed as appropriate.

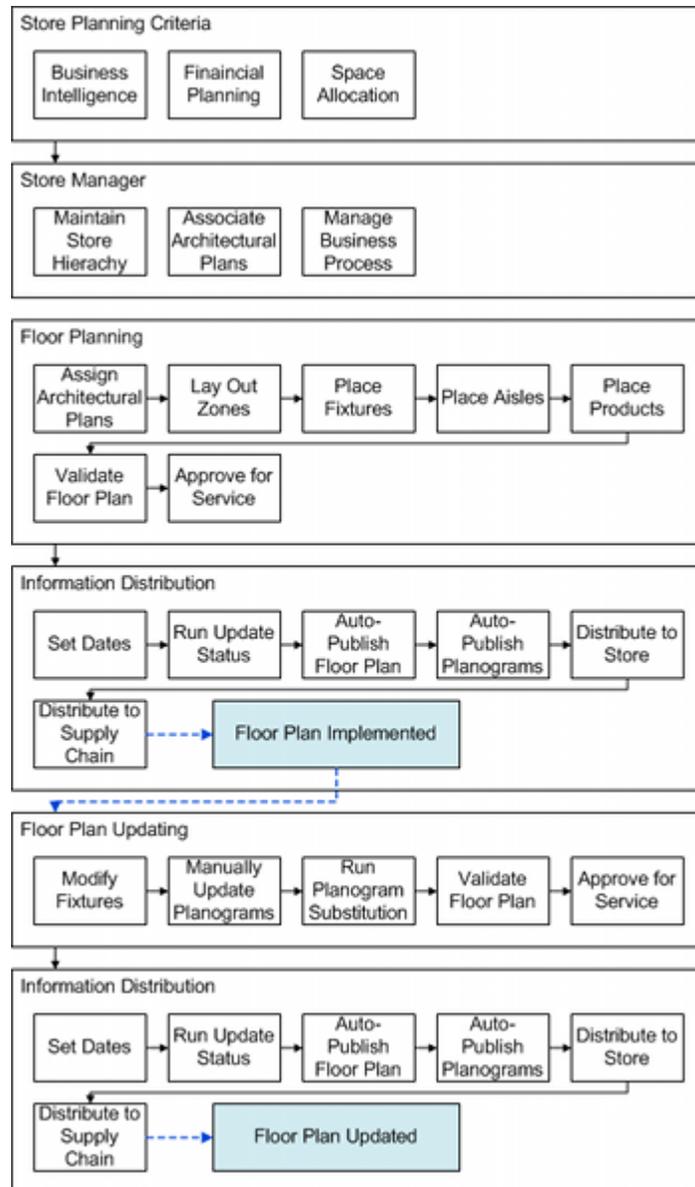
Performance Measurement

At an appropriate time, the performance of the store should be examined by means of reports and KPIs. This information can be fed back into the Range and Resource Planning and Category and Assortment Planning in time for the next cycle of store planning.

Overview of Store Planning

Note: The information below is intended for general guidance and should not be interpreted as being a recommended solution.

This section of help gives a high level overview of the store planning process.



Store Planning Criteria

The process starts with store planning criteria for other parts of the retail organization. These may include:

- **Business Intelligence** - for example from syndicated data, market basket analysis or loyalty card programs.
- **Financial Planning** - criteria on the product mix required to meet profitability criteria.
- **Space Allocation** - sub-dividing the available space in the store into areas for each department and category.

This information serves as a set of criteria and constraints that a floor plan must meet before it is released for service.

Store Manager

Store Manager is used for the administration of the store planning process. These include:

- **Maintaining the Store Hierarchy**
Maintaining the store hierarchy includes adding, editing and deleting stores, floors, revision and floor plans as required.
- **Associating Architectural Plans**
Architectural plans are used as underlays for floor plans in order to show the position of walls, doors, windows, lighting and services. Associating architectural plans is a two-part process, with the second step required when a floor plan is open.
- **Managing Business Processes**
Stores, Floors, Revision and floor plans all go through different stages in their business life cycle. For example a store may be at the design stage, in service, closed for refurbishment or sold and out of service.

Floor Planning

If a new floor plan is to be created, the general stages are as follows:

Note: Precise details of departmental areas, number and types of fixtures and products, performance targets, etc will often be specified in the store planning criteria.

- **Assign Architectural Plan**
An architectural plan should already have been associated with the parent floor for the floor plan in Store Manager. This can now be assigned to this specific floor plan.
- **Lay Out Zones**
The next stage is to lay out the zones within the floor plan. These can be used to indicate the positions and areas of departments, sub-departments, aisles, etc. This can only be done in the Planner module. Zones come in several broad types:
 - **Internal Area:** There is only one zone of this type in a floor plan. It is used to indicate the maximum extents and area used for retail purposes.
 - **Department:** This type is used to indicate the departments within a retail outlet. Any floor plan that is to be viewed in In-Store Space Collaboration must have zones of this type for it to open.
 - **Other:** This type is often used to indicate sub-departments within a main department, aisles, etc.

Place Fixtures

The fixturing can then be laid out. Fixtures can either be placed individually or a gondola runs. Fixture placement is generally done in the Planner module because of the ability to place the fixtures with great accuracy. After the fixturing has been placed, it is often Bay Numbered - this makes it easier for users to identify a specific fixture within a floor plan.

- **Place Aisles**
The next stage is to draw the aisles. These can only be placed in the Planner model and allow the aisle to be identified. The direction the aisle is drawn also serves to identify the predominant traffic direction. This can be used when placing multibay planograms that have been designed to be viewed in a specific sequence.
- **Place Products**

After the fixtures and aisles are in place, products can be placed. 'Big ticket' items can be placed as individual products, but the majority of merchandise is placed in the form of planograms.

- **Validate Floor Plan**

After the floor plan has been created, it is next validated to see the layout is optimum. Validation can be done using reports and KPIs. Because of the visual nature of KPIs these often allow validation to be completed in the least possible time. Validation can include:

- Whether planograms have been placed on appropriate fixtures.
- Whether the planogram adjacencies will maximise (for example) impulse buying.
- Whether financial performance criteria will be met.

If necessary amendments can be made to the floor plan and the new arrangement revalidated.

- **Approve for Service**

The final stage is to approve the floor plan for service. This is done in Store Manager by setting the status to Authorized. This enables the Publish and Effective (Current) dates to be set. Macro Space Management batch tools can then be used to automatically change the floor plan status and publish the floor plan and its associated planograms.

Information Distribution

When the floor plan has been approved for service, the next stage is to distribute the information at the pertinent time.

- **Set Dates**

When the floor plan has been approved and set to Authorized status, the Publish and Effective Dates are set.

- The Publish Date is when information is distributed in preparation for putting the floor plan into service. This date is set far enough in advance of the implementation date that all preparations for putting the floor plan into service (including ordering equipment and merchandise) can be put in hand.
- The Effective Date is when the floor plan will be put into service (made current). This date will usually be integrated with the retailers strategic planning so that the change is made in coordination with promotional and advertising campaigns, etc.

Run Update Status

UpdateStatus.exe is a small Macro Space Management utility that can automatically change the status of floor plan. It is generally set to run as a batch process on a nightly schedule. When the Publish Date has been met or exceeded, Update Status will change the status of the floor plan from Authorized to Published. In most implementations this also sets the floor plan to read only status. This prevents further changes to the floor plan unless an administrator deliberately overrides this.

- **Auto-Publish Floor Plan**

Another Macro Space Management application can be scheduled to publish the floor plan on the Publish Date. This results in a copy of the floor plan (typically in DWF or PDF format) being placed in a specified location. From there the retail chain can make arrangements to distribute the information to the store - typically by e-mail.

- **Auto-Publish Planograms**

A further Macro Space Management application can be scheduled to publish the planograms on the Publish Date. This results in a copy (typically in Word document or PDF format) being placed in a specified location. From there the retail chain can make arrangements to distribute the information to the store - typically by e-mail.

- **Distribute to Supply Chain**

In parallel with publishing the information, information needs to be sent to the supply chain for the equipment, merchandise, signage and promotional material needed. This is generally achieved by running reports on the floor plan to identify the types and quantities required, then creating the appropriate purchase orders.

- **Run Update Status**

UpdateStatus.exe executes as a batch process on a nightly schedule. When the Effective Date has been met or exceeded, Update Status will change the status of the floor plan from Published to Current. In most implementations this also maintains the floor plan at read only status. This prevents further changes to the floor plan unless an administrator deliberately overrides this.

Simultaneously with update status changing the status of this floor plan to Current, any pre-existing Current floor plan for this specific floor will have its status changed to Historical. This indicates it has been superseded by a more recent version.

- **Implementing the Floor Plan**

On the Effective Date, the store will know to put the changes into effect. This means setting out the fixturing, populating it with merchandise and setting up the signage and promotional material. This will require careful planning and allocation of labor.

Floor Plan Updating

Once a floor plan has been put into service, it will probably be subject to a series of updates. These may vary from changing a number of the planograms on the end caps through to remodelling a substantial part of the store. A typical procedure is described below:

- **Modify Fixtures**

The fixtures are modified as required. Typical examples include adding or removing display bins from an aisle or changing the widths of several aisles.

- **Manually Update Planograms**

If the fixturing has been changed, it may be necessary to manually populate the modified fixtures with the appropriate planograms.

- **Run Planogram Substitutions**

Planogram substitutions are an automated way of changing the specified planograms in one or more stores. This can be done in several forms including:

- **One to One Substitutions:** A planogram is swapped out for one of identical size.
- **One to Many Substitutions:** A large planogram is swapped out for several smaller ones.
- **Many to One Substitutions:** Several smaller planograms are swapped out and replaced by a single large one.

There are a number of reasons for planogram substitutions. The more common ones include:

- **Space Trading:** Reducing the space assigned to a poorly performing category and increasing the space available to a better performing one.

- **Seasonal Changes:** Swapping out seasonal goods; for example changing Halloween products for Christmas ones.
- **Special Offers:** Swapping out standard planograms for planograms containing products in modified packaging for the special offer.

Validate Floor Plan

After the floor plan has been created, it is next validated to see the layout is optimum. Validation can be done using reports and KPIs and would be similar to the exercise carried out when the floor plan was first created.

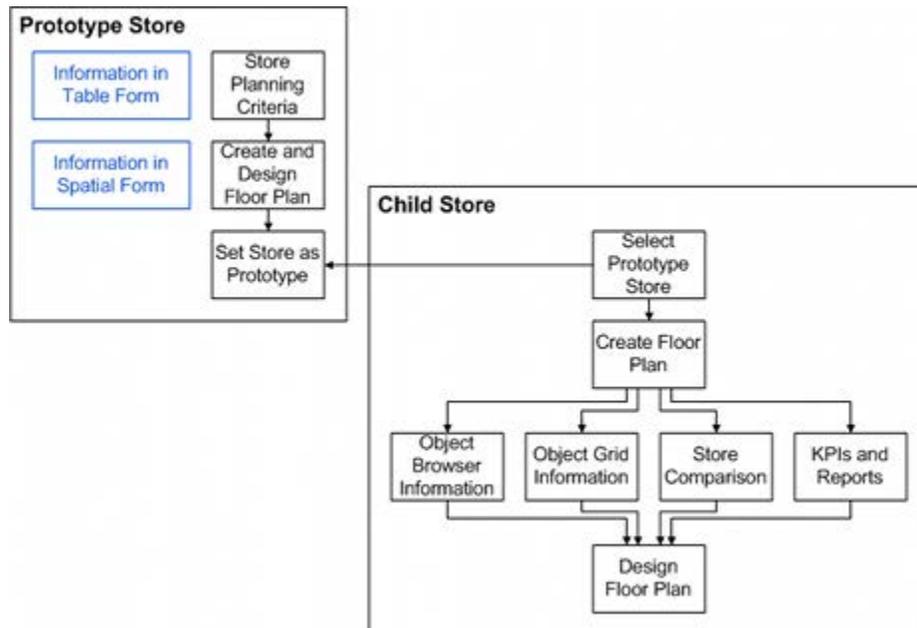
Information Distribution

When the revised floor plan has been approved for service, the next stage is to distribute the information at the pertinent time. This follows the same procedure as implementing the original floor plan.

Using Prototype Stores

Overview of Prototype stores

One useful concept in Macro Space Management is that of Prototype Stores.



Prototype Stores are exemplars of a store that has an idealized layout. They may be actual stores that are performing better than average. Alternatively they may be 'paper' stores that have been designed as guidance for real store layouts. The process is as follows:

1. Store Planning Criteria

Store planning criteria are received in tabular form. This will be information on departmental areas, numbers and types of fixtures and products, suggested product adjacencies, etc.

Create and Design Prototype Store

The planning criteria are then used to design the prototype store. This results in the tabular information in the planning criteria being transformed into a series of spatial relationships where departments, equipment and merchandise are placed relative to

each other. After the store plan has been optimized by means of reports and KPIs, it is ready for use as a reference.

Set Store as a Prototype

The store can then be designated as a prototype by checking the **Set as Prototype** check box in the General tab of the **Add/Edit Store** dialog box in Store Manager.

Select Prototype Store and Create Floor Plan

The child store is then associated with its prototype store by selecting the prototype store from the list of those available in the **Add/Edit Store** dialog box in Store Manager. This information is now set in the **File Properties** dialog box. Any floor plans now created can potentially reference the information held on the prototype store in the database. This information is:

- Information in the Properties Window of the Object Browser: The Custom SQL supplied with Macro space Planning can be modified to show the quantities in the Prototype and Child stores for comparison purposes.
- Information in the Object Grid: The information supplied in the object grid can be customized (Custom SQL) to show only equipment and merchandise in the Prototype Store.
- The Store Comparison tool: This compares the quantities of equipment, merchandise categories and planograms in the prototype and its child and specifies differences between the two.
- KPI's and Reports: These can be customized to the client's requirements and can be used to look at specific aspects of the floor plan.

Design Floor Plan

Using the Prototype Store, the child floor plan can then be designed. A typical use of the functionality would be to take a prototype store of 30,000 ft² and create a child plan of similar area but different physical layout containing broadly similar department sizes and equipment/merchandise placements.

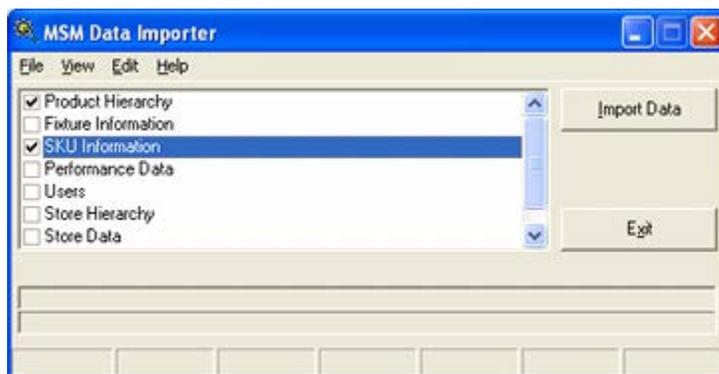
Note: Information in the Object Browser and Object Grid is controlled by SQL statements in the AVTTB_CUSTOM_SQL table in the database. Modifying this SQL can change the information appearing to customer specific requirements. The code in the application has the ability to use specific tags in the Custom SQL such as {FIL_ID}. This allows the code to execute the SQL statement with the File ID (FIL_ID) of the currently open floor plan in the 'where' clause.

MSM Batch Processes

There are certain processes in the store planning process that can be automated and run on a regular schedule using a scheduling tool. These are:

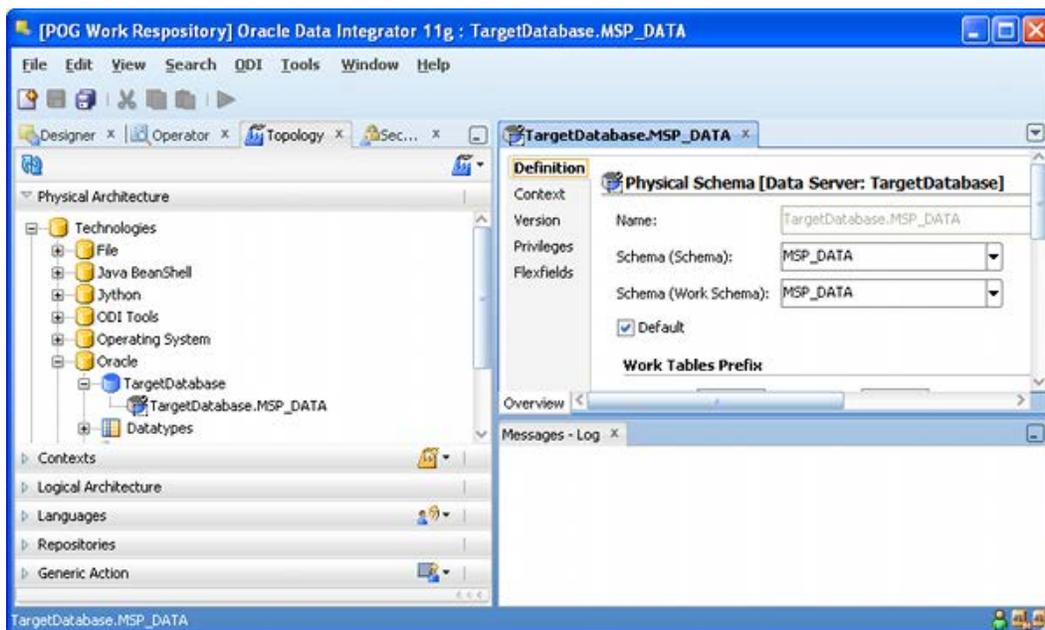
- Data Importer
- ODI Planogram Importer
- Automated Calculations
- Update Status
- Floor Plan Publishing
- Planogram Publishing

Data Importer



Data Importer is a Macro Space Management (MSM) module that allows imports of data into the MSM database to be configured and executed. In principle any table (including custom information) can be imported into the database and used for reporting purposes.

ODI Planogram Importer



Oracle Data Integrator (ODI) is another Oracle application. It can be configured to import planogram definitions. This requires an XML file to be configured by the retailer in a very specific format. This XML file can then be imported into the MSM database by ODI.

Automated Calculations

MSM provided a series of automated calculations that can be used to ensure the information in the database is current before reports are generated. These calculations are:

- **Allocated Areas:** Allocating floor area to fixture to take into account the aisles around them when generating performance data.
- **Aisle Adjacency:** Identifying which fixtures are associated with an aisle.
- **Fixture Adjacency:** Identifying which fixtures are to the left, right above or below each other.

- **Product Adjacency:** Identifying which products are to the left right or on the same fixture.
- **Face Planes:** Calculating the frontal area of each product for performance metrics.
- **Space Measurement:** Calculating the volume of each product for performance metrics.

Update Status

Update Status is a small MSM utility that is capable of changing the status of a store or floor plan. This allows dates for actions to be pre-set then automatically executed. This utility is typically used by retailers to trigger ordering of the equipment and merchandise required to execute a store plan change.

Floor Plan Publishing

Floor Plan Publishing enables the user to automatically generate an electronic copy of the floor plan and deposit it in a specified directory. From there the retailer can disseminate the information to the store.

Planogram Publishing

Planogram Publishing enables the user to automatically generate an electronic copy of the planograms that will be changed during a reset of a floor plan and deposit it them a specified directory. From there the retailer can disseminate the information to the store.

Custom SQL

Note: this information is for DBAs and Administrators only. Standard users cannot access the database and modify the requisite tables.

Definition of Custom SQL

The code used in Macro Space Planning has the ability to update SQL statements so they are specific to the currently active floor plan, etc, when it executes them. This is an addition to Standard SQL and is done by the use of placeholders such as {FIL_ID} for File ID.

In Standard SQL, a simple statement would be:

```
Select PRODUCT_NAME from PRODUCT where FIL_ID = 123
```

Custom SQL is of the form:

```
Select PRODUCT_NAME from PRODUCT where FIL_ID = {FIL_ID}
```

When the code references the Custom SQL it identifies the placeholder and substitutes the File ID of 123 from the currently active floor plan for {FIL_ID}. This enables the application to return a specific sub-set of results for the currently active floor plan, etc.

In the screen shot below, a Quick Report is being used in a floor plan to identify the planograms that can be placed. The fields that appear can all be customized by a DBA or Administrator with the correct permissions in the database. For example, if the planograms have User Defined Attributes (UDAs) associated with them, key UDA's could be displayed in the Quick Report. Similarly, if this floor plan is associated with a prototype store, quantities of planograms in the currently active floor plan could be compared with those in the prototype store.

POG CODE	DESCRIPTION	GROUP NAME	LENGTH (FT)	DEPTH (IN)	HEIGHT (IN)	BAYS	INSTANCES
00000019	1 Bay Mixed Cola	Carbonated Drinks	3	24	72	1	1
00000015	1 Bay Bottled Pepsi	Carbonated Drinks	3	24	72	1	1
00000014	1 Bay Bottled Coke	Carbonated Drinks	3	24	72	1	1
00000056	4 Bay Mixed Soups	Tinned Soup	12	24	72	4	1
00000004	1 Bay White Wine	Wines	3	24	72	1	1
00000003	1 Bay Red Wine	Wines	3	24	72	1	1
00000037	1 Bay Specialty Beer	Beers, Ciders and Lagers	3	24	72	1	1
00000011	2 Bay Mixed Spirits	Spirits	6	24	72	2	1

Where Custom SQL Can Be Used

Custom SQL can be used in the following ways:

- To populate data into the Properties and Summary Windows in the Object Browser.
- To populate data into the Object Grid and to specify the filters and sort criteria available.
- To populate data into some of the Find dialog boxes.
- To specify some of the data for annotation in Planner.
- To specify data that can be referenced by Title Blocks.
- To specify the data that will appear in Quick Reports.

Where Custom SQL is Stored

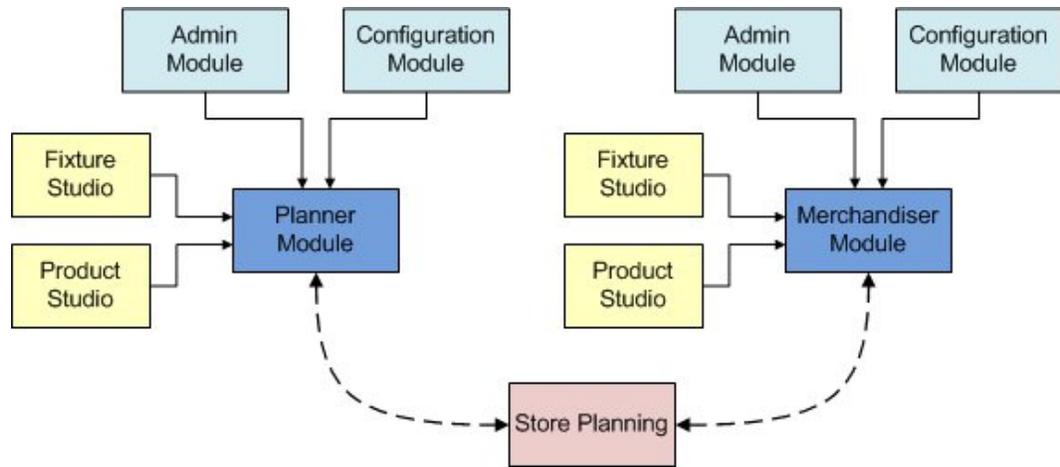
The primary repository for Custom SQL is in the AVTTB_CUSTOM_SQL in the database; although other tables come into use. The Custom SQL itself is stored in the CSQ_SQL field. This can be edited to change the table referenced and fields displayed.

Note: See the *Macro Space Planning Data Model* for more information.

Overview of Other MSM Modules

A number of other modules affect the behavior of equipment and merchandise in the Planner and Merchandiser modules. These are described briefly below - for more information see the help files for the respective modules.

Note: Users will need the appropriate privileges to access these modules.



Administration Module

Access to the Administration module is generally carefully restricted. The settings made have a global effect for all users of the Planner and Merchandiser modules. Examples include:

Option	Description	Planner	Merch
Floor Plan Publishing	How floor plans are published (made available to stores for implementation)	X	X
Planogram Publishing	How planograms are published (made available to stores for implementation)	X	X
Statuses	The statuses available to show how far a store, item of equipment, item of merchandise, etc, is through its business life cycle.	X	X
Annotation (Text Styles)	How annotation for zones, fixtures, products and planograms draws	X	
Zones	The hierarchy of available zones to place in a floor plan	X	
Ranges	The list of temperature ranges that can be assigned to equipment and merchandise. This affects equipment and merchandise when display styles are used.		X
Styles	The list of styles that can be assigned to equipment and merchandise. This affects equipment and merchandise when display styles are used.		X
Planogram Substitution	How to automatically substitute one planogram for another in floor plans.	X	X
Data Security	What access rights users have for specific objects such as stores or planograms.	X	X

Option	Description	Planner	Merch
Title Blocks	How a 'frame' of information is added to the floor plan before it is published. Information in the title block can include store name, floor plan designers's name, date of implementation, etc.	X	

Configuration Module

The Configuration Module can be called from the file menu of either the Planner or Merchandiser modules. Only four tabs will be available (the full range only being available if called from the Administration module). These four tabs affect the behavior of the Planner and Merchandiser modules on a user by user basis - the settings do not have a global effect. Examples include:

Option	Description	Planner	Merch
Zones Tab	<ul style="list-style-type: none"> How zones are drawn when being added to the floor plan. How zones are highlighted in the floor plan. 	X X	
Fixturing tab	<ul style="list-style-type: none"> How the Add Fixture dialog box functions How Connection Points function Highlighting of Fixtures 	X X X	X
Merchandising Tab	<ul style="list-style-type: none"> Selection Method for Fixtures Highlighting of Products Checking Planogram Placement Validity 	X X X	X
Merchandiser tab	<ul style="list-style-type: none"> Appearance of buildings, equipment and merchandise 		X

Fixture Studio

Fixture Studio is another Macro Space Planning module. It is used to configure the Fixture and Gondola Hierarchies, together with Fixtures and Gondolas themselves. Settings in Fixture Studio affect the behavior of Equipment in the Planner and Merchandiser modules. Examples include:

Option	Description	Planner	Merch
Insertion height	The height at which equipment is inserted in the floor plan - a fixture will generally be inserted at floor level, a hanging sign 10 feet above it.	X	X
Connection Points	Datums by which one item of equipment aligns itself with another. In Planner, this is only Fixtures; in Merchandiser it is fixtures and shelves.	X	X
Associated	This is used to specify whether one item of		X

Equipment	equipment can accept another - for example whether a fixture will accept shelves.	
Temperature Range	Compared to the temperature range on the display style being placed to determine if it is compatible with the equipment it is being placed on.	X
Style	Compared to the style of the display style to determine if the display style can be placed on a specific fixture or shelf.	X
Merchandisable Areas	Determines the volume that merchandise can take up on a fixture or shelf.	X

Product Studio

Product Studio is another Macro Space Planning module. It is used to hold information on the products available for placement in floor plans. This product information can either be imported from another database or entered manually. Settings in Product Studio affect the behavior of merchandise in the Planner and Merchandiser modules. Examples include:

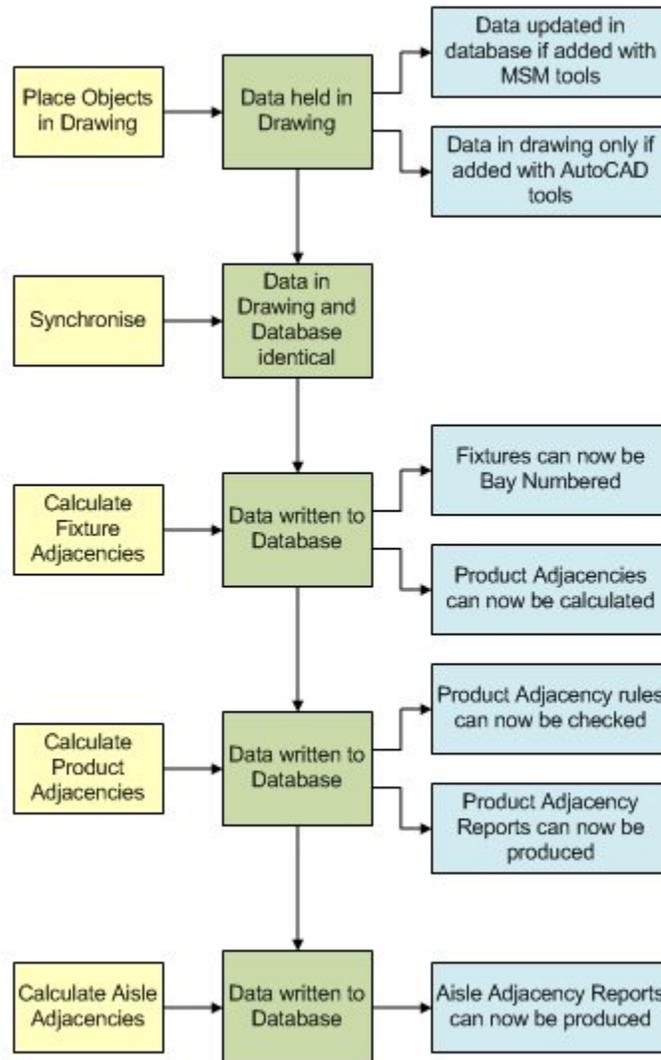
Option	Description	Planner	Merch
Product Colors	The colors products for merchandiser at different levels in the hierarchy can be configured	X	X
Publish, Effective and Expiry Dates	These specify the dates an item of merchandise is available between and what date information will be published to users.	X	X
Temperature Range	Compared to the temperature range on the parent fixture or shelf to determine if the display style can be placed.		X
Style	Compared to the style on the parent fixture or shelf to determine if the display style can be placed.		X
Product Dimensions	The size of a specific display style - this will determine the number of items that can be inserted on a fixture or shelf.		X
Peg Holes	Specifies the datum point by which a display style hangs from a product or rail.		X
Images	Associates an image with a display style that can subsequently be displayed in a floor plan.		X

About Synchronization and Adjacencies

When fixtures, fittings and gondolas are placed on the drawing using MSM tools, they are also sent as data to the Macro Space Management central database.

If fixtures in the drawing are modified with AutoCAD tools, this will change the drawing, but not the central database.

The process of making sure the AutoCAD drawing and the Macro Space Management Central database hold the same information is known as synchronization.



After the drawing has been synchronized with the central database, the Adjacency calculations can be run.

Fixture Adjacency calculations establish the physical relationship of one fixture to another.

These relationships are used for both bay numbering and as the basis for subsequent Product Adjacency calculations.

Product Adjacency calculations establish the relationship of one type of product to another. They cannot be run until the Fixture Adjacencies have been calculated.

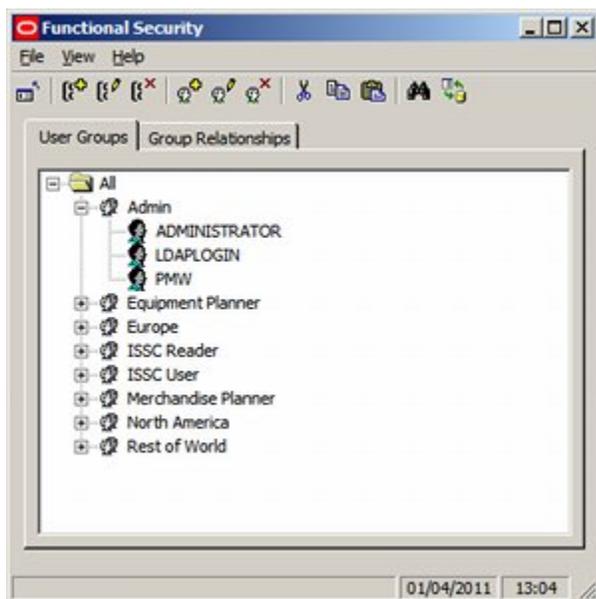
Logging In

How Passwords and Privileges are Configured

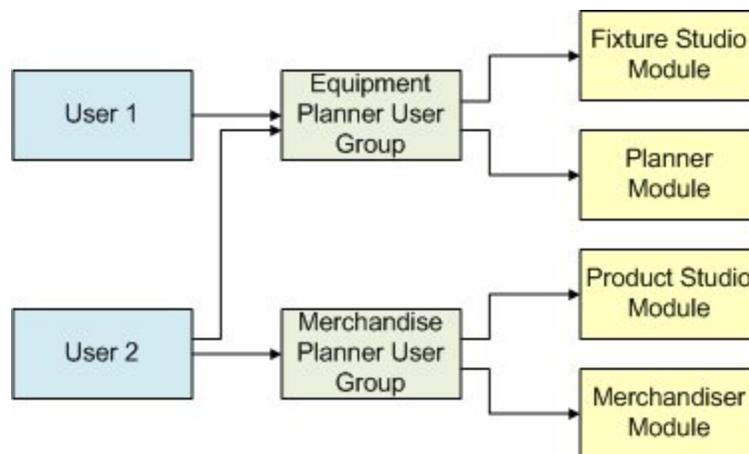
Passwords and Privileges are configured in Macro Space Management's Administration module.

Note: Access to the Administration Module is normally restricted to a limited number of users. This is because the Administration Module can be used to set a wide variety of parameters affecting how Macro Space Management operates.

Access rights to the Macro Space Management modules are set using the Functional Security option.



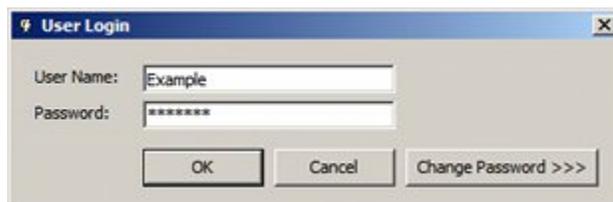
Users are assigned to User Groups in the User Groups Tab. Which modules a User Group can access is specified in the Group Relationships tab. User's privileges thus depend on what user groups they are assigned to.



In the above example, User 1 is only a member of the Equipment Planner user group. Accordingly, their access is restricted to the Fixture Studio and Planner modules. User 2 is a member of the Equipment Planner and Merchandiser Planner user groups. They have wider access and can use the Fixture Studio, Planner, Product Studio and Merchandiser modules.

Logging in to Macro Space Management Modules

When a user first attempts to access a Macro Space Management module, the **Log In dialog box** will appear.



This requires the user to enter a User Name and Password. If these are correct, the user will be able to access the desired module. After the initial log in, information will be held in **Security Server**. Users will therefore be able to access all other Macro Space Management modules they have permissions for without the need to log in again.

If the user attempts to log into a module for which they do not have permissions for, a warning will appear and the log in attempt will be terminated.

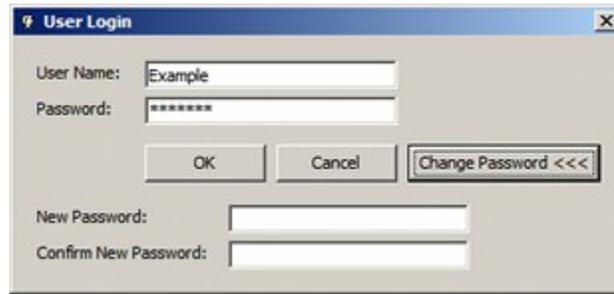


Note: The permissions for which modules can be accessed are configured in the Administration module.

Password Changes

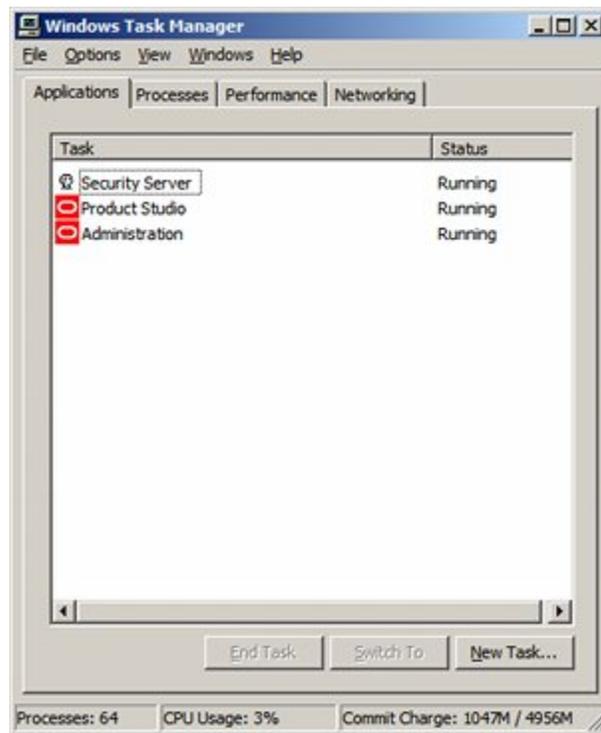
Macro Space Management can be configured to require password changes at specified intervals. If one of these intervals has been exceeded, the user will be asked to change their password the next time they log in. This can be done by means of the **Change**

Password >>> option on the **Log In dialog box**. This will reveal another part of the dialog box where the changed password can be entered and confirmed.

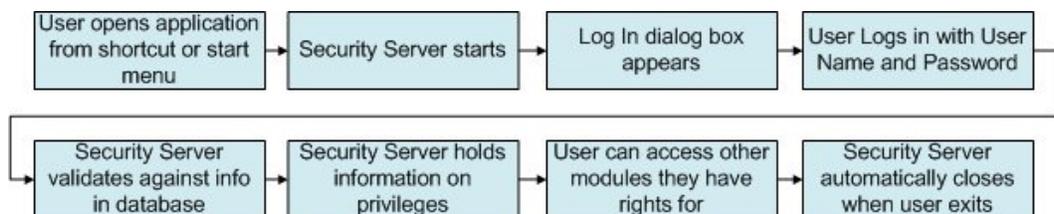


Security Server

Security Server is a Macro Space Management application that runs in the background and is normally not visible to users. When running, it can be seen in Windows Task Manager.



How Security Server operates is shown in the following flowchart.



1. The user opens a Macro Space Management module from a shortcut or the Windows start menu.
2. Security server starts but remains in the background.

3. The Log In dialog box appears.
4. The user types their user name and password into the Log In dialog box.
5. Security Server validates the user name and password against the information held in the database. If they are correct and the user has sufficient privileges, the Macro Space Management module opens.
6. Security Server holds information on what other privileges the user has in Macro Space Management.
7. If the user attempts to access other modules, Security Server will check the information it holds and allow or deny access as required. This means that a user only has to log into Macro Space Management once per session.
8. When the user exits the last Macro Space Management module, Security Server also closes.

Security Server and Application Errors

On occasion a Macro Space Management module might encounter a significant error and automatically close. Because the closure was not user initiated, Security Server does not close but remains open in the background. If the module that unexpectedly closed is reopened, Security Server will contain information incompatible with the restart and further application errors will result.

In the event of a Macro Space Management module failing unexpectedly, carry out the following actions:

1. Save the information in any other Macro Space Management modules that are open and close those modules.
2. Open **Windows Task Manager**, highlight **Security Server** and click **End Task**.
3. When Security Server has closed, the required Macro Space Management modules can be restarted.

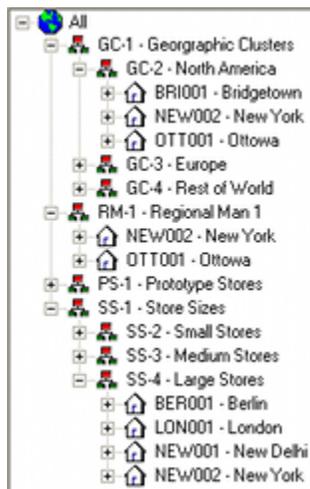
Store Manager – Business Processes

Store Manager Business Processes

Store Manager enables Equipment Layout Managers, Merchandise Managers and Store Planners to control the business process flows relating to planning and maintaining the 'bricks and mortar' stores within a retail organization. It can perform the following general functions:

Grouping Together Stores of Common Purpose in the Hierarchy

Stores can be assigned to multiple clusters in the Store Hierarchy. This enables stores with similar characteristics to be grouped together for reporting of control purposes. For example the New York Store could be a member of The North America, Large store and Regional Manager 1 clusters. This enables groups of stores to be selected - for example all stores in North America, or all stores of size over 50,000 square feet.

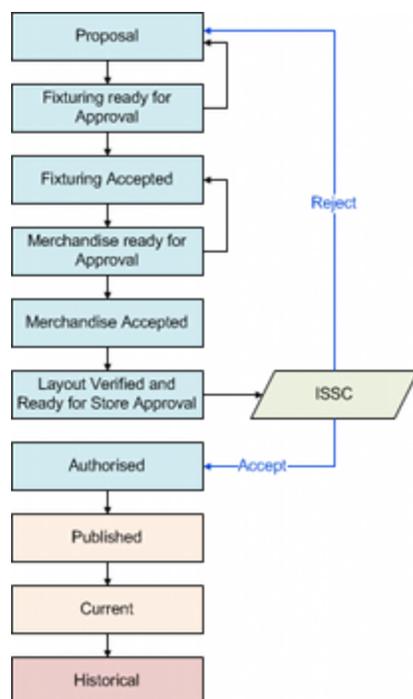


It also allows stores sharing (for example) similar demographic characteristics to be grouped together. For example clusters could be created according to the ethnic mix of the store catchment area. If a 'Hispanic' cluster was created, that would enable all stores with a predominantly Hispanic shopper base to be grouped together. This would allow the product mix going into the stores to be optimized to suit that specific customer base. For example, the stores might have a higher proportion of burritos, enchiladas and fajitas than a store catering to a predominately Asian or Caucasian clientele.

Similarly, stores could be characterized according to the average wealth of the shoppers using them - for example 'Low Income', 'Middle Income' and 'High Income' clusters could be created and stores assigned accordingly. Stores in the 'High Income' cluster would then be selected for planograms containing a higher proportion of 'premium' products than average. Similarly, stores in the 'Low Income' cluster would have planograms with more 'value' products.

Controlling Business Life Cycle

The planning process for any new floor plan can go through a number of stages, several of which will require approval before the floor plan is put into service.



In the above example, it can be seen that the floor plan goes through a number of statuses during the creation process. For example the fixturing is placed then approved by a manager, before the merchandise is placed and approved. It is also possible to use In-Store Space Collaboration (ISSC) to control business flows. ISSC users have the option to Accept or Reject a floor plan. These options will advance or reverse the current status of the floor plan.

The floor will eventually reach Authorised status where dates can be specified for when preparations should be started for putting the floor plan into service (Publishing) and when the floor plan will be put into service (made Current). The floor plan will normally be automatically changed to Published and Current status by a Macro Space Management utility called **Update Status**. (This utility should be set to run at regular intervals by a scheduling tool). The software will also automatically change the status of the floor plan to Historical when it is superseded by a more recent plan.

Batch processes can be used when the floor plan reaches Publish status to auto-generate the pertinent floor plan and planograms.

Communicating Information

Store Manager can also be used as a medium for communicating information. This is done in several ways.

- **File Notes**

It is possible to attach notes (short lines of text information) to floor plans. This enables store planners in Macro Space Management and In-Store Space Collaboration (who may be based in very different locations) to communicate requests and information to each other. This information can be seen in the Notes tab of the floor plan Properties dialog box.



- **Publishing a Floor Plan**

When a floor plan is Published, a hard or electronic copy can be generated via a batch process. The retailer must use their own systems to disseminate this copy of the floor plan to the store in preparation for putting it into effect. Simultaneously, the retailer must generate a report specifying the equipment, merchandise and signage required to put the floor plan into effect. Orders will then need to be placed so that these items are available when required.

Batch processes can be used when the floor plan reaches Publish status to auto-generate the pertinent planograms.

- **Making a floor Plan Effective (Current)**

When a floor plan is made effective (current), that is the signal for it to be put into service. The retailer should create a report identifying which store plans have achieved Current status and notify the stores accordingly.

Reports and the Macro Space Planning Database

Information generated in Store Manager is stored in the Macro Space Planning database. It will generally require custom reports to disseminate this information to other departments and stores within a retail organization. Example of reports could include:

- Floor plans that have reached a stage in their business life cycle that requires approval before the next stage is commenced.
- Floor plans that have reached published status.
- Bills of material for the equipment in a floor plan
- Lists of products and planograms in a floor plan
- Lists of floor plans that have reach current status and need to be put into service.
- KPIs for the performance of merchandise in a floor plan.

These reports are not supplied with the application. It is the responsibility of the retailer to develop appropriate reports that suit their specific business processes.

Integrating Store Manager into Retail Processes

Every retailer will have their own business processes. This section of the user guide can only cover basic principles in brief detail. It is intended to give new users of the application some insights into how store manager could be used within the existing processes. Users will have to adapt the general principles to suit their specific case.

Identify Need for Floor Plan Change

Typically the need for producing a new floor plan will originate from an external system. For example, a specific category in category management might have seasonal components that require updating. An instance of this might be in the meat department, where the 'Bacon and Sausage' category might be allocated more space in the summer season than in winter due to increased sales because of barbecues in the summer months.

The retailer will have to have some form of system integrating Category Management and Macro Space Planning so that requirements to update floor plans can be communicated from one system to another.

Floor Plan Created in Store Manager

As a result of the identified need, instructions would be given to a store planning manager to create a revised floor plan. The manager in turn would give instructions to a specific floor planner to create a new floor plan (or modify an existing one).

Floor Plan Ready for Approval

When the floor planner has completed the floor plan, a retailer's internal systems would probably require approval. This could be done in many ways - for example a senior manager could be given In-Store Space Collaboration enabling them to view the reports and KPIs before deciding whether to approve or reject the proposed floor plan.

Floor Plan Set to Authorised Status

On the floor plan getting approved, it can be set to Authorised status. This allows two dates to be set:

1. Publish Date

The Publish Date specifies the date at which the floor plan is to be sent to the store in preparation for implementation. It is also the date at which information on the equipment and merchandise required for the changes need to be sent to supply chain management so that they can be placed on order.

2. The Effective Date

The Effective Date schedules the date at which the floor plan will come into service (becomes Current). It can also serve as advance information for a Workforce Management System as to the amount of labor, etc., required for the changes. This would allow the retailer to plan for labor utilisation within the store or arrange for an external merchandise change management organization to come in on the scheduled date.

Update Status Changes Floor Plan Status to Published

Update Status is a small Macro Space Management utility that is typically run every night by means of a scheduling tool. At the appropriate date it will change the status of the floor plan to Published.

Publishing Planogram Designs and Floor Plan

At the same time as the status is changed, other batch tools can be used to publish any pertinent planogram designs in the floor plan and publish the floor plan itself. This information will be put in specified folders on a specific server. The retailer will have to use their reporting systems to identify the quantities of equipment, merchandise and signage needed to make the change. This information will then need to be communicated to the supply chain systems and orders placed.

The retailer will also need to use their systems to distribute the planogram designs and the floor plan to the store, together with information on when the changes are intended to come into effect.

Note: As well as ordering the equipment, merchandise and signage, other preparatory work may be required - for example in ensuring the labor is available to make the changes on the specified date.

Update Status Changes Floor Plan Status to Current

Update Status (run by the scheduling tool) changes the status of the floor plan to current. Retailers can develop a reporting tool to identify all floor plans scheduled to become current within a specified period and confirm that the store has made the necessary preparations to put the changes into effect.

Financial KPIs and Reports

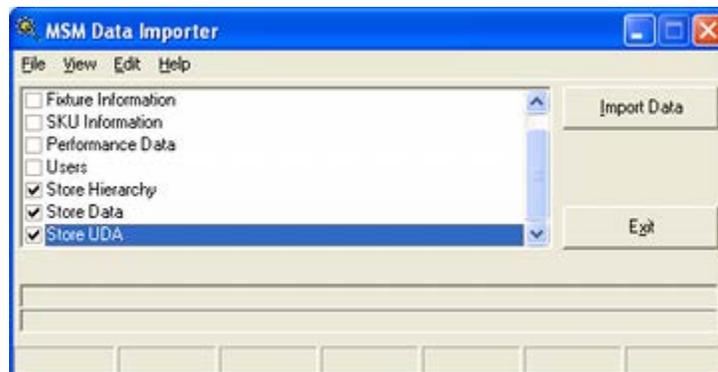
Macro Space Management allows retailers to understand how efficiently they are using space within their bricks and mortar outlets. Running KPIs and reports enables retailers to optimize future floor plans. It also allows information to be fed back into Category Management to optimize future categories and their associated assortments.

Importing Data and Setting up Store Manager

Before commencing use of Store Manager, though needs to be given as to what data is imported and how data is to be structured within Store Manager.

Importing Data

Macro Space Management has a Data Import module. This enables data to be taken from external databases and imported into the Macro Space Planning central database. Activating this module brings up the MSM Data Importer dialogue box.



This allows the classes of data to be imported to be selected. Data Importer is fully configurable

Oracle's consultants can configure the exact nature of the data import so that specified data is selected from the designated databases and imported into the required fields within Macro Space Management's central database.

Configuring the Store Manager Hierarchy

General

Before Macro Space Management can be used, it is necessary to set up a Hierarchical Tree within Store Manager. This structure enables the stores to be arranged in logical groupings by means of Clusters and Sub-clusters.

The performance of individual Stores can be compared against selected Prototype Stores, while the performance of one cluster of stores can be compared against another cluster.

The structure of this hierarchical tree should be carefully considered as it will affect the quality of information that can be produced using Macro Space Management, and hence determine the effectiveness of Macro Space Management as a tool for improving the profitability of a business.

Planning the Structure

Typical information needed to plan how individual stores should be assigned within the structure includes:

- Store Size
- Store Turnover
- Store Location
- Store Demographics

Criteria can then be developed as to cluster types, and hence whether individual stores should be assigned to single or multiple clusters.

For example, a store could be associated with three separate and distinctive clusters. One cluster would enable the store to be compared against those in other regions, one against stores of similar turnover, and the third against stores of similar size.

Consideration should also be given to which stores can be designated as Prototypes for comparison purposes. Correctly assigned prototype stores will also allow swift and effective comparison of individual store performance against an exemplar.

A correctly planned structure can significantly improve the performance of a retail organization – a poorly planned structure could prevent the full power of Macro Space Management being used.

Store Manager - Overview

Overview of Store Manager Module

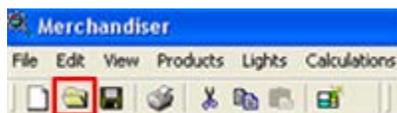
Accessing the Store Manager Module

Store Manager can be accessed from either the Planner or Merchandiser modules.

In Planner, Store Manager is accessed by clicking on the Open File option in the standard toolbar. Alternatively, the Open File option can be selected from the File menu.



In Merchandiser, Store Manager is also accessed by clicking on the Open File option in the standard toolbar. Alternatively, the Open File option can be selected from the File menu.

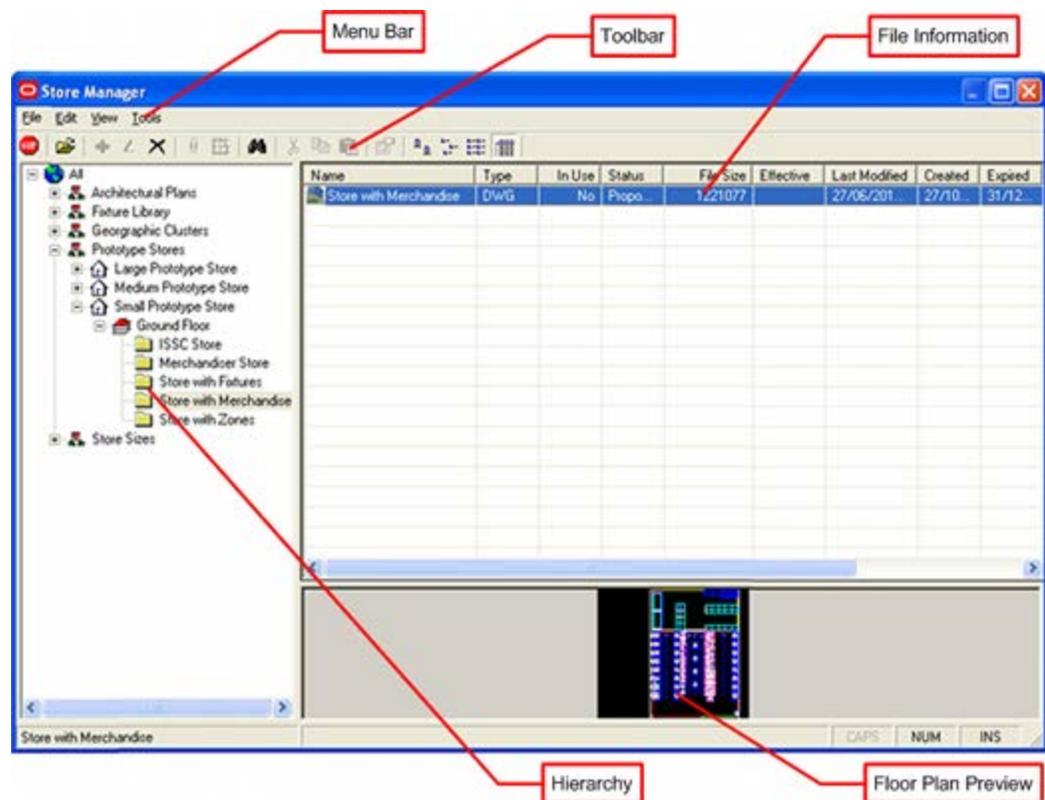


Overview of Module

Oracle's Macro Space Management software combines the traditional merchandising approach with store planning, construction, operation and inventory management. It is designed to maximize profitability and returns by enabling the optimum layout and mix of products to be efficiently planned right across an organizations' range of retail outlets.

Macro Space Management contains large amounts of information. This can be as specific as the current contents of a shelf in a single store or as general as the floor plans to be implemented business wide in 6 months time. This mass of information has to be organized and administered. Within Macro Space Management this is achieved by the Store Manager module.

Store Manager operates in a similar way to Windows Explorer. It has been designed to be easy to use and allows information to be grouped in a way that reflects the structure of the organizations.



The menu and tool bars can be seen to the top left of the window.

A frame showing the hierarchical tree of Clusters, Stores, Floors and Revisions can be seen to the left of the window.

The files associated with a particular Revision can be seen in the frame to the upper right.

A preview of the drawing to be selected can be seen towards the lower right.

Using Store Manager you can:

- Assign your retail outlets to logical groupings, allowing comparisons and analysis of sales to be made between individual stores or groups of stores.
- Assign or change floor plans for stores, allowing the effects of differing store layouts or merchandising mixes to be evaluated.
- Carry out routine administration on the files used within Macro Space Management.
- Get reports on the data used within Macro Space Management.
- Interface with external programs allowing import and export of data to and from those programs.

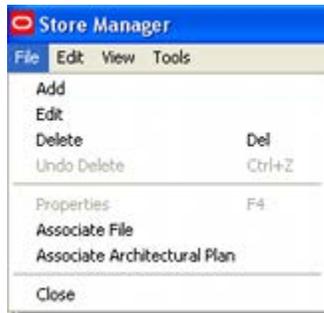
Note: Macro Space Management's sister program, In-Store Space Collaboration, can be used to access and edit drawings held in the central Macro Space Management database.

The Store Manager Menu Bar

The Store Manager Menu bar contains several options:



File activates a pull down menu with options primarily concerned with operations on files.



Some of these may be grayed out depending on what Store Manager function is being used.

This menu can be used to add, edit and delete files and to associate files and architectural plans.

Edit activates a pull down menu with options to cut, copy and paste files.



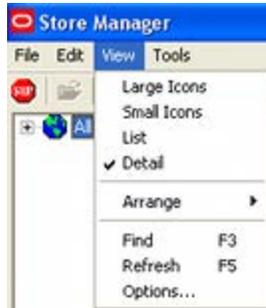
Some of these may be grayed out depending on what Store Manager function is being used.

View activates a pull down menu with various options controlling the way Store Manager appears.



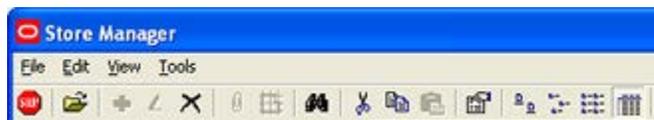
These can be used to change the way Store Manger displays information.

The **Tools** option is only available to administrators and is toggled on and off by means of <Ctrl + A>.



It contains a series of options used to check in files, check directory integrity, import files and create hierarchies.

The Store Manager Toolbar



The Store Manager toolbar contains a series of options for administering the objects and files in Macro Space Management. Depending on which operation is being carried out, one or more options may be greyed out (unavailable).

Icon	Description
	Close Store Manager
	Open a Drawing
	Add an Item
	Edit an Item
	Delete an Item
	Create reports
	Associate File
	Associate Architectural Plan

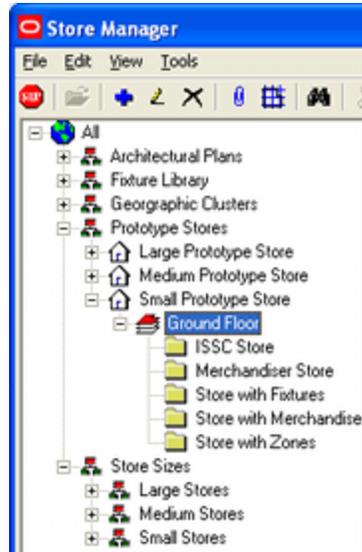
Icon	Description
	Search
	Cut
	Copy
	Paste
	Properties
	Large icons for files
	Small Icons for files
	List of files
	Details of files

Basic Concepts

This section of help covers some basic concepts helpful to new users.

Hierarchical Structures

A **Hierarchical structure** is one where objects are organized in the form of a tree. The more fundamental data is close to the trunk, while the more dependent data is further out on the branches. The most fundamental part of the hierarchical structure is the root.



Hierarchical structures are used to allow objects to be set out in a logical relationship to each other.

The Prototype stores cluster contains prototype stores of different sizes. These stores each have floors associated with them - and the floors have revisions associated with them.

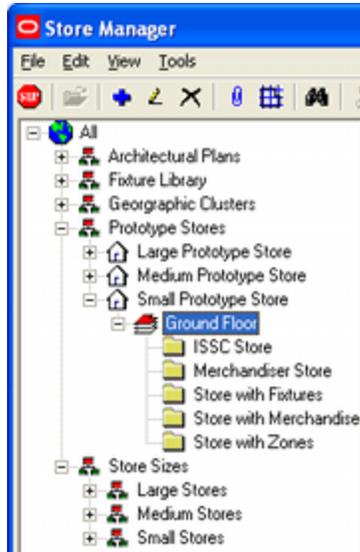
Parent-Child Relationships

Some objects within Store Manager are linked together in such a manner that changes to one object may result in changes to other objects linked to it. Such objects are described as being in a parent-child relationship. The object that has dependent objects associated with it is known as the parent, while the objects that are associated with the parent object are known as the children.

In a hierarchical structure, children of one parent can be parents of their own children in turn.

When the status of a parent object is changed; it can often result in changes to the status of child objects. Similarly, the status of parent objects can sometimes only be changed when the status of the appropriate child object is correct.

When a parent object is deleted, it affects all the associated child objects. Conversely, a child object can often be deleted without affecting the parent.

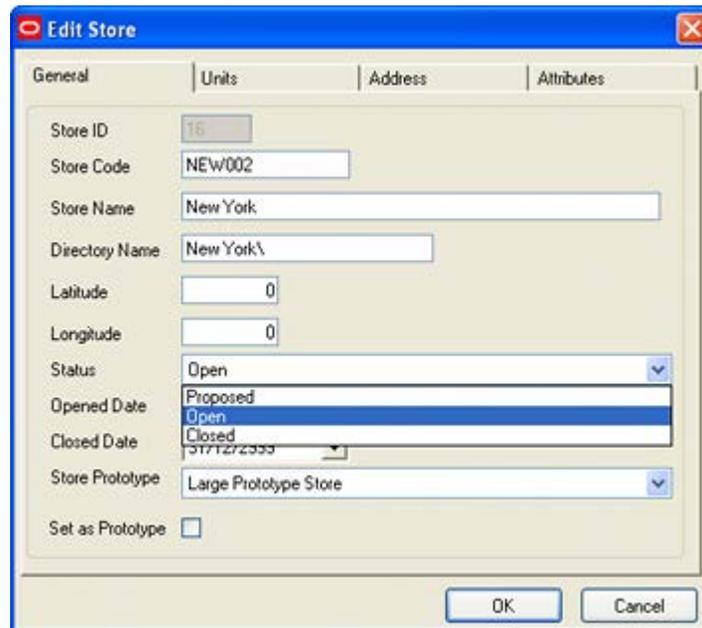


In the above example, the Ground Floor is a child of the Small Prototype store, but is a parent several Revisions - including 'Store with Fixtures'.

Status

Status defines the current standing of an object within the business life cycle.

For example, Stores generally have three statuses.



At the beginning of the process, the Store has a **Proposed** status as it is only at the design stage. When the store has been built, its status will change to **Open**. Finally, if the store has reached the end of its useful life, it will be assigned **Closed** status.

The status of an object thus changes as Macro Space Management users move through the business cycle.

Publish and Effective Dates

Publish and **Effective** dates are associated with the status of a floor plan.

The Publish date is the date at which the floor plan is issued to the stores. Floor plans are typically published a number of days or weeks in advance of the time the changes are required.

The Effective date is the date at which the published drawing becomes current.

Publish and Effective dates can be turned on or off by making changes to the ENABLE_FILE_TRIGGER_DATES system variable in the Administration Module.

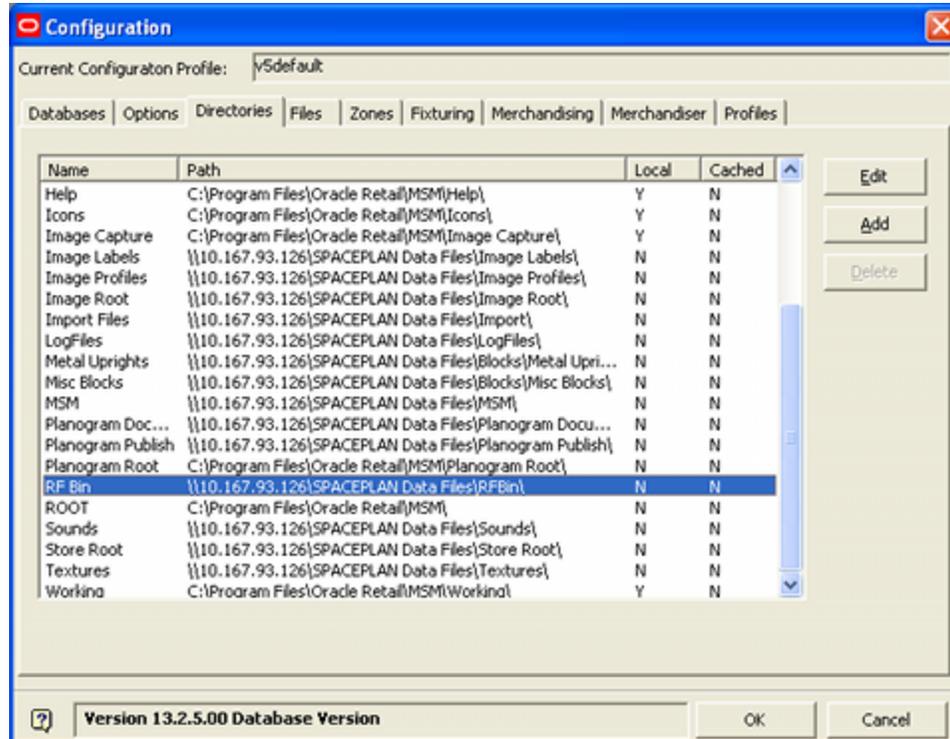
Note: It is STRONGLY recommended that users discuss this with Oracle's Technical Support team before making the changes.

Once enabled, Publish and Effective dates can be used to automatically change the status of revisions and drawings by making use of the UpdateStaus.exe file in the Macro Space Management/Tools sub-directory.

Note: UpdateStatus.exe can be set to run on a daily or weekly basis by the Windows task manager, allowing some degree of automation of common tasks. However, for full automation of common tasks, it is recommended that Macro Space Management users use the Enterprise version of Macro Space Management.

RFBin

The **RFBin** is Macro Space Management's equivalent of the Recycle Bin. Files marked for deletion are sent to the RFBin, but will not be permanently deleted until the **Purge** option is used in the Tools menu. Its location is specified in the Directories tab of the Configuration module.



The path to this directory can only be changed by users with rights to the Administration module.

Overview of Objects

This section of help describes the objects found in the Store Manager hierarchy.

Store Root



The **Store Root** is the origin of the hierarchical tree. All other data emanates from the root.

Normally, stores are grouped in clusters and sub-clusters. However, it is possible to add stores directly at the root level without them being associated with a cluster or sub-cluster.

Clusters



A **Cluster** is a logical grouping of stores that meet specified criteria. Examples of possible groupings for Clusters include stores that are:

- In the same country.
- In the same region.
- Of the same size.
- Of the same turnover.

- Of the same internal layout.

Clusters of a specific type can be further divided into sub-clusters.

Sub-Clusters



A **Sub-cluster** is a sub-division of a Cluster. Sub-clusters are used to allow a finer level of detail when analyzing the performance of groups of stores.

For example the cluster of stores labelled England might be further sub-divided into sub-clusters called north, central and south.

Stores



A **Store** is the unique description of a specific retail outlet. Stores are made up of one or more floors.

Stores are normally associated with one or more clusters; although they can, (less usually), be directly associated with the Store Root.

Floor



A **Floor** is a distinct physical level within a store.

A Floor can contain one or more revisions, (arrangements of fixtures and fittings), associated with it.

Revision



Revision is the name given to a version of the arrangement of fixtures and fittings on a floor. Floors can have many revisions. For example, a floor could have Spring, Summer, Autumn and Winter revisions, each representing a planning arrangement to be used at the appropriate time.

Revisions are often color coded to show their status. Floors can also have different revisions showing different marketing mixes, fixture arrangements, etc.

Files

A **File** is a general description for a category of records. Floor plans are files, as are Architectural Plans.

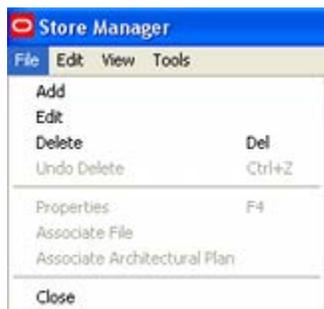
The Store Manager Hierarchy

General Note on Adding, Editing and Deleting Objects

There are three broad ways of invoking the Add, Edit or Delete options.

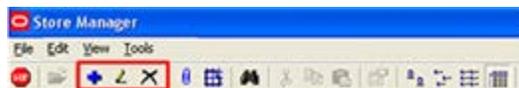
File Menu

Objects can be added to, edited in or deleted from the hierarchy by highlighting an appropriate object and selecting the pertinent option from the **File** menu.



Toolbar

Objects can be added to, edited in or deleted from the hierarchy by highlighting an appropriate object and selecting the pertinent option from the **Toolbar** menu.



Right Click Menu

Objects can be added to, edited in or deleted from the hierarchy by highlighting an appropriate object right clicking to bring up the **Right Click Menu**.



Deleted Objects

Whether objects are visible after deletion depends on whether the **Show Files Marked for Deletion** option has been selected in the **Options** dialog box accessed from the **View** menu. If selected, objects marked for deletion will show with a black cross.

Name	Type	In Use	Status	File Size
 Proposed Summer Plan-1	DWG	No	Proposed	1791459
 Proposed Summer Plan-2	DWG	No	Proposed	74136

If not selected, the objects marked for deletion will be hidden from view until purged.

Adding, Editing and Deleting Clusters

Add and Edit Dialog Boxes

The Add and Edit dialog boxes are identical but for the title. Only the Add dialog box will be shown in this section, but the descriptions of the fields equally apply to the Edit dialog boxes.

Adding (and Editing) Clusters

To add a Cluster, highlight the Store Root or another cluster and select **Add** from the **File Menu**, **Toolbar** or **Right Click Menu**. The **Add Cluster** dialog box will appear.



Cluster ID: once the dialog box is saved, this field will populate with the ID that is the primary key in the database.

Cluster Name: This is the name assigned to the cluster.

Cluster Type: This is assigned from a drop down list. It is normally used as a filter for reporting purposes.

Cluster Code: This is the unique identifying code assigned to the cluster.

Deleting Clusters

To delete a cluster, highlight it and select **Delete** from the **File Menu**, **Toolbar** or **Right Click Menu**. The cluster is now marked for deletion but will not be permanently removed until purged using the **Purge** option from the **Tools** menu.

Adding, Editing and Deleting Stores

Add and Edit Dialog Boxes

The Add and Edit dialog boxes are identical but for the title. Only the Add dialog box will be shown in this section, but the descriptions of the fields equally apply to the Edit dialog boxes.

Adding (and Editing) Stores

To add a store, highlight the parent cluster and select **Add** from the **File Menu**, **Toolbar** or **Right Click Menu**. The **Add Store** dialog box will appear. There are four tabs.

1. General Tab

In the General Tab:

Store ID: Once the dialog box is saved, this field will populate with the ID that is the primary key in the database.

Store Code: This is the unique code used to identify the store.

Store Name: this is the name of the store.

Directory Name: This is the name of the directory that will be automatically created to hold the files associated with the store. It will be created below the **Store Root** specified in the **Directories Tab** of the **Configuration Module**.

Latitude: This can be entered to identify the position of the store.

Longitude: This can be entered to identify the position of the store.

Status: This is set from a drop down list. It specifies where the store is in its business life cycle.

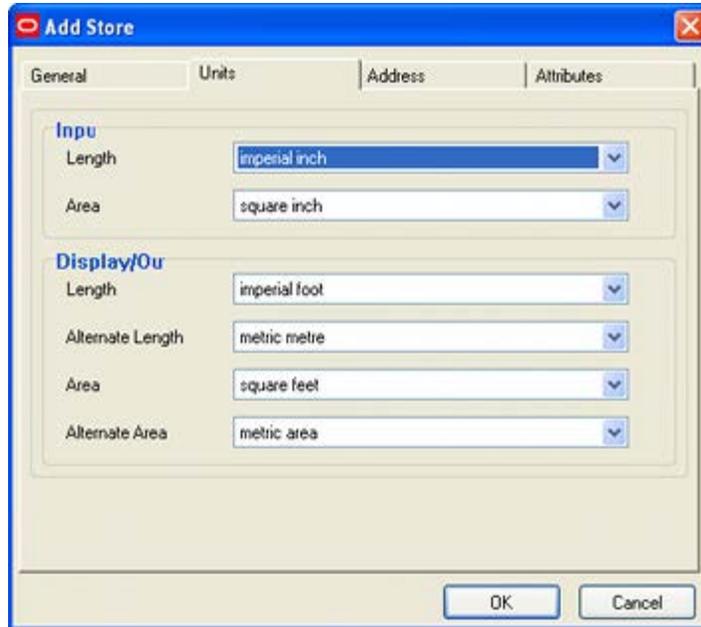
Opened Date: This is the date the store is scheduled to open. If the store is not at Open status when this date is reached, Update Status will automatically change the status to Open.

Closed Date: This is the date the store is scheduled to close. If the store is not at Closed status when this date is reached, Update Status will automatically change the status to closed.

Store Prototype: This enables the user to specify another store to be used as a prototype for comparison purposes. Available prototypes are set by selecting the Set as Prototype check box.

Set as Prototype: This check box designates the store as a Prototype. If set as a prototype, it cannot have a prototype store assigned to it.

2. Units Tab



- **Input Units**

Length: These are the default length units used for the floor plan.

Area: These are the default area units used for the floor plan.

- 2. **Display/Output Units**

Length: These are the default length units used for displaying information the floor plan.

Alternative Length: These are the alternative length units used for displaying information for the floor plan.

Area: These are the default area units used for displaying information the floor plan.

Alternative Area: These are the alternative area units used for displaying information for the floor plan.

- 3. **Address Tab**

Address: Line 1
Line 2
Line 3
Line 4

Post Code: AB1 CD2 Area Code: ABCD

Telephone: 01234 56789

OK Cancel

Address: There are 4 lines available to enter the address of the store.

Post Code: This field holds the post code of the store. This might be used in the UK.

Area Code: This field holds the area code of the store. This might be used in the US.

Telephone: This field holds the telephone number of the store.

4. Attributes Tab

	Property	Value
1	Manager	Joe Bloggs
2	Regional Manager	Jane doe
3	Demographic	Multi Racial
4	Normal or Mirrored	Normal
5	Next Stock Check Due	31/12/12

OK Cancel

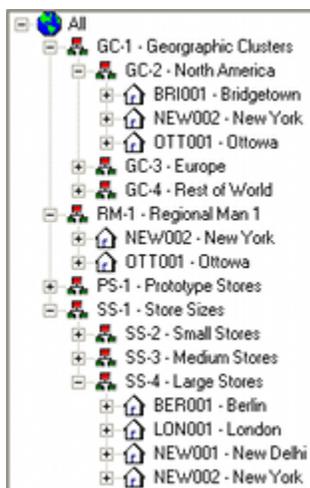
The attributes tab contains the name and value of the User Defined Attributes assigned to the store. These are configured in the Administration Module and will vary from retailer to retailer.

Deleting Stores

To delete a store, highlight it and select **Delete** from the **File Menu**, **Toolbar** or **Right Click Menu**. The store is now marked for deletion but will not be permanently removed until purged using the **Purge** option from the **Tools** menu.

Adding Stores to Multiple Clusters

Stores can belong to more than one cluster. This enables stores sharing a common characteristic to be grouped together for reporting, control or planning purposes.



In the above example, the New York store is in the following clusters:

- North America
- Large Stores
- Regional Manager 1

This enables New York to be selected along with all stores in North America, all Large Stores or all stores supervised by Regional Manager 1.

Note: Copying a store merely associates it with multiple clusters - it does not duplicate the floor plans associated with the store.

Adding Stores to Multiple Clusters

To add a store to a multiple cluster, highlight the store and choose the **Copy** option from the **Edit** menu, **Toolbar** or **right click menu**. Select the required cluster to copy the store to and use the **Paste** option from the **Edit** menu, **Toolbar** or **right click menu**.

Removing Stores from Multiple Clusters

To remove a store from a cluster, highlight the store then select the **Delete Link** option from the **right click menu**. This will remove the database link between the store and that specific cluster, but it will remain associated with any other clusters it has been copied into.

Adding, Editing and Deleting Floors

Add and Edit Dialog Boxes

The Add and Edit dialog boxes are identical but for the title. Only the Add dialog box will be shown in this section, but the descriptions of the fields equally apply to the Edit dialog boxes.

Adding (and Editing) Floors

To add a floor, highlight the parent store and select **Add** from the **File Menu**, **Toolbar** or **Right Click Menu**. The **Add Floor** dialog box will appear.

Floor ID: Once the dialog box is saved, this field will populate with the ID that is the primary key in the database.

Floor Type: This is the type of floor. It is set from a drop down list which is pre-populated with names like Basement, ground floor, etc.

Description: This is the name given to the floor.

Directory: This is the name of the directory that will be automatically created to hold the files associated with the floor. It will be created below the directory for the parent store.

Status: This is set from a drop down list. It specifies where the floor is in its business life cycle.

Allocated Area Tolerance: This is a value that can be entered for reporting purposes. It allows the actual area allocated for retail purposes to be compared with some theoretical value.

Elevation: This field can be used to specify the height above ground level for reporting purposes.

Edit Levels: This button can be used to edit the default levels for items of equipment that are to be placed at levels other than floor level. Examples would be posters and banners. If not activated during the creation of the floor, these levels cannot be edited later.

Adding, Editing and Deleting Revisions

Add and Edit Dialog Boxes

The Add and Edit dialog boxes are identical but for the title. Only the Add dialog box will be shown in this section, but the descriptions of the fields equally apply to the Edit dialog boxes.

Adding (and Editing) Revisions

To add a floor, highlight the parent floor and select **Add** from the **File Menu**, **Toolbar** or **Right Click Menu**. The **Add Revision** dialog box will appear.

Revision ID: Once the dialog box is saved, this field will populate with the ID that is the primary key in the database.

Revision Number: This is a number that can be assigned to the revision.

Revision Description: This is the name of the revision.

Directory: This is the name of the directory that will be automatically created to hold the files associated with the floor. It will be created below the directory for the parent floor.

Status: This is set from a drop down list. It specifies where the revision is in its business life cycle.

Season Description: This drop down list allows the user to select a season from a list of predefined seasons. If set, this can be used (in conjunction with the **Custom SQL**) to filter data in the **Object Grid**.

Birth Date: This is the date the revision was created.

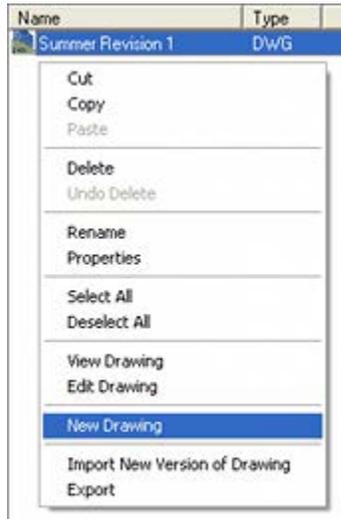
Death Date: This is the date the revision went out of service.

Adding, Editing and Deleting Floor Plans

Adding Floor Plans

If the **Add Proposal Drawing** check box is selected when a new revision is created, a new floor plan will be automatically created in the new revision. To add a new or additional

floor plan, go to the right hand pane in Store Manager and bring up the right click menu. Select **New Drawing**. A new floor plan will be created.



When the floor plan is first created, it will be auto-assigned a name - in this example Proposal290.

Name	Type	In Use	Status
Summer Revision 1	DWG	No	Proposed
Proposal290	DWG	No	Proposed

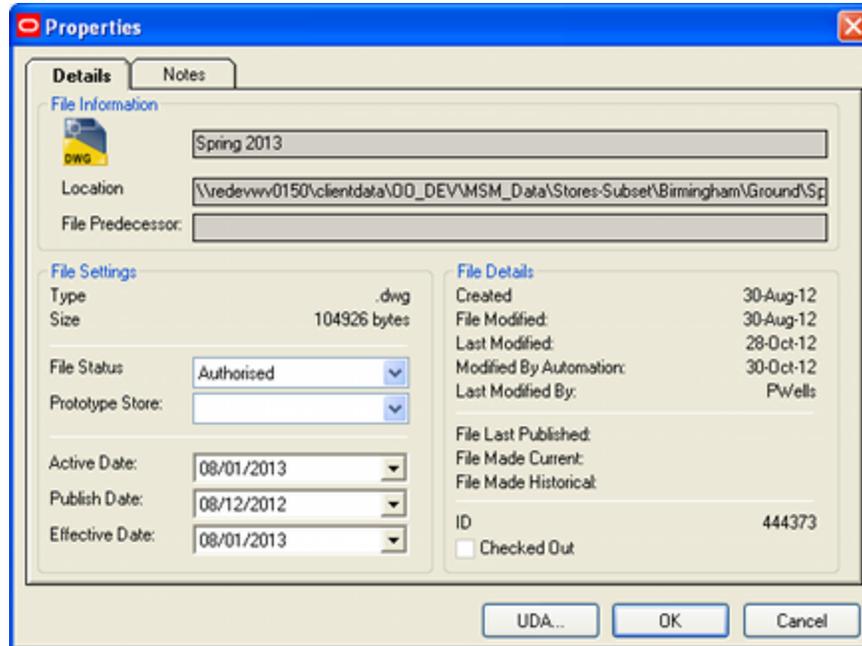
This name can be changed by highlighting it and selecting **Rename** from the right click menu.

Editing Floor Plans

When a floor plan has been added, it can be edited by highlighting it and selecting the Properties option on the Right click menu. This will bring up the Properties dialog box.

Details Tab

The Details tab contains information of the floor plan.



File Name is the name assigned to the file - this will typically be the name of the floor plan.

Location is the path to where the physical copy of the DWG file is held. This will be below the **Store Root** specified in the **Directories Tab** of the **Configuration Module**. (This tab is only accessible if the configuration module is opened via the Administration module).

File Predecessor is the name of the file this file was derived from. This will be populated if the file was created automatically as a result of the **Planogram Substitution** process.

Type shows the extension of the file - and hence its type. The DWG extension indicates it is an AutoCAD file.

Size is the physical size of the file.

File Status is where the floor plan is in its business life cycle. See the section on statuses for more information.

Prototype Store is the name of another store which can be used for comparison purposes. After being set up through the **Custom SQL**, it is possible to compare the selected floor plan with the floor plan at Current status in the prototype store. This enables differences to be compared for reporting purposes.

Active Date is the date at which the floor plan is scheduled to come into service. This date can be used as a filter to determine whether equipment of merchandise will be available for placement at the time which the floor plan will be made current (active).

Publish Date will be grayed out and unavailable until the floor plan is at Authorised status. Once set, the publish date is the date at which **Update Status** will automatically change the status of the floor plan to Published. A copy of the floor plan will then be placed in the designated export directory for onward transmission to the store in preparation for putting the floor plan into service. When the Publish Date first appears, it will be set to a default value by the software.

Effective Date will be grayed out and unavailable until the floor plan is at Authorised status. Once set, the effective date is the date at which **Update Status** will automatically change the status of the floor plan to Current. This is the signal (via an appropriate

reporting system) for the store to put the floor plan into effect. When the Effective Date first appears, it will be set to a default value by the software.

Created is the date the floor plan was originally created in Store Manager. Alternatively, if the floor plan was imported, this will be the date it was originally created in raw AutoCAD.

File Modified is the date the floor plan was originally created in Store Manager. Alternatively, if the floor plan was imported, this will be the date it was last modified in raw AutoCAD. Once the file has been saved in Planner, the database will hold the date of that save but the File Modified field will continue to show the date it was last modified in raw AutoCAD.

Last Modified is the date the file was last saved by a user in the Planner or Merchandiser modules or in In-Store Space Collaboration.

Modified by Automation is the date the file was last modified by a batch process such as planogram substitution.

Last Modified By is the individual or process that last modified the file.

Note: The **Created**, **File Modified**, **Last Modified** and **Modified by Automation** dates can be used to decide on how to manually synchronize the floor plan if Auto-Synchronization is not enabled: see the section on synchronisation.

File Last Published is the date the file was last published as a result of **Update Status** being run.

File Made Current is the date the file was made current - typically as a result of **Update Status** being run.

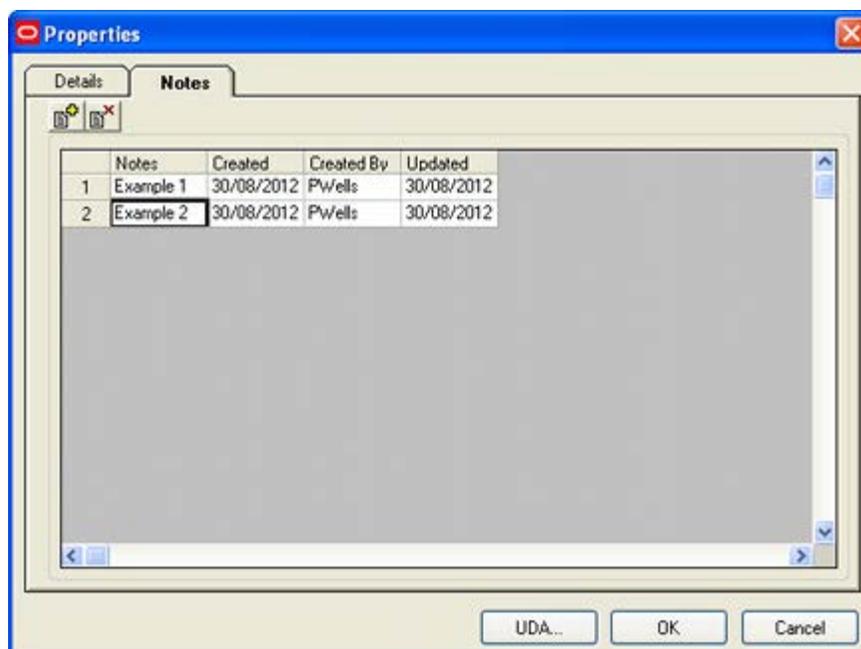
File Made Historical is the date the floor plan was superseded as a current file by another floor plan. This change is made automatically by the software and the date set accordingly.

ID is the value of the **FIL_ID** field in the **AVTTB_FILE** table in the database. This information is provided to assist support personnel in problem solving.

Checked Out indicates whether the file is in use or not.

Notes Tab

The Notes tab holds details of notes created in both Macro Space Management and In-Store Space Collaboration. These notes are visible in both applications and serve both to record and communicate data.



- **Macro Space Management**

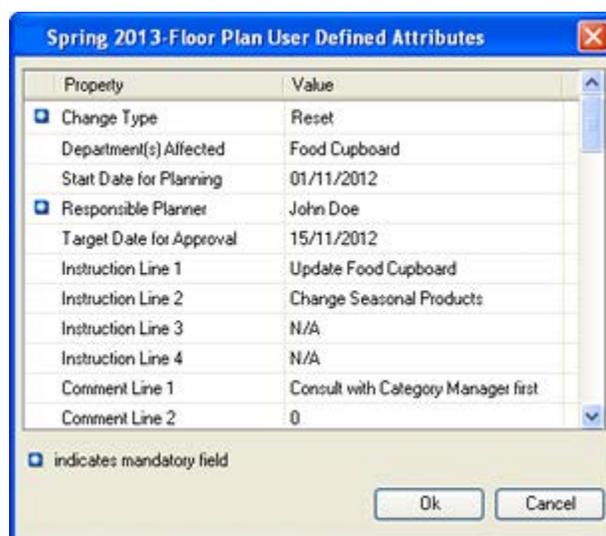
Notes can be entered by typing them into any vacant line. Existing notes can be edited by selecting them then typing a revised entry. Notes in MSM only apply to the floor plan itself and cannot be applied to objects within that floor plan.

- **In-Store Space Collaboration**

ISSC users can add notes to the floor plan. They can also add notes to objects in the floor plan such as zones and fixtures. These notes can be read in MSM.

UDA Option

Clicking the UDA button will bring up the Floor Plan User Defined Attributes dialog box. This holds retailer specific information for the floor plan. In the example below, it has been configured to hold information on why the floor plan is being updated.



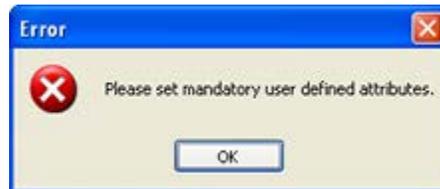
The list of available fields can be configured using the User Defined Attributes option from the General Menu in the Administration module. Users in Store Manager can then

set the values for each floor plan. Depending on how each field has been configured in the Administration module, users can enter numeric, text or currency values, select from a drop down list, enter a date from a calendar or tick or untick a check box.

Some values can be defined as mandatory when they are configured in the Administration module. These are indicated by a blue asterisk. If a mandatory value is not filled in this will be indicated by a red cross; as can be seen for the Responsible Planner field in the screen shot below.

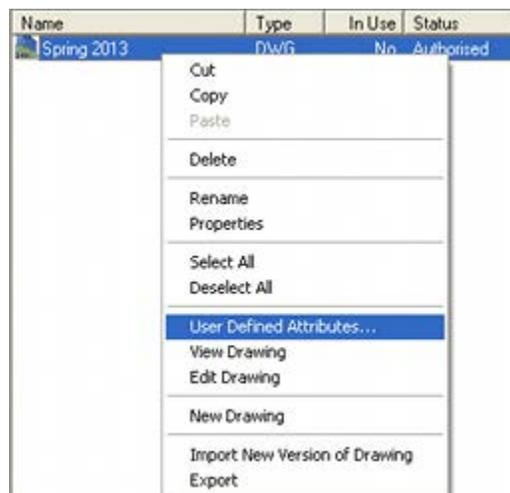
Property	Value
<input checked="" type="checkbox"/> Change Type	Reset
Department(s) Affected	Food Cupboard
Start Date for Planning	01/11/2012
<input checked="" type="checkbox"/> Responsible Planner	
Target Date for Approval	15/11/2012

If the user attempts to close the User Defined Attributes dialog box without setting a mandatory attribute, a warning will result.



- **Accessing the File UDA dialog box directly**

If required, the File UDA dialog box can be accessed directly from the right click menu in the list pane store Manager.



If multiple floor plans have been selected, the File UDA dialog box will display the attributes for the last floor plan selected.

Importing, Exporting and Copying Floor Plans

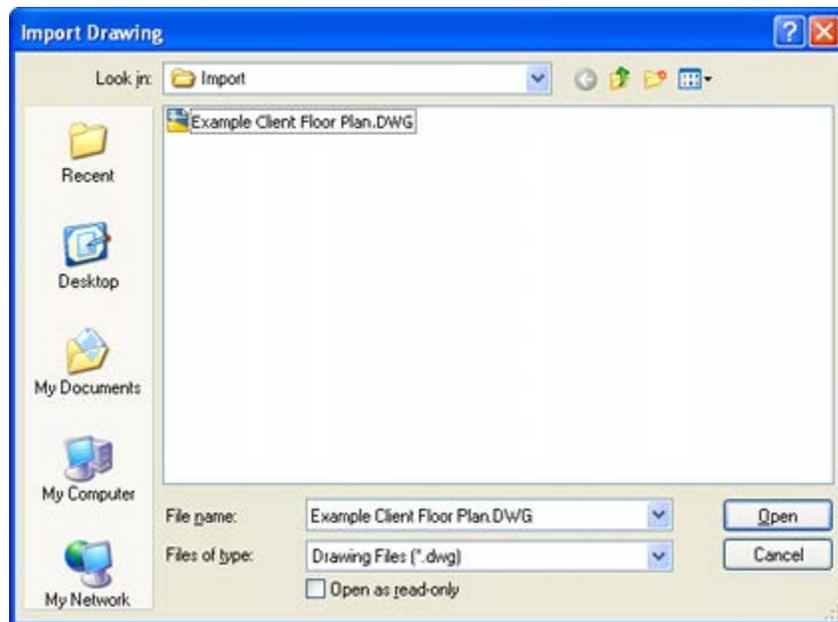
Floor plans can be either imported or copied.

Importing Floor Plans

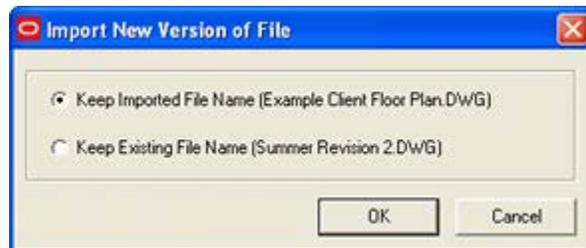
Floor plans can be imported into Store Manager. This is done by highlighting an existing floor plan (this can be a blank) and then selecting the Import New Version of Drawing option from the right click menu.



This will bring up the **Import Drawing** dialog box.



This enables users to browse to the Windows folder holding the floor plan and select it. On clicking the **Open** button, the **Import New Version of File** dialog box will appear.

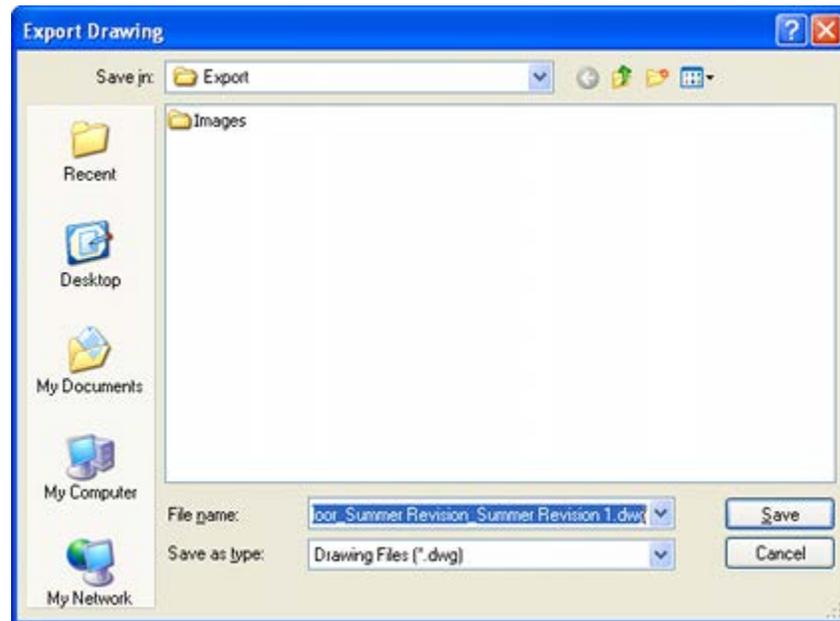


Users can select whether to keep the existing file name or use that of the file to be imported.

Important Note: objects in the imported floor plan will not be written to the MSP database until the file has been synchronised '**Match the Drawing**'. Blocks in the imported floor plan that also exist in Fixture Studio will then be written to the database.

Exporting Floor Plans

Floor plans can be exported from Store Manager by highlighting the pertinent floor plan then selecting **Export** from the right click menu. This will bring up the **Export Drawing** dialog box.



The filename will be a composite of the form: **Store Name_Floor Name_Revision Name_File Name**. After selecting an appropriate directory, the file can be exported by clicking the **Save** button.

Copying Floor Plans

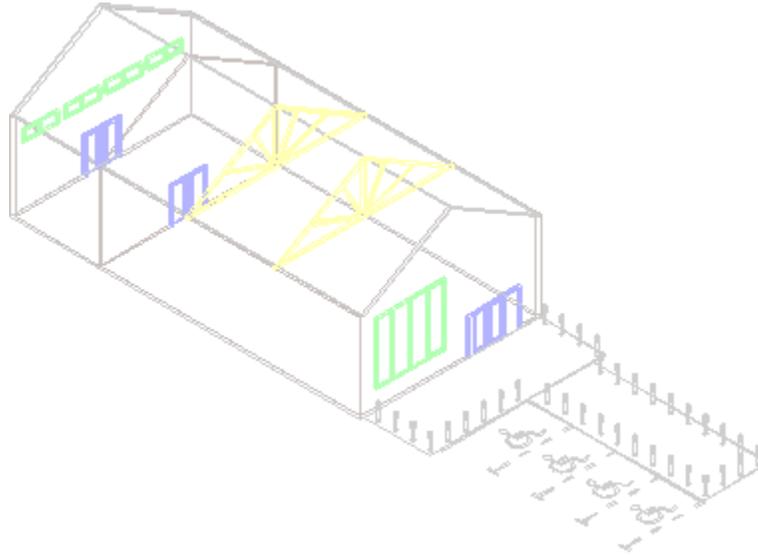
Floor plans can be copied within a revision or from one revision to another. Copying is done by highlighting the required floor plan then selecting the Copy option from the right click menu. After navigating to the required location, the Paste option can be used from the right click menu to place a copy of the file. At the same time and exact copy of all existing information in the database for the original file is created for the copied file.

Note: If copying from one floor to another, any architectural plans associated with the original should be temporarily unchecked. Once the floor plan has been pasted to the revision in the new floor, it can be associated with any architectural plans associated with that floor. The architectural plans can also be re-associated with the old floor plan.

Associating Architectural Plans

Overview of Architectural Plans

Architectural Plans can only be associated with Floors. They contain information on the structure and fabric of the building including the position of walls, doors, electrical systems and other services.



The above screen shot shows a DWG type architectural plan in isometric view. Its outlines show fainter than other objects in the floor plan because it effectively serves as an underlay to the floor plan. This architectural plan shows the structure of the store and allows the zones to be correctly drawn and the fixtures correctly positioned with respect to the walls, doors and windows.

Architectural plans are used in two stages:

1. They must first be associated with a parent floor in Store Manager.
2. After the architectural plan has been associated with a specific floor, it can then be associated with any child floor plan. This is done from the Insert menu in the Planner module once the floor plan has been opened in Planner.

Types of Architectural Plans

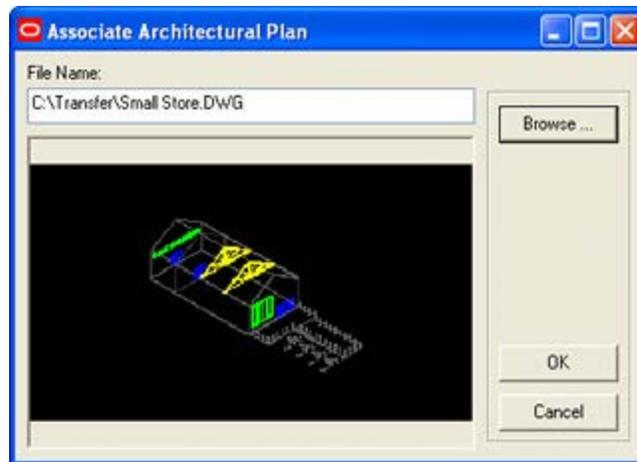
Macro Space Planning recognizes two forms of architectural plans:

- DWG files can only be used within the Planner module.
- DWF files can be used both within the Planner module and in In-Store Space Collaboration (ISSC).

Because of a current limitation of the software, if a DWF file is to be used for ISSC, it must be associated before any DWG files are associated for use in Planner. If this is not done, the DWF file will fail to appear in ISSC.

Associating an Architectural Plan

Architectural plans can only be associated with floors. Once associated this makes them available for use within any floor plan associated with the parent floor. Architectural Plans can be associated by highlighting the required floor then selecting the Associate Architectural Plan command from the **File menu**, the **Toolbar** or the **right click menu**. This will bring up the Architectural Plan Association dialog box.



1. Browse to the required file.
2. Click **OK**.
3. The file will be copied to the specified folder and will become available for use within individual floor plans.

Note: The architectural plan will not appear in an individual floor plan unless it is associated with it using the **Insert** menu in the **Planner** module once the floor plan has been opened in **Planner**.

Associating Files

Files can be associated with any level of the store hierarchy except clusters. Any form of file can be associated including:

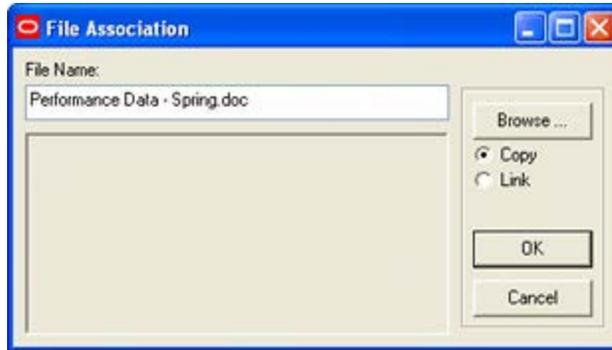
- Word documents
- Excel spreadsheets
- PDF Files

These files can be used for many purposes including:

- Performance reports at store, floor and floor plan level
- Store specific information on suggested improvements to merchandise
- Non-MSP information that will be useful for store planners.

How to Associate Files

Files can be associated by selecting the **Associate File** command from the **File menu**, the **Toolbar** or the **right click menu**. This will bring up the File Association dialog box.



1. Browse to the required file.
2. Specify whether the file is to be copied into Store Manager or whether a link is to be created to an external file.
3. Click OK.
4. If the file is copied, a copy will be imported into the appropriate folder in Store Manager.

Name	Type	In Use
Ground Floor		
Tallin Performance Data - Spring	DOC	No

5. If a file is linked, MSP will hold a copy of the path to the file.

Note: If linking to a file, ensure it is available on a network resource or it might not be available to all users.

The advantage of linked files is that the latest version will be available if they are updated by an external program. Copied files will need to be re-imported in order that the latest version is available in Store Manager.

Deleting Associated Files

Deleting associated files may be carried out by highlighting them then selecting the **Delete** command from the **File menu**, the **Toolbar** or the **right click menu**. The file will not be permanently deleted until the **Purge** option is used from the **Tool** menu.

Overview of Statuses

Concept of Statuses

Statuses are used to indicate where an object is in its business life cycle. For example a store will go through a design stage, be built, be opened, be closed for refurbishment, reopen for business and finally be closed as its structure wears out or it is sold. By being able to set statuses in the store hierarchy, store planners can indicate where stores, floors, revision and floor plans are in their business life cycle - and hence control activities based on that information. The example below shows example statuses for a store.

The screenshot shows the 'Edit Store' dialog box with the 'General' tab selected. The 'Status' dropdown menu is open, displaying the following options: 'Open', 'Proposed', 'Open', 'Closed', and 'Closed'. The 'Open' option is currently selected. Other fields in the dialog include 'Store ID' (16), 'Store Code' (NEW002), 'Store Name' (New York), 'Directory Name' (New York\), 'Latitude' (0), 'Longitude' (0), 'Opened Date', 'Closed Date', 'Store Prototype' (Large Prototype Store), and a 'Set as Prototype' checkbox.

For example, a floor plan may go through a series of stages during the planning processes - these would include laying out the equipment, receiving approval for that layout, laying out the merchandise, receiving approval for that merchandise, authorizing that floor plan to go into service, publishing the floor plan, putting it into service and finally retiring it from service.

Because a large retail organization may have several thousand stores and an even large number of floor plans, it is standard practice to set up a report identifying which objects have had their statuses changed recently and what actions are required.

Configuring Statuses

Macro Space Planning has a set of default statuses configured. The list of available statuses can be modified using the Status dialog box in the Administration module. This also allows the order statuses are displayed, whether they are reversible, whether files become read only when the status is selected, etc.

Note: See the Administration Module User Guide for more information.

Type /	Level	Description	Order	Reversible	Read Only	Selectable	Accept	Reject	Approve	Code
Block										
Block	Proposed	Proposed	1	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>			<input type="checkbox"/>	BLK-1
Block	Current	Current	3	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			<input type="checkbox"/>	BLK-2
Block	Historic	Old	4	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			<input type="checkbox"/>	BLK-3
File										
File	Proposed	Proposed	1	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>			<input type="checkbox"/>	FIL-1
File	Ready for ISSC	Ready for ISSC	2	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Authorised	Proposed	<input checked="" type="checkbox"/>	FIL-2
File	Authorised	Authorised	3	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>			<input type="checkbox"/>	FIL-3
File	Published	Published	4	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			<input type="checkbox"/>	FIL-4
File	Current	Current	5	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>			<input type="checkbox"/>	FIL-5
File	Historic	Historical	6	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>			<input type="checkbox"/>	FIL-6

Users and In-Store Space Collaboration

Users in In-Store Space Collaboration have the ability to indirectly change the status of a floor plan. When closing and saving a floor plan, some users have the option to **Accept** or **Reject** that floor plan. This will result in the present status of that floor plan being changed to a predefined alternative.

Non-Reversible Statuses

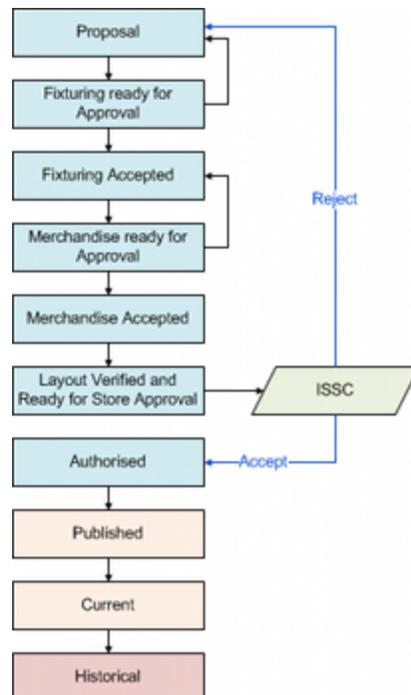
Some statuses are set to be non-reversible - users can select that status, but having selected it cannot then manually reset that status to an earlier one.

Non-Selectable Statuses

Some statuses can be set to not be selectable manually. An example of this is Current status as floor plans are normally automatically changed to that status by the **Update Status** functionality.

Example of Controlling Business Flows with Statuses

The following is a simple example of how statuses can be used to control business flows:



1. The process flow starts with a floor plan at **Proposal** status.
2. After laying out the fixturing, the store planner changes the status to **Fixturing ready for Approval**. This alerts his manager.
3. The manager reviews the layout of the fixturing. If they disagree with it, they set the status back to **Proposal** - causing the store planner to rework the fixturing. If the manager agrees with the layout of the equipment they change the status to **Fixturing Accepted**.
4. Once the status has been changed to **Fixturing Accepted**, the store planner places the merchandise. When this is complete, the store planner sets the status to **Merchandise ready for Approval**.
5. The manager reviews the layout of the merchandise. If they disagree with it, they set the status back to **Fixturing Accepted** - causing the store planner to rework the products and planograms. If the manager agrees with the layout of the equipment they change the status to **Merchandise Accepted**.
6. At an appropriate time, the manager then changes the status to **Layout Verified and Ready for Store Approval**. This makes the floor plan visible in In-Store Space Collaboration.
7. The store manager opens the floor plan in ISSC. They have two choices when saving it. Clicking **Reject** will change the status back to **Proposal**, starting the whole planning process again. Clicking **Accept** will change the status to **Authorised**. The **Publishing** and **Effective Dates** will then be set.
8. When the Publish date is reached, the **Update Status** tool will change the status to **Published**, causing a copy of the floor plan to be sent to the store in preparation for its implementation.
9. When the **Effective** date is reached, the **Update Status tool** will change the status to **Current**. The store will then be notified to put the plan into effect.
10. When another floor plan for that store becomes current, the existing store plan will be superseded and will be set to **Historical** status.

Changing the Status of Objects

Changing Statuses

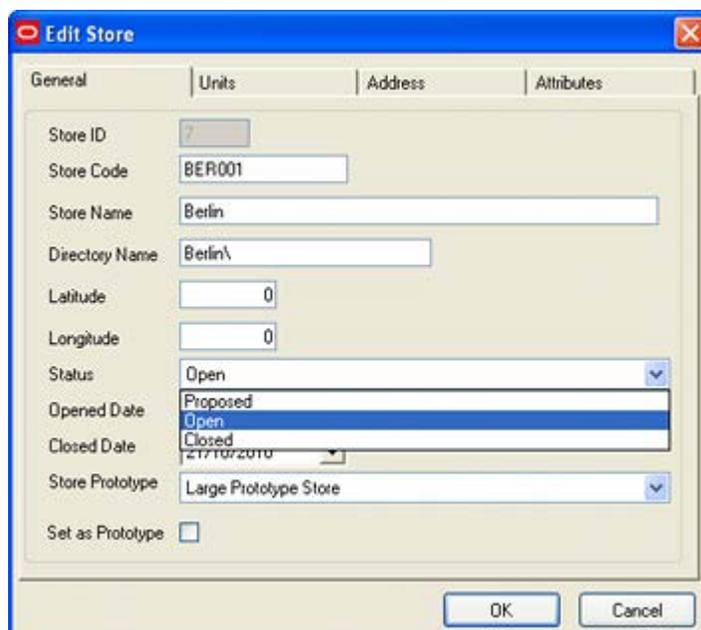
Statuses can be changed by selecting the required store, floor, revision or floor plan in the store hierarchy. It can then be opened for edit using the right click menu or the edit option from the Edit menu on the menu bar or the edit option from the toolbar.

Clusters

Clusters and sub-clusters are administrative devices for arranging stores in logical groupings. As such they do not have a status.

Stores

Statuses for stores are set using the **Status** drop down list in the Store dialog box.



If a store is set to **Closed**, all associated floor plans will be set to **Read Only** status. Any attempt to open those files for editing will result in the appearance of a warning dialog box.



Floors

Statuses for floors are set using the **Status** drop down list in the Floor dialog box.

If a floor is set to **Closed**, all associated floor plans will be set to **Read Only** status. Any attempt to open those files for editing will result in the appearance of a warning dialog box.

Revisions

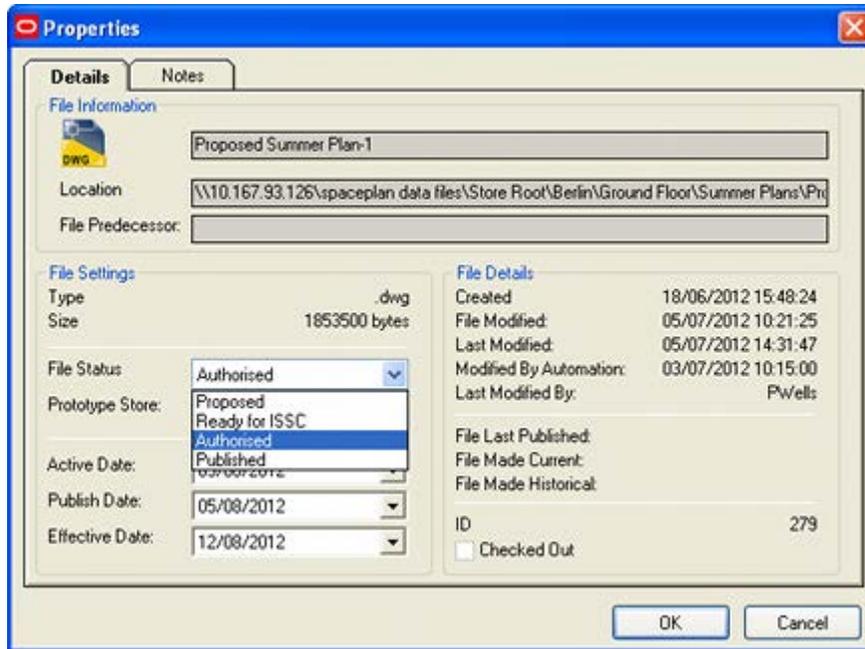
Statuses for revisions are set using the **Status** drop down list in the Revision dialog box.

If a revision is set to **Closed**, all associated floor plans will be set to **Read Only** status. Any attempt to open those files for editing will result in the appearance of a warning dialog box.



Files

Statuses for revisions are set using the **Status** drop down list in the File Properties dialog box.



Some statuses for floor plans may not be **reversible** - for example, if the status is set manually to Published, it may not be possible to set it back to an earlier date. Other statuses are not **selectable** - for example it is not generally possible to set the status to Current manually as this is normally done automatically when Update Status is run.

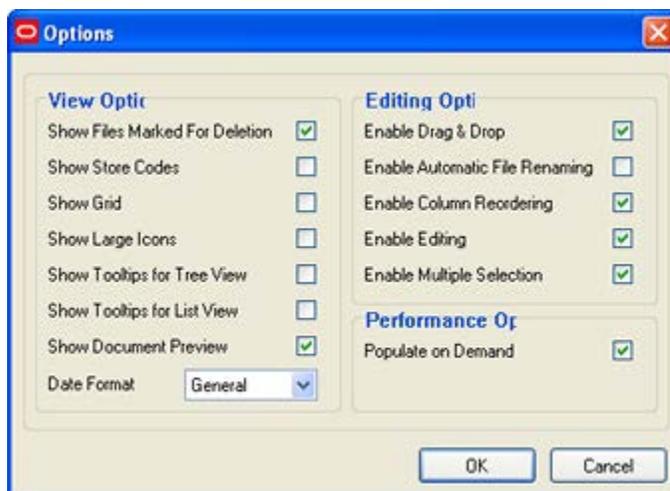
When the floor plan status is set to Authorised, it becomes possible to set up **Publish Date** and **Effective Date**.

- When the Publish Date is reached, Update Status will change the status to Published.
- When the Effective Date is reached, Update Status will change the status to Current.

Advanced Administration

Customizing Display Options

The appearance of some aspects of the Store Manager module can be customized via the Options option on the View pull down menu. This brings up the Options dialogue box.



Show Files Marked for Deletion

The Show Files Marked for Deletion option is used to specify whether files marked for deletion are to remain visible or are to be hidden. If the Show files option is chosen, files marked for deletion will be shown with the deleted icon.



Note: Files marked for deletion are not permanently removed from the database until the **Purge** option has been used from the **Tools** menu.

Show Store Codes

This option allows users to specify whether on not the Store Code will be displayed before the Store Name in the store hierarchy.



Show Grid

If active, this option adds a grid to the list of objects displayed in the list view pane on the right hand side of Store Manager.

Show Large Icons

This check box changes the icon size.

Show Tooltips for Tree View

If active, this option displays the store, floor or revision code when the mouse pointer is held over the object within the Store Manager hierarchy.

Show Tooltips for List View

If active, displays the full path when the mouse pointer is held over a file in the list view pane on the right hand side of Store Manager.

Show Document Preview

If active, this option puts a preview of the document at the bottom of the Store Manager Window

Date Format

This option uses a drop down list to select the form the date is displayed in.

Enable Drag and Drop

If enabled, this allows the Store hierarchy to be rearranged by dragging and dropping.

Enable Automatic File Renaming

This option is not currently active.

Enable Column Reordering

If active, this allows the columns in the list view pane on the right hand side of Store Manager to be dragged and dropped to a different order.

Enable Editing

This option is not currently active.

Enable Multiple File Selection

If active, this option allows the user to multi-select files for further operations.

Populate on Demand

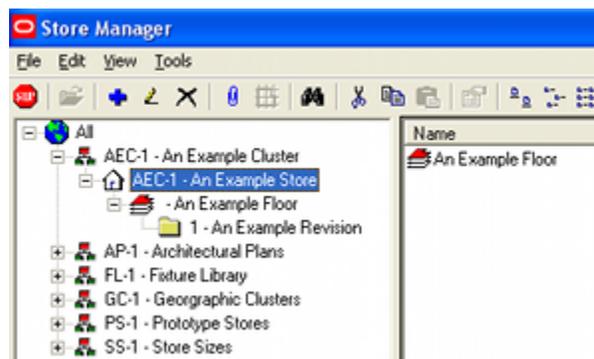
The Populate on Demand Option does not load full information for the store hierarchy until the users opens a specific branch. That branch is then populated with full data as the user opens it. If this option is not selected, all branches of the hierarchy populate as Store Manager is opened.

Windows Folders and the Store Hierarchy

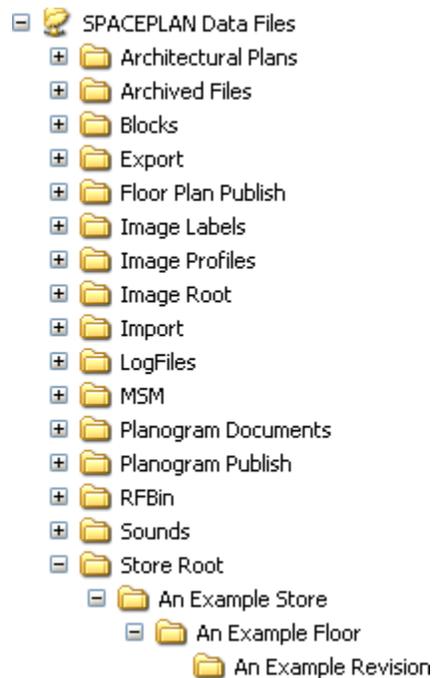
Store Manager has a specified structure:

1. Clusters
2. Stores
3. floors
4. Revisions
5. Files

Specific files associated with specific levels on the hierarchy will be in the appropriate folders. For example Architectural plans will be in folders associated with floors and floor plans in folders associated with revisions.



Clusters only exist in the Macro Space Planning database. For Stores, Floors and Revisions, Windows folders are created below the Store Root specified in the Directories tab of the Configuration module - this tab can only be accessed if the Configuration module is accessed via the Administration module.



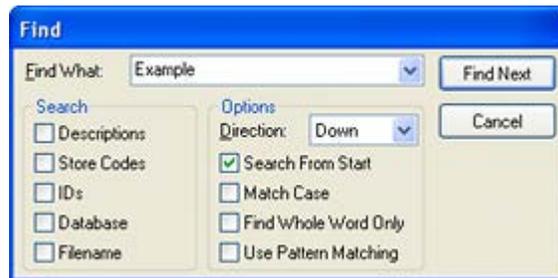
Any physical files associated with specific levels on the hierarchy will be in the appropriate folders. For example Architectural plans will be in folders associated with floors and floor plans in folders associated with revisions.

Searching the Store Hierarchy

The search facility can be activated by clicking the search icon on the toolbar.



This brings up a dialogue box with a dialogue box with a series of options. Select the required options and click on OK.



The search function in Store Manager performs an *in-string* search and does not support wild-cards. It will thus only return exact matches.

The search starts from any selected node, and can be set to search up or down from that node.

Significance of Dates in File Properties Dialog Box

The File Properties dialog box that can be accessed from Store Manager contains a series of dates that give information on how and when the file was last modified or processed.



These dates have the following significance:

- Created:** This is the date the floor plan was originally created in Store Manager. Alternatively, if the floor plan was imported, this will be the date it was originally created in raw AutoCAD.

- **File Modified:** This is the date the floor plan was last modified in raw AutoCAD.
- **Last Modified:** This is the date the file was last saved by a user in the Planner or Merchandiser modules or in In-Store Space Collaboration.
- **Modified by Automation:** This is the date the file was last modified by a batch process such as planogram substitution.

These dates are often used to decide on the correct actions when manually or automatically synchronizing the floor plan.

Note: See the section on synchronization for more information.

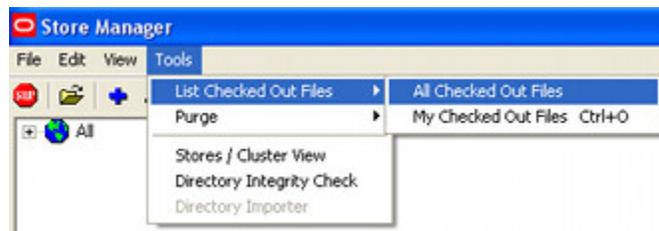
List Checked Out Files

Checked out files are files that the database has flagged as being in use for some reason. These include:

- File is checked out to a user in either Macro Space Management or In-Store Space Collaboration.
- File is checked out to a batch process.
- File has remained checked out due to a software problem.

In these instances, users with access to Store Manager can manually check the files back in.

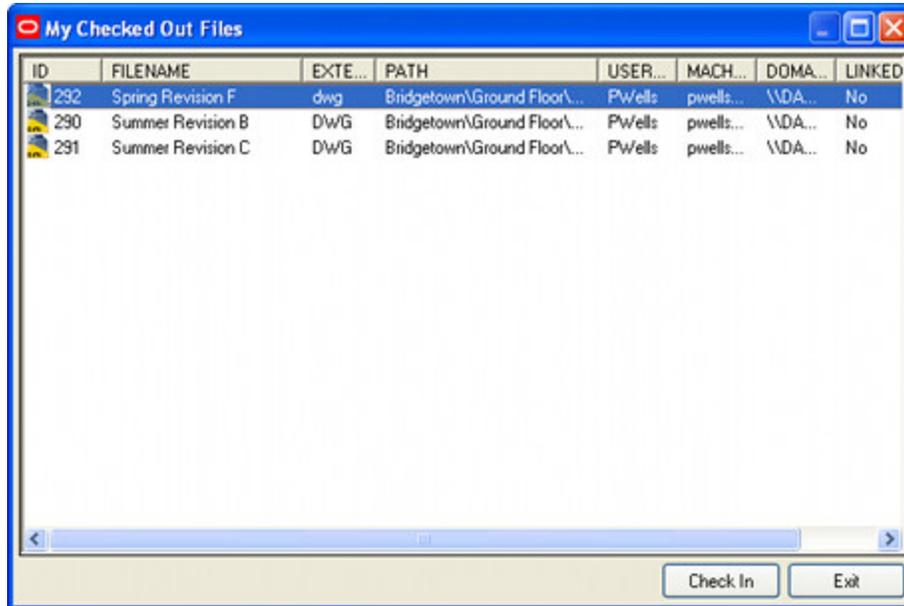
Note: If the file is manually checked back in, all changes since the previous save will be lost.



Selecting All Checked Out Files lists every file checked out from Store Manager.

Selecting My Checked Out Files lists the files checked out by that particular log in identity. (This can also be accessed by <Ctrl + O>).

After the option has been selected, the user has the option to check files back in by highlighting them then clicking Check In.



Purging from Store Manager

The Purge option allows users to permanently delete several types of object:

- Objects in the Store Manager hierarchy such as clusters, stores, floors, revisions and floor plans.
- Back-up files for AutoCAD (files with a BAK extension)
- Text log files created for Store Manager.

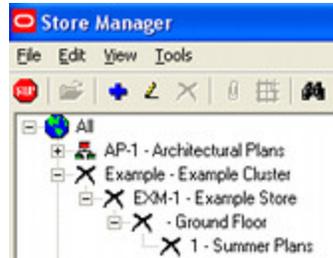
Removing Objects from the Store Manager Hierarchy

Permanent removal of objects from the Store Manager hierarchy is done in two stages.

1. The required object is marked for deletion in the store hierarchy. If the selected object is a DWG file, it will be moved to the RFBin. The location of this folder is specified in the Directories tab of the Configuration Module. (This tab is only accessible when the Configuration module is accessible via the Administration module).
2. The objects are permanently deleted using the Purge option from the Tools menu.

Deleting Objects

Depending on settings in the Options dialog box (View menu), objects marked for deletion will either be hidden from view or denoted with the Deleted icon.

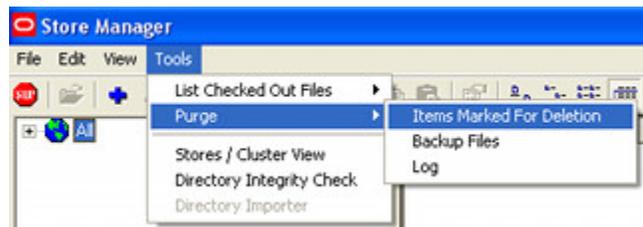


Purging Objects

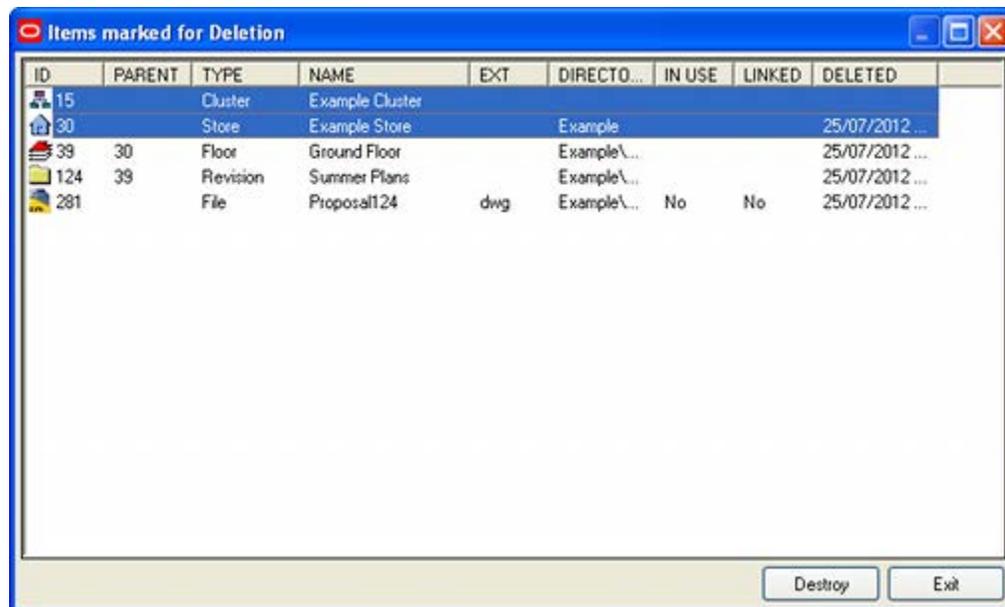
Purging objects results in their permanent removal from the Macro Space Planning database. In the case of the DWG files used for floor plans, these will also be physically deleted from the RFBin - where they were moved to when marked for deletion.

Note: Purged DWG floor plans files cannot be recovered, so care should be taken to ensure they are no longer required.

To purge objects, select the **Purge** option from the **Tools** menu.



This will bring up the **Items Marked for Deletion** dialog box



Items marked for deletion are highlighted and then removed by clicking **Destroy**.

Note: The right click menu gives the option to Select All Files, Deselect All Files, Destroy or Undelete files.

Objects cannot be deleted if they have child objects associated with them. The most common example of this occurring is when an architectural plan is in the list of files to be

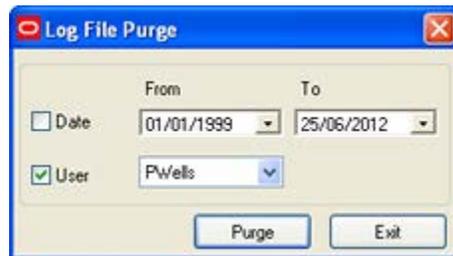
deleted. All floor plans associated with the architectural plan should be deleted before the architectural plan itself is deleted.

Purging .BAK files

When Planner modifies a file, some settings in Planner can cause it to save a back-up version. This is saved with the file extension .BAK. Because floor plans can be large, these .BAK files can occupy a considerable amount of server or hard disc space. Purging the files frees up this space and may improve performance.

Purging Log Files

Store Manager writes a series of log files when any errors occur. These files accumulate over time. The "purge log files" allows the option of deleting these files; either between a date range, or on the user's computer.



Importing directories

The **Import Directory** option allows files to be imported into the Store Manager file structure and corresponding entries to be made in the database. The import process is as follows:

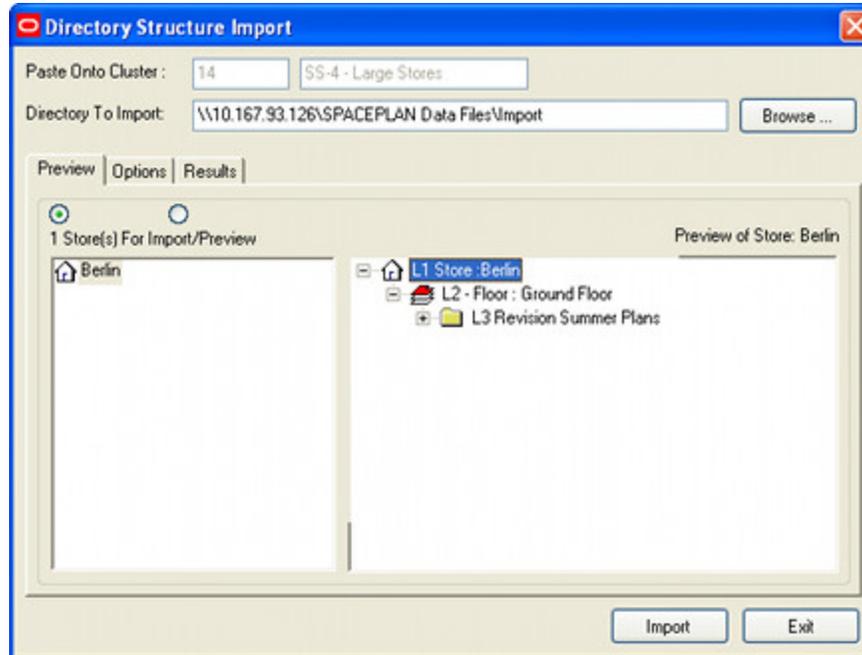
Preparation

The files to be imported must have a data structure compatible with Store Manager – the files should be in the store/floor/revision/file hierarchy. If there are multiple stores to import, these files should be under a common directory.

Importing

A parent cluster should be selected within the Store Manager hierarchy, (or created if required). This parent cluster will be the target for the files to be imported.

The Import Directory option should then be selected from the Administrator menu. This will bring up a dialogue box called Directory Structure Import. This has three options called Preview, Options and Results.



In the Preview tab, use the Browse button to navigate to the require source for the directories to be imported.

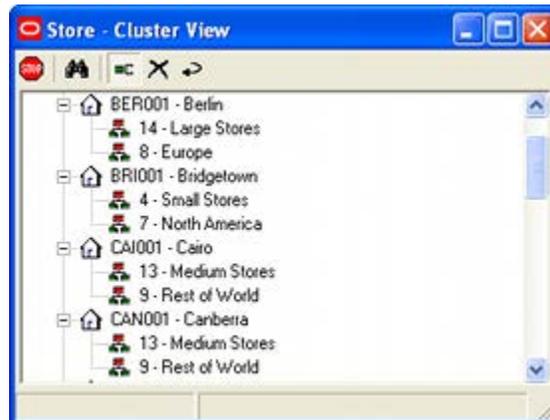
In the Options tab specify the file extensions to be excluded from the import.

Click the Import button to import the information.

The results can be seen in the Result tab.

Store/Cluster view

Selecting the **Store/Cluster view** option brings up a window allowing an alternative way of viewing the information held within the hierarchical data structure within Store Manager. Stores are listed in the sequence determined by their unique identification code. The cluster to which the store has been allocated is displayed immediately below the store.



Where stores are assigned to multiple clusters, this will be shown. For example the Berlin store belongs to both the Europe and Large Store clusters.

Integrity Check

The **Integrity Check** compares the store directory structure shown in the current display window with that registered in the database. Any errors found are displayed and should be brought to the attention of the Systems Administrator for rectification.



The **ID** column contains a list of the File ID's used by Macro Space Management as references for the files. If a File ID is missing, this means a problem with the directory structure.

The **Type** is the type of object. It can be a Store, Floor or Revision. Clusters and sub-clusters will not appear as they are folders for holding files, not files themselves.

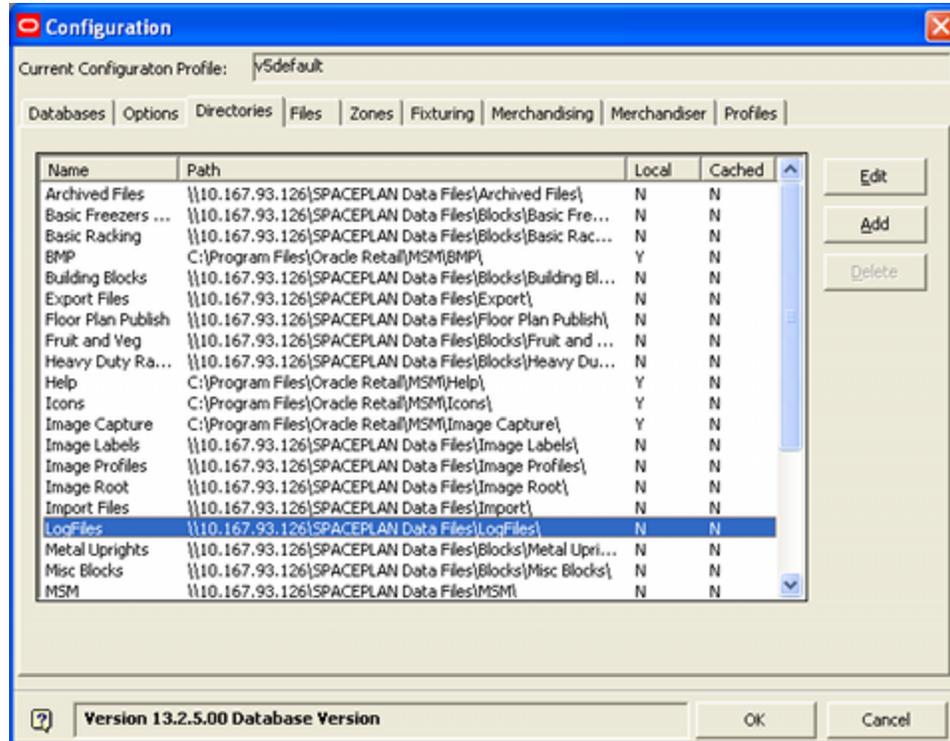
The **Description** is the name given to the object.

The **Path** is the path in the directory structure to the designated object.

Log Files

Log files are files recording events and problems during operation of Macro Space Management. This enables problems to be investigated at a later date.

They can be found at the location specified in the Directories tab of the Configuration Module - this tab is only available if the configuration module is open via the Administration module.



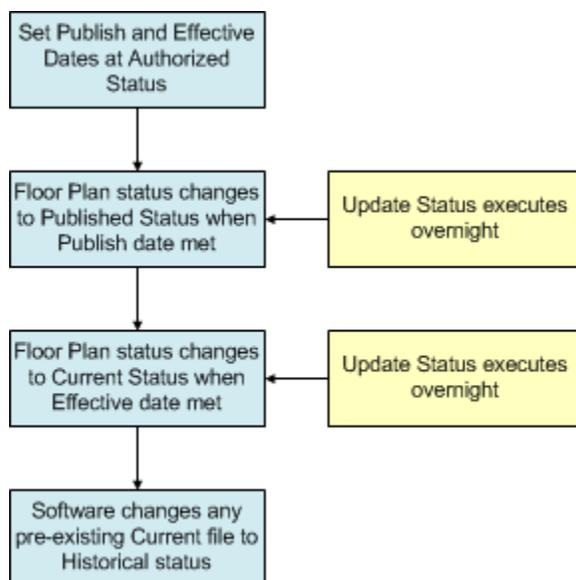
Double clicking on a specific file will bring up a log of that aspect of Macro Space Management's operations.

Note: In many cases, log files have been superseded by information written back to tables in the Macro Space Planning database.

Update Status

Overview of UpdateStatus.exe

UpdateStatus.exe is a small Macro Space Management tool that can be used to change the status of floor plans.



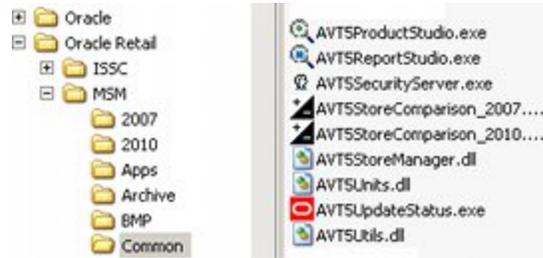
1. The initial stage is to set the Publish and Effective dates when a floor plan reaches Authorized status
2. Update status is set to execute every night by means of a scheduling tool.
3. When the Publish date is met or exceeded, the status of the floor plan is changed to Published.
4. When the Effective Data is met or exceeded, the status of the floor plan is changed to current.
5. At the same time as the status of the floor plan is changed to current any pre-existing current file for that floor is changed to Historical status.

Running Update Status

There are three ways of running UpdateStatus.exe; directly, using Windows Scheduler or using another batch scheduling tool. It is normal to install a copy of Macro Space Management on the batch server - UpdateStatus would generally be run from there.

1. Running Directly

To run UpdateStatus.exe directly, navigate to the C:\Program Files\Oracle Retail\MSM\Common directory on the batch server.



Click on AVT5UpdateStatus.exe to run the file.

2. Through Windows Scheduler

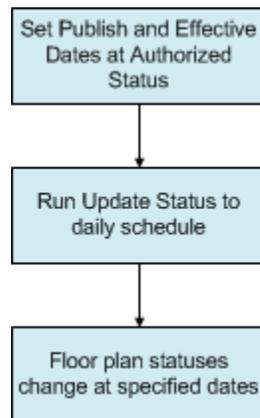
Windows Scheduler gives the option of running UpdateStatus.exe automatically at set intervals.

3. Through other Batch Scheduling Tools

UpdateStatus.exe can also be run through more advanced batch scheduling tools.

Using UpdateStatus.exe

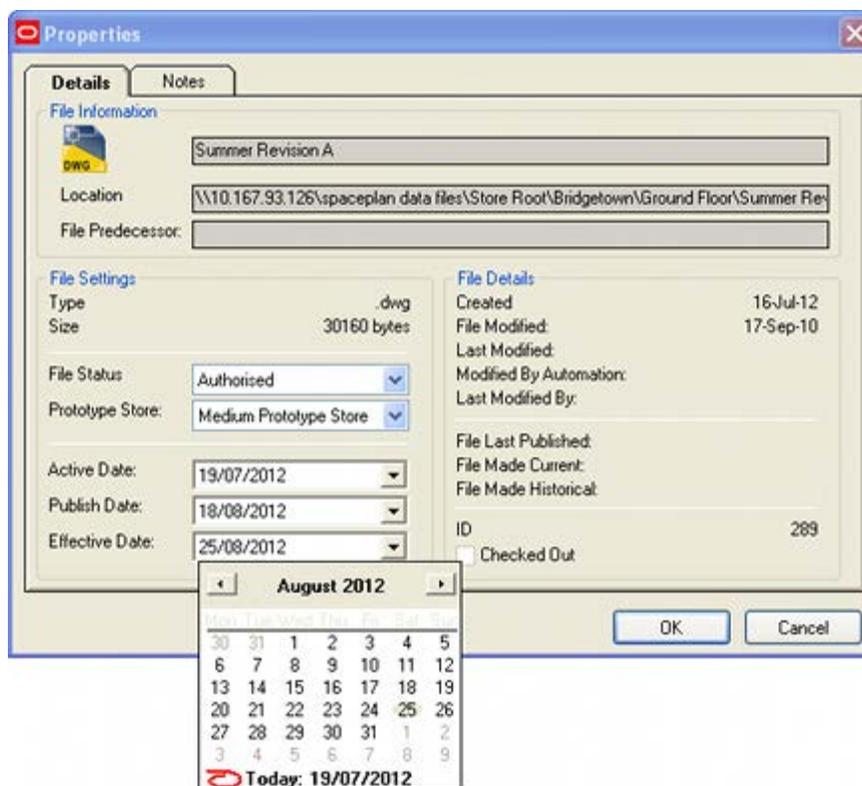
To use UpdateStatus.exe the following actions are required.



The process is carried out as follows:

Open the file Properties dialog box

This is done by highlighting the required file within the right hand pane of Store Manager then right clicking to bring up the pop-up menu. Selecting Properties from this menu will bring up the Properties dialogue box.



Note: setting the varying values required for Update Status is carried out by clicking the down arrow on the pertinent field. In the above screenshot, the effective date is being set.

Set File status to Authorized

This is done by highlighting the required file within the right hand pane of Store Manager then right clicking to bring up the pop-up menu. Selecting Properties from this menu will bring up the Properties dialogue box.

Set the Publish Date

The Publish Date is the date at which the floor plan will be set to Publish status by Update Status. This will allow the requisite store to begin preparations for implementing the changed floor plan. The default Publish Date is set a specific number of days ahead of date the value is being set - this time period is set by the PUBLISH_DATE_LEAD_PERIOD system variable in the Administration module.

The Publish Date can be set using the drop down calendar.

Set the Effective Date

The Effective Date is the date at which the floor plan will be set to Current status by Update Status. This is the date at which the requisite store will carry out the changes required for the floor plan. The default Effective Date is set a specific number of days ahead of date the value is being set - this time period is set by the EFFECTIVE_DATE_LEAD_PERIOD system variable in the Administration module.

The Effective Date can be set using the drop down calendar.

Run UpdateStatus.exe

Update status can be run manually. However, it is more normal to run it using a scheduling tool.

- When the Publish Date is met or exceeded, the status of the file will be changed to Published.
- When the Effective Date is met or exceeded, the status of the file will be changed to Current.

Note: If a floor contains several files of Authorized status with Effective dates before the date UpdateStatus.exe is run, only the latest file will have Current status - all other files will have Historical Status.

If run directly, a small pop-up window will report the results.



Note: UpdateStatus.exe will not actually publish the file or notify the store that Publish or Current status has been reached. This has to be done via MSMs Automated Floor Plan Publishing functionality and the retail organizations own reporting tools.

Potential difficulties with UpdateStatus.exe

Multiple Authorized Files within a Floor

If there are multiple Authorized files within a floor, when UpdateStatus.exe is run, it will sequentially change them to Current status based on the Effective Date. As each file is changed to Current status, it will change the preceding file to Historical Status.

Note: Each Revision can only contain one Authorized file. Therefore, if a floor is to have multiple Authorized files, multiple Revisions must be created for that floor. If a floor only has a single Revision then this can only contain a single Current file and a single Authorized file. (It can contain multiple Proposed and Historical files. If a floor has multiple revisions, then care must be taken to keep track of which Revision contains the Current version of the drawing.

Files with an Effective Date greater than the date UpdateStatus.exe is run will not have their status changed.

All Effective Dates set to a date before the date UpdateStatus.exe is run will be changed to Current status in the sequence based on the date and time they were authorized. This will result in all but the last file set to Authorized being set first to current, and then to historical status.

This means that only the last file to be set to Authorized will retain Current status.

Status of Revisions

UpdateStatus.exe does not currently change the status of Revisions when floor plans within the Revision have their status changed.

It is therefore currently possible to have a Current file in a Revision that is not of Current status.

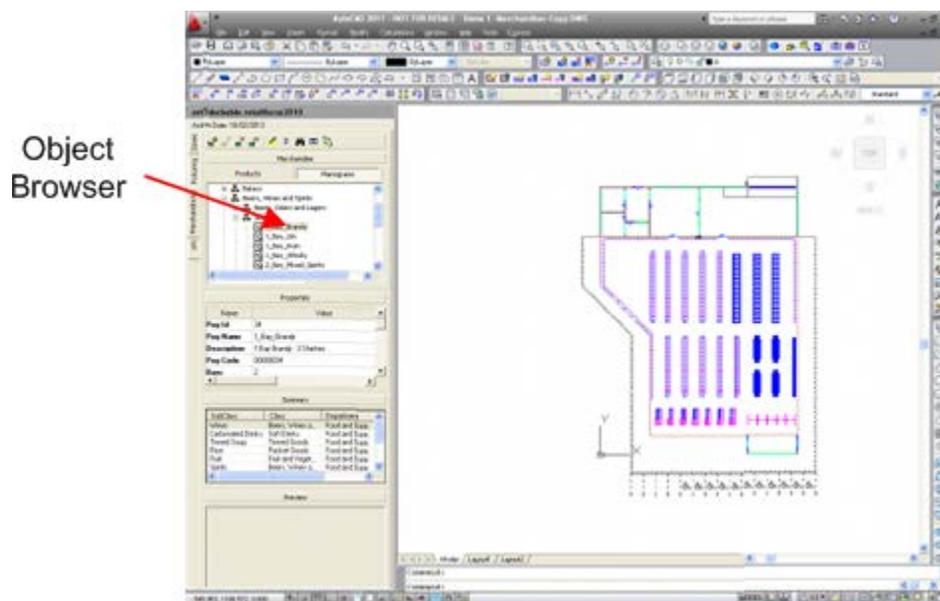
Dates

UpdateStatus will change the status of a floor plan depending on whether the Publish Date or Effective Date has been met or exceeded. Running Update status at 23.30 on 12th June will have a different date to running it at 00.15 on 13th June, although the two instances are only 45 minutes apart.

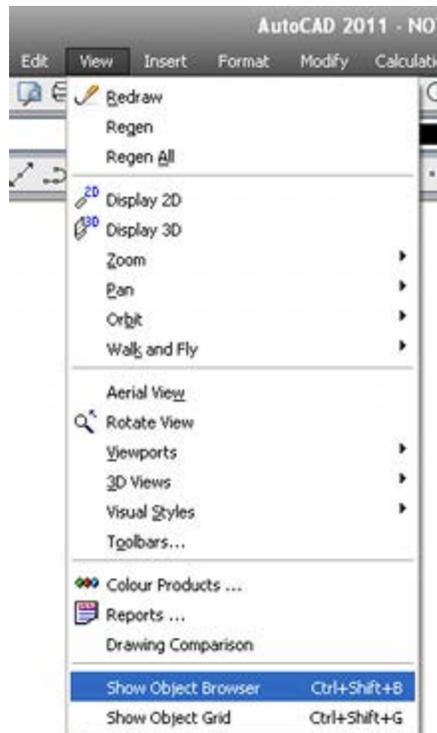
Object Browser

About the Object Browser

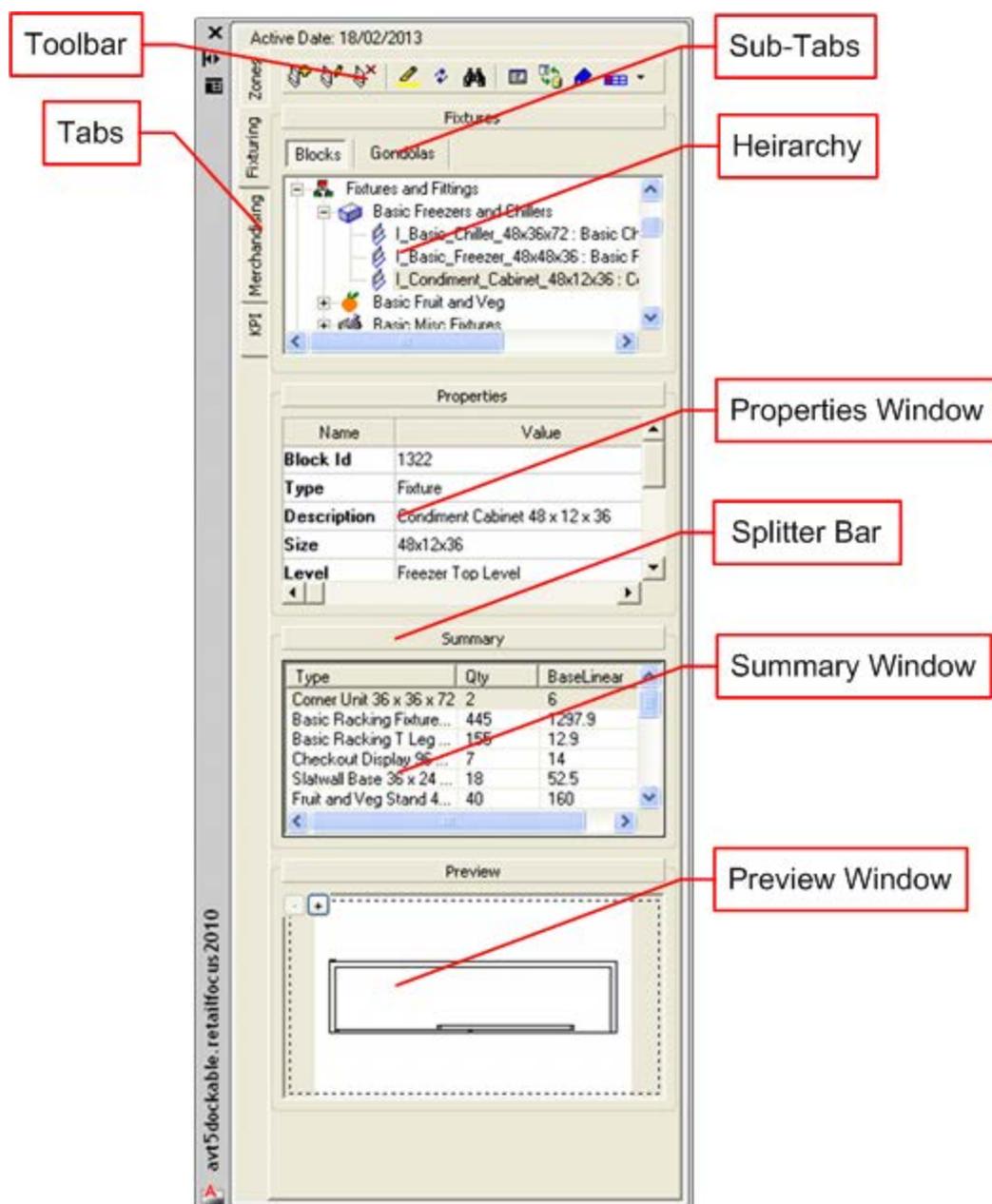
The **Object Browser** offers Macro Space Management users a single point of access to the Zone, Fixture, Product, and Planogram libraries and the Key Performance Indicators (KPI's). It is found in both the Planner and Merchandiser environments and is used to control the various activities within those environments.



The **Object Browser** can be turned off by clicking on the 'x' in the upper right corner. It can be opened by selecting the Show Object Browser option on the View drop down menu.



The **Object Browser** has a series of parts. These are described below.



Tabs allow the Object Browser to be switched from one function to another.

At present, the Object Browser can be used to added, edit, and delete Zones, Fixtures, and Merchandise.

Each tab has the same general components.

A **Toolbar** at the top allows various functions to be accessed. These typically allow adding, editing, and deleting of the required objects, together with searching, filtering and refreshing options.

The Fixturing and Merchandising Tabs have **Sub-Tabs**.

In Fixturing, the user can click on one or other button to select Fixturing or Gondola operations.

In Merchandising, the user can use the buttons to switch between planograms and products.

Each tab has a series of Information Windows. These vary from tab to tab but can include:

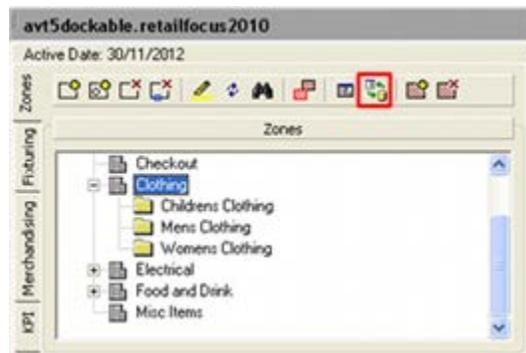
- **Hierarchical trees:** These give information on what objects can be added, edited, or deleted in the drawing. In the Zones Tab for example, the hierarchical tree allows the user to select different types of zones.
- **The Properties window:** This gives details of the selected object.
- **The Summary window:** This gives totals of types of objects placed in the drawing.
- **The Preview window:** This shows a low resolution image of the selected object.

In the fixturing tab for example, this would be an image of the selected fixture.

The Information windows can be opened or closed by clicking on the **Splitter Bars**.

The Refresh Option

All toolbars have a Refresh option.



Clicking Refresh will update the application with the latest information from the database. This means that if information has been updated in another module (for example the Administration module) since the application was opened Planner (or Merchandiser) will be updated to match.

For example, if the zone definitions have been updated in the Administration Module after Planner was opened, clicking Refresh will bring the updated information into Planner.

The Zones Tab

Overview of the Zones Tab

Macro Space Management uses Zones to assign space to different departments and non-sales areas. The zone types available to your business are customized within the Administration Module. Zones can also be used to help user's select fixtures or merchandise.

The Zones tab is divided into four sections:

- The Toolbar – provides controls to add, modify, and delete zones from a store plan.
- The Zones Window – shows a hierarchy of available zones.
- The Properties Window – when a Zone is selected from the hierarchy, its properties are visible in this window.
- The Summary Window – shows details of the zones based on the open store plan.

Note: Zones are 'read only' in the Merchandiser environment. Accordingly, the majority of the functionality that is present when the Object Browser is used in the Planner module is not operative.

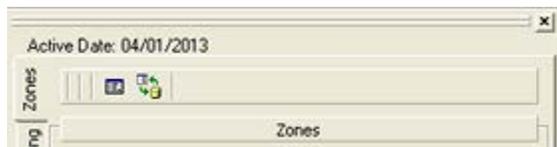
Toolbar

Planner



Icon	Description
	Add Zone
	Add Hole
	Delete all Zones of that type
	Delete selected Zone or Hole
	Highlight Zone in Store Plan
	Highlight Selected zone in Tree
	Detect Clashes
	Options
	Refresh
	Hatch
	Remove Hatch

Merchandiser

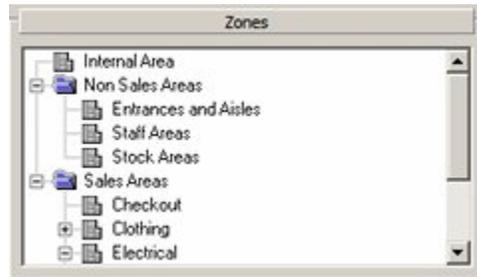


Icon	Description
	Options

Icon	Description
	Refresh

The Hierarchy Window

The hierarchy window displays the zone hierarchy. This hierarchy is defined in the Administration module and shows all the zones that can be added to a store plan.



The hierarchy can be expanded using the plus control next to each item on the hierarchy. It can also be collapsed by using the minus control next to each item.

The Properties Window

The Properties window displays information for the zone that has been selected in the zone hierarchy. The content of this window is customizable.



The Summary Window

The Summary window displays information on the zones placed in the open store plan. The content of this window is customizable by an Oracle Retail consultant. If set up to do so, this window can also show the zones drawn in the prototype store plan and their areas. This allows the user to see what zones should be added to the new store plan and the target areas.



The Fixturing Tab

Overview of the Fixturing Tab

The Fixturing tab allows users to add fixtures, fittings, gondolas and other equipment to the store plan. It is divided into five parts as follows:

- The toolbar – provides controls that allow users to add, edit, and delete fixtures and gondolas
- The Fixtures window – shows a hierarchy of available blocks and gondolas
- The Properties window – after selecting a block from the hierarchy, this window shows the details for the selected block. The content of this window is customizable by an Oracle Retail consultant
- The Summary window – shows details of equipment placed based on the active store plan. The content of this window is customizable by an Oracle Retail consultant
- The Preview window – shows an image of the object selected in the fixture hierarchy.

Note: In Merchandiser, fixtures can only be added by dragging and dropping from the hierarchy. The Add icon is not active.

The **Fixturing Tab Toolbar** in the Object Browser enables the user to control all aspects of adding, editing and deleting fixtures and gondolas within the Planner and Merchandiser environments.

Clicking on the Switch Buttons will determine whether the Fixturing or Gondola options are active.

Fixturing Toolbar

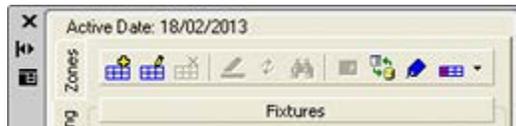


Icon	Action
	Add Fixture
	Edit Fixture in Fixture Studio
	Delete Fixture
	Highlight Fixture in drawing
	Highlight selected item in tree
	Find
	Options

Icon	Action
	Refresh
	Show Attributes
	Promotional Fixtures

Note: When Fixtures are added, the Add Fixture dialogue box (present in the Planner Environment) does not appear in Merchandiser.

Gondola Toolbar



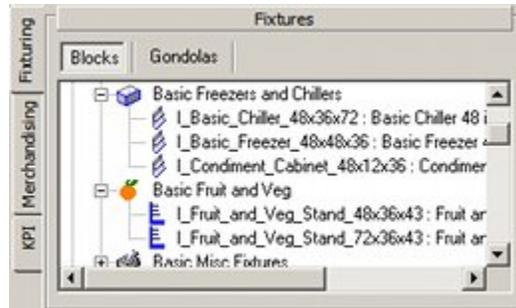
Icon	Action
	Add Gondola
	Edit Gondola in Fixture Studio
	Delete gondola option not available
	Highlight Gondola in drawing option not available
	Highlight selected item in tree option not available
	Find Option not available
	Options not available
	Refresh
	Show Attributes
	Promotional Fixtures

The Hierarchy Window

The Hierarchy window displays both the block and the gondola hierarchies. To toggle between the hierarchies use the Blocks or Gondolas buttons respectively. The hierarchies are defined in the Fixture Studio environment and show all the fixtures and gondolas that can be added to a store plan.

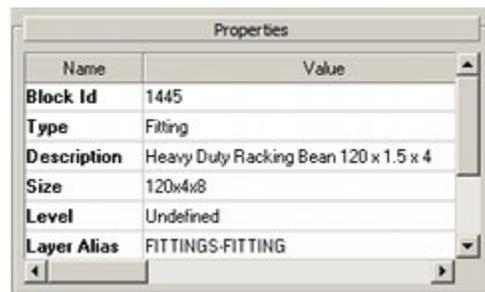
The hierarchy can be expanded using the plus control next to each item on the hierarchy. It can also be collapsed by using the minus control next to each item.

An item in the hierarchy can be highlighted by clicking on the name of the block or gondola.



The Properties Window

The Properties window displays information for the block that has been selected in the blocks hierarchy. The content of this window is customizable.



The Summary Window

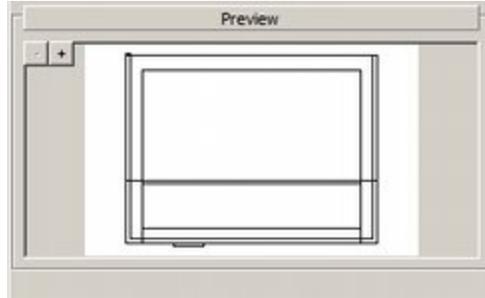
The Summary window displays information on the blocks placed in the open store plan. The content of this window is customizable.

The screenshot shows the 'Summary' window with a table of fixture data. The table has four columns: 'Dept', 'Linear Feet', 'Target LF', and 'Differe'. The data is as follows:

Dept	Linear Feet	Target LF	Differe
	1211	0	-
Food and Drink Zone	2389	0	-
Stock Areas - all stock	612	0	-

The Preview Window

The Preview window shows a sample picture of the block selected in the block hierarchy.

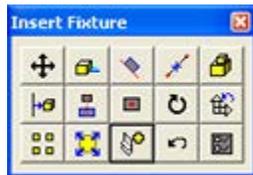


The preview is not updated when the Gondola hierarchy is displayed.

Placing Fixtures and Gondolas

Placing Fixtures - Planner Module

To add a block to the store plan, highlight the required block in the hierarchy. You can then either press the Add Fixture button on the tool bar, or drag and drop the fixture to the store plan drawing. When a block is added the Insert fixture dialog opens.



These controls allow blocks to be positioned accurately in the store plan. Pressing the left mouse button places the block in an initial position. Pressing the right mouse button or the <Esc> key finishes placing the block.

Placing Fixtures - Merchandiser Module

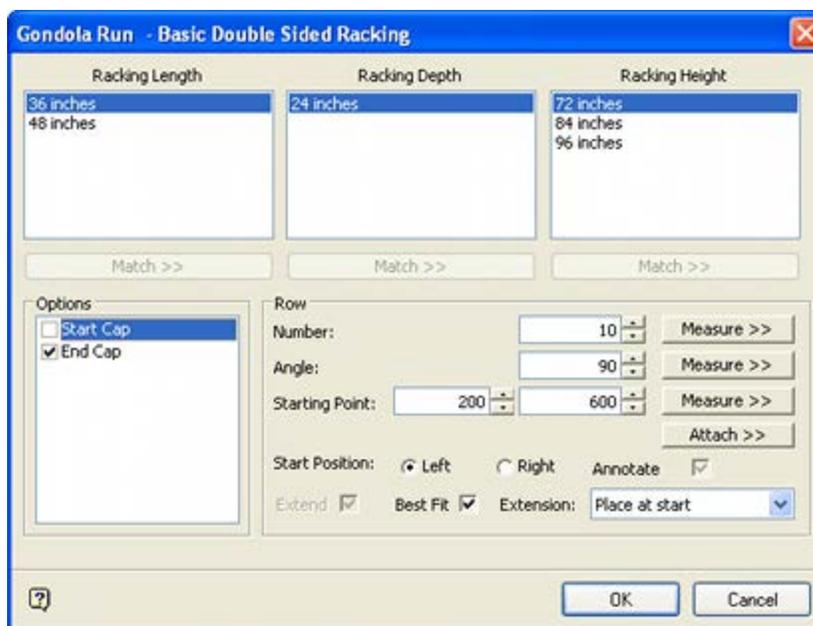
To add a block to the store plan, highlight the required block in the hierarchy then drag and drop the fixture to the store plan drawing.

(The Insert Fixture dialogue box will not appear in Merchandiser).

Placing Gondolas

To add a gondola to the store plan, highlight the required gondola in the hierarchy. Press the Add Gondola button on the toolbar or drag and drop the gondola to the store plan drawing.

The user is prompted to select a start point for the gondola. Pressing the left mouse button opens the Gondola Run dialog box.



The Gondola Run dialog box allows the user to select the dimensions of the blocks to use in the gondola. It also allows the number of bays or length of the gondola to be set. Once the desired options have been set, pressing the OK button closes the dialog and places all the blocks required for the gondola run in to the store plan.

The Merchandising Tab

The **Merchandising tab** allows users to add product placeholders (products), and planogram placeholders (planograms) to the store plan. A product is any category, sub-category, or SKU that is included in the product hierarchy, i.e. any level in the hierarchy. Planograms are also organized in to a hierarchy of planogram groups. However, you can only place planograms in to the store plan. Planogram groups cannot be placed. Placeholders are markers that can be placed on to fixtures to indicate the product category, sub-category or planogram that will be used.

The Merchandising tab is divided in to 5 parts:

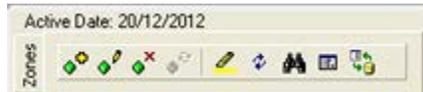
- The toolbar – provides controls that allow products and planograms to be added, edited, and deleted
- The Merchandise window – shows a hierarchy of available products and planograms
- The Properties window – shows details for the product that has been selected in the product hierarchy. Similarly, it will show details of a planogram that has been selected in the planogram hierarchy. The content of this window is customizable by an Oracle Retail consultant.
- The Summary window – shows details of products and planograms placed based on the active store plan. The content of this window is customizable by an Oracle Retail consultant
- The Preview window – shows a sample picture of product display styles selected in the product hierarchy

Note: Product display styles are only available in Merchandiser. In Merchandiser, products and planograms can only be added by dragging and dropping from the hierarchy. The Add icon is not active

The **Merchandising Tab Toolbar** in the Object Browser enables the user to control all aspects of adding, editing and deleting products and planograms within the Planner and Merchandiser environments.

Clicking on the Switch Buttons will determine whether the Product or Planogram options are active.

Products Toolbar



Icon	Action
	Add Product
	Edit Definition
	Delete Product
	Reverse Product Placement Direction (not active)
	Highlight in Store
	Highlight in Tree
	Find
	Options
	Refresh

Planogram Toolbar



Icon	Action
	Add Planogram

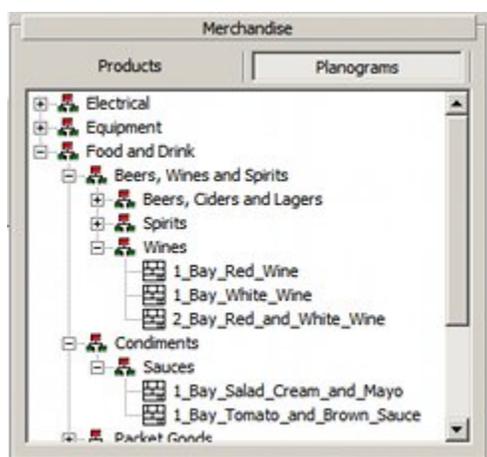
Icon	Action
	Edit Definition
	Delete Planogram
	Reverse Planogram Placement Direction
	Highlight in Store
	Highlight in Tree
	Find
	Properties
	Refresh

The Hierarchy Window

The hierarchy window displays both the product and the planogram hierarchies. To toggle between the hierarchies use the Products or Planograms buttons respectively.

The Product hierarchy is defined in the Product Studio module and shows all the products that can be added to a store plan. The Planogram hierarchy can be configured in Merchandiser and shows all the planograms that can be added to a store plan.

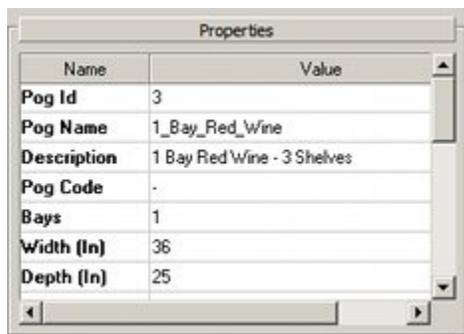
The hierarchy can be expanded using the plus control next to each item on the hierarchy. It can also be collapsed by using the minus control next to each item.



An item in the hierarchy can be highlighted by clicking on the name of the product or planogram.

The Properties Window

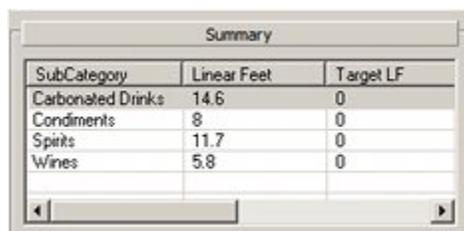
The Properties window displays information for the merchandise that has been selected in the products or planograms hierarchy. The content of this window is customizable by an Oracle Retail consultant.



Name	Value
Pog Id	3
Pog Name	1_Bay_Red_Wine
Description	1 Bay Red Wine - 3 Shelves
Pog Code	-
Bays	1
Width (In)	36
Depth (In)	25

The Summary Window

The Summary window displays information on the merchandise placed in the open store plan. The content of this window is customizable by an Oracle Retail consultant. The window can show the merchandise allocated per zone in the prototype store plan. This allows the user to see what merchandise should be added to the new store plan.



SubCategory	Linear Feet	Target LF
Carbonated Drinks	14.6	0
Condiments	8	0
Spirits	11.7	0
Wines	5.8	0

The Preview Window

The Preview Window will be blank for products unless an image has been associated with that product in Product studio. It will always be blank for Planograms.

The KPI Tab

The **KPI's tab** of the Object Browser allows users to see performance of a store plan at a glance. The available KPI's are customizable and more can be added either by an Oracle Retail consultant or a trained Macro Space Management super user.

The KPI tab is divided into 4 parts:

- The toolbar – provides controls that allow KPI's to be run and modified
- The Indicators window – shows a hierarchy of available KPI's
- The Layers window – shows a list of KPI's that have been run against the store plan
- The Legend window – shows the color bands associated with a KPI that has been run

When the tab is first opened the Layers and Legend windows are blank. These windows are populated when a KPI is run.

Note: Some KPIs require information such as financial data to be imported into the Macro Space Planning database before they will work correctly.

The **KPI Tab Toolbars** in the Object Browser are used to Add and Edit KPI's. They are also used to Edit and Delete the list of KPI's selected for display in the ViewPorts

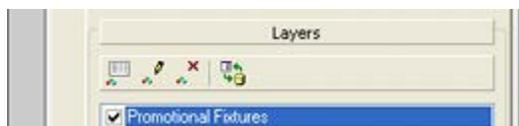
Upper Toolbar



Icon	Description
	Edit Indicator
	Edit Themes
	Add KPI
	Synchronize Views

The Synchronize Views Icon allows the user to choose whether the ViewPorts are synchronized or not. One application of this is when ViewPorts are synchronized and three different KPI's are opened in different windows. The ViewPorts will then show identical perspectives on the Virtual Reality environment with the information from different KPI's overlaid.

Lower Toolbar



Icon	Description
	View Data
	Edit KPI in list of those displaying
	Delete KPI from list of those displaying
	Refresh All

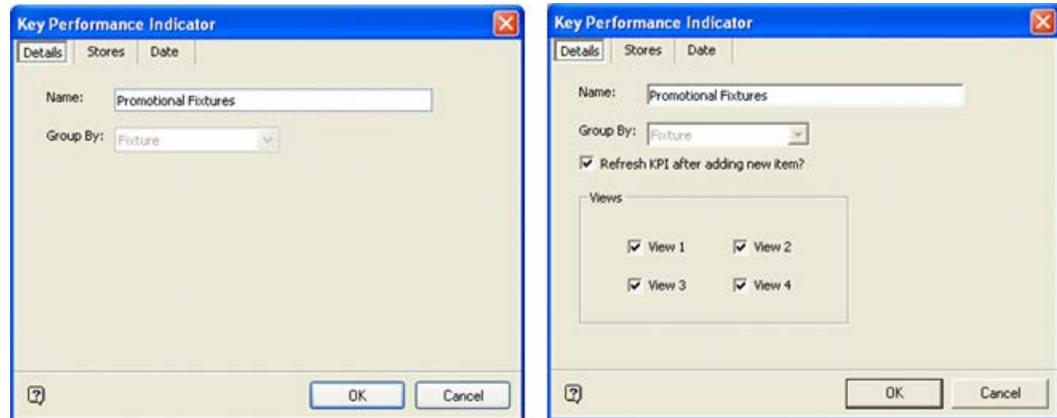
These commands are user to alter the list of those KPI's current displayed in the ViewPorts.

Running a KPI

In order to run a KPI the user must highlight the KPI that is to be run from the hierarchy of Indicators that are shown on the Object Browser.

Details Tab

Pressing the **Add KPI** button opens the Key Performance Indicator dialog for the highlighted KPI with the Details tab active. Slightly different versions of the Details tab will appear in Planner and Merchandiser. Merchandiser has more options because it can show up to four views of the floor plan simultaneously.

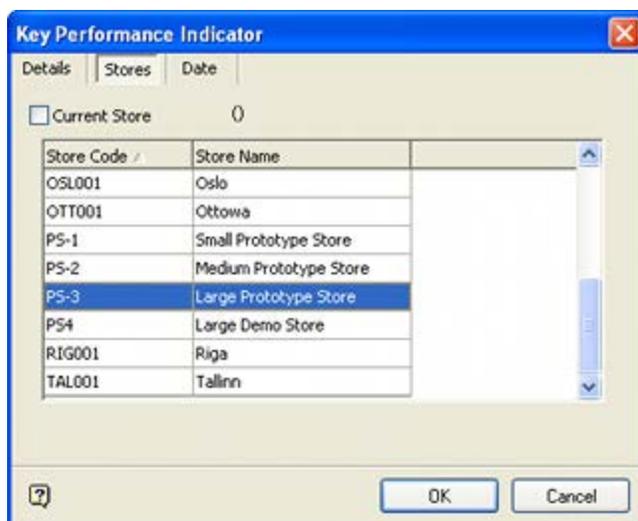


The Details tab shows the name of the selected KPI in the **Name** field. The user can edit this if they wish. This will only change the name that is shown in the Layers section of the KPI tab on the Object Browser and not the name of the KPI definition saved in the database.

The **Group By** field is automatically populated with the KPI Type that was saved in the KPI definition.

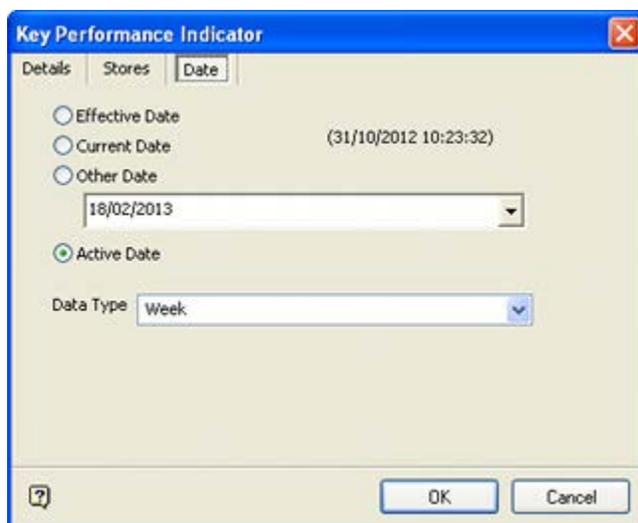
Stores Tab

The Stores tab enables users to specify whether the KPI should be run against the current floor plan or a floor plan in an equivalent store. The latter option is useful when a new store is being planned and there is no operational data available for it. However, the store data is being taken from must be an exact clone of the new store or data will not map across directly. Using a store specific KPI also requires a KPI to be developed for the purpose.



Date Tab

The Data tab has several options selectable by radio button. These can be used to specify the date range for the data where data is time sensitive. The initial action is to set the Data type. This can be set to any time period from a specific day to a year.



The next stage is to set the specified date for the date.

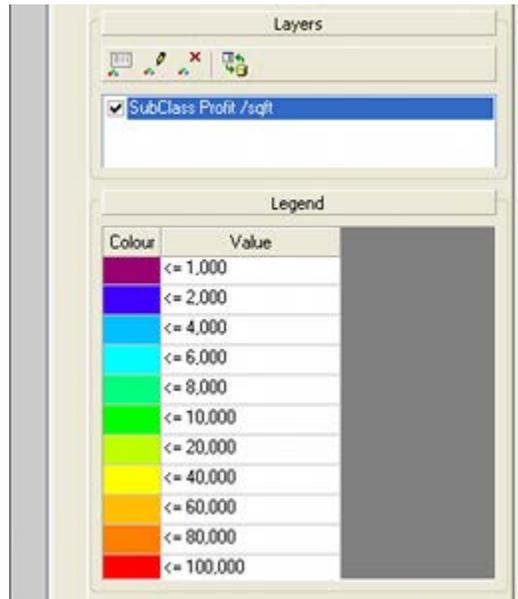
- **Effective Date** will use the Effective Date specified in the File Properties dialog box in Store Manager. This can only be used if the floor plan has not yet reached Current status and the Effective Date has been set.
- **Current Date** will use the Current Date specified in the File Properties dialog box in Store Manager. This can only be used if the floor plan is at Current status.
- **Other Date** can be manually set by the user using the Calendar control
- **Active Date** will use the Active Date specified at the top of the Object Browser.

When the OK button is clicked, the software will use the date and the data type to identify the correct calendar period. For example, if the date has been set to 21st June 2013 and the Data Type has been set to Month, the software will select the data associated with the calendar period June 2013.

Note: When selecting date specific data, that data must first exist in the database for the KPI to display correctly.

Running the KPI

Pressing the OK button will close the dialog and apply the KPI to the store plan drawing. The Layers frame will show the KPI that has just been run and the legend will be updated with the Color Theme for the KPI.



KPI's can be turned off in the store plan view by un-ticking the tick box next to the KPI name in the Layers pane on the Object Browser. If no KPI's are ticked the store plan view returns to the normal view mode.

Deleting the KPI

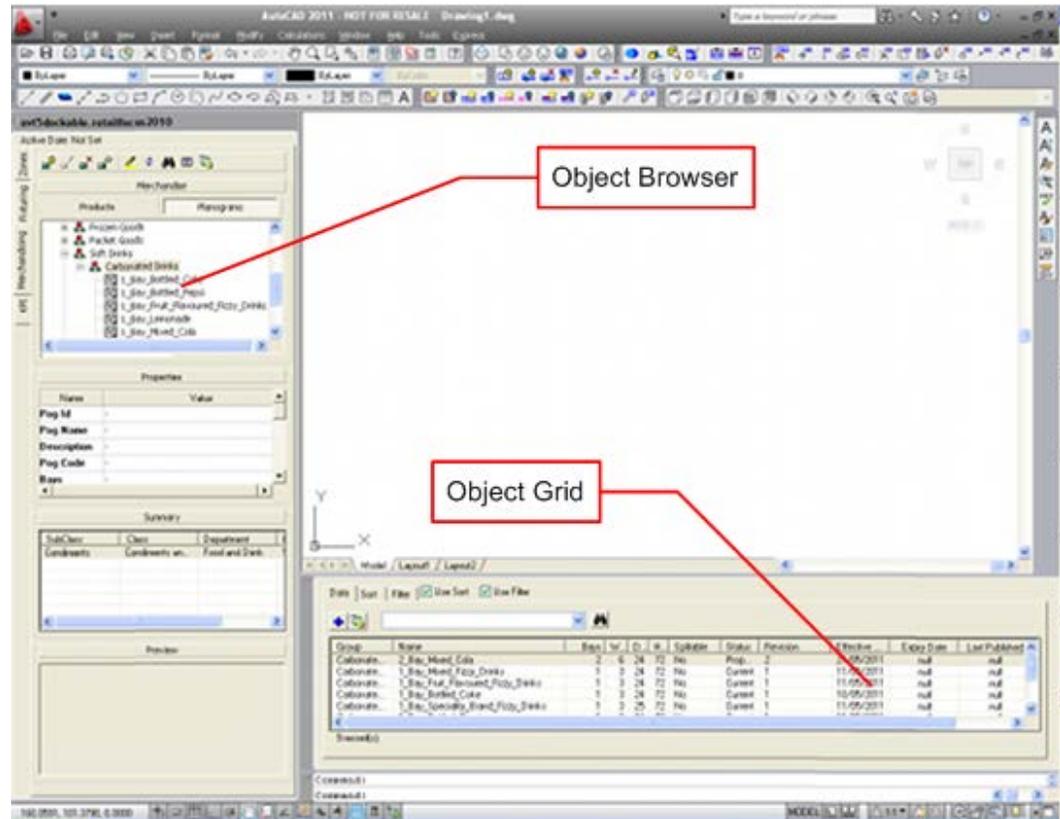
The **Delete KPI button** removes the highlighted KPI from the list in the Layers pane. If this is the KPI being displayed in the store plan view, then the results will be cleared and the view returns to normal, i.e. with no KPI applied.

Note: The Delete KPI option only removes the KPI from the current floor plan. The KPI definition is still saved in the database. If the KPI needs to be run again, this can be done by selecting it within the KPI hierarchy again and clicking the Add KPI button.

Object Grid

About the Object Grid

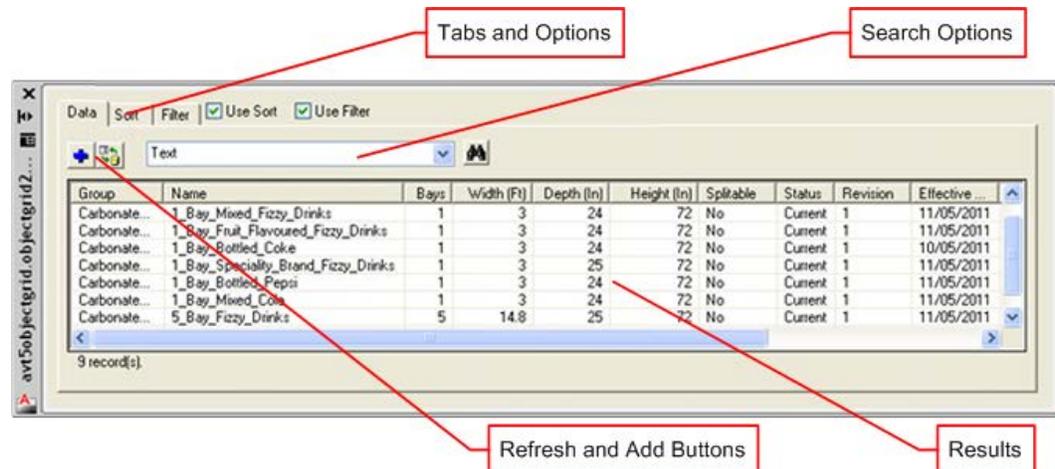
The **Object Grid** provides an alternative to selecting lower level objects in the Object Browser, including Zones, Fixtures, Products and Planograms.



It is used in conjunction with the Object Browser and is available in both the Planner and the Merchandiser environments.

Note: The OBJECT_GRID_DATA_LIMIT system variable is used to set the maximum number of limits that will be returned in the Object Grid. The optimum value for this system variable will vary from system to system depending on the performance of that system. The value set will have to be a compromise between execution speed of the query and whether the result set returned is sufficient for the user's needs.

The Object Grid has the following major parts:



Tabs and Options

There are three tabs:

- **The Data Tab** contains a list of all returned results up to the limit set in the OBJECT_GRID_DATA_LIMIT system variable. Results are also constrained by the filters in use.
- **The Sort Tab** allows the user to select the fields the data will be ordered by and whether the data will be in ascending or descending order.
- **The Filter Tab** allows the raw data sent to the Object Grid to be filtered to a smaller sub-set before it is displayed in the Object Grid.

For the settings in the filter and sort tabs to be active; the appropriate check boxes (just to the right of the tabs) must be selected.

Search Options

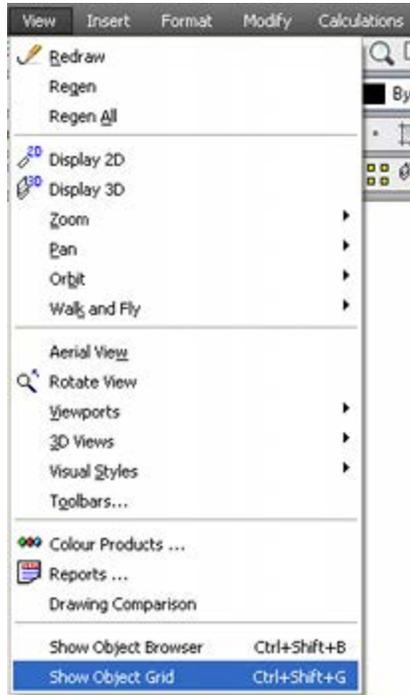
Once a result set has been returned, it is possible to search for any value in the results by entering that value into the text box and clicking the Find icon to the right. The results can be stepped through by repeatedly clicking the find icon.

Refresh and Add Buttons

For data to be added to the Object Grid, the refresh button must be toggled on (depressed). Clicking on a node in the appropriate hierarchy will return the results associated with that node. Highlighting a result and clicking the Add button will result in that object being added to the floor plan in Planner. Objects must be 'dragged and dropped' in order to add them to a Merchandiser floor plan.

Columns

The columns can be hidden or displayed by right clicking in them.

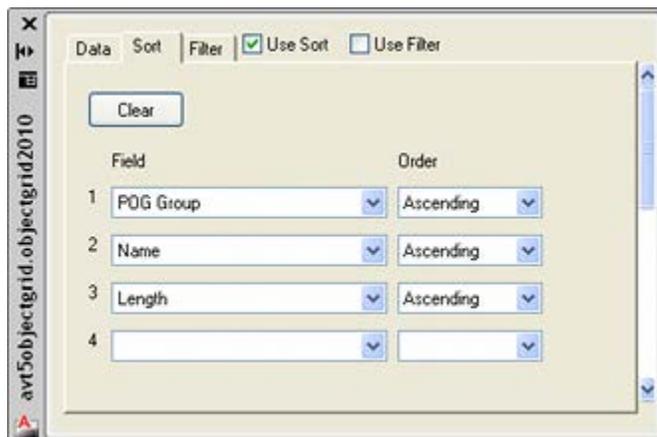


Note: The Object Grid can be "dragged and dropped" to different sides of the screen if the Allow Docking option is selected from the right click menu. If Allow Docking is not on, the Object Grid can be positioned at any point on the screen.

The Object Grid Sort and Filtering Tabs

The Sort Tab

The Sort tab allows the user to determine which columns will be used to sort the data and the priority with which they will be used. Settings will not take effect unless the **Use Sort** check box is ticked.



The selected fields determine both the fields that will be used for sorting. The sequence they are selected in specifies the priority that will be used. The available fields for sorting

will match the fields in the Data tab. The order specifies whether data will be shown ascending (A -->Z) or descending (Z-->A).

Note: Data can also be sorted by clicking on the column headers in the Data tab.

The Filter Tab

The Filter Tab can be used to filter the full list of results down to a more restricted set pertinent to the fixtures being merchandised. Settings will not take effect unless the **Use Filter** check box is ticked.

	Field	Operator	Value	Combination
1	POG Group	=	Cereals	
2	Name	LIKE	Kelloggs	
3	Length	=	48	
4				
5				

- The **Field** specifies the field that is to be used to filter the data. The sequence they are selected in specifies the priority that will be used.
- The **Operator** specifies how the value will be used. For example the = sign requires an exact match, the LIKE option uses implied wild cards to match all or part of the value being searched for.
- The **Value** is the numeric or text value that is to be matched.
- The **Combination** can be set to **AND** or **OR**. If set to **AND**, all conditions must be met. If set to **OR**, multiple conditions can be met.

Note: The OR condition applies to all field set. If four AND fields and one OR field is specified, the OR field will return a set of results independent of the AND fields.

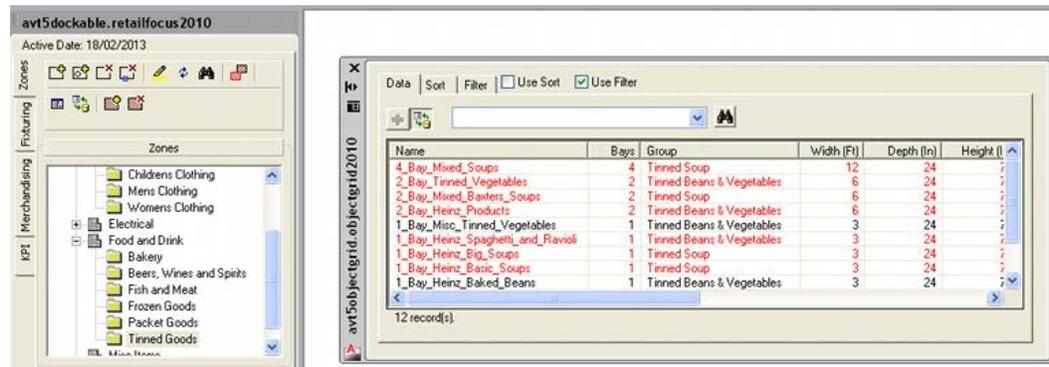
Using the Object Grid

The Object Grid will behave in different ways depending on which tab of the Object Browser is selected. The results returned can be customized by modifying the information in the AVTTB_CUSTOM_SQL table. (This table is only accessible by Administrators with access rights to the database).

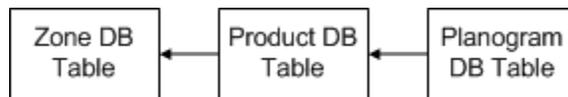
Zones Tab

The Zones Tab gives the opportunity to return lists of products or planograms associated with specific zones. This can serve as a pre-filtering process - for example by returning all planograms associated with the Frozen Food zone. In the example below, highlighting the Tinned Goods zone in the Object Browser then clicking the Refresh button in the Object Grid has returned all planograms associated with that zone.

Note: The Object Browser has been configured to show placed planograms in red and unplaced planograms in black.



This is controlled by Custom SQL using the following logic.



When a planogram is created or imported, the planogram tables in the database will contain the Product ID for each planogram that identifies the node in the Product Hierarchy that is a common source for all products in the planogram. This product node can in turn be manually associated with a specific zone in the database, allowing that product node to be associated with that zone.

When the Custom SQL (AVTTB_CUSTOM_SQL table in the database) is being set up to populate the Object Grid, it can reference that product ID, allowing the Object Grid to populate with merchandise associated with that zone.

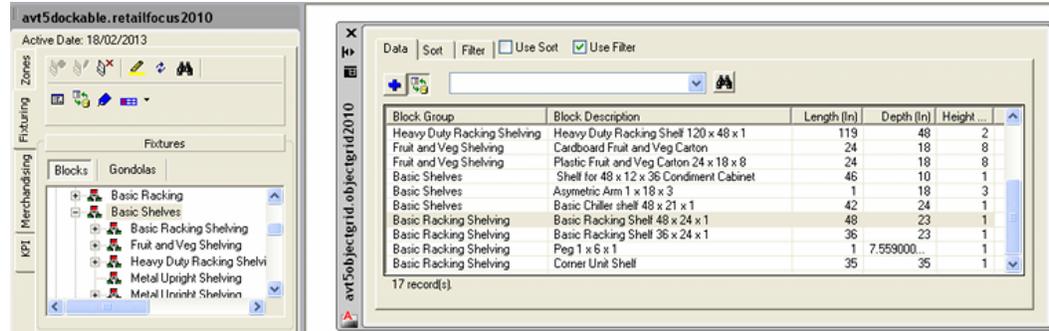
There are two ways this functionality can be used:

- In an open floor plan in the Planner and Merchandiser modules
- In an open planogram design in the Merchandiser module.

In each option, only one form of merchandise (either products or planograms) can be selected on the basis of the zone it is associated with. Retailers may configure this as they require, but the usual way is to configure the planograms associated with a specific zone to be selected in the floor plan, and the products in the planogram design window.

Fixturing Tab

The Fixturing Tab allows users to select fixtures based on their parent fixture group in the Object Browser. In the example below, the Basic Shelves Fixture Group has been selected in the Object Browser. Clicking the Refresh button on the Object Grid then returns all shelves associated with that fixture group and its child fixture groups.



Note: Gondolas cannot be selected using the Object Grid.

Merchandising Tab

The Merchandising Tab allows users to select products or planograms based on their parent group in the Object Browser. Clicking the Refresh button on the Object Grid then returns all results associated with that group and its children.

Products

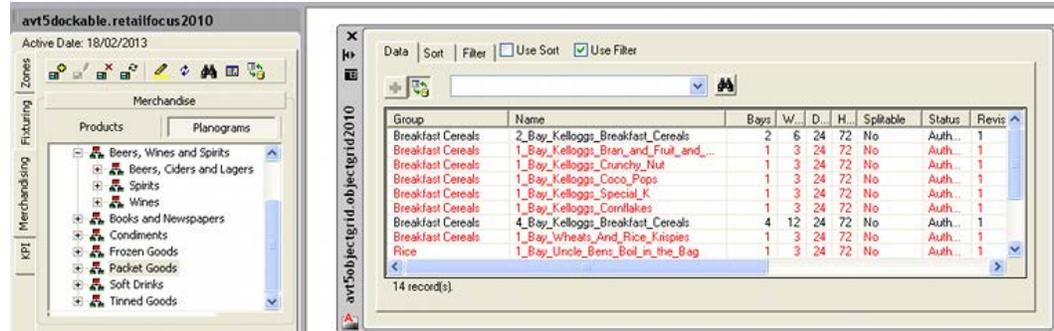
Products can be selected at Department, Class or Sub-Class level by clicking at that level in the product hierarchy and then clicking the Refresh button on the Object Grid. Clicking at other levels in the hierarchy (for example Item) will result in an error message.



Note: In the above example, more results have been returned than permitted by the maximum limit. This limit is set using the OBJECT_GRID_DATA_LIMIT system variable accessed using the System Variable option from the General menu in the Administration module.

Planograms

Planograms can be selected by clicking on the parent planogram group in the Object Browser, then clicking the Refresh button on the Object Grid. If the planogram group has child planogram groups, any planograms associated with those child groups will also be displayed.



Key Performance Indicators

The Object Grid cannot carry out any actions associated with KPIs.

Adding Objects

The method of adding an object varies slightly depending on whether the user is in the Planner or Merchandiser modules.

Planner

Objects can be added from the Object grid into the drawing in two ways; by 'dragging and dropping' or by clicking on the Add button in the Data Tab. The Add button will only be enabled if an object is selected by clicking on it. Only a single object can be added to the drawing at one time.

Merchandiser

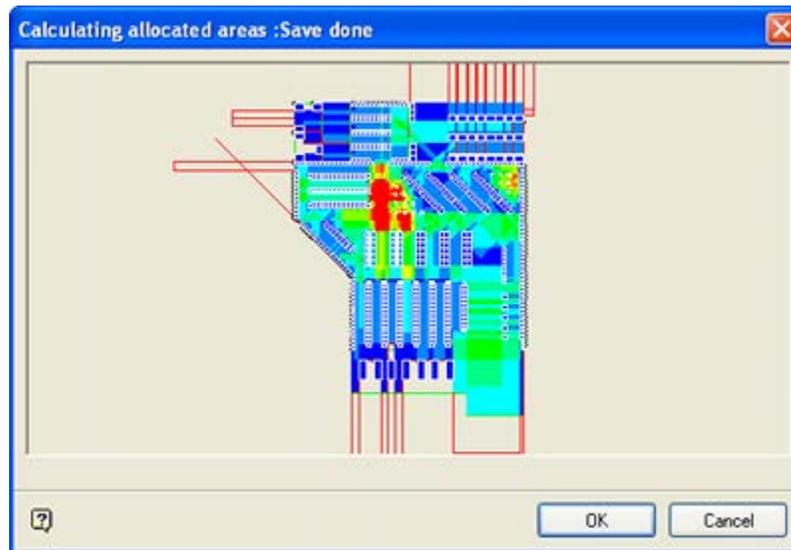
Objects can only be added by 'dragging and dropping' as the Add button is disabled in this environment. Only a single object can be added to the drawing at one time.

Calculations

Overview of Calculations

Macro Space Management has many capabilities. One of these is to understand space. After creating a floor plan, it is then possible to run a number of calculations that give information on how well (or how badly) the floor plan has been laid out. This information can then be used to further optimize the floor plan, enabling a retailer to maximise the sales and profit from the available area.

One example is area calculations: this apportions the floor area in a specific floor between the fixtures in that floor. This data then allows the amount of aisle space allocated to a fixture to be taken into account. In the screen shot below, the red areas show points where customers can stand in a floor plan and see a lot of fixtures - including end caps. This enables a retailer to identify prime areas to place high margin merchandise.



Custom Reports and KPIs

The results of the varying calculations write back to tables within the database. The template database supplied does not contain any specific reports or KPI's that can make use of that information. However, one of the aims of Macro Space Planning is to allow users to understand the use of space within their bricks and mortar retail outlets. It is possible to produce custom reports or KPI's that will enable them to optimize that space. Some of the reports/KPIs that can be created are detailed for each type of calculation within this section of the user guide.

Example of Use of Calculations

Consider a number of categories associated with snacks and convenience buys. Users not using Macro Space Management will have information in tabulated form.

Category	Base Linear (feet)	Profit	Profit per foot Base Linear
Crackers and Savory Biscuits	12	\$3,600	\$300
Chocolate	16	\$6,400	\$400
Crisps and Snacks	12	\$3,000	\$250
Sweet Biscuits	8	\$2,400	\$300
Sweets, Mints and Gums	4	\$1,400	\$350

If users use the Allocated Area calculation, it is possible to extend this information to take into account the aisle space associated with the fixtures the products are on. For example, it is now possible to see that chocolate is showing a good profit when related to base linear, but a poor one when the about of floor space assigned to it is taken into account.

Category	Base Linear (feet)	Profit	Profit per foot Base Linear	Allocated Area (Square Feet)	Profit per Square Foot
Crackers and Savory Biscuits	12	\$3,600	\$300	720	\$5
Chocolate	16	\$6,400	\$400	1,600	\$4
Crisps and Snacks	12	\$3,000	\$250	600	\$5
Sweet Biscuits	8	\$2,400	\$300	400	\$6
Sweets, Mints and Gums	4	\$1,400	\$350	280	\$5

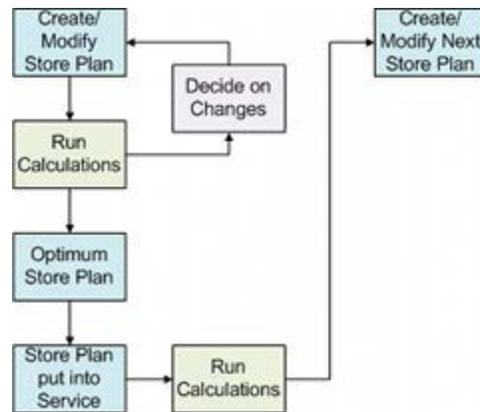
If used in conjunction with EPOS data, a KPI could be created that shows fixtures containing these products and whether they are on target for budgeted profit.



Here a store planner (or store manager) can see at a glance which fixtures contain products that are performing well or badly. In this case it is possible to see an end cap is performing below expectations and further investigation is required to identify the reasons.

Calculations and the Business Process

Calculations - providing the necessary reports and KPI's are available - can be used at any stage of the store planning process.



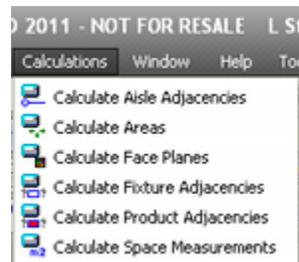
The initial stage would be for a floor plan to be created or modified. Calculations would then be run on that store plan, leading to information on how effectively the space within the store was being used. This information would allow a store planner to keep returning to his floor plan and optimizing it. Once optimized, the floor plan would be published and put into service. Once operational in a real life store, EPOS and other data from the 'live store' could be used to determine what improvements to make in the next iteration of the floor plan.

The necessary reports and KPIs resulting from the calculations are likely to be retailer specific - every retail chain has its own ideas and theories about how best to utilise the space within its retail outlets. These reports and KPIs can be developed from a thorough knowledge of the technicalities of retail and careful study of how data is stored within the Macro Space Planning database.

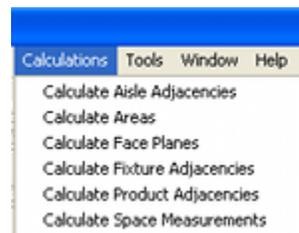
General Technicalities for Calculations

Initiating Calculations

Calculations are initiated from the Calculations menu in Planner.

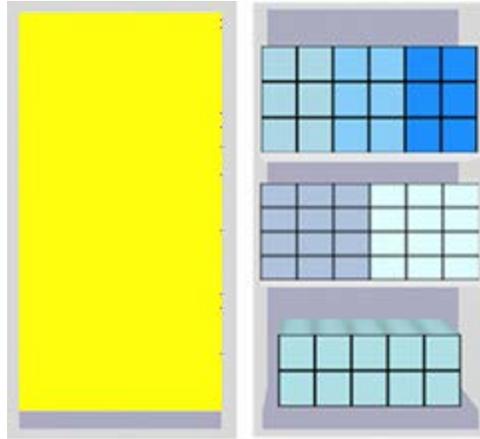


Alternatively, they can be initiated from the Calculations menu in Merchandiser.



Imploded and Exploded Planograms

Planograms can exist in two forms: 2D (imploded) and 3D (exploded).



The example planogram on the left is imploded (2D) and takes the form of a product block occupying the volume of the planogram. There is no information on the shelves and individual products present. The planogram on the right has been exploded to 3D form and contains information on both shelves and individual products.

Planograms can be changed between the imploded and exploded form in the Merchandiser module. The Face Plane and Space Measurement calculations will only return meaningful results for planograms in 3D (exploded) form that contain Display Styles.

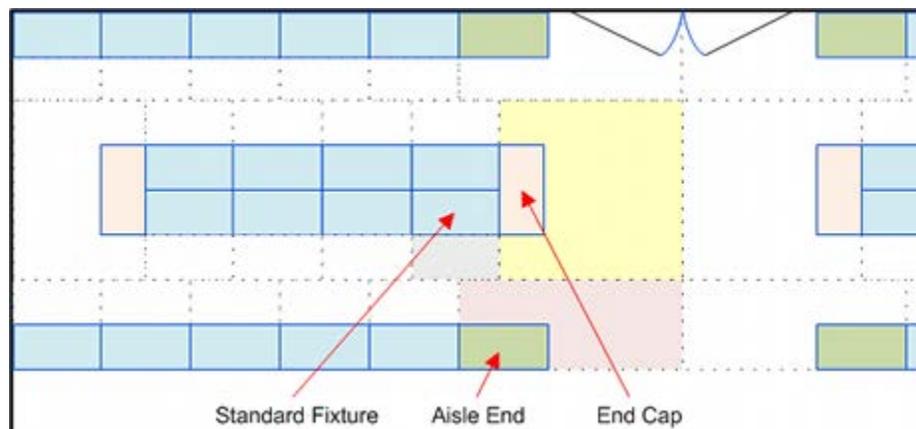
Information on Database Tables

Information is provided in the following sections on the database tables associated with the calculations. These are not generally accessible to normal users, but only to those with the correct privileges for accessing the database. This information has primarily been provided as an aid to anyone intending to produce custom reports.

Allocated Areas

Principles of Allocated Areas

The **Allocated Area** calculation is used to apportion areas of floor space to specific fixtures. This allows reports on performance to take into account the way the floor has been laid out.



In the above simplified example, fixtures are shown with a solid outline and the resulting allocated area with a dotted outline. It can be seen that an end cap will receive a greater

allocated area than a standard fixture, while a fixture at an aisle end could have an allocated area intermediate between the two. The result can be seen in the following table.

Fixture	Footprint Sales	Sales ft2	Allocated Sales Area	Sales ft2
Standard Fixture	8 ft ²	\$1,200	\$150	16 ft ² \$75
Aisle Fixture	8 ft ²	\$1,800	\$225	40 ft ² \$45
End Cap	8 ft ²	\$54000	\$375	60 ft ² \$90

If performance figures were looked at purely on the basis of fixture area (footprint), it would appear that the aisle end fixture was performing well. However, when the floor area allocated to it is taken into account, it can be seen that the sales per square foot are disappointing.

This form of analysis allows a number of facets of floor layout to be explored:

- Wider aisles may mean fewer fixtures in a store, but will increased product visibility lead to higher sales?
- Are products performing badly because visibility for their parent fixture is poor and customers can't see them?
- How significantly does fixture position (end of aisle, centre of aisle) impact on sales?

Space Measurements

The Allocated Area result is also used in the Space Measurement calculation.

Allocated Area Calculation Technicalities

System Variables Affecting Allocated Areas

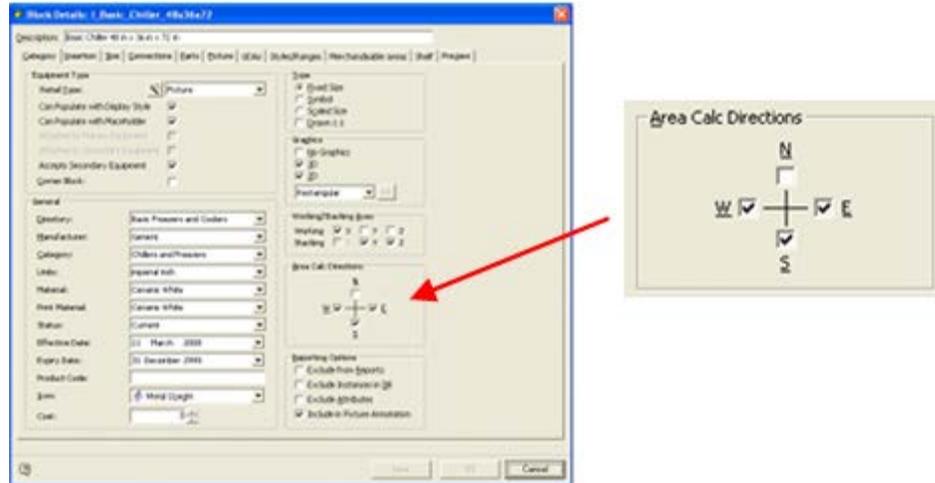
The following system variables affect the allocated areas calculation:

- AREA_LARGE_INCREMENT
- AREA_MEDIUM_INCREMENT
- AREA_SMALL_INCREMENT
- AREA_MAX_DISTANCE
- AREA_UNIT_OF_MEASURE

These system variables are set in the Administration Module - see the *Administration Module User Guide* for more information.

Area Calculation Directions

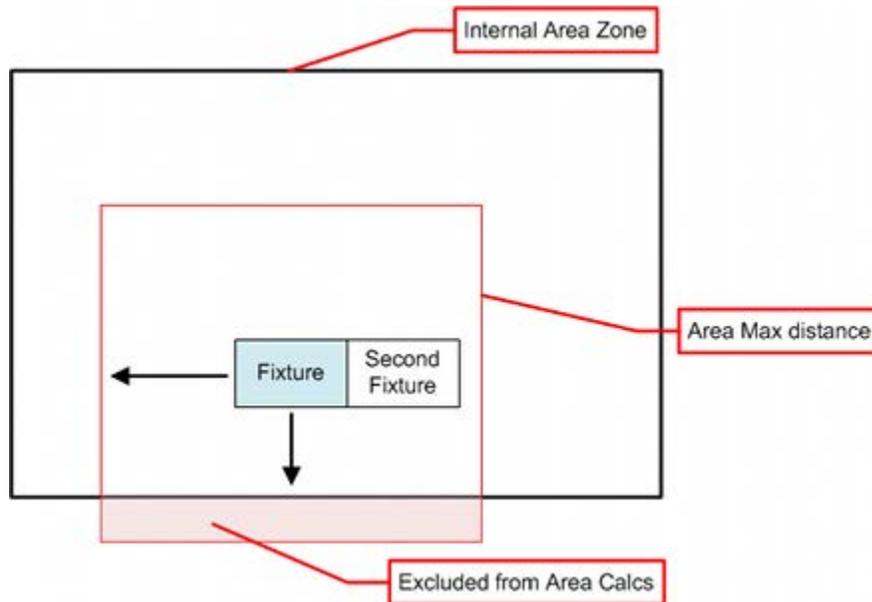
The directions for which the calculations apply for a specific type of fixture are set in the Block Details dialog box in Fixture Studio.



Fixtures such as spinners or bins that can be seen from all directions might have all four area calculation directions set. Conversely, fixtures such as slatwalls will not have the products visible from the back and will have their directions set to left, right and forward. See the *Fixture Studio User Guide* for more information.

Internal Area Zone and AREA_MAX_DISTANCE_SYSTEM_VARIABLE

Two factors affect the maximum area that can be allocated to a fixture: the Internal Area zone and the AREA_MAX_DISTANCE system variable.



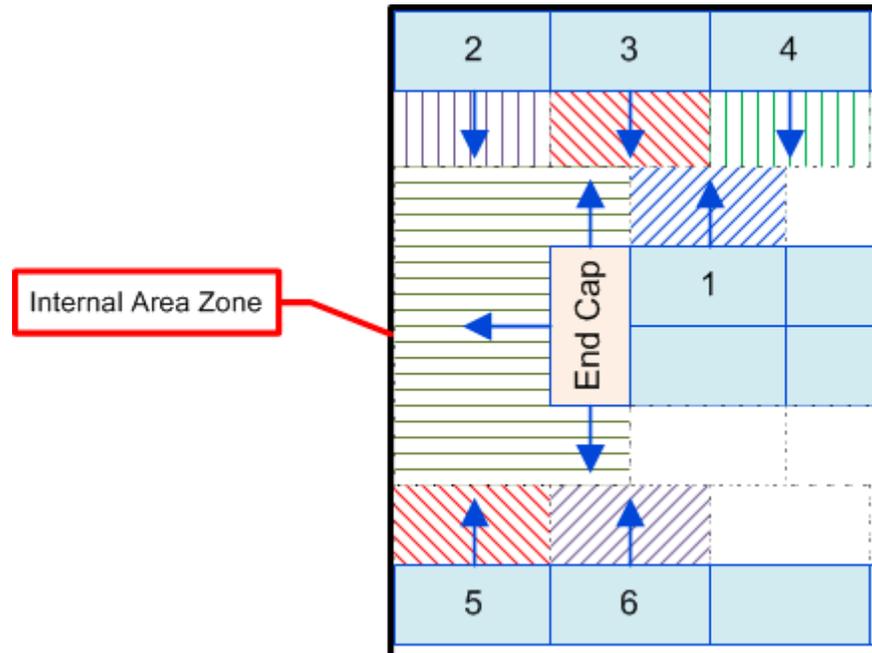
Individual fixtures 'feel out' in the specified directions until:

- They reach another fixture.
- They reach the boundary of the Internal Area zone.
- They reach the distance specified in the AREA_MAX_DISTANCE system variable.

If the maximum distance is greater than the distance to the boundary of the Internal Area zone, the area allocated to that fixture will be determined by the distance to the Internal Area zone boundary.

Sharing Areas between Fixtures

If fixtures share areas, the space will be apportioned between them.

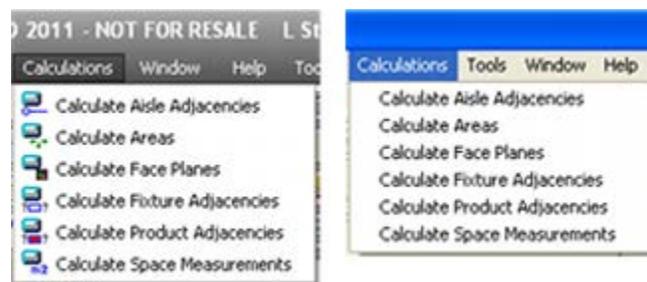


If we take the example of Fixture 1, it will feel out towards Fixtures 3 and 4. Similarly, Fixtures 3 and 4 will feel out towards Fixture 1. The total areas will be subdivided between them, which will approximate to the hatched areas in the diagram above. The end cap is more complex. It will feel out forwards until it reaches the boundary of the internal area. It will also feel out left and right and will be constrained by Fixtures 2, 3, 5 and 6. The end cap will thus be allocated a larger area.

Using the Allocated Area Calculation

Running the Allocated Area Calculation

The Allocated Area calculations can be run from the Calculations menu in either Planner or Merchandiser.



Allocated Area Results

Allocated Area results are stored in the AVTTB_FIXTURE table in the FIX_ALLOCATED_AREA field.

FIL_ID	FIX_ID	FIX_ALLOCATED_AREA
266	4	6077.35
266	5	2587.89
266	7	2160.18
266	8	6669.46
266	10	2160

Allocated Areas are only assigned to fixtures - they are not assigned to fittings, shelves, etc. As the AVTTB_FIXTURE table contains entries for all types of equipment, the results will have to be filtered to be specific for fixtures.

Reporting Using Allocated Areas

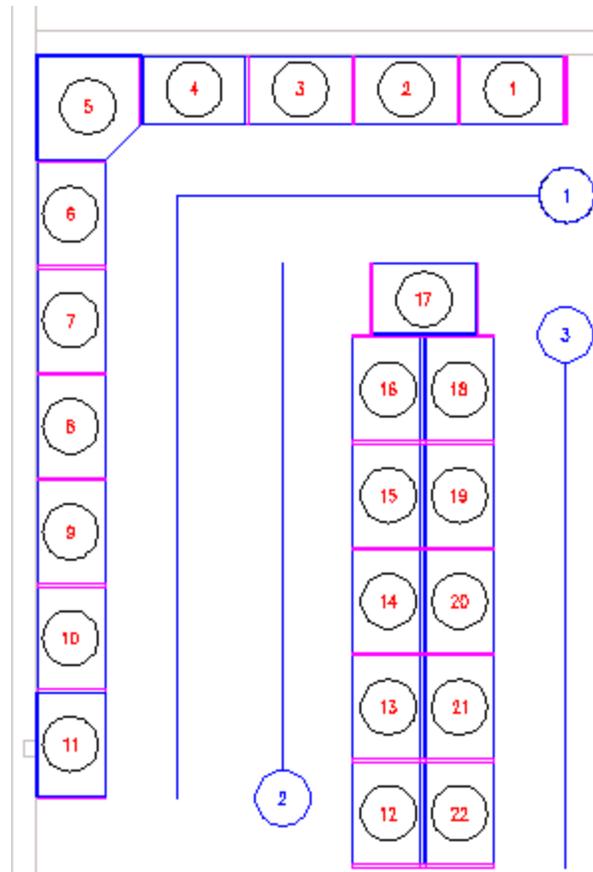
The default database supplied with Macro Space Planning does not contain any KPIs or Reports that use the results of Allocated Area calculations. These will have to be configured by the user; possibly using EPOS data. Possible reports include:

- Fixtures with allocated areas above or below a specified value.
- Total sales values per unit of allocated area.
- Total profit per unit of allocated area.
- Fixtures over and under-performing financially based on allocated area.

Aisle Adjacencies

Principles of Aisle Adjacencies

The Aisle Adjacency Calculation is used to assign fixtures to MSP Aisles. As these aisles have a direction, it is also possible to determine the sequence of the fixtures along that aisle. After products or planograms have been associated with those fixtures, it is then possible to generate reports stating whether those products are well or badly placed along the aisle.



In the above example, Aisle 3 contains fixtures 18 - 22, with Fixture 18 at the start of the aisle and Fixture 22 at the end. It is then possible to use this information in custom reports. For example, once the planograms on the fixtures are known, it would be possible to:

- Identify whether multi-bay planograms have been placed matching the direction of traffic flow they have been designed for.
- Identify whether there are desirable product affinities - for example are pasta sauces next to pasta.

Aisle Adjacency Technicalities

System Variables Affecting Aisle Adjacencies

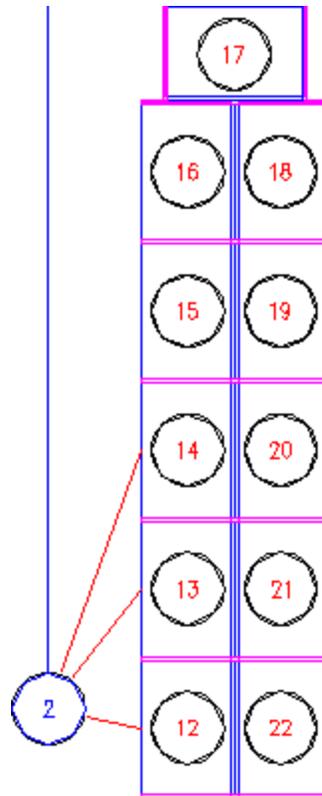
The `ADJACENCY_AISLESIZE` system variable specifies the maximum distance that a fixture can be from an Aisle and still be associated with it. For example, if the `ADJACENCY_AISLESIZE` is set to 48 inches (4 feet), no fixture greater than that distance from the aisle will be associated with it.

Method of Measuring Distances

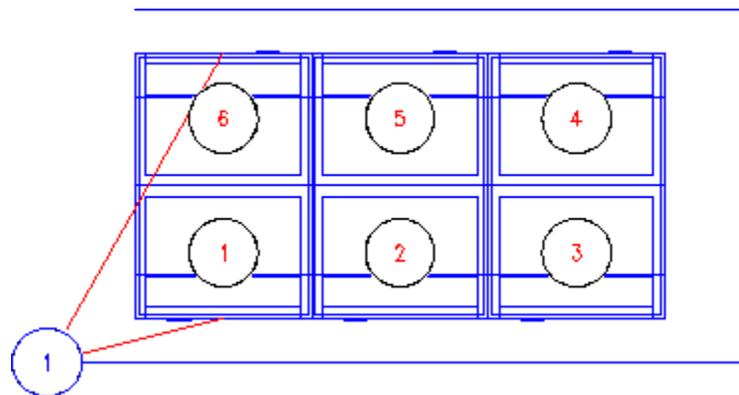
The `AVTTB_AISLE_ADJACENCY` table contains two distances associated with a specific aisle.

- `AIL_DISTANCE_FROM_START`

This distance is measured from the start position of the aisle to the centre of the front of the fixture.



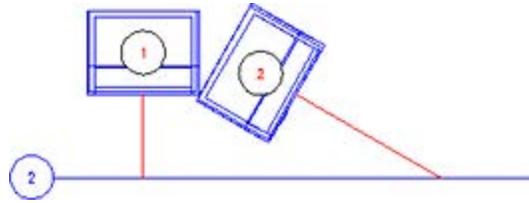
In the above example, the red lines indicate the distances from the start of Aisle 2 to Fixtures 12, 13 and 14. For this reason, it is best not to draw aisles using paths that wrap back on themselves.



In the above example Fixtures 1 and 6 will be shown as the closest to the start of the aisle; the true sequence along the aisle is 1 - 6.

- **AIL_DISTANCE_FROM_AISLE**

This distance is calculated perpendicular to the front of the fixture.



In the above example the centres of the fronts of both fixtures are the same vertical distance from the aisle. However, because the distance to the aisle is measured perpendicular to the front of the fixture, Fixture 1 will be shown as being closer to the aisle than Fixture 2.

Items of Equipment that can be Assigned to Aisles

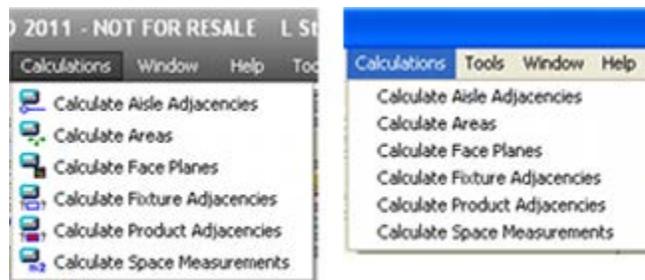
Only equipment of type **Fixture** can be assigned to aisles in the AVTTB_AISLE_ADJACENCY table. (Fixture types are assigned in the Category Tab of the Block Details dialog box in the Fixture Studio module - see the *Fixture Studio User Guide* for more information).

In addition Fixtures will only be assigned to a single aisle - this will be the nearest aisle within the limits set by the ADJACENCY_AISLESIZE system variable.

Using the Aisle Adjacency Calculations

Running the Aisle Adjacency Calculation

The Allocated Area calculations can be run from the Calculations menu in either Planner or Merchandiser.



Aisle Adjacency Results

Aisle Adjacency results are stored in the AVTTB_AISLE_ADJACENCY table.

COLUMN_NAME	DATA_TYPE
FIL_ID	NUMBER(10,0)
FIX_ID	NUMBER(10,0)
AIL_NAME	NVARCHAR2(64 CHAR)
AIL_SEGMENT	NUMBER(5,0)
AIL_ONRIGHT	NUMBER(10,0)
AIL_DISTANCE_FROM_START	FLOAT
AIL_DISTANCE_FROM_AISLE	FLOAT

Using Aisle Adjacency Results

The default database supplied with Macro Space Planning does not contain any KPIs or Reports that use the results of Aisle Adjacency calculations. These will have to be configured by the user, and would require using data from other tables such as products (AVTTB_PRODUCT) and affinities between products (AVTTB_ADJACENCY_SEVERITY_TYPE). Possible reports include:

- Identifying whether multi-bay planograms have been placed matching the direction of traffic flow they have been designed for.
- Identifying whether planograms that require power (for example TV planograms) are in aisles that have been supplied with power
- Identifying whether there are desirable product affinities - for example whether pasta sauces are next to pasta.
- Identifying whether there are undesirable product affinities - for example whether shotgun shells are next to baby food.

If the ADJACENCY_AISLESIZE system variable is set to a sufficient size, it is possible to include the fixtures on both sides of the aisle, allowing the product affinities to be established for products sharing the entire aisle.

As an example, a short report could be generated for an aisle containing the 'Rice, Pasta and Noodles' category.

Segment	Side of Aisle	Distance from Start	Base Linear of Product	Profit/Foot
Instant Rice	Left	0 ft	12 ft	\$125
Ready to Heat Rice	Right	0 ft	8 ft	\$150
Instant Noodles	Left	12 ft	8 ft	\$75
Instant Pasta	Right	8 ft	4 ft	\$125
Dry Short Pasta	Right	16 ft	4 ft	\$100

This enables a store planner to see that the Instant Noodles segment with a profit of \$75 per base linear foot is placed in a prime position in the centre of the aisle yet is under-performing.

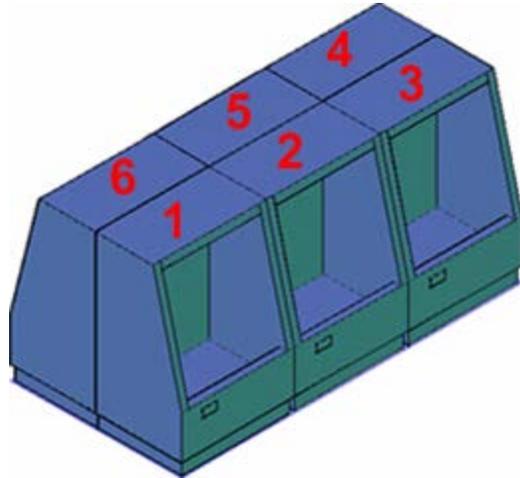
Fixture Adjacencies

Principles of Fixture Adjacencies

The Fixture Adjacency calculation is used for several purposes:

- To determine which fixtures are assigned to a specific gondola and what the relationship of the fixtures are to each other within the gondola.
- As a precursor to updating result in the AVTTB_FIXTURE_SEQUENCE table which is used to hold additional information on the arrangement of fixtures within gondolas.
- As a necessary predecessor to the Product Adjacency calculation.
- As a necessary predecessor to placing multi-bay planograms in In-Store Space Collaboration

The Fixture Adjacency calculation determines which fixtures are to the left, right, above or behind other fixtures.



In the above example, Fixture 2 has Fixture 1 to the left, Fixture 4 behind and to the right, etc.

Fixture Adjacency Technicalities

System Variables Affecting Fixture Adjacencies

The following system variables affect the fixture calculation:

- ADJACENCY_FIXTURE_SIZE
- ADJACENCY_LATERALGAP
- ADJACENCY_VERTICALGAP

These system variables are set in the Administration Module - see the *Administration Module User Guide* for more information.

Bitwise System Variables

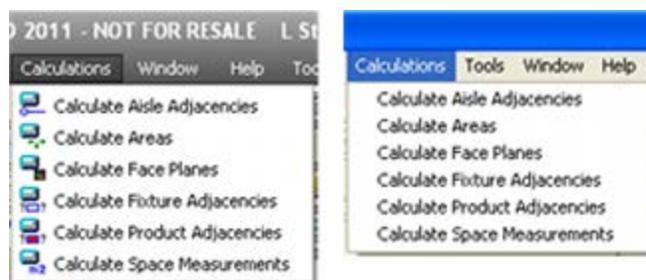
The results of the Fixture Adjacency calculations are stored in the AVTTB_FIXTURE_SEQUENCE table. The type of adjacency is stored in the ADJ_TYPE field as a bitwise system variable:

- 1 = Adjacent to Right
- 2 = Adjacent to Left
- 4 = Adjacent to Back
- 8 = Aisle Adjacency (Not in Use)
- 16 = Not in Use
- 32 = Adjacent Above

Bitwise variables can be built up of combinations of numbers, so 5 = Adjacent to Right and Behind.

Using Fixture Adjacencies

The Fixture Adjacency calculations can be run from the Calculations menu in either Planner or Merchandiser.



Fixture Adjacency Results

Aisle Adjacency results are stored in the AVTTB_FIXTURE_ADJACENCY table.

COLUMN_NAME	DATA_TYPE
FIL_ID	NUMBER(10,0)
FIX_ID	NUMBER(10,0)
ADJ_ID	NUMBER(10,0)
ADJ_TYPE	NUMBER(5,0)
ADJ_LEVEL	NUMBER(5,0)
MER_ID	NUMBER(10,0)
ADJ_MER_ID	NUMBER(10,0)

More information pertinent to gondolas is stored in the AVTTB_FIXTURE_SEQUENCE table.

COLUMN_NAME	DATA_TYPE
FIL_ID	NUMBER(10,0)
FIX_ID	NUMBER(10,0)
FSQ_SEQUENCE	NUMBER(5,0)
FSQ_GONDOLA	NUMBER(5,0)
FSQ_LEVEL	NUMBER(5,0)
FSQ_BAY	NUMBER(5,0)
FSQ_FRONTAGE	NUMBER(5,0)
FSQ_SIDE1	NUMBER(5,0)
FSQ_SIDE2	NUMBER(5,0)
MER_ID	NUMBER(10,0)

Using the Fixture Adjacency Results

1. Product Adjacencies

Fixture Adjacency results are a necessary precursor for running the Product Adjacency calculations.

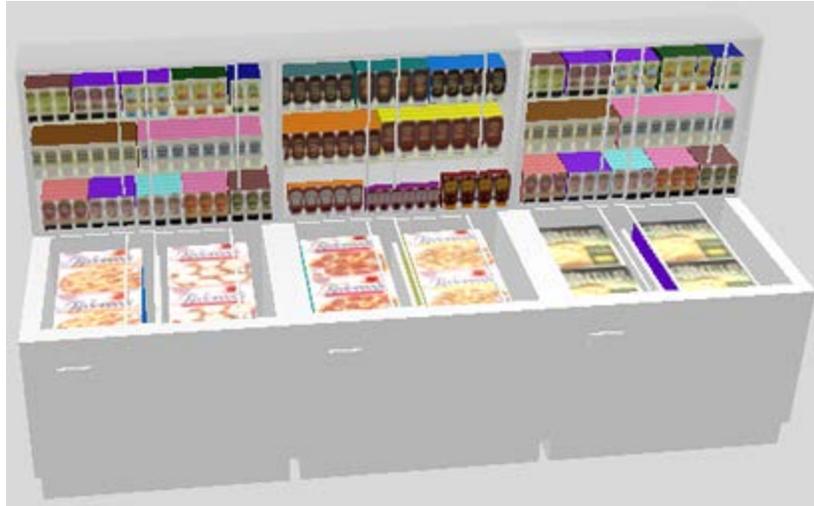
2. Reports Based on Fixture Adjacencies

Although it is not usual to generate reports or KPIs based on Fixture Adjacencies, it would be possible to produce specialised reports. An example would be to generate a report that used Fixture UDAs to identify if a fixture used to hold hot food has been placed directly behind a fixture used for frozen products.

Product Adjacencies

Principles of Product Adjacencies

The Product Adjacency Calculation is used to determine the relationship of products on adjacent fixtures to one another. Products may be to the left, right, above or on the same fixture as other products. Results are aggregated up to sub-class (sub-category/sub-segment) level.



A necessary precursor for running the product adjacency calculations is that the Fixture Adjacency Calculation has been run first.

When run, Product Adjacency aggregates the products up to subclass (sub-category/sub-segment) level and then reports which products are to the left/right/above other products. This information can then be used in conjunction with the Adjacency Severity rules to identify products that are well or badly placed.

The Adjacency Severity rules are configured in the Administration module.

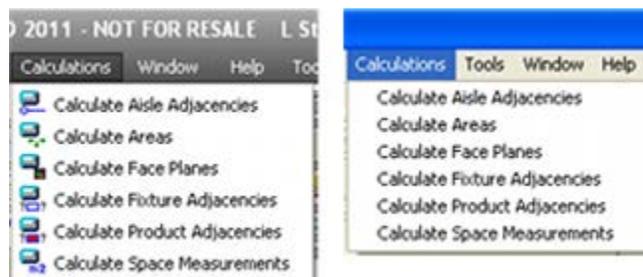
Description	Product 1	Product 2	Rule
Beer + Spirits	Beers, Lagers and Ciders	Spirits	EXCELLENT: Sub-classes well placed
Beer + Wines	Beers, Lagers and Ciders	Wines	EXCELLENT: Sub-classes well placed
Beer and Cereals	Beers, Lagers and Ciders	Breakfast Cereals	Satisfactory: Sub-classes near enough
Bread + Cakes	Bread	Cakes	Satisfactory: Sub-classes near enough
Bread + Rolls	Bread	Rolls	EXCELLENT: Sub-classes well placed

The results are stored in the AVTTB_ADJACENCY_RULE table.

Using Product Adjacencies

Running the Product Calculation

The Product calculations can be run from the Calculations menu in either Planner or Merchandiser.



Product Adjacency Results

Product Adjacency results are stored in the AVTTB_PRODUCT_ADJACENCY table.

COLUMN_NAME	DATA_TYPE
FIL_ID	NUMBER(10,0)
PRD_ID	NUMBER(19,0)
PAJ_START_SEQUENCE	NUMBER(5,0)
PAJ_GONDOLA	NUMBER(5,0)
PAJ_LENGTH	FLOAT
PAJ_END_SEQUENCE	NUMBER(5,0)
PAJ_BAYGROUP	VARCHAR2(25 BYTE)
PAJ_BAYNUMBER	NUMBER(5,0)
ZON_ID	NUMBER(10,0)
PRD_ID_LEFT	NUMBER(10,0)
PAJ_LENGTH_LEFT	FLOAT
PRD_ID_RIGHT	NUMBER(10,0)
PAJ_LENGTH_RIGHT	FLOAT
PRD_ID_SAME	NUMBER(10,0)
PAJ_LENGTH_SAME	FLOAT
POG_ID	NUMBER(10,0)
POG_ID_LEFT	NUMBER(10,0)
POG_ID_RIGHT	NUMBER(10,0)
POG_ID_SAME	NUMBER(10,0)
AST_ID_LEFT	NUMBER(5,0)
AST_ID_RIGHT	NUMBER(5,0)
AST_ID_SAME	NUMBER(5,0)

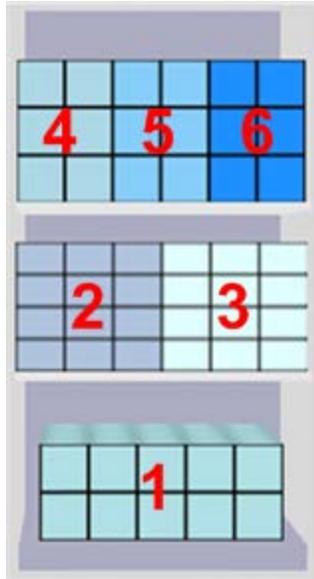
Using the Product Adjacency Results

The main way of using the product adjacency results (AVTTB_PRODUCT_ADJACENCY table) is in conjunction with the Adjacency Rules table (AVTTB_ADJACENCY_RULE table). This allows a report to be generated specifying whether products that are to the left, right or above another product are products that are desirable or undesirable to have in that relationship.

Face Planes

Principles of Face Planes

Face Planes can be used to calculate the frontal area of products at display style level.



In the above example the base of the fixture contains a single product (1), the first shelf two products (2 & 3) and the top shelf three products (4, 5 & 6). The Face Plan calculation can be used to relate sales information to the frontal area of the products.

Product Number	Sales	Area	Sales ft ²
1	\$225	4.5 ft ²	\$50/ft ²
2	\$135	2.25 ft ²	\$60/ft ²
3	\$90	2.25 ft ²	\$40/ft ²
4	\$75	1.5 ft ²	\$50/ft ²
5	\$45	1.5 ft ²	\$30/ft ²
6	\$105	1.5 ft ²	\$70/ft ²

This allows (for example) space trading to be carried out. Product 5 is occupying the same frontal area as Product 6, but is generating less than half the sales per square foot. There would thus be a case to increase the number of facings of Product 6 and correspondingly reduce the number of facings of Product 5.

Note: For a similar calculation using volumes see the section on Space Measurement.

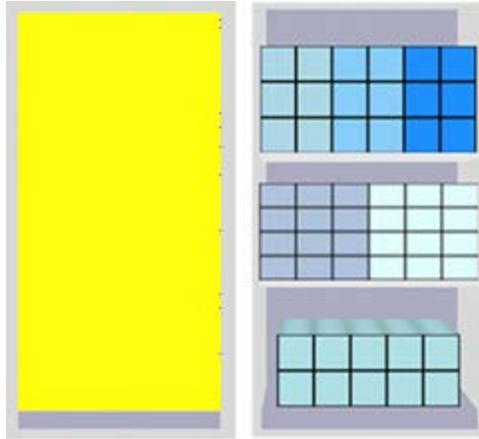
Face Plane Technicalities

System Variables Affecting Face Plane Calculations

There is no system variable connected with the Face Plane calculations.

Imploded and Exploded Planograms

Planograms can exist in two forms: 2D (imploded) and 3D (exploded).



The example planogram on the left is imploded (2D) and takes the form of a product block occupying the volume of the planogram. There is no information on the shelves and individual products present. The planogram on the right has been exploded to 3D form and contains information on both shelves and individual products.

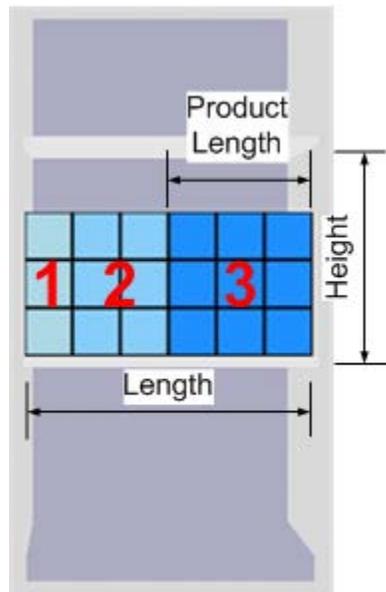
Planograms can be changed between the imploded and exploded form in the Merchandiser module. The Face Plane calculation will only return meaningful results for planograms in 3D (exploded) form that contain Display Styles.

Display Styles

Display Styles are the lowest level in the MSP Product hierarchy. Each display style is associated with a specific SKU and contains information on product dimensions. When the Face Plane calculation is run, results are aggregated up to the parent SKU.

Calculation Method

The calculation method is as follows:



1. The total frontal area is found by multiplying the length of the shelf (or fixture) by the available height.

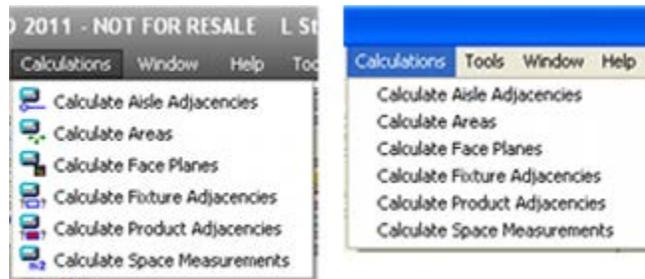
2. The frontage product occupies on the shelf is determined - for example Product 3 in the above example occupies 50% of the shelf.
3. The total frontal area is proportioned among the products according to the frontage they occupy.

Product	Total Area	Frontage	Face Plane
1	4 ft ²	50%	2 ft ²
2	4 ft ²	35%	1.4 ft ²
3	4 ft ²	15%	0.06 ft ²

Using the Face Plane Calculations

Running the Face Plane Calculation

The Face Plan calculations can be run from the Calculations menu in either Planner or Merchandiser.



Face Plane Results

Face Plane results are stored in the AVTTB_FACE_PLANE table.

COLUMN_NAME	DATA_TYPE
FIL_ID	NUMBER (10,0)
PRD_ID	NUMBER (10,0)
FIX_ID	NUMBER (10,0)
SHF_ID	NUMBER (10,0)
MER_ID	NUMBER (10,0)
FPC_FACE_AREA	FLOAT

Using the Face Plane Results

There are a number of potential ways of using the face plane results.

- By linking to individual planograms placed in a floor plan (AVTTB_PLANO table) to generate area based performance metrics.
- By linking to the aisle adjacency table (AVTTB_AISLE_ADJACENCY table) to generate area based performance metrics for that aisle.
- By linking to the product hierarchy (AVTTB_PRODUCT_DEF table) and the products placed in a floor plan (AVTTB_PRODUCT table) to generate area based performance metrics for entire categories, segments or sub-segments in a floor plan.

Space Measurements

Principles of Space Measurements

Space Measurements are used for calculating linear dimensions and volumes associated with planograms in a floor plan. These can then be combined with EPOS data for reporting purposes. For the full set of information in Space Measurements, the allocated area calculation must first have been run. In addition, the planogram must be in Exploded (3D) form - if not, the shelf linear figure will be inaccurate.

Products will be aggregated up to sub-class (sub-category or sub-segment) level.

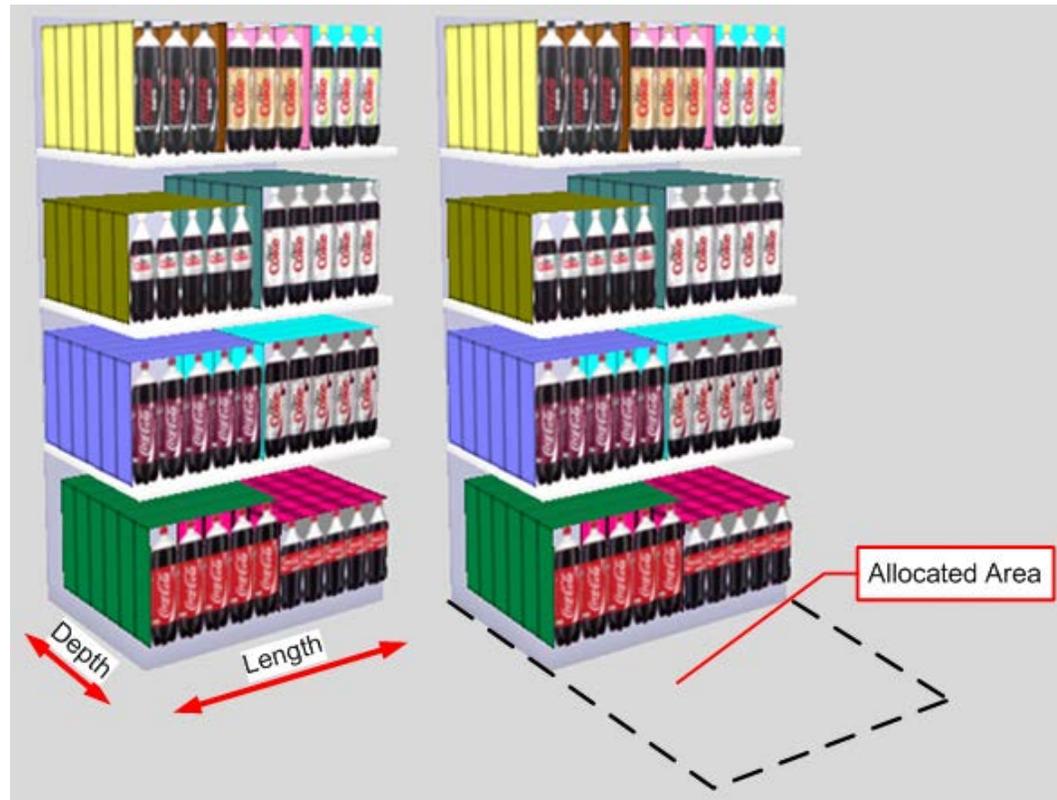
The Space Measurement calculation provides the following information:

Base Linear and Shelf Linear



- **Base Linear** is the length of the fixture.
- **Shelf Linear** is the cumulative length of the shelves on the fixture.

Footprint and Allocated Area



- **Footprint** is the physical space the fixture occupies on the floor. It is calculated by multiplying the fixture length and depth.
- **Allocated Area** is the space the fixture occupies on the floor when any associated areas of its aisle have been apportioned to it.

Display Volume, Nominal Volume and Allocated Volume

These provide different volumes for calculation purposes:

- **Display Volume** is the actual volume occupied by the products. This will be less than the maximum volume of the parent fixtures because of finger gaps, unused spaces, etc.
- **Nominal Volume** is the Base Linear value for the parent fixtures, multiplied by the values of the CALC_STND_DEPTH and CALC_STND_HEIGHT system variables. This provides a nominal volume for the fixtures that is purely dependent on the Base Linear values.
- **Allocated Volume** is the Allocated Area for the parent fixtures multiplied by the value of the CALC_STND_HEIGHT system variable. It gives a volume within the floor plan for reporting purposes that takes into account any aisle space associated with the fixtures but which is not dependent on the height of the fixtures.

Space Measurement Technicalities

System Variables Affecting Space Measurement

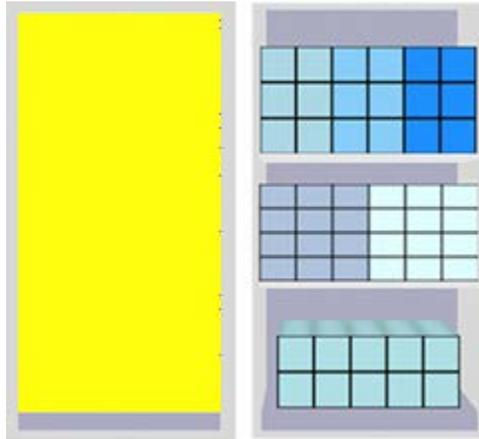
The following system variables affect the Space Measurement calculation:

- CALC_STND_DEPTH
- CAL_STD_HEIGHT

These system variables are set in the Administration Module - see the *Administration Module User Guide* for more information.

Imploded and Exploded Planograms

Planograms can exist in two forms: 2D (imploded) and 3D (exploded).



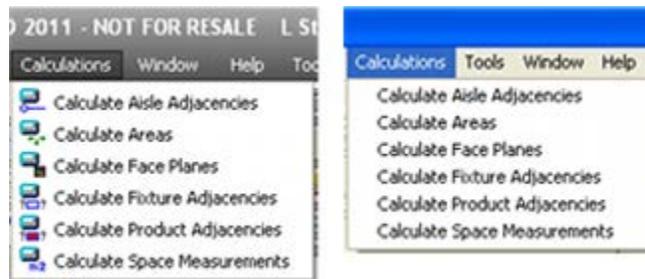
The example planogram on the left is imploded (2D) and takes the form of a product block occupying the volume of the planogram. There is no information on the shelves and individual products present. The planogram on the right has been exploded to 3D form and contains information on both shelves and individual products.

Planograms can be changed between the imploded and exploded form in the Merchandiser module. The Space Measurement calculation will only return meaningful results for planograms in 3D (exploded) form that contain Display Styles.

Using Space Measurements

Running the Space Measurement Calculation

The Space Measurement calculations can be run from the Calculations menu in either Planner or Merchandiser.



Space Measurement Results

Space Measurement results are stored in the AVTTB_PRODUCT_MEASUREMENT table.

COLUMN_NAME	DATA_TYPE
FIL_ID	NUMBER(10,0)
PRD_ID	NUMBER(19,0)
PRM_BASE_LINEAR	FLOAT
PRM_SHELF_LINEAR	FLOAT
PRM_ALLOCATED_AREA	FLOAT
PRM_FOOTPRINT	FLOAT
PRM_DISPLAY_VOLUME	FLOAT
PRM_NOMINAL_VOLUME	FLOAT
PRM_ALLOCATED_VOLUME	FLOAT

Reporting Using Space Measurements

The default database supplied with Macro Space Planning does not contain any KPIs or Reports that use the results of Space Measurement calculations. These will have to be configured by the user; possibly using EPOS data. Results will be aggregated up to subclass (sub-category/sub-segment) level.

Possible reports include:

- Products at subclass level expressed as feet of shelf length (base linear plus shelf linear).
- Sales turnover for products at subclass level expressed as turnover per foot of shelf length (base linear plus shelf linear).
- Profit for products at subclass level expressed as profit per foot of shelf length (base linear plus shelf linear).
- Products at subclass level expressed as square feet of floor area (based on allocated area).
- Sales turnover for products at subclass level expressed as turnover per square feet of floor area (based on allocated area).
- Profit for products at subclass level expressed as profit per square feet of floor area (based on allocated area).
- Products at subclass level expressed as a cumulative volume (based on display, nominal or allocated volumes).
- Sales turnover for products at subclass level expressed as a turnover per unit volume (based on display, nominal or allocated volumes).
- Profit for products at subclass level expressed as profit per unit volume (based on display, nominal or allocated volumes).

Quick Reports

About Quick Reports

Quick Reports can be called from the View menu in the Planner and Merchandiser modules. Because each retailer will have a different slant on the information they wish to see during store planning, Quick Reports can be customized to user requirements. They are used to provide information on specific aspects of the currently active floor plan.

NAME	DESCRIPTION	BAYGROUP	BAYNUMBER	ACADHANDLE
L_BR_Fixture_36x24x72	Basic Racking Fixture 36 x 24 x 72	Food	F-16	149
L_BR_Fixture_36x24x72	Basic Racking Fixture 36 x 24 x 72	Food	F-18	FB
L_BR_Fixture_36x24x72	Basic Racking Fixture 36 x 24 x 72	Food	F-10	171
L_BR_Fixture_36x24x72	Basic Racking Fixture 36 x 24 x 72	Food	F-1	123
L_BR_Fixture_36x24x72	Basic Racking Fixture 36 x 24 x 72	Food	F-12	155
L_BR_Fixture_36x24x72	Basic Racking Fixture 36 x 24 x 72	Food	F-17	135
L_BR_Fixture_36x24x72	Basic Racking Fixture 36 x 24 x 72	Food	F-13	152

In the example above, a Quick Report has been configured to show all unpopulated fixtures in a floor plan. The store planner can then use the bay number or the highlight button on the toolbar to identify the fixtures.

Forms of Quick Reports

Quick Reports are of three broad types:

General Reports

These are reports that give general information from the database without being dependent on a floor plan or planogram being open. The example below shows a Quick Report developed to show which floor plans are currently checked out.

DATE CHECKED OUT	STORE CODE	STORE NAME	FLOOR	FILE NAME	STATUS	USER
22/08/2012 14:30:51	BR1001	Bridgetown	Ground Floor	Spring 2013	Proposed	Joe Bloggs
22/08/2012 14:32:32	BR1002	Brighton	Ground Floor	Summer 2013	Proposed	Jane Joe
22/08/2012 14:31:44	BR1001	Bridgetown	Ground Floor	Winter 2013	Proposed	John Smith
22/08/2012 14:33:34	OSL001	Oslo	Ground Floor	Fall 2013	Proposed	John Smith

Floor Plans

These are reports that give information on the currently active floor plan. The example below shows a comparison between planograms placed in the currently active floor plan and the designated prototype store.

NAME	PLANOGRAM GROUP	BASELINEAR	PROTOTYPE BASELINEAR
1_Bay_Carlsberg_Lager	Beers, Ciders and Lagers	5.8	2.9
1_Bay_Speciality_Beer	Beers, Ciders and Lagers	5.8	2.9
1_Bay_Heinz_Basic_Soups	Tinned Soup	2.9	5.8
1_Bay_Baxters_Favourite_Soups	Tinned Soup	2.9	5.8
4_Bay_Basic_Spirit_Planogram	Spirits	12	5.8
2_Bay_Red_and_White_Wine	Wines	5.8	5.8

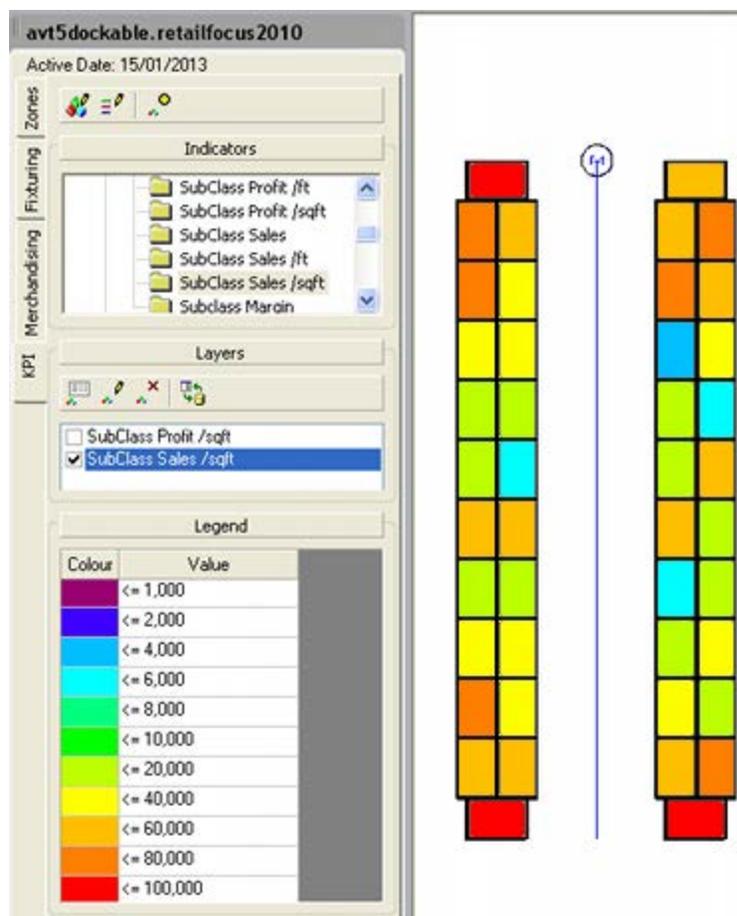
Planograms

Quick Reports for Planograms can only be accessed when a planogram design is open for review in the Merchandiser Module. This form of Quick Report cannot be accessed from the Planner Module. In the example below, a simple Quick Report has been developed to list what products are present on what shelves in each planogram bay.

BAY	LOCATION	PRODUCT	FACINGS	DEPTH	STACK	TOTAL
BAY 1	FIXTURE	Wholegrain Rice 250g	3	23	2	138
BAY 1	FIXTURE	Vegetable Pilau Rice 250g	2	23	2	92
BAY 1	FIXTURE	Tomato & Basil Rice 250g	3	23	2	138
BAY 1	SHELF 1	Thai Sweet Chili Rice 250g	3	23	2	138
BAY 1	SHELF 1	Thai Curry Rice 250g	2	23	2	92
BAY 1	SHELF 1	Tandoori Rice 250g	3	23	2	138
BAY 1	SHELF 2	Spicy Mexican Rice 250g	3	23	2	138
BAY 1	SHELF 2	Special Fried Rice 250g	2	23	2	92
BAY 1	SHELF 2	Rice Chicken 250g	3	23	2	138
BAY 1	SHELF 4	Pilau Rice 250g	3	23	2	138
BAY 1	SHELF 4	Mushroom Rice 250g	2	23	2	92
BAY 1	SHELF 4	Long Grain Wild Rice 250g	3	23	2	138
BAY 1	SHELF 4	Long Grain Rice 250g	1	23	1	23
BAY 1	SHELF 4	Lemon-Rosemary Rice 250g	2	23	1	46
BAY 1	SHELF 4	Golden Vegetable Rice 250g	1	23	1	23
BAY 1	SHELF 4	Egg Fried Rice 250g	2	23	1	46
BAY 1	SHELF 4	Chinese Style Rice 250g	2	23	1	46

Quick Reports and KPI's

Quick Reports and KPI's complement each other. KPI's can be used to visually display the same information that a Quick Report can display in tabular form.



In the above example, the financial performance of a pair of gondolas is being examined. Fixtures generating high levels of sales can be seen at a glance - as can poorly performing ones. As the KPI shows performance date in bands, it could be complemented by a Quick Report showing detailed information for each fixture.

Configuring Quick Reports

Quick Reports are completely configurable by implementors or administrators with access to the Macro Space Planning (MSP) Database. Information on how to carry out this configuration is included with the *Macro Space Planning Data Model*. Anyone wishing to configure will need a good working knowledge of SQL and a detailed knowledge of the database schema.

What Quick Reports Can Be Used For

Quick Reports can be used to display any information in the database pertinent to store planning tasks. Some examples of potential uses:

Compliance

Compliance is verifying that the floor plan does not contain errors that may prevent the floor plan being correctly implemented when the floor plan is published and put into service. Example Quick Reports that are possible include:

Aisles

- Planograms that have a flow direction not appropriate for the aisles they have been placed in.

Equipment

- Items of equipment that are not due to come into service or will be taken out of service when the floor plan is implemented.
- Fixtures that have not been populated with merchandise or which have multi-placed planograms.

Merchandise

- Planograms on inappropriate fixtures; for example fixtures of the wrong size or wrong temperature range.
- Multi-placed planograms that require correction.

Zones

- Merchandise that is not appropriate for that zone - for example clothing in a Food and Drink zone.

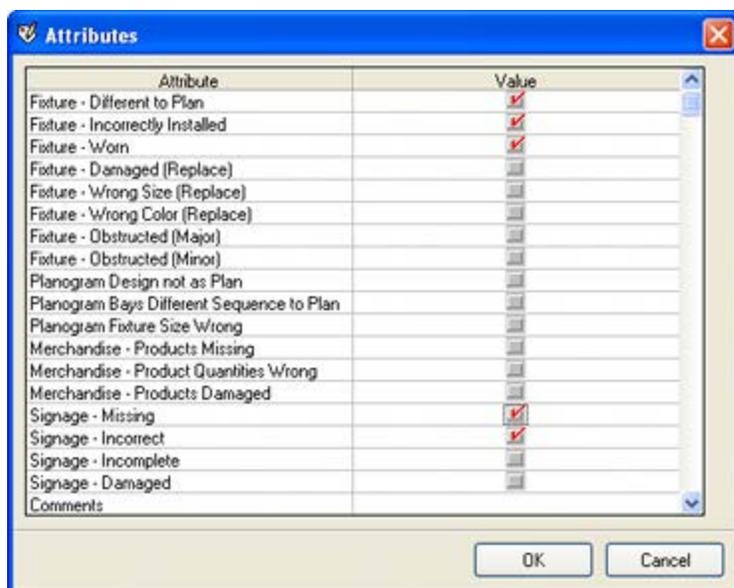
External Information

External information can be used as a basis for planning the currently active floor plan. Examples of such information include:

- Product Targets: information from an external application such as Category Management as to the types and quantities of merchandise that are recommended for placement in the floor plan.
- Comparison with Prototype Store: If a prototype store has been assigned, reports could compare the zones, fixtures, merchandise and financial performance of the currently active floor plan to its prototype.

Fixture Attributes

Customizable Fixture Attributes can be assigned to fixtures in a floor plan. This is done using the Fixture Attributes option in the Fixturing toolbar on the Object Browser.



These attributes can then be inspected on a 'fixture by fixture' basis in the floor plan by another store planner. It may be more convenient to create a quick report summarizing the information in the floor plan.

Performance Metrics

After Point of Sale data has been imported into the MSP database, this information can be used to give a variety of tabulated reports on performance of the currently active floor plan. Examples of such performance metrics include:

- Sales and profit by zone (department).
- Cumulative sales volume for a fixture.
- Cumulative sales volume for a fixture expressed relative to the area occupied by the fixture and the area of aisle allocated to it.
- Cumulative profit for a fixture.
- Cumulative profit for a fixture expressed relative to the area occupied by the fixture and the area of the aisle allocated to it.
- Best and worst performing products in the floor plan.

Planogram Substitutions

MSP can automatically substitute planograms in an existing floor plan and then publish that floor plan for implementation. Quick Reports could include:

- Planograms that were substituted and their bay numbers.
- Signage that will require changing as a result of the substitutions.

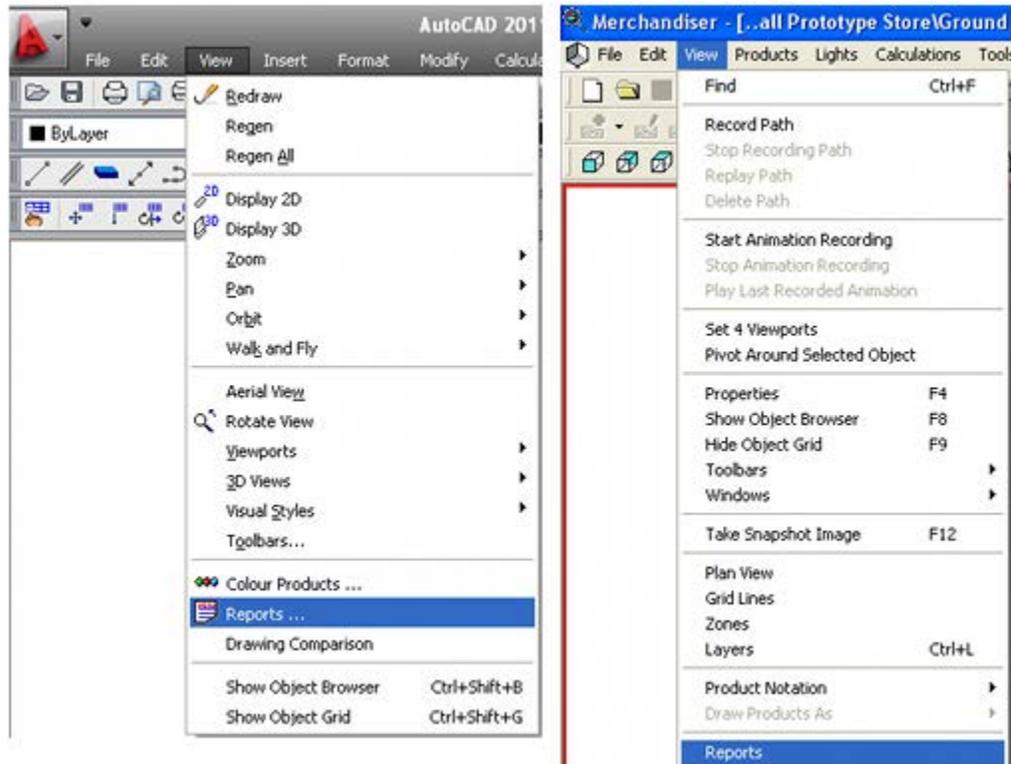
Promotional Fixtures

Promotional fixtures are fixtures that have been flagged in the MSP database as being in a position will generate high sales volumes. Examples include end caps, free standing bins for special offers and checkouts holding merchandise designed to induce impulse buys. It is possible to generate Quick Reports specific to these promotional fixtures

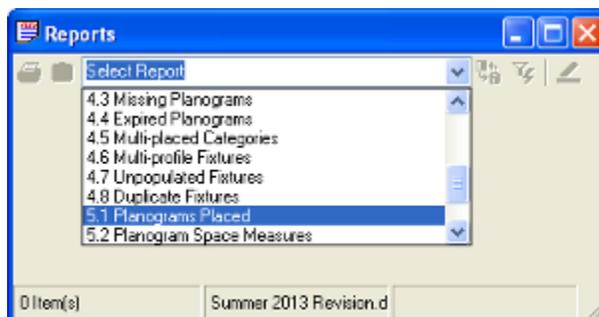
Note: The above list is not exhaustive. Any information in the database can potentially be used to give information on the currently active floor plan and hence improve some aspect of that floor plan.

Using Quick Reports

To open a Quick Report, select the Report option from the view menu in either Planner or Merchandiser.



This will bring up the Quick Reports dialog box. The required report can be selected from the drop down list. On clicking the selected report, it will open.



On clicking the selected report, it will open.

POG CODE	DESCRIPTION	GROUP NAME	LENGTH (FT)	DEPTH (IN)	HEIGHT (IN)	BAYS	INSTANCES
00000019	1 Bay Mixed Cola	Carbonated Drinks	3	24	72	1	1
00000015	1 Bay Bottled Pepsi	Carbonated Drinks	3	24	72	1	1
00000014	1 Bay Bottled Coke	Carbonated Drinks	3	24	72	1	1
00000056	4 Bay Mixed Soups	Tinned Soup	12	24	72	4	1
00000004	1 Bay White Wine	Wines	3	24	72	1	1
00000003	1 Bay Red Wine	Wines	3	24	72	1	1
00000037	1 Bay Specialty Beer	Beers, Ciders and Lagers	3	24	72	1	1
00000011	2 Bay Mixed Spirits	Spirits	6	24	72	2	1

17 Item(s) Merchandiser Store.dwg

Multiple reports can be open at one time by revisiting the view menu and selecting additional reports.

Dynamically Updating

Quick Reports do not dynamically update so, once opened, they will progressively lose accuracy as changes are made in the floor plan. To overcome this, Quick Reports can be instantly updated by clicking **Refresh** in the toolbar.

Synchronization

Quick Reports are based on information currently held in the database. They will not be accurate if differences exist between the currently open floor plan and the database. Examples of this include changes made to zones with AutoCAD tools and changes made to the database with Batch tools. If in any doubt, the Synchronize option should be used to ensure the information in the current Planner floor plan and the database is identical.

Quick Reports Toolbar

The Quick Reports toolbar has the following options:

Icon	Description	Comment
	Print	This option will print the current contents of the quick report to the default printer for the computer MSM is being run on.
	Copy to Clipboard	This option will copy the current contents of the report to the Windows clipboard. From there it can be pasted into other applications like Excel.
	Select report	This option allows a user to select an alternative Quick Report without closing the dialog box.
	Refresh	This option refreshes the quick report with the latest data held in the database. It also clears any filters that have been set.

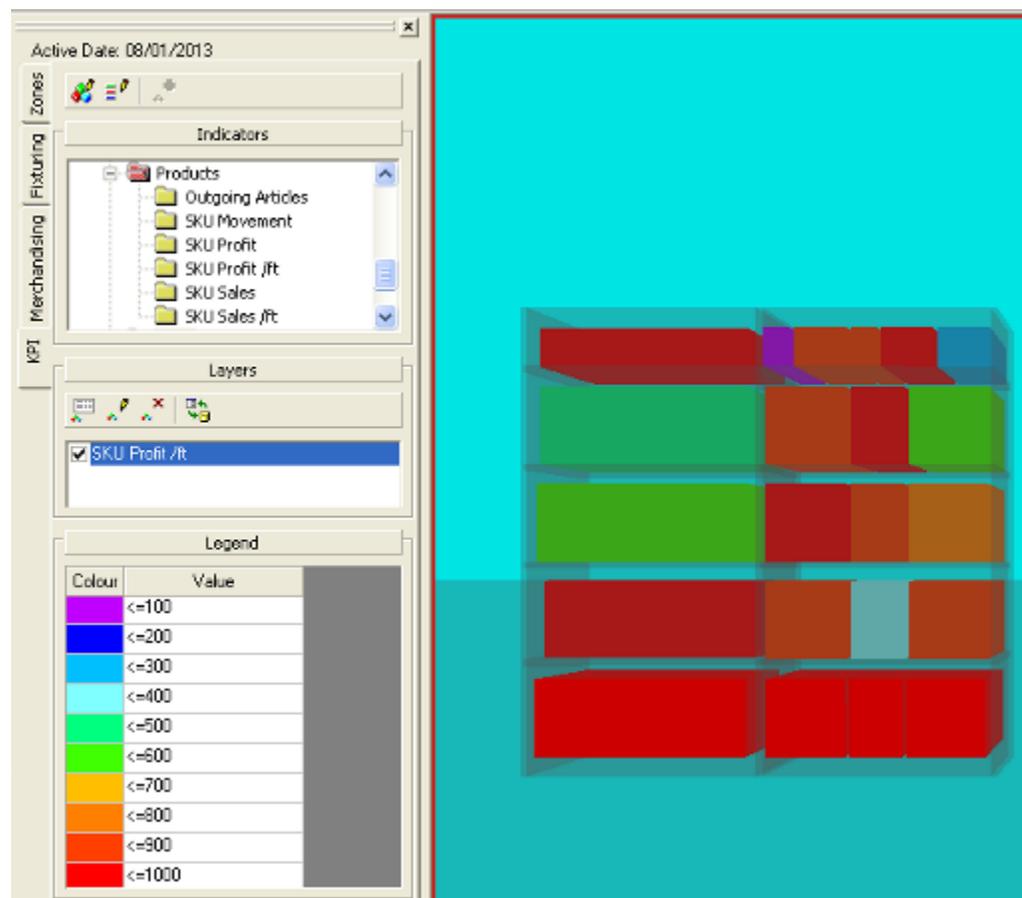
Icon	Description Comment	
	Filter	This filters the data in the report to match the data in the currently highlighted cell. Multiple filters can be used, each refining the data.
	Highlight in Floor Plan	This option causes the selected object to highlight in the floor plan. For this to work in Planner the Quick report must contain the AutoCAD handle.

Key Performance Indicators

Overview of Key Performance Indicators

Overview of KPIs

Key Performance Indicators (KPIs) are used in parallel with Quick Reports and BI Publisher reports to give information on the currently active floor plan. Quick Reports and BI Publisher reports give tabulated information; KPIs are used to color code the floor plan with performance related criteria.



The above example from the Merchandiser module shows products on shelves and fixtures color coded as to the level of profit they are making relative to the length of base or shelf linear that they occupy.

Data Sources

The following data sources can be used for KPIs:

SQL Statements

SQL statement can be used for simple KPIs. For example a SQL statement could be used to return a list of promotional fixtures or a list of unpopulated fixtures.

Stored Procedures

Stored Procedures are recommended for more complex KPI's. This is because they are more efficient at processing large volumes of data. A stored procedure might be used to generate data for a KPI giving the cumulative profit for the products on a fixture while taking into account the amount of aisle space allocated to it.

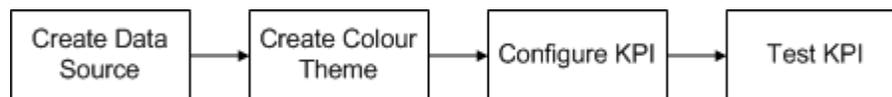
Views

There are a number of views included with the database. Existing KPI's can reference those views for data. This facility has been removed for new KPI's.

Note: Providing the appropriate permissions exist, it is possible to create data sources for KPIs that reference multiple schemas. For example data in the Macro Space Planning Database could be combined with data from other databases to create a KPI referencing (for example) extended product attributes.

Overview of Creating KPIs

KPI's are created as follows:

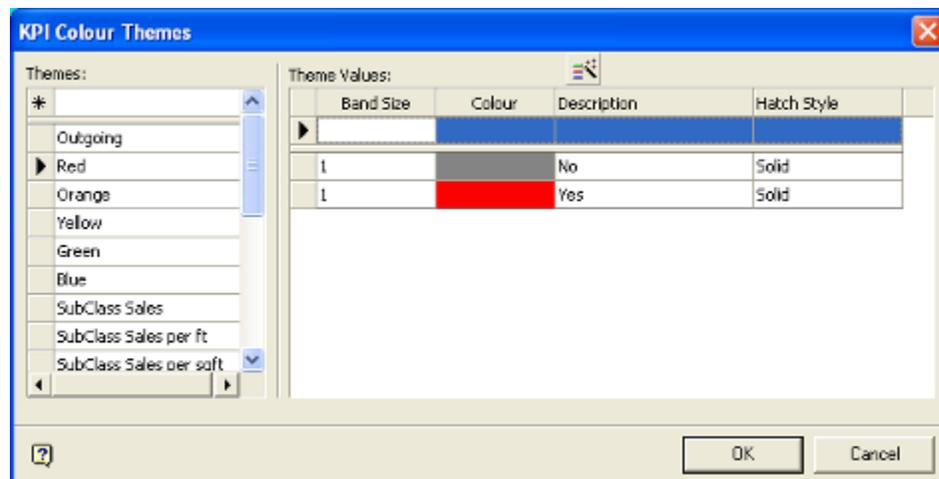


Create Data Source

The data source is created. Typically this will be a SQL statement or a stored procedure.

Create Color Theme

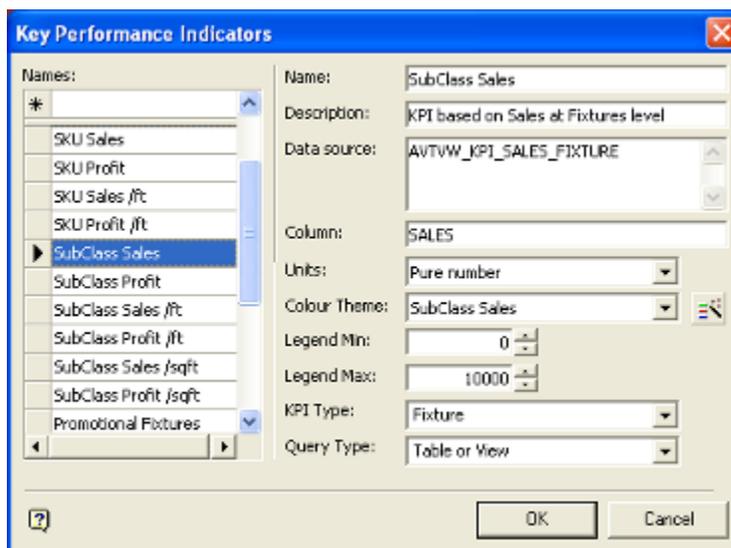
The next stage is to create a Color Theme to determine how the objects in the KPI will be colored. The simple example below show how objects can be coded red or gray according to whether a database flag is set or not. Any example of this is color coding fixtures as to whether they have been designated **Promotional Fixtures** or not.



Color Themes can be edited or created using the KPI Color Themes dialog box accessed from the toolbar in the KPI tab of the Object Browser in either the Planner or Merchandiser Modules.

Configure KPI

KPIs are configured using the Key Performance Indicators dialog box accessed from the toolbar in the KPI tab of the Object Browser in either the Planner or Merchandiser Modules.



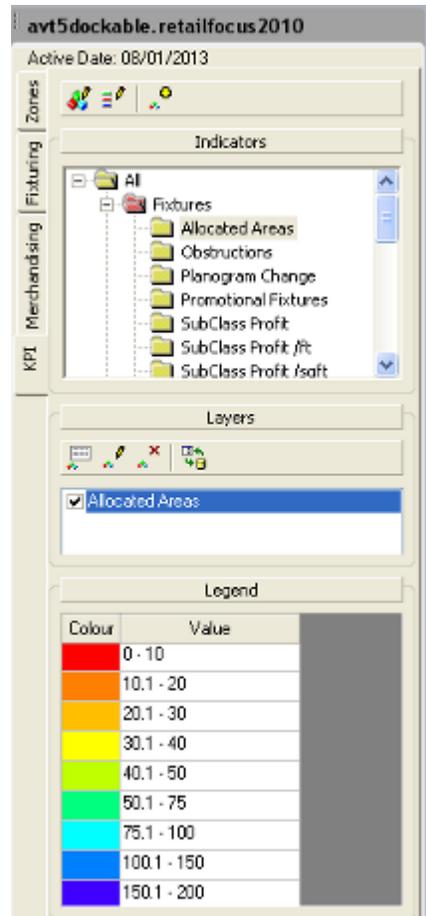
This enables the KPI Name, Data Source, Color Theme and other parameters to be configured.

Test KPI

After the KPI has been configured it should be tested against a set of verified data to ensure that objects are color coding as required.

Overview of Running KPI's

KPI's are run from the toolbars on the KPI tab of the Object Browser.



The upper toolbar give users the option to configure KPI Definitions, Configure Color Themes and to add a KPI to the currently active floor plan. The lower toolbar allows users to see the data being used for the KPI, edit the KPI parameters, remove the KPI from use in the floor plan and refresh the KPI definition if it has been updated by another user.

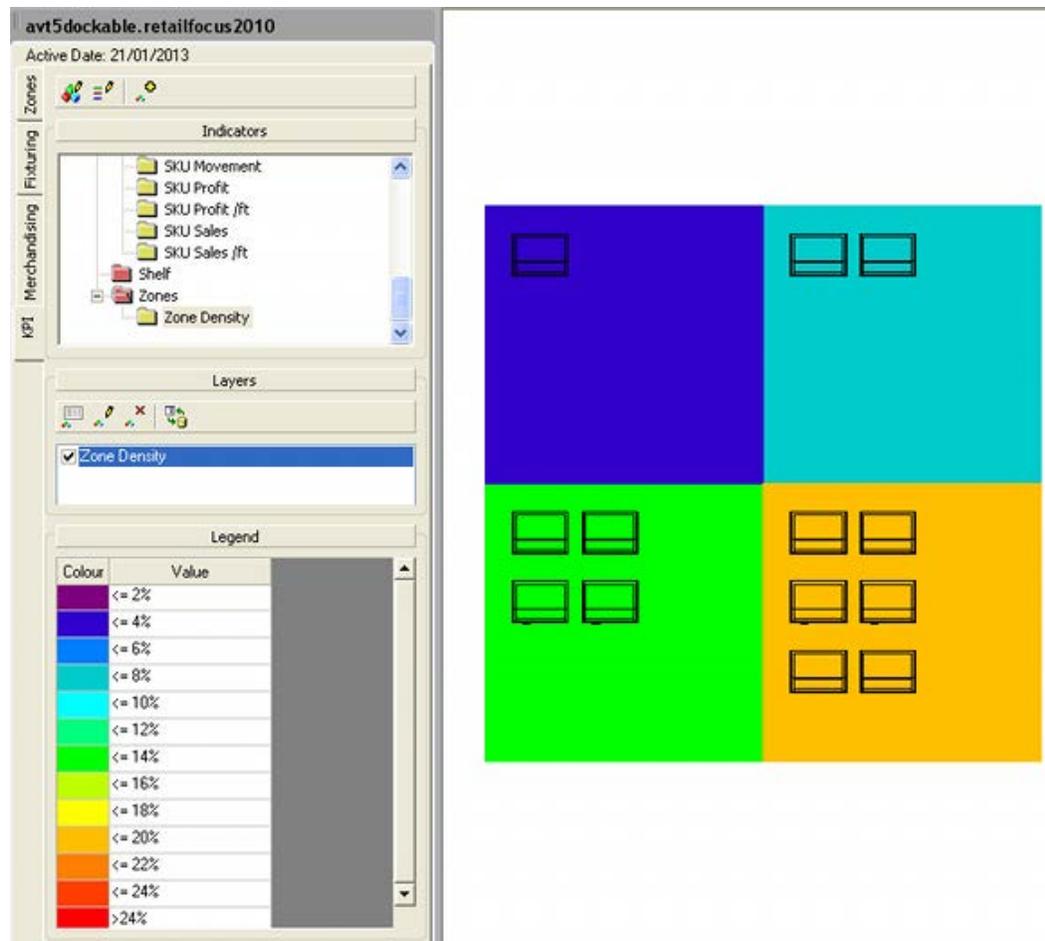
Types of KPI

There are four types of object that can be color coded using KPI's.

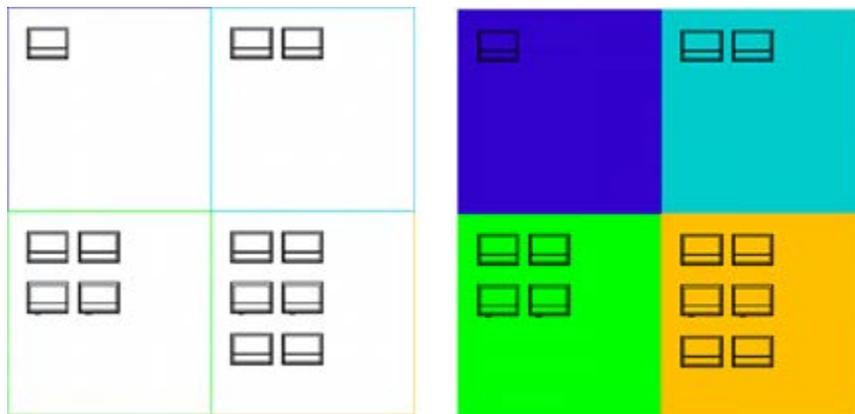
- Zones
- Fixtures
- Shelves
- Products

Zones

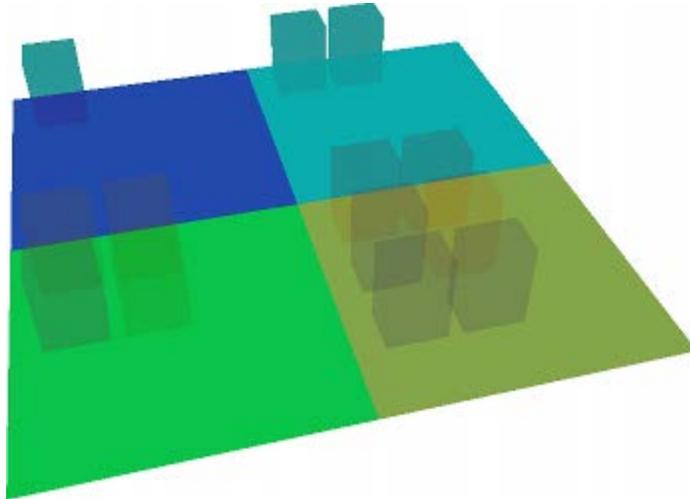
Zones can be color coded according to performance criteria. In the example below, the zones in Planner have been color coded according to the percentage of the available area taken up by equipment. As the number of fixtures in a zone increases, the color coding of a zone changes to reflect the increasing amount of floor area taken up by equipment.



How a zone will color for a KPI in Planner depends on whether it is **hatched** or not. In the screen shot below, the left hand image shows a KPI applied with hatching turned off, the right hand image a KPI with hatching on.



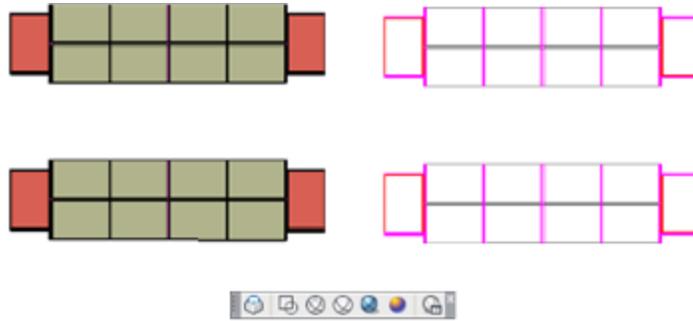
Zone KPIs will also display in the Merchandiser module. Objects not specific to the KPI in the Merchandiser module will display in a semi-transparent form. In the example below, the fixtures have been turned semi-opaque.



Fixtures

Fixtures can also be color coded by performance criteria. In the example below from the Planner module, fixtures designated as promotional fixtures have been color coded differently to standard fixtures

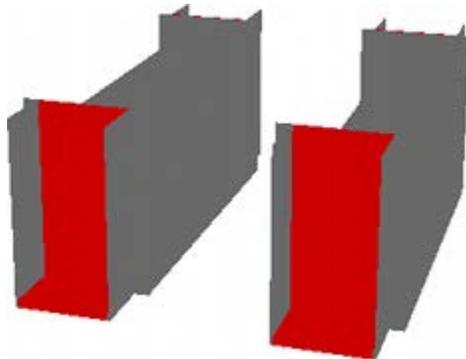
How Fixtures display in Planner depends on the visual style used. These can be changed using the visual style toolbar (shown below the fixtures).



The fixtures on the left are shown in conceptual visual style, the ones on the right in wire frame.

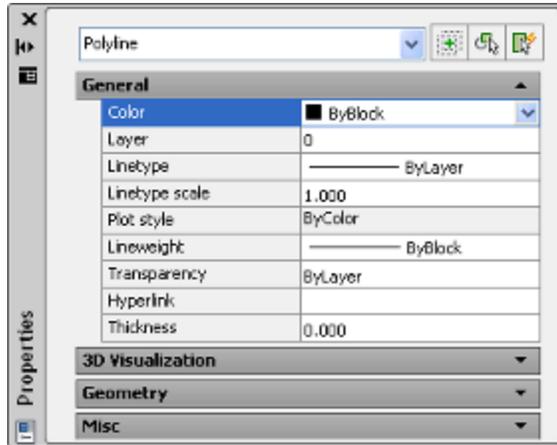
Note: If KPI's are displayed in wire frame mode, only the outlines of the fixture will color.

Fixture KPI's will also display in the Merchandiser module.



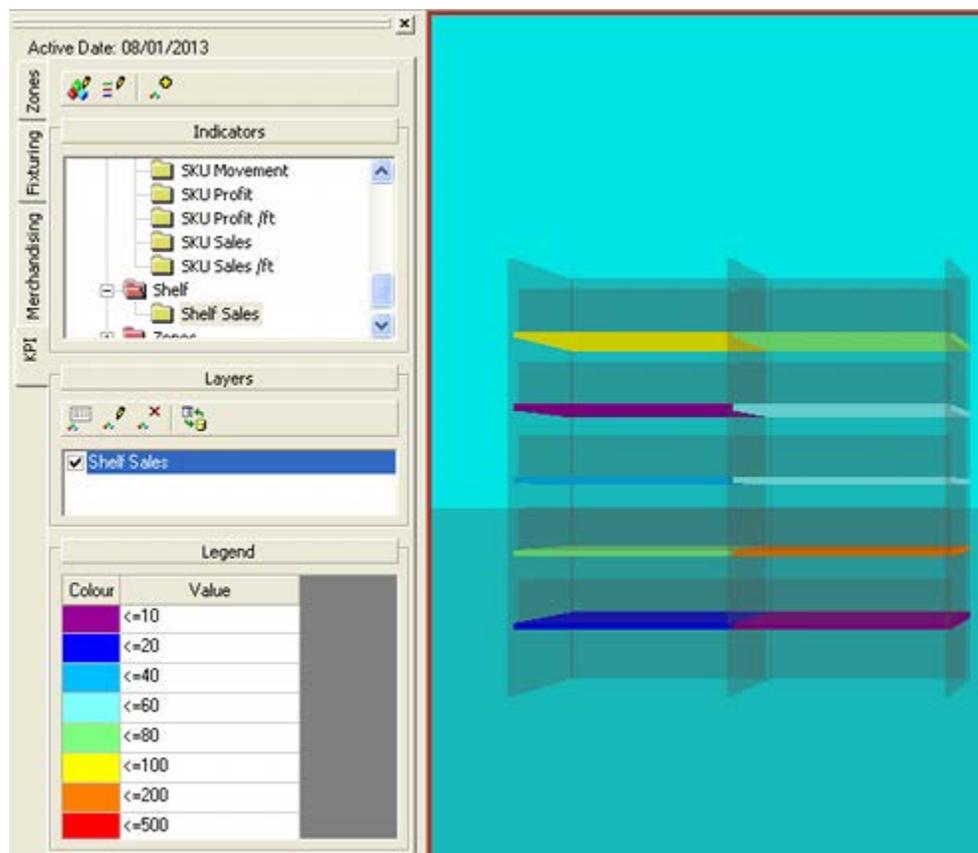
Fixtures and Coloring for KPIs in Planner

For fixture KPI's to work in Planner, the AutoCAD blocks used to represent the fixtures must have specific properties. Specifically, the block referenced by Fixture Studio must have the **Color** properties set to By Block. This enables individual fixtures to color as specified by the KPI functionality. If the Color property is left as the default (By Layer), the KPI will not work in Planner.



Shelves

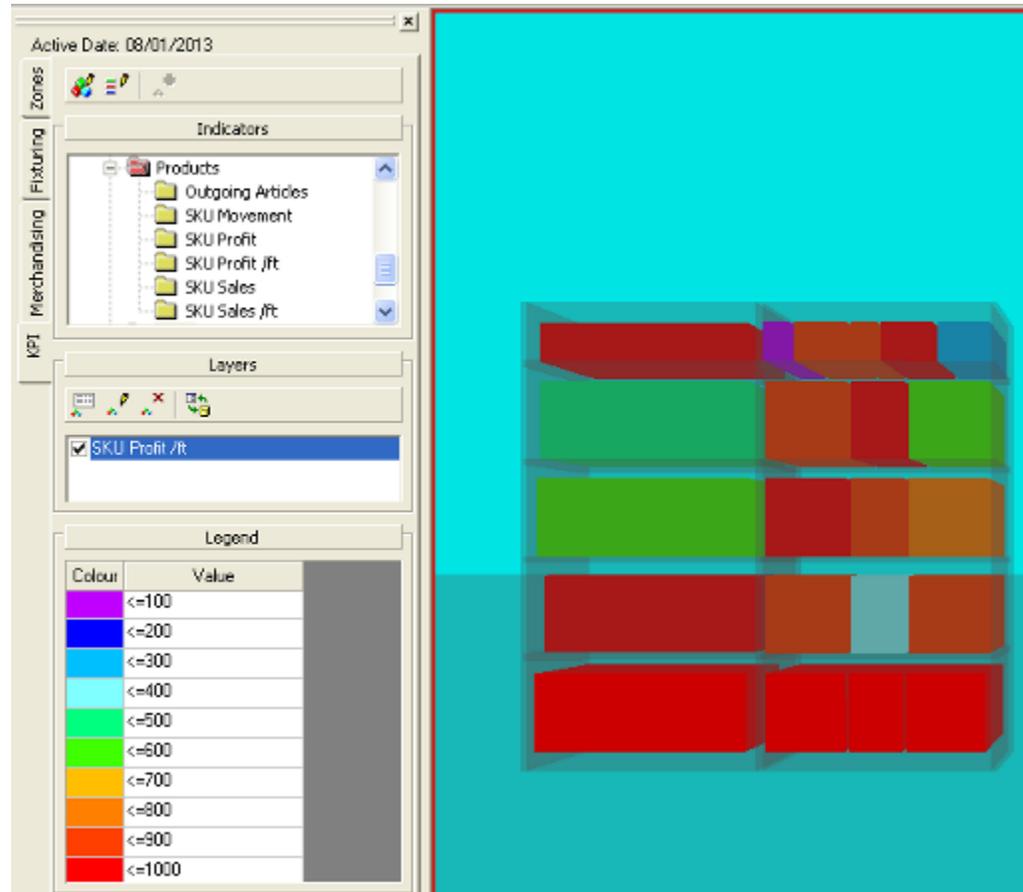
Shelf KPI's are generally only be used in the Merchandiser module. In this example the shelves on the fixtures have been color coded according to their performance. Objects not specific to the KPI will display in a semi-transparent form. In the example below, the fixtures have been turned semi-opaque.



An example of a Shelf KPI might be a book shop giving the performance of the genre of books each shelf contains.

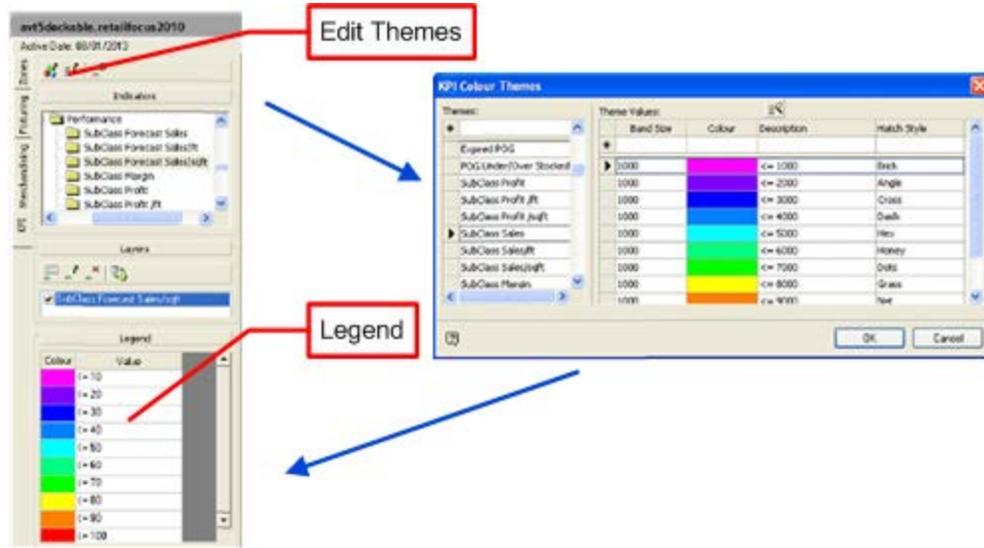
Products

Product KPI's can only be used in the Merchandiser module. In this example the products on the shelves and fixtures have been color coded according to their performance. Objects not specific to the KPI will display in a semi-transparent form. In the example below, the fixtures and shelves have been turned semi-opaque.



Creating and Maintaining Color Themes

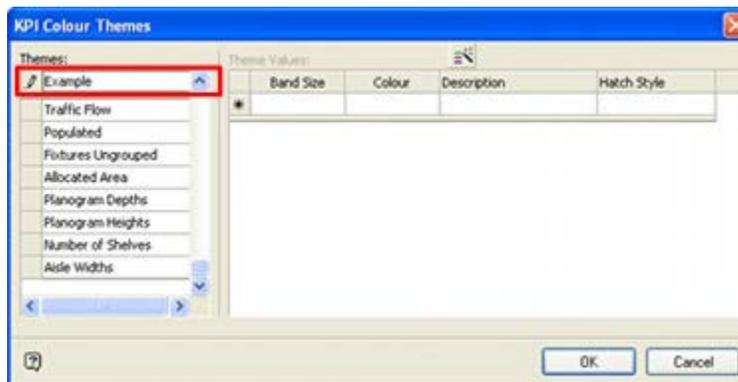
Color Themes are used to color code objects according to performance. They are created and maintained in the KPI Tab of the Object Browser. Clicking the **Edit Themes** button on the toolbar will bring up the **KPI Color Themes** dialog box. Once a color theme has been configured, it can be associated with a KPI. Once assigned, the color theme will appear in the **Legend** part of the Object Browser.



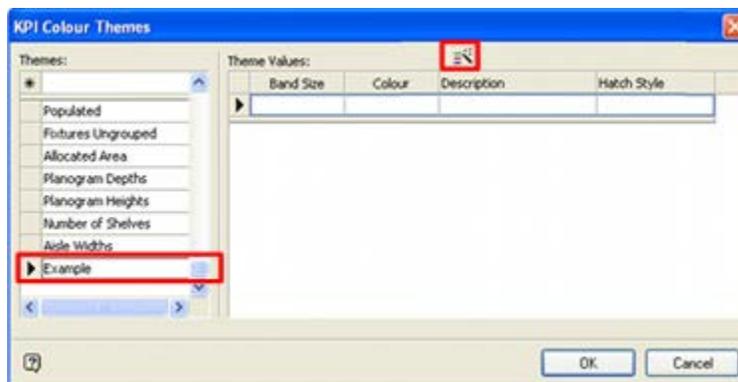
Creating a Color Theme Using the Wizard

The simplest way to create a color theme is by using the Wizard. This is done as follows:

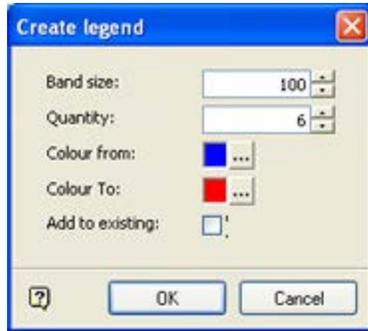
1. Add the name of the new color theme by entering the name of the color theme in the text box at the top of the KPI Color Themes dialog box and pressing Return.



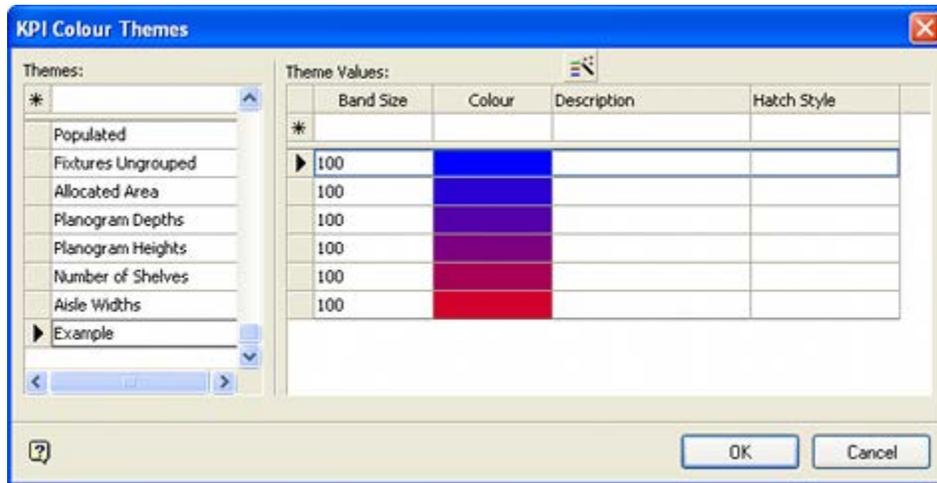
2. Highlight the newly added color theme name in the list and click the Wizard button on the toolbar.



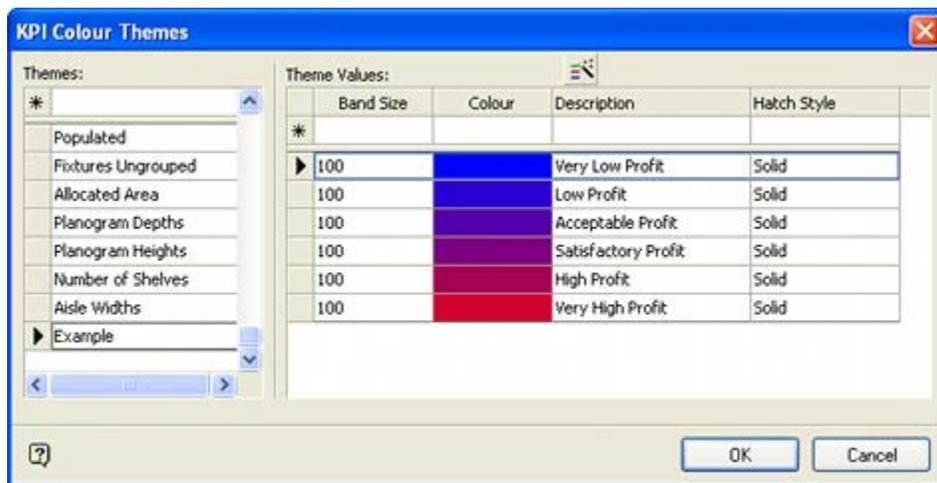
3. This will bring up the Create Legend Wizard.



- a. Specify the Band Size and Quantity.
 - b. Specify the Start and End Colors
 - c. Decide if the color bands are to be added to any existing color bands.
 - d. Click OK
4. The KPI Color Themes dialog box will reappear with the band size and color added.



5. Complete the Descriptions and select a Hatch style from the drop down list.



6. On clicking OK, the color theme will be created.

Note: Color Theme bands are cumulative. In the above example, Very Low Profit will contain results 0 - 100, Low Profit 101 - 200, etc.

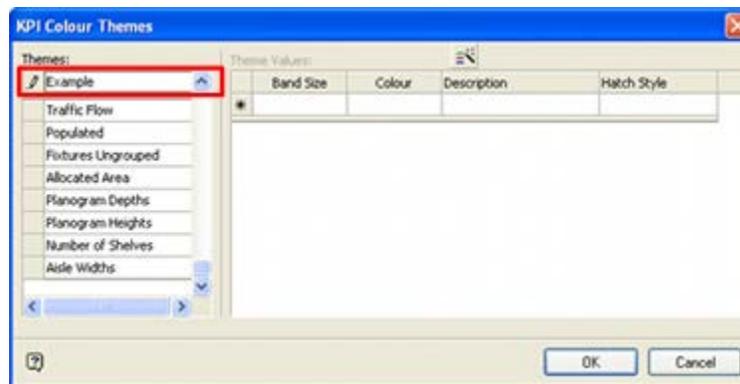
Manually Creating a Color Theme

Manually creating a color theme allows custom band sizes and colors. As the sequence of color bands cannot be altered once added, it is suggested that the bands be planned out prior to entering them.

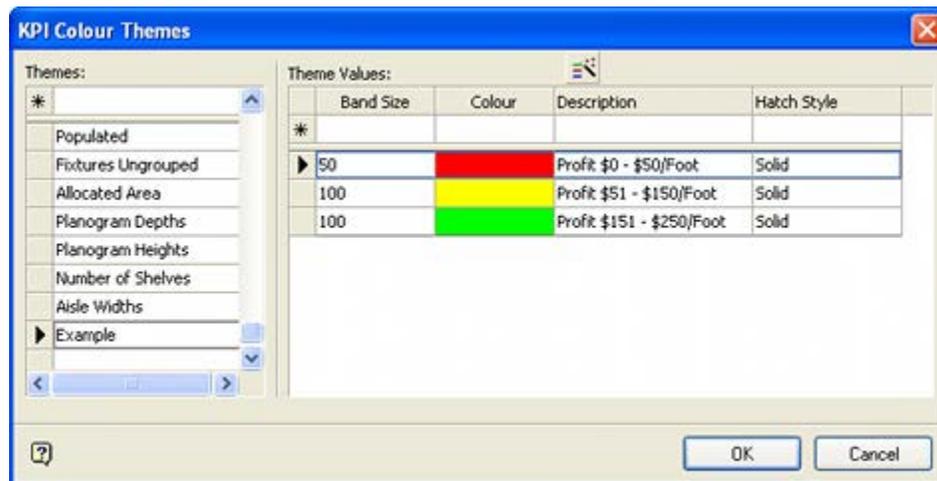
Band Name	Band Size	Cumulative Band Size	Color
Profit \$0 - \$50/Foot	50	0 - 50	Red
Profit \$51 - \$150/Foot	100	51 - 150	Yellow
Profit \$151 - \$250/Foot	100		Green

To manually create a color theme:

1. Add the name of the new color theme by entering the name of the color theme in the text box at the top of the KPI Color Themes dialog box and Pressing Return.



2. Enter the required data into the dialog box.



There is no way to re-order the data once entered, so when entering long lists of data care must be taken to enter it in the correct sequence. Also note that for hatch styles

to work in the Merchandiser module, hatch patterns must first have been configured using the Hatch Styles option from the Planning menu in the Administration module.

Editing a Color Theme

Once created, it is possible to edit a color theme. An example would be changing the band size for one or more bands or adding or removing bands. Care should be taken editing color themes as this may affect any KPI's dependent on them.

Configuring the KPI

Data Source

There are two main data sources for Key Performance Indicators:

- SQL Statements
- Stored Procedures

These must first be created and tested before the KPI itself can be configured. These use standard SQL. The results must contain the following information:

- A Store ID (STR_ID) to identify the bricks and mortar outlet the information is valid for.
- A File ID (FIL_ID) to identify the specific floor plan the data is associated with.
- A Calendar ID (CAL_ID) to identify the time period the data is valid for.
- An Object ID to identify what object to color in the floor plan. This may be a Zone ID (ZON_ID), Fixture ID (FIX_ID), Shelf ID (SHF_ID or Product ID (PRO_ID). Each of these IDs is for the instance of the object placed in the floor plan.
- One or more columns of results.

Configuring the KPI

The KPI can then be configured in the

KPI Name

This is entered in the text box at upper left then added by pressing Return. The name will then appear in the name field in the right hand side of the dialog box.

Description

This is used purely in the dialog box and gives information on the purpose of the KPI.

Data Source

This is the SQL statement or stored procedure used to generate the data used in the KPI.

Note: Older KPI's may use a table or a view as the data source. This functionality has been maintained for backward compatibility and new KPIs cannot use these as a data source.

Column

The column must be a column in the results returned by the SQL statement of stored procedure.

Units

The units are those for the data. The most commonly used are 'Pure Number' for data such as movement and currency values for financial results.

Color Theme

This is the color scheme used for coloring the results. The range of values it can cater for must be compatible with the expected range of results. Weekly financial results will thus have a different color theme from monthly, quarterly or yearly financial results. In Macro Space Management, results outside the ones specific in the Color Theme will not be colored.

Legend Minimum

This is used in In-Store Space Collaboration. Results below this value will result in the object being colored black.

Legend Maximum

This is used in In-Store Space Collaboration. Results above this value will result in the object being colored black.

KPI Type

This is used to specify the type of object to be colored. The SQL statement or stored procedure used to generate the result set must contain the appropriate ID for this type of object - for example a Fixture ID (FIX_ID) for KPIs designed for fixtures.

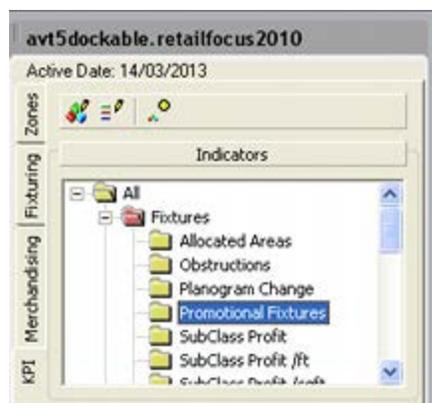
Query Type

This drop down list specifies whether the data source is a SQL statement or stored procedure.

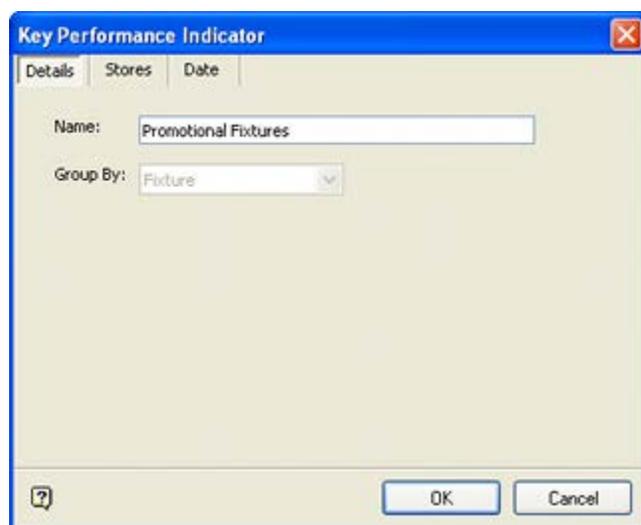
Using the KPI

Using the KPI

The first stage is to select the KPI and click the Add button on the upper toolbar in the KPI tab of the Object Browser.



This will bring up the Key Performance Indicator dialog box. This will open in the Details tab.



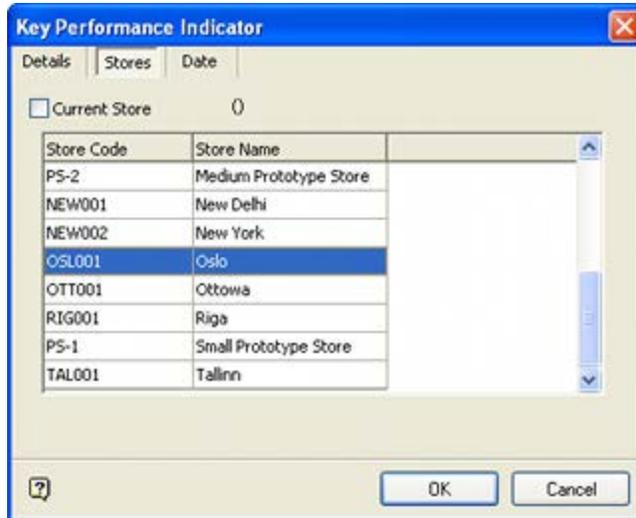
This tab shows the name of the KPI (which can be edited before it displays in the Object Browser) and the type of object that is being colored by the KPI - in this instance Fixtures.

Note: the above screen shot shows the KPI dialog box from the Planner module. A slightly different one will appear in the Merchandiser module.

Two other tabs can be used to further define the KPI before it is displayed.

Stores Tab

By default the KPI is run against the currently active floor plan. However, sometimes it is useful to look at results in a new store for which there is no operational data. This can be done by reading the data from another store. This will only be effective if the store arrangements are identical and the ID's in the database are also an exact match - for example the Fixture ID for a fixture in a specific position in the store the KPI is being displayed in must have the exact same Fixture ID in the store the data is being read from. Reading in data from another store must therefore be done with care.

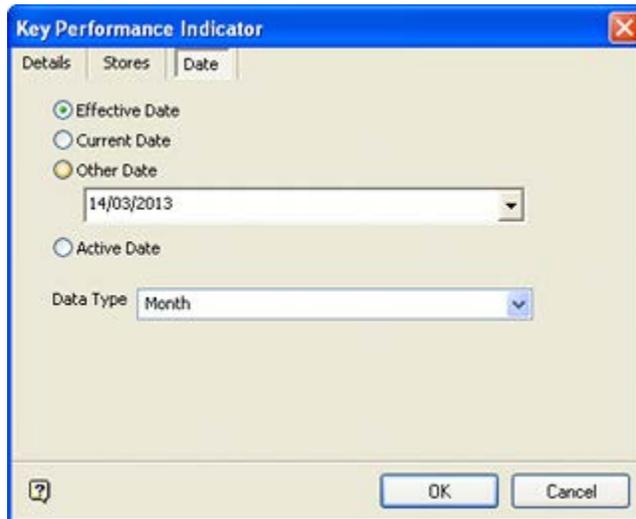


To select data from another store:

1. Uncheck the Current Store checkbox.
2. This will display a list of all stores in the retail chain.
3. Highlight the store it is desired to read data from.

Data Tab

The Data tab is used when data is time specific.



The radio button allows users to select a data for time sensitive data.

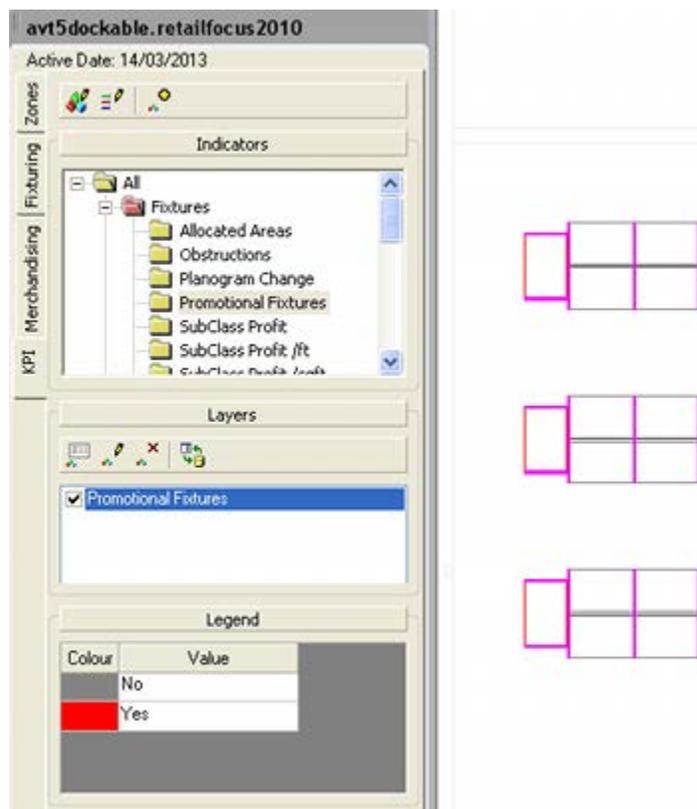
- **Effective Date** is for floor plans that have reached Authorised or Published status, but have not yet reached Current status. In this case data will be used that is pertinent to the Effective Date set in the File Properties dialog box in Store Manager.
- **Current Date** is used for files that have reached Current Status. It will use the date the floor plan is shown as reaching Current Status from the database.
- **Other Date** can be set to any value using a calendar.

- **Active Date** is used for floor plans in the earlier stages of planning. The date used for the data is the Active Date shown at the top of the Object browser (or in the file Properties dialog box in Store Manager).

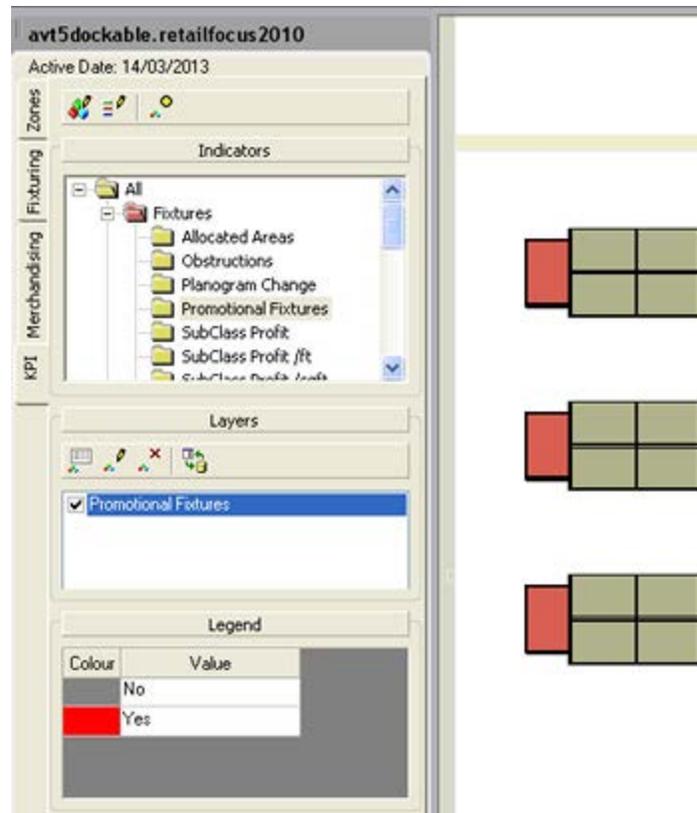
The data type is then set from the drop down list. This may be any time period ranging from a day's data to a year. This date is then converted to the corresponding calendar information and the data displayed in the KPI.

Note: For time specific data to be used, the data must first exist in the correct form. For example, if weekly sales data is being used, that data must first exist in weekly form. If it does not, then the SQL Query or Procedure used for the KPI must have the ability (for example) to take daily data and roll it up into weekly data.

On clicking the OK button, the name of the KPI will appear in the Layers part of the Object browser and the legend will appear. The selected objects will also color. If the floor plan in Planner is in wire frame mode (see below) only the outline of the fixture will color. This may make it difficult to see.



To make KPI's more visible in Planner, it is possible to change the visual style (Visual Styles toolbar) to Conceptual visual style. This makes the entire fixture color and the KPI easier to read.



Individual items of data can be seen by bring up the Key Performance Indicator dialog box. This will be of maximum use when there is financial or movement data involved.

Fixture	Cost	Price	Movement	Indicator
F_43 - Basic Racking Fixture 36 x 24 x 72	0	0	0	1.5
F_117 - Basic Racking Fixture 36 x 24 x 72	0	0	0	1.5
F_80 - Basic Racking Fixture 36 x 24 x 72	0	0	0	1.5
F_85 - Basic Racking End L-Leg 1 x 24 x 72	0	0	0	0.5
F_84 - Basic Racking Fixture 36 x 24 x 72	0	0	0	0.5
F_81 - Basic Racking Start L-Leg 1 x 24 x 72	0	0	0	0.5
F_82 - Basic Racking Start T-Leg 1 x 48 x 72	0	0	0	0.5
F_83 - Basic Racking Fixture 36 x 24 x 72	0	0	0	0.5
F_86 - Basic Racking Fixture 36 x 24 x 72	0	0	0	0.5
F_90 - Basic Racking Fixture 36 x 24 x 72	0	0	0	0.5
F_91 - Basic Racking Fixture 36 x 24 x 72	0	0	0	0.5

The KPI data shown in the floor plan is static. If changes are made in the floor plan, it may be necessary to use the Refresh button in the KPI toolbar to rerun the KPI and update the floor plan.

Examples of KPI's

Many types of KPI are possible. Many retailers create their own KPI's to address reporting requirements specific to their business. Some examples are given below, but in principle any information from the database can be used for KPI purposes. Data can also

be combined with that held in other databases (for example POS data) to create more complex KPIs.

Four basic forms of object can be color coded for performance: zones, fixtures, shelves and products. Some examples are given below.

Zone KPIs

Validation KPIs

KPI's can be used to show things such as zone density: the proportion of floor space occupied by fixtures. A low zone density might indicate space is not being used efficiently, a high one that the store is a slightly claustrophobic experience for customers.

Performance KPIs

If a floor has been subdivided into multiple departments and sub-departments, it is possible to show the overall financial performance for those departments in terms of sales, margins, profitability, etc. This shows overall performance of the store at a glance.

Fixture KPIs

Validation KPIs

Validation KPI's could be written for fixtures to verify that planograms have been correctly placed. Examples include confirming that the planogram is on a fixture of the correct dimensions and type.

Performance KPIs

Performance KPIs can be used to show the results of the planograms on the fixtures. If the allocated area calculation is used, the sales performance can be related to the total floor area associated with the fixture.

Other KPIs

Other KPI's could use the Adjacency Rules (set up in the Administration module) to identify the relative position of products with strong affinities. This might let store planners optimize planogram placement by (for example) by changing planogram position to bring products with a strong sales affinity close together.

Another use of Fixture KPIs would be to show fixtures containing products with high shrinkage. A concentration of such fixtures would indicate a part of the store with security issues.

Shelf KPIs

Shelf KPIs are more normally used in the Merchandiser module.

Validation KPIs

Validation KPIs can be used to verify positions of products for their intended demographic. For example, children's magazines should probably be at a low level, so they are more visible to their target audience, while 'adult' magazines should be on a high shelf, out of reach of young children.

Performance KPIs

If a shelf contains products for which there is little merit in showing individual performance figures, then the overall performance of the shelf may be a better business indicator. An example would be a book shop, where the performance of a genre of books is more important than the performance on an individual book in that genre.

Product KPI's

Product KPI's are only possible in the Merchandiser module as display styles (detailed product information) cannot be displayed in the Planner module.

Performance KPIs

KPIs could be created to show the values of sales volume, profit or movement by band.

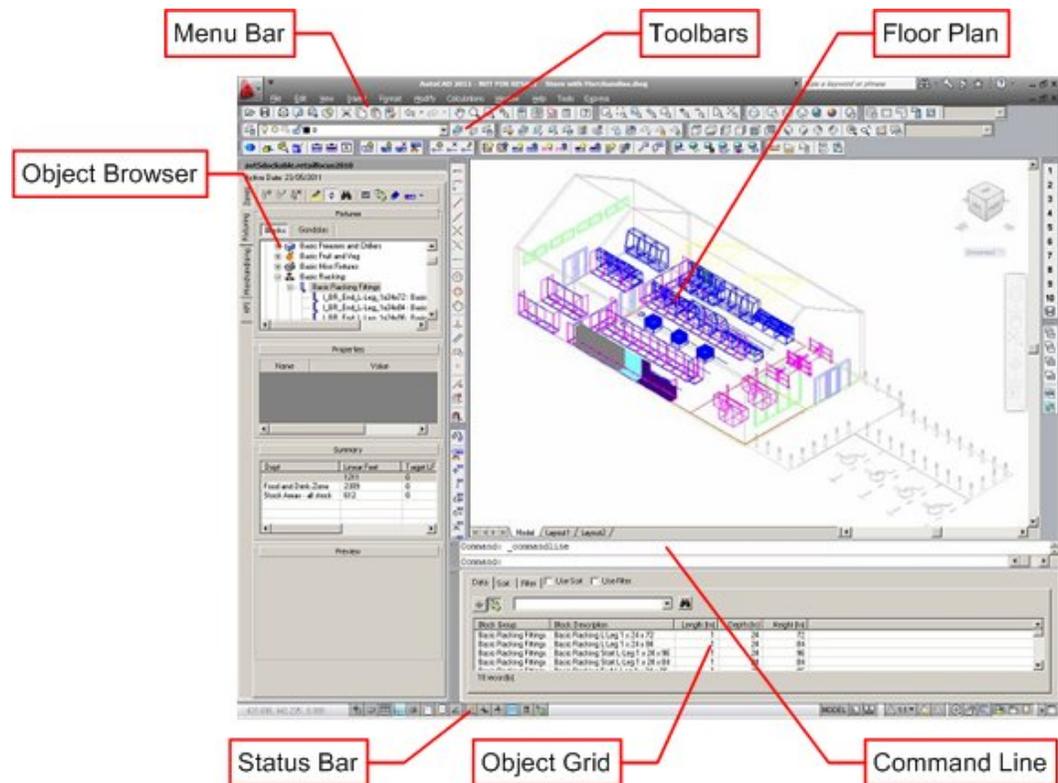
Ranking KPIs

KPIs could be created to highlight the top 10 and bottom 10 products by sales volume, profit, or movement.

Planner Module Basics

Overview of Planner Module

The Planner Module is based on AutoCAD. It can be used to plan the layout of departments (zones), equipment and merchandise within stores with considerable accuracy. It can also be used to generate reports on performance to enable the user to continually improve the efficiency and profitability of that store.



It has the following components:

Menu Bar - allows users to access various AutoCAD and Planner module commands.

Toolbars - allows users to access various AutoCAD and Planner toolbars.

Object Browser - allows users to add edit and delete zones, equipment and merchandise. Also allows users to see visual performance reports (hot-spotting/Key Performance Indicators).

Object Grid - alternative method for users to place fixtures, products and planograms.

Command Line - allowing text based input for many AutoCAD and Planner commands

Status Bar - allows many AutoCAD commands to be toggled on or off.

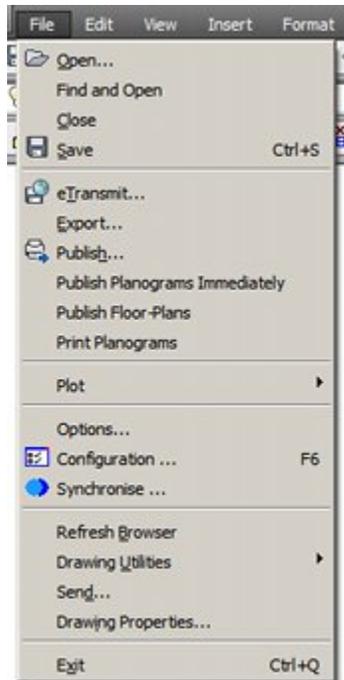
Floor Plan - the currently active representation of a floor within a specific store.

Planner Menu Overview

The File Menu

The **File Menu** allows users access to a number of general options.

Note: This section of the help file refers to the File menu associated with the 2008 version of AutoCAD. Users using earlier versions of AutoCAD may find a slightly different menu.



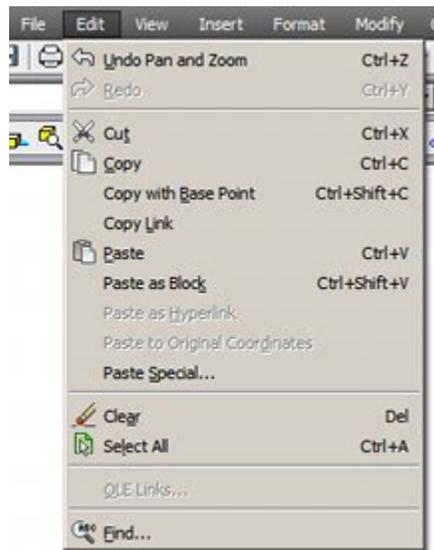
Functionality	Source	Comment
Open	Macro Space Management	Opens Store Manager
Close	Macro Space Management	Closes the current drawing
Save	Macro Space Management	Saves the current drawing
eTransmit	AutoCAD	See AutoCAD Help File for further information.
Export	AutoCAD	See AutoCAD Help File for further information.
Publish	AutoCAD	See AutoCAD Help File for further information.
Plot	AutoCAD	See AutoCAD Help File for further information.
Options	AutoCAD	See AutoCAD Help File for further information.
Configuration	Macro Space Management	Opens the Configuration Module

Functionality	Source	Comment
Synchronize	Macro Space Management	Opens the Synchronization Module
Refresh Browser	Macro Space Management	Refreshed the Object Browser with the latest information from the database
Drawing Utilities	AutoCAD	Calls varying AutoCAD utilities - see AutoCAD Help File for further information.
Send	AutoCAD	See AutoCAD Help File for further information.
Drawing Properties	AutoCAD	See AutoCAD Help File for further information.
Exit	Macro Space Management	Exits the Module

The Edit Menu

The **Edit Menu** mainly gives access to AutoCAD Functionality.

Note: This section of the help file refers to the Edit menu associated with the 2008 version of AutoCAD. Users using earlier versions of AutoCAD may find a slightly different menu.



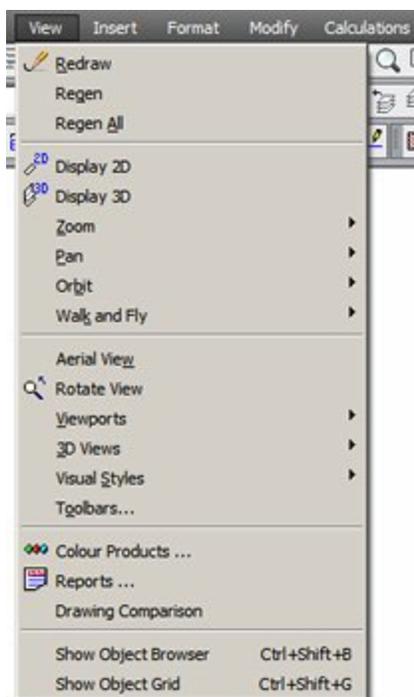
Functionality	Source	Comment
Undo	Macro Space Management	Allows the last command(s) to be undone. (The exact text will vary depending on what the last executed command was).
Redo	Macro Space Management	Allows the last command(s) to be undone. (The exact text will vary depending on what the last executed command was).

Functionality	Source	Comment
Cut	AutoCAD	See AutoCAD Help File for further information.
Copy	AutoCAD	See AutoCAD Help File for further information.
Copy with Base Point	AutoCAD	See AutoCAD Help File for further information.
Copy Link	AutoCAD	See AutoCAD Help File for further information.
Paste	AutoCAD	See AutoCAD Help File for further information.
Paste as Block	AutoCAD	See AutoCAD Help File for further information.
Paste as Hyperlink	AutoCAD	See AutoCAD Help File for further information.
Paste to Original Coordinates	AutoCAD	See AutoCAD Help File for further information.
Paste Special	AutoCAD	See AutoCAD Help File for further information.
Clear	AutoCAD	See AutoCAD Help File for further information.
Select All	AutoCAD	See AutoCAD Help File for further information.
OLE Links	AutoCAD	See AutoCAD Help File for further information.
Find	AutoCAD	See AutoCAD Help File for further information.

The View Menu

The **View Menu** provides the following options:

Note: This section of the help file refers to the View menu associated with the 2008 version of AutoCAD. Users using earlier versions of AutoCAD may find a slightly different menu.



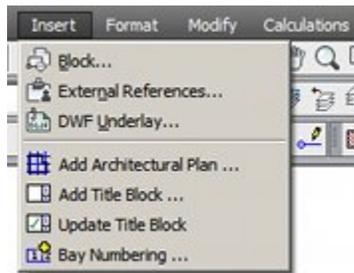
Functionality	Source	Comment
Redraw	AutoCAD	See AutoCAD Help File for further information.
Regen	AutoCAD	See AutoCAD Help File for further information.
Regen All	AutoCAD	See AutoCAD Help File for further information.
Display 2D	Macro Space Management	Displays the drawing in Macro Space Management 2D Mode. (The blocks must have been configured accordingly).
Display 3D	Macro Space Management	Displays the drawing in Macro Space Management 3D Mode. (The blocks must have been configured accordingly).
Zoom	AutoCAD	See AutoCAD Help File for further information.
Pan	AutoCAD	See AutoCAD Help File for further information.
Orbit	AutoCAD	See AutoCAD Help File for further information.
Walk and Fly	AutoCAD	See AutoCAD Help File for further information.
Aerial view	AutoCAD	See AutoCAD Help File for further information.
Rotate View	AutoCAD	See AutoCAD Help File for further information.
Viewports	AutoCAD	See AutoCAD Help File for further information.
3D views	AutoCAD	See AutoCAD Help File for further information.
Visual Styles	AutoCAD	See AutoCAD Help File for further information.
Toolbars	AutoCAD	See AutoCAD Help File for further information.

Functionality	Source	Comment
Color Products	Macro Space Management	Allows products be to colored according to their general type.
Reports	Macro Space Management	Allows simple reports to be produced on objects within the current drawing.
Drawing Comparison	Macro Space Management	Allows one drawing to be compared with another.
Show (Hide) Object Browser	Macro Space Management	Will show or hide the Object Browser.
Show (Hide) Object Grid	Macro Space Management	Will show or hide the Object Grid.

The Insert Menu

The **Insert Menu** provides ways to attach further information to the store plan.

Note: This section of the help file refers to the Insert menu associated with the 2008 version of AutoCAD. Users using earlier versions of AutoCAD may find a slightly different menu.



Functionality	Source	Comment
Block	AutoCAD	See AutoCAD Help File for further information.
External References	AutoCAD	See AutoCAD Help File for further information.
DWF Underlay	AutoCAD	See AutoCAD Help File for further information.
Add Architectural Plan	Macro Space Management	X-Refs an architectural plan to the currently active drawing
Add Title Block	AutoCAD	See AutoCAD Help File for further information.
Update Title Block	AutoCAD	See AutoCAD Help File for further information.

Functionality	Source	Comment
Bay Numbering	Macro Space Management	Add numbering to the fixtures in the store plan

The Format Menu

The **Format Menu** provides allows the user to control the layers, dimensions and units associated with the drawing.

Note: This section of the help file refers to the Format menu associated with the 2008 version of AutoCAD. Users using earlier versions of AutoCAD may find a slightly different menu.

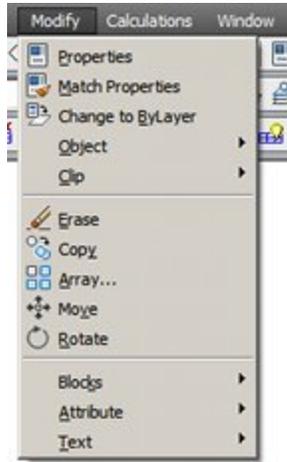


Functionality	Source	Comment
Layer Aliases	Macro Space Management & AutoCAD	Calls a mixture of Macro Space Management and AutoCAD functionality.
Layer	AutoCAD	See AutoCAD Help File for further information.
Layer States Manager	AutoCAD	See AutoCAD Help File for further information.
Layer Tools	AutoCAD	See AutoCAD Help File for further information.
Dimension Style	AutoCAD	See AutoCAD Help File for further information.
Units	AutoCAD	See AutoCAD Help File for further information.
Drawing Set Up	Macro Space Management	Allow the user to select the scales for Paper space.

The Modify Menu

The **Modify Menu** provides functionality for modifying objects in the store plan.

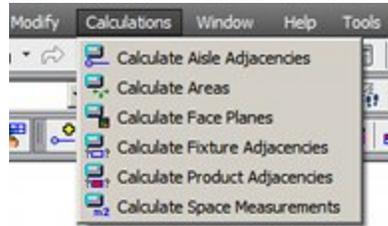
Note: This section of the help file refers to the Modify menu associated with the 2008 version of AutoCAD. Users using earlier versions of AutoCAD may find a slightly different menu.



Functionality	Source	Comment
Properties	AutoCAD	See AutoCAD Help File for further information.
Match Properties	AutoCAD	See AutoCAD Help File for further information.
Change to ByLayer	AutoCAD	See AutoCAD Help File for further information.
Object	AutoCAD	See AutoCAD Help File for further information.
Clip	AutoCAD	See AutoCAD Help File for further information.
Erase	AutoCAD	See AutoCAD Help File for further information.
Copy	AutoCAD	See AutoCAD Help File for further information.
Array	AutoCAD	See AutoCAD Help File for further information.
Move	AutoCAD	See AutoCAD Help File for further information.
Rotate	AutoCAD	See AutoCAD Help File for further information.
Blocks	Macro Space Management & AutoCAD	Calls a mixture of Macro Space Management and AutoCAD functionality.
Attributes	Macro Space Management	Allow the user to select the scales for Paper space.
Text	Macro Space Management & AutoCAD	Calls a mixture of Macro Space Management and AutoCAD functionality.

Calculations Menu

The **Calculations Menu** enables users to initiate varying calculations that write data into the central Macro Space Planning database.

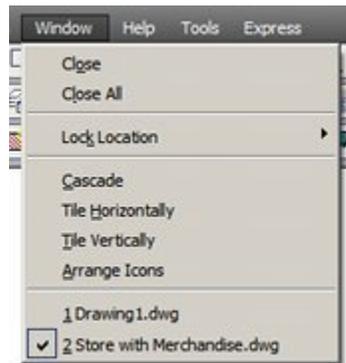


None of the functionality accessed from this menu is AutoCAD functionality.

The Window Menu

The **Window Menu** allows users to arrange multiple drawings, if open, and to select an active drawing from a set of open drawings.

Note: This section of the help file refers to the Window menu associated with the 2008 version of AutoCAD. Users using earlier versions of AutoCAD may find a slightly different menu.



All functionality in this menu is AutoCAD functionality.

The Help Menu

The **Help Menu** contains a number of options that access Help and Assistance.

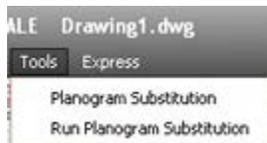
Note: This section of the help file refers to the Help menu associated with the 2008 version of AutoCAD. Users using earlier versions of AutoCAD may find a slightly different menu.



Functionality	Source	Comment
AutoCAD Help	AutoCAD	See AutoCAD Help File for further information.
New Features Workshop	AutoCAD	Not yet available
Planner Help	Macro Space Management	Calls Macro Space Management's Help File for this module.
Additional Resources	AutoCAD	See AutoCAD Help File for further information.
Customer Involvement Program	AutoCAD	See AutoCAD Help File for further information.
About	AutoCAD	Gives the AutoCAD version.
About Planner	Macro Space Management	Gives the Planner version

Tools Menu

The tools menu has options concerning Planogram Substitution.



Functionality	Source	Comment
Planogram Substitution	Administration Module	Pertinent permissions required.
Run Planogram Substitution	Administration Module	Pertinent permissions required.

Permissions to access the planogram substitution functionality are set in the Administration module. If the appropriate permissions are not available, a warning message will result and access to the functionality will be denied.



Business Processes for Floor Plan and Planogram Tools

Information in Planner Floor Plans and the Database

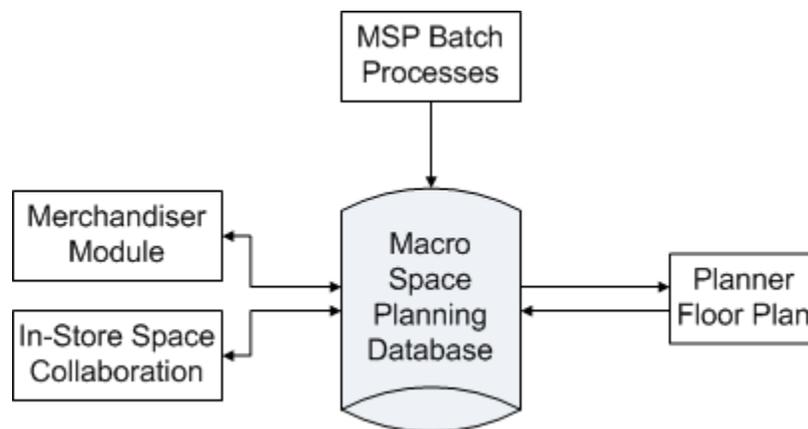
When considering batch processes, it is useful to understand how Macro Space Planning stores and processes data.

The Macro Space Planning Database

All information is held in the Macro Space Planning database. This information can be viewed and edited manually in one of three ways:

- Via an AutoCAD based floor plan in the Planner module.
- Via the Virtual Reality representation in the Merchandiser Module
- Via the simple graphic interface in the In-Store Space Collaboration application.

Data may also be modified directly in the database by means of batch processes. An example of this is running planogram substitutions.



Reading and Writing Data in the Database

If a floor plan is viewed or edited in the Merchandiser module or in the In-Store Space Collaboration application, data is written directly to and from the database. Any changes made in one application are immediately visible in the other. Changes made by a batch process are written directly to the database and are also visible immediately in the Merchandiser module or in the In-Store Space Collaboration application.

The situation is more complex for the AutoCAD floor plan in Planner.

Changes made Manually in Planner

What is read from or written back to the database during manual editing varies considerably depending on whether Auto-Synchronisation or Dynamic Synchronization are turned on.

- If Auto-Synchronisation is on, changes made in the database are automatically applied to the AutoCAD floor plan when it is opened. This includes changes made manually in the Merchandiser module or in the In-Store Space

Collaboration application and by batch processes. If Auto-Synchronization is Off, any changes that exist purely in the database will not be reflected in the AutoCAD floor plan and such changes must be included by manual synchronisation.

- If Dynamic Synchronisation is on, changes made to the majority of (but not all) changes made to objects in the floor plan using AutoCAD (rather than Planner) functionality are written to the database at the time. If Dynamic Synchronization is Off, any changes that exist purely in the AutoCAD floor plan may not be reflected in the database and such changes must be included by manual synchronisation.

This means that changes made in the Merchandiser module or in the In-Store Space Collaboration application, made by batch processes or made by AutoCAD tools may result in differences in the data held in the database and in the AutoCAD version of the floor plan. Store planners working in Planner thus need to follow a clear business process to ensure that the information in the database and AutoCAD floor plan remain consistent with each other.

Changes Made by Batch Processes Prior to Publishing Floor Plans

The differences between the database and the information held in the Planner AutoCAD floor plan achieve their greatest significance when considering floor plan publishing. The floor plan that is published is the copy held in the Windows folder on the Macro Space Planning file server. If changes have been made to the database by a batch process (for example planogram substitution) immediately prior to publishing the floor plan, those changes will not yet be reflected in those Planner AutoCAD floor plan. Those floor plans need to be processed prior to publishing to update the products, annotation and any associated calculations. This can be done as a discrete Floor Plan Processing operation run via BatchRunner and the command line. Alternatively, it can be done by using the Floor Plan Processing built into the Floor Plan Publishing process.

Overview of Automated Floor Plan and Planogram Publishing

Introduction

Macro Space Planning is a store planning tool that allows store plans to be created with the aid of imported planograms. After the floor plans have been created, the information needs to be transmitted to the store and executed there. This process is normally executed by administrators, but a brief explanation has been included in the store planning help for the benefit of store planners.

How the Process is Configured and Operated

The process is configured in the Administration module using the Configure Floor Plan Publishing and Configure Planogram Publishing options accessed from the File menu. The process can then run by invoking a small Macro Space Planning tool called BatchRunner. The precise way BatchRunner operates is controlled by command line switches. BatchRunner is normally initiated by a scheduling tool. More sophisticated scheduling tools can automatically pass the command line switches to BatchRunner. The scheduling tool can also operate a small utility called UpdateStatus.exe. This is used to change the status of the floor plan from Published to Current.

BatchRunner and UpdateStatus.exe

BatchRunner can be found in the C:\Program Files\Oracle Retail\MSM\Common.Net folder on each MSM installation. Access to the functionality is controlled in the

Functional Security dialog box in the Administration Module. BatchRunner is controlled via the command line and can run the following operations:

- Processing Floor Plans (running operations such as calculations and restructure drawing).
- Publishing Floor Plans.
- Publishing Planograms.
- Executing Planogram Substitution and Revision Changes.

UpdateStatus.exe can be found in the C:\Program Files\Oracle Retail\MSM\Common folder in each MSM installation. Access to the functionality is controlled in the Functional Security dialog box in the Administration Module. When executed, UpdateStatus.exe changes the status of files from Published to Current when the Effective Date is reached or exceeded.

Other Business Processes

Retailers will also have business processes for carrying out actions associated with implementing those floor plans and planograms that are outside of the scope of Macro Space Planning. These include giving the stores access to the published floor plans and planograms and putting the necessary orders into the supply chain.

Reports

As installed, Macro Space Planning does not provide any reports for monitoring the results of batch process controlled floor plan processing, floor plan publishing, planogram publishing or planogram substitution. It is the retailer's responsibility to provide these.

Automated Floor Plan and Planogram Publishing

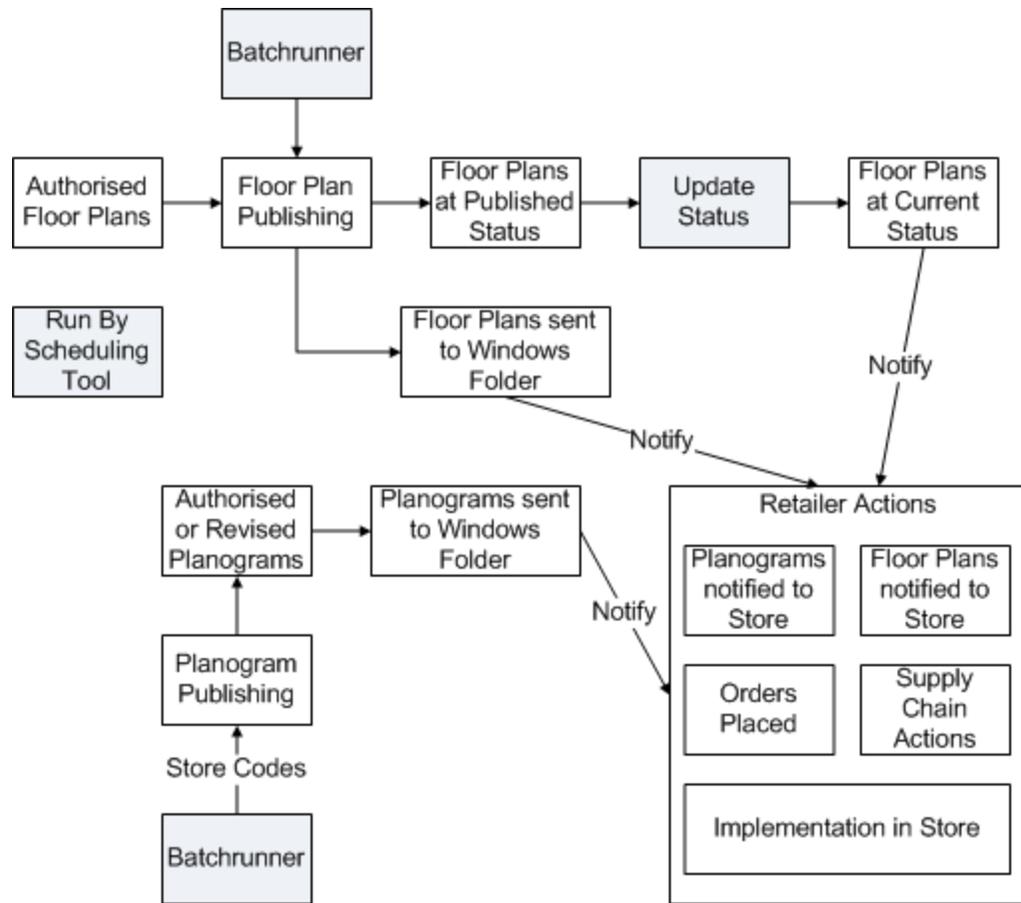
The basic process is described in the flow chart below. Conceptually, it can be viewed as taking place in the following general stages:

A store plan is created and set to Authorized status. At the same time the Publish and Effective Dates are set.

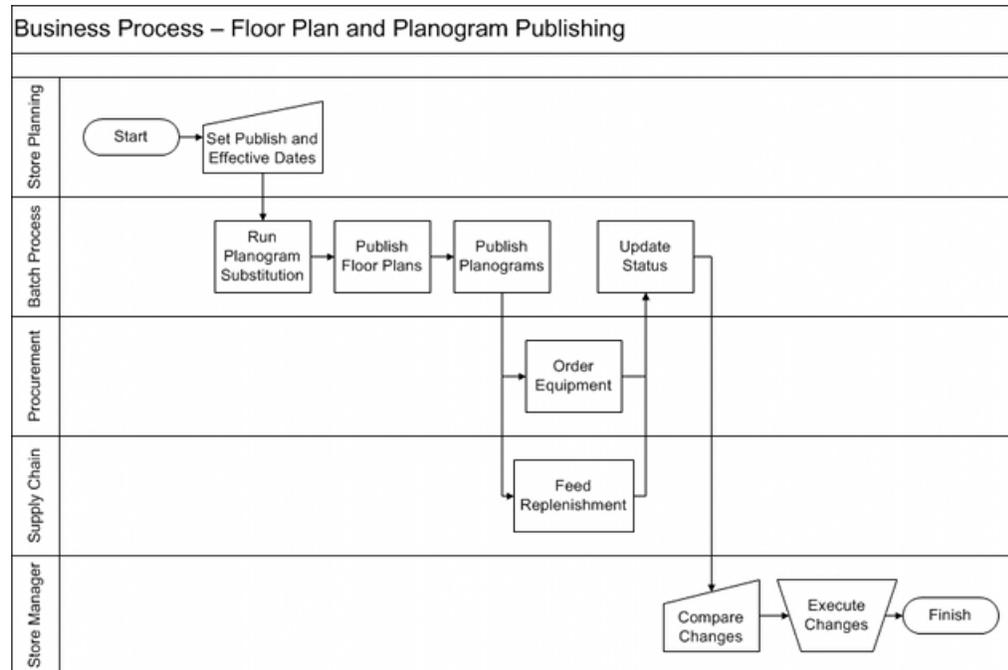
BatchRunner will initiate the publishing of both floor plans and planograms to specified directories or printers when the Publish Dates are reached or exceeded.

Reaching the Publish date is also the trigger for the retail chain to notify the store that the floor plans and planograms are available in specified locations. The retail chain will also initiate ordering the required equipment and merchandise.

When the Current Date is reached, Update Status will change the status of the floor plan to Current. This is the signal to put it into service in the store.



This may be seen in slightly simplified form in this process flowchart:



Details of Process

Note: floor plans and planogram designs can either be published in electronic form or printed as a hard copy. This example assumes electronic form: it is equally applicable for printed documentation.

Generating Floor Plans

For floor plans to be published they must first be at Authorised status with Publish Date and Effective Date set. These dates act as triggers for successive action.

Generating Planogram Designs

Planogram designs are normally imported into Macro Space Planning. There is a chain of logic determining when the planogram design is published.

- When the Publish Date is met or exceeded the planogram will be published. This will set the Last Published Date.
- If the Last Modified Date exceeds the Last Published Date, the planogram will also be published - this indicates that a modification has been made to the planogram.

Floor Plan Publishing

The first stage of the process is to publish the floor plan. For an automated process, this is done via the BatchRunner utility. This will be run by a scheduling tool at regular intervals. When BatchRunner identifies that a Publish Date has been met or exceeded it changes the status of the floor plan from Authorised to Published. Simultaneously, the Floor Plan Publishing tool sends a copy of the floor plan to a Windows folder structure under the Floor Plan Publishing root specified in the Directories Tab of the Configuration Module. (This tab can only be accessed by opening the Configuration Module in the Administration Module).

Floor Plan Publishing and Floor Plan Processing

Floor plan processing allows the AutoCAD drawing representing the floor plan to be refreshed with the latest changes. For example, if planogram substitution has been carried out, the AutoCAD drawing will have to be synchronized relative to the database, have annotation refresh and have the calculations refreshed prior to publishing the floor plan. This can be done as a separate option via the command line or it can be done during the floor plan publishing process using options specified in the **Floor Plan Publishing Configuration dialog box**.

Another use of floor plan processing is to run calculations prior to running reports to ensure the data used for the reports is fully up to date.

Note: The flowchart above assumes floor plan processing is carried out as part of the floor plan publishing process.

Planogram Publishing

In parallel with publishing the floor plan, a set of planogram designs need to be sent to the store. For a routine update, this will just be the planograms that are being changed. For a remodel, a full set of planogram designs will be required. For an automated process, this is done via the BatchRunner utility. This will be run by a scheduling tool at regular intervals. When BatchRunner identifies that the planogram needs to be published by comparing Publish Date, Last Published Date and Last Modified Date, it will cause that planogram to be published to a Windows folder structure under the Planogram Publishing root specified in the Directories Tab of the Configuration Module. (This tab can only be accessed by opening the Configuration Module in the Administration Module).

Note: Depending in settings in the Planogram Publishing Configuration dialog box in the Administration module, the planogram designs sent to the windows folder will either be a complete set of planograms for the store or just the planograms that have been recently updated or revised.

Notification that Information has been Published

The Floor Plan and Planogram Publishing functionality will send copies of the floor plans and planograms to specified Windows folders. Notifying the store that new floor plans and planograms are available and ensuring that the store can access that information is the responsibility of the retailer.

Implementation Actions by Retailer

After the floor plans and planogram designs have been published, preparations need to be made for executing them in store. This is a retailer responsibility - Macro Space Planning can provide the data to orchestrate those actions.

Executing the Changes

The floor plan also has an Effective Date. UpdateStatus.exe (run at intervals by a scheduling tool) will identify when the Effective Date is met or exceeded and then change the floor plan status to Current. When a floor plan reaches Current status, this is a signal to the store that all planned changes should have been executed on that date and the floor plan put into service.

At the same time as the floor plan is changed to current, its properties are changed to read only to prevent further changes being made in it. The floor plan being changes to current also causes the floor plan it replaces to be changed to Historical status.

Overview of Automated Planogram Substitution

Introduction

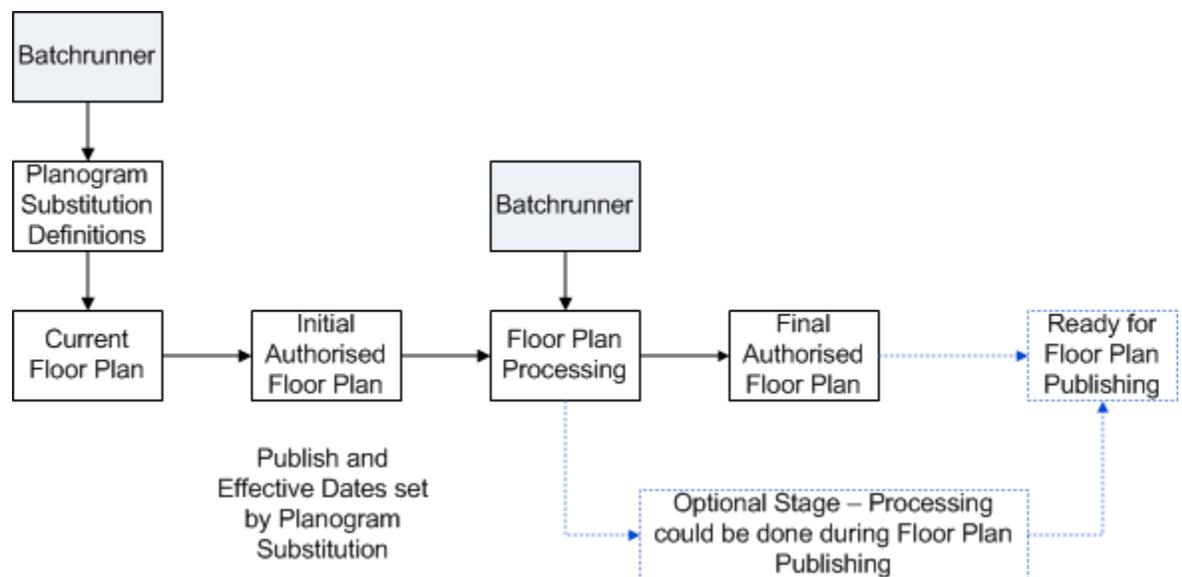
Macro Space Planning allows users with the appropriate privileges to first define planogram substitutions and then to execute those substitutions in selected stores. This section has been included to show how a floor plan can be updated with a different suite of planograms using batch processes. The updated floor plans (and new planogram designs) can then be published by batch processes in turn.

There are several ways of accomplishing this: the diagram below shows how a Current floor plan can be used to generate a duplicated file incorporating the required planogram substitutions.

Note: This example assumes the `PLANOGRAM_SUBSTITUTION_COPY_FILE` system variable is set to On (allowing floor plans of Current Status to be modified by Planogram Substitution) and that planogram substitution definitions have been set up accordingly.

How the Process is Configured and Operated

Planogram Substitutions are configured in the Planogram Substitution dialog box. This can be accessed from the Administration Module, the Planner Module, the Merchandiser Module and directly from the provided shortcut. BatchRunner is capable of running those planogram substitutions against a specified floor plan - in this case a floor plan at Current status in a specific store.



As a result of running the planogram substitution a duplicate floor plan will be created in the same revision at Authorised status. This floor plan will have the Publish Date set to the Effective Start Date of the Planogram Substitution. The Effective Date of the floor

plan will be set based on the Publish Data of the floor plan and the time interval specified in the EFFECTIVE_DATE_LEAD_PERIOD system variable. The AutoCAD version of this floor plan will be an exact copy of the floor plan it was cloned from as the planogram substitutions were executed purely in the database.

The next stage is therefore to use floor plan processing to update the AutoCAD version of the floor plan so it reflects the revised information in the database. This is done by means of the Floor Plan Processing option. BatchRunner can run varying options depending on the switches used in the command line. The options required are:

- Synchronization: 'Match the Database' will bring in the planogram substitutions held in the database. (An alternative is to use the Auto-Sync option).
- Annotation: The new planograms will require the annotation refreshed to reflect the changes.
- Calculations: These require updating so that any subsequent reporting will be accurate.

Note: Floor Plan Publishing has the option to carry out floor plan processing as part of the publishing process. This example shows how floor plan processing can be run as a separate operation. One reason for doing this would be a store planner briefly looking at the duplicated store plan before submitting it for the floor plan publishing operation.

Note: If the duplicated floor plan is opened in the Merchandiser Module or in In-Store Space Collaboration, the information is read directly from the database and no synchronisation is needed. However, it is the AutoCAD version of the floor plan that is published. This needs to be updated before Floor Plan Publishing is carried out.

Once the AutoCAD version of the floor plan has been processed, it will be identical to the information held in the database. As it is at Authorized status with the Publish Date and Effective Date set, the floor plan will be published by any automated floor plan publishing process when the Publish Date is reached or exceeded.

Reports

As installed, Macro Space Planning does not provide any reports for monitoring the results of batch process controlled planogram substitution. These would normally be configured during the implementation process to requirements specified by the retailer.

Immediate Publishing of Floor Plans and Planograms

Overview of Immediate Publishing

The majority of retail organizations will publish floor plans and planograms as part of an overnight batch process. This process can be scheduled on different frequencies varying from daily to weekly. Occasions will inevitably occur when there is a need to publish information before the next scheduled batch run. Planner has several tools to assist in this process. Three are:

- **Immediate Floor Plan Publishing:** Publish selected floor plans at Authorised status that have met or exceeded their Publish Date.

- **Immediate Planogram Publishing:** Publish selected planograms. The planograms available for publishing will depend on criteria set in the Administration Module.
- **Print Planograms:** This allows a store planner to print off a copy of selected planograms in the currently active floor plan. Alternatively, they may be generated in PDF form.

Access to Immediate Floor Plan Publishing and Immediate Planogram Publishing is controlled by settings in the Functional Security dialog box in the Administration module. Planograms can be printed from the currently active store plan by any users with access rights.

Publishing Floor Plans

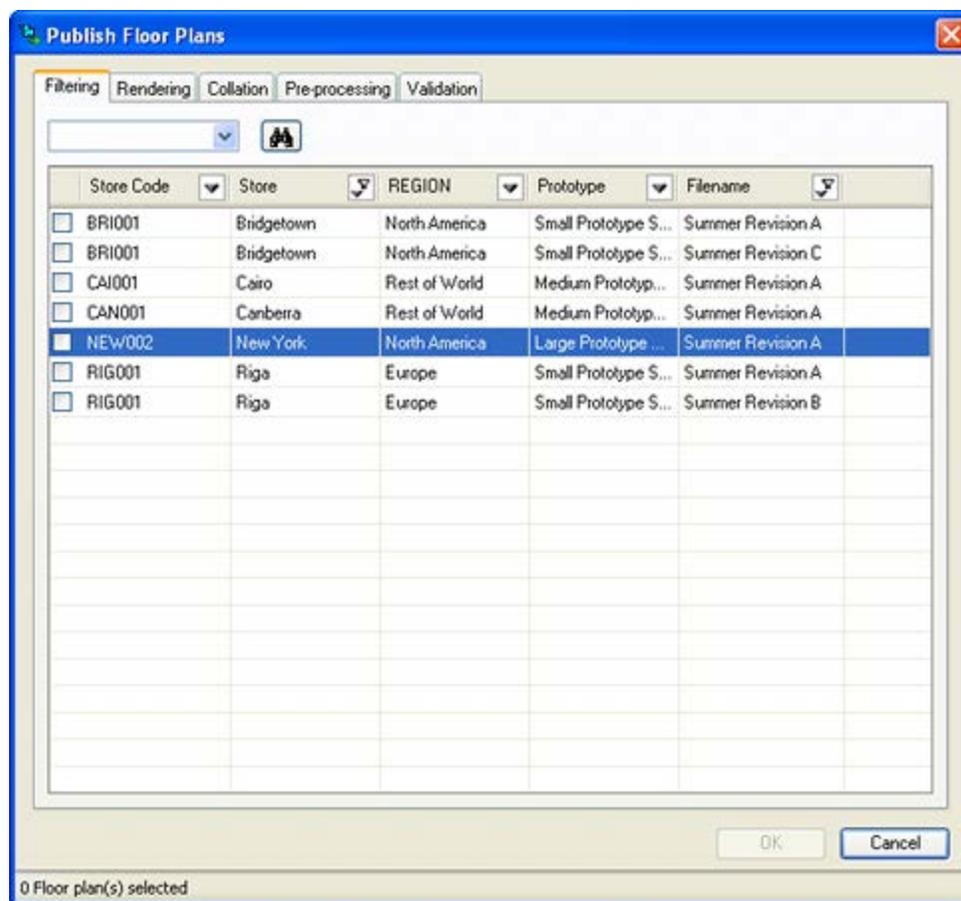
This option is for urgent publishing of floor plans. An example of this would be if floor plans are being published and transmitted to store by a weekly batch process. If this batch process ran every weekend, there might be a need to publish selected floor plans in mid-week so as to avoid waiting for the next scheduled batch run.

Permission to Access the Floor Plan Publishing Functionality

Publishing a floor plan will often trigger other actions within a retail organization. Generally, it will cause orders to be placed into the supply chain and the store to start planning for the changes. Accordingly, users require permission to access to the functionality. This is done in the Group Relationships tab of the **Functional Security dialog box** in the Administration Module. Users without this permission will not be able to open the dialog box.

The Publish Floor Plans Dialog Box

The Publish Floor Plans dialog box is accessed from the File menu. It opens with the same settings as those for batch processing - these are configured using the **Configure Floor Plan Publishing dialog box** in the **Administration Module**. Floor plans can be selected for publishing by ticking the check boxes and then clicking **OK**.



This dialog box will show all floor plans at Authorised Status that have met or exceeded their Publish Date.

Where Floor Plans Will Be Published To

Immediate publishing of floor plans will result in the files being sent to the same folders as used for the batch process. The root folder for this is specified in the Directory Tab of the Configuration Module. (This tab can only be accessed if the Configuration Module is opened from the Administration Module). The file structure below the root folder and the form of the file name are specified in the Output tab of the **Floor Plan Publishing Configuration dialog box** in the Administration module.

Other Floor Plan Publishing Tabs

- **Rendering:** The Rendering tab gives a number of options for controlling the visual appearance of the floor plan when published.
- **Collation:** The Collation tab determines the way floor plans will be published below the Floor Plan Publishing root.
- **Pre-Processing:** This option allows the user to carry out a series of operations on the floor plan to ensure that the information in it and data associated with it are completely up to date.
- **Validation:** These are the checks that are performed before the floor plan is published. Any individual floor plan that fails validation will not be published, while an entry will be written to the pertinent log table.

Immediate Publishing of Planograms

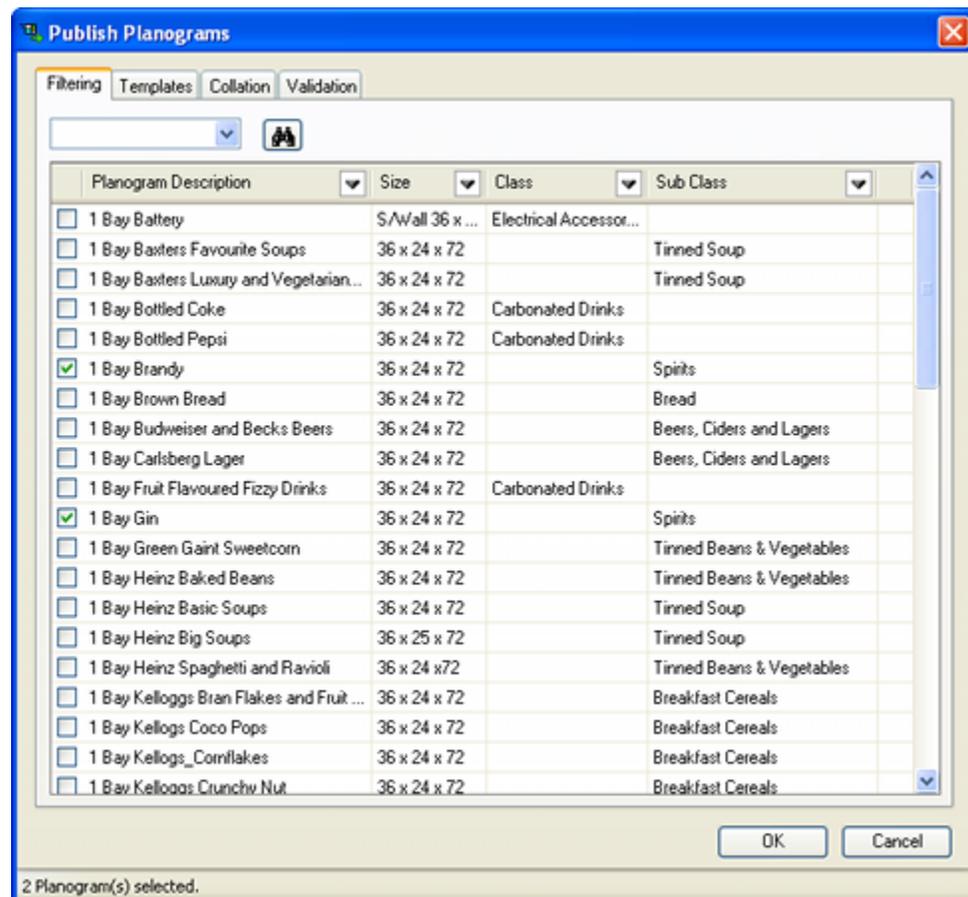
This option is for urgent publishing of planograms. An example of this would be if planograms are being published and transmitted to store by a weekly batch process. If this batch process ran every weekend, there might be a need to publish selected planograms in mid-week so as to avoid waiting for the next scheduled batch run.

Permission to Access the Immediate Planogram Publishing Functionality

Because the Immediate Planogram Publishing option could result in large numbers of planograms being published during working hours (with the corresponding load on the system), users require permission to access to the functionality. This is done in the Group Relationships tab of the **Functional Security dialog box** in the Administration Module. Users without this permission will not be able to open the dialog box.

The Immediate Planogram Publishing Dialog Box

The Immediate Planogram Publishing dialog box is accessed from the File menu. It opens with the same settings as those for batch processing - these are configured using the Configure Planogram Publishing dialog box in the Administration Module. Planograms can be selected for publishing by ticking the check boxes and then clicking **OK**.



The quantity of planograms that appear in this dialog box depends on a setting in the Output tab of the **Planogram Publishing Configuration dialog box** in the Administration module.

- If the **Re-publish planogram if files are missing** option is checked, all planograms (irrespective of whether they have been published or not) will be available for selection.
- If the **Re-publish planogram if files are missing** option is not checked, only planograms that have not been published or planograms that have been modified since they were last published will be available for publishing.

Note: Care should be taken when selecting planograms for Immediate Planogram Publishing if the **Republish planogram if files are missing** option is checked. Planograms will be published for all stores that have that planogram placed. If a large number of planograms are selected for publishing, this will mean a substantial amount of processing and significant amounts of data passed over the network. If Immediate Planogram Publishing is run during the day with large amounts of planograms selected, it may slow the response for other users.

Where Planograms Will Be Published To

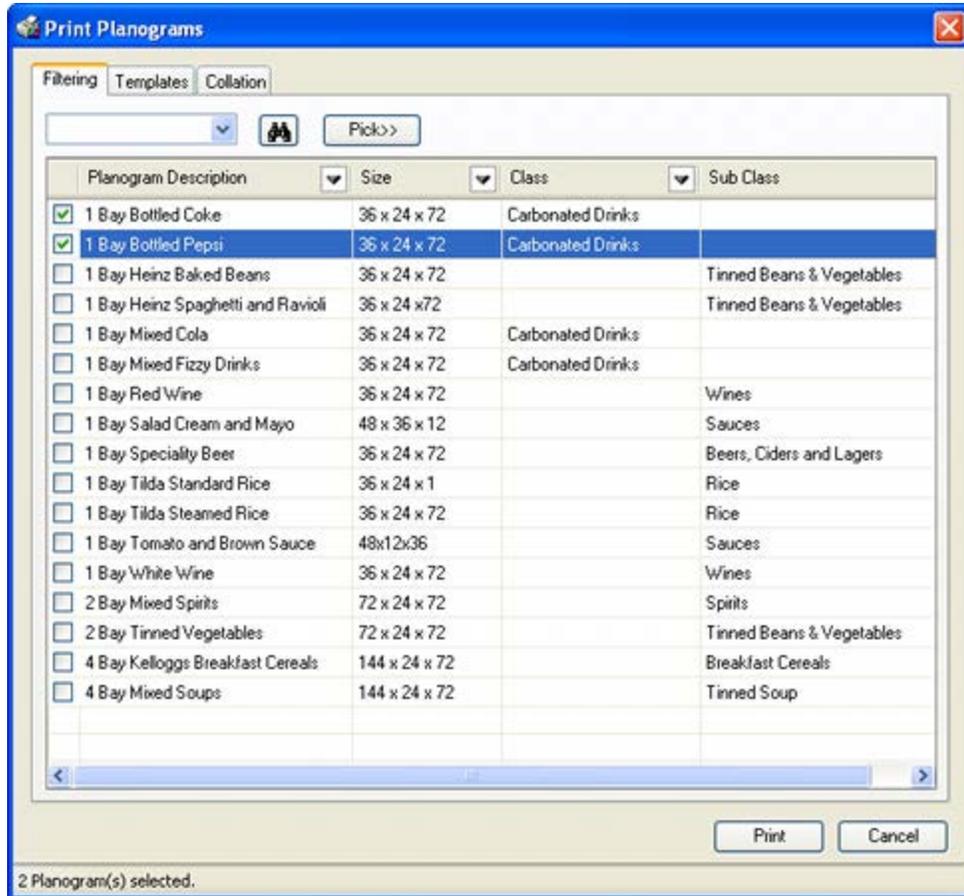
Immediate publishing of planograms will result in the files being sent to the same folders as used for the batch process.

Other Planogram Publishing Tabs

- **Templates:** The Templates tab allows the user to select the form the planogram definition will be output in.
- **Collation:** The Collation tab determines the way planograms will be published below the Planogram Publishing root.
- **Validation:** These are the checks that are performed before the floor plan is published. Any individual floor plan that fails validation will not be published, while an entry will be written to the pertinent log table.

Printing Planograms

The Planogram Printing option is called from the File menu and allows planograms from the currently active floor plan to be printed. The selected planograms will be sent to the default printer for the computer Macro Space Management is running on. Planograms can be selected for printing by ticking the check boxes and then clicking OK.

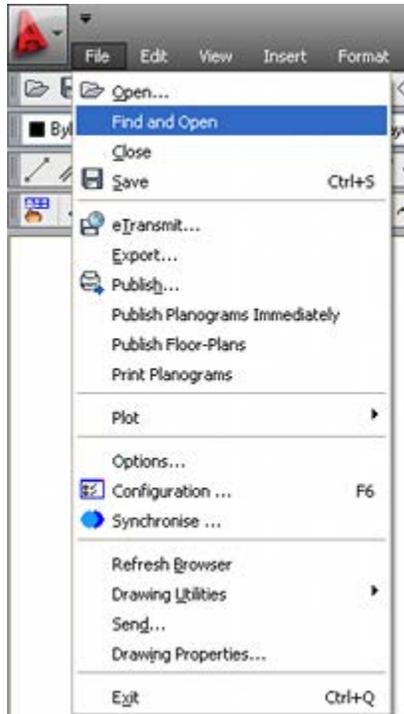


Planograms are selected in the Filtering tab, with the type of report required selected in the Templates tab. (These templates are configured in the report designer module). The sequence the planograms are printed in is specified in the Collation tab. This is useful if a large number of planograms are being printed.

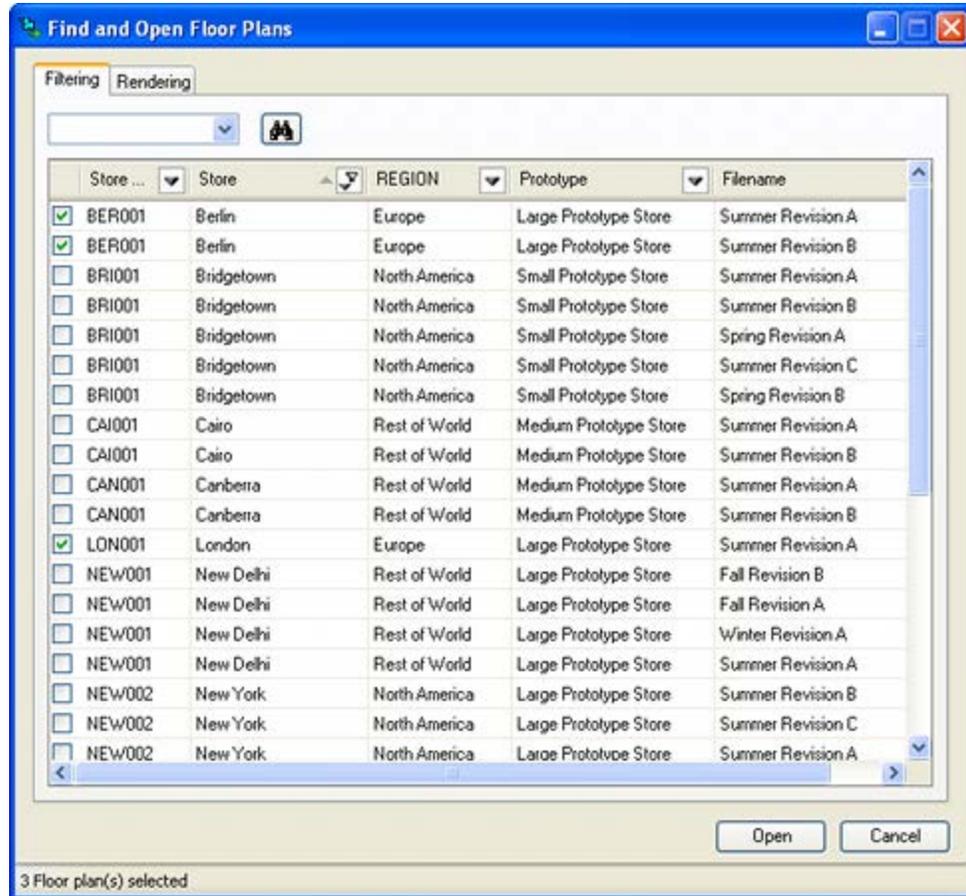
Find and Open

Overview of Find and Open

Find and Open provides an alternative to opening floor plans via Store Manager. It will return a list of all floor plans that a user has permissions for and allow them to select which to open. It is accessed from the File menu in the Planner module.

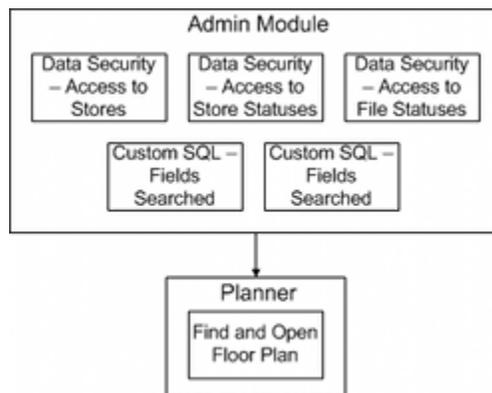


Selecting the **Find and Open** option will bring up the Find and Open dialog box.



Note: Users will only be able to see floor plans they have been assigned permissions for in the Administration Module. If a user has not been assigned those permissions, they will not be able to see the floor plan in the Find and Open dialog box.

The basic method of operation is as follows:



Administration Module

Within the Administration Module:

- The Stores users have permissions to open floor plans from are assigned in the Data Security dialog box - Stores Tab.
- The Store Statuses users have permissions to open floor plans from are assigned in the Data Security dialog box - Statuses Tab
- The File Statuses users have permissions to open floor plans from are assigned in the Data Security dialog box - Statuses Tab.
- Custom SQL (configurable from the Custom Query option accessed from the General Menu in the Administration module) will determine what fields appear in the Find and Open dialog box. This is done by modifying the Floor Plan Print dialog box.
- The Custom Query Option in the Administration Module (General Module) can be used to configure what fields can be search using the Find option. This is done by modifying the Stores query.

These settings determine what will appear in the Find and Open Floor Plans dialog box when it is accessed in the Planner module and what fields can be searched.

Note: In order to access the Administration Module, users must have permission to do so.

Planner Module

The Print Floor Plans dialog box may be accessed from the File Menu > Find and Open option. Users with permissions to access the Planner module automatically have permission to use the functionality.

Using Find and Floor Plan

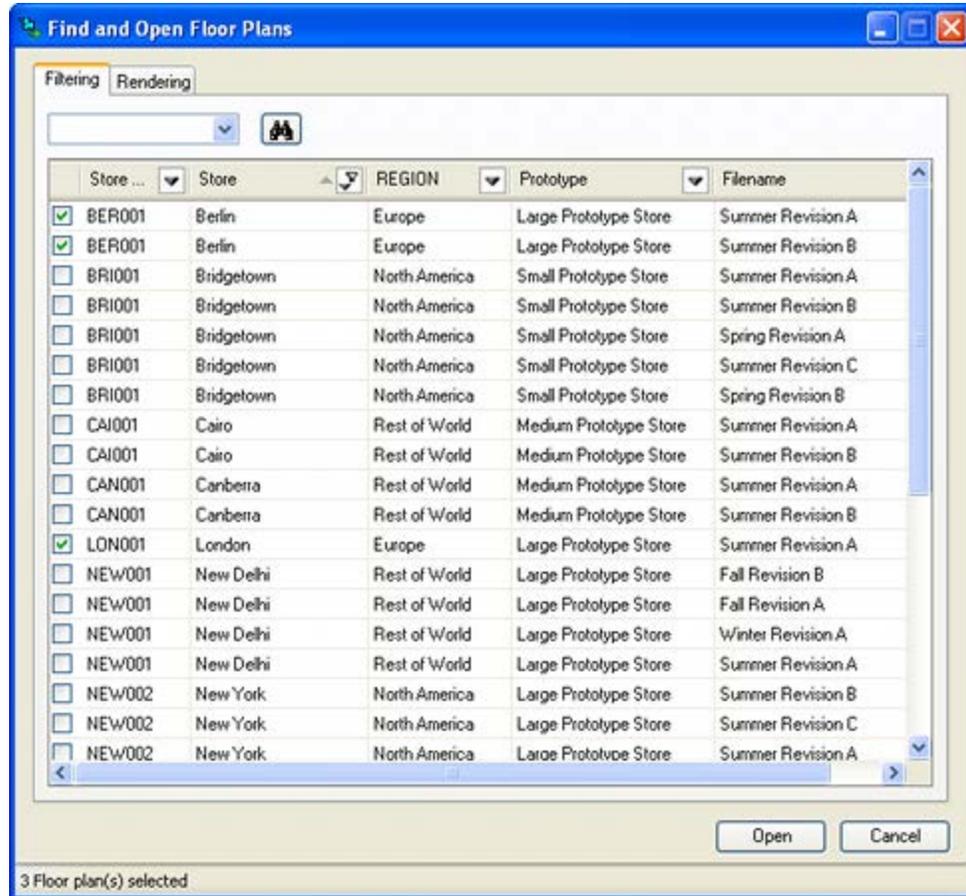
The functionality is used as follows:

The Find and Open Plans dialog box is selected from the file menu.

1. The appropriate floor plans are selected in the Filtering tab of the Print Floor Plans dialog box.
2. Settings determining the visual appearance of the printed drawing are specified in the Rendering tab.
3. On clicking the Open button, the selected floor plans will be opened. At the same time as they are opened, the required changes to the visual appearance (specified in the Rendering tab) will be made.
4. After the selected floor plans have been opened, the Find and Open Plans dialog box will remain open until the Cancel button has been clicked.

The Filtering Tab

The **Filtering tab** enables the user to select the Floor Plans to open. It will populate with all floor plans that the user has permission to access.



Find

Which fields Find will operate on is determined by the Custom SQL configured in the Custom Query option accessed from the General Menu in the Administration module. The Find option can be used by typing text into the text box then clicking the Find icon. Each successive click will move the user to the next floor plan matching the text being searched for. When no more matches are available, a confirmatory dialog box will appear.



Find operates with explicit or implied wild cards. The explicit wild cards are:

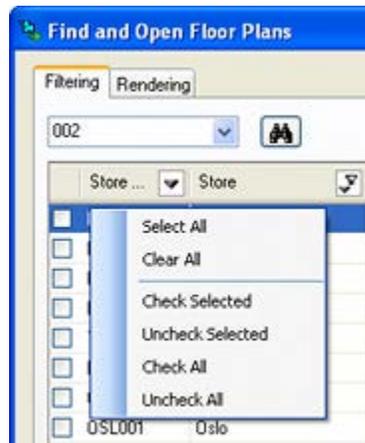
Wild Card	Description
*	Any characters
?	Any character in this position

Wild Card	Description
#	Any number in this position

If explicit wild cards are not used, implicit wild cards will be assumed. For example the text entry 'New' will be treated as '*New*' and will find New York, New Delhi, etc.

Right Click Menu

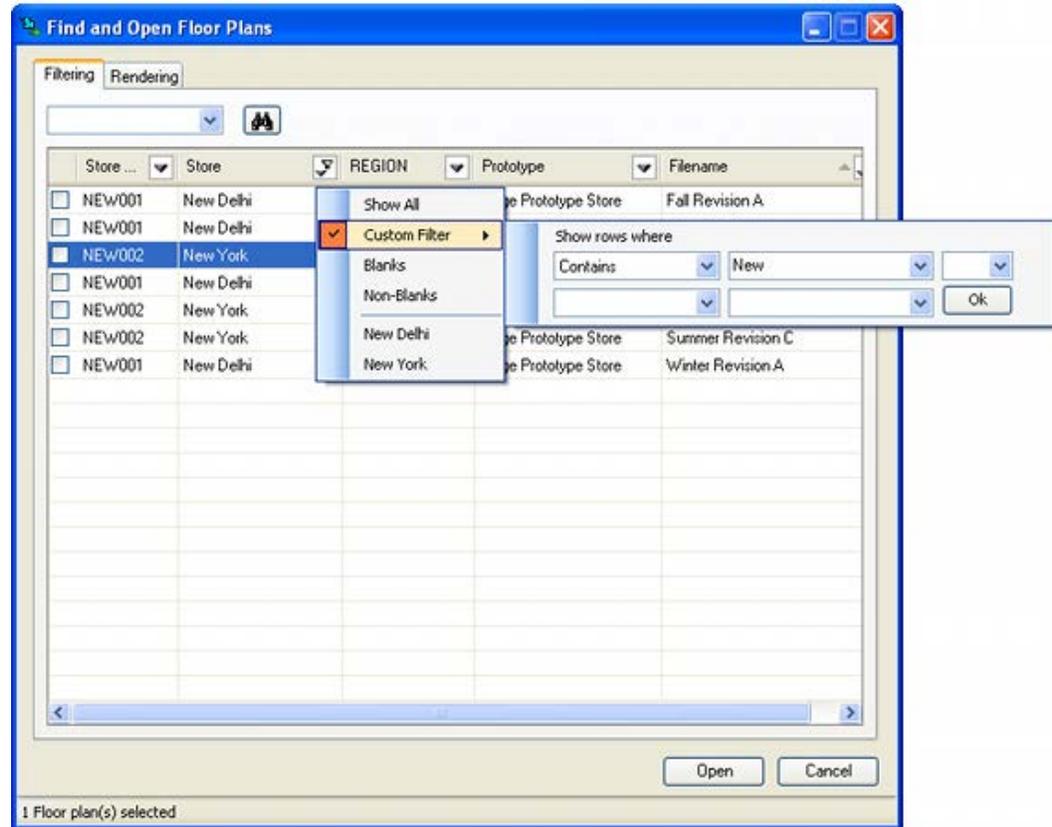
The right click menu provides a quick way of modifying the selected items.



- **Select All** will select (but not check) all rows of data
- **Clear All** will deselect (but not uncheck) all rows of data
- **Check Selected** will check all rows of selected data
- **Uncheck Selected** will uncheck all rows of selected data
- **Check All** will check all rows of data
- **Uncheck All** will uncheck all rows of data
- **Paste** allows users to paste a carriage returned list of floor plan identifiers from the Windows clipboard. All rows in the dialog box that match the pasted information will be checked.

Filtering

The **dialog box** is provided with a series of filters on each column. Setting a filter on one column will affect data in all other columns.



They are used as follows:

1. **Show All** - this option shows all results.
2. **Custom Filter** - this option allows users to set filters using Boolean logic. The options are:
 - **Equal to:** will return rows that are an exact match for the entered text.
 - **Not Equal to:** will return rows that do not match the text string
 - **Contains:** will return rows where part of the data matches the text string. (Uses implied wild cards).
 - **Does not contain:** will return rows where no part of the data matches the text string. (Uses implied wild cards).
 - **Begins with:** will return rows where the text string is an exact match for the start of the data.
 - **Ends with:** will return rows where the text string is an exact match for the end of the data.
 - **Does not begin with:** will return rows where the text string is not an exact match for the start of the data.
 - **Does not end with:** will return rows where the text string is not an exact match for the end of the data.
3. **Blanks** - column will be filtered to only show rows with null values.
4. **Non-Blanks** - column will be filtered to only show rows containing a value
5. **Results** - column will be filtered to only show the selected result.

Boolean logic also includes the use of **And** or **Or**.

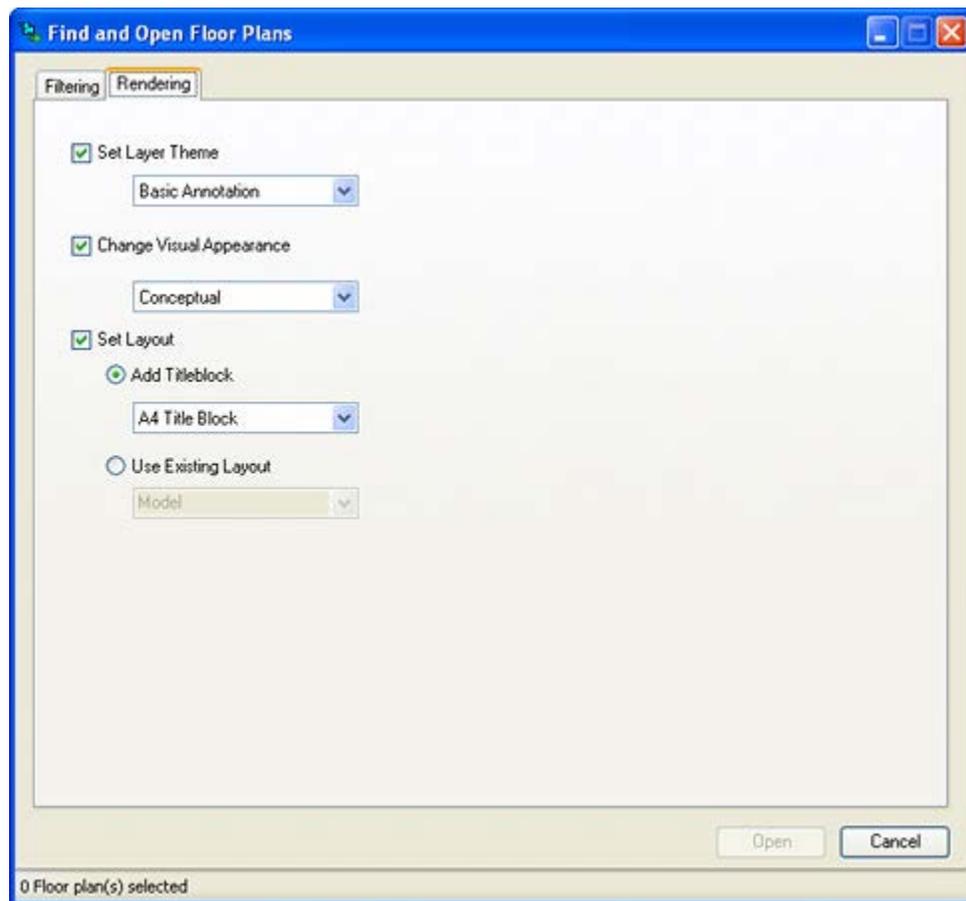
1. **And** means that both conditions must be met. A and B means the data returned must contain both A and B.
2. **Or** means either condition can be met. A or B means the data returned can contain either A or B. It does not need to contain both.

Selecting Floor Plans to open

Floor plans may be selected for opening by ticking the appropriate check box. On clicking OK, the floor plan(s) will open.

The Rendering Tab

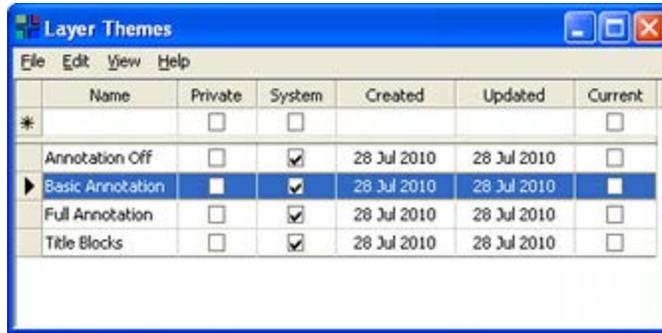
The **Rendering Tab** is used to ensure the visual appearance of the floor plan is as desired.



Set Layer Theme

If the check box is selected, users can select a layer theme from the drop down list. A number of layer themes can exist - each holding a specific set of settings for the individual layers. Selecting a specific layer theme, will automatically configure the individual layers to the settings designated for that layer theme.

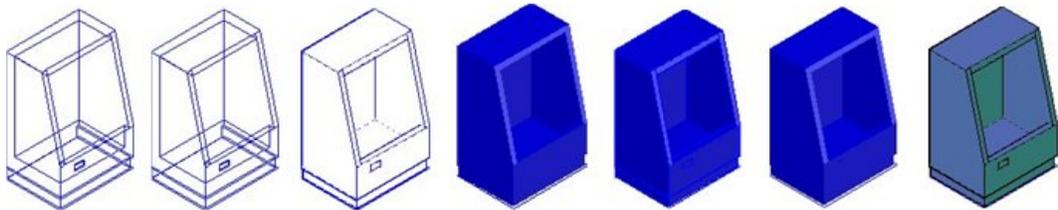
These layer themes are configured in the Layer Themes dialog box accessed from the Layer Aliased dialog box on the Format menu.



Change Visual Appearance

If the checkbox is ticked, this allows users to change the visual appearance of the drawing. The options are:

1. 2D Wire Frame
2. 3D Wire Frame
3. Hidden Detail
4. Shaded
5. Shaded with Edges
6. Conceptual
7. Realistic



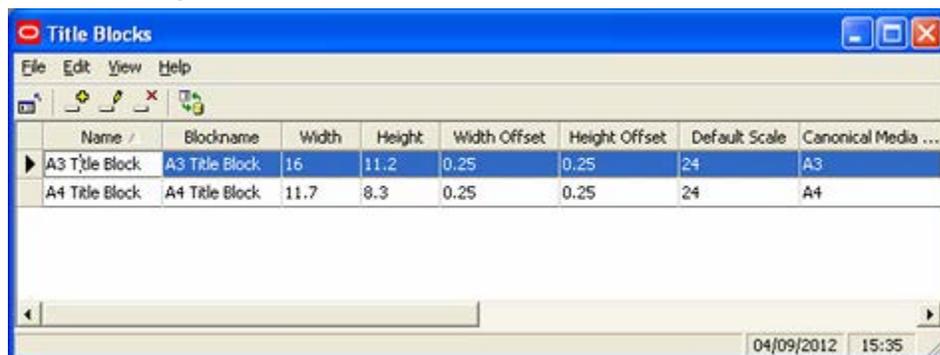
The images above show the different visual appearances available. They can be set by means of the Visual Styles toolbar or Visual Styles Manager.

Set Layout

If the checkbox is ticked the users can select one of two options: Add Titleblock or Use Existing Layout.

1. Add Titleblock

If the Add Titleblock option is selected, users may select a title block from a drop down list. The list of available title blocks is configured using the Title Block option on the Planning menu in the Administration module.



2. Use Existing Layout

If the Use Existing Layout option is selected, users can enter a name matching the name of a paper space tab. This may be typed in. Alternatively it may be selected from the drop down list, which will contain the last ten names. Information in the drop down list is not case sensitive and the following wild cards may be used:

Wild Card	Comment
*	Any number of characters
?	Any single character
#	Any single number

The names of the paper space tabs can be seen at the foot of the floor plan in the Planner module. In the example below they are named Overall Store, Food and Drink, Electrical and Clothing.



Floor Plan Printing

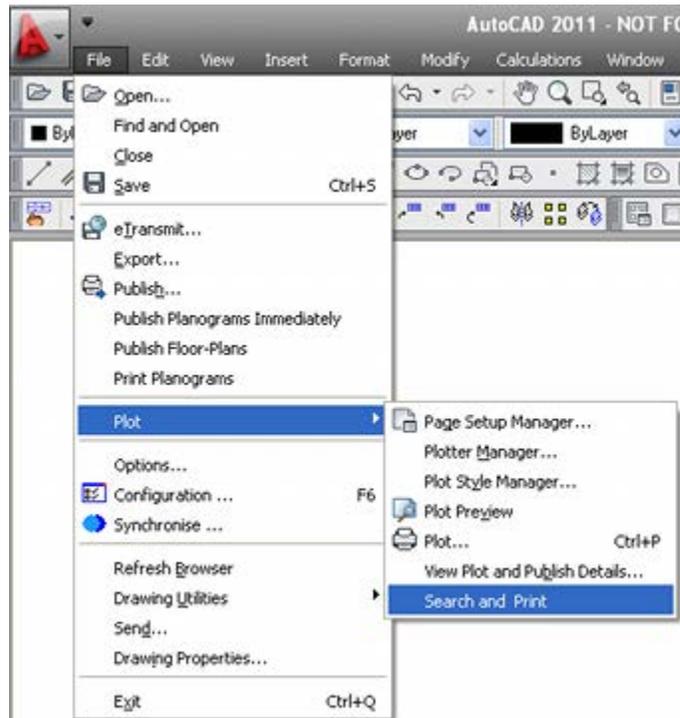
Overview of Floor Plan Printing

Floor Plan Printing allows the user to list all floor plans that they have access rights to. They then have the ability to select plans to be printed and, before they are printed, specify how the appearance and data associated with the floor plans can be updated. After printing, all changes will be undone so that the floor plan is in the condition it was in before printing.

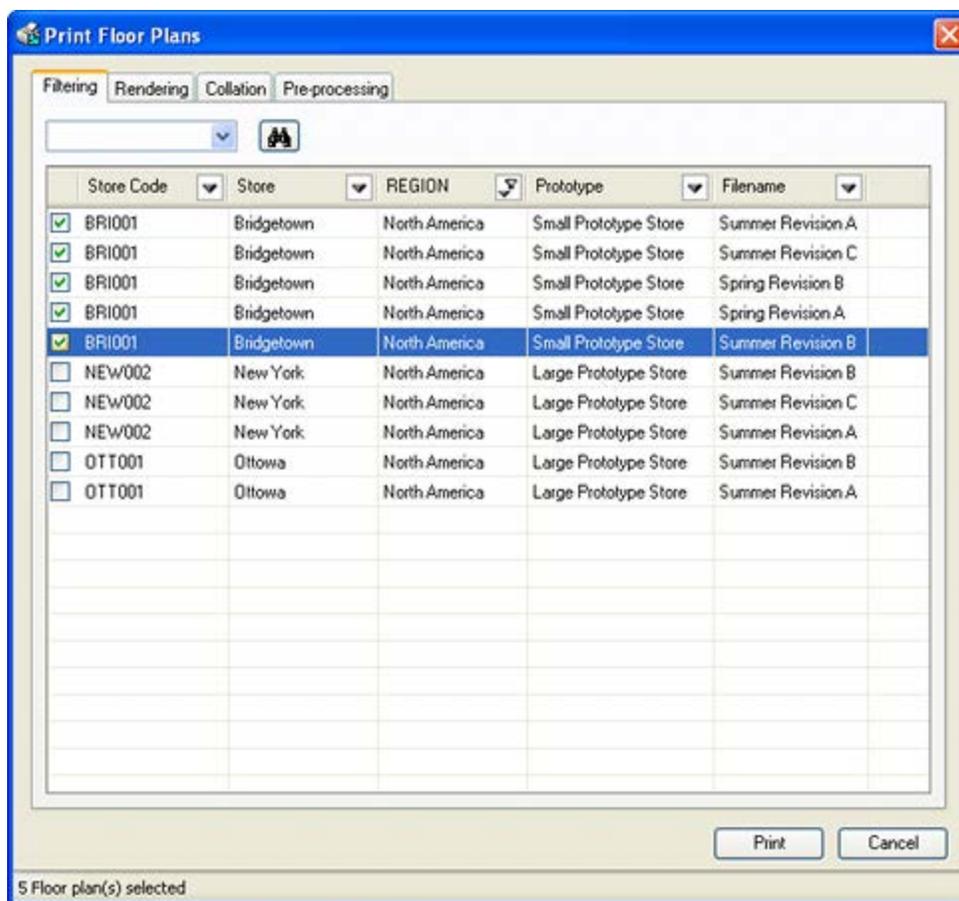
Note: Users wishing to Publish the floor plan (output it in electronic or hard copy form with permanent changes) should use the Immediate Floor Plan Publishing option from the File menu.

Assessing Floor Plan Printing

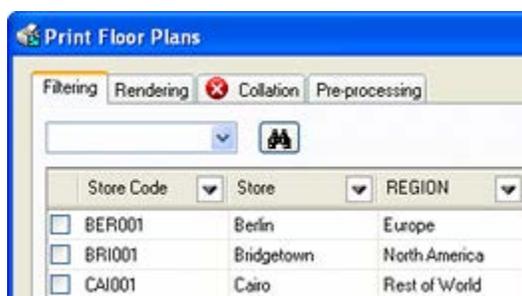
The **Print Floor Plan** functionality is accessed from the File Menu > Plot > Search and Print option. Users with permissions to access the Planner module will automatically have permission to use the functionality.



The Print Floor Plan dialog box will appear.



If there are any errors during selecting the options, a warning icon will appear on the appropriate tab and an explanation will appear in the status bar. In the example below, there is a problem with the selected options on the collation tab.



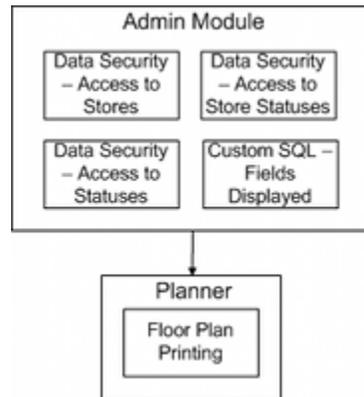
Reversing Changes Made During Floor Plan Printing

Options in the **Print Floor Plans dialog box** allow the user to specify the changes required to the floor plan before it is printed. The settings selected in the Rendering and Pre-Processing tabs will affect the visual appearance of the floor plan and will be made before it printing. This allows users to review a hard copy version of the floor plan in a specified condition.

After printing, the changes will be reversed and the floor plan returned to the state it was before printing. The status of the floor plan will also be left unchanged.

Using Floor Plan Printing

The basic method of operation is as follows:



Administration Module

Within the Administration Module:

- The Stores users have permissions to print floor plans from are assigned in the Stores option of the Status tab of the Data Security dialog box.
- The Store statuses users have permissions to print floor plans from are assigned in the Stores option of the Status tab of the Data Security dialog box.
- The file statuses users have permissions to print floor plans from are assigned in the Files option of the Statuses tab of the Data Security dialog box.

Note: the floor plans that a user can see are dependent on the combination of store, store status and file status permissions.

- The fields that display in the Filtering Tab of the Print floor Plans dialog box are configured in the Custom SQL dialog box.

These settings determine what will appear in the Print floor Plans dialog box when it is accessed in the Planner and Merchandiser modules.

Note: In order to access the Administration Module, users must have permission to do so.

Planner Module

The Print Floor Plans dialog box may be accessed from the File Menu > Plot option. Users with permissions to access the Planner module automatically have permission to use the functionality.

Using Floor Plan Printing

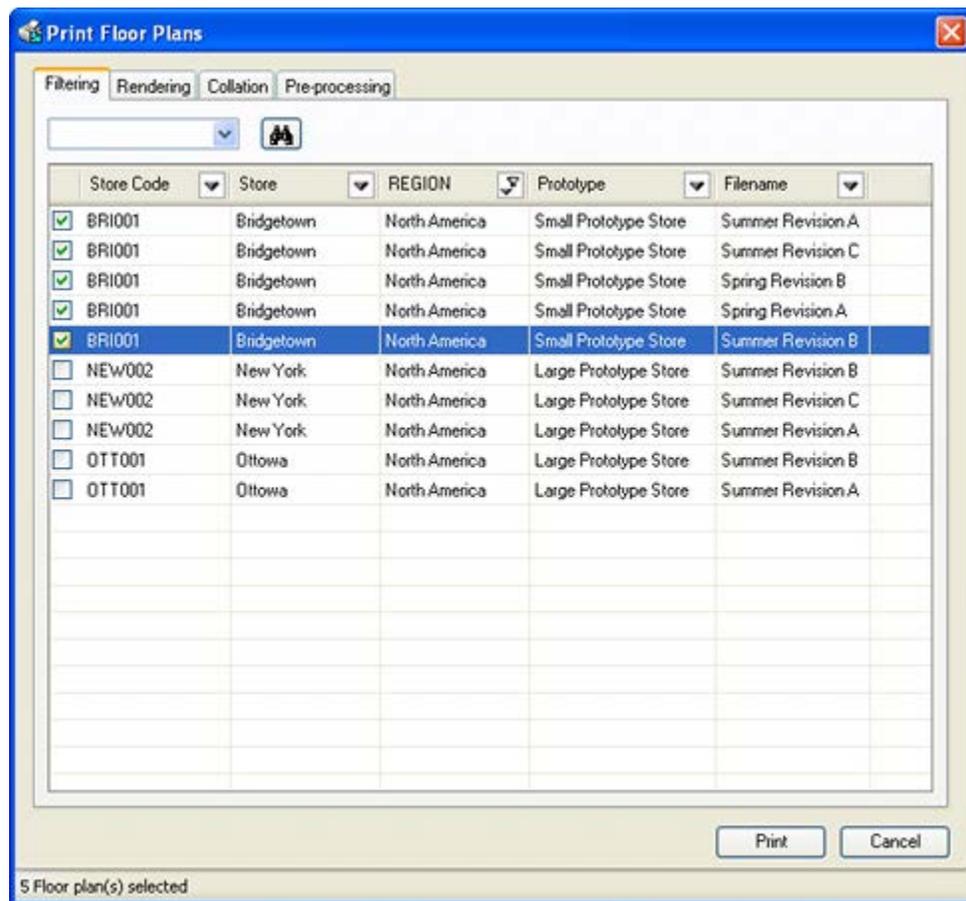
The functionality is used as follows:

- The Print Floor Plans dialog box is selected from the file menu.
- The appropriate floor plans are selected in the Filtering tab of the Print Floor Plans dialog box.
- Settings determining the visual appearance of the printed drawing are specified in the Rendering tab.

- Settings determining how data associated with the floor plan is updated are specified in the Pre-Processing tab.
- The sequence the selected floor plans are to be printed in is specified in the Collation Tab.
- On clicking the Print button, the first floor plan will be opened (if not already open) in the sequence specified in the Collation Tab.
- Changes will be made to the floor plan as specified in the Rendering and Pre-processing tabs.
- The floor plan will be printed on the default printer associated with the user's computer.
- The changes made for printing purposes will be undone and the floor plan checked back in.

The Filtering Tab

The Filtering tab enables the user to select the Floor Plans to print. It will populate with all floor plans which have Publish Dates on or before the current date.



Find

The Find option can be used by typing text into the text box then clicking the Find icon. Each successive click will move the user to the next floor plan matching the text being searched for. When no more matches are available, a confirmatory dialog box will appear.



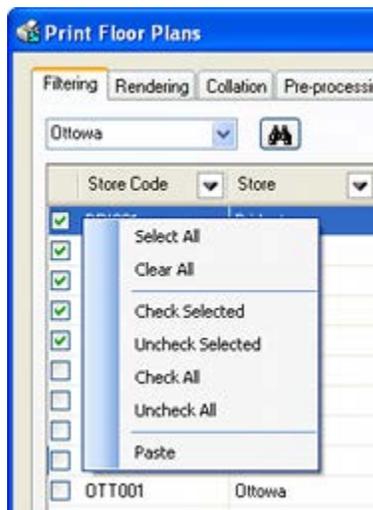
Find operates with explicit or implied wild cards. The explicit wild cards are:

Wild Card	Description
*	Any characters
?	Any character in this position
#	Any number in this position

If explicit wild cards are not used, implicit wild cards will be assumed. For example the text entry 'New' will be treated as '*New*' and will find New York, New Delhi, etc.

Right Click Menu

The right click menu provides a quick way of modifying the selected items.



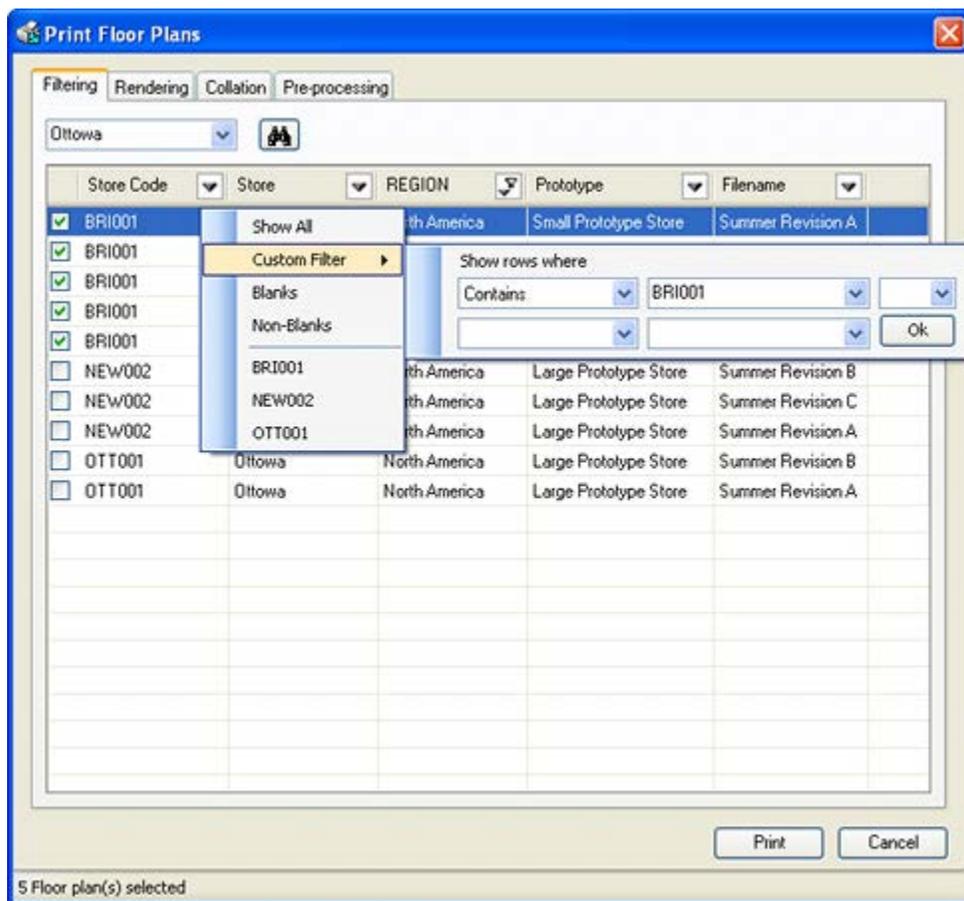
- **Select All** will select (but not check) all rows of data
- **Clear All** will deselect (but not uncheck) all rows of data
- **Check Selected** will check all rows of selected data
- **Uncheck Selected** will uncheck all rows of selected data
- **Check All** will check all rows of data
- **Uncheck All** will uncheck all rows of data
- **Paste** allows users to paste a carriage returned list of floor plan identifiers from the Windows clipboard. All rows in the dialog box that match the pasted information will be checked.

Selecting Floor Plans to Process

Floor plans may be selected for printing by ticking the appropriate check box.

Using Filters in the Filtering Tab

The **Filtering Tab** is provided with a series of filters on each column. Setting a filter on one column will affect data in all other columns.



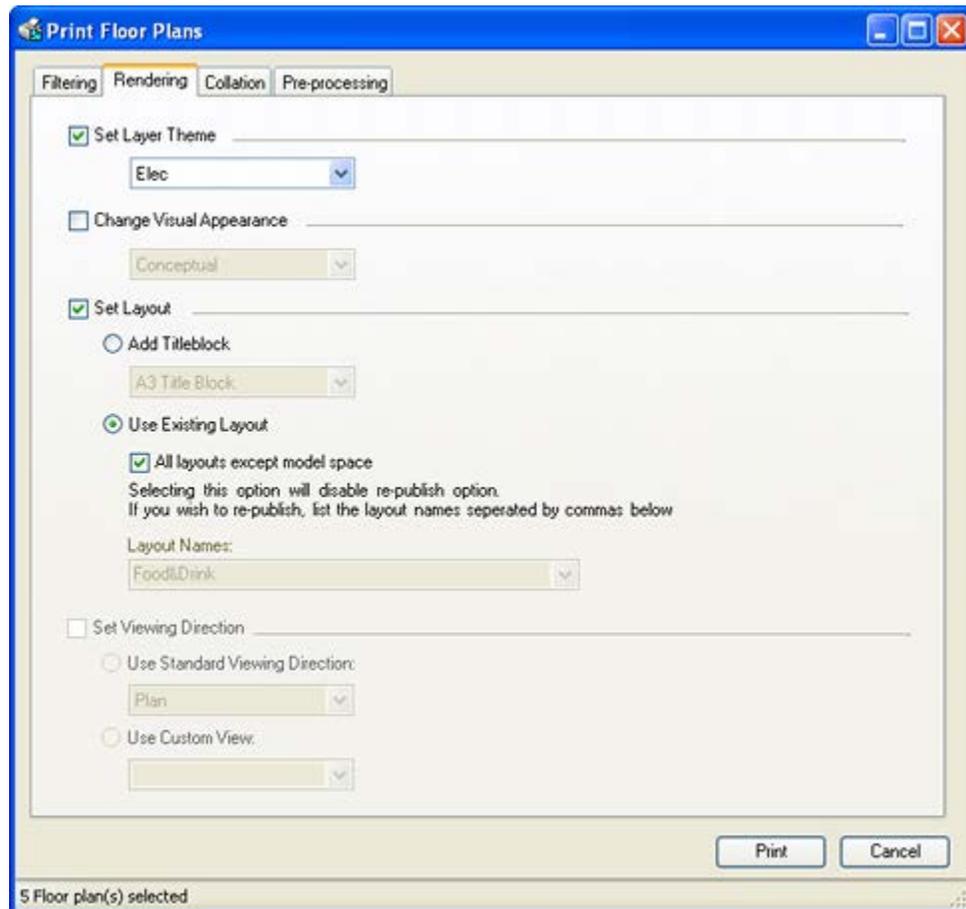
They are used as follows:

- **Show All** - this option shows all results.
- **Custom Filter** - this option allows users to set filters using Boolean logic. The options are:
 - **Equal to:** will return rows that are an exact match for the entered text.
 - **Not Equal to:** will return rows that do not match the text string
 - **Contains:** will return rows where part of the data matches the text string. (Uses implied wild cards).
 - **Does not contain:** will return rows where no part of the data matches the text string. (Uses implied wild cards).
 - **Begins with:** will return rows where the text string is an exact match for the start of the data.
 - **Ends with:** will return rows where the text string is an exact match for the end of the data.

- **Does not begin with:** will return rows where the text string is not an exact match for the start of the data.
 - **Does not end with:** will return rows where the text string is not an exact match for the end of the data.
 - **Blanks** - column will be filtered to only show rows with null values.
 - **Non-Blanks** - column will be filtered to only show rows containing a value
 - **Results** - column will be filtered to only show the selected result.
- Boolean logic also includes the use of **And** or **Or**.
- **And** means that both conditions must be met. **A and B** means the data returned must contain both A and B.
 - **Or** means either condition can be met. **A or B** means the data returned can contain either A or B. It does not need to contain both.

The Rendering Tab

The **Rendering Tab** is used to ensure the visual appearance of the floor plan is as desired.

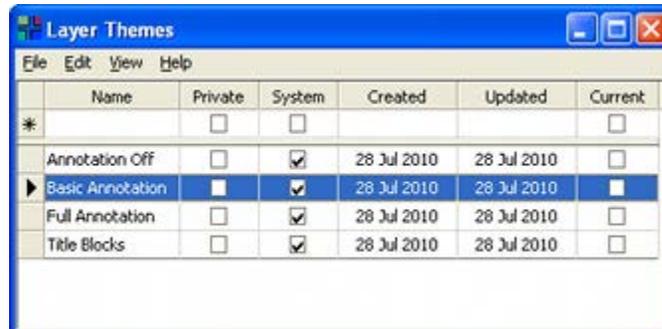


Set Layer Theme

If the check box is selected, users can select a layer theme from the drop down list. A number of layer themes can exist - each holding a specific set of settings for the

individual layers. Selecting a specific layer theme, will automatically configure the individual layers to the settings designated for that layer theme.

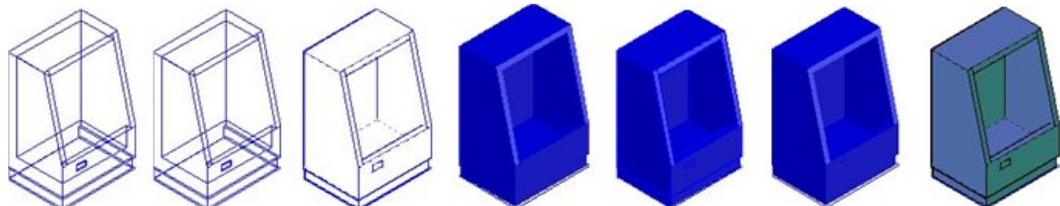
These layer themes are configured in the Layer Themes dialog box accessed from the Layer Aliased dialog box on the Format menu.



Change Visual Appearance

If the checkbox is ticked, this allows users to change the visual appearance of the drawing. The options are:

- 2D Wire Frame
- 3D Wire Frame
- Hidden Detail
- Shaded
- Shaded with Edges
- Conceptual
- Realistic



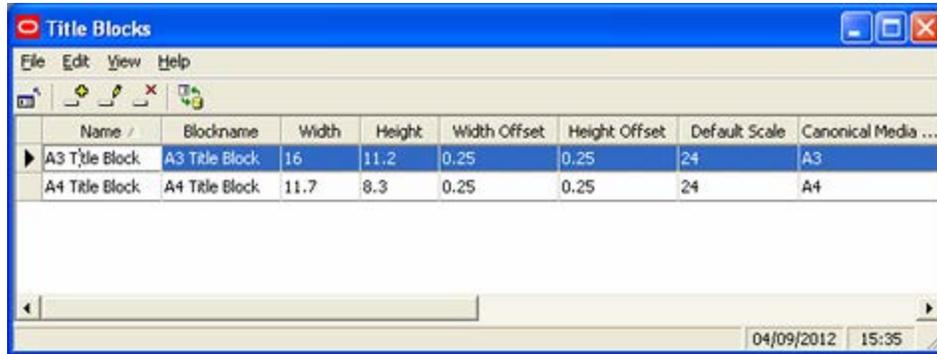
The images above show the different visual appearances available. They can be set by means of the Visual Styles toolbar or Visual Styles Manager.

Set Layout

If the checkbox is ticked the users can select one of two options: Add Titleblock or Use Existing Layout.

1. Add Titleblock

If the Add Titleblock option is selected, users may select a title block from a drop down list. The list of available title blocks is configured using the Title Block option on the Planning menu in the Administration module.



2. Use Existing Layout

If the Use Existing Layout option is selected, the user has two options; to publish all layouts except model space, or to publish selected layouts.

- **All layouts except model space**

If this option is selected, all layouts except the model space layout will be published for each floor plan. The layout names option will also be greyed out and unavailable.

- **Layout Names**

If this option is selected, users can enter a name matching the name of a paper space tab. This may be typed in. Alternatively it may be selected from the drop down list, which will contain the last ten names. Information in the drop down list is not case sensitive and the following wild cards may be used:

Wild Card	Comment
*	Any number of characters
?	Any single character
#	Any single number

The names of the paper space tabs can be seen at the foot of the floor plan in the Planner module. In the example below they are named Overall store, food and drink, Electrical and Clothing.



If multiple layout names are required, these should be separated by a comma.

3. Set Viewing Direction

The viewing direction can be set if a Layout tab has been selected in the set Layout section. Users can then select the View direction from the drop down list. The options are:

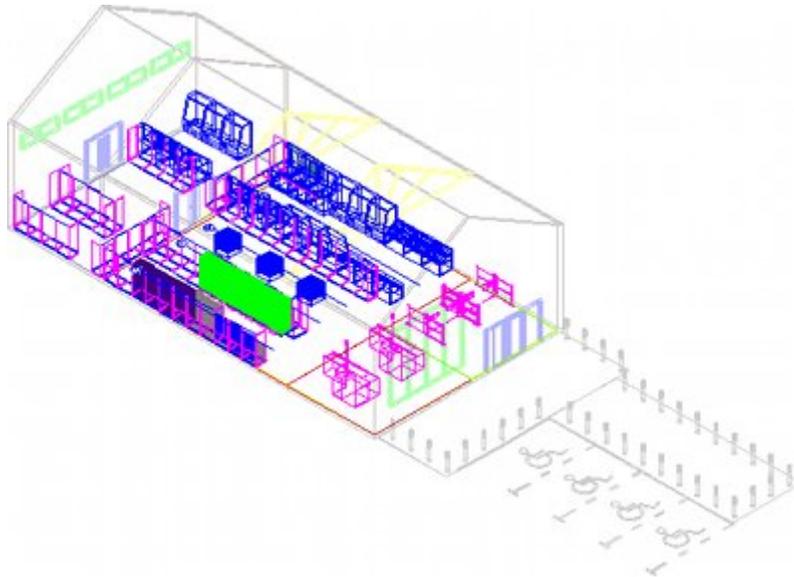
- Plan
- NE Isometric
- SW Isometric
- SE Isometric
- NW Isometric

- N Elevation
- E Elevation
- S Elevation
- W Elevation

These correspond to the options in the 3D view option from the View menu, or in the View toolbar.

If the user elects to Use Custom View, the user will be able to type in the name of a custom view. This custom view name may use standard wild cards to allow for inconsistencies in the actual name. It will not be case sensitive.

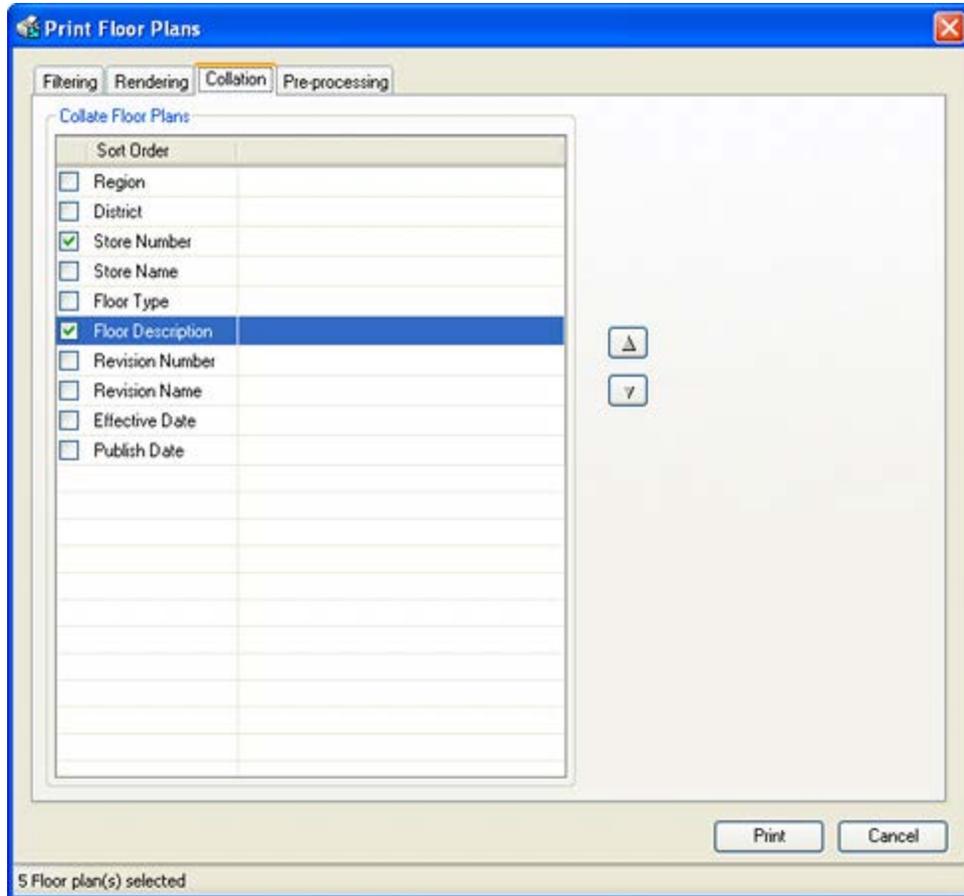
The example below shows a floor plan in SW Isometric view.



The Collation Tab

The **Collation Tab** allows users to specify the sequence the floor plans will be printed in. This makes it easier to sort and distribute them after printing.

At least one collation option must be selected, or the tab will show as having an error.



The available options can be ordered by highlighting them, then using the up or down arrows. The options are made active by using the check boxes.

- **Region** is a specific type of cluster set in the Cluster type drop down list in the Cluster dialog box in Store Manager.
- **District** is a specific type of cluster set in the Cluster type drop down list in the Cluster dialog box in Store Manager.



- **Store Number** is the Store Code in the Store dialog box in Store Manager.
- **Store Name** is the Store Name in the Store dialog box in Store Manager.

- **Floor Type** is the Floor Type in the Floor dialog box in Store Manager.
- **Floor Description** is the Floor Description in the Floor dialog box in Store Manager.

- **Revision Name** is the Revision Name in the Floor dialog box in Store Manager.
- **Revision Number** is the Revision Number in the Floor dialog box in Store Manager.

Edit Revision

Revision ID: 131

Revision Number: 1

Revision Description: Summer Plans

Revision Directory Name: Summer Plans\

Status: Proposal

Season Description: All Seasons

Birth Date: 01 March 2013

Death Date: 31 December 2999

Has Sections:

Add Proposal Drawing:

OK Cancel

- **Effective Date** is the Effective Date in the File Properties dialog box in Store Manager
- **Publish Date** is the Publish Date in the File Properties dialog box in Store Manager.

Properties

Details Notes

File Information

Summer Revision A

Location: \\10.167.93.126\spaceplan data files\Store Root\Paris\Ground Floor\Summer Plans\Sur

File Predecessor:

File Settings

Type: .dwg

Size: 130278 bytes

File Status: Authorised

Prototype Store: Large Prototype Store

Active Date: 01/05/2013

Publish Date: 01/04/2013

Effective Date: 01/05/2013

File Details

Created: 01-Aug-12

File Modified: 06-Sep-12

Last Modified: 06-Sep-12

Modified By Automation:

Last Modified By: PWells

File Last Published:

File Made Current:

File Made Historical:

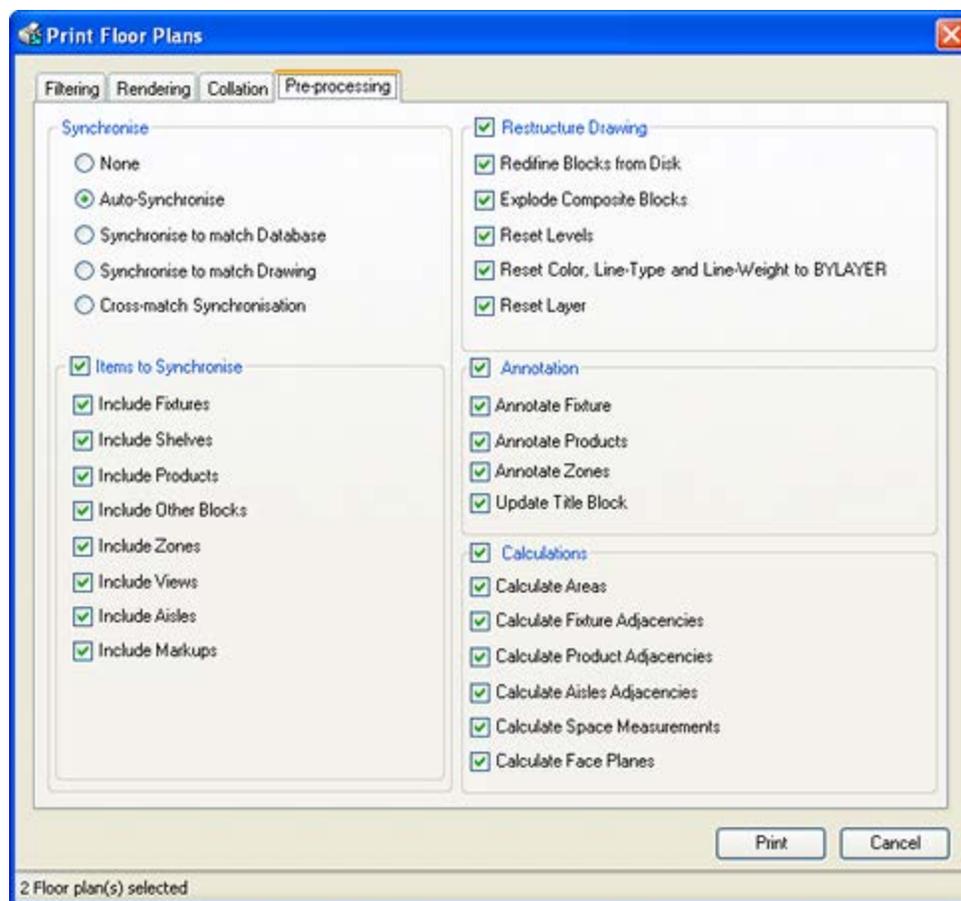
ID: 302

Checked Out

OK Cancel

The Pre-Processing Tab

The **Pre-processing tab** is used to ensure that the information in the floor plan is up to date.



Synchronize

Synchronize is used to make sure that the information in the floor plan matches that held in the Macro Space Planning database. This information could differ for a number of reasons:

- Changes have been made in the floor plan using AutoCAD tools and these changes have not been written to the database.
- Changes have been manually made to floor plans in the Merchandiser module, or in In-Store Space Collaboration.
- Changes have been made to floor plans in the database by batch processes.
- Changes have been made to the floor plan outside Macro Space Planning - for example in raw AutoCAD.

The following options are available:

- **None** - no synchronization operations will be carried out.
- **Auto-Synchronize** - the application will automatically detect which form of synchronization is required:
 - If the information in the database exceeds the date the floor plan was last modified and saved in Planner (or modified in raw AutoCAD), the information will be synchronized "match the database".
 - If the date of the information in the floor plan (or the date it was modified in raw AutoCAD) exceeds the date the information was written to the database, the information will be synchronized "match the drawing".

- If (i) the date the floor plan was last modified in raw AutoCAD exceeds the date the floor plan was last modified in Planner and (ii) the date the floor plan was last modified in Planner is less than the date the floor plan was last modified in Merchandiser, In-Store Space Collaboration or by a batch process, synchronization will be by 'cross-matching'.
 - Information in the floor plan for zones, fixtures and other blocks and aisles will be written to the database.
 - Information in the database for shelves and merchandise will be written into the floor plan.
- **Synchronize to Match Database** - information in the database will be written into the floor plan.
- **Synchronize to Match Drawing** - information from the floor plan will be written to the database.
- **Cross Match** - information on zones, fixtures and other blocks and aisles will be written to the database, while information on shelves and merchandise will be written into the floor plan.

Items to Synchronize

Once the synchronization method has been selected, specific items can be selected for the synchronization operation to work on.

- **Include Fixtures** - fixtures and fittings will be synchronized.
- **Include Shelves** - shelf objects will be synchronized.
- **Include Products** - products and planograms will be synchronized
- **Include Other Blocks** – include blocks of type 'Other'.
- **Include Zones** - Zones will be synchronized.
- **Include Views** - view positions in Planner or Merchandiser will be synchronized. (This will not affect In-Store Space Collaboration).
- **Include Aisles** - Aisles will be synchronized.

The following points should be noted:

- If shelf positions are changed in Planner and the 'Synchronize to Match Drawing' option is selected, the modified shelf positions will be written back to the database. This could potentially affect any planograms using those shelves.
- Zones can only be added, edited or deleted in Planner. If 'Synchronize to Match Database' is selected, the current zone information in the Planner floor plan will be changed to match that held in the database. This might be done to reverse changes made and saved in the Planner module.
- Aisles can only be added, edited or deleted in Planner. If 'Synchronize to Match Database' is selected, the current aisle information in the Planner floor plan will be changed to match that held in the database. This might be done to reverse changes made and saved in the Planner module.

Restructure Drawing

Restructure Drawing allows users to update the drawing so that the blocks in the drawing match the latest information defined in Fixture Studio.

- **Redefine Blocks from Disc** - this results in the DWG files in the drawing being updated with the latest versions of those DWG files defined in Fixture Studio.

- **Explode Composite Blocks** - this will explode all blocks defined as composites in Fixture Studio. These blocks will be placed on Layer 0 and will require having Color, Line type and Line-Weight to set to BYLAYER.

Note: Composite Blocks that are not flagged as composite in Fixture Studio will not be exploded.

- **Reset Levels** - this will reset the elevation of the block to that defined by the level assigned to it in the Insertion Tab of the Block Details dialog box in Fixture Studio.
- **Reset Color, Line type and Line-Weight to BYLAYER** - this option will look at the color, line type and line weight of each instance of a block in the drawing. If they differ from the defaults for that layer, they will be set back to those defaults.
- **Reset Layer** - if blocks have been moved to a layer different to that specified in the Insertion Tab of the Block Details dialog box in Fixture Studio, the block will be restored to the default layer.

Annotation

The annotation option allows users to update the annotation in the floor plan so it matches the latest annotation rules specified in the Text Styles option in the Administration Module.

- **Annotate Fixtures** - all fixtures that have had the 'Include in Fixture Annotation' check box ticked in the Category Tab of the Block Details dialog box in Fixture Studio will have their annotation updated.
- **Annotate Products** - all products, planograms and planogram profiles will have their annotation updated.
- **Annotate Zones** - all zones will have their annotation updated.
- **Update Title Block** - all text boxes in the title block that reference information in the database will have that information updated.

Calculations

This option is used to update the calculations associated with the floor plan. This has a number of benefits including ensuring that reports based on this floor plan are accurate and up to date. It also ensures that annotation draws correctly.

- **Calculate Areas** - this updates the area calculations; and hence the floor area assigned to each fixture.
- **Calculate Fixture Adjacencies** - this updates the fixture adjacencies; and hence the relationship of one fixture to another.
- **Calculate Product Adjacencies** - this updates the product adjacencies; and hence the relationship of one product to another.
- **Calculate Aisle Adjacencies** - this updates the aisle adjacencies; and hence which products share an aisle.
- **Calculate Space Measures** - this updates space measures: the volume occupied by each product in a planogram.
- **Calculate Face Planes** - this updates face planes: the frontal area occupied by each product in a planogram.

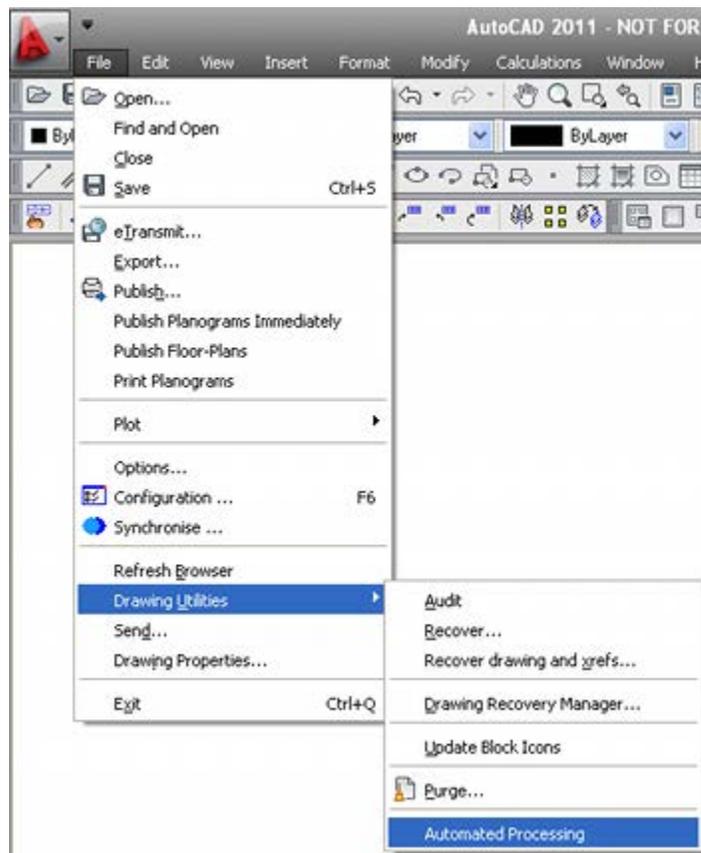
Floor Plan Processing

Overview of Floor Plan Processing

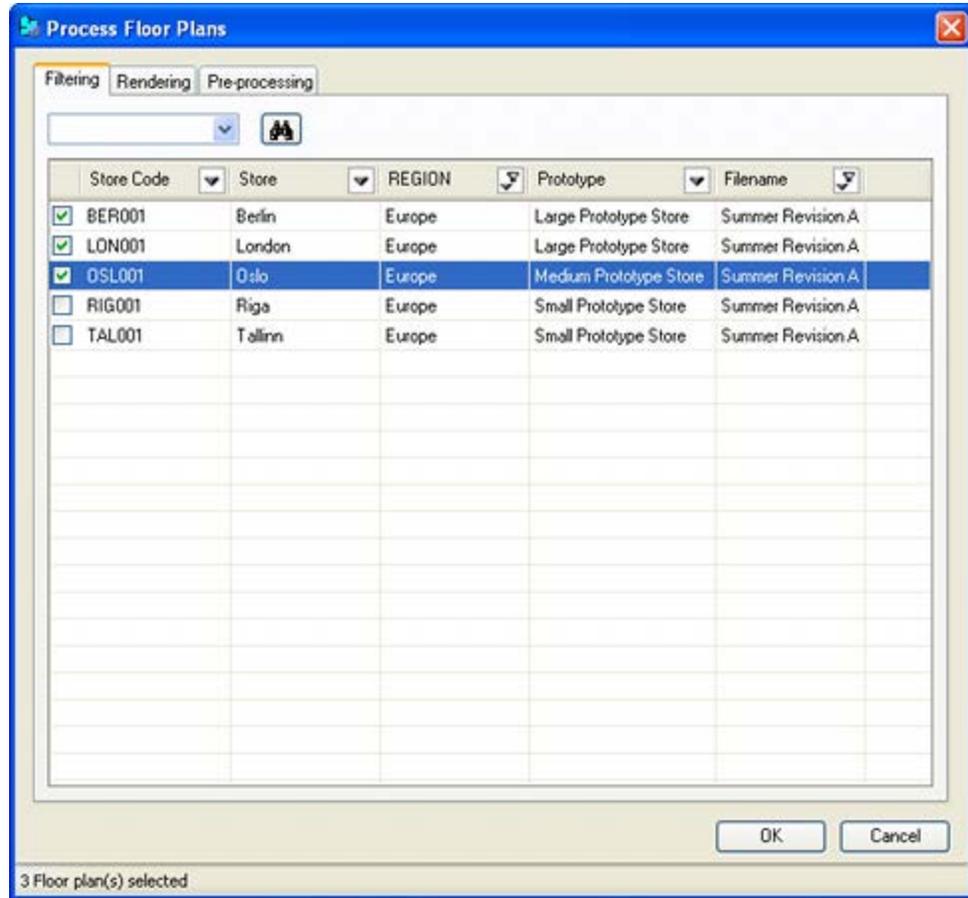
Floor Plan Processing is used to prepare floor plans for further use after manual or other batch operations have been carried out.

Accessing Floor Plan Processing

The Process Floor Plan functionality is accessed from the File Menu > Drawing Utilities > Automated Processing option.



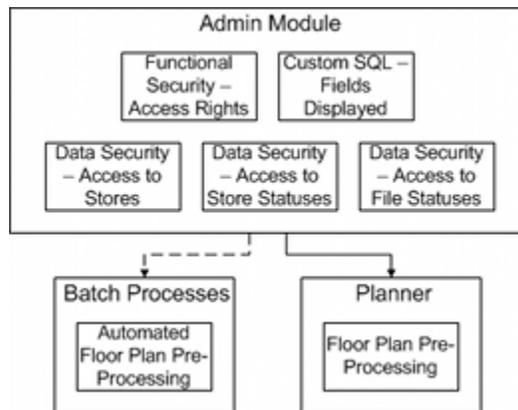
Selecting Automated Processing will bring up the Process Floor Plans dialog box. This will open at the filtering tab and will display all floor plans that are at or have exceeded their Publish Date.



Note: The columns that are displayed in the dialog box are configurable in the Custom SQL option available from the General Menu in the Administration module.

Using Floor Plan Processing

Floor Plan Processing is used to prepare floor plans for further use after manual or other batch operations have been carried out. The options available are:



The basic method of operation is as follows:

Administration Module

- Permissions to use the floor plan pre-processing functionality are assigned in the Functional security dialog box in the Administration module.
- The stores that users have permissions to process floor plans for are set in the Stores tab of the Data Security dialog box in the Administration module.
- The store statuses that users have permissions to process floor plans for are set in the Stores option of the Status tab of the Data Security dialog box in the Administration Module.
- The file statuses that users have permission to process are set in the Files option of the Status tab of the Data Security dialog box in the Administration module.

Note: The floor plans that a user has permission to process are dependent on the combination of store, store status and file status permissions.

- The fields that users can see in the Floor Plan Processing dialog box are specified in the Custom SQL dialog box in the Administration Module.

Batch Processes

Floor Plan Pre-Processing can be run as a batch process. In order to do this, a user must first have been assigned permission in the Functional Security dialog box in the Administration Module. The Batch Process will then execute using command line switches to define parameters.

Planner Module

In order to use Immediate Floor Plan Pre-Processing a user must first have been assigned permission in the Functional Security dialog box in the Administration Module. When the Floor Plan Processing dialog box first opens, the user must manually chose the required settings.

The options available in **Floor Plan Processing** are:

- **Synchronization**
Synchronization is used to ensure that the floor plan (DWG file) used in the Planner module and the information held in the database is identical. Differences could build up between the two. Differences can occur if for instance, changes are made to the floor plan outside the Macro Space Planning, or changes are made to the database by processes such as planogram substitution. Using synchronize resolves these differences.
- **Rendering**
Rendering is used to ensure the visual appearance of the published or printed drawing conforms to a specified format. This includes configuring the layers used in the floor plan, the visual appearance of the blocks used, refreshing the data displayed in the title block and selecting the layout tab in AutoCAD paper space.
- **Restructuring Drawing**
The restructure options are used to ensure that the blocks in the floor plan conform to the latest versions defined in the Fixture Studio module. For example, the functionality can be used to ensure that the version of the DWG file used to represent the block is the latest version, that its color, line type and line weight are set to the correct values for the layer is designated to be on and that its

elevation in the drawing (z coordinate) is identical to the value specified in Fixture Studio.

- **Annotation**

The annotation options are used to refresh zone, fixture and product annotation. They are also used to ensure the information displayed in the Title Block is up to date. For example, if the Planogram Substitution functionality has been used to change some of the planograms in the floor plan, it would be necessary to re-annotate the floor plan to reflect the changed merchandise.

- **Calculations**

The calculation option is used to ensure that information used for reporting purposes is up to date. For example, if the Planogram Substitution functionality has been used to change some of the planograms in the floor plan, Product Adjacency, Aisle Adjacency, Face Plane and Space Measurement calculations would probably have to be re-run to ensure the information generated for any reports associated with that floor plan was up to date.

Examples of the use of Floor Plan Automated Processing include:

- **Ensure Floor Plan data is up to date before generating reports**

If manual changes have been made in floor plans, it is by no means guaranteed that the person editing the floor plan has remembered to update the calculations before saving and closing the drawing. Running the calculations via Floor Plan Automated Processing is a prudent step to ensure reporting accuracy.

- Planogram substitutions have been run as a batch process

The need then is to prepare the floor plans for when they are next manually opened, or for when they are published. The processing tasks would include:

- Synchronize (batch the database) to bring the substituted planograms into the Planner floor plans (DWG files).
- Annotation to update the annotation associated with the changed planograms.
- Calculations (Product Adjacency, Aisle Adjacency, Face Plane and Space Measurement) to ensure that any subsequent reports are accurate.

- **Floor Plans are to be published and reports are to be generated**

If floor plans are to be published and reports are to be generated, business work flows may make it sensible to run Floor Plan Automated Processing as a predecessor to generating the reports and floor plans. In this case Floor Plan Publishing would be configured without any options selected on the pre-processing tab.

Results from Floor Plan Processing

The results from Floor Plan Processing are stored in two tables within the database. These results can be viewed via reports generated from BI Publisher (or similar software).

Permissions to Run Process Floor Plans

Before a user can run the Process Floor Plans functionality, they must first have been assigned the appropriate permissions in the Administration module. This is done using the Functional Security dialog box accessed from the Security menu.

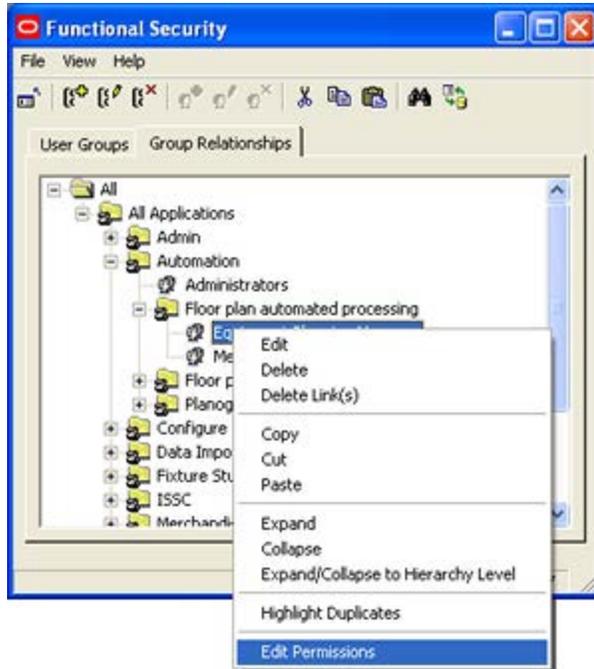
Note: For users to access the Administration Module, they must first have the appropriate permissions.



Users assigned to the Automation Command Group (such as the Administrator User Group) can run all Automation Functionality. User Groups assigned to the child Command Groups (Floor Plan Automated Publishing, Floor Plan Publishing, Planogram Publishing) have the ability to use that functionality. In the example above, the Equipment Planning Manager and Merchandise Planning Manager User Groups have been assigned permission to use the Floor Plan Automated Processing functionality.

Note: Floor Plan Automated Processing (the right to run calculations on floor plans) is a separate user group to Floor Plan Publishing. Floor Plan Publishing users can run calculations on floor plans as part of the publishing process. To run Floor Plan Automated Publishing 'stand alone' as a preparatory action for outputting reports, etc, requires the user to have separate permission for that functionality.

The User Groups precise rights depend on settings in the Permissions dialog box. This is accessed from the right click menu in the Functional Security dialog box.



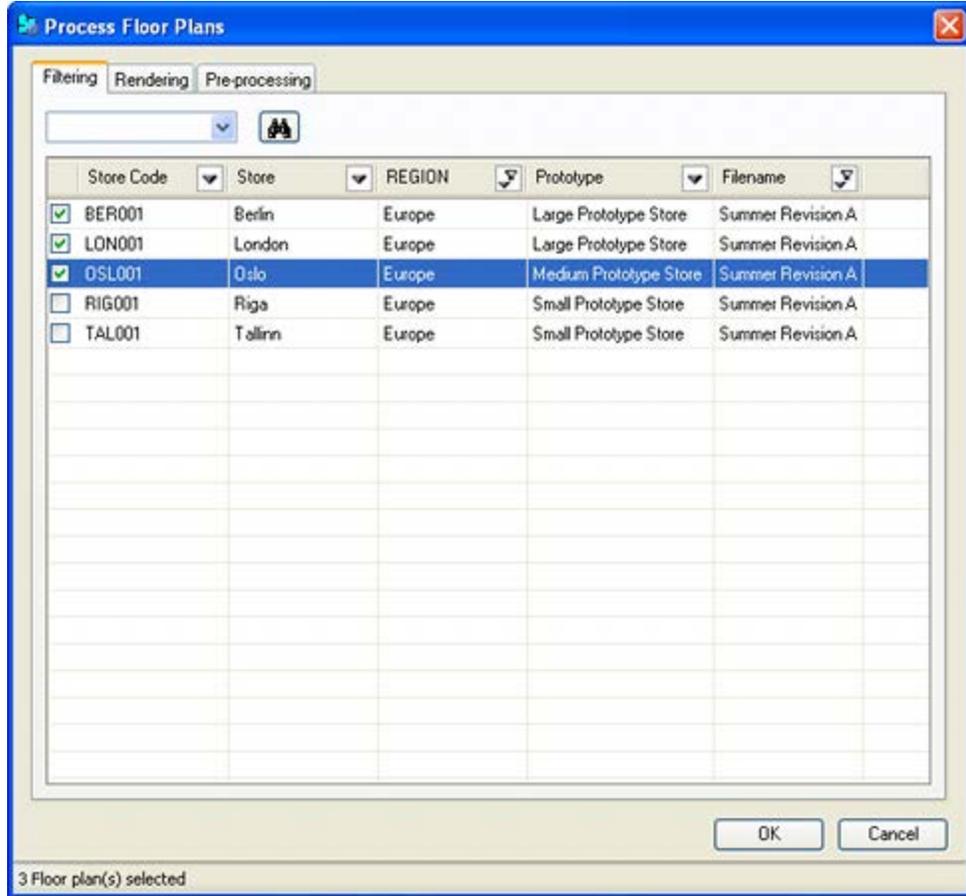
This will bring up the Permissions dialog box.



- If the User Group belongs to a Command Group higher in the Command Group hierarchy, by default it will inherit the permissions from that higher Command Group. This permission can be varied at the lower level by changing the selections made using the check boxes.
- If the User Group only exists at this level in the hierarchy, the Permissions dialog box will initially have all check boxes blank. The Administrator must then assign Allow or Deny permissions.

The Filtering Tab

The **Filtering tab** enables the user to select the Floor Plans to Process. It will populate with all floor plans which have Publish Dates on or before the current date.



Find

The Find option can be used by typing text into the text box then clicking the Find icon. Each successive click will move the user to the next floor plan matching the text being searched for. When no more matches are available, a confirmatory dialog box will appear.



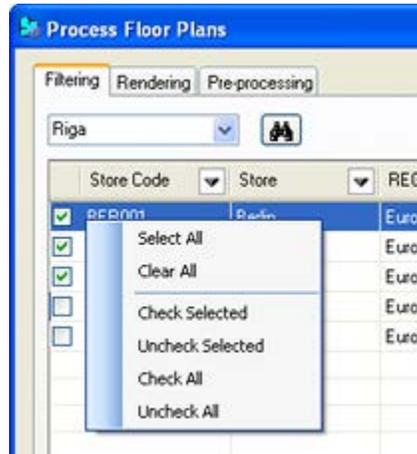
Find operates with explicit or implied wild cards. The explicit wild cards are:

Wild Card	Description
*	Any characters
?	Any character in this position
#	Any number in this position

If explicit wild cards are not used, implicit wild cards will be assumed. For example, the text entry 'New' will be treated as '*New*' and will find New York, New Delhi, etc.

Right Click Menu

The right click menu provides a quick way of modifying the selected items.



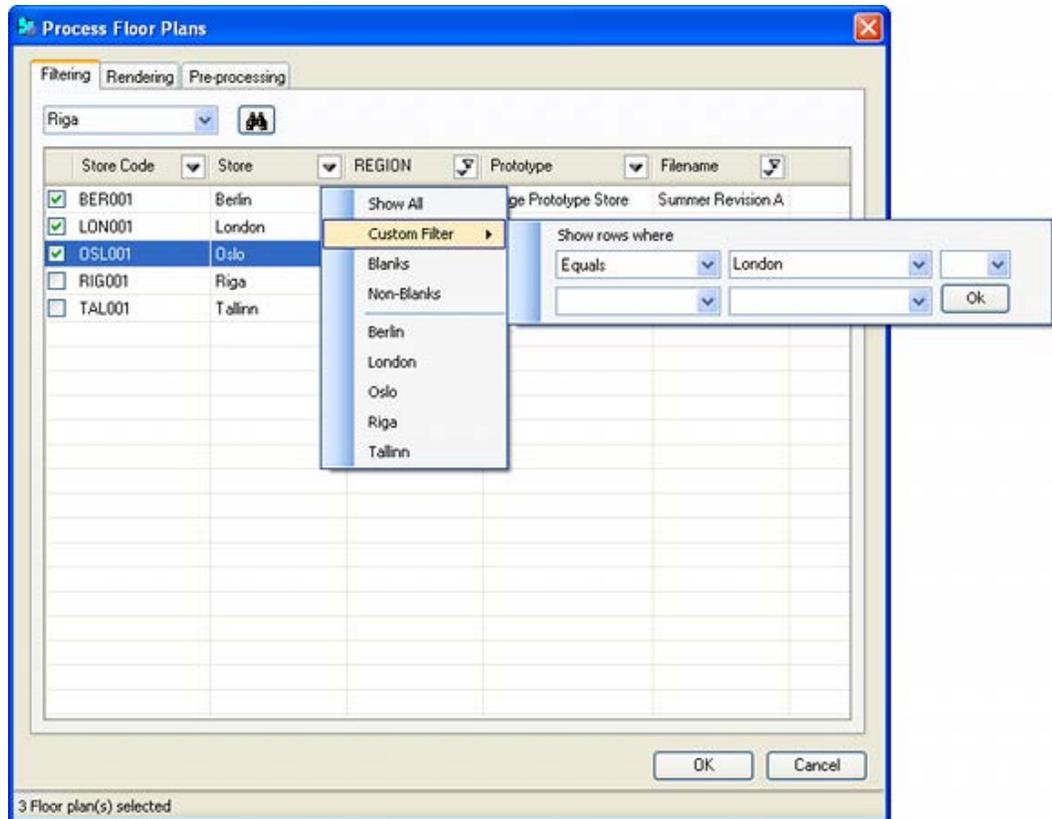
- **Select All** will select (but not check) all rows of data
- **Clear All** will deselect (but not uncheck) all rows of data
- **Check Selected** will check all rows of selected data
- **Uncheck Selected** will uncheck all rows of selected data
- **Check All** will check all rows of data
- **Uncheck All** will uncheck all rows of data

Selecting Floor Plans to Process

Floor plans may be selected for processing by ticking the appropriate check box.

Using Filters in the Filtering Tab

The **Filtering Tab** is provided with a series of filters on each column. Setting a filter on one column will affect data in all other columns.



They are used as follows:

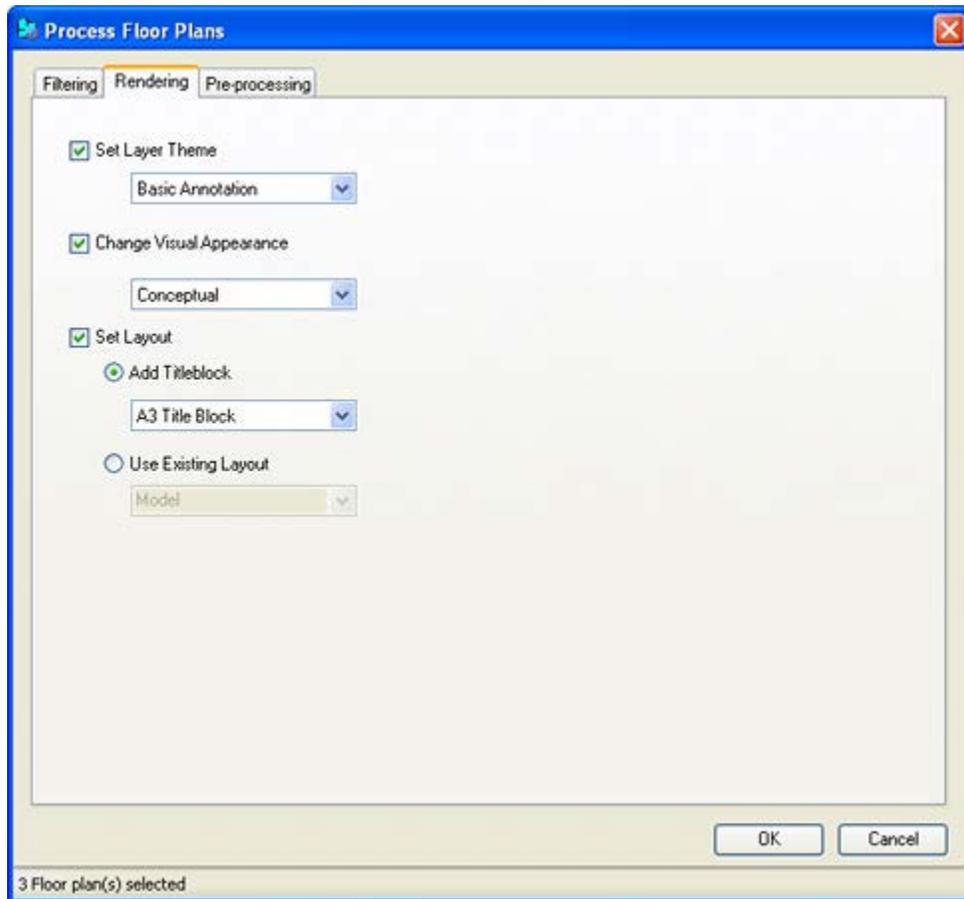
- **Show All** - this option shows all results.
- **Custom Filter** - this option allows users to set filters using Boolean logic. The options are:
 - Equal to: will return rows that are an exact match for the entered text.
 - Not Equal to: will return rows that do not match the text string
 - Contains: will return rows where part of the data matches the text string. (Uses implied wild cards).
 - Does not contain: will return rows where no part of the data matches the text string. (Uses implied wild cards).
 - Begins with: will return rows where the text string is an exact match for the start of the data.
 - Ends with: will return rows where the text string is an exact match for the end of the data.
 - Does not begin with: will return rows where the text string is not an exact match for the start of the data.
 - Does not end with: will return rows where the text string is not an exact match for the end of the data.
- **Blanks** - column will be filtered to only show rows with null values.
- **Non-Blanks** - column will be filtered to only show rows containing a value
- **Results** - column will be filtered to only show the selected result.

Boolean logic also includes the use of **And** or **Or**.

- **And** means that both conditions must be met. A and B means the data returned must contain both A and B.
- **Or** means either condition can be met. A or B means the data returned can contain either A or B. It does not need to contain both.

The Rendering Tab

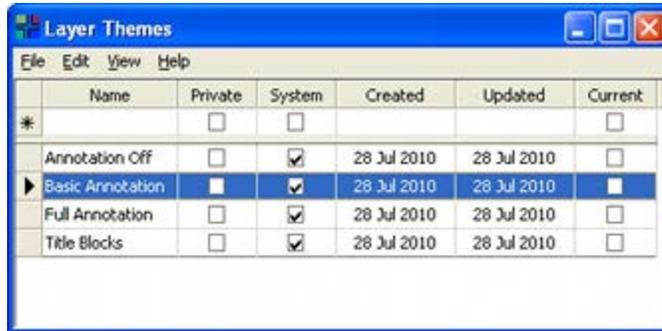
The **Rendering Tab** is used to ensure the visual appearance of the floor plan is as desired.



Set Layer Theme

If the check box is selected, users can select a layer theme from the drop down list. A number of layer themes can exist - each holding a specific set of settings for the individual layers. Selecting a specific layer theme, will automatically configure the individual layers to the settings designated for that layer theme.

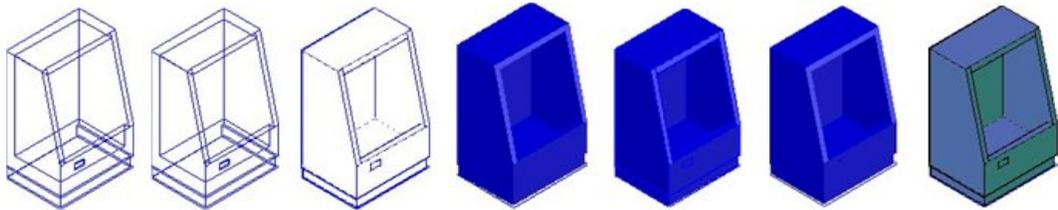
These layer themes are configured in the Layer Themes dialog box accessed from the Layer Aliased dialog box on the Format menu.



Change Visual Appearance

If the check box is ticked, this allows users to change the visual appearance of the drawing. The options are:

- 2D Wire Frame
- 3D Wire Frame
- Hidden Detail
- Shaded
- Shaded with Edges
- Conceptual
- Realistic



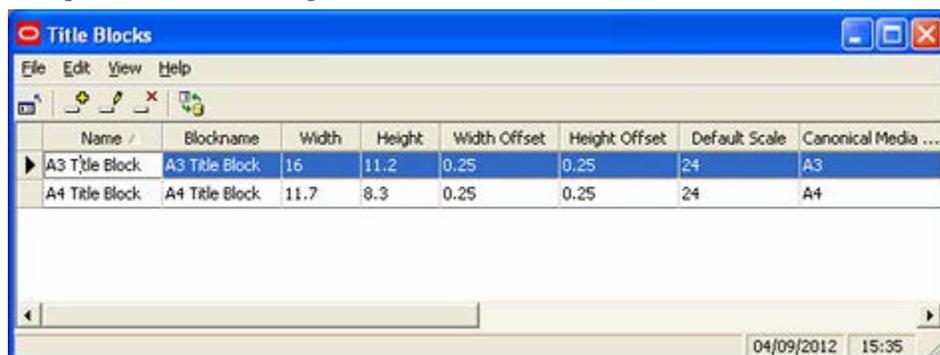
The images above show the different visual appearances available. They can be set by means of the Visual Styles toolbar or Visual Styles Manager.

Set Layout

If the checkbox is ticked the users can select one of two options: Add Titleblock or Use Existing Layout.

- **Add Titleblock**

If the Add Titleblock option is selected, users may select a title block from a drop down list. The list of available title blocks is configured using the Title Block option on the Planning menu in the Administration module.

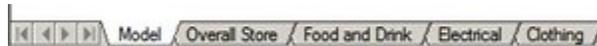


- **Use Existing Layout**

If the Use Existing Layout option is selected, users can enter a name matching the name of a paper space tab. This may be typed in. Alternatively it may be selected from the drop down list, which will contain the last ten names. Information in the drop down list is not case sensitive and the following wild cards may be used:

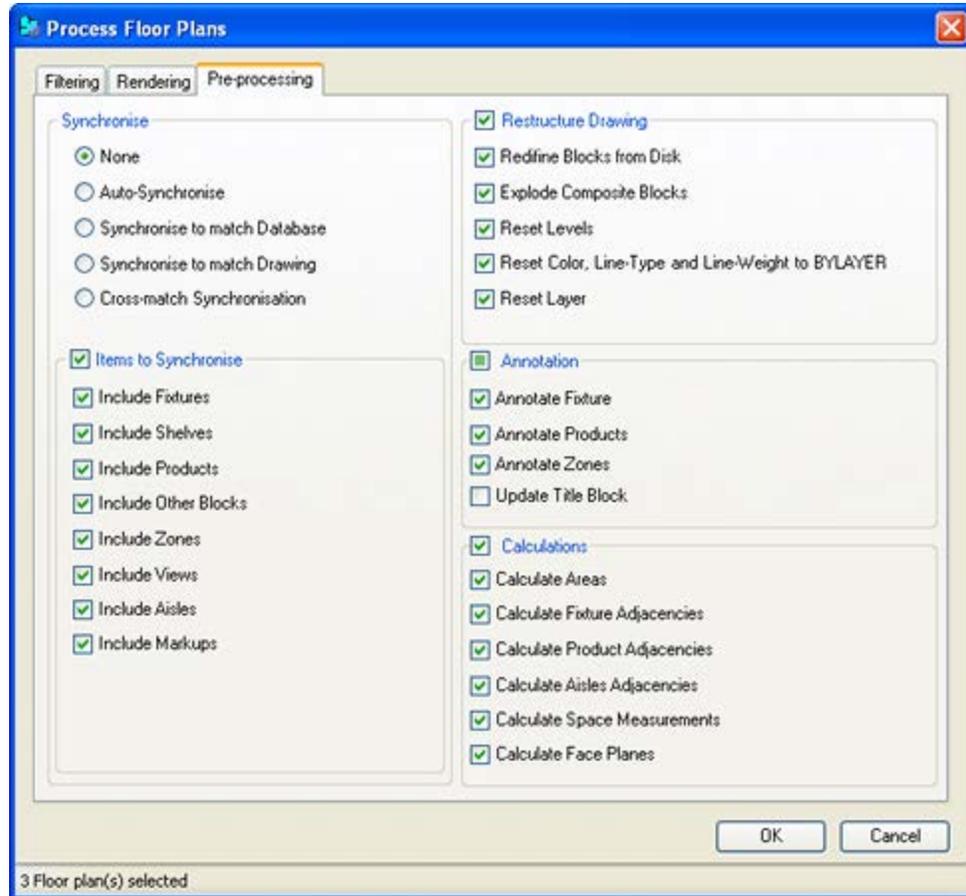
Wild Card	Comment
*	Any number of characters
?	Any single character
#	Any single number

The names of the paper space tabs can be seen at the foot of the floor plan in the Planner module. In the example below they are named Overall store, food and drink, Electrical and Clothing.



The Pre-processing Tab

The **Pre-processing tab** is used to ensure that the information in the floor plan is up to date.



Synchronize

Synchronize is used to make sure that the information in the floor plan matches that held in the Macro Space Planning database. This information could differ for a number of reasons:

- Changes have been made in the floor plan using AutoCAD tools and these changes have not been written to the database.
- Changes have been manually made to floor plans in the Merchandiser module, or in In-Store Space Collaboration.
- Changes have been made to floor plans in the database by batch processes.
- Changes have been made to the floor plan outside Macro Space Planning - for example in raw AutoCAD.

The following options are available:

- **None** - no synchronization operations will be carried out.
- **Auto-Synchronize** - the application will automatically detect which form of synchronization is required:
 - If the information in the database exceeds the date the floor plan was last modified and saved in Planner (or modified in raw AutoCAD), the information will be synchronized "match the database".
 - If the date of the information in the floor plan (or the date it was modified in raw AutoCAD) exceeds the date the information was written to the database, the information will be synchronized "match the drawing".

- If (i) the date the floor plan was last modified in raw AutoCAD exceeds the date the floor plan was last modified in Planner and (ii) the date the floor plan was last modified in Planner is less than the date the floor plan was last modified in Merchandiser, In-Store Space Collaboration or by a batch process, synchronization will be by 'cross-matching'.
- Information in the floor plan for zones, fixtures and other blocks and aisles will be written to the database.
- Information in the database for shelves and merchandise will be written into the floor plan.
- **Synchronize to Match Database** - information in the database will be written into the floor plan.
- **Synchronize to Match Drawing** - information from the floor plan will be written to the database.
- **Cross Match** - information on zones, fixtures and other blocks and aisles will be written to the database, while information on shelves and merchandise will be written into the floor plan.

Items to Synchronize

Once the synchronization method has been selected, specific items can be selected for the synchronization operation to work on.

- **Include Fixtures** - fixtures and fittings will be synchronized.
- **Include Shelves** - shelf objects will be synchronized.
- **Include Products** - products and planograms will be synchronized
- **Include Other Blocks** - this synchronizes all blocks assigned as type 'other' in Fixture Studio.
- **Include Zones** - Zones will be synchronized.
- **Include Views** - view positions in Planner or Merchandiser will be synchronized. (This will not affect In-Store Space Collaboration).
- **Include Aisles** - Aisles will be synchronized.

The following points should be noted:

- If shelf positions are changed in Planner and the 'Synchronize to Match Drawing' option is selected, the modified shelf positions will be written back to the database. This could potentially affect any planograms using those shelves.
- Zones can only be added, edited or deleted in Planner. If 'Synchronize to Match Database' is selected, the current zone information in the Planner floor plan will be changed to match that held in the database. This might be done to reverse changes made and saved in the Planner module.
- Aisles can only be added, edited or deleted in Planner. If 'Synchronize to Match Database' is selected, the current aisle information in the Planner floor plan will be changed to match that held in the database. This might be done to reverse changes made and saved in the Planner module.

Restructure Drawing

Restructure Drawing allows users to update the drawing so that the blocks in the drawing match the latest information defined in Fixture Studio.

- **Redefine Blocks from Disc** - this results in the DWG files in the drawing being updated with the latest versions of those DWG files defined in Fixture Studio.

- **Explode Composite Blocks** - this will explode all blocks defined as composites in Fixture Studio. These blocks will be placed on Layer 0 and will require having Color, Line type and Line-Weight to set to BYLAYER.

Note: Composite Blocks that are not flagged as composite in Fixture Studio will not be exploded.

- **Reset Levels** - this will reset the elevation of the block to that defined by the level assigned to it in the Insertion Tab of the Block Details dialog box in Fixture Studio.
- **Reset Color, Line type and Line-Weight to BYLAYER** - this option will look at the color, line type and line weight of each instance of a block in the drawing. If they differ from the defaults for that layer, they will be set back to those defaults.
- **Reset Layer** - if blocks have been moved to a layer different to that specified in the Insertion Tab of the Block Details dialog box in Fixture Studio, the block will be restored to the default layer.

Annotation

The annotation option allows users to update the annotation in the floor plan so it matches the latest annotation rules specified in the Text Styles option in the Administration Module.

- **Annotate Fixtures** - all fixtures that have the 'Include in Fixture Annotation' checkbox ticked in the Category Tab of the Block Details dialog box in Fixture Studio will have their annotation updated.
- **Annotate Products** - all products, planograms and planogram profiles will have their annotation updated.
- **Annotate Zones** - all zones will have their annotation updated.
- **Update Title Block** - all text boxes in the title block that reference information in the database will have that information updated.

Calculations

This option is used to update the calculations associated with the floor plan. This has a number of benefits including ensuring that reports based on this floor plan are accurate and up to date. It also ensures that annotation draws correctly.

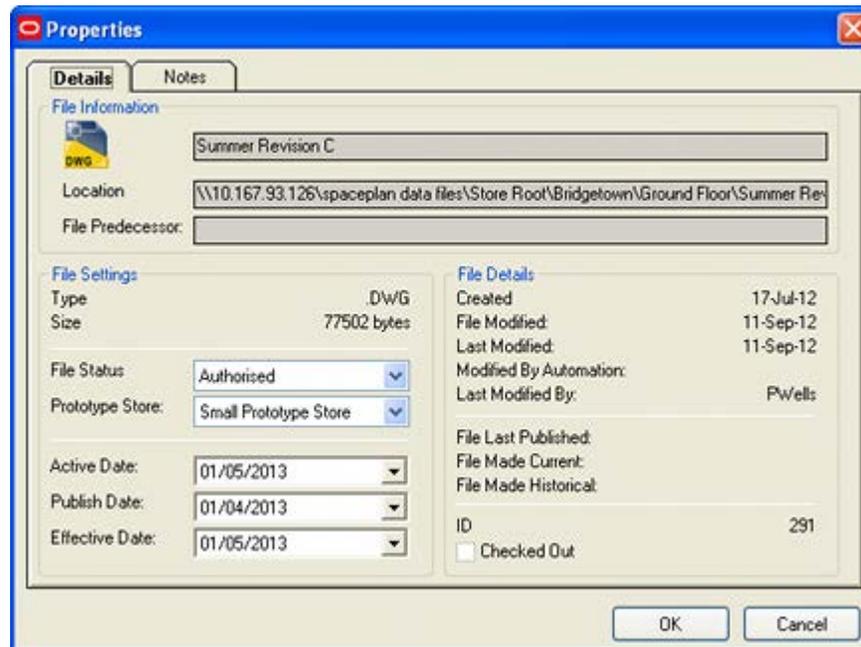
- **Calculate Areas** - this updates the area calculations; and hence the floor area assigned to each fixture.
- **Calculate Fixture Adjacencies** - this updates the fixture adjacencies; and hence the relationship of one fixture to another.
- **Calculate Product Adjacencies** - this updates the product adjacencies; and hence the relationship of one product to another.
- **Calculate Aisle Adjacencies** - this updates the aisle adjacencies; and hence which products share an aisle.
- **Calculate Space Measures** - this updates space measures: the volume occupied by each product in a planogram.
- **Calculate Face Planes** - this updates face planes: the frontal area occupied by each product in a planogram.

Floor Plan Publishing

Overview of Floor Plan Publishing

Note: The way that planogram publishing performs in the Planner and Merchandiser modules is dependent of settings in other modules. This section is included so that users of the Planogram Publishing Functionality can discuss requested changes with the Administrators.

The purpose of publishing a floor plan is to disseminate information on the type, quantity and layout of equipment and merchandise to those tasked with implementing the change. Publishing this floor plan can be done in hard copy or electronic format. The date at which this is executed depends on the Publish Date set in the File Properties dialog box in Store Manager.



Note: Publishing floor plans should not be confused with reporting on that floor plan. Reporting is used for the collation of information required for ordering the equipment and merchandise required to implement the floor plan. Reports will be used in conjunction with the purchasing system and supply chain planning in order to ensure the required equipment and merchandise arrive at the required locations in a timely manner.

The Floor Plan Publishing functionality is used to disseminate floor plans to specified printers or Windows folders to facilitate implementing those floor plans.

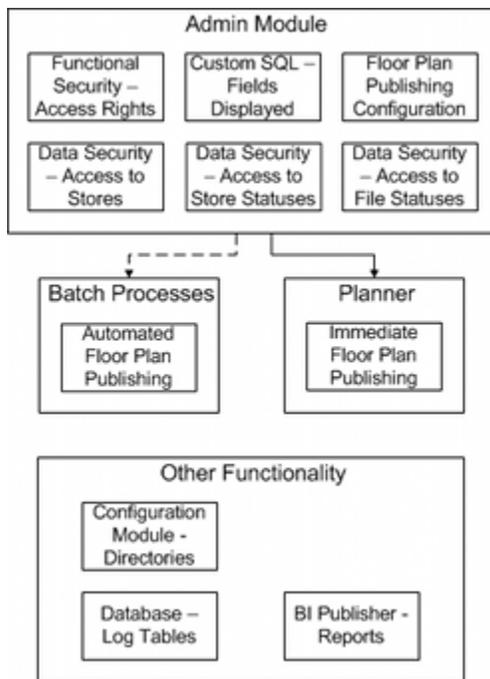
Note: A retail organization will still need a method of distributing the floor plans from the printer or Windows folder to the end user.

If there are any errors during selecting the options, a warning icon will appear on the appropriate tab and an explanation will appear in the status bar. In the example below, there is a problem with the selected options on the collation tab.



Using Floor Plan Publishing

The basic method of operation is as follows:



Administration Module

The Administration module is used to configure access to the different parts of the functionality. It is also used to assign permissions to print or publish specific floor plans and planograms. Finally, it is used to configure how the batch processes for publishing floor plans will work. There are four options that affect publishing and printing of floor plans:

- The **Functional Security** option (Security menu) allows Administrators to control who can run Floor Plan as a batch process. It also controls who can access Immediate Floor Plan Publishing in the Planner Module.
- The **Data Security** option (Security menu) allows Administrators to control what stores, store statuses and file statuses a user can use to print or publish from within the Planner module - this in turn control what floor plans they see.
- The **Custom Query** dialog box allows an Administrator to specify what fields will appear in the Immediate Floor Plan Publish dialog box in the Planner module.
- **Configuring Outputs for Batch Process:** the outputs for the batch process are configured in the administration module using the Floor Plan Publishing Configuration dialog box.

Running as a Batch Processes

Floor Plan Publishing can be run as a batch process - this is typically run overnight so that these processor hungry tasks can be executed without affecting the manual users of the system. The settings determining how Floor Plan Publishing operates when called by the batch process are set in the **Floor Plan Publishing Configuration** dialog box.

Floor Plan Pre-Processing (running a series of calculations to make sure that information used for reporting, etc., is accurate) can either be done as a separate preceding batch process, or it can be done according to settings in the Pre-Processing Tab of the **Floor Plan Publishing Configuration** dialog box.

The rights for both Floor Plan Pre-Processing and Floor Plan Publishing are set in Functional Security in the Administration Module.

Planner Module

Within the Planner module, the **Immediate Publishing of Floor Plans** functionality can only be accessed by users that have been granted permissions in the Administration module.

Other Functionality

There are three other items of functionality that affect floor plan publishing.

- In the Configuration Module, the Directories tab allows users to specify where the root folder holding published floor plans is located. Sub-folders holding specific published floor plans will be created as children of this root folder.
- Tables in the Macro Space Planning database hold the results of floor plan pre-processing and floor plan publishing operations.
- BI Publisher (or a similar application) can be used to generate reports based on the information held in the tables in the database - for example the names and results of floor plans that have been processed.

Permissions to Run Immediate Floor Plan Publishing

Before a user can run Immediate Floor Plan Publishing, they must first have been assigned the appropriate permissions in the Administration module. This is done using the Functional Security dialog box accessed from the Security menu.

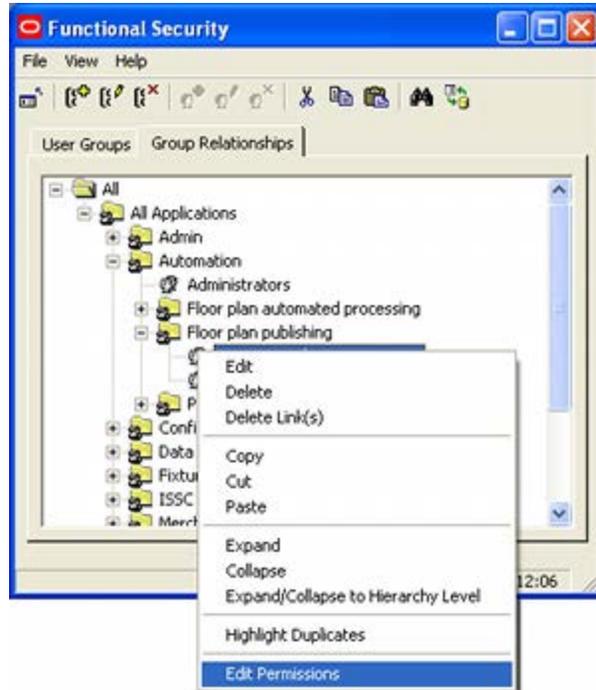
Note: this dialog box will only be accessible to users with access rights to the Administration Module.



Users assigned to the Automation Command Group (such as the Administrator User Group) can run all Automation Functionality. User Groups assigned to the child Command Groups (Floor plan automated publishing, Floor plan publishing, Planogram publishing) have the ability to use that functionality. In the example above, the Equipment Planning Manager and Merchandise Planning Manager User Groups have been assigned permission to use the Floor Plan Publishing functionality.

Note: Floor Plan AutomatedPublishing (the right to run calculations on floor plans) is a separate user group. Users with permissions for Floor Plan Publishing can set calculation options in the Pre-processing tab of the Floor Plan Publishing Configuration dialog box. These will execute during the publishing of floor plans. They will not execute unless the user is a member of a User Group with permissions for the Floor Plan Automated Publishing User Group.

The User Groups precise rights depend on settings in the Permissions dialog box. This is accessed from the right click menu in the Functional Security dialog box.



This will bring up the Permissions dialog box.

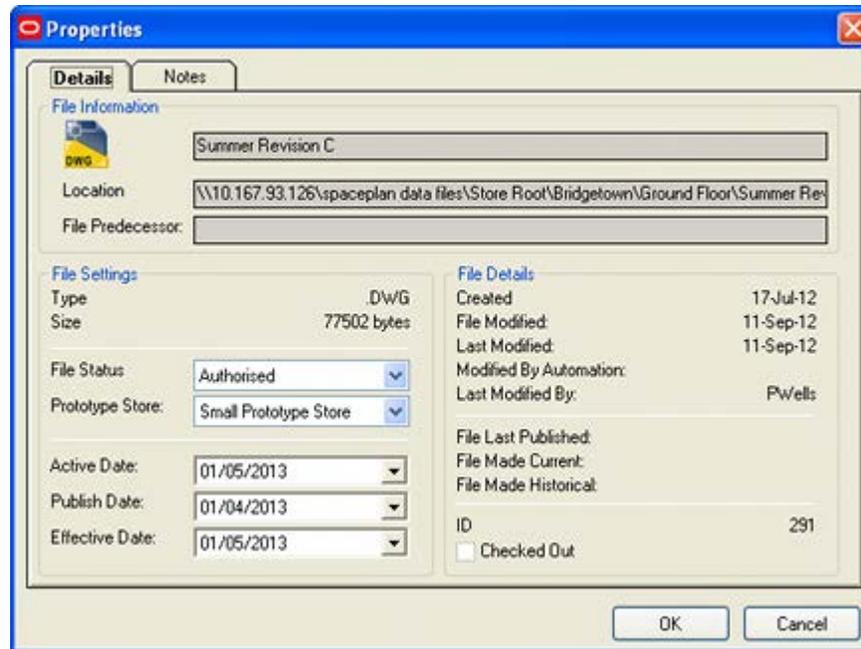


- If the User Group belongs to a Command Group higher in the Command Group hierarchy, by default it will inherit the permissions from that higher Command Group. This permission can be varied at the lower level by changing the selections made using the check boxes.
- If the User Group only exists at this level in the hierarchy, the Permissions dialog box will initially have all check boxes blank. The Administrator must then assign Allow or Deny permissions.

Dates Floor Plans will be Published

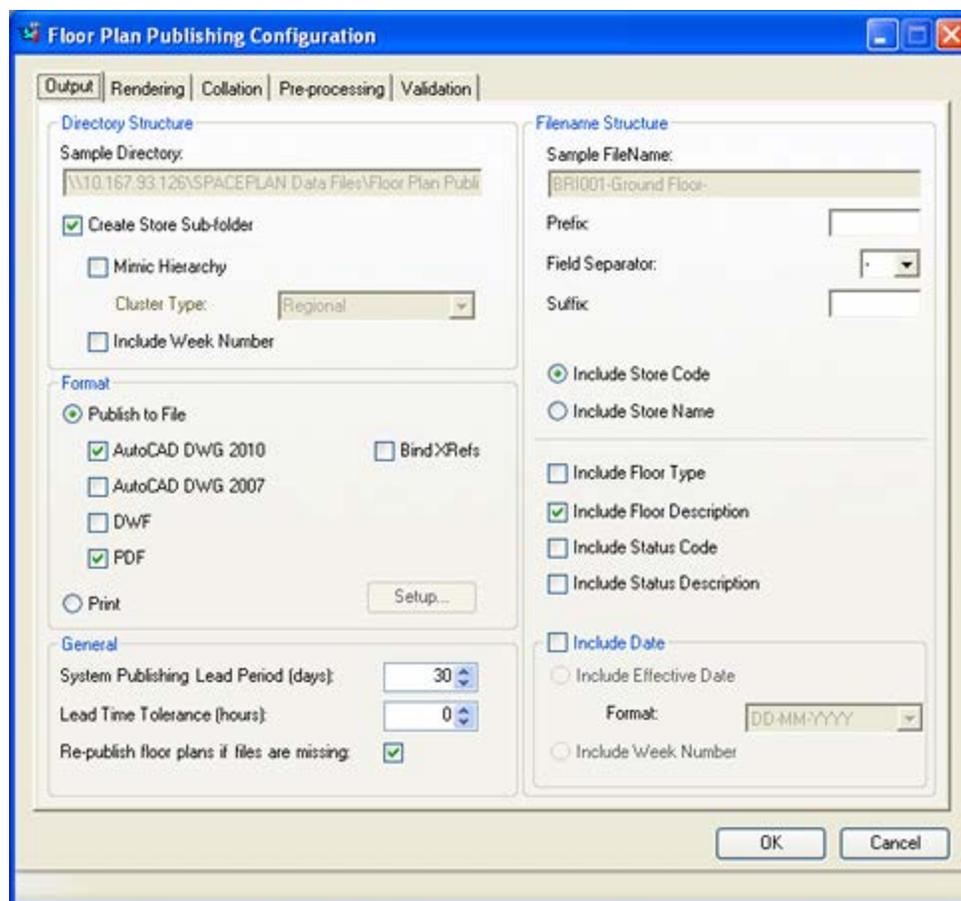
The purpose of publishing a floor plan is to disseminate information on the type, quantity and layout of equipment and merchandise to those tasked with implementing the change. Publishing a floor plan can be done in hard copy or electronic format. The date at which this is executed depends on the Publish Date set in the **File Properties** dialog box in Store Manager.

Note: the Publish Date operates on the date only and takes no account of the time of day. Publish Dates are stored in Date/Time format in the database, but the functionality only references the Date.



Another factor affecting the date at which at which floor plans will be published is the **Lead Time Tolerance (Hours)** setting on the Output tab of the Floor Plan Publishing Configuration dialog box in the Administration Module.

Note: this dialog box will only be accessible to users with access rights to the Administration Module.



Batch processes can be set to start at any time of the day. For example, the batch process might initiate at 8 p.m. (20.00 hrs) in the evening to allow the maximum number of batch processes to be run before users come in for work again the following morning. However, the Publish date for the floor plan might be set for when the following day begins at midnight. The **Lead Time Tolerance (Hours)** setting allows for this.

For example, if batch process is run on the 2nd June at 20.00 hrs in the evening and has no lead time tolerance, a floor plan that has a Publish Date of 3rd June would be ignored for publishing purposes by this run of the batch process. If however, the **Lead Time Tolerance (Hours)** setting is set to 5 hours, this will be added onto the Date and Time for the batch process and cause the batch process to operate as if it were running at 01.00 hrs in the morning of 3rd June. All floor plans with a Publish Date of 3rd June would then be published.

Criteria for Publishing Floor Plans

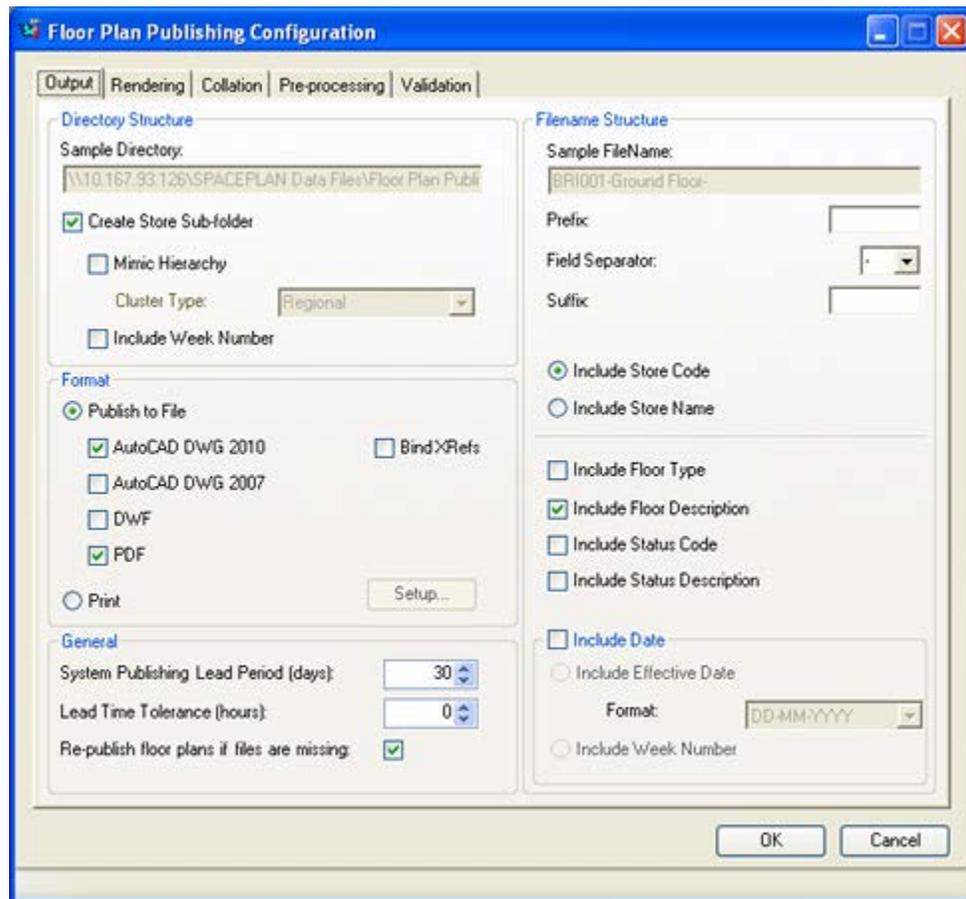
There are two criteria for publishing floor plans:

- **Floor Plan Publish Date is equal to or earlier than the current date**
If the Publish Date set in the File Properties dialog box in Store Manager is equal to or earlier than the current date (taking into account the Lead Time Tolerance (Hours) setting), the floor plan will be published.
- **Floor Plan has been Updated since it was Published**
In some implementations of Macro Space Planning it is possible that the floor plan may have been modified after it was last published. The condition for this is that the Modified by Planner date is greater than the Last Published Date.

Locations Floor Plans will be Published To

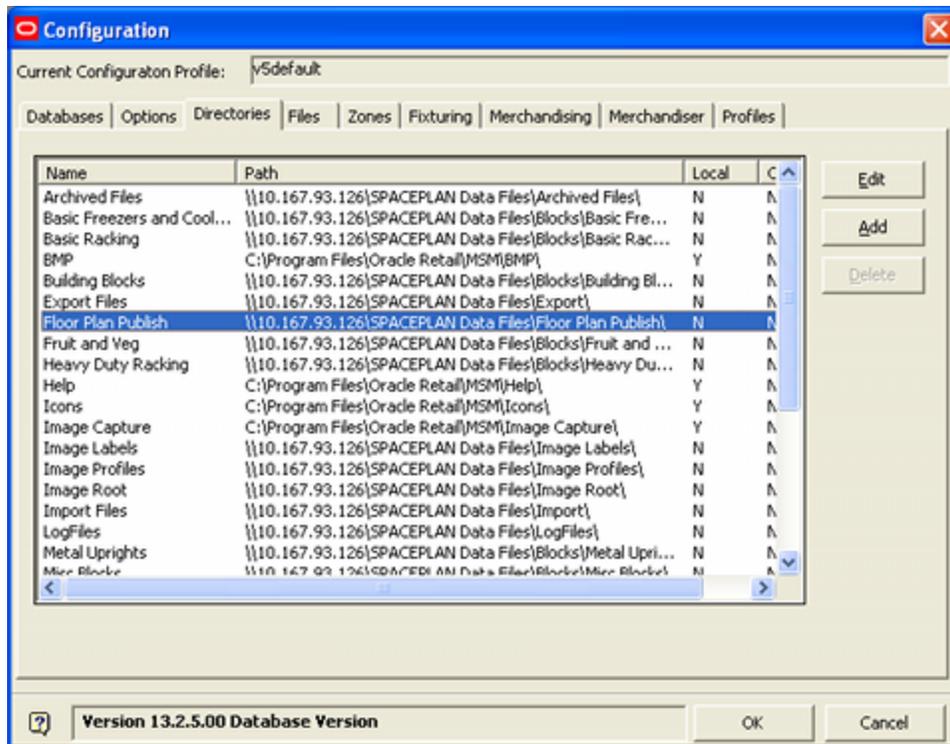
The locations Floor Plans will be published to and the file names used are specified in the Output tab of the Floor Plan Publishing Configuration dialog box in the Administration module.

Note: this dialog box will only be accessible to users with access rights to the Administration Module.



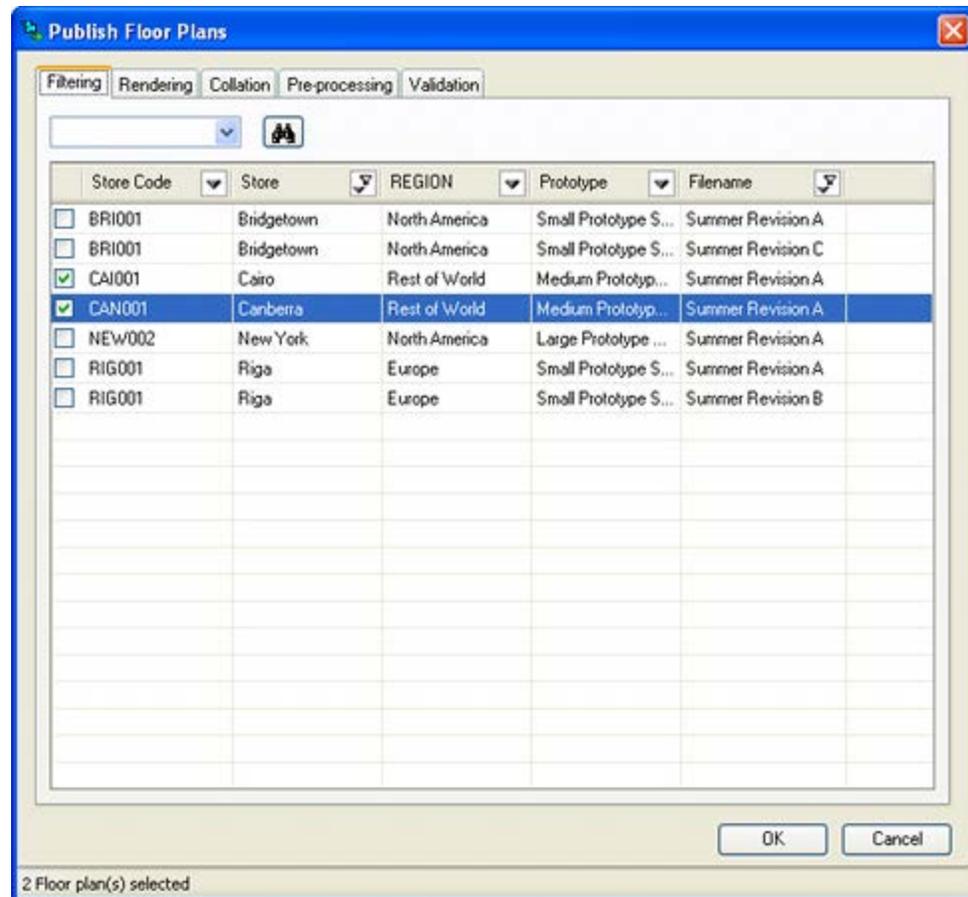
This dialog box allows Administrators to specify the directory structure, file format and file name that will be used when floor plans are published.

The starting point for the location floor plans will be published to in electronic form can be seen in the details for the Floor Plan Publish system directory specified in the Directories Tab of the Configuration module. This tab can only be accessed if the Configuration module is opened from the Administration module.



The Filtering Tab

The **Filtering Tab** is used to select the floor to publish.



Find

The Find option can be used by typing text into the text box then clicking the Find icon. Each successive click will move the user to the next floor plan matching the text being searched for. When no more matches are available, a confirmatory dialog box will appear.



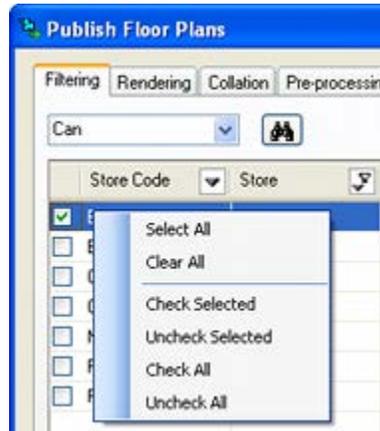
Find operates with explicit or implied wild cards. The explicit wild cards are:

Wild Card	Description
*	Any characters
?	Any character in this position
#	Any number in this position

If explicit wild cards are not used, implicit wild cards will be assumed. For example the text entry 'Wine' will be treated as '*Wine*' and will find White Wine, Red Wine, etc.

Right Click Menu

The right click menu provides a quick way of modifying the selected items.



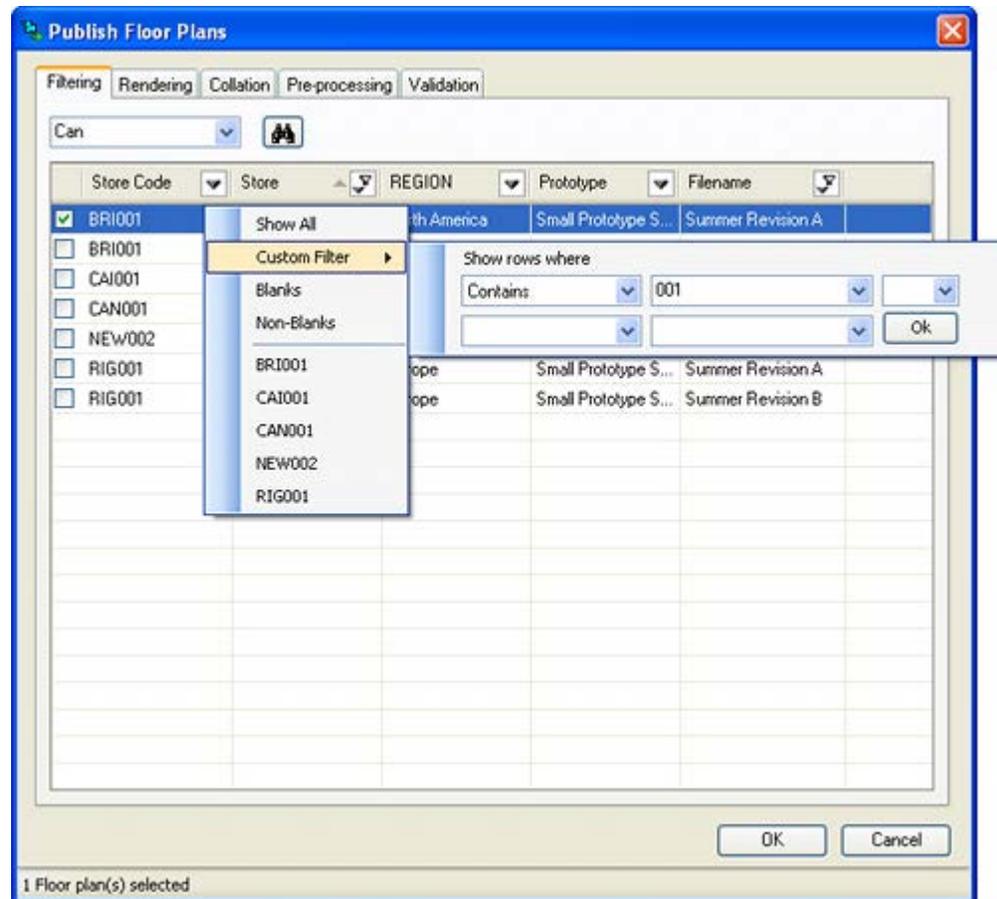
- **Select All** will select (but not check) all rows of data
- **Clear All** will deselect (but not uncheck) all rows of data
- **Check Selected** will check all rows of selected data
- **Uncheck Selected** will uncheck all rows of selected data
- **Check All** will check all rows of data
- **Uncheck All** will uncheck all rows of data
- **Paste** allows users to paste a carriage returned list of floor plan identifiers from the Windows clipboard. All rows in the dialog box that match the pasted information will be checked.

Selecting Floor Plans to Process

Floor plans may be selected for printing by ticking the appropriate check box.

Using Filters in the Filtering Tab

The **Filtering Tab** is provided with a series of filters on each column. Setting a filter on one column will affect data in all other columns.



They are used as follows:

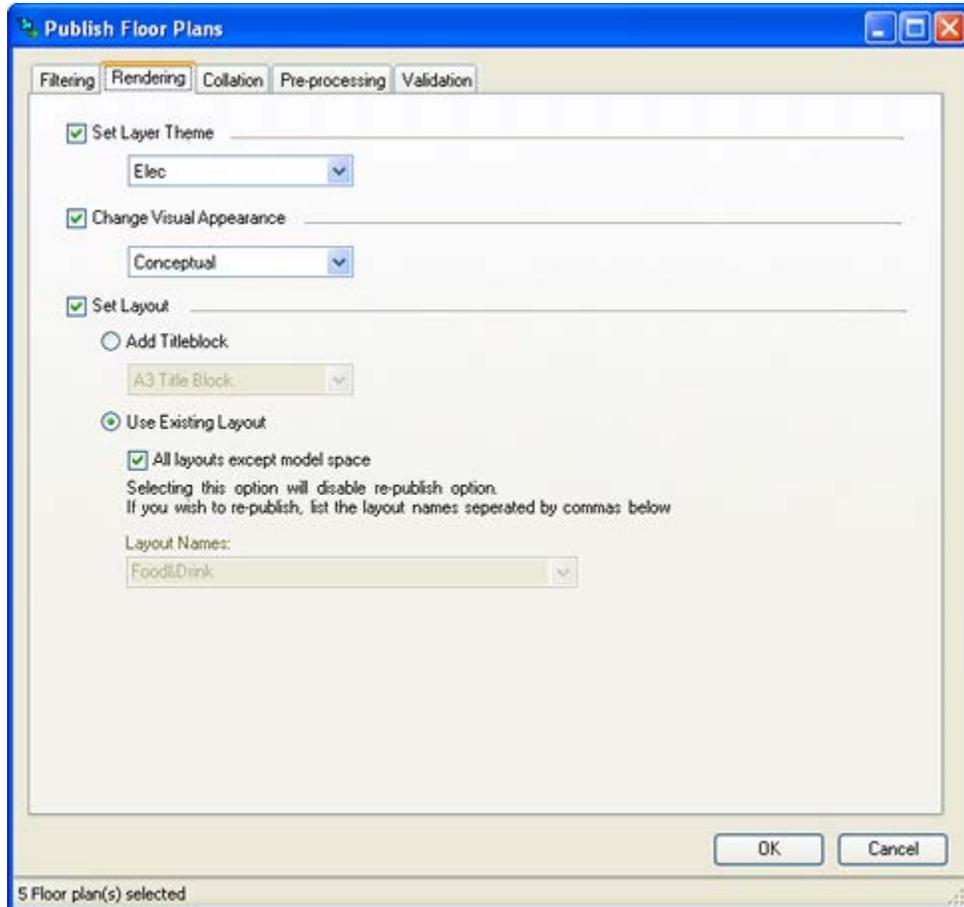
- **Show All** - this option shows all results.
- **Custom Filter** - this option allows users to set filters using Boolean logic. The options are:
 - **Equal to:** will return rows that are an exact match for the entered text.
 - **Not Equal to:** will return rows that do not match the text string
 - **Contains:** will return rows where part of the data matches the text string. (Uses implied wild cards).
 - **Does not contain:** will return rows where no part of the data matches the text string. (Uses implied wild cards).
 - **Begins with:** will return rows where the text string is an exact match for the start of the data.
 - **Ends with:** will return rows where the text string is an exact match for the end of the data.
 - **Does not begin with:** will return rows where the text string is not an exact match for the start of the data.
 - **Does not end with:** will return rows where the text string is not an exact match for the end of the data.
- **Blanks** - column will be filtered to only show rows with null values.
- **Non-Blanks** - column will be filtered to only show rows containing a value
- **Results** - column will be filtered to only show the selected result.

Boolean logic also includes the use of **And** or **Or**.

- **And** means that both conditions must be met. A and B means the data returned must contain both A and B.
- **Or** means either condition can be met. A or B means the data returned can contain either A or B. It does not need to contain both

The Rendering Tab

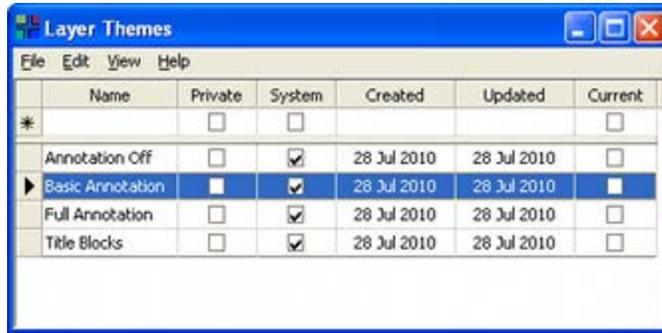
The **Rendering Tab** is used to ensure the visual appearance of the floor plan is as desired.



Set Layer Theme

If the checkbox is selected, users can select a layer theme from the drop down list. A number of layer themes can exist - each holding a specific set of settings for the individual layers. Selecting a specific layer theme, will automatically configure the individual layers to the settings designated for that layer theme.

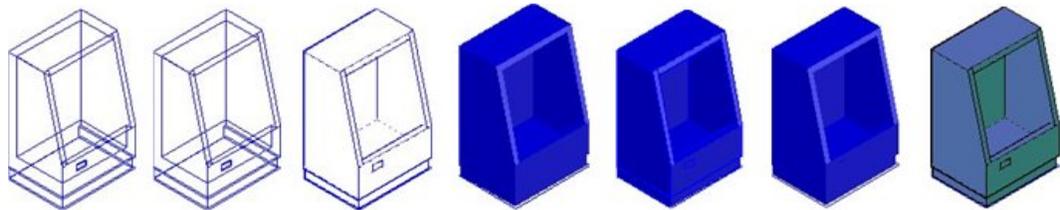
These layer themes are configured in the Layer Themes dialog box accessed from the Layer Aliased dialog box on the Format menu in the Planner module.



Change Visual Appearance

If the check box is ticked, this allows users to change the visual appearance of the drawing. The options are:

- 2D Wire Frame
- 3D Wire Frame
- Hidden Detail
- Shaded
- Shaded with Edges
- Conceptual
- Realistic



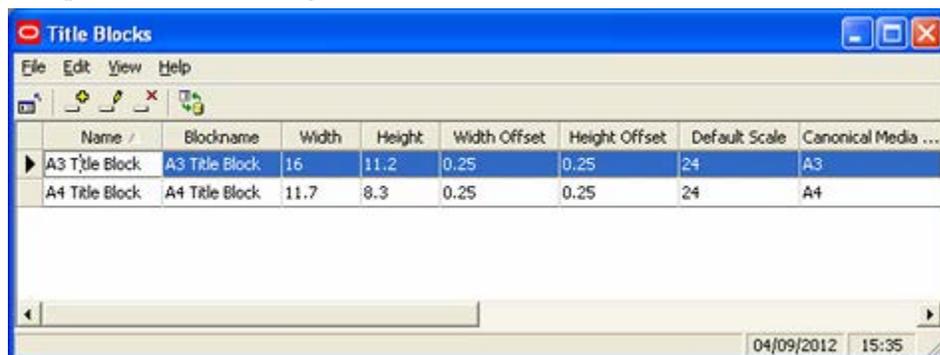
The images above show the different visual appearances available. Within the Planner module, the option can be set in either the Visual Styles toolbar or Visual Styles Manager.

Set Layout

If the checkbox is ticked the users can select one of two options: Add Titleblock or Use Existing Layout.

- **Add Titleblock**

If the Add Titleblock option is selected, users may select a title block from a drop down list. The list of available title blocks is configured using the Title Block option on the Planning menu in the Administration module.



- **Use Existing Layout**
If the Use Existing Layout option is selected, the user has two options; to publish all layouts except model space, or to publish selected layouts.
- **All layouts except model space**
If this option is selected, all layouts except the model space layout will be published for each floor plan. The layout names option will also be greyed out and unavailable.
If this option is chosen, it will not be possible to republish floor plans. This is because without a list of specified layout names, it is not possible to determine which layouts require republishing.
- **Layout Names**
If this option is selected, users can enter a name matching the name of a paper space tab. This may be typed in. Alternatively it may be selected from the drop down list, which will contain the last ten names. Information in the drop down list is not case sensitive and the following wild cards may be used:

Wild Card	Comment
*	Any number of characters
?	Any single character
#	Any single number

If wild cards are used, the Republish option will only publish a single match for each floor plan. For example, if the wildcard is Con*, the Confectionery layout will be published and the Consumables layout will be omitted.

The names of the paper space tabs can be seen at the foot of the floor plan in the Planner module. In the example below they are named Overall Store, Food and Drink, Electrical and Clothing.

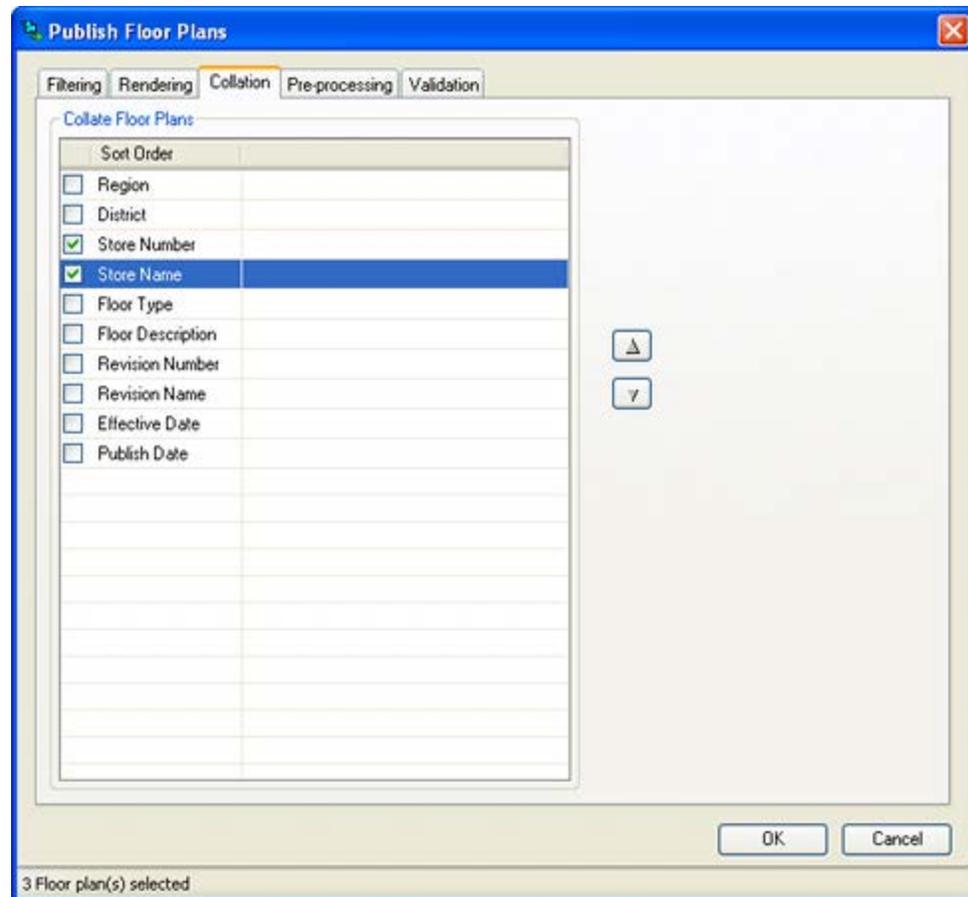


If multiple layout names are required, these should be separated by a comma.

The Collation Tab

The **Collation Tab** allows users to specify the sequence floor plans will be published or printed in. Its main use is in printing hard copy versions of the floor plans where the sequence they are printed in makes it easier to sort and distribute them after printing.

At least one collation option must be selected, or the tab will show as having an error.



The available options can be ordered by highlighting them, then using the up or down arrows. The options are made active by using the check boxes.

- **Region** is a specific type of cluster set in the Cluster type drop down list in the Cluster dialog box in Store Manager.
- **District** is a specific type of cluster set in the Cluster type drop down list in the Cluster dialog box in Store Manager.



- **Store Number** is the Store Code in the Store dialog box in Store Manager.
- **Store Name** is the Store Name in the Store dialog box in Store Manager.

The 'Edit Store' dialog box contains the following fields and values:

- Store ID: 31
- Store Code: PAR001
- Store Name: Paris
- Directory Name: Paris\
- Latitude: 0
- Longitude: 0
- Status: Open
- Opened Date: 01/02/2013
- Closed Date: 31/12/2999
- Store Prototype: Large Prototype Store
- Set as Prototype:

- **Floor Type** is the type selected from the drop down list in the Floor dialog box in Store Manager.
- **Floor Description** is the Description in the Floor dialog box in Store Manager.

The 'Edit Floor' dialog box contains the following fields and values:

- Floor ID: 40
- Floor Type: Ground Floor
- Description: Ground Floor
- Directory: Ground Floor\
- Status: Existing
- Allocated Area: 0
- Percentage Tolerance: 0
- Elevation: 0
- Edit Levels ...

- **Revision Number** is the Revision Number in the Revision dialog box in Store Manager.
- **Revision Name** is the Revision Description in the Revision dialog box in Store Manager.

Edit Revision

Revision ID: 131

Revision Number: 1

Revision Description: Summer Plans

Revision Directory Name: Summer Plans\

Status: Proposal

Season Description: All Seasons

Birth Date: 01 March 2013

Death Date: 31 December 2999

Has Sections:

Add Proposal Drawing:

OK Cancel

- **Publish Date** is the Publish Date set in the File Properties dialog box in Store Manager.
- **Effective Date** is the Effective Date set in the File Properties dialog box in Store Manager.

Properties

Details Notes

File Information

Summer Revision A

Location: \\10.167.93.126\spaceplan data files\Store Root\Paris\Ground Floor\Summer Plans\Sur

File Predecessor:

File Settings

Type: .dwg

Size: 130278 bytes

File Status: Authorised

Prototype Store: Large Prototype Store

Active Date: 01/05/2013

Publish Date: 01/04/2013

Effective Date: 01/05/2013

File Details

Created: 01-Aug-12

File Modified: 06-Sep-12

Last Modified: 06-Sep-12

Modified By Automation:

Last Modified By: PWells

File Last Published:

File Made Current:

File Made Historical:

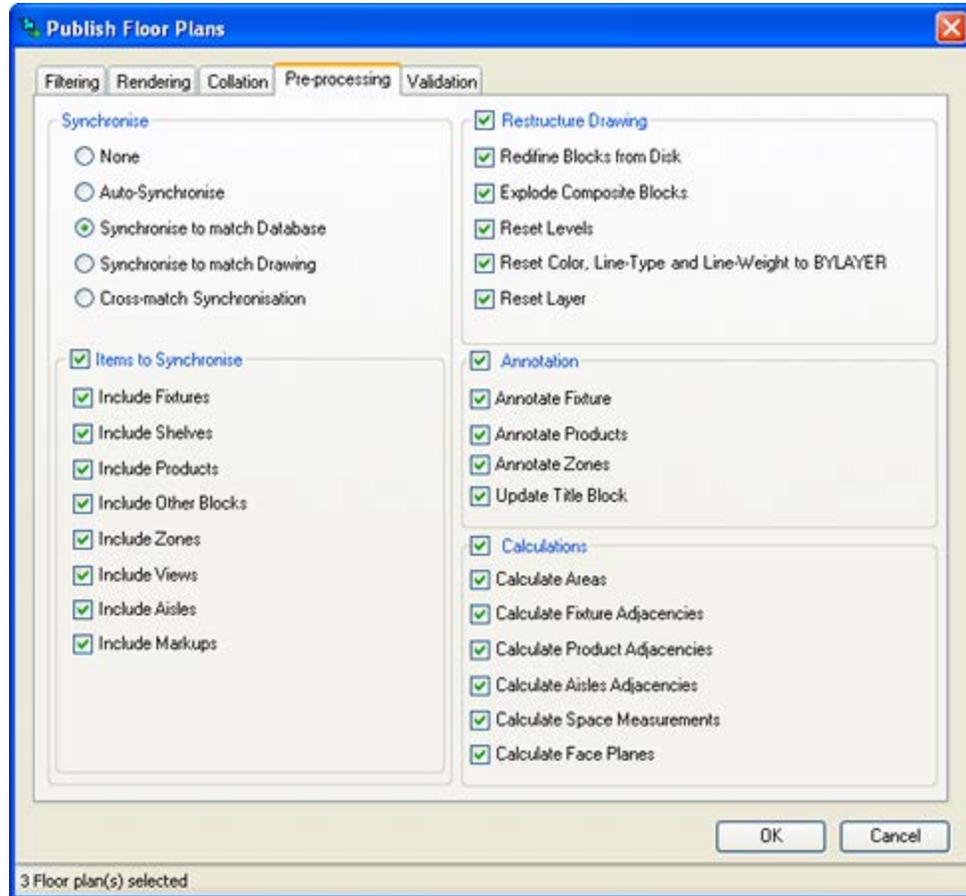
ID: 302

Checked Out

OK Cancel

The Pre-processing Tab

The **Pre-processing tab** is used to ensure that the information in the floor plan has been correctly updated.



Synchronize

Synchronize is used to make sure that the information in the floor plan matches that held in the Macro Space Planning database. This information could differ for a number of reasons:

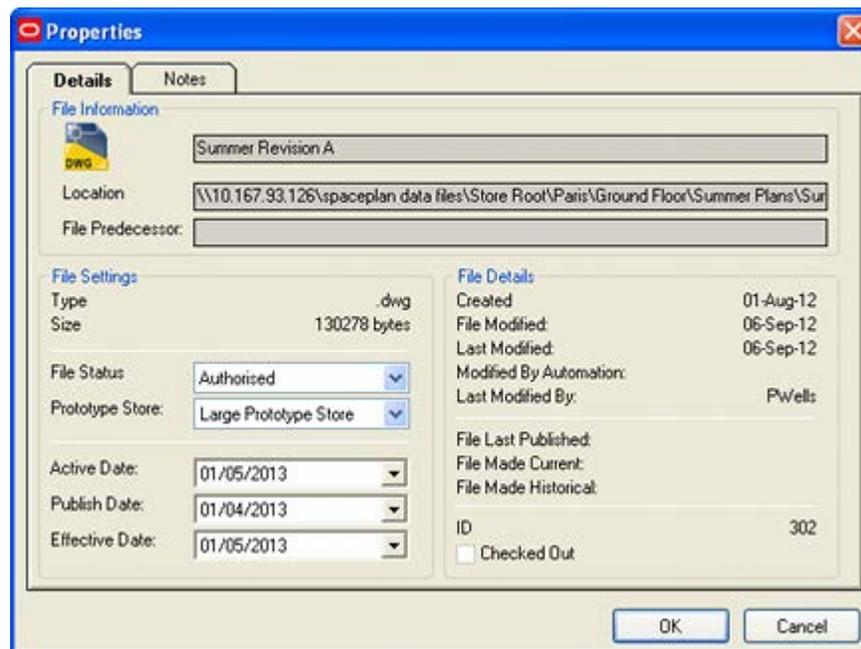
- Changes have been made in the floor plan using AutoCAD tools and these changes have not been written to the database.
- Changes have been manually made to floor plans in the Merchandiser module, or in In-Store Space Collaboration.
- Changes have been made to floor plans in the database by batch processes.
- Changes have been made to the floor plan outside Macro Space Planning - for example in raw AutoCAD.

The following options are available:

- **None** - no synchronization operations will be carried out.
- **Auto-Synchronize** - the application will automatically detect which form of synchronization is required:
 - If the information in the database exceeds the date the floor plan was last modified and saved in Planner (or modified in raw AutoCAD), the information will be synchronized "match the database".
 - If the date of the information in the floor plan (or the date it was modified in raw AutoCAD) exceeds the date the information was written to the database, the information will be synchronized "match the drawing".

- If (i) the date the floor plan was last modified in raw AutoCAD exceeds the date the floor plan was last modified in Planner and (ii) the date the floor plan was last modified in Planner is less than the date the floor plan was last modified in Merchandiser, In-Store Space Collaboration or by a batch process, synchronization will be by 'cross-matching'.
 - Information in the floor plan for zones, fixtures and other blocks and aisles will be written to the database.
 - Information in the database for shelves and merchandise will be written into the floor plan.
- **Synchronize to Match Database** - information in the database will be written into the floor plan.
- **Synchronize to Match Drawing** - information from the floor plan will be written to the database.
- **Cross Match** - information on zones, fixtures and other blocks and aisles will be written to the database, while information on shelves and merchandise will be written into the floor plan.

Date information can be seen in the File Properties dialog box in Store Manager.



Items to Synchronize

Once the synchronization method has been selected, specific items can be selected for the synchronization operation to work on.

- **Include Fixtures** - fixtures and fittings will be synchronized.
- **Include Shelves** - shelf objects will be synchronized.
- **Include Products** - products and planograms will be synchronized
- **Include Other Blocks** - this synchronizes all blocks assigned as type 'other' in Fixture Studio.
- **Include Zones** - Zones will be synchronized.
- **Include Views** - view positions in Planner or Merchandiser will be synchronized. (This will not affect In-Store Space Collaboration).

- **Include Aisles** - Aisles will be synchronized.

The following points should be noted:

- If shelf positions are changed in Planner and the 'Synchronize to Match Drawing' option is selected, the modified shelf positions will be written back to the database. This could potentially affect any instances of placed planograms using those shelves.
- Zones can only be added, edited or deleted in Planner. If 'Synchronize to Match Database' is selected, the current zone information in the Planner floor plan will be changed to match that held in the database. This might be done to reverse changes made and saved in the Planner module.
- Aisles can only be added, edited or deleted in Planner. If 'Synchronize to Match Database' is selected, the current aisle information in the Planner floor plan will be changed to match that held in the database. This might be done to reverse changes made and saved in the Planner module.

Restructure Drawing

Restructure Drawing allows users to update the drawing so that the blocks in the drawing match the latest information defined in Fixture Studio.

- **Redefine Blocks from Disc** - this results in the DWG files in the drawing being updated with the latest versions of those DWG files defined in Fixture Studio.
- **Explode Composite Blocks** - this will explode all blocks defined as composites in Fixture Studio. These blocks will be placed on Layer 0 and will require having Color, Line type and Line-Weight to set to BYLAYER.

Note: Composite Blocks that are not flagged as composite in Fixture Studio will not be exploded.

- **Reset Levels** - this will reset the elevation of the block to that defined by the level assigned to it in the Insertion Tab of the Block Details dialog box in Fixture Studio.
- **Reset Color, Line type and Line-Weight to BYLAYER** - this option will look at the color, line type and line weight of each instance of a block in the drawing. If they differ from the defaults for that layer, they will be set back to those defaults.
- **Reset Layer** - if blocks have been moved to a layer different to that specified in the Insertion Tab of the Block Details dialog box in Fixture Studio, the block will be restored to the default layer.

Annotation

The annotation options allow users to update the annotation in the floor plan so it matches the latest annotation rules specified in the Text Styles option in the Administration Module.

- **Annotate Fixtures** - all fixtures that have the 'Include in Fixture Annotation' check box ticked in the Category Tab of the Block Details dialog box in Fixture Studio will have their annotation updated.
- **Annotate Products** - all products, planograms and planogram profiles will have their annotation updated.
- **Annotate Zones** - all zones will have their annotation updated.
- **Update Title Block** - all text boxes in the title block that reference information in the database will have that information updated.

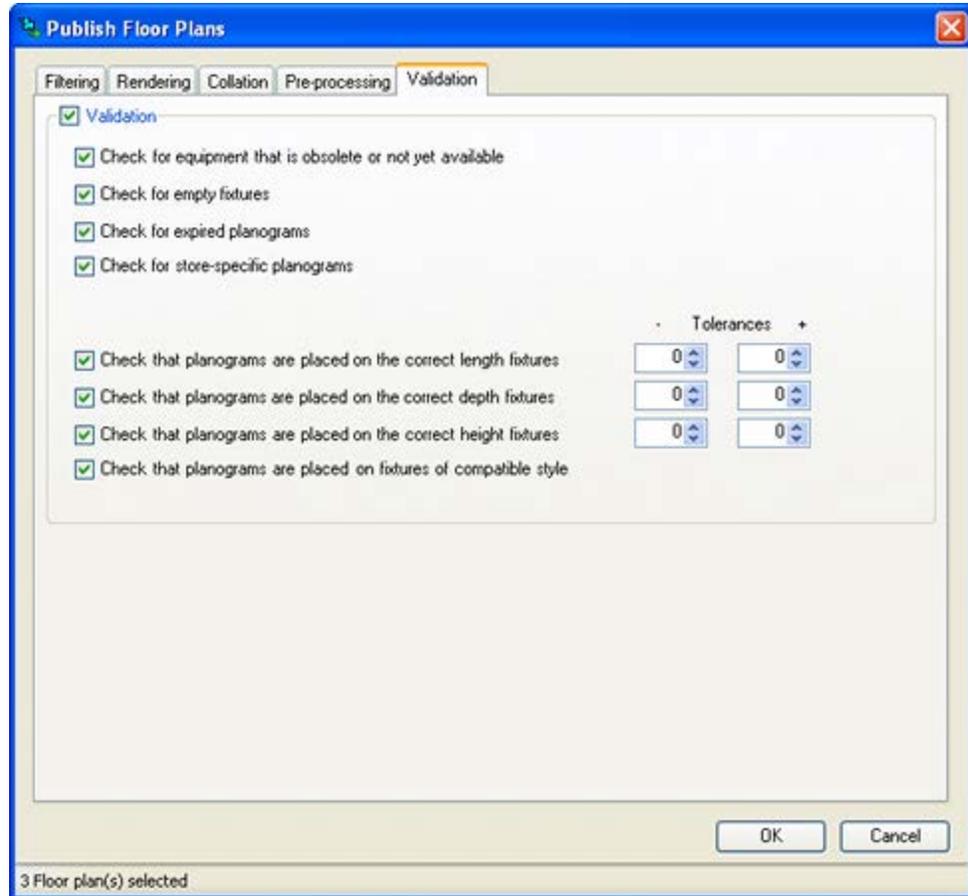
Calculations

This option is used to update the calculations associated with the floor plan. This has a number of benefits including ensuring that reports based on this floor plan are accurate and up to date. It also ensures that annotation draws correctly.

- **Calculate Areas** - this updates the area calculations; and hence the floor area assigned to each fixture.
- **Calculate Fixture Adjacencies** - this updates the fixture adjacencies; and hence the relationship of one fixture to another.
- **Calculate Product Adjacencies** - this updates the product adjacencies; and hence the relationship of one product to another.
- **Calculate Aisle Adjacencies** - this updates the aisle adjacencies; and hence which products share an aisle.
- **Calculate Space Measures** - this updates space measures: the volume occupied by each product in a planogram.
- **Calculate Face Planes** - this updates face planes: the frontal area occupied by each product in a planogram.

The Validation Tab

The **Validation Tab** enables users to set a series of validation checks that must be satisfied before the floor plan is published. If any of the checks fail, the floor plan will be not be published and details written to the AVTTB_PROCESS_FILE_LOG table. Information in this table can be read by means of a BI Publisher report or similar.



The tolerance values will use the system units, i.e. inches for imperial systems, and millimeters for metric systems. The values on the left are the lower tolerance; the values on the right are the upper tolerance.

- Check for equipment that is obsolete or not yet available** - if selected, this validation option will compare the effective and expiry dates of the equipment against the effective date of the planogram
 The Effective and Expiry Dates of the equipment are set in the Category tab of the Block Details dialog box in Fixture Studio.

Block Details: I_Fruit_and_Veg_Stand_48x36x43

Description: Fruit and Veg Stand 48 x 36 x 43

Category | Insertion | Size | Connections | Parts | Fixture | LDAs | Styles/Ranges | Merchandisable areas | Shelf | Preview

Equipment Type

Retail Type:

Can Populate with Display Style

Can Populate with Placeholder

Attaches to Primary Equipment

Attaches to Secondary Equipment

Accepts Secondary Equipment

Corner Block:

Type

Fixed Size

Symbol

Scaled Size

Drawn 1:1

Graphics

No Graphics

3D

2D

Working/Stacking Axes

Working X Y Z

Stacking X Y Z

Area Calc Directions

N

W E

S

Reporting Options

Exclude from Reports

Exclude Instances in DB

Exclude Attributes

Include in Fixture Annotation

General

Directory:

Manufacturer:

Category:

Units:

Material:

Print Material:

Status:

Effective Date:

Expiry Date:

Product Code:

Icon:

Cost:

The Effective Date of the Planogram is set in the Details tab of the Planogram design dialog box in the Merchandiser module.

Planogram: 1_Bay_Uncle_Bens_Express_Rice

Details Properties Stores Seasons Fixture Styles Design Financial LDAs

Name: 1_Bay_Uncle_Bens_Express_Rice Revision: 1

Description: 1 Bay Uncle Bens Express Rice

Associated Document: ...

Size Description: 36 x 24 x 72

Status: Authorized Client Code: 00000067

Family Code: Family ABC Buddy Family Code: Buddy Family 456

Assortment Code: Assortment 123 Links: Imperial Inch

Temperature Range: Ambient Goods Time Units: standard hour

Weight Range: < No Ranges Selected > Manpower Set Time: 1.00

Publish Date: 02 November 2011 Manpower Dismantle Time: 0.50

Effective Date: 12 November 2011 Category Role: Primary Business Driver

Expiry Date: 31 December 2999 Inventory Model: Inventory DEF

Stock Type: Normal Rank: 0

Autofill Rule: < No Rule Selected > Traffic Flow: Left to Right
 Right to Left

Preferred Template: Basic Planogram Report Requires Power:

Can be Split:

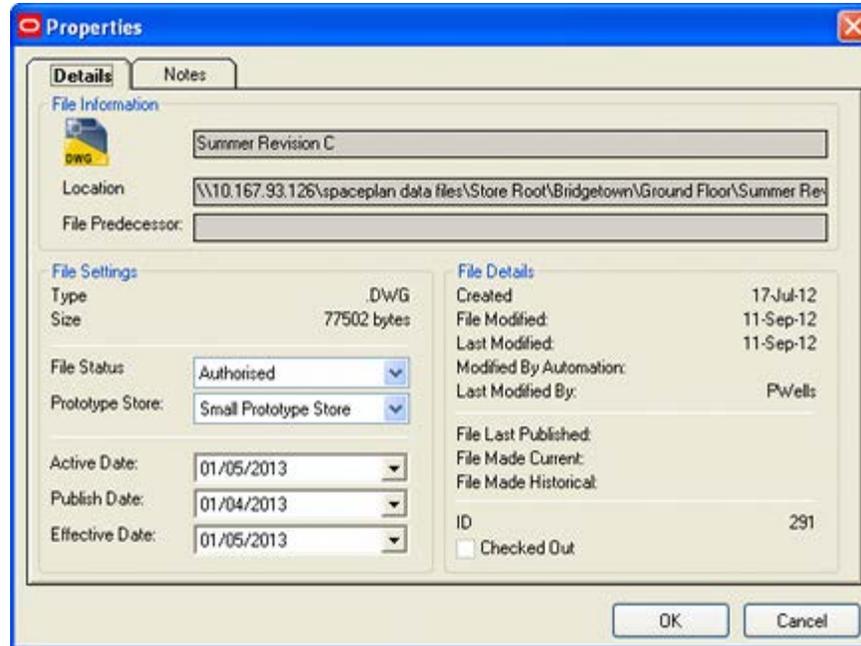
OK Save As Cancel

This validation check will error if the Planogram Effective Date is before the Equipment Effective Date or after the Equipment Expiry Date.

The relevant part of the check will be ignored if the equipment effective or expiry date is undefined.

- **Check for empty fixtures** - if selected, this validation option will search for fixtures which do not contain any products.
- **Check for expired planograms** - if selected, this validation option will compare the effective and expiry dates of the planogram against the effective date of the floor-plan. It will check:
 - The Effective Date of the Planogram is less than or equal to the Floor Plan Effective Date
 - The Floor Plan Effective Date is less than the Planogram Expiry Date

The Floor Plan Effective Date is set in the File Properties dialog box in Store Manager. (Store Manager can be accessed from the Planner or Merchandiser modules).

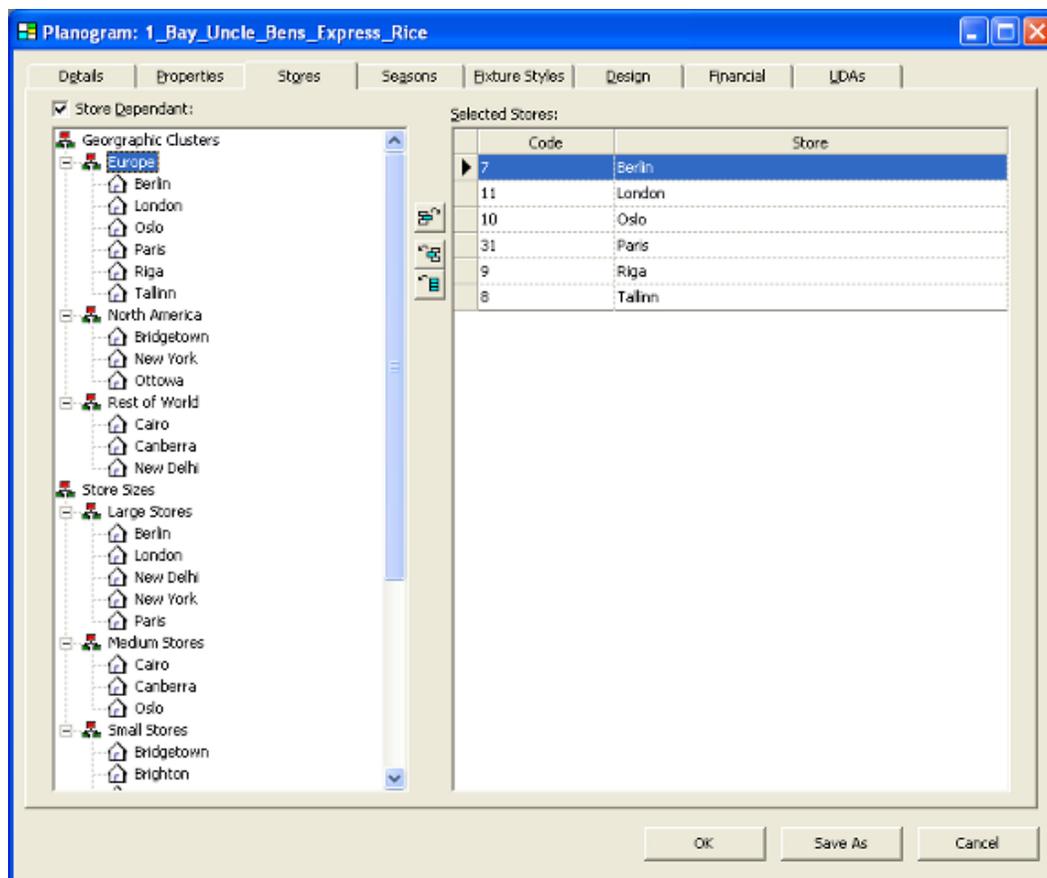


Note: Active Dates can also be set in the File Properties dialog box in Store Manager.

The relevant part of the check will be ignored if the planogram effective or expiry date is undefined.

- **Check for store-specific planograms** - if selected, this validation option will check the placed planograms are either store specific and associated with this store, or are generic planograms that are associated with all stores.

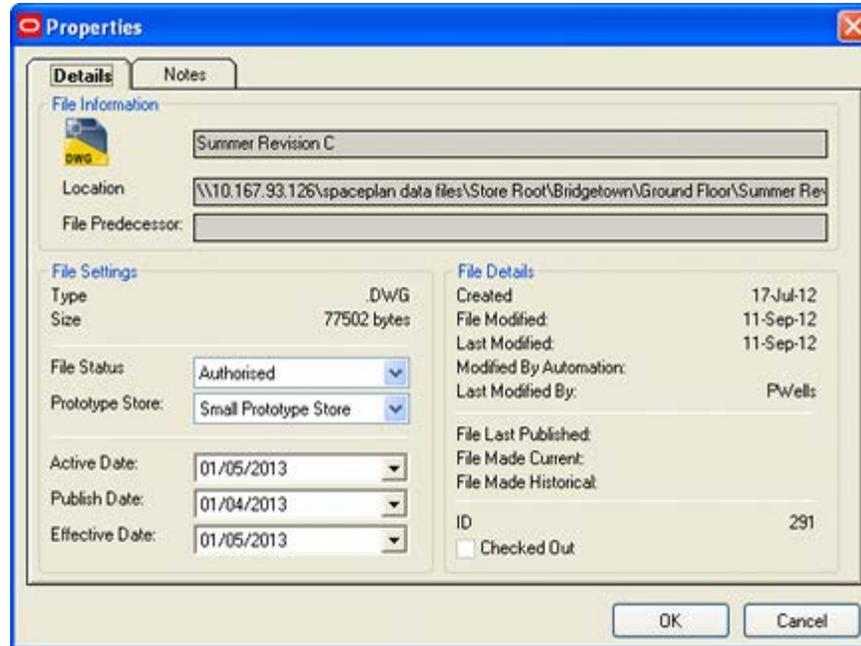
Whether planogram are store specific or not is specified in the Stores tab of the Planogram Design dialog box in the Merchandiser module.



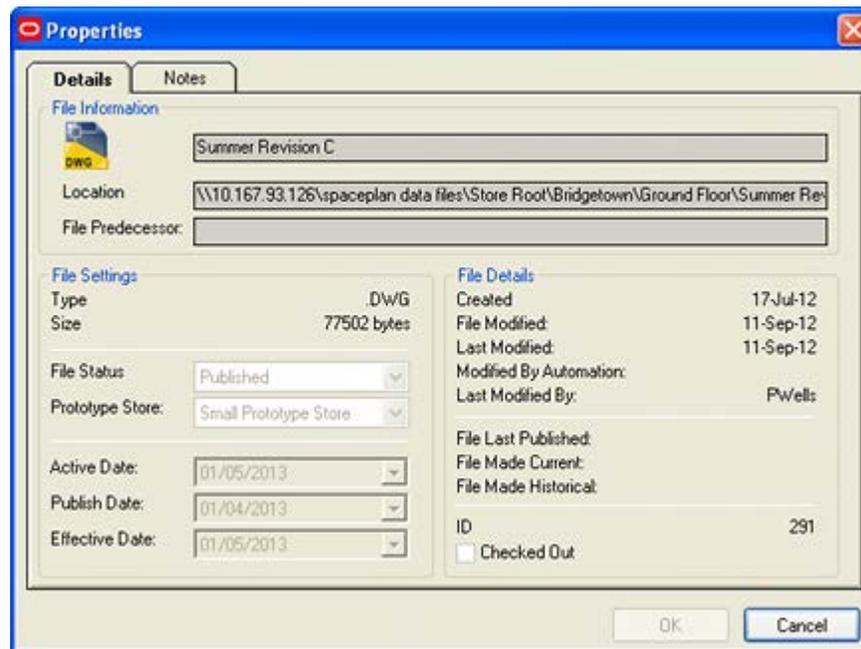
- **Check that planograms are placed on correct length fixtures** - if checked, this option will check that the length of the planogram falls within the total of the fixture lengths that the planogram is placed on. This check will take into account the length tolerances.
- **Check that planograms are placed on correct depth fixtures** - if checked, this option will check that the depth of the planogram matches the fixture depths that the planogram is placed on. This check will take into account the depth tolerances.
- **Check that planograms are placed on correct height fixtures** - if checked, this option will check that the height of the planogram matches the fixture heights that the planogram is placed on. This check will take into account the heights tolerances.
- **Check that planograms are placed on correct fixture styles** - if checked, this option will check that the fixture style assigned to the planogram matches the fixture styles assigned to the fixtures it has been placed on.

Floor Plan Publishing and Status Change

When floor plans are reviewed and accepted for subsequently being put into service, the status is set to Authorized and the Publish Date and Effective Dates set in the File Properties dialog box in Store Manager.



When Floor Plan Publishing is run, the status of the Floor Plan will be changed to Published. (Depending on settings in the Status dialog box, it may also be changed to Read Only).



This change of status allows the progress of the floor plan through its business life cycle to be monitored.

Planogram Publishing

Overview of Planogram Publishing

Note: The way that planogram publishing performs in the Planner and Merchandiser modules is dependent of settings in other modules. This section is included so that users of the Planogram Publishing Functionality can discuss requested changes with the Administrators.

Note: The default settings for the Planogram Publishing dialog box are derived from settings in the Planogram Publishing Configuration dialog box in the Administration module.

The purpose of publishing a planogram is to disseminate information on the type, quantity and location of shelves and merchandise to those tasked with implementing the change. Publishing a planogram design can be done in hard copy or electronic format. The date at which this is executed depends on the Publish Date set in the Details tab of the Planogram Design dialog box in the Merchandiser module.

The screenshot shows a software window titled "Planogram: 2_Bay_Tilda_Rice" with a blue title bar and standard Windows window controls. The window contains a "Details" tab with various fields for planogram configuration. The fields are organized into two columns:

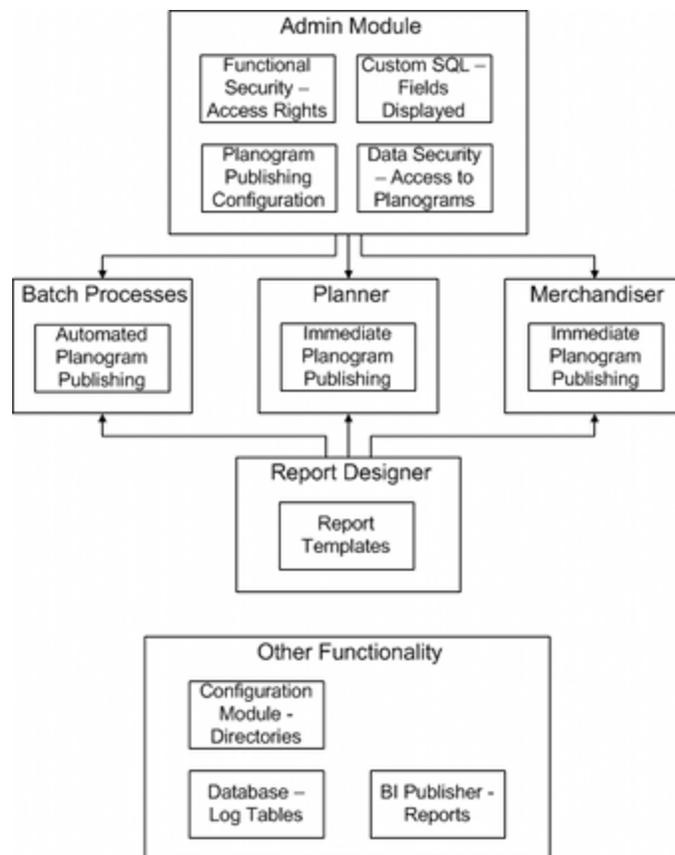
Field Name	Value	Field Name	Value
Name	2_Bay_Tilda_Rice	Revision	1
Description	2 Bay Tilda Rice	Client Code	00000065
Associated Document	[Empty]	Buddy Family Code	Buddy Family 456
Size Description	72 x 24 x 72	Units	imperial inch
Status	Authorized	Time Units	standard hour
Family Code	Family ABC	Manpower Set Time	1.00
Assortment Code	Assortment 123	Manpower Dismantle Time	0.50
Temperature Range	Ambient Goods	Category Role	Primary Business Driver
Weight Range	< No Ranges Selected >	Inventory Model	Inventory DEF
Publish Date	04 October 2012	Rank	0
Effective Date	17 October 2012	Traffic Flow	<input checked="" type="radio"/> Left to Right <input type="radio"/> Right to Left
Expiry Date	31 December 2999	Requires Power	<input type="checkbox"/>
Stock Type	Normal		
Autofill Rule	< No Rule Selected >		
Preferred Template	Basic Planogram Report		
Can be Split	<input type="checkbox"/>		

At the bottom right of the window, there are three buttons: "OK", "Save As", and "Cancel".

The Planogram Publishing functionality is used to disseminate planogram designs to specified printers or Windows folders to facilitate implementing those planogram designs.

Note: A retail organization will still need a method of distributing the planogram designs from the printer or Windows folder to the end user.

The basic method of operation is as follows:



Administration Module

The Administration module is used to configure access to the different parts of the functionality. It is also used to assign permissions to print or publish specific floor plans and planograms. Finally, it is used to configure how the batch processes for publishing floor plans. There are three options that affect publishing and printing of planograms:

- The **Functional Security** option (Security menu) allows Administrators to control who can run Planogram Publishing as a batch process. It also controls who can access Immediate Planogram Publishing in the Planner Module. It also allows Administrators to control who can access Report Designer to create report templates for publishing planogram designs.
- The **Data Security** option (Security menu) allows Administrators to control what planograms a user can print or publish from in the Planner and Merchandiser modules (and in In-Store Space Collaboration).
- The **Custom Query** dialog box allows an Administrator to specify what fields will appear in the Immediate Planogram Publish dialog box in the Planner module.

Configuring Outputs for Batch Process: the default settings for the batch process output of planogram designs are configured in the administration module using the **Planogram Publishing Configuration** dialog box.

Running as a Batch Processes

Planogram Publishing can be run as a batch process - typically run overnight so that processor hungry tasks can be executed without affecting the manual users of the system. The settings determining how this operates are set in the **Planogram Publishing**

Configuration dialog box. The rights for Planogram Publishing are set in Functional Security in the Administration Module.

Planner Module

Within the Planner module, the **Immediate Publishing of Floor Plans** functionality can only be used by users for whom permissions have been granted in the Administration module.

Merchandiser Module

Within the Merchandiser module, the **Immediate Publishing of Floor Plans** functionality can only be used by users for whom permissions have been granted in the Administration module.

Report Designer

Report Designer can be used to create report templates that determine the format the planogram design is published in.

Other Functionality

There are three other items of functionality that affect planogram publishing.

- **Configuration Module** - the Directories tab allows users to specify where the root folders holding published planograms are located. Sub-folders holding specific planograms will be created as children of this root folder.
- **Tables** in the Macro Space Planning database hold the results of planogram publishing operations.
- **BI Publisher** (or a similar application) can be used to generate reports based on the information held in the database - for example the names and results of planograms that have been published.

Permissions to Run Immediate Planogram Publishing

Before a user can run Immediate Planogram Publishing, they must first have been assigned the appropriate permissions in the Administration module. This is done using the Functional Security dialog box accessed from the Security menu.

Note: this dialog box will only be accessible to users with access rights to the Administration Module.



Users assigned to the Automation Command Group (such as the Administrator User Group) can run all Automation Functionality. User Groups assigned to the child Command Groups (Floor plan automated publishing, Floor plan publishing, Planogram publishing) have the ability to use that functionality. In the example above, the Merchandise Planning Manager User Group has been assigned permission to use the Planogram Publishing functionality.

The User Groups precise rights depend on settings in the Permissions dialog box. This is accessed from the right click menu in the Functional Security dialog box.



This will bring up the Permissions dialog box.



1. If the User Group belongs to a Command Group higher in the Command Group hierarchy, by default it will inherit the permissions from that higher Command Group. This permission can be varied at the lower level by changing the selections made using the check boxes.
2. If the User Group only exists at this level in the hierarchy, the Permissions dialog box will initially have all check boxes blank. The Administrator must then assign Allow or Deny permissions.

Dates Planograms will be Published

The purpose of publishing a planogram is to disseminate information on the type, quantity and location of shelves and merchandise to those tasked with implementing the change. Publishing a planogram design can be done in hard copy or electronic format. The date at which this is executed depends on the Publish Date set in the Details tab of the Planogram Design dialog box in the Merchandiser module.

Note: the Publish Date operates purely on the date only and takes no account of the time of day. Publish Dates are stored in Date/Time format in the database, but the functionality only references the Date.

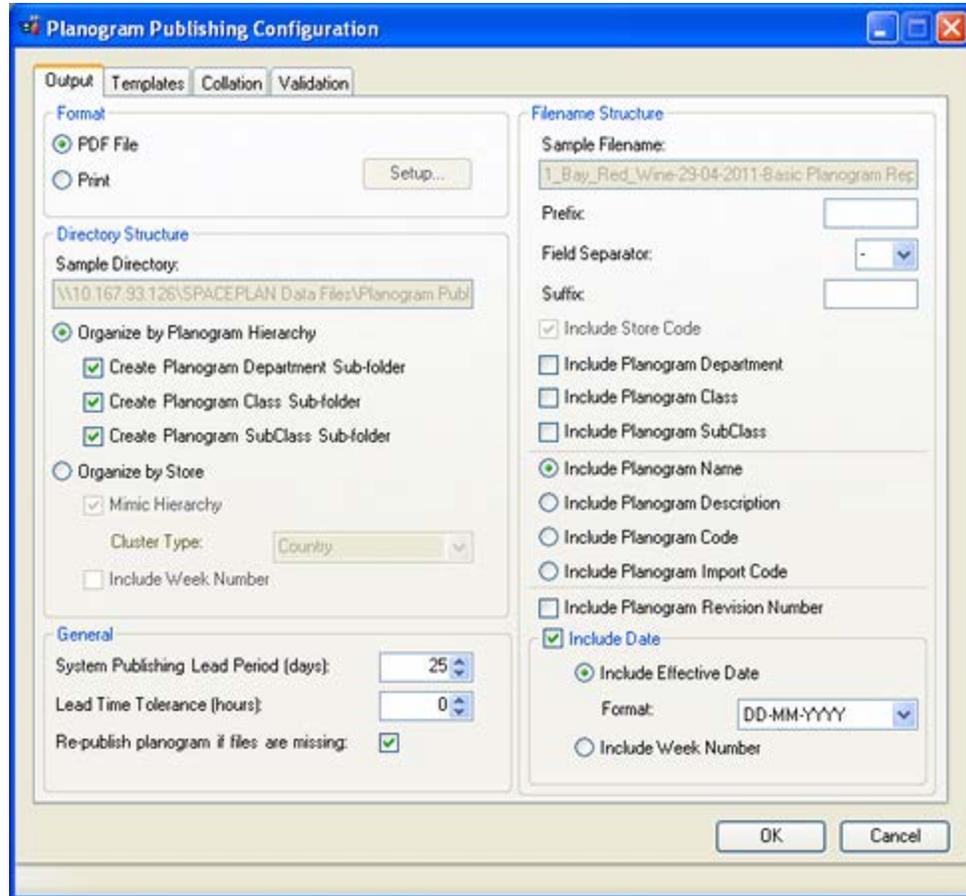
The screenshot shows a software dialog box titled "Planogram: 2_Bay_Tilda_Rice". It has a tabbed interface with "Details" selected. The fields are organized as follows:

- Name:** 2_Bay_Tilda_Rice, **Revision:** 1
- Description:** 2 Bay Tilda Rice
- Associated Document:** (empty field with a browse button "...")
- Size Description:** 72 x 24 x 72
- Status:** Authorized (dropdown), **Client Code:** 00000065
- Family Code:** Family ABC, **Buddy Family Code:** Buddy Family 456
- Assortment Code:** Assortment 123, **Units:** imperial inch (dropdown)
- Temperature Range:** Ambient Goods (dropdown), **Time Units:** standard hour (dropdown)
- Weight Range:** < No Ranges Selected > (dropdown), **Manpower Set Time:** 1.00 (spinner)
- Publish Date:** 04 October 2012 (dropdown), **Manpower Dismantle Time:** 0.50 (spinner)
- Effective Date:** 17 October 2012 (dropdown), **Category Role:** Primary Business Driver (dropdown)
- Expiry Date:** 31 December 2999 (dropdown), **Inventory Model:** Inventory DEF
- Stock Type:** Normal (dropdown), **Rank:** 0 (spinner)
- Autofill Rule:** < No Rule Selected > (dropdown), **Traffic Flow:** Left to Right, Right to Left
- Preferred Template:** Basic Planogram Report (dropdown), **Requires Power:**
- Can be Split:**

Buttons at the bottom: OK, Save As, Cancel.

Another factor affecting the date at which at which planograms will be published is the **Lead Time Tolerance (Hours)** setting on the Output tab of the Planogram Publishing Configuration dialog box in the Administration Module.

Note: This dialog box will only be accessible to users with access rights to the Administration Module.



Batch processes can be set to start at any time of the day. For example, the batch process might initiate at 8 p.m. (20.00 hrs) in the evening to allow the maximum number of batch processes to be run before users come in for work again the following morning. However, the Publish date for the planogram might be set for when the following day begins at midnight. The **Lead Time Tolerance (Hours)** setting allows for this.

For example, if batch process is run on the 2nd June at 20.00 hrs in the evening and has no lead time tolerance, a planogram that has a Publish Date of 3rd June would be ignored for publishing purposes by this run of the batch process. If however, the **Lead Time Tolerance (Hours)** setting is set to 5 hours, this will be added onto the Date and Time for the batch process and cause the batch process to operate as if it were running at 01.00 hrs in the morning of 3rd June. All planograms with a Publish Date of 3rd June would then be published.

Criteria for Publishing Planograms

There are two criteria for publishing planograms:

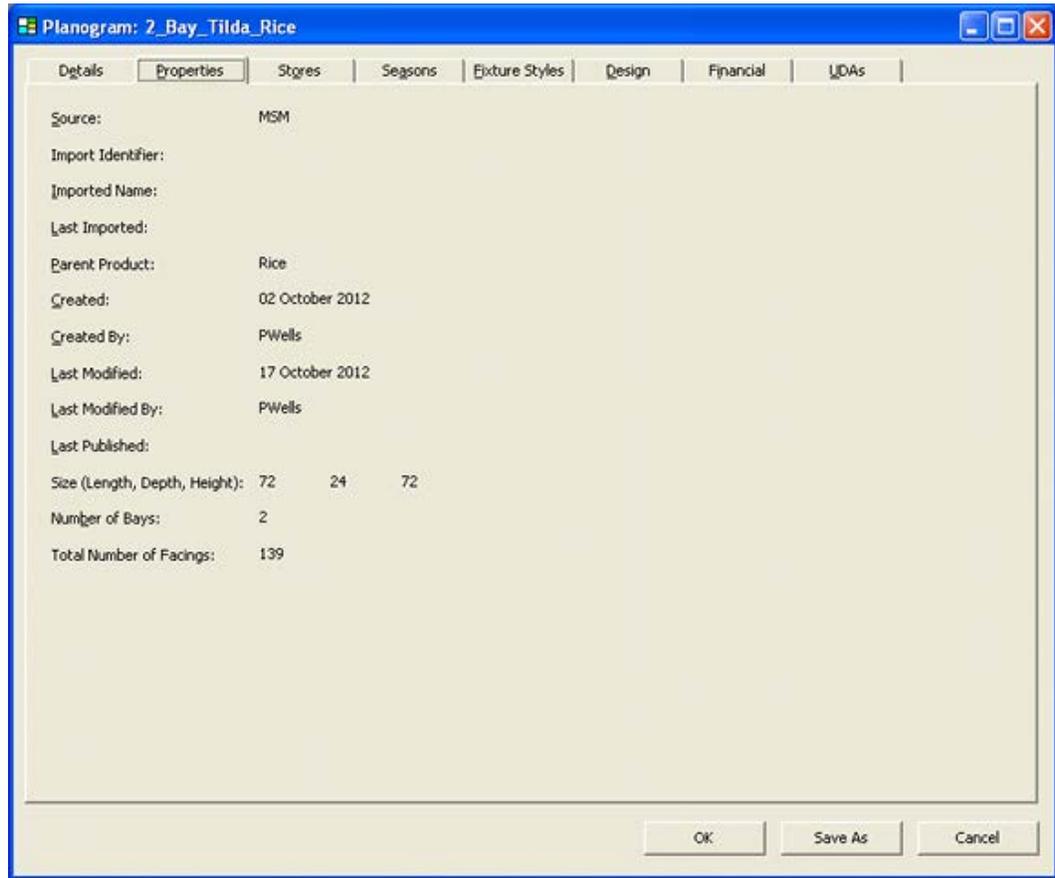
1. Publish Date has been exceeded

If the Publish Date set in the **Planogram Design** dialog box in Merchandiser exceeds the current date (taking into account the **Lead Time Tolerance (Hours)** setting), the planogram will be published.

2. Planogram has been Updated since it was Published

It is possible that the planogram may have been modified after it was last published - for example of a later revision has been created. The condition for this is that the Last

Modified date is greater than the **Last Published Date**. These can be seen on the Properties tab of the Planogram Design dialog box in the Merchandiser module.



Note: Planograms may also be republished if the **Republish planogram if files are missing** option has been checked in the Planogram Publishing Configuration dialog box.

Locations Planogram Designs will be Published To

The locations Planogram designs will published to and the file names used are specified in the Output tab of the Planogram Publishing Configuration dialog box in the Administration module.

Note: this dialog box will only be accessible to users with access rights to the Administration Module.

Planogram: 2_Bay_Tilda_Rice

Details Properties Stores Seasons Fixture Styles Design Financial UDAs

Name: 2_Bay_Tilda_Rice Revision: 1

Description: 2 Bay Tilda Rice

Associated Document: ...

Size Description: 72 x 24 x 72

Status: Authorized Client Code: 00000065

Family Code: Family ABC Buddy Family Code: Buddy Family 456

Assortment Code: Assortment 123 Units: imperial inch

Temperature Range: Ambient Goods Time Units: standard hour

Weight Range: < No Ranges Selected > Manpower Set Time: 1.00

Publish Date: 04 October 2012 Manpower Dismantle Time: 0.50

Effective Date: 17 October 2012 Category Role: Primary Business Driver

Expiry Date: 31 December 2999 Inventory Model: Inventory DEF

Stock Type: Normal Rank: 0

Autofill Rule: < No Rule Selected > Traffic Flow: Left to Right
 Right to Left

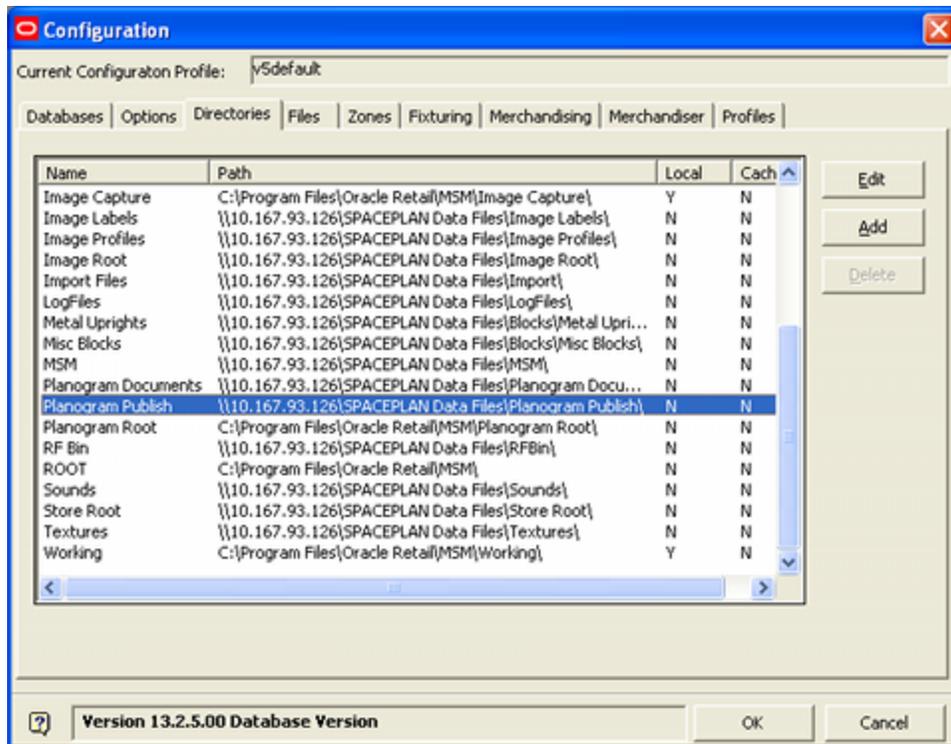
Preferred Template: Basic Planogram Report Requires Power:

Can be Split:

OK Save As Cancel

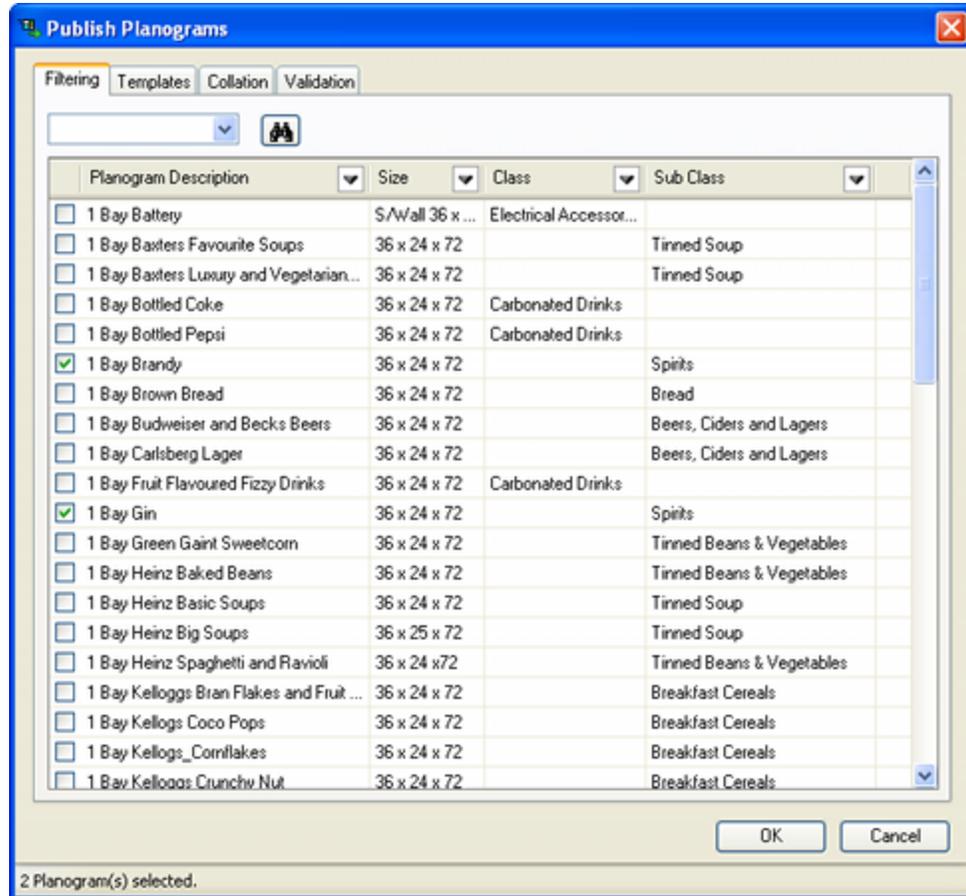
This dialog box allows Administrators to specify the directory structure, file format and file name that will be used when planogram designs are published.

The starting point for the location planograms will published to in electronic form can be seen in the details for the Planogram Publish system directory specified in the Directories Tab of the Configuration module. This can only be accessed if the configuration module is opened from the Administration module.



The Filtering Tab

The **Filtering Tab** is used to select the planograms to publish.



Find

The Find option can be used by typing text into the text box then clicking the Find icon. Each successive click will move the user to the next planogram matching the text being searched for. When no more matches are available, a confirmatory dialog box will appear.



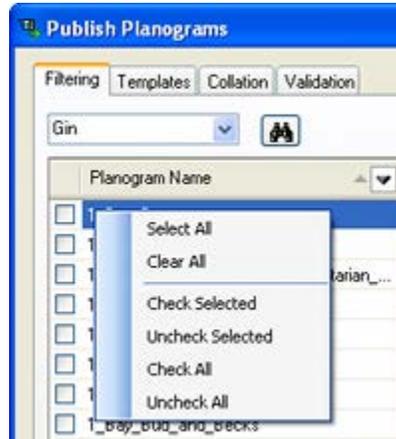
Find operates with explicit or implied wild cards. The explicit wild cards are:

Wild Card	Description
*	Any characters
?	Any character in this position
#	Any number in this position

If explicit wild cards are not used, implicit wild cards will be assumed. For example the text entry 'Wine' will be treated as '*Wine*' and will find White Wine, Red Wine, etc.

Right Click Menu

The right click menu provides a quick way of modifying the selected items.



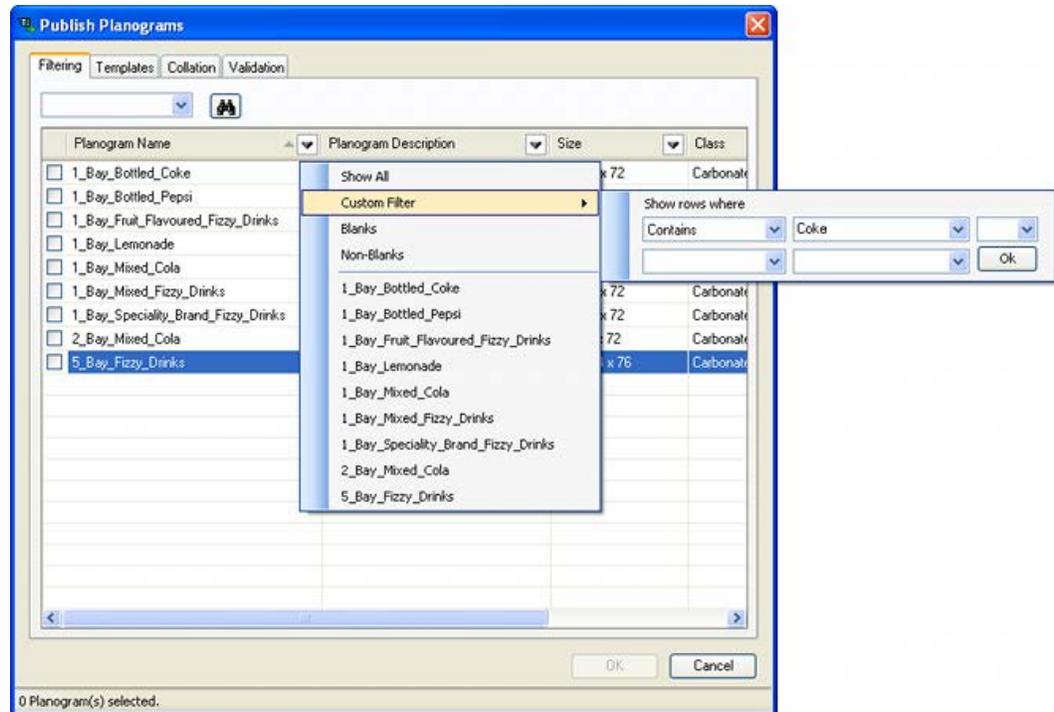
- **Select All** will select (but not check) all rows of data
- **Clear All** will deselect (but not uncheck) all rows of data
- **Check Selected** will check all rows of selected data
- **Uncheck Selected** will uncheck all rows of selected data
- **Check All** will check all rows of data
- **Uncheck All** will uncheck all rows of data
- **Paste** allows users to paste a carriage returned list of planogram identifiers from the Windows clipboard. All rows in the dialog box that match the pasted information will be checked.

Selecting Planograms to Process

Planograms may be selected for publishing by ticking the appropriate check box.

Using Filters in the Filtering Tab

The **Filtering Tab** is provided with a series of filters on each column. Setting a filter on one column will affect data in all other columns.



They are used as follows:

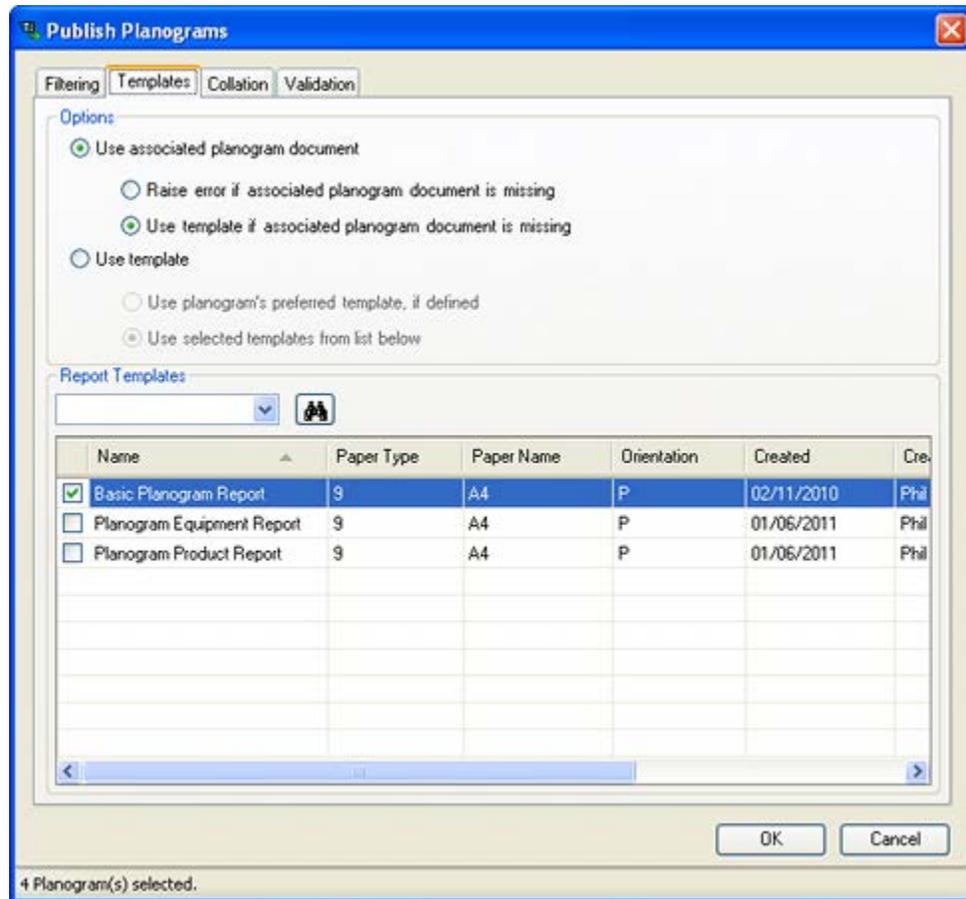
- **Show All** - this option shows all results.
- **Custom Filter** - this option allows users to set filters using Boolean logic. The options are:
 - **Equal to:** will return rows that are an exact match for the entered text.
 - **Not Equal to:** will return rows that do not match the text string
 - **Contains:** will return rows where part of the data matches the text string. (Uses implied wild cards).
 - **Does not contain:** will return rows where no part of the data matches the text string. (Uses implied wild cards).
 - **Begins with:** will return rows where the text string is an exact match for the start of the data.
 - **Ends with:** will return rows where the text string is an exact match for the end of the data.
 - **Does not begin with:** will return rows where the text string is not an exact match for the start of the data.
 - **Does not end with:** will return rows where the text string is not an exact match for the end of the data.
- **Blanks** - column will be filtered to only show rows with null values.
- **Non-Blanks** - column will be filtered to only show rows containing a value
- **Results** - column will be filtered to only show the selected result.

Boolean logic also includes the use of **And** or **Or**.

- **And** means that both conditions must be met. A and B means the data returned must contain both A and B.
- **Or** means either condition can be met. A or B means the data returned can contain either A or B. It does not need to contain both.

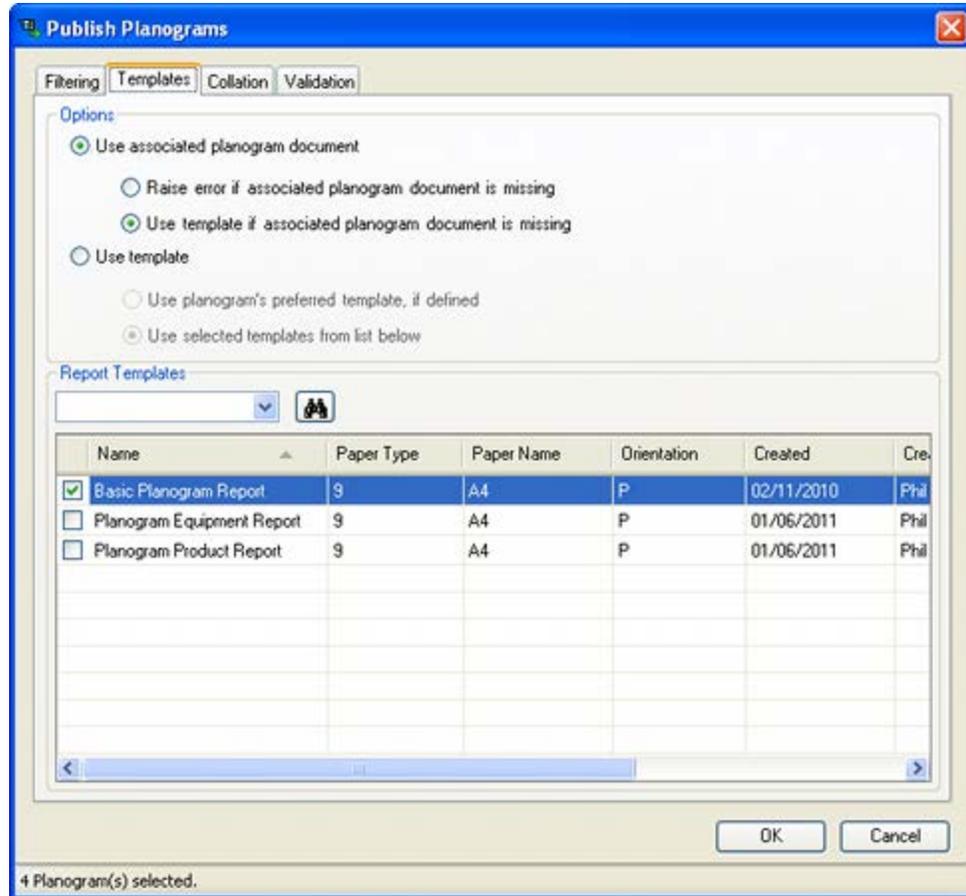
The Templates Tab

The **Templates Tab** is used so specify the type of report that will be used to output details of the planogram design.



The user can use a radio button to specify the form the report will take: an imported 'associated planogram document' or a template that is configured in the Report Designer Module.

- **Use Associated Planogram document** - this option publishes the planogram design information using a pre-generated report using one of the following file formats: BMP, GIF, JPEG, JPG, PDF, PNG, TIFF or WMF. This report will be imported when a planogram is imported using Oracle Data Integrator (ODI). The Associated Document (if available) is specified in the Associated Document text box in the Details tab of the Planogram Design dialog box in the Merchandiser module.



There are two options (selected using the radio button) for when the pre-generated report is missing.

- Write an error to the AVTTB_PUBLISH_POG_LOG table. Information in this table can be read by means of a BI Publisher report or similar.
- Use the default Report Designer template.
- **Use Template** - this option allows the user to define the way the template from the Report Designer module is selected. There are two options:
 - **Use Planograms preferred template**, if defined - this option is specified in the Preferred Template drop down list in the Details tab of the Planogram Design dialog box in the Merchandiser module.
 - **Use Selected Template from List Below** - this option can be set by checking items in the list of available templates. One or more templates may be selected. If multiple templates are selected, the name of the template will be added to the file name in brackets - for example 1_Bay_Mixed_Fizzy_Drinks (Basic Planogram Report).pdf

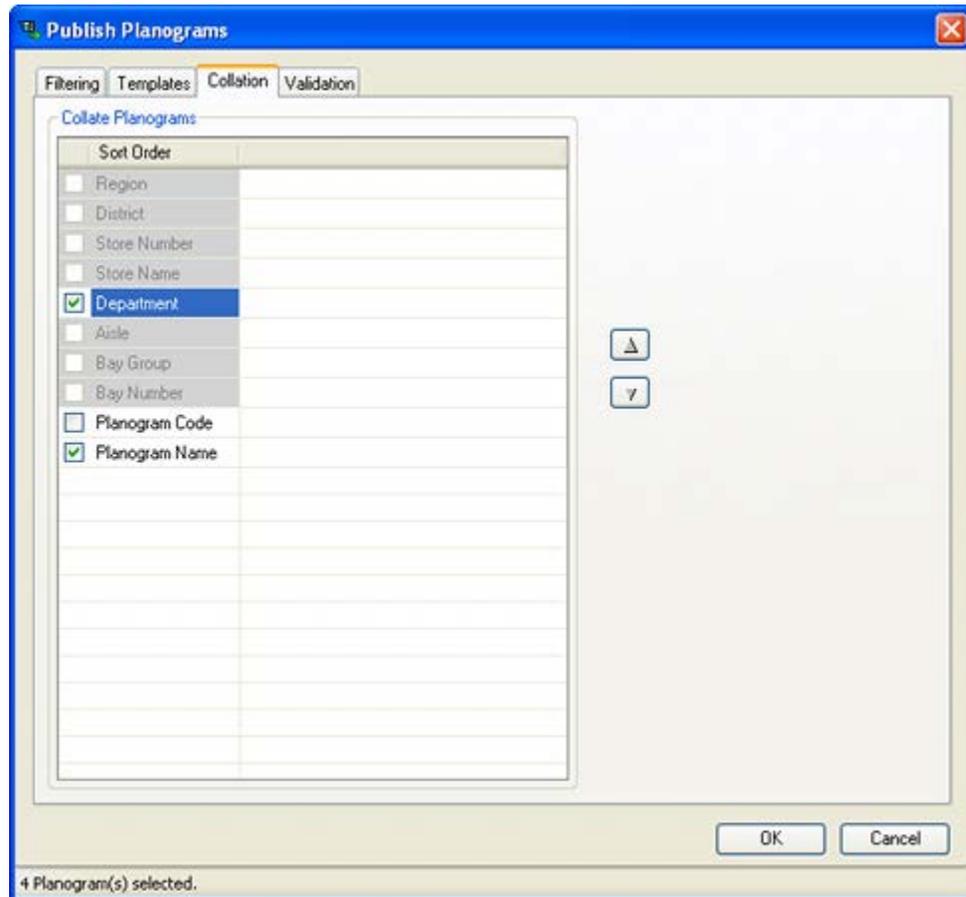
If necessary, the list of templates can be searched by entering a text string into the drop down list, then clicking the **Find** button. (Actual or implied wild cards can be used). Each click of the Find button will cause the search engine to move forward through the matching results until no results are left.

Note: The last 10 text strings can be selected using the drop down list in the text box.

The Collation Tab

The **Collation Tab** allows users to specify the sequence the planogram designs will be published or printed in. Its main use is in printing hard copy versions of the designs where the sequence they are printed in makes it easier to sort and distribute them after printing.

At least one collation option must be selected, or the tab will show as having an error.



The available options can be ordered by highlighting them, then using the up or down arrows. The options are made active by using the check boxes.

- **Region** is a specific type of cluster set in the Cluster type drop down list in the Cluster dialog box in Store Manager.
- **District** is a specific type of cluster set in the Cluster type drop down list in the Cluster dialog box in Store Manager.

The 'Edit Cluster' dialog box has the following fields:

- Cluster ID: [Empty text box]
- Cluster Name: North America
- Cluster Type: Region (dropdown menu)
- Cluster Code: GC-2

Buttons: OK, Cancel

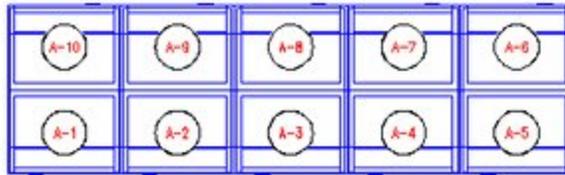
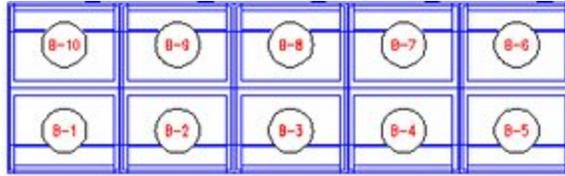
- **Store Number** is the Store Code in the Store dialog box in Store Manager.
- **Store Name** is the Store Name in the Store dialog box in Store Manager.

The 'Edit Store' dialog box, General tab, has the following fields:

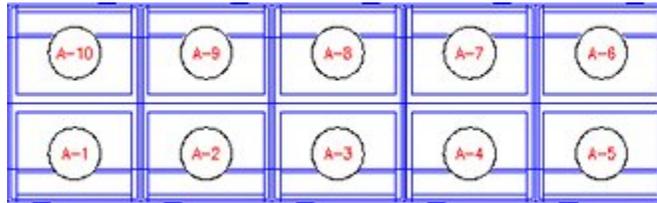
- Store ID: 31
- Store Code: PAR001
- Store Name: Paris
- Directory Name: Paris\
- Latitude: 0
- Longitude: 0
- Status: Open (dropdown menu)
- Opened Date: 01/02/2013 (calendar icon)
- Closed Date: 31/12/2999 (calendar icon)
- Store Prototype: Large Prototype Store (dropdown menu)
- Set as Prototype:

Buttons: OK, Cancel

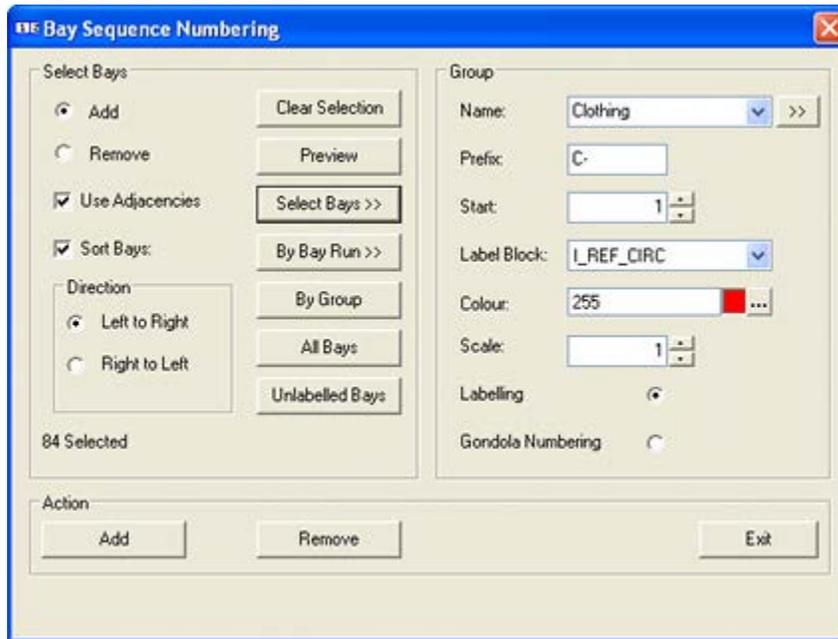
- **Department** is the department (zone) in the floor plan the planogram is associated with.
- **Aisle** is the aisle the planogram is associated with. For this option to operate, aisles must first be drawn in the floor plan in the Planner module. In the example below, Aisle F-1 has been drawn between two runs of fixtures.



- **Bay Number** is the bay number associated with the fixtures the planogram is placed on. For this option to operate, the fixtures in the floor plan must previously have been bay numbered.



- **Bay Group** is the Name assigned to a number of fixtures sharing a common characteristic. It is assigned in the Name field of the Bay Numbering dialog box in the Planner module.



- **Planogram Name** is the name of the planogram. This is set in the Name field of the Planogram Design dialog box in Merchandiser.

- **Planogram Code** is the code for the planogram. This is set in the Client Code field of the Planogram Design dialog box in Merchandiser.

Errors and Results

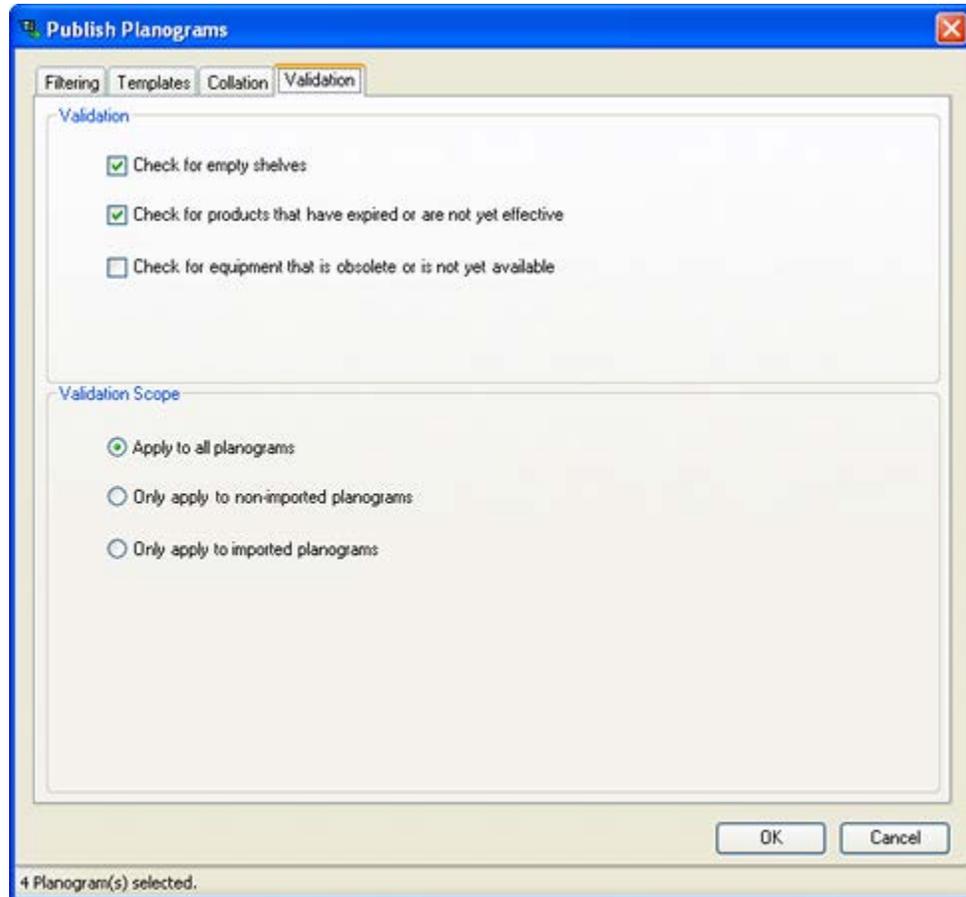
If any settings in the **Planogram Publishing dialog box** will lead to errors during publishing, an error symbol will be displayed on the tab containing the data with the problem. The OK button will also be grayed out and unavailable.

Users must correct the problems before the OK button will activate.

The results from Planogram Publishing are stored in two tables within the database. These results can be viewed via reports generated from BI Publisher (or similar software).

The Validation Tab

The **Validation tab** enables users to set a series of validation checks that must be satisfied before the planogram design is published. If any of the checks fail, the details will be written to the AVTTB_PUBLISH_POG_LOG table. Information in this table can be read by means of a BI Publisher report or similar.



- **Check for empty shelves** - this option will check the parent fixture and associated shelf objects. It will raise an error report if:
 - The fixture and associated shelf objects can be populated with product display styles, but no product display style has been placed.
 - The fixture and associated shelf objects can be populated with display styles, but no display styles have been placed.
- **Check for products that have expired or are not yet effective** - this option will check all products in the planogram against the effective date of the planogram. It will raise an error report if:
 - The Product Effective Date is after the Planogram Effective Date - i.e. the product is not yet available to place in the planogram.
 - The Product Expiry Date is before the Planogram Effective Date - i.e. the product will expire while the planogram is still in service.

The check will be ignored if the product effective or expiry date is undefined.

The Planogram Effective Date is set in the Details tab of the Planogram Design dialog box in Merchandiser.

Planogram: 2_Bay_Tilda_Rice

Details Properties Stores Seasons Fixture Styles Design Financial UDAs

Name: 2_Bay_Tilda_Rice Revision: 1

Description: 2 Bay Tilda Rice

Associated Document: ...

Size Description: 72 x 24 x 72

Status: Authorized Client Code: 00000065

Family Code: Family ABC Buddy Family Code: Buddy Family 456

Assortment Code: Assortment 123 Units: imperial inch

Temperature Range: Ambient Goods Time Units: standard hour

Weight Range: < No Ranges Selected > Manpower Set Time: 1.00

Publish Date: 04 October 2012 Manpower Dismantle Time: 0.50

Effective Date: 17 October 2012 Category Role: Primary Business Driver

Expiry Date: 31 December 2999 Inventory Model: Inventory DEF

Stock Type: Normal Rank: 0

Autofill Rule: < No Rule Selected > Traffic Flow: Left to Right
 Right to Left

Preferred Template: Basic Planogram Report Requires Power:

Can be Split:

OK Save As Cancel

The Product Effective and Expiry dates are set in the Details tab of the SKU dialog box in Product Studio.

- **Check for equipment that is obsolete or not yet available** - this option will check all equipment in the planogram against the effective date of the planogram. It will raise an error report if:
 - The Equipment Effective Date is after the Planogram Effective Date - i.e. the equipment is not yet available for the planogram.
 - The Equipment Expiry Date is before the Planogram Effective Date - i.e. the equipment will be taken out of service while the planogram is still in use.

The check will be ignored if the equipment effective or expiry date is undefined.

The Equipment Effective and Expiry dates are set in the Category tab of the Block Details dialog box in Fixture Studio.

- **Validation Scope** - this controls when to apply the validation checks. There are three options - selectable by the radio button.
 - Apply to all planograms.
 - Apply to non-imported (manually created) planograms.
 - Apply to imported planograms.

The application will automatically distinguish between imported and manually created planograms by means of the information held in the Macro Space Planning database. This can be used to reduce the time required for validating planograms - for example if the planogram designs have already been validated in the third party software used to design them, there may be no need to validate them again when this functionality is used to publish planograms.

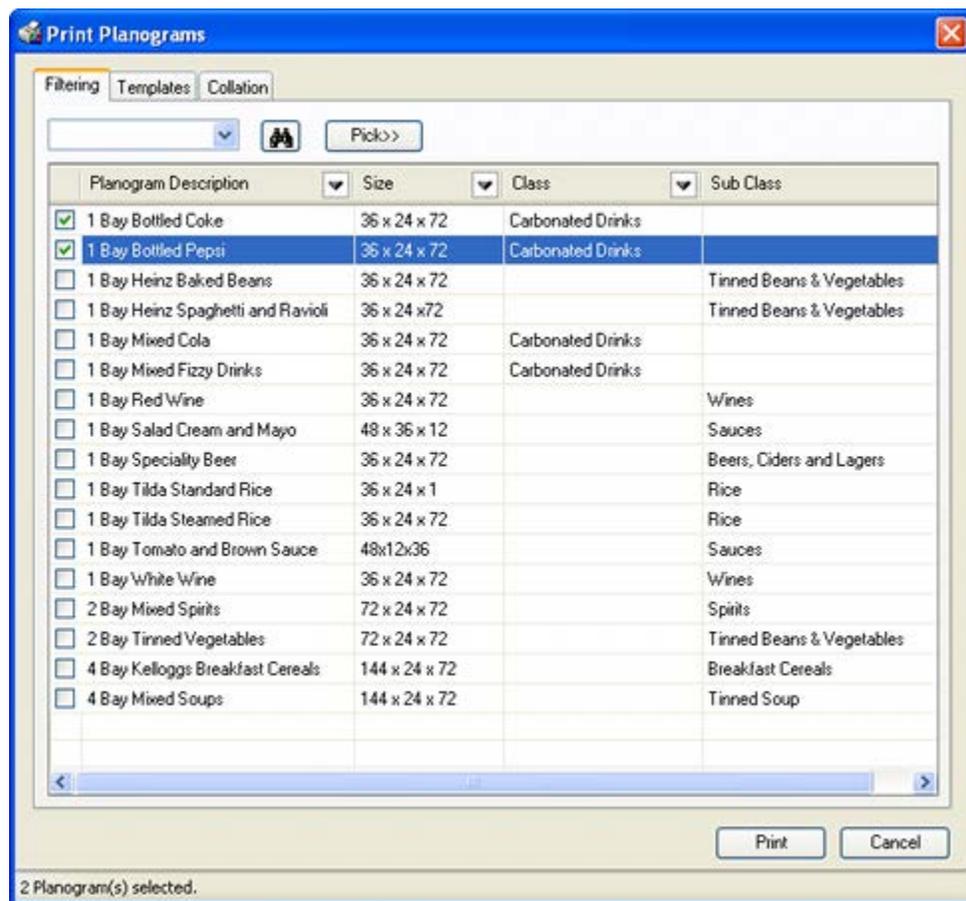
Planogram Printing

Overview of Planogram Printing

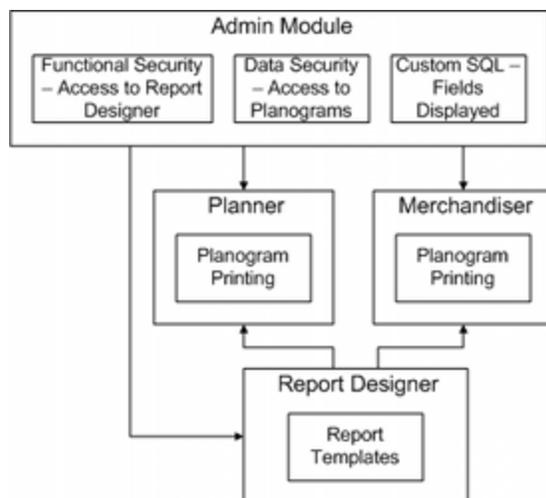
Planogram Printing allows users to select planograms in the currently active floor plan and print out information on the ones they have permissions to print.

Note: Users wishing to Publish the planogram design plan (output it in electronic or hard copy form with permanent changes) should use the Immediate Planogram Publishing option from the File menu.

Note: the default settings for this dialog box are derived from settings in the Planogram Publishing Configuration dialog box in the Administration module.



The basic method of operation is as follows:



Administration Module

Within the Administration Module:

- The planogram users have permissions to print are assigned in the Data Security dialog box - Planograms Tab.
- The fields that display in the Filtering Tab of the Print Planograms dialog box are configured in the Custom SQL dialog box.
- Planograms can be printed using report templates specified in the Report Designer module. Permission to access this module is specified in the Functional Security dialog box.

These settings determine what will appear in the Print Planograms dialog box (and the reports that will be available) when it is accessed in the Planner and Merchandiser modules.

Note: In order to access the Administration Module, users must have permission to do so.

Planner Module

The Print Planograms dialog box may be accessed from the File Menu - a floor plan containing planograms must previously have been opened. Users with permissions to access the Planner module automatically have permission to use the functionality.

Merchandiser Module

The Print Planograms dialog box may be accessed from the File > Print Menu - a floor plan containing planograms must previously have been opened. Users with permissions to access the Merchandiser module automatically have permission to use the functionality.

Report Designer

The Report Designer module is used to design report templates that can be specified for use in the Print Planograms dialog box. Permissions to access this module are assigned in the Functional Security dialog box in the Administration module.

Using Planogram Printing

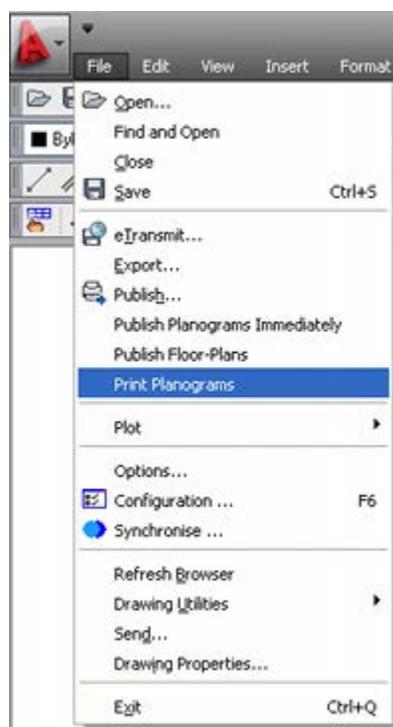
The functionality is used as follows:

1. A floor plan containing planograms is opened in the Planner or Merchandiser module.
2. The Print Planogram option is selected from the File menu in the Planner or Merchandiser module.
3. The appropriate planograms are selected in the Filtering tab of the Print Planograms dialog box.
4. The report to use is specified in the Templates tab.
5. The sequence the selected floor plans are to be printed in is specified in the Collation Tab.
6. On clicking the Print button, the selected planogram reports will be printed on the default printer associated with the user's computer.

Accessing the Planogram Print Functionality

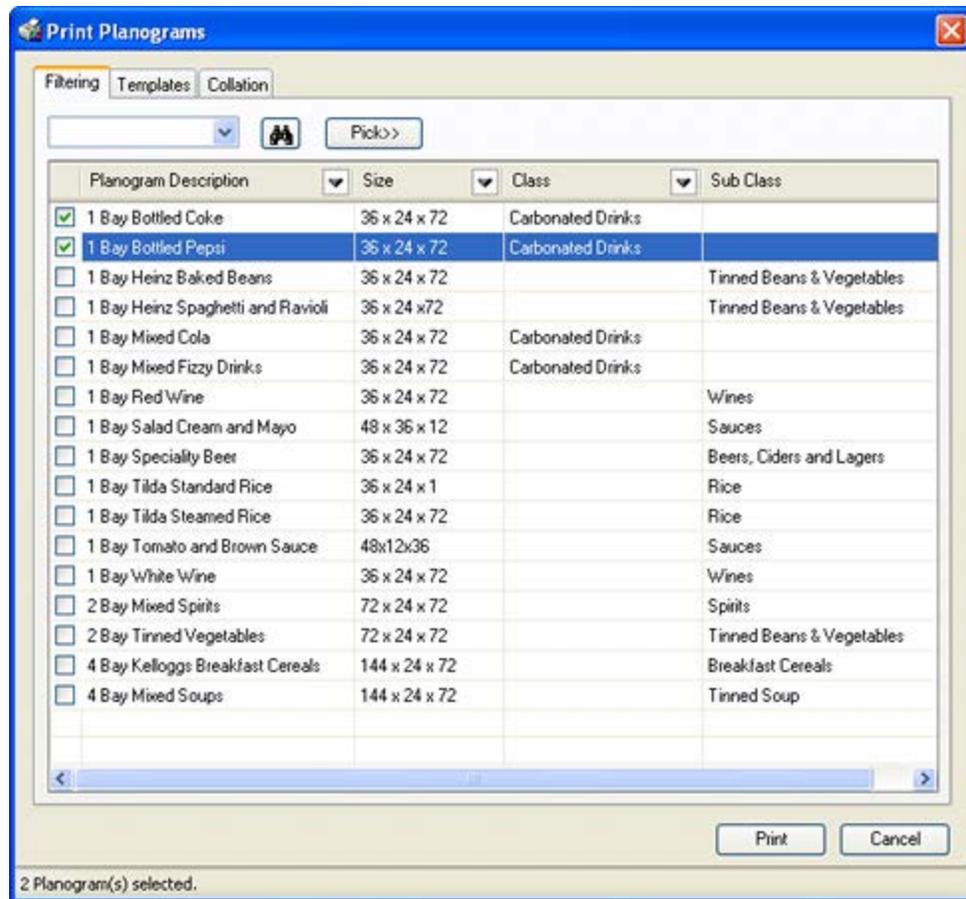
Note: before accessing the Print Planogram functionality, users should open a floor plan containing planograms.

The Print Planogram functionality is accessed from the File Menu. Users with permissions to access the Planner module will automatically have permission to use the functionality.



Opening State of Functionality

When the Print Planogram dialog box opens it will be populated with all planograms in the currently active floor plan. By default, they will be checked for selection.

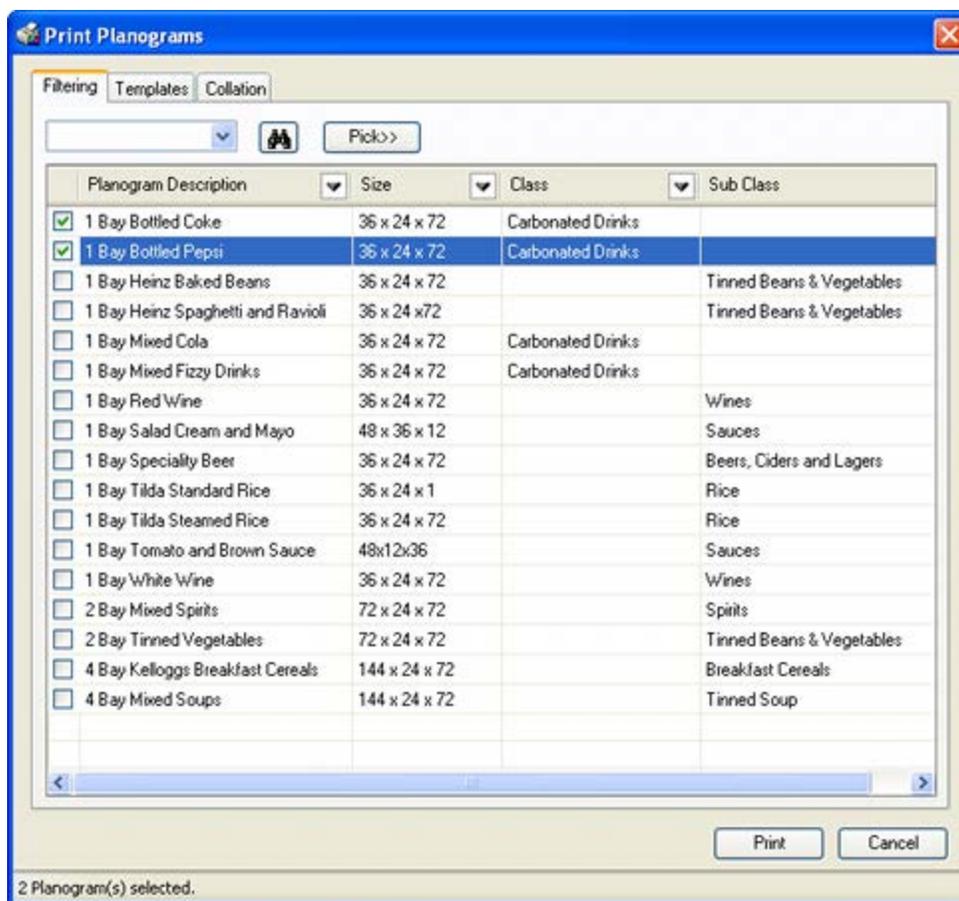


Note: the columns that are displayed in the dialog box are configurable in the Custom SQL option available from the General Menu in the Administration module.

The Filtering Tab

The **Filtering tab** enables the user to select the Planograms to print. It will populate with all planograms in the currently active floor plan.

Note: If there are multiple instances of a planogram in a floor plan, only a single entry will appear in the list of planograms.



Find

The Find option can be used by typing text into the text box then clicking the Find icon. Each successive click will move the user to the next floor plan matching the text being searched for. When no more matches are available, a confirmatory dialog box will appear.



Find operates with explicit or implied wild cards. The explicit wild cards are:

Wild Card	Description
*	Any characters
?	Any character in this position
#	Any number in this position

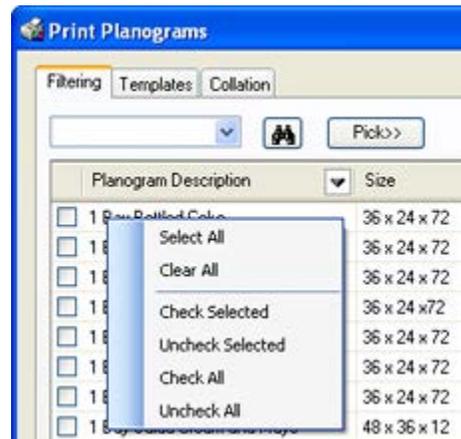
If explicit wild cards are not used, implicit wild cards will be assumed. For example the text entry 'Wine' will be treated as '*wine*' and will find I Bay Red Wine, 1 Bay White Wine, etc.

Pick

Pick takes the user to the currently active floor plan. They can then use AutoCAD selection methods to select specific planograms. When the AutoCAD selection is completed with a right mouse click, the user will be returned to the Print Planogram dialog box and the dialog box will populate with the selected planograms.

Right Click Menu

The right click menu provides a quick way of modifying the selected items.



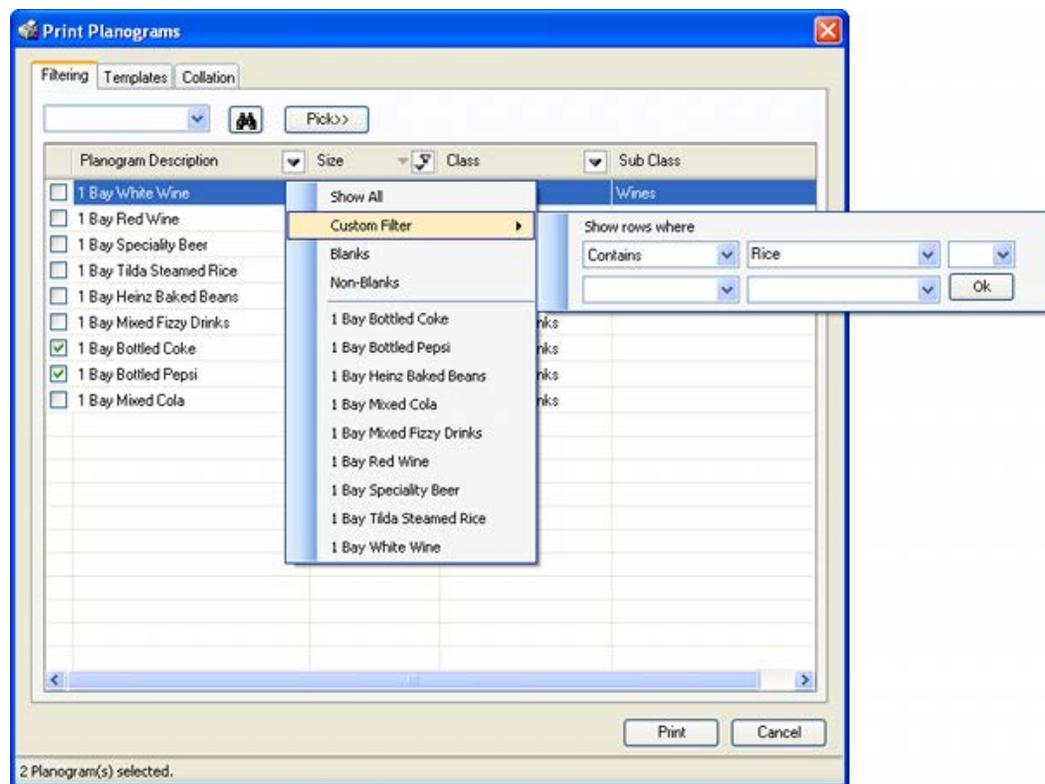
- **Select All** will select (but not check) all rows of data
- **Clear All** will deselect (but not uncheck) all rows of data
- **Check Selected** will check all rows of selected data
- **Uncheck Selected** will uncheck all rows of selected data
- **Check All** will check all rows of data
- **Uncheck All** will uncheck all rows of data
- **Paste** allows users to paste a carriage returned list of floor plan identifiers from the Windows clipboard. All rows in the dialog box that match the pasted information will be checked.

Selecting Planograms to Print

Planograms may be selected for printing by ticking the appropriate check box.

Using Filters in the Filtering Tab

The **Filtering Tab** is provided with a series of filters on each column. Setting a filter on one column will affect data in all other columns.



They are used as follows:

- **Show All** - this option shows all results.
- **Custom Filter** - this option allows users to set filters using Boolean logic. The options are:
 - **Equal to:** will return rows that are an exact match for the entered text.
 - **Not Equal to:** will return rows that do not match the text string
 - **Contains:** will return rows where part of the data matches the text string. (Uses implied wild cards).
 - **Does not contain:** will return rows where no part of the data matches the text string. (Uses implied wild cards).
 - **Begins with:** will return rows where the text string is an exact match for the start of the data.
 - **Ends with:** will return rows where the text string is an exact match for the end of the data.
 - **Does not begin with:** will return rows where the text string is not an exact match for the start of the data.
 - **Does not end with:** will return rows where the text string is not an exact match for the end of the data.
- **Blanks** - column will be filtered to only show rows with null values.
- **Non-Blanks** - column will be filtered to only show rows containing a value
- **Results** - column will be filtered to only show the selected result.

Boolean logic also includes the use of **And** or **Or**.

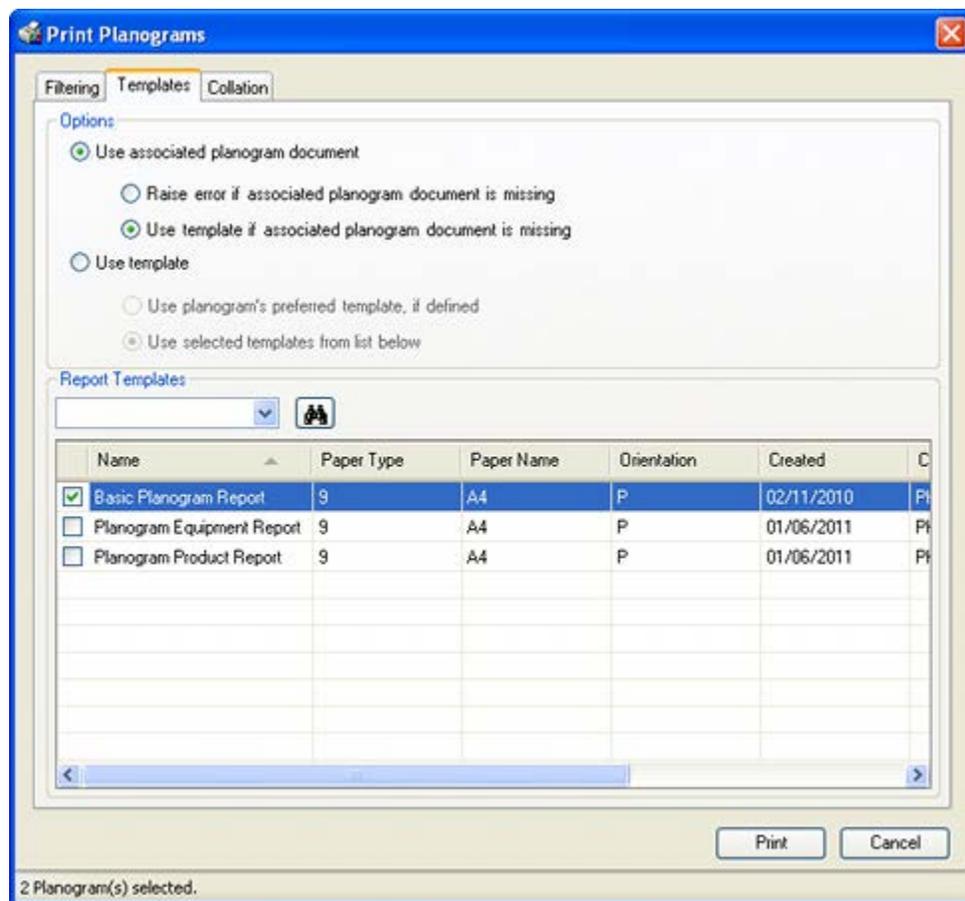
- **And** means that both conditions must be met. A and B means the data returned must contain both A and B.

- **Or** means either condition can be met. A or B means the data returned can contain either A or B. It does not need to contain both.

The Templates Tab

The **Templates Tab** allows users to specify the template format to be used when printing planogram designs.

IMPORTANT NOTE: There is a known issue with planogram templates. The Planogram Publishing Configuration dialog box in the Macro Space Management Administration Module has an option to print associated planogram documents. At present this option is not available in the Print Planogram dialog box. Accordingly, the Template Tab in the Planogram Publishing Configuration dialog box should have the option set to **Use Template**.



The user can use a radio button to specify the form the report will take: an imported 'associated planogram document' or a template that is configured in the Report Designer Module.

- **Use Associated Planogram document** - this option publishes the planogram design information using a pre-generated report using one of the following file formats: BMP, GIF, JPEG, JPG, PDF, PNG, TIFF or WMF. This report will be imported when a planogram is imported using Oracle Data Integrator (ODI). The

Associated Document (if available) is specified in the Associated Document text box in the Details tab of the Planogram Design dialog box in the Merchandiser module.

There are two options (selected using the radio button) for when the pre-generated report is missing.

- Write an error to the AVTTB_PUBLISH_POG_LOG table. Information in this table can be read by means of a BI Publisher report or similar.
- Use the default Report Designer template.
- Use Template - this option allows the user to define the way the template from the Report Designer module is selected. There are two options:
 - **Use Planograms preferred template, if defined** - this option is specified in the Preferred Template drop down list in the Details tab of the Planogram Design dialog box in the Merchandiser module.
 - **Use Selected Template from List Below** - this option can be set by checking items in the list of available templates. One or more templates may be selected. If multiple templates are selected, the name of the template will be added to the file name in brackets - for example 1_Bay_Mixed_Fizzy_Drinks (Basic Planogram Report).pdf

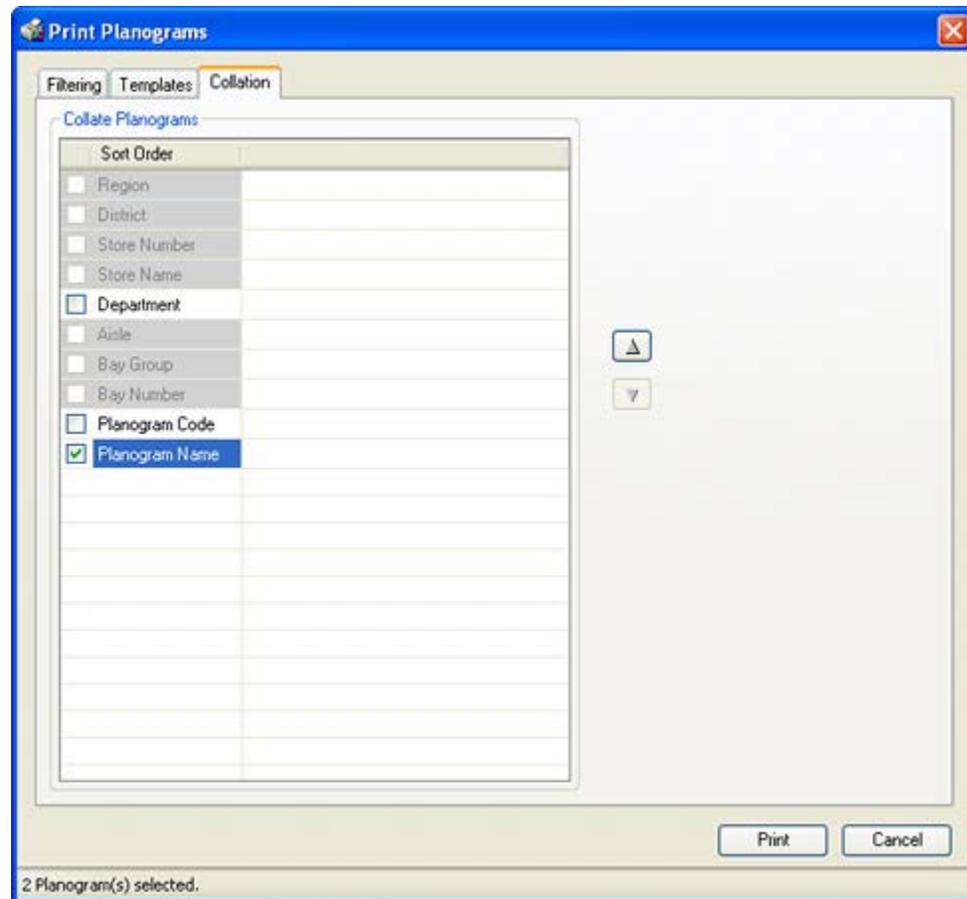
If necessary, the list of templates can be searched by entering a text string into the drop down list, then clicking the **Find** button. (Actual or implied wild cards can be used). Each click of the Find button will cause the search engine to move forward through the matching results until no results are left.

Note: the last 10 text searches can be selected using the drop down list in the text box.

The Collation Tab

The Collation Tab allows users to specify the sequence the planogram designs will be published or printed in. Its main use is in printing hard copy versions of the designs where the sequence they are printed in makes it easier to sort and distribute them after printing.

At least one collation option must be selected, or the tab will show as having an error.

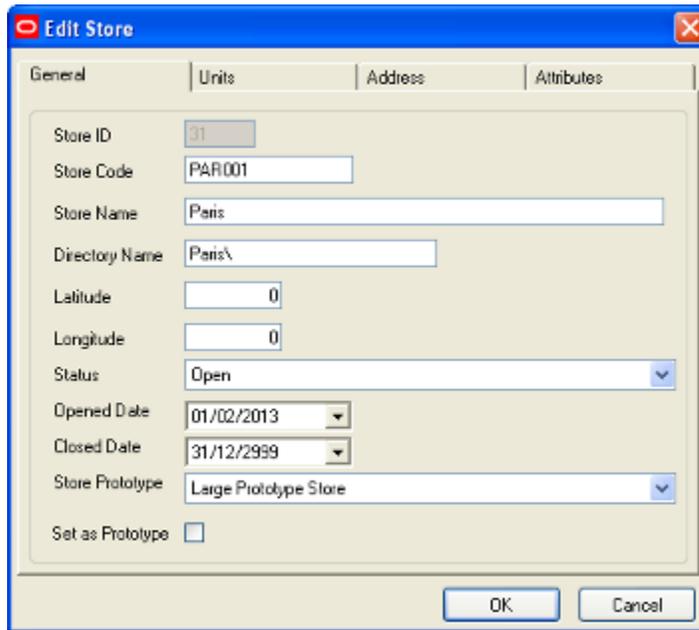


The available options can be ordered by highlighting them, then using the up or down arrows. The options are made active by using the check boxes.

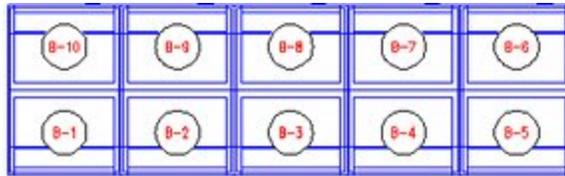
- **Region** is a specific type of cluster set in the Cluster type drop down list in the Cluster dialog box in Store Manager.
- **District** is a specific type of cluster set in the Cluster type drop down list in the Cluster dialog box in Store Manager.



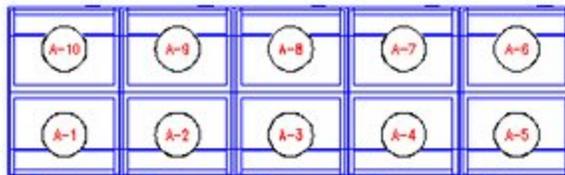
- **Store Number** is the Store Code in the Store dialog box in Store Manager.
- **Store Name** is the Store Name in the Store dialog box in Store Manager.



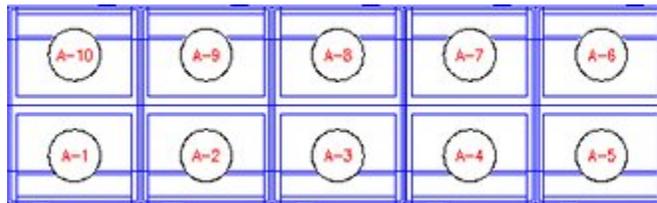
- **Department** is the department (zone) in the floor plan the planogram is associated with.
- **Aisle** is the aisle the planogram is associated with. For this option to operate, aisles must first be drawn in the floor plan in the Planner module. In the example below, Aisle F-1 has been drawn between two runs of fixtures.



F-1



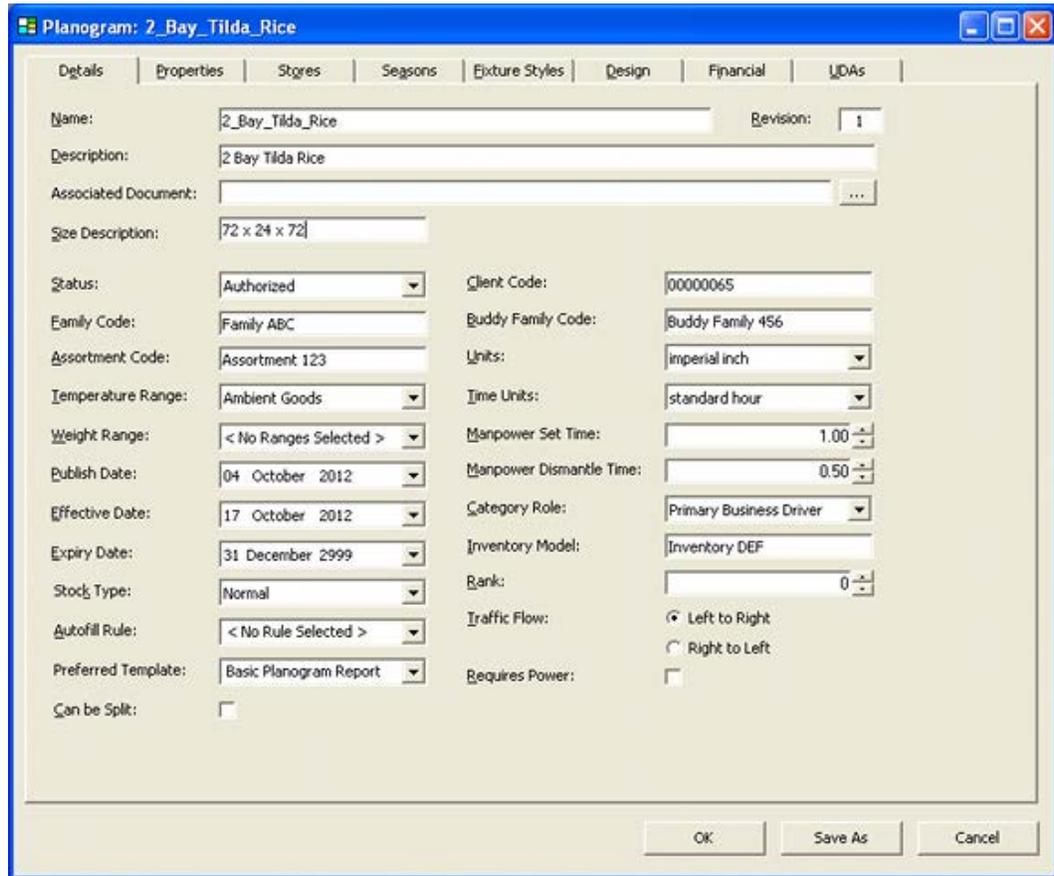
- Bay Number is the bay number associated with the fixtures the planogram is placed on. For this option to operate, the fixtures in the floor plan must previously have been bay numbered.



- Bay Group** is the Name assigned to a number of fixtures sharing a common characteristic. It is assigned in the Name field of the Bay Numbering dialog box in the Planner module.

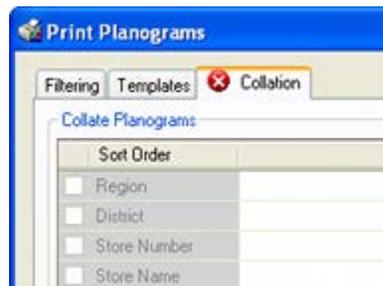
- Planogram Name** is the name of the planogram. This is set in the Name field of the Planogram Design dialog box in Merchandiser.

- **Planogram Code** is the code for the planogram. This is set in the Client Code field of the Planogram Design dialog box in Merchandiser.



Errors and Results

If any settings in the Print Planograms dialog box will lead to errors during printing, an error symbol will be displayed on the tab containing the data with the problem. The Print button will also be grayed out and unavailable.



Users must correct the problems before the Print button will activate.

The results from Floor Plan printing are stored in two tables within the database. These results can be viewed via reports generated from BI Publisher (or similar software).

Synchronisation

Overview of Synchronization

Planner and Synchronization

The Planner module is based on AutoCAD. Work done in the floor plans is initially saved back to an AutoCAD (DWG) file before information is written back to the Macro Space Planning (MSP) database. However, there are ways that the information in the AutoCAD floor plan can diverge from the information held in the database. These ways are:

- The floor plan has been modified in Raw AutoCAD.
- AutoCAD functionality can be used which results in changes to the floor plan, but not to the database. This will occur when dynamic synchronization is set to Off.
- Changes can be made to the floor plan in the Merchandiser module - this will write information back to the MSP database but not to the AutoCAD drawing in Planner.
- Changes can be made to the floor plan in In-Store Space Collaboration - this will write information back to the MSP database but not to the AutoCAD drawing in Planner.
- Changes can be made to the floor plan using batch processes such as Planogram Substitution. This will write information back to the MSP database but not to the AutoCAD drawing in Planner.

Synchronization is therefore used to ensure that what is shown graphically in the floor plan is also what is held in the database. There are three forms of synchronization.

Manual Synchronization

Manual synchronization is synchronization carried out by the user by invoking the functionality from the menu bar or Retail toolbar.

Dynamic Synchronization

Dynamic Synchronisation can be turned on or off by the user. If turned on, many of the changes made by AutoCAD tools are simultaneously written back to the database.

Auto-Synchronization

Auto-Synchronization is used when changes have been made to the database by work carried out in the Merchandiser module, in In-Store Space Collaboration or by Batch tools. If active, when a floor plan is subsequently opened in Planner, the required updates will be made to the floor plan. Dependent on settings; confirmation may be required from the user first.

Synchronisation and the Administration Module

Some of the synchronisation functions in the Planner are affected by settings in the Administration module.

Dynamic Synchronize

The default setting for dynamic synchronization is held in the **DYNAMIC_SYNC** system variable set in the System Variable dialog box accessed from the General menu of the Administration module. This may be set to one of two options:

- **Off:** Dynamic sync is not enabled.
- **On:** Dynamic Sync is enabled

Auto-Synchronize

Depending on settings for the AUTOSYNC system variable, when a Planner floor plan is opened and there are differences between that floor plan and the database, one of three options will occur.

- No auto-synchronization will occur, leaving the user to manually synchronize the floor plan as required.
- Auto-Synchronisation will occur, but requires confirmation by the user before it goes ahead.
- Auto-Synchronisation will occur automatically as the floor plan opens.

Saving Default Synchronisation Settings

Depending on settings for the SYNC_SETTINGS system variable user will find the synchronisation dialog box opens with either:

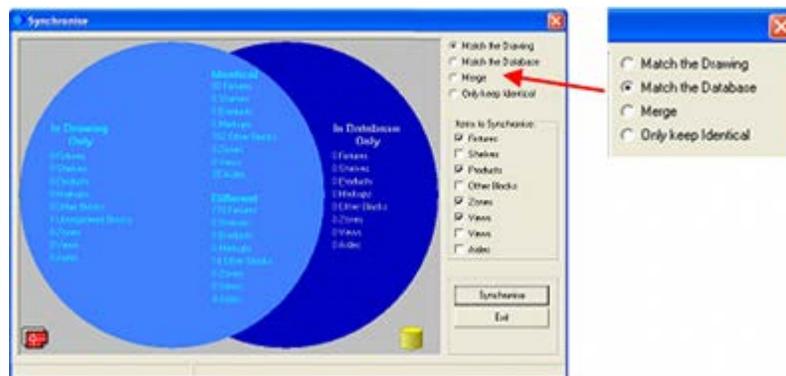
- A generic set of default settings common to all users.
- A user selected set of default settings.

The settings that can be specified are:

1. The Form of Synchronization that takes place

This may be either:

- Match the Drawing (floor plan)
- Match the Database
- Merge
- Keep Identical

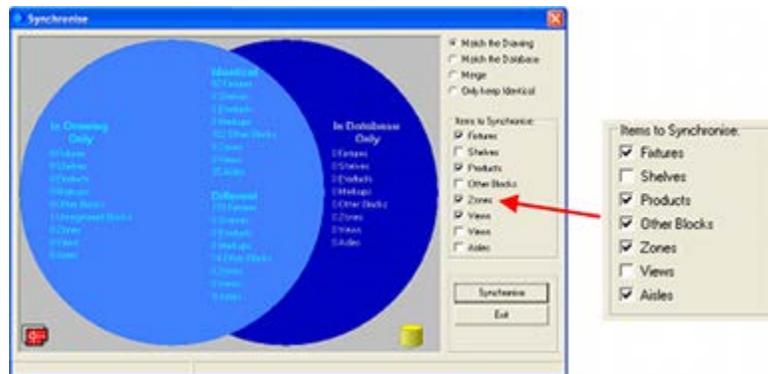


2. The Items that are Synchronized

These can include:

- Fixtures
- Shelves
- Products

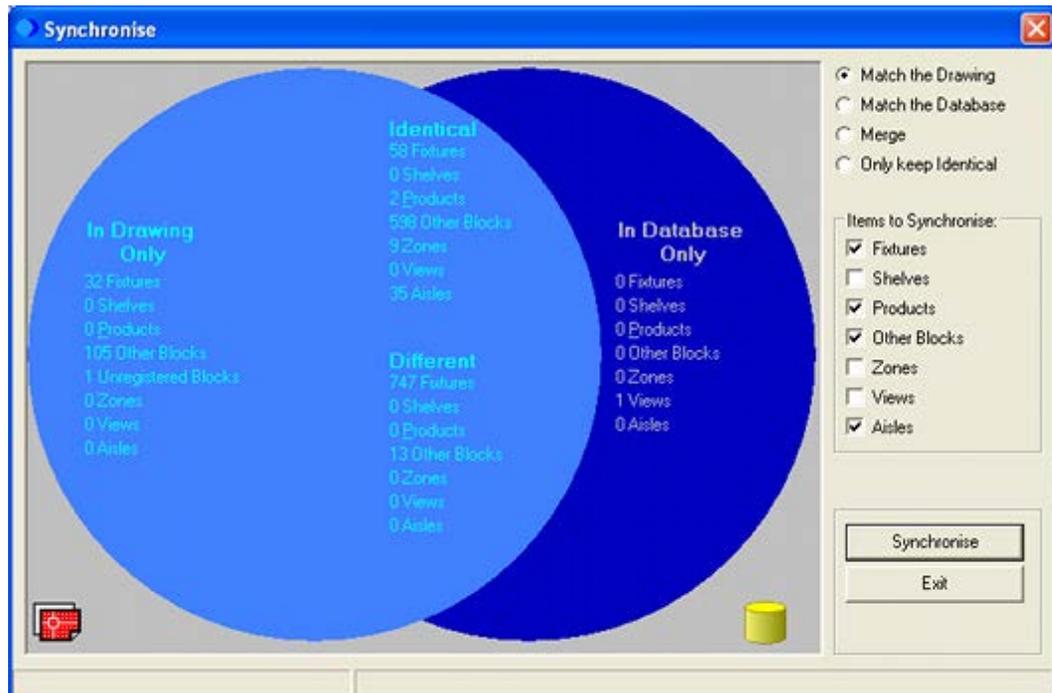
- Other blocks
- Zones
- Views
- Aisles



See your Administrator for more information on what has been implemented.

Manual Synchronization

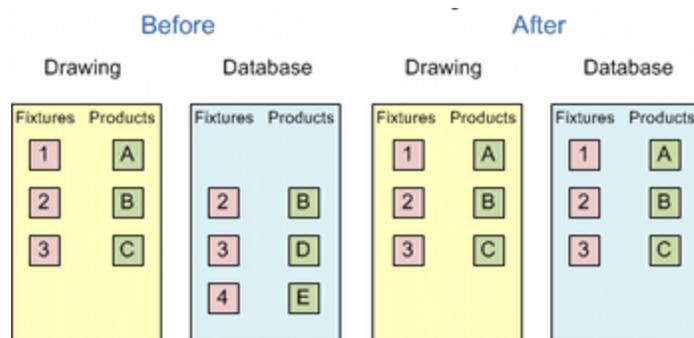
Manual Synchronisation is used to ensure that the information held in the floor plan in the Planner module is identical to the information held in the database. It is done using the Synchronisation dialog box.



Synchronisation can be done in several ways:

Match the Drawing

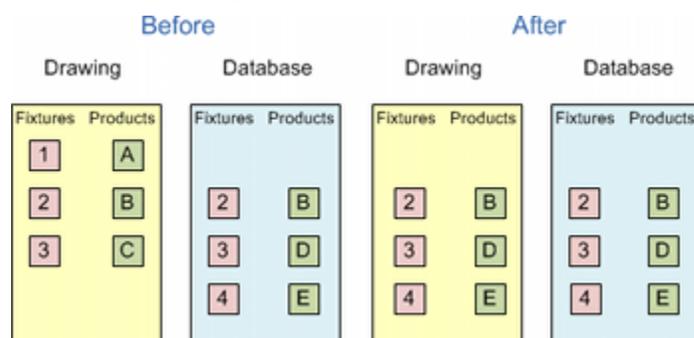
Data in the database will be overwritten with data from the drawing.



In this example, the drawing contains Fixtures 1, 2 and 3, together with products A, B and C. This information overwrites the data on Fixtures 2, 3 and 4 and their associated products B, D and E that was originally held in the database.

Match the Database

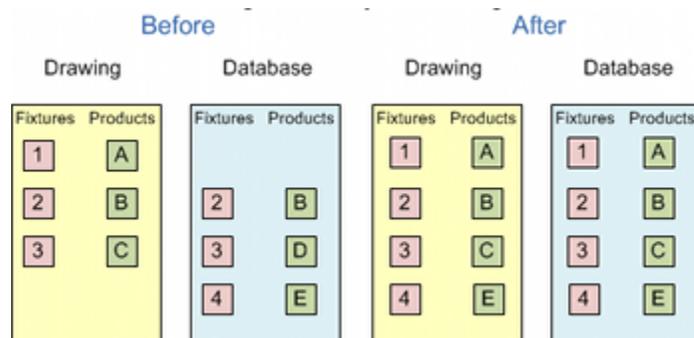
Data in the drawing will be overwritten with data from the database.



In this example, the drawing contains Fixtures 1, 2 and 3, together with products A, B and C. This information is updated with Fixtures 2, 3 and 4 and their associated products B, D and E that is held in the database.

Merge

Merge combined the data in the drawing and the database so the same information is present in both places. Where information is present in both locations, merging can be done with priority to the drawing or priority to the database.



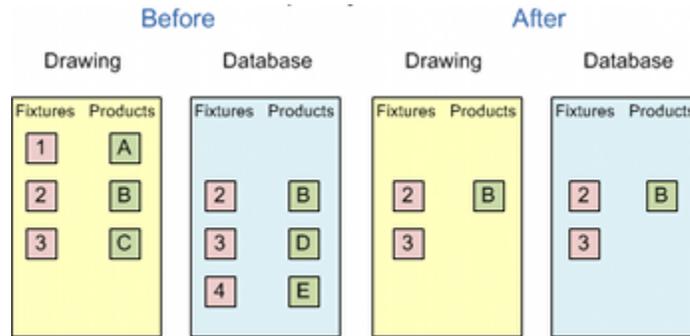
In this Merge example, priority has been given to the drawing. Data is modified as follows:

- Fixture 4 and Product E do not exist in the drawing, so they are added.
- Fixture 1 and Product A do not exist in the database, so they are added.

- Fixtures 2 and 4, together with Product B are identical in both the database and drawing, so no changes are made.
- Product C in the drawing coincides with Product D in the database. Because priority has been given to the drawing, Product C overwrites Product D in the database.

Keep Identical

Keep identical only keeps items that are identical in the drawing and the database.

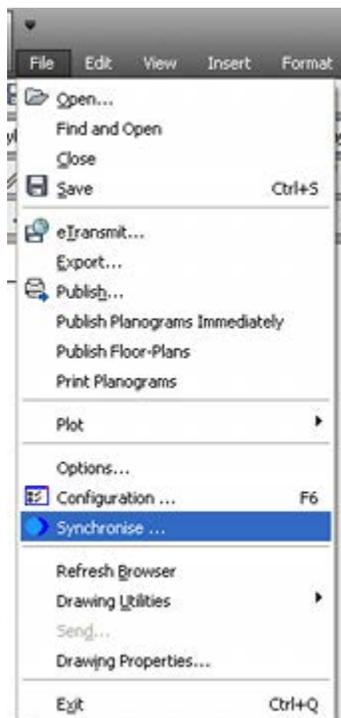


In this example, only Fixtures 2 and 3 and product B are identical. After the synchronize operation these three items only will be present in both database and drawing.

Manual Synchronization Dialog Box

Accessing the Synchronization Dialog Box

The synchronisation dialog box can be accessed from the File menu.

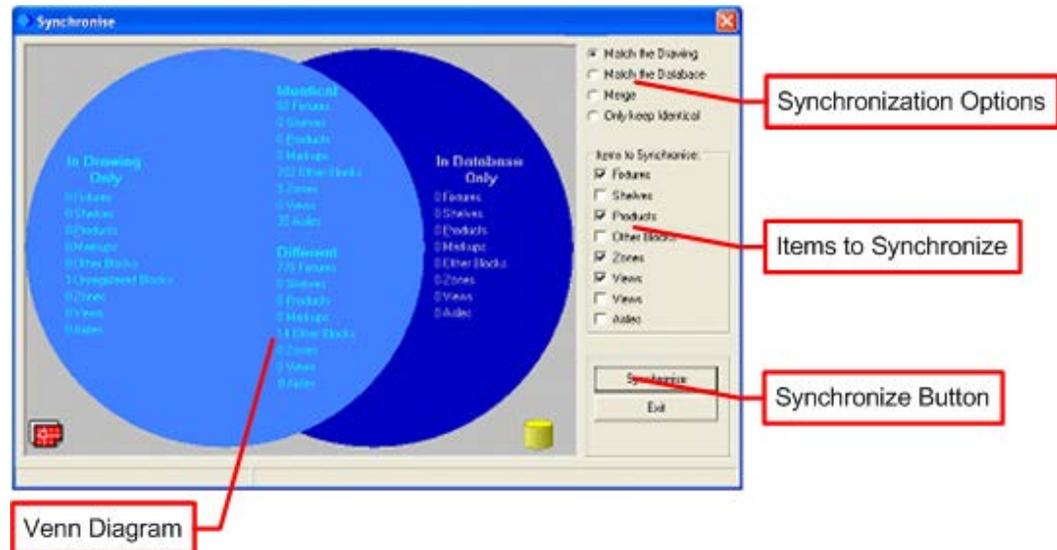


Alternatively, it can be accessed from the Retail toolbar.



Parts of the Synchronization Dialog Box

The synchronisation dialog box has the following components.

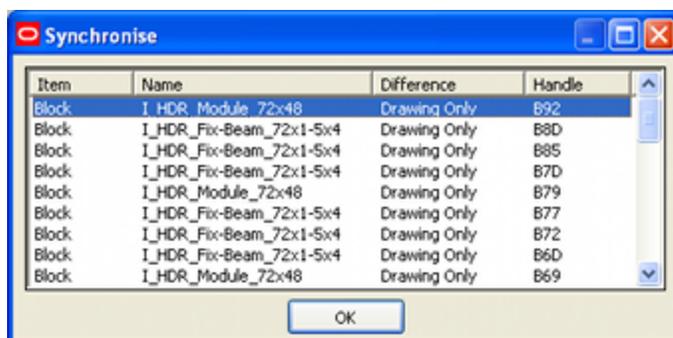


- **Synchronisation Options:** These specify the form synchronization is to take - for example write the contents of the floor plan to the database (Match the Drawing).
- **Items to Synchronize:** These specify what objects in the floor plan are to be synchronised - for example zones, aisles and fixtures.
- **Venn Diagram:** This can be used to determine which synchronization option is required. (More info).
- **Synchronize Button:** This initiates manual synchronization options.

If the mouse pointer is poised over a category of information in the Venn diagram, a black question mark will appear.



Left clicking on the category will bring up a dialogue box with details of the items.



Guidelines for Manually Synchronizing

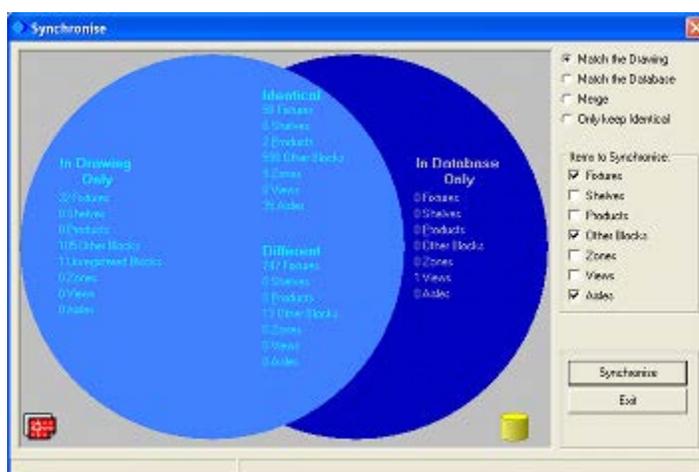
The appropriate synchronisation actions can be determined using the Venn diagram in the synchronisation dialog box. This will vary according to the Synchronisation option selected in the upper right of the dialog box. The Venn diagram identifies:

- Objects that are identical in the drawing (floor plan) and the database.
- Objects that exist in the drawing and database but differ in some way - for example in their position.
- Objects that exist in the drawing only.
- Objects that exist in the database only.

Note: Manual Synchronization will only be required if Auto-Synchronisation has not been enabled.

Match the Drawing

The Match the Drawing option has a light blue circle highlighting what data is identical in the drawing and database, what is different and what is in the drawing only. The dark blue circle shows data in the database only.

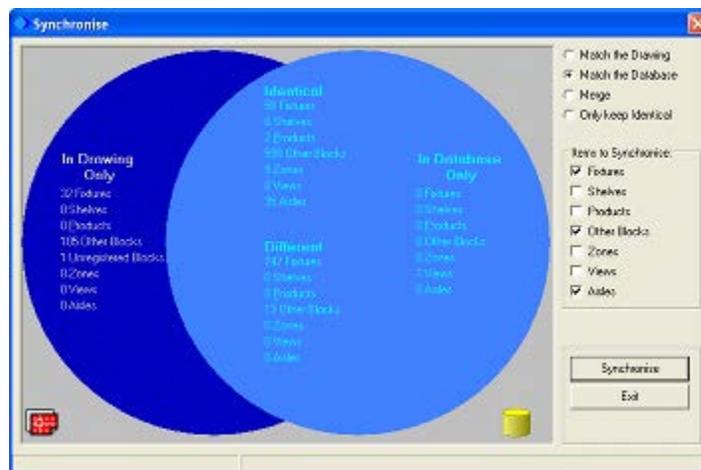


Use this option when the information in the currently active Planner floor plan is the version you wish to save back to the database. This may be required if:

- A raw AutoCAD drawing has been imported.
- The USER11 system variable has been set to 0 and the results of specific AutoCAD operations are not being written to the database.

Match the Database

The Match the Database option has a light blue circle highlighting what data is identical in the floor plan and database, what is different and what is in the database only. The dark blue circle shows data in the drawing only.

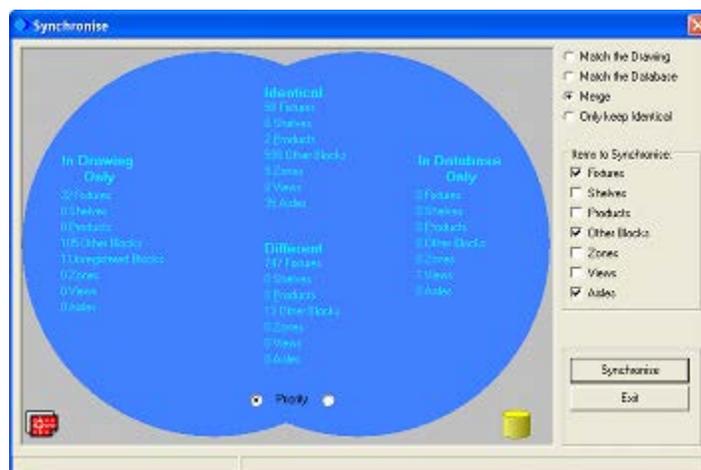


Use this option if the floor plan has been modified outside of the planner module. This could occur if:

- The floor plan has been updated in the Merchandiser module.
- The floor plan has been updated in In-Store Space Collaboration
- The floor plan has been updated by a batch process.

Merge

This option is not commonly used. It might be required if changes have been made to the floor plan in the Planner module but not written back to the database. If the floor plan is in this condition when (for example) batch tools are used it will be difficult to establish what the correct version of the drawing should be like. In this event it may be necessary to merge to changes so that floor plan and database are identical, then use KPI's and reports to determine where errors exist in the floor plan.



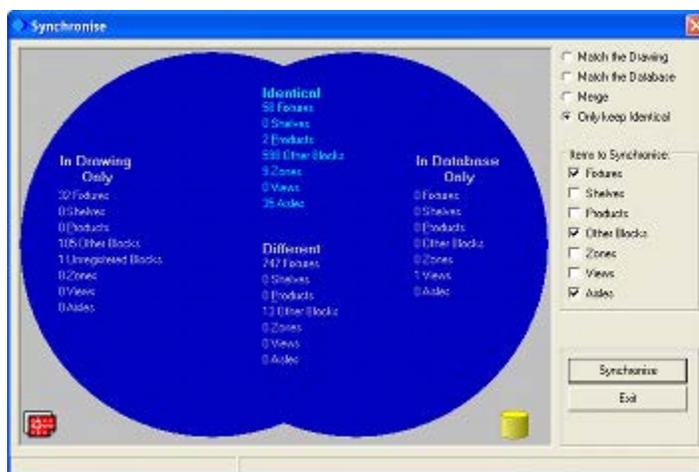
All data is enclosed within the light blue circles.

- Data in the drawing but not in the database will be written to the database.
- Data in the database but not in the drawing will be written to the drawing.

- Data for objects that have differences (but are identical in position) will be overwritten in the drawing or database depending on which priority radio button is selected.

Only Keep Identical

This option is not commonly used. It applies to a similar situation where a floor plan has had changes made in both the planner module and (for example) by a batch process. The data may have become confused. The most practical option might be only to keep data that is identical in the drawing and database as only this data can be guaranteed to be correct. Any necessary changes can then be reapplied.



All data is enclosed within dark blue circles. Only data shown as identical within the drawing and database will be retained.

Dynamic Synchronization

Overview of Dynamic Synchronization

Dynamic Synchronization can be turned on or off as required. The setting determines whether changes to **Fixtures**, **Product Blocks** and **Other Blocks** made in a Planner AutoCAD floor plan using AutoCAD commands are automatically written back to the database when they are executed or whether manual synchronization is subsequently required.

Note: Zones, Aisles and Shelves are not affected by Dynamic Synchronization and will require a manual synchronize to write changes made with AutoCAD tools to the database.

DYNAMIC_SYNC System Variable

The initial setting for a new user is governed by the value of the **DYNAMIC_SYNC** system variable set in the System Variable dialog box accessed from the General menu of the Administration module. This may be set to one of two options:

- Off:** Dynamic sync is not enabled.
- On:** Dynamic Sync is enabled

The first time a user accesses a Planner floor plan, the dynamic synchronisation setting for that user will be set to that matching the **DYNAMIC_SYNC** system variable. After the

global value of dynamic synchronization has been set, individual users can then toggle dynamic synchronization on or off as required.

Changing Individual Settings for Dynamic Synchronization

Once an individual user has been assigned the global value for dynamic synchronisation, they can change this as desired via the AutoCAD command line.

```
Command: AVT_DYNAMICSYNC
Enter new state for Dynamic Synchronize [ON/OFF] <OFF>:
```

Entering the command AVT_DYNAMICSYNC will allow users to enter On or Off as an option.

Note: once users have entered their personal setting for Dynamic Synchronization this will not be affected by changes to the DYNAMIC_SYNC system variable.

Use of Dynamic Synchronization

Users have the option of turning Dynamic Synchronization On or Off. There are advantages for either option.

Dynamic Synchronization On

If dynamic synchronization is on, changes made to **fixtures, products, planograms** and **other blocks** made with AutoCAD tools will be immediately written back to the database. This will mean the information in quick reports, the summary window in the Object Browser, etc will be continually updated. However, for large floor plans, performance of the application may be marginally slowed.

Dynamic Synchronization Off

If dynamic synchronization is off, performance of the application may be slightly faster. However, the user will have to manually synchronize the floor plan in order to ensure that the effects of changes made with AutoCAD tools will be written back to the database.

Auto-Synchronizing

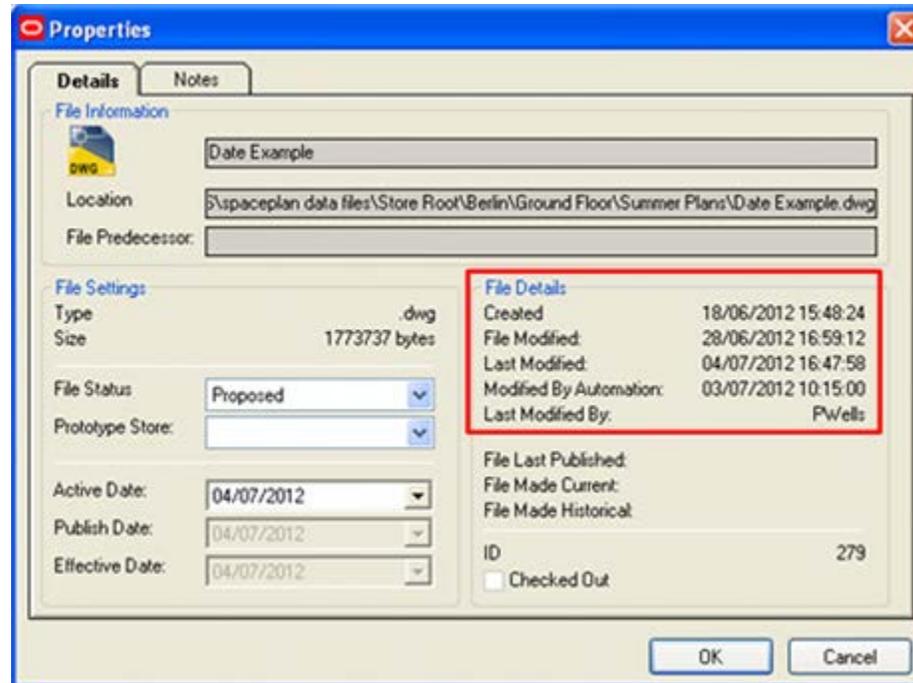
Depending on settings in the Administration module, it is possible to set the floor plan to automatically undergo the required changes when opened in the Planner module. Based on settings in the Administration module, this will either require the user to confirm the synchronisation can occur, or it will occur without requiring permissions. If confirmation is required, a dialog box will appear, requiring the user to click OK before synchronization can proceed.



Note: Depending on the auto-synchronize options, different objects will be synchronized - see below for details.

How Auto-Synchronization Works

Auto-Synchronisation works by comparing a series of dates held in the AVTTB_FILE table in the database. This table is only available to people with permissions to access the database - although most can be seen in the File Properties dialog box in Store Manager.

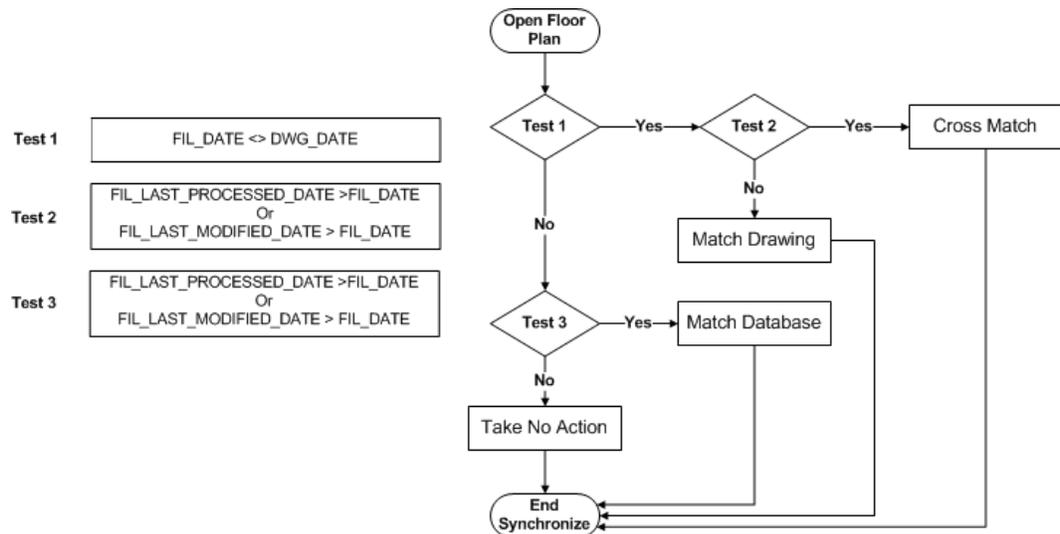


These dates have the following significance:

AVTTB_FILE Table Field	Properties Dialog Box Date	Comment
FIL_BDATE	Created	This can be the date the floor plan was originally created in Store Manager. If the floor plan was copied from another floor plan in Store Manager, this will be the date the floor plan was copied. If the floor plan was imported, this will be the date it was originally created in raw AutoCAD.
FIL_DATE	File Modified	This is the date the floor plan was originally created in Store Manager. Alternatively, if the floor plan was imported, this will be the date it was last modified in raw AutoCAD. Once the file has been saved in Planner, the FIL_DATE field will hold the date of that save but the File Modified field will continue to show the date it was last modified in raw AutoCAD.
FIL_LAST_MODIFIED	Last Modified	This is the date the file was last saved by a user in the Planner or Merchandiser modules or in In-Store Space Collaboration.
FIL_LAST_PROCESSED	Modified by Automation	This is the date the file was last modified by a batch process Automation such as planogram substitution.

AVTTB_FILE Table Field	Properties Dialog Box	Comment Date
DWG_DATE	Not in Dialog Box	This date is stored purely in the DWG file for the floor plan. It is the date the floor plan was created in raw AutoCAD or last modified in raw AutoCAD.

The logic of Auto-Synchronization can be seen in the following flowchart.



- When the floor plan is opened, Test 1 (FIL_DATE <> DWG_DATE) is applied.
- If this test is True, Test 2 (FIL_LAST_PROCESSED > FIL_DATE or FIL_LAST_MODIFIED > FIL_DATE) is applied to determine whether the synchronisation should be **Cross Match** or **Match Drawing**.
- If Test 1 is not true, Test 3 (FIL_LAST_PROCESSED > FIL_DATE or FIL_LAST_MODIFIED > FIL_DATE) is checked to determine whether to synchronize **Match Database** or take no action.

Synchronize 'Match the Database'

The following objects will be synchronised.

- Fixtures
- Products
- Other Blocks

Synchronize 'Match the Drawing'

The following objects will be synchronised:

- Fixtures
- Products
- Other Blocks
- Zones
- Aisles

Synchronize 'Cross Match'

The following objects will be synchronised:

- Fixtures
- Shelves
- Products
- Other Blocks
- Zones
- Aisles

Fixtures, other blocks, zones and aisles will be updated in the database to match the floor plan using the existing synchronize functionality. Shelves, planogram definition placeholders and product placeholders will be updated in the floor plan to match the database using the existing Synchronize functionality.

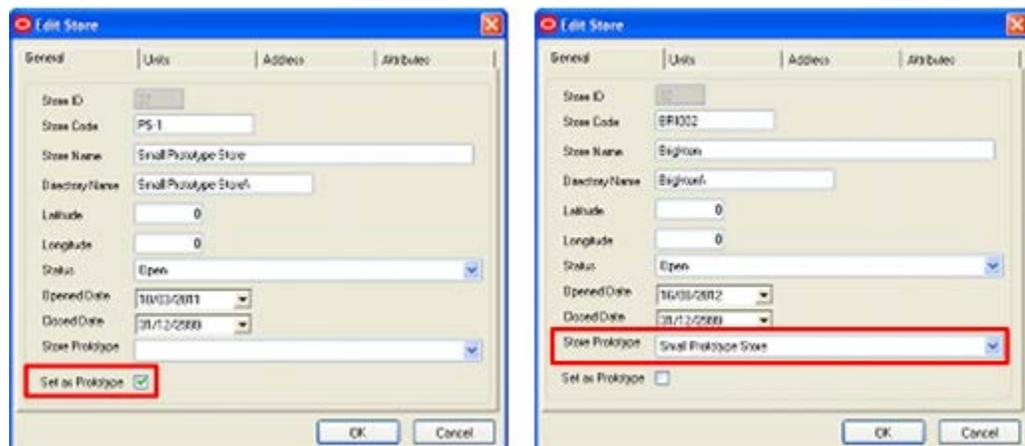
Prototype Stores

Overview of Prototype Stores

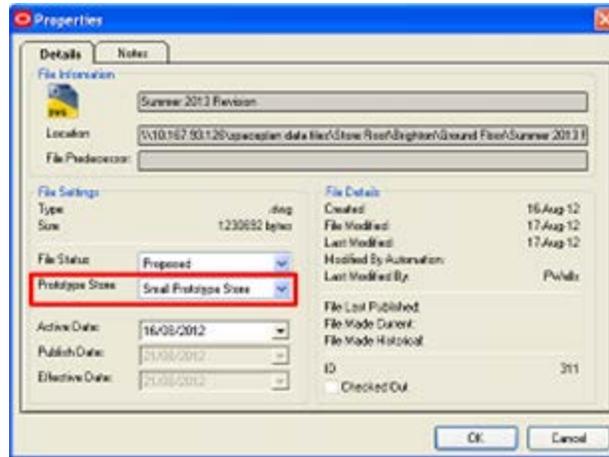
Prototype Stores are a Macro Space Management concept. They are stores that can be designated as having specific properties that can be used as a basis for comparison for other stores.

Setting and Designating Prototype Store

Designating a store as a prototype store is done in **Store Manager** by checking the **Set as Prototype** check box in the **General Tab** of the **Add/Edit Store** dialog box (left hand screen shot below). Once prototype stores have been designated, they can be selected as the basis for comparison by other stores. This is done by selecting the required from the Store Prototype drop down list in the **General Tab** of the **Add/Edit Store** dialog box (right hand screen shot below). This associates the store with its designated prototype store in the database. This link can then be used for reporting purposes.



A further action will be required in the **File Properties** dialog box (right click Menu in Store Manager).



Here the Prototype Store to be used as the basis for comparison is set using the drop down list in the Details tab.

Technicalities of Using Prototype Stores

When a prototype store is assigned, a flag is set in the database.

- The **STR_PROTOTYPE** field is set in the **AVTTB_STORE** table when the prototype store is designated in the Add/Edit Store dialog box in Store Manager.
- The **STR_PROTOTYPE** field is set in the **AVTTB_FILE** table when the prototype store is designated in the File Properties dialog box in Store Manager.

This information can then be used by Macro Space Management's Custom SQL to generate information specific to the currently active floor plan. Example uses include comparing the zones, equipment or merchandise between a store and its designated prototype. This comparison normally meets two criteria:

- The floors are the same type; for example the first floor in one store is being compared with the first floor in another.
- The floor plan in the prototype store is at **Current** status as this represents the in-service version of the prototype store

Example Uses of Prototype Stores

Once a store has been set as a prototype and referenced by another store/floor plan, the information can be used in several ways:

- As a basis for comparison in the Object Browser.
- As a filter for selection in the Object Grid.
- As a basis for comparison in Quick Reports
- As data used in Key Performance Indicators (KPIs).
- As a store to compare against in Store Comparison.

Using Prototype Stores in Planner

Example Uses of Prototype Stores

Once a store has been set as a prototype and referenced by another store/floor plan, the information can be used in several ways:

- As a basis for comparison in the Object Browser.

- As a filter for selection in the Object Grid.
- As a basis for comparison in Quick Reports
- As data used in Key Performance Indicators (KPIs).
- As a store to compare against in Store Comparison.

Object Browser

The information displayed in the Summary Window can be customized by changing the Custom SQL that returns the information. In the example below, the standard information has been customized to allow a comparison of the area of the zones in the current and prototype stores. This allows the areas of the zones in stores of dissimilar shape to be adjusted until they occupy roughly the same area.

Summary				
Zone Name	Gross Area (sq ft)	Net Area (sq ft)	Prototype Gross Area (sq ft)	Prototype Net Area (sq ft)
Food and Drink Zone	1105.04	1105.04	1596.67	1596.67
Checkout and Exit Merchandise	446.42	446.42	446.42	446.42
Entrances and Aisles - not for sales	375.97	375.97	316.91	316.91
Stock Areas - all stock	760	760	760	760
Internal Area Zone - Max Retail Area	3120	3120	3120	3120

Similar modifications can be made to the Custom SQL to display comparisons between the equipment and merchandise in the current and prototype stores.

Object Grid

The information displayed in the object grid for the current floor plan can be compared relative to information in the prototype store. In the example below, planograms present in the prototype store and already placed in the current floor plan are shown in black, planograms present in the prototype store but not yet present in the current floor plan are shown in red.

Group	Name	Bays	Width (ft)	Depth (in)	Height (in)	Splitable	Status
Rice	2_Bay_Uncle_Bens_Rice	2	6	24	72	No	Authorized
Rice	1_Bay_Uncle_Bens_Express_Rice	1	3	24	72	No	Authorized
Rice	2_Bay_Tilda_Rice	2	6	24	72	No	Authorized
Rice	1_Bay_Uncle_Bens_Boil_in_the_Bag	1	3	24	72	No	Authorized
Rice	1_Bay_Tilda_Standard_Rice	1	3	24	72	No	Authorized
Rice	1_Bay_Tilda_Steamed_Rice	1	3	24	72	No	Authorized

14 record(s)

Quick Reports

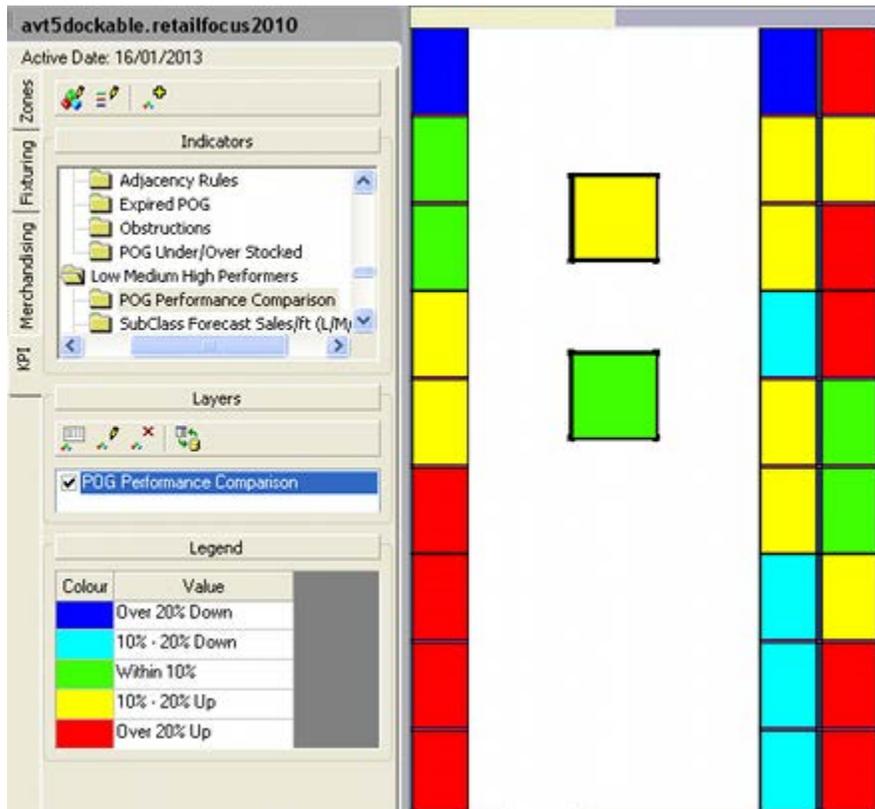
Prototype Stores can also be used in Quick Reports. In the example below, the Quick Report has been set up to show the base linear for products at sub-class level in the currently active store and its associated prototype.

PRODUCTS	STORE	PROTOTYPE
Beers, Lagers and Ciders	18 FT	12 FT
Wines	12 FT	6 FT
Spirits	24 FT	12 FT
Bread	6 FT	6 FT
Tinned Vegetables	12 FT	12 FT
Rice	12 FT	12 FT
Tinned Soup	12 FT	18 FT
Frozen Pizza	4 FT	4 FT

13 Item(s) Summer Revision A.dwg

KPIs

KPI's are another way of comparing the prototype store to the currently active store pan. In the example below, planogram performance in the current floor plan is being compared to that of the prototype store. This enables anyone viewing the floor plan to see relative performance at a glance.



Drawing Comparison

Drawing Comparison is a utility available from the View menu in the planner module, or run directly from the C:\Program Files\Oracle Retail\MSM\Common folder. The utility allows comparison of equipment, merchandise categories or planograms between a designated prototype store and the current floor plan.

Category	Planogram	Template	Store Base	Difference
Tinned Soup	00000051	70	35	Under
Beers, Ciders and Lager	00000037	35	70	Over
Beers, Ciders and Lager	00000040	35	70	Over
Tinned Soup	00000054	70	35	Under
Books and Newspapers	00000036	37	0	Missing
Sauces	00000026	48	0	Missing
Sauces	00000025	48	0	Missing
Spirits	00000024	0	140	Illegal
Wines	00000005	0	70	Illegal

Planogram Differences: Prototype Store : Sum 9 Items

Planogram Substitution

Configuring Access to the Planogram Substitution Functionality

Access to the planogram substitution functionality is configured in the Administration Module. Only users with access to the Administration module will be able to configure access to the Planogram Substitution functionality.

The steps can be summarized as follows:

User Group Role

The User Group the User belongs to (accessed from the Security menu > Functional Security dialog box > User Groups tab in the Administration Module) must have the Admin User role assigned.



Add User Group to Planogram Substitution Command Group

While still in the Functional Security dialog box, switch to the Group relationships tab.



The User Group the User belongs to must be a member of the Planogram Substitution command group.

In addition, the permissions must also be set (right click menu) for that User Group.



When the above actions have been carried out, specific users will have been assigned the right to access the Planogram Substitution Functionality in the Planner Module and to run substitutions in the currently active floor plan.

Planogram Substitution Technicalities

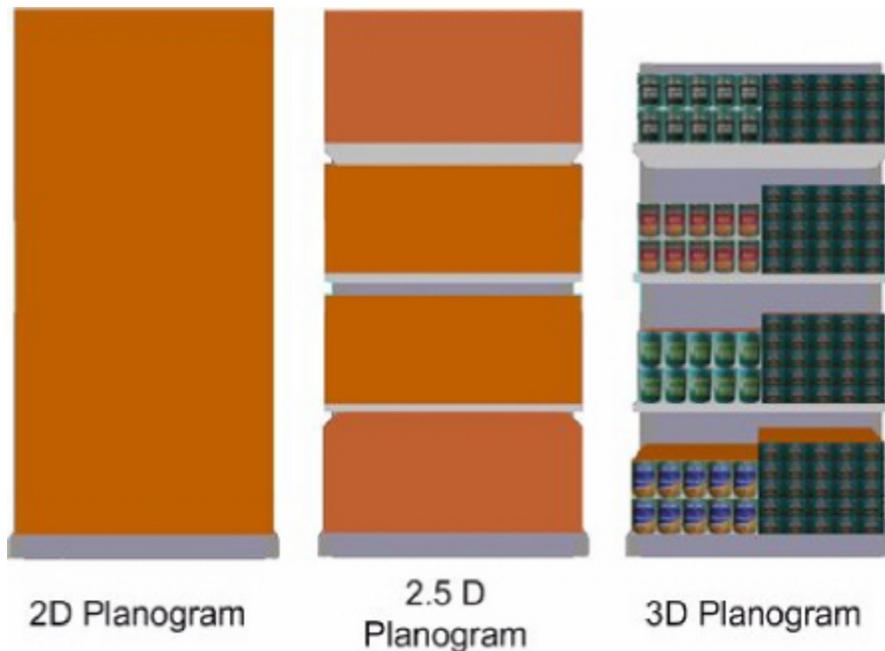
Forms of Planogram Representation

There are three forms that planograms can take.

- 2D Planogram (Placeholder)

- 3D planogram (called 2.5 D in the Merchandiser Module).
- 3D with Product Items (Full Detail).

These appear in the Merchandiser module as follows:



A 2D planogram is purely a placeholder. A 3D planogram (2.5 D in Merchandiser) shows the shelves and a simple product block to show the shelves are occupied. A 3D planogram with Product items shows the shelves, together with full details of the products.

Planograms can only be placed in 2D form in the Planner module and in In-Store space Collaboration. Users in the Merchandiser module have the option to place in 2.5D or 3D form (depending on settings in the Merchandising tab of the Configuration Module) and can explode 2D or 2.5D planograms to the 3D form.

Planograms are only visible in the Planner module if they are in 2D form. Planograms in 2.5D or 3D form will not be visible (but can be indicated by means of a KPI).

The `PLANOGRAM_SUBSTITUTION_PROCESS_EXPLODED` System Variable

The `PLANOGRAM_SUBSTITUTION_PROCESS_EXPLODED` system variable has a significant impact on the way planogram substitutions are carried out. It can be set to 0, 1, 2, 3 or 4 in the Administration Module (General menu).

System Variable Values

System Variable	Description
0	Only planograms in 2D form will be substituted - with planograms in 3D form being ignored. The substituted planograms will be placed in 2D form. No information on the planograms that have been ignored for substitution will be written to the Planogram Substitution Log.

System Variable	Description
1	Only planograms in 2D form will be substituted - with planograms in 3D form being ignored. The substituted planograms will be placed in 2D form. Information on the planograms in 3D form that have been ignored for substitution will be written to the Planogram Substitution Log.
2	Planograms in 2D form will be substituted with planograms also in 2D form. Planograms in 3D and 2.5D form will be placed in 2D form when substituted.
3	3D and 2.5D planograms will be substituted by 2D planograms. A warning will be written to the Planogram Substitution Log identifying the 3D and 2.5 D planograms that were placed in 2D form during the substitution.
4	Planograms in 3D form will be substituted with planograms also in 3D form. Planograms in 2D form will be placed in 3D form when substituted. Planograms in 2.5D form will be replaced by a 2D form if that is the way the planogram design has been defined. It will be replaced by a 3D form if the planogram design is in 3D format.

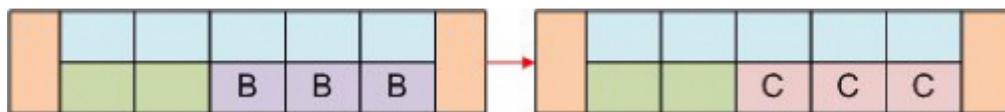
Examples of Planogram Substitution

Planogram Substitution can come in many forms. This allows users complete flexibility in selecting planograms to be substituted and defining the planograms that are to be inserted as their replacements.

Note: A number of examples are given below - in practice the validity of each substitution will be determined by rules selected on the rules tab of the Planogram Substitution Definition dialog box. For example, if the 'Length' rule is off, lengths will not be validated and planograms of unequal lengths can be substituted.

One to One

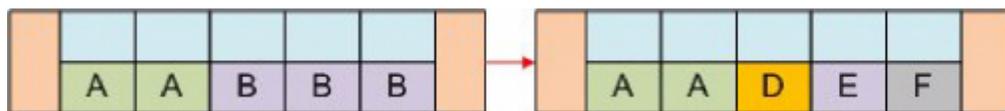
The simplest form of planogram substitution is a 'one to one' substitution. One planogram of a specified length is replaced by another planogram of equal length.



In the above example, the 12 foot planogram 'B' has been replaced with another 12 foot planogram 'C'.

One to Many

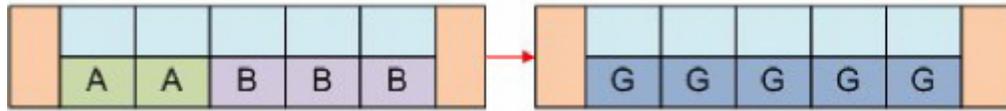
Another form of planogram substitution is a 'one to many' substitution. One planogram of a specified length is replaced by two or more planograms whose combined lengths are the same as that of the planogram they are replacing.



In the above example the 12 foot planogram 'B' has been replaced by the 4 foot planograms 'D', 'E' and 'F'.

Many to One

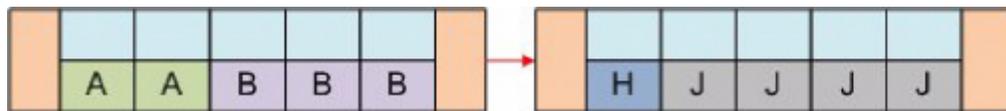
In Many to One planogram substitutions, several planograms are selected and replaced by a single planogram equal in length to the sum of the lengths of the planograms it is replacing.



In the above example, the 8 foot planogram 'A' and the 12 foot planogram 'B' are to be replaced by the single 20 foot planogram 'G'.

Many to Many

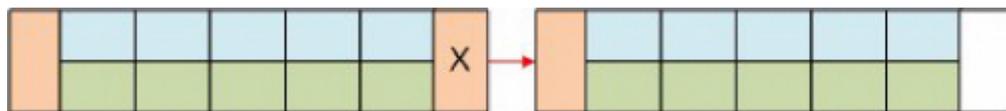
A 'Many to Many' planogram substitution occurs when multiple planograms are selected for replacement and are substituted for by multiple planograms occupying the same length as the planograms they are replacing.



In the above example, the 8 foot planogram 'A' and the 12 foot planogram 'B' are to be replaced by the 4 foot planogram 'H' and the 16 foot planogram 'J'.

One to None

It is possible to carry out a One to None Substitution - the removal of a planogram without specifying a replacement. This might be called for when a planogram has to be removed for legal reasons, etc., but no replacement has been decided on.

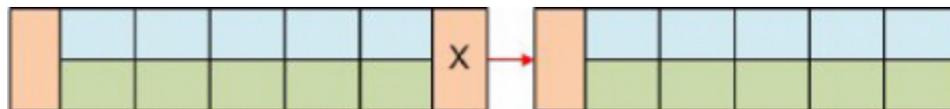


In the above example the planogram 'X' on the end cap of the gondola is to be removed without a replacement being specified.

Note: It is also possible to carry out 'Many to None' substitutions.

One to None with Fixture Removal

As well as a One to None substitution, it is also possible to remove the parent fixture. This might be because parts of a store are being assigned to a different purpose and the fixturing is changing as well as the planograms.



In the above example the planogram 'X' on the end cap of the gondola is to be removed along with its parent fixture.

Revision Substitution

If no existing planograms have been selected for substitution, it is still possible to carry out Revision Substitution. Revision Substitution is when slight changes have been made

to a planogram design and it has been saved as a new version rather than a new design. When planogram substitution is carried out, all other planograms in the store will be automatically be updated to the latest revision providing the Effective Date of the revision is less than the Active Date of the floor plan the Revision Substitution is being carried out in.

Accessing and Configuring Planogram Substitutions

Accessing the Planogram Substitution Functionality

The Planogram Substitution functionality is accessed from the Tools menu.



Functionality	Source	Comment
Planogram Substitution	Administration Module	Pertinent permissions required.
Run Planogram Substitution	Administration Module	Pertinent permissions required.

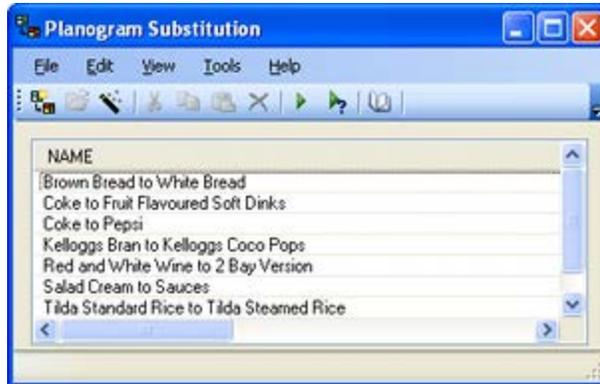
Permissions to access the planogram substitution functionality are set in the Administration module. If the appropriate permissions are not available, a warning message will result and access to the functionality will be denied.



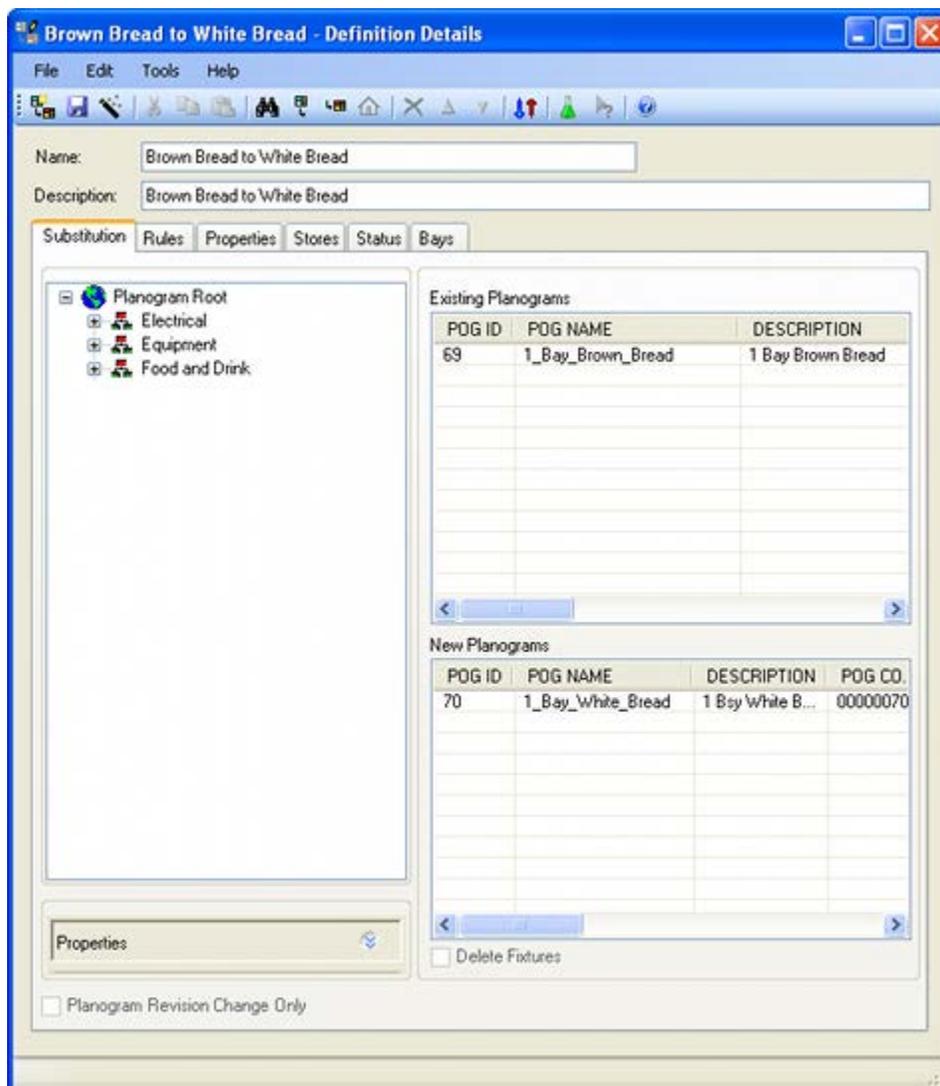
Configuring Planogram Substitutions

Note: For full details on the Planogram Substitution dialog boxes click the Help buttons on the dialog boxes.

Upon selecting Planogram substitution from the Tools menu, the first dialog box to open is the Planogram Substitution dialog box.



Double clicking any named planogram substitution will bring up the Planogram substitution definition dialog box.



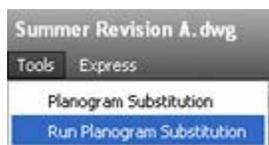
Details of an individual planogram substitution can be configured in the dialog box.

Running Planogram Substitutions

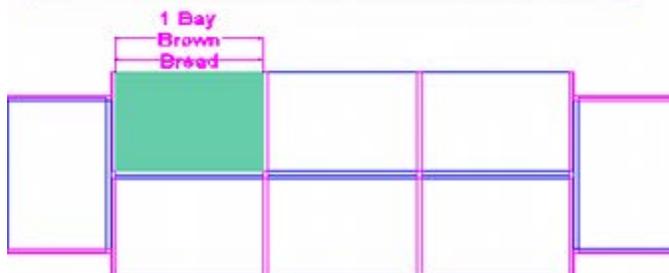
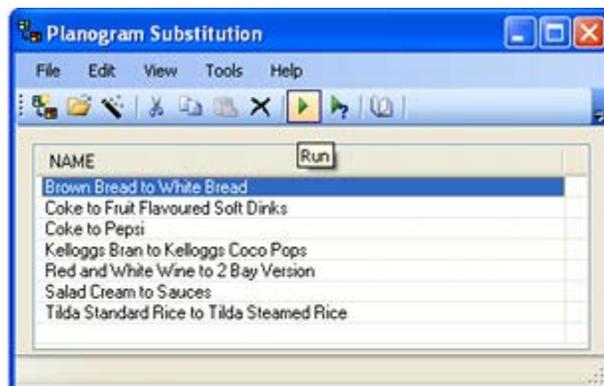
Note: Users will require permissions to be set in the Administration Module before they can access the Planogram Substitution functionality.

Initiating the Planogram Substitution

Planogram Substitutions can be initiated from the Tools Menu.



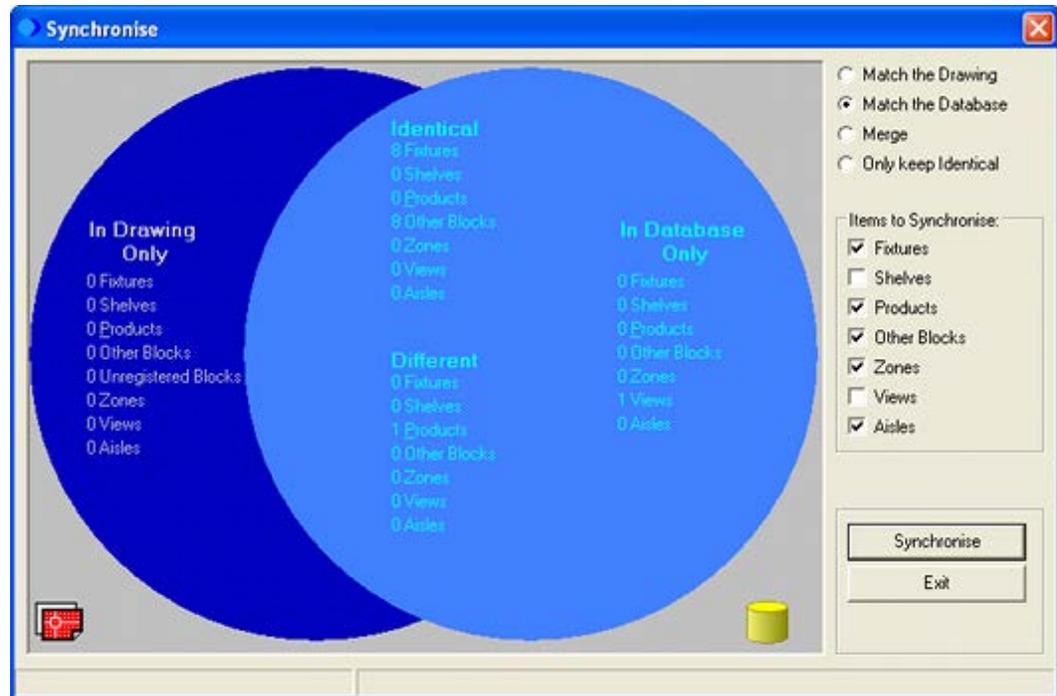
This will cause all valid substitutions to be run for the currently active floor plan. Alternatively, users can use the Run option in the Planogram Substitution dialog box.



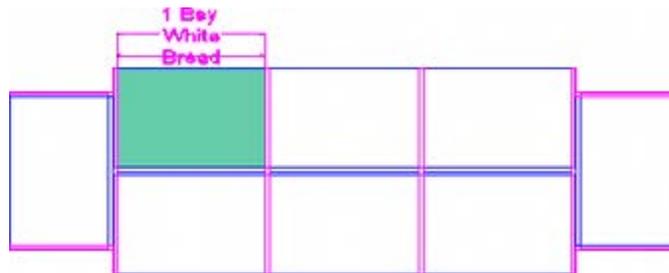
Only highlighted planogram substitutions will run - in the above example the **Brown to White Bread** substitution has been selected.

Actions after Running a Planogram Substitution

Planogram Substitutions execute in the database. In the example above, the database table will have been changed to indicate the currently active floor plan now contains a **White Bread** rather than a **Brown Bread** planogram. However, the information in the displayed in the Planner floor plan will remain unchanged. In order to make the floor plan match the information in the database, synchronization is required. This is done by calling the Synchronization dialog box from either the **File** menu or **Retail** toolbar.



After Synchronizing Match the Database, the planograms in the currently active floor plan will match those held in the database.



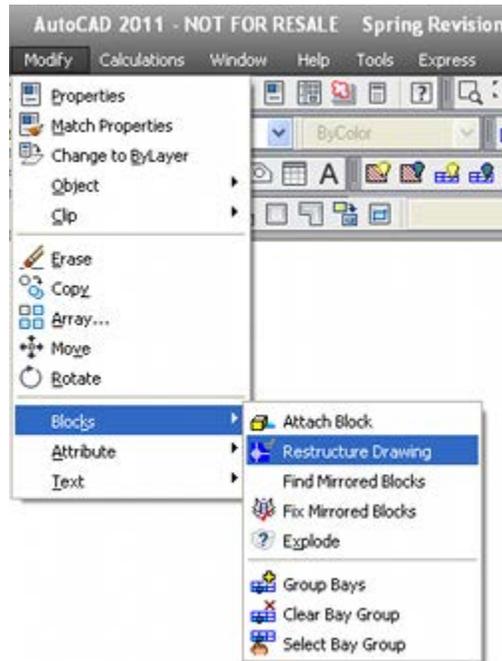
Other Planner Functionality

Restructure Drawing

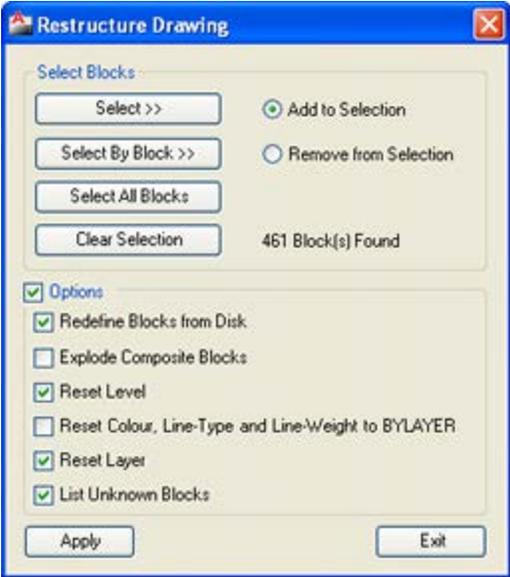
Restructuring Drawing can be initiated from the Retail Toolbar.



Alternatively, the functionality can be invoked from the Modify menu.



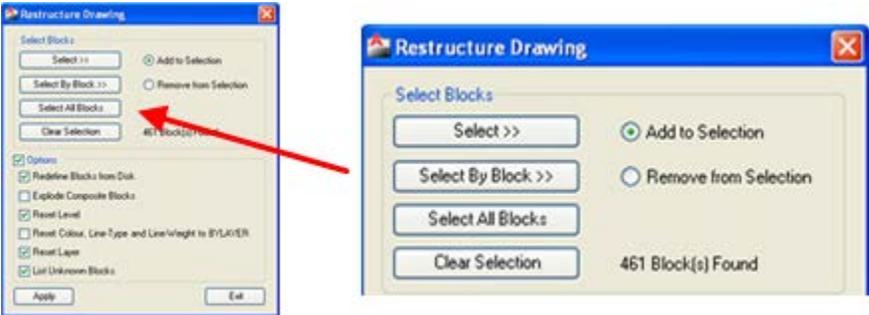
This will bring up the Restructure Drawing dialogue box.



The purpose of this dialog box is to restore blocks in the currently active floor plan to match the properties of the blocks as defined in Fixture Studio.

Selecting Blocks for Restructuring

Selecting Blocks for Restructuring is done by using the varying selection options and building up a list of blocks for the Restructuring operations to be carried out on.



Each selection is added to the current list (Add to Selection radio button) or removed from the current list (Remove from Selection radio button). A list containing several types of blocks can thus be built up - the total number of blocks currently selected being shown in the dialogue box.

Clicking on **Select** or **Select By Block** temporarily hides the Restructure Drawing dialog box and takes the user to the currently active floor plan.

The apply button will remain grayed out until blocks have been selected and one or more check boxes selected.

Select

Select takes the user to the drawing where they can use standard AutoCAD selection methods to select one or more blocks. Valid methods include individual selection, windows or crossing selection boxes and fences. Selection must be completed with a right mouse click.

Select by Block

This option takes the user to the currently active floor plan. Selecting an individual block will select all blocks of that type. Multiple block types may be selected before selection is completed with a right mouse click.

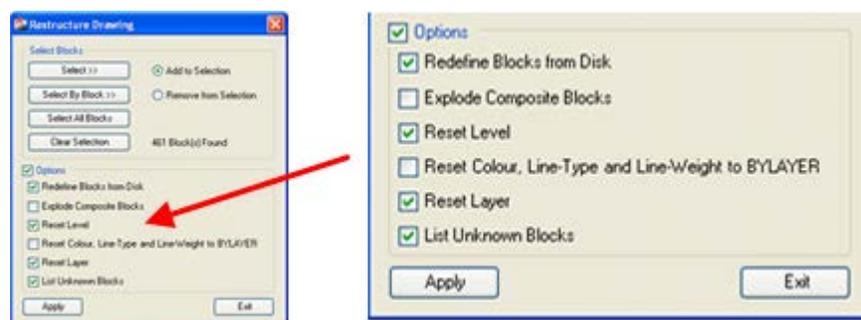
Select all Blocks

Clicking this button will select all blocks in the currently active floor plan.

Clear Selection

Clicking this button will deselect all currently selected blocks.

Once the blocks have been selected, varying **restructuring options** can be chosen.



Restructure Block Options

Redefine blocks from Disk

If the master block definition registered in Fixture Studio has been updated, it is possible to update the older version of the block held in the currently active floor plan with the more recent block held in Fixture Studio. On clicking the Apply button the block definition held in the 'database' section of the drawing will be updated, resulting in all visible instances of the block being changed.

Note: Block names will be ignored if they are not registered in Fixture Studio.

Explode Composite Blocks

This option will take any selected blocks and determine if they are composite (a block made up of made up of two or more previously defined blocks).

If any blocks are composite, they will be exploded into their component blocks and any connection points associated with the composite blocks removed. (If individual blocks within the composite have connection points assigned, these will not be affected).

Note: blocks correctly registered and configured in Fixture Studio have an attribute called BSLINK-ATT assigned to them. If a composite has this attribute assigned, it will be removed when the composite is exploded using Restructure Drawing. If the composite is exploded using AutoCAD Explode, this attribute may be left in the floor plan. It is therefore suggested that Macro space Planning composites are exploded using Restructure Drawing.

Reset Level

This option results in any selected blocks being reassigned to the level (elevation above floor level) they are assigned to in the Insertion Tab of the Block Definition dialog box in Fixture Studio.

If the level is set to 'undefined', no changes will be made in the level for the block.

Note: Both shelves and products should be on undefined levels and should not be affected by this command.

Reset Color, Line Type and Line Weight to BYLAYER

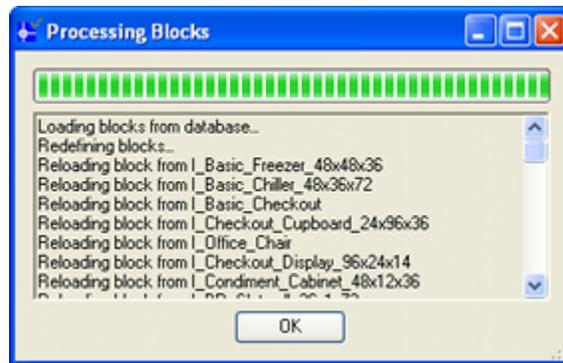
If the colors, line types and line weights of any selected block in the currently active floor plan are different from the default properties of the layer on which they have been placed, the properties of the selected blocks will be set back to those defaults. An example of this could be if a KPI was run in the floor plan. If there was some sort of failure before the floor plan was checked back in, the individual blocks in the drawing could be colored according to the KPI. Running Reset Color, Line Type and Line Weight to BYLAYER will reset those properties to the default values assigned in Fixture Studio.

Reset Layer

If the selected block is on a different layer to that defined for that block in Fixture Studio, the block will be reassigned to that layer in the currently active floor plan.

List Unknown Blocks

It is possible for blocks to exist in the drawing, but not be registered in Fixture Studio. These sorts of blocks are shown in the Processing Blocks dialogue box that appears when the drawing is being restructured.



The Retail Layers Toolbar

The **Retail Layers Toolbar** enables users to quickly control which layers pertinent to Retailing are visible.



Buttons	Description
	Turns on all zones, zone text and aisles / boundary layers
	Turns off all zones, zone text and aisles / boundary layers

Buttons	Description
	Turns on all fixtures (but not fittings)
	Turns off all fixtures (but not fittings)
	Turns on all fittings (but not fixtures)
	Turns off all fittings (but not fixtures)
	Turns on all products, shelves and associated annotation
	Turns off all products, shelves and associated annotation
	Turns on all general notes, markups and general dimension lines
	Turns off all general notes, markups and general dimension lines
	Toggles fixtures to 2D layer (if set up for this)
	Toggles fixtures to 3D layer (if set up for this)

Display 2D and 3D

The **Display 2D** and **Display 3D** options are available from the View pull down menu.



They are also available from the Retail Layers toolbar.

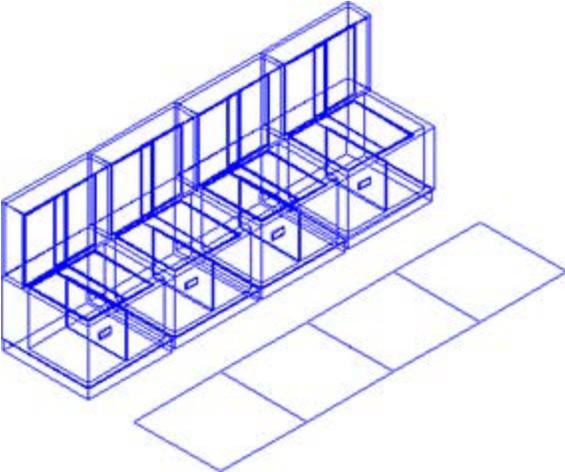


This functionality is specific to Macro Space Management. It requires fixtures that have been configured in a specific way prior to having been registered in Fixture Studio. (The method is described in more detail in the Fixture Studio help file). Fixtures that have not been configured in this manner will not toggle between 2D and 3D form.

If Display 2D is selected, only the base of the fixture will be displayed, giving an outline plan view. If display 3D is selected, all of the fixture will be displayed, giving a three dimensional view if the drawing is viewed from an oblique angle.

The purpose of the 2D functionality is to simplify the floor plan when the floor plan is being published prior to being put into service. Instead of all the construction lines for the fixtures being visible, only the outline is visible in the printed output. This makes the published plan easier to read when distributed to the stores for implementation.

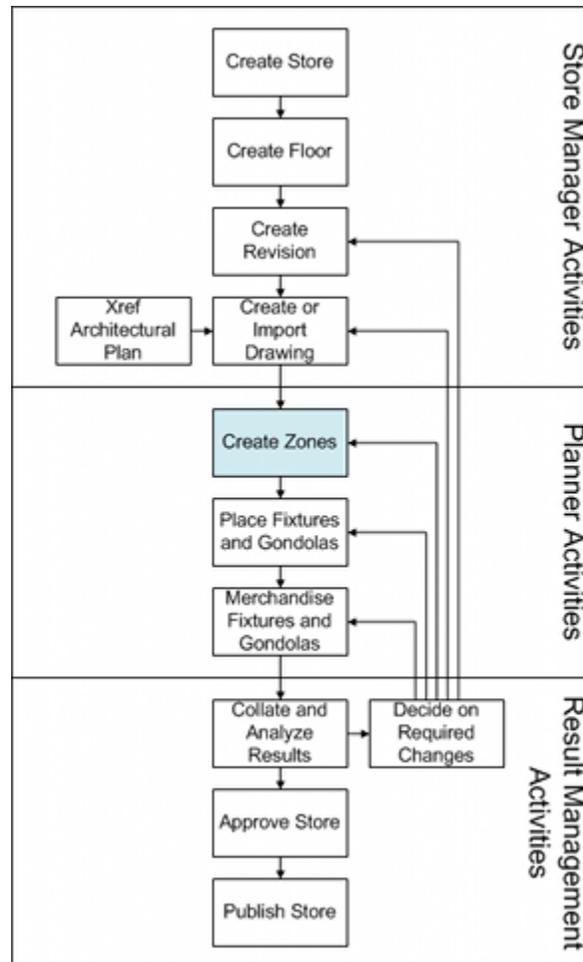
The difference can be seen in the example below where the same fixtures can be seen in both 3D form (top) and 2D form (bottom).



Zones in Planner

Overview of Zones

Note: The information in this section is for guidance only. It should not be taken as a definitive business process.



Configuring Zones

Zones are configured in the Administration Module - their properties can thus only be changed by a user with Administration privileges.

Placing Zones

After the floor plan has been created in Store Manager, the next stage is to subdivide the available floor area into departments/zones. These zones serve to define a section of floor that is used for a specific and clearly defined purpose. Examples would include areas for food and drink sales, cafeterias, holding stock or staff only areas.

Zones can be added to a floor plan and subsequently edited. If zones contain obstructions such as staircases, pillars or lifts, 'holes' can be cut in the zone to allow for these non-productive areas.

Clashing Zones

Because it is important for reporting accuracy to avoid overlapping zones of the same type, a **Detect Clashes** facility is available. This allows overlapping zones to be easily identified and corrected.

Filtering using Zones

It is possible to configure Macro Space Management so that the zones can be used for filtering purposes when selecting from the Object Grid. For example, it is possible to filter the list of available products to they are pertinent for the zone the selected fixture is in.

Reporting using Zones

Zones can be used as filters for reporting purposes. For example it is possible to return performance figures per square foot department by department.

Zones, Filtering and Reporting

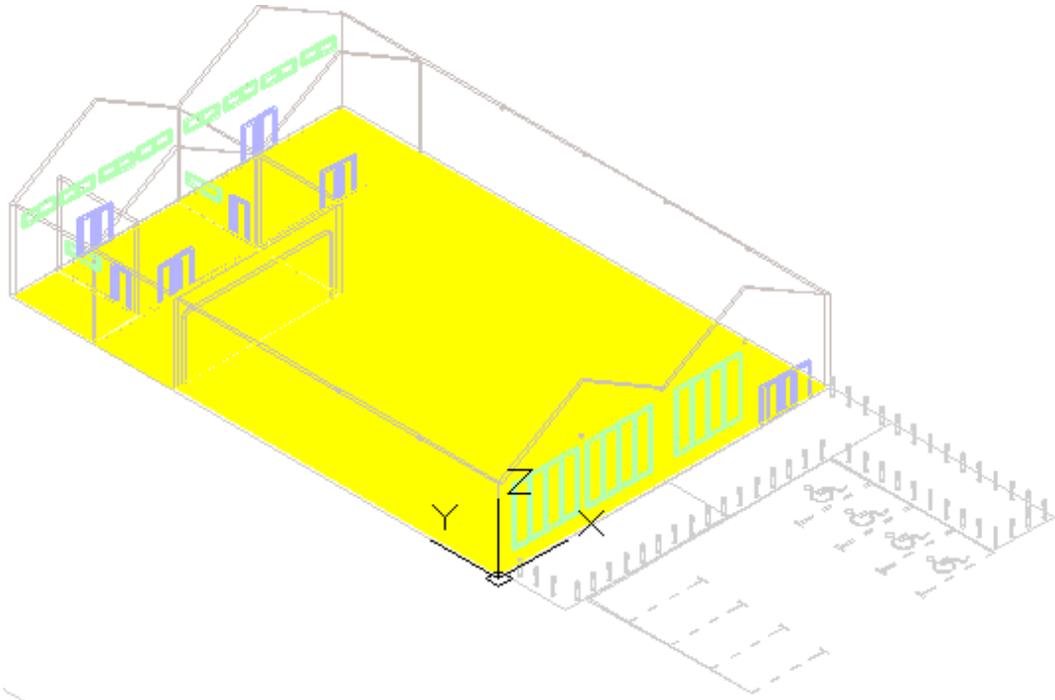
Technicalities of Allocating Fixtures to Parent Zones

Zones have several uses for reporting purposes. The exact use depends on what parent type the zone has been assigned to in the Administration module. The three zone types are:

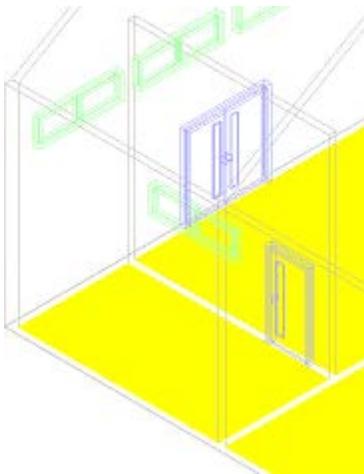
- Internal Area
- Department
- Other

Internal Area

The Internal Area type zone is used to define the maximum area used for retail purposes. There should only be one zone of zone type Internal Area per floor. In the example below, it defines the maximum area within the store.



For accuracy, the internal area zone can be added in a series of stages. This prevents the thickness of walls being taken into account. In the example below, an internal area has been added for each room in the store, ensuring the total area relates to floor area alone and not occupied by the footprint of the walls.



The internal area zone also set bounds for how much area can be assigned to a fixture in the Allocated Area calculation.

Department

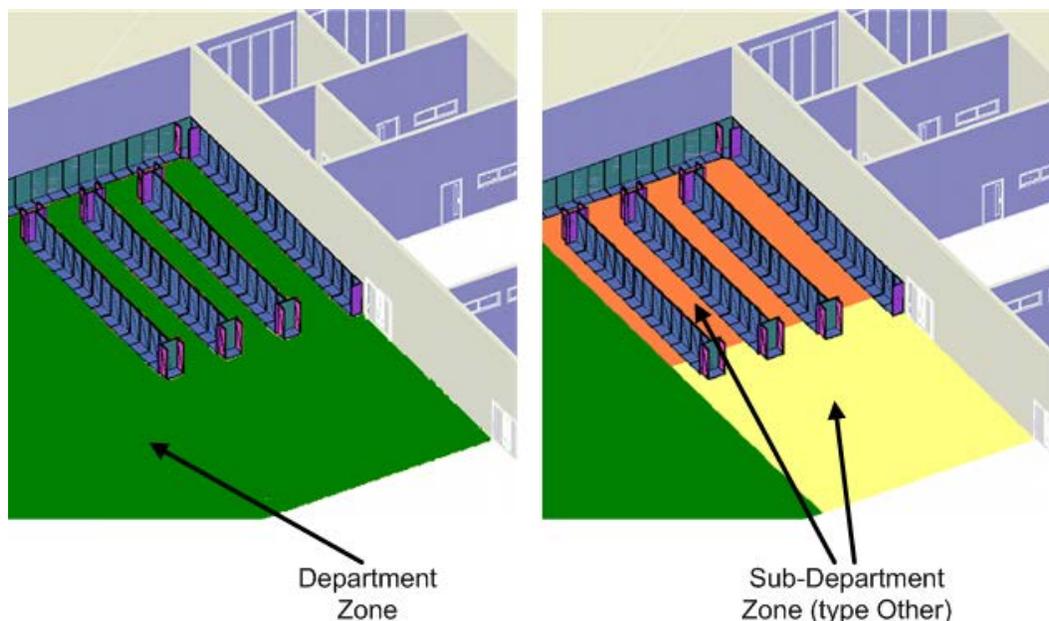
Department type zones are the main zone used for reporting purposes. This is because fixtures can be assigned to one (and one only) department type zone. (This information is stored in the ZON_ID field of the AVTTB_FIXTURE table).

Other

All zones not of Internal Area type or Department type belong to the Other type. Fixtures can be assigned to multiple zones of type Other as well as type Department. (This information is stored in the AVTTB_ZONE_FIXTURE_LINK table).

Example of Reporting using Department and Other Type Zones

Consider the example below. In the left hand image all the fixtures are within a Department type zone. In the AVTTB_FIXTURE table they will be shown as exclusively belonging to that department for reporting purposes.



In the right hand image sub-departments have been assigned within the main department. The AVTTB_ZONE_FIXTURE_LINK table will show fixtures as belonging to both the parent department and the pertinent sub-department. In the case of fixtures crossing the sub-department boundaries, they may be show as belonging to bother departments. Filtering and reporting needs to take this into account.

Note: Information on how fixtures are assigned to tables is not normally accessible to ordinary users. The information on tables specified above is mainly for the benefit of implementors and administrators.

Filtering

Because of the way Macro Space Management (MSM) automatically assigns fixtures to parent zones, this information can be used for filtering purposes in the Object Grid. For example, it is possible to modify the Custom SQL (AVTTB_CUSTOM_SQL table) for the Object Grid so that it only displays products and planograms pertinent to the zone the selected fixtures are in. This form of filtering can be used to save time and make it faster to populate a floor plan with merchandise.

Reporting

Zones can be used as filters for reporting purposes. For example, because fixtures are associated with zones and products or planograms can then be associated with their

parent fixtures, it is possible to report on the performance of the merchandise within a specific zone. These reports can then be aggregated as necessary.

For example, it would be possible to report in the sub-departments within the Food and Drink department to see how sub-segments of this department were performing. It would then be possible to aggregate these reports up to see the performance of the entire department. Because zones have measurable areas, it is possible to report performance related to area.

Department or Sub-Department	Area	Profit	Profit/square foot
Drinks	10,000 ft ²	\$44,000	\$4.40/ft ²
Spirits and Liqueurs	1,500 ft ²	\$10,000	\$6.67
Wines	2,000 ft ²	\$12,000	\$6.00
Beers and Lagers	2,500 ft ²	\$13,500	\$5.40
Soft Drinks	4,000 ft ²	\$8,500	\$2.13

Zones and the Administration Module

Options in the Administration Module allow several aspects of Zones to be configured.

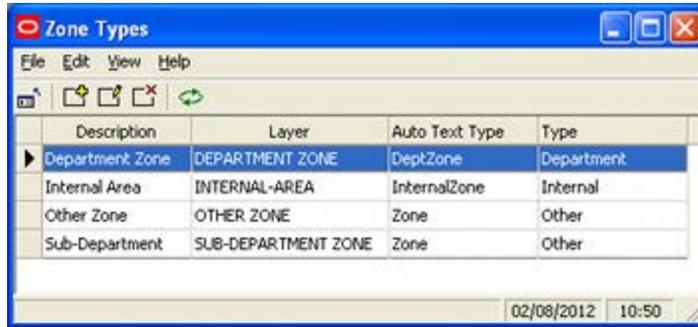
Note: The Administration Module is only available to users with Administrators Privileges.

If you do not have these privileges, you will not be able to access the Administration Module.

- Zone Types can be configured using the Zone Types option.
- Zone Definitions can be configured using the Zone Definition option.
- Zone Hatch Styles can be configured using the Hatch Styles option.
- Zone Annotation can be configured in using the Text Styles option.

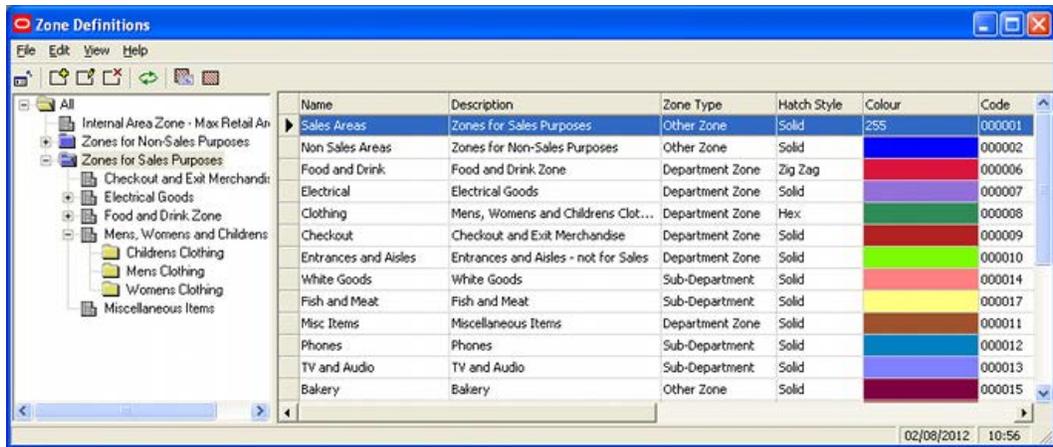
Zone Types

Zones are assigned to one of three types: **Internal Area**, **Department** and **Other**. These types are configured in the **Zone Types** dialog box.



Zone Definitions

Zone definitions are the actual zones that are placed. The hierarchy, name, hatch style and color, etc, can all be set up in the **Zone Definitions** dialog box in the Administration module.



Hatch Styles

Hatch styles are a method of coloring zones in both the Planner and Merchandiser modules. Planner comes with a pre-configured set of hatch styles, but hatch styles need to be configured for Merchandiser. This is done in the Hatch Styles dialog box.



Annotation

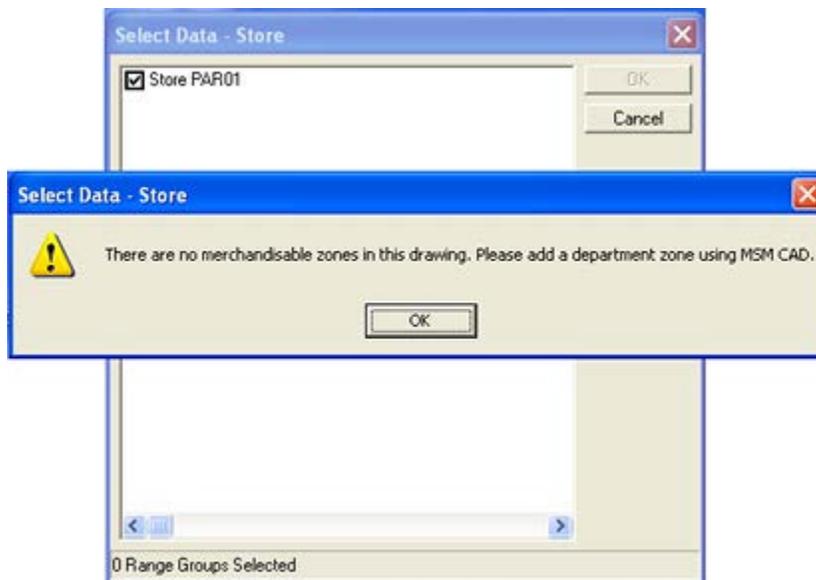
The annotation for zones is controlled from the Text Styles dialog box. This allows full control over the text description placed, together with its position and size.



ID	Name	Description	Font	Bold	Italics	Colour	Layer Alias	Auto
1	General	General Notes	Arial				NOTES-TEXT	None
2	Dept	Dept Zones	Arial				DEPT-TEXT	Department Zone
3	Internal	Internal Zones	Arial				INTERNALZONE-TEXT	Internal Zone
4	Zone	General Zones	Arial				DEPT-TEXT	Zone
5	Product	Product Description	Arial				PRODUCT-TEXT	Product Placeholder
6	Planogram	Planogram Details	Arial				PLANOGRAM-TEXT	Planogram
7	Profile	Profile Details	Arial				PRODUCT-TEXT	Planogram
8	10 BayNumbering	Bay Numbering	Arial				BAYNUMBERING	None
9	11 Fixture	Fixture Details	Arial				FIXTURE-TEXT	Fixture

Zones and In-Store Space Collaboration

In-Store Space Collaboration (an application that can use and modify data created in Macro Space Planning can only work within department type zones within a floor plan. If no zones of that type are available, then an error message will result when a user tries to open that floor plan.



Accordingly, all floor plans intended for use within In-Store Space Collaboration should have a minimum of one department type zone.

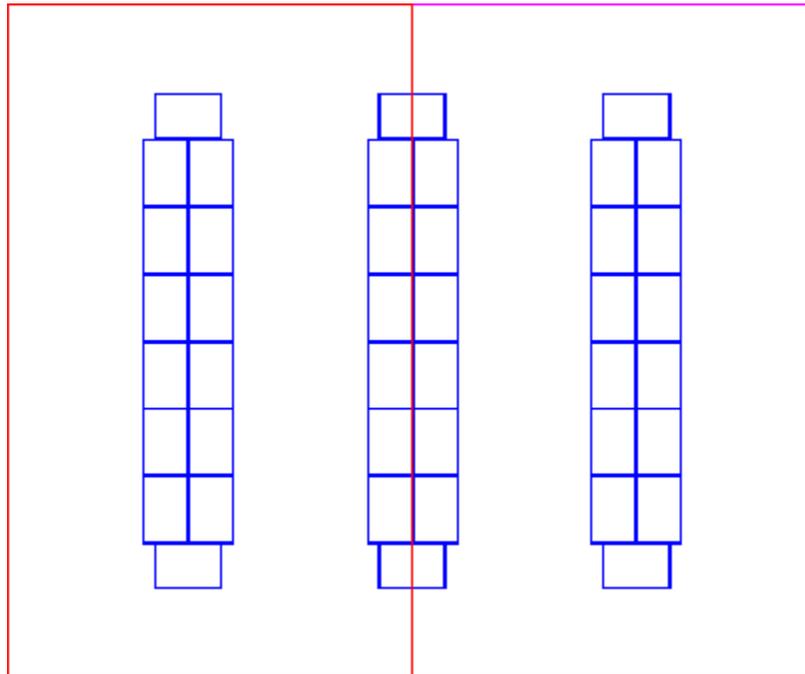
Practical Tips for Drawing Zones

When drawing zones, some practical tips should be borne in mind.

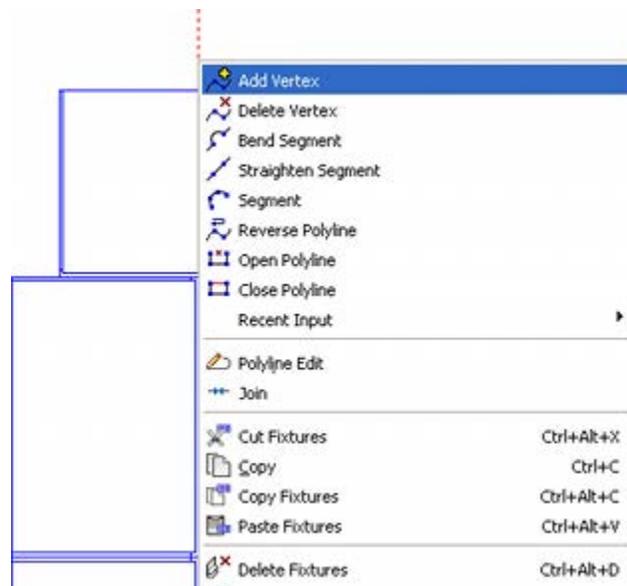
Zones and End Caps

End caps on gondolas present a specific problem as far as zones and reporting are concerned. By virtue of their position, many end caps are precisely bisected by a zone drawn along the axis of gondola. This 50/50 split can cause problems with reporting as it is difficult for the functionality to determine which zone the majority of the fixture is in.

In the example below, the central gondola is precisely bisected by the boundaries of two zones.



The solution is to move the position of the boundaries by using AutoCAD vertices. To do this, select a boundary line for a zone, right click and select Add Vertex.

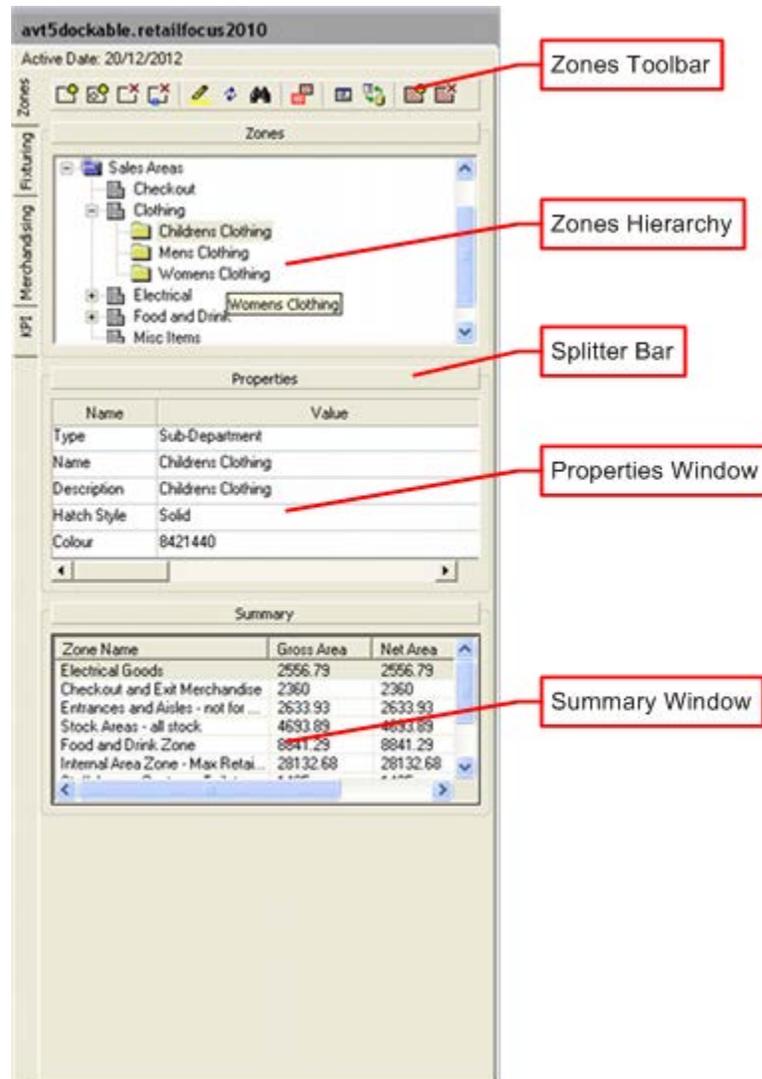


With Object Snap (OSNAP) turned on, snap the line to a corner of the end cap.

Zones on the Object Browser

Overview of Zones on the Object Browser

The **Zones Tab** can be used to add and delete zones in the currently active floor plan. It can also be used for other operations involving zones including highlighting them in the zone hierarchy or floor plan and adding and removing hatching.



- The Zones Toolbar contains a series of icons used to control operations concerning zones.
- The Zones Hierarchy displays the available zones.
- Clicking on the Splitter Bars will open or close individual windows on the Object browser.
- The Properties Window has information on the zone currently highlighted in the hierarchy.

- The Summary Window has information on the zones currently placed in the floor plan.

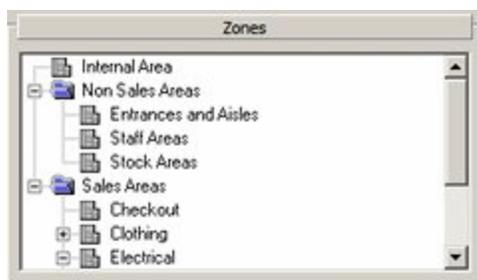
Using the Object Browser for Zone Operations

The **Zones Toolbar** contains a series of icons allowing various operations to be carried out on Zones.



Icon	Description
	Add Zone Boundary
	Add Hole
	Delete all of Zone Description
	Delete Specific Zone
	Highlight Zone in Drawing
	Highlight Zone in Tree
	Find
	Detect clashes
	Configuration Options
	Refresh
	Add Hatching
	Remove Hatching

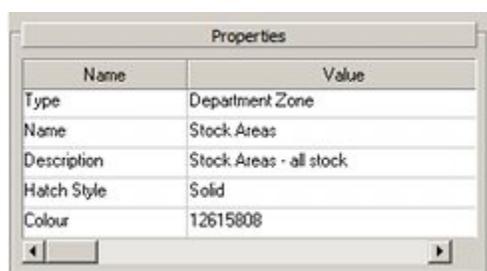
The **Zones Hierarchy Window** is found immediately below the toolbar.



It contains a Hierarchical Tree giving a list of all the available Zone types.

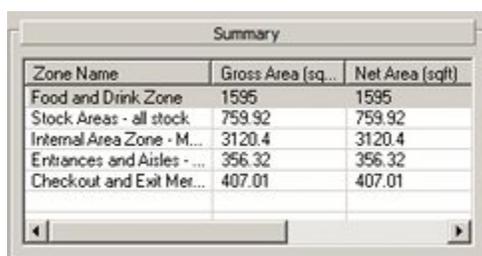
Note: Zone types and descriptions can be added, edited or deleted using the Administration Module.

The **Properties Window** gives details of the Zone Definition that has been selected in the hierarchy.



Note: Information in this window is controlled from Custom SQL in the AVTTB_CUSTOM_SQL table. Administrators can customise the information that appears in the Properties Window by modifying the Custom SQL.

The **Summary Window** contains details of Zones within the currently active drawing.



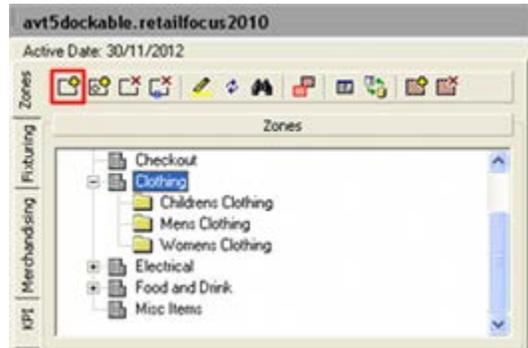
The information typically includes Zone Name, Zone Description, and Gross and Net Areas. Zone Names and Zone Descriptions can be sorted by clicking on the column headings. If a zone has been selected in the drawing, it will be highlighted in the summary of zone properties.

Note: Information in this window is controlled from Custom SQL in the AVTTB_CUSTOM_SQL table. Administrators can customise the information that appears in the Summary Window by modifying the Custom SQL.

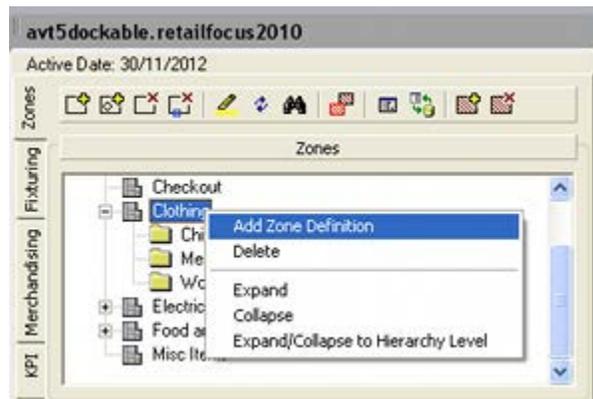
Creating and Editing Zones

Adding the Zone

Zones can be added to the currently active floor plan by highlighting a zone in the zone hierarchy in the Object Browser and clicking the Add Zone icon on the toolbar.



Alternatively, zones can be added by highlighting a zone and using the right click menu.



Drawing the Zone

Note: Zones must be a single closed boundary. If the end of the line defining the boundary is not correctly attached to the start (**Closed** in AutoCAD terminology), the zone will not draw correctly.

Once **Add Zone** has been selected from the Object Browser toolbar, the **Specify start point** prompt will appear in the command line.

```
Command: AVT_SETFOCUS
Command: Specify start point:
```

The zone can be drawn using various methods in AutoCAD. The easiest of these are:

- **Using OSNAPS**

An effective way to draw a zone conforming to the contours of door, walls, stairs, etc, is to turn AutoCAD's OSNAP (Object Snap) functionality on and draw the zone section by section, snapping to specific points in an architectural plan. The final part of the zone (joining the line back to the start point) is best done by typing the AutoCAD Close command into the command line. This will cause a

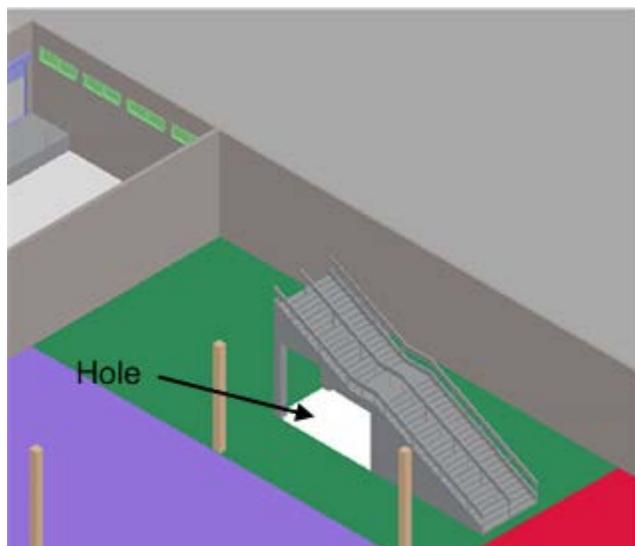
line to be drawn from the position of the last drawn point to the start of the zone, thus forming the closed boundary required for the zone to be drawn directly.

- **Drawing the zone using AutoCAD's coordinate system**

An alternative way of drawing the zone is to draw a line to points defined by AutoCAD's coordinate system; either to absolute points (560,480) or to points relative to the last point (@560,480). As per the OSNAP method, the final part of the zone (joining the line back to the start point) is best done by typing the AutoCAD Close command into the command line.

Cutting Holes

There will be unproductive areas of floor in any floor plan. In the example below, the area under the stairs cannot be used. The white rectangle visible under the stairs represents a hole cut in the zone.

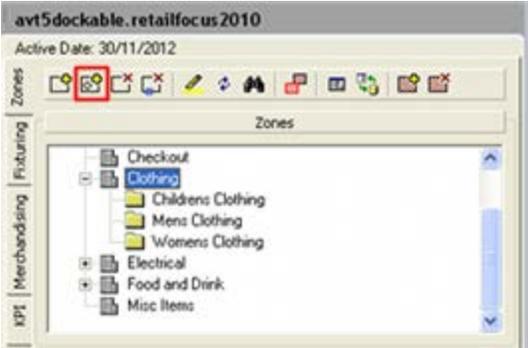


This allows performance metrics to be based on the usable area of the zone, not its total area.

Summary			
Zone Name	Gross Area	Net Area	Zone Type
Food and Drink Z...	8740.82	8740.82	Department Zone
Electrical Goods	9120.14	9120.14	Department Zone
Bakery	2674.16	2674.16	Other Zone
Fish and Meat	1699.06	1699.06	Sub-Department
Mens, Womens a...	3466.28	2926.28	Department Zone
Beers, Wines and...	2633.2	2633.2	Sub-Department
Frozen Goods	1699.06	1699.06	Sub-Department

In this example, the Gross Area of the zone is 3466 square feet and the net area 2926 square feet. Assuming the zone has generated \$50,000 of sales in a week, using the gross area would give sales of \$14.4 per square foot and using the net area would give sales of \$17.1 per square foot. The latter figure is probably more representative of how the zone is performing.

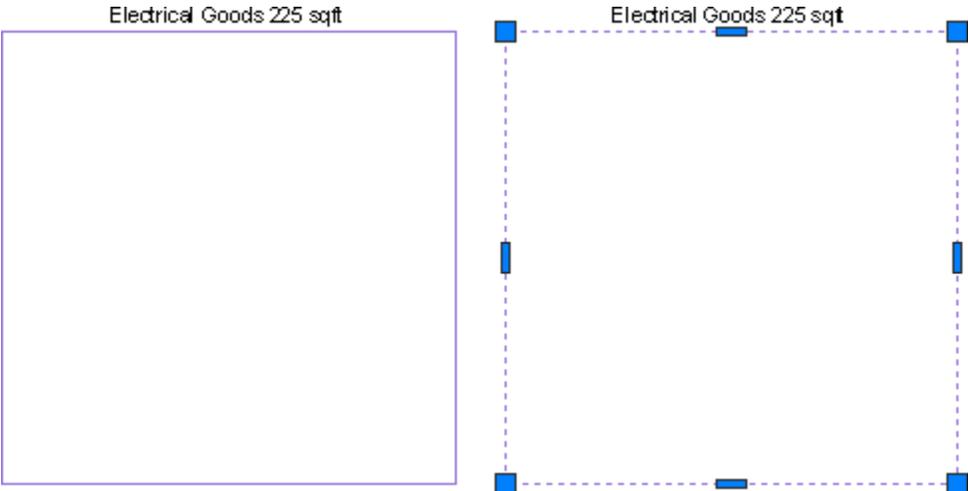
To cut the hole, highlight the zone into which the hole is to be cut in the zone hierarchy in the Object Browser then click the **Cut Hole** icon on the Zone toolbar.



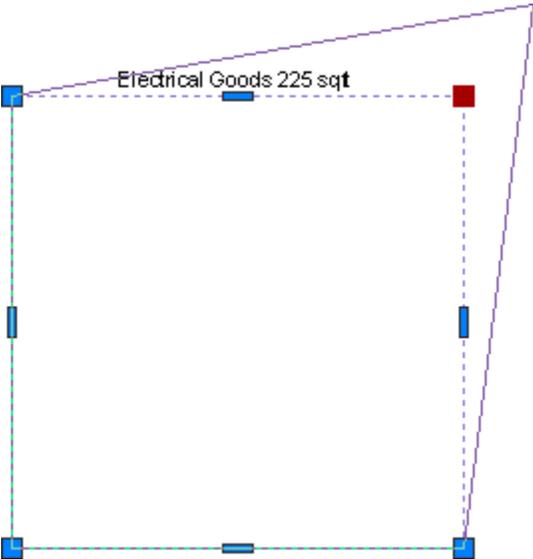
The hole can then be drawn in a similar way to a zone.

Editing the Zone Boundaries

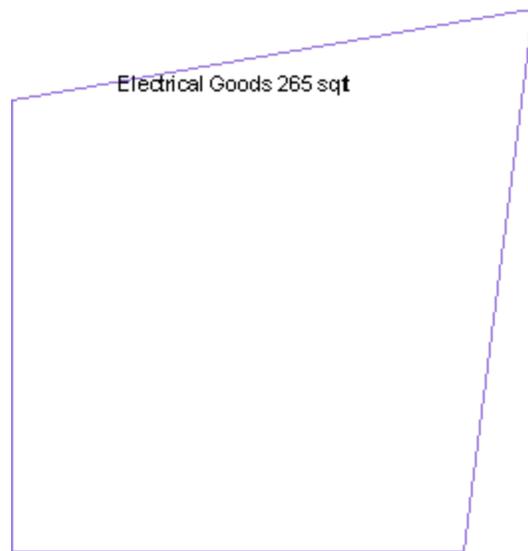
The position of a zone boundary can be changed using AutoCAD Grips. To resize a zone, click on the boundary to activate the grips. These appear as blue squares or rectangles.



The grips can then be used to drag the zone boundary to its new position.

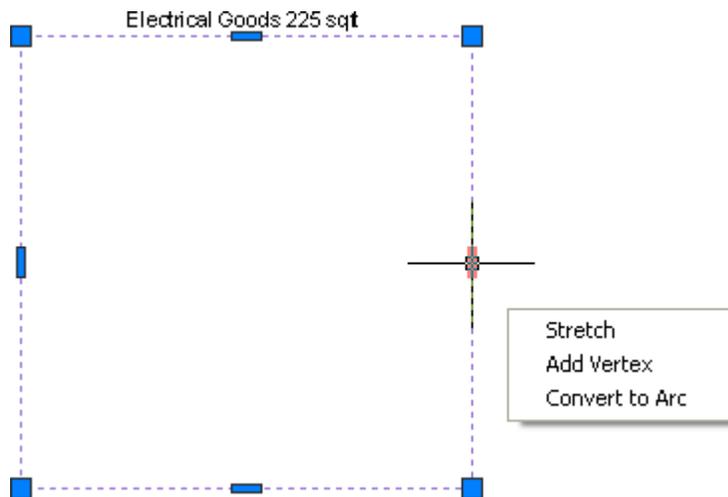


On hitting the Escape Key, the boundary will become permanent in its new position.



The zone annotation will update to reflect the new size, but changes in the zone boundary position will not be written back to the database. Accordingly, after the zone boundaries have been modified, the floor plan must be synchronised **Match the Drawing**.

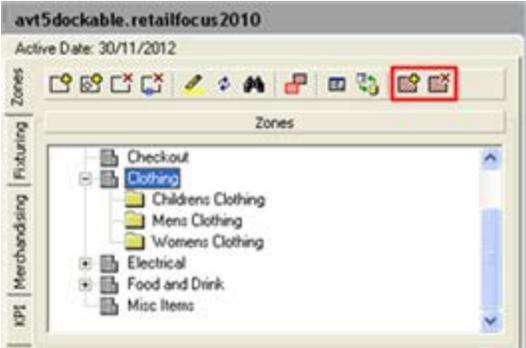
A slightly more advanced way of changing the zone boundaries is to activate the AutoCAD grips, then hover the mouse pointer over one of them. This will bring up a list of additional options.



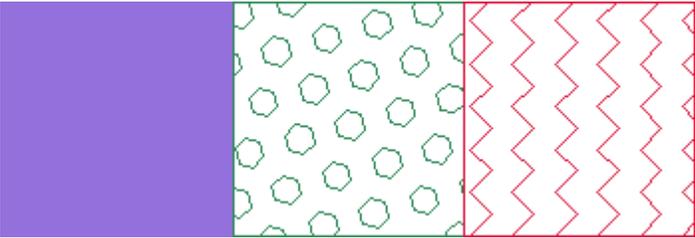
After using these options, the floor plan must again be synchronized.

Hatching the Zone

If zones are not set to hatch automatically on being placed (configuration module), they can be hatched (or have the hatching removed) by means of the Add Hatch or Delete Hatch icons on the zones toolbar.



The example below show solid, hexagon and zig-zag hatches.



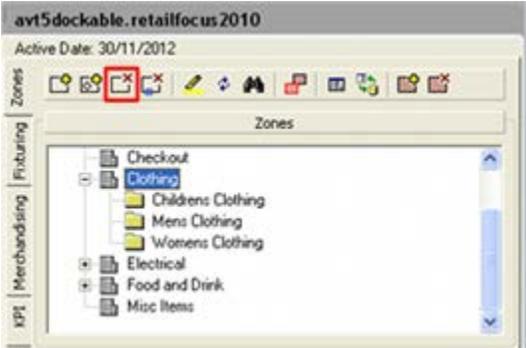
Deleting Zones and Holes

Deleting holes and zones can be done in one of two separate ways:

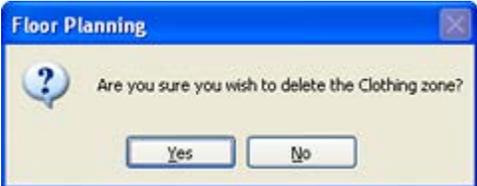
- Deleting all instances of a zone (and its associated holes) in a floor plan
- Deleting a specific instance of a zone or a hole

Deleting all instances of a zone (and its associated holes) in a floor plan

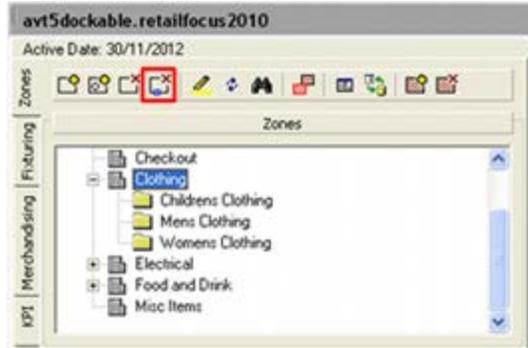
Deleting all instances of a zone within a floor plan is done by highlighting the appropriate zone in the zone hierarchy in the object browser and clicking Delete zone in the toolbar.



The Delete Zone confirmation will appear. On clicking OK, the zone will be deleted.



Deleting a specific instance of a zone or a hole



Deleting as specific instance of a zone within a floor plan (or hole within a zone) is done by clicking the **Delete Boundary/Hole** icon on the toolbar. A prompt will appear in the command line asking the user to select

```
Command: *Cancel*
Command: Select boundary to remove
```

On left clicking the outline of a zone or hole, it will be deleted from the floor plan without the need for further confirmation.

Zone Highlighting Options

There are two highlighting options available on the zones toolbar.

- Highlight Zone
- Highlight Selected Item in Tree

Highlight Zone

Highlight zone allows a user to find a zone in the floor plan. The option has to be turned on by toggling the icon on the Zones toolbar so it is depressed.



After the icon has been toggled on, highlighting any zone in the zone hierarchy will cause the selected zone to be highlighted in the floor plan. The highlighting method will depend on setting in the Zones tab of the Configuration module.

Note: It is recommended that the Highlight zone option be left off until needed - leaving it on may have a marginal impact on performance in the floor plan.

Highlight Selected Item in Tree

Highlight Selected Item in Tree allows a user to select a zone in the floor plan and have it highlighted in the Zone Hierarchy in the Object browser. The option has to be turned on by toggling the icon on the Zones toolbar so it is depressed.

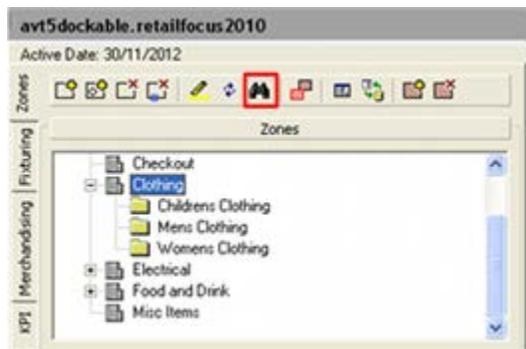


Clicking on the boundary of the zone in the floor plan will then cause that zone to be highlighted in the hierarchy.

Note: It is recommended that the Highlight zone option be left off until needed - leaving it on may have a marginal impact on performance in the floor plan.

Find In Tree

Find in Tree allows users to search for Zone Names in the Zone Hierarchy.



Clicking the icon will bring up the Find Zone dialogue box.



To use the dialogue box:

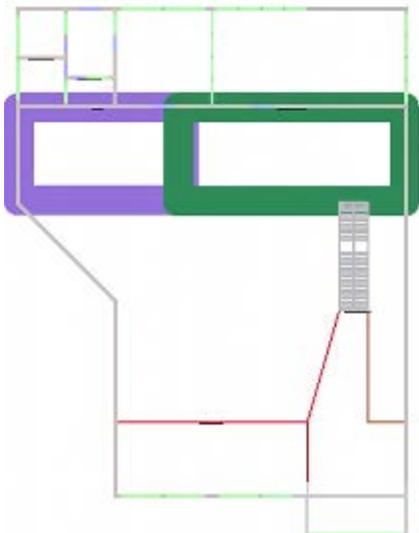
1. Type a text string into the text box
2. Click on the search Icon
3. Any zones with a name matching the search string will be listed
4. To select a zone in the hierarchy, highlight it and click the OK button

Detect Clashes

Clashes occur when the boundaries of two zones of the same type (which must be on the same AutoCAD layer) overlap. This could mean inaccurate reporting. If the Detect Clashes option in the zones tab of the Configuration module has not been selected, the **Detect Clashes** option on the Zones toolbar can be used to manually check for clashes.



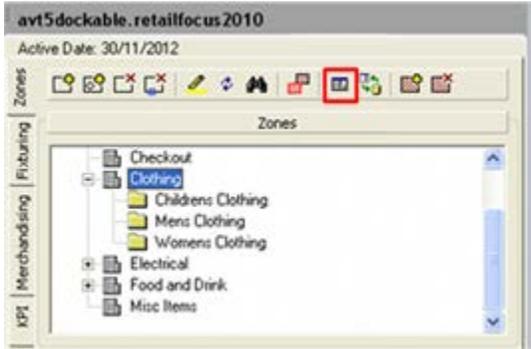
If clashes exist, the offending zones will be highlighted.



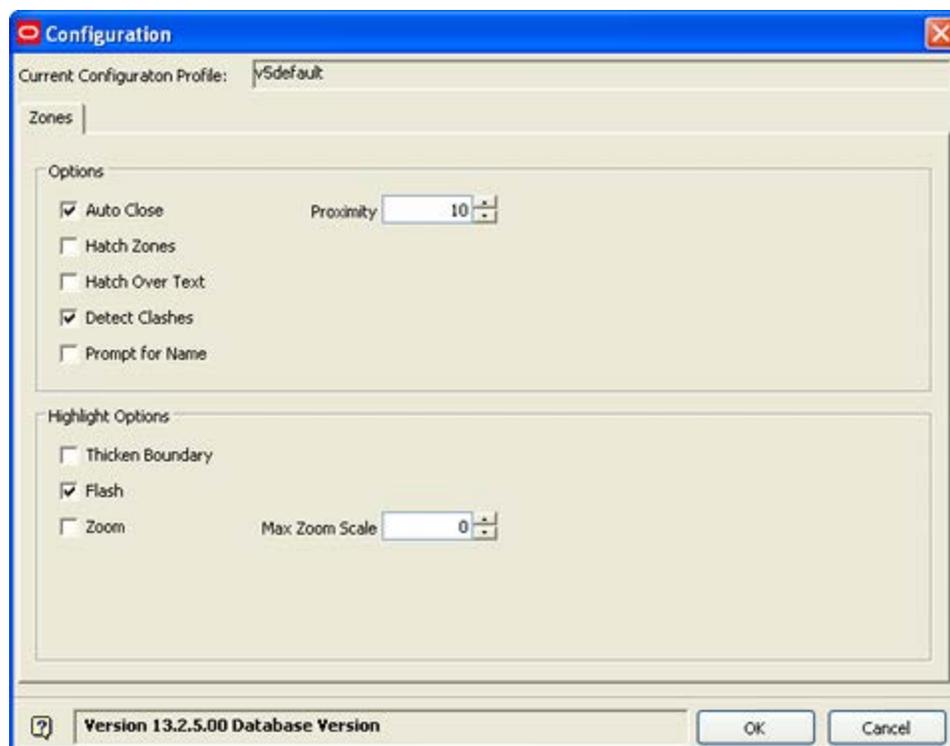
In the above example highlighting has been set to the thicken option - the two overlapping zones have greatly thickened boundaries.

Configuring Zone Behavior

The way zones behave can be configured in the Configuration module. To access the Zones tab, click **Properties** on the Zones toolbar.



This will bring up the Zones tab of the Configuration module.

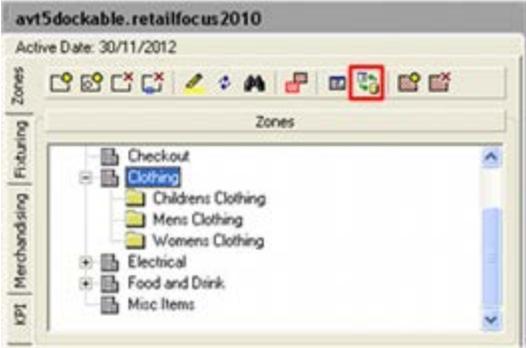


The general options are as follows:

- **Auto Close** will cause the zone boundary to close (became a continuous boundary) when drawing it if you left click with the mouse within the **Proximity** distance of the start point of the zone.
- **Hatch** determines if the zones should hatch when drawn.
- **Hatch over Text** specifies whether the hatch should overlap the text or not.
- **Detect Clashes** will cause any zones of the same zone type to flash if the boundaries overlap when being drawn. This is important for reporting accuracy.
- **Prompt for Name** will allow the user to enter a custom name for the zone when placing it.
- The highlight options are as follows:
 - **Thicken Boundary** will cause the zone boundary to thicken when the Highlight Zone option is chosen on the zone toolbar.
 - **Flash** will cause the zone boundary to flash when the Highlight Zone option is chosen on the zone toolbar.
 - **Zoom** will cause the zone boundary to increase in size when the Highlight Zone option is chosen on the zone toolbar.

Refreshing Zone Information

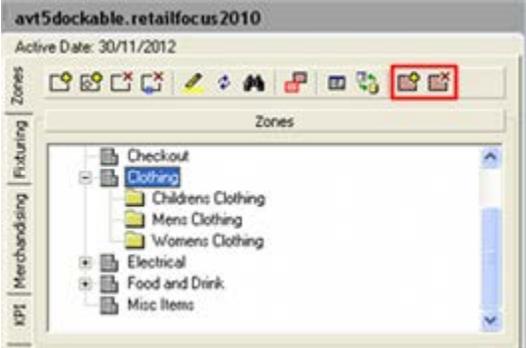
The Refresh option refreshes zone information in the Object Browser.



Clicking on the Refresh button in the zones tab will load the latest zone information from the database into the zone hierarchy. This is used to update the Object Browser when changes have been made to Zone Types and Zone Descriptions in the Administration module.

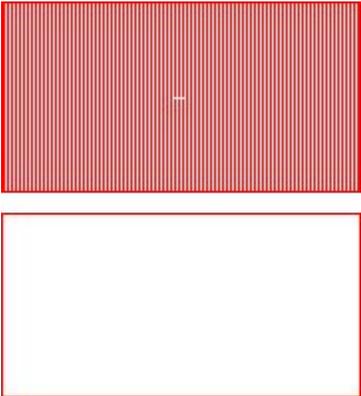
Adding and Removing Hatching

Hatching can be added to or removed from zones using the appropriate option.



- To hatch a zone, select the zone in the hierarchy and click the Hatch icon.
- To remove the hatch, select the zone in the hierarchy and click the Delete Hatch icon

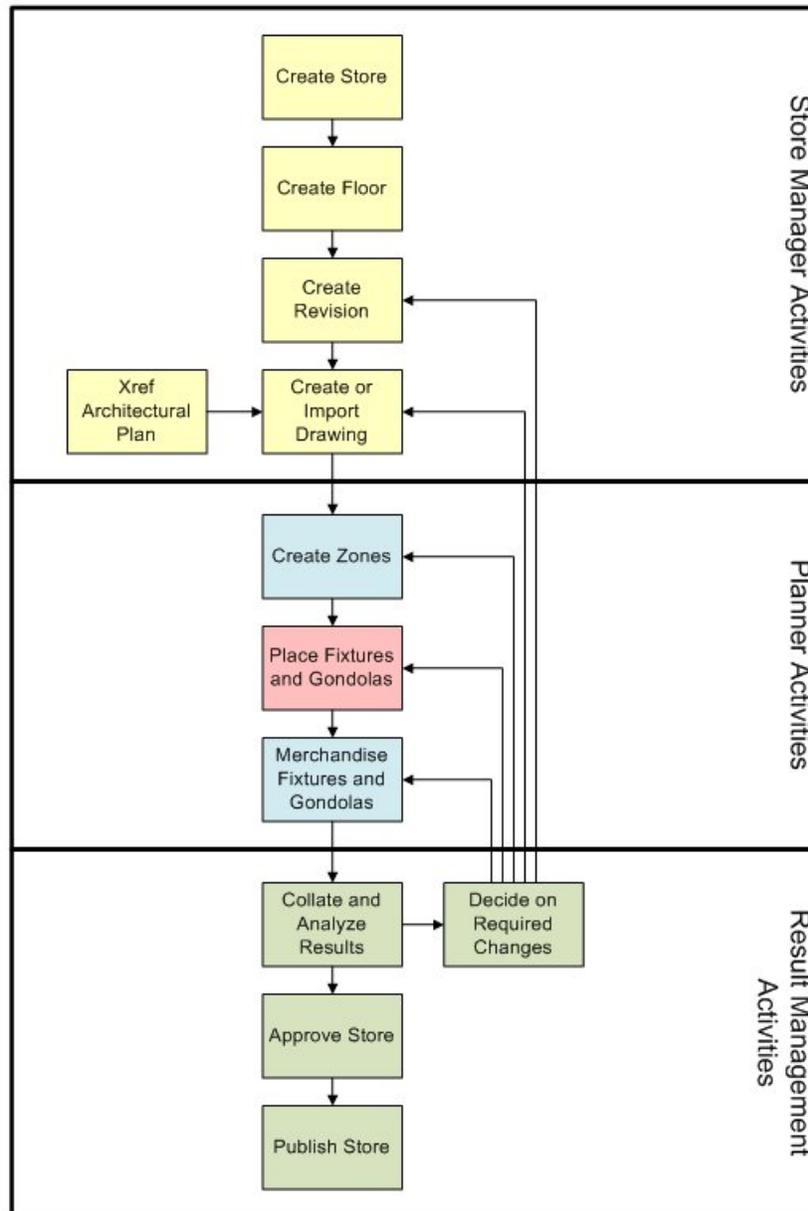
In the example below, the top zone is hatched, the bottom one is not.



Overview of Fixturing

The Planner Module and the Business Life Cycle

The **Planner module** is part of the Business Life Cycle.



Store Manager Activities start the business cycle.

Here stores, floors and revisions are added, edited or deleted. Revisions contain store plans. These are often x-refed to architectural plans so that fixtures and gondolas can be placed relative to the walls of the store.

(Store Manager can be accessed from both Planner and Merchandiser).

Store Planning involves the placement of zones, fixtures and merchandise.

Zones can only be placed in Planner (although they can be seen in Merchandiser).

Fixtures and merchandise can be placed in both Planner and Merchandiser. (It is normally more convenient to carry out Fixturing Operations in Planner and Merchandising operations in Merchandiser).

Using the Fixtures module, the user can:

- Place single or multiple fixtures, fittings and gondolas.
- Move or rotate fixtures, fittings and gondolas.
- Erase fixtures, fittings and gondolas.
- Number bays in fixtures and gondolas.
- Calculate effective sales areas.
- Collate information on fixtures and fittings.

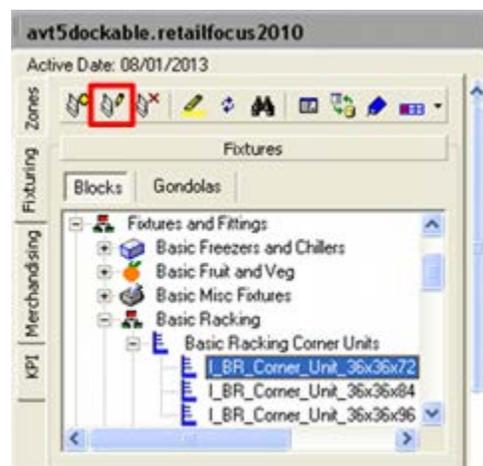
After the floor plan has been designed, each fixture can subsequently be populated by a predetermined quantity and arrangement of sales products using the Planogram Selection and Add Product modules. After the floor has been merchandised, Macro Space Management can be used to analyze and report on the effectiveness of the layout.

Result Management involves checking the completed store layout by means of Reports and Key Performance Indicators before releasing the layout to stores for implementation or starting on the next phase of planning.

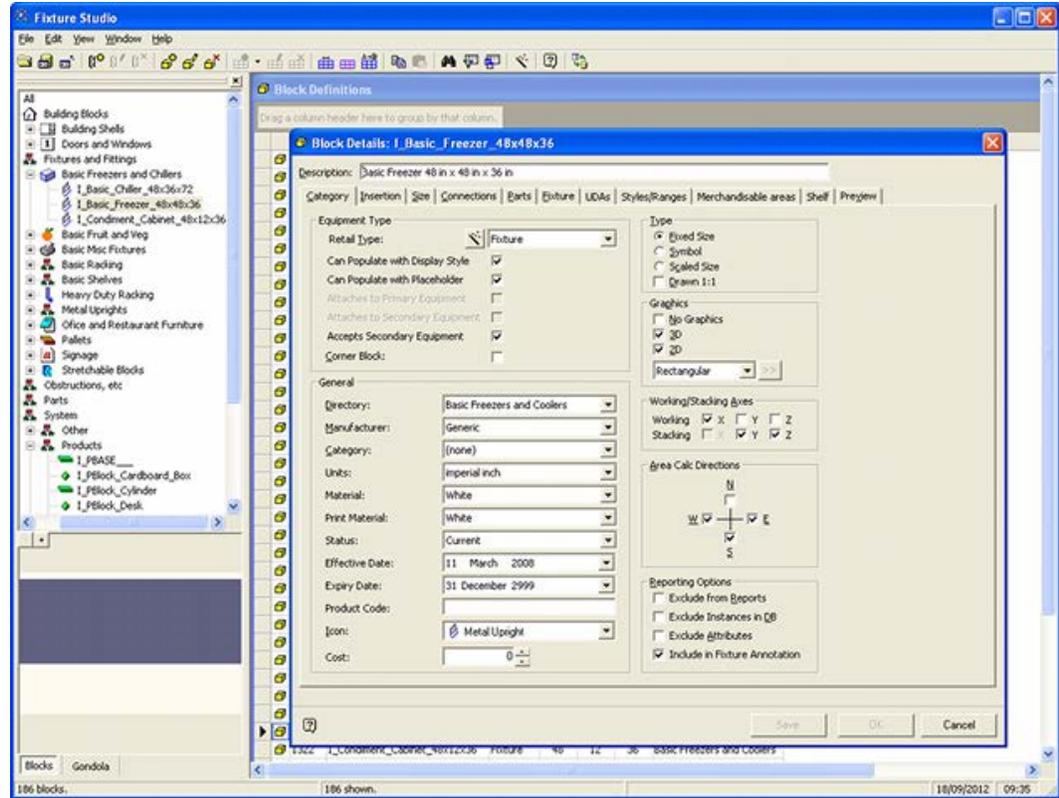
About Fixture Studio

Fixture Studio is a stand alone module where Fixtures and Gondolas can be added, edited and deleted. These fixtures and gondolas can then be used on the Planner (and Merchandiser) environments

Fixture Studio can be opened (or activated if already open) from the Object Browser in the Planner module by clicking on the Edit icon on the Fixturing toolbar. (There is an Edit Fixture icon when working with fixtures and an Edit Gondola icon when working with gondolas).

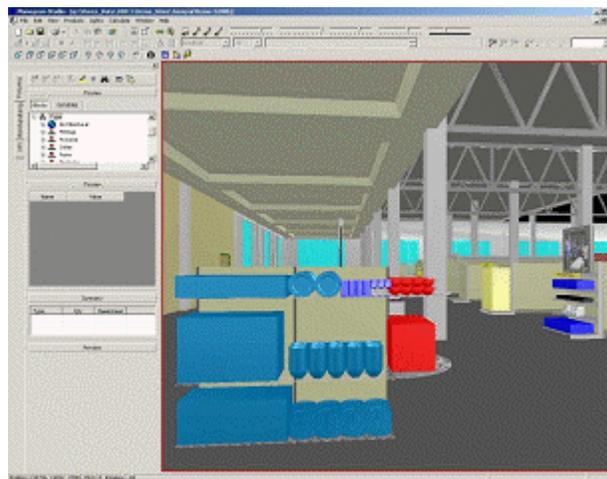


Fixture studio allows the properties of fixtures and gondolas to be specified. It also allows the hierarchical tree in which they are organized to be modified.



About Merchandiser

The **Merchandiser Module** is a virtual reality environment that can be used in conjunction with the Computer Aided Design (CAD) environment of the Planner module.



The merchandiser module has several functions:

Firstly, it can be used to design planograms.

Secondly, it can be used to design a floor layout; fixtures, fittings and gondolas being placed and viewed in the 3D virtual reality (VR) environment. It is not as precise as the Planner environment, but gives a more visual representation of the store plan.

Finally, the fixtures and gondolas can be populated with shelves, products and planograms, again in the 3D virtual reality (VR) environment.

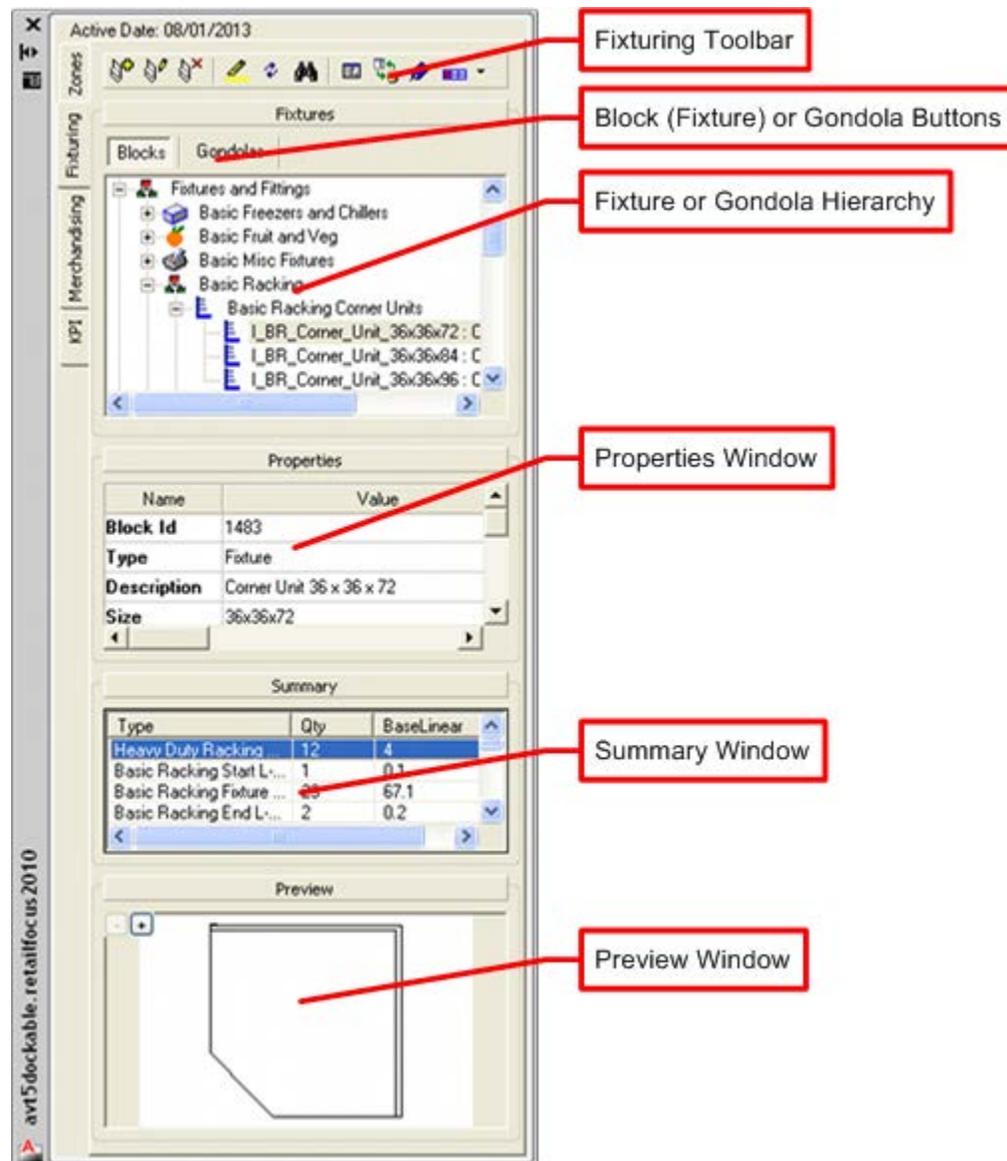
Note: Shelves can only be placed in the Merchandiser environment, although they can be seen in the Planner environment after Synchronization.

Note: Products can only be placed at display style level in Merchandiser. Such products are not visible in Planner.

Fixturing on the Object Browser

Overview of Fixturing on the Object Browser

Clicking on the Fixturing Tab on the Object Browser brings up a series of options for adding, editing and deleting Fixtures and Gondolas.



- The **Toolbar** gives access to a series of options concerning fixtures.
- The **Buttons** allow the user to toggle between Fixtures (Blocks) and Gondolas.
- The **Hierarchy Window** allows users to select fixtures (or gondolas) from the list available.
- The **Properties Window** shows the properties assigned to the selected fixture.

- The **Summary Window** shows the number of instances of the selected fixture placed in the drawing.
- The **Preview Window** shows a preview of the selected Fixture

Using the Object Browser for Fixturing Operations

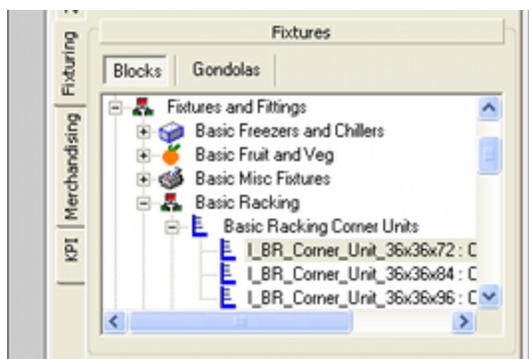
The **Fixturing Toolbar** is found on the Object Browser. It is selected by clicking on Blocks in the Fixturing window.



It contains a series of icons allowing various operations to be carried out on Fixtures. Some may be greyed out if they are not available for that operation.

Icon	Description
	Add Fixture
	Edit Fixture
	Delete Fixture
	Highlight selected item in view
	Highlight selected item in tree
	Search
	Configuration Options
	Refresh
	Attributes
	Promotional Fixtures On or Off

The **Fixtures Hierarchies Window** shows a hierarchical tree of all the available fixtures or gondolas.



The tree can be expanded or contracted by clicking on the + or – icons.
 The Fixturing window can be minimized by clicking on the splitter bar.



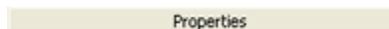
The Blocks or Gondolas buttons immediately above the window determines whether the hierarchical tree shows fixtures or gondolas.

The hierarchical tree can be configured in Fixture Studio.

The **Properties Window** will show the properties for the currently selected fixture.

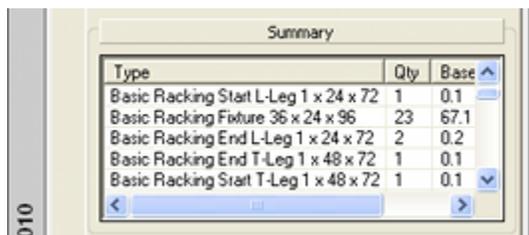


The Properties window can be minimized by clicking on the splitter bar.



Note: Information in this window is controlled from Custom SQL in the AVTTB_CUSTOM_SQL table. Administrators can customise the information that appears in the Properties Window by modifying the Custom SQL.

The **Summary Window** will show a user defined list of fixtures placed in the drawing.



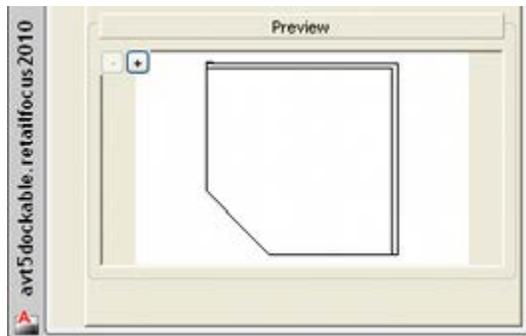
Clicking on a column heading will re-order that column. Clicking again will reverse the sort order.

The Summary window can be minimized by clicking on the splitter bar.

Summary

Note: Information in this window is controlled from Custom SQL in the AVTTB_CUSTOM_SQL table. Administrators can customise the information that appears in the Summary Window by modifying the Custom SQL.

The **Preview Window** shows a low resolution image of the fixture selected in the hierarchical tree. The - or + options to the upper left can be used to display two different types of preview.



The window can be resized in the horizontal plane by dragging the edge of the Object Browser with the mouse. It can be resized in the vertical plane by dragging the bottom of the window with the mouse.

The Preview window can be minimized by clicking on the splitter bar.

Preview

The virtual reality form of the preview can be rotated by positioning the mouse pointer in the screen and holding down the left mouse key. The position of the mouse cursor will determine the direction of rotation, while the distance of the mouse cursor from the object will determine the speed of rotation. The image can be moved up and down using the central wheel on the mouse.

The image can be resized by holding down the <Ctrl> key, then left clicking the mouse and dragging the object.

Deleting Fixtures

Deleting Fixtures is done from the Object Browser

Sequence of Actions Required

There are two potential ways of deleting fixtures. The first is to select the required fixture first.

1. Select required fixture or fixtures and right click to confirm selection.
2. Click the Delete icon.
3. The selected fixtures will be deleted.

The alternative is to select the delete option first.

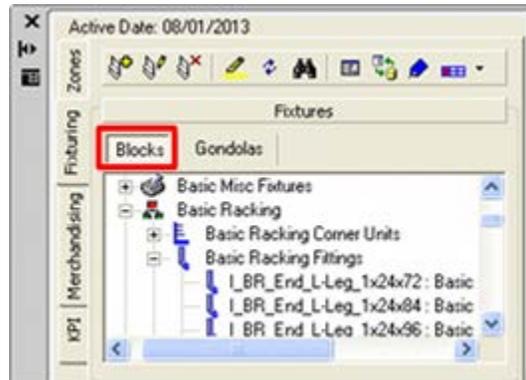
1. Click the Delete icon
2. Select required fixture or fixtures.
3. Right click to confirm selection and the fixtures will be deleted.

Either way is valid. This example will use the latter option of selecting the delete option first and the fixtures last.

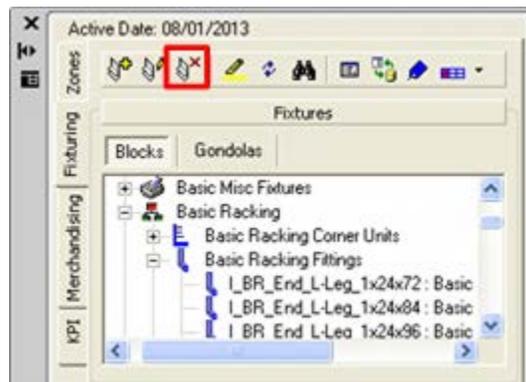
Deleting Fixtures

Deleting products can be carried out as follows:

1. Select the Fixtures Button on the Merchandising tab of the Object Browser



2. Select the Delete option from the Toolbar



3. Selecting Fixtures

On clicking Delete Fixture, the command line in Planner will prompt users to select fixtures.

```
Command:
Select objects:
```

These can be selected by standard AutoCAD methods including left clicking individual fixtures or using window and crossing selection boxes. In this instance, four fixtures have been selected by left clicking, the information being reflected in the command line.

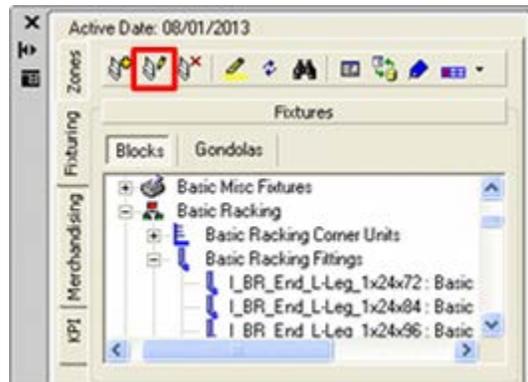
```
Select objects: 1 found, 4 total
Select objects:
```

Note: Clicking on the products themselves will not be effective - deleting products requires the user to select the parent fixtures for the products. Accordingly, users should left click on the fixture itself or use window and crossing selection boxes that encompass both the product and its parent fixture.

On right clicking to complete the selection, the fixtures will be deleted.

Editing Fixtures

Fixtures can be edited by clicking the Edit Product icon on the toolbar. This icon will only be active if the user belongs to a user group with access rights to Fixture Studio.



On clicking Edit fixture, the user will then be taken to fixture Studio. If a fixture is highlighted in the product hierarchy at the time the Edit Fixture icon is clicked, this product will be open for editing in Fixture Studio.

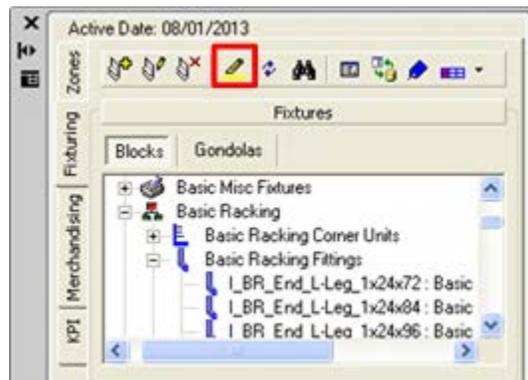
Fixture Highlighting Options

There are two highlighting options available on the Fixturing toolbar.

- Highlight Fixture
- Highlight Selected Fixture in Tree

Highlight Fixture

Highlight zone allows a user to find a fixture in the floor plan. The option has to be turned on by toggling the icon on the Fixturing toolbar so it is depressed.

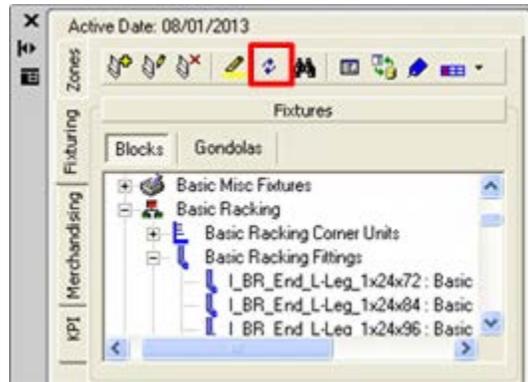


After the icon has been toggled on, highlighting any fixture in the fixture hierarchy will cause the selected fixture to be highlighted in the floor plan. The highlighting method will depend on setting in the Fixturing tab of the Configuration module.

Note: It is recommended that the Highlight zone option be left off until needed - leaving it on may have a marginal impact on performance in the floor plan.

Highlight Selected Item in Tree

Highlight Selected Item in Tree allows a user to select a fixture in the floor plan and have it highlighted in the Fixture Hierarchy in the Object browser. The option has to be turned on by toggling the icon on the Fixturing toolbar so it is depressed.

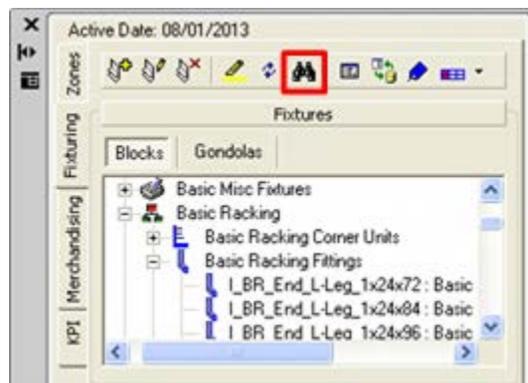


Clicking on the boundary of the fixture in the floor plan will then cause that fixture to be highlighted in the hierarchy.

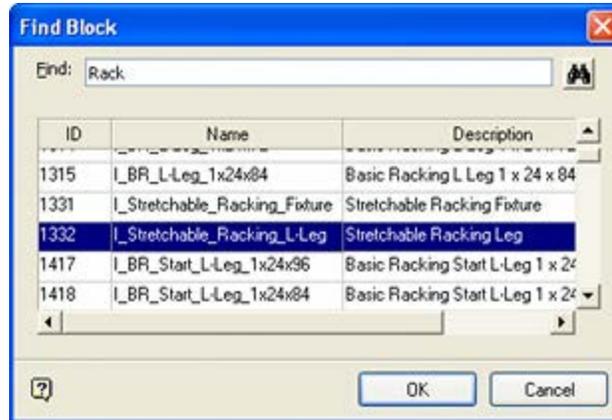
Note: It is recommended that the Highlight zone option be left off until needed - leaving it on may have a marginal impact on performance in the floor plan.

Finding Fixtures in the Hierarchy

Find in Tree allows users to search for fixtures in the Fixture Hierarchy.



Clicking the icon will bring up the Find Zone dialogue box.



To use the dialog box:

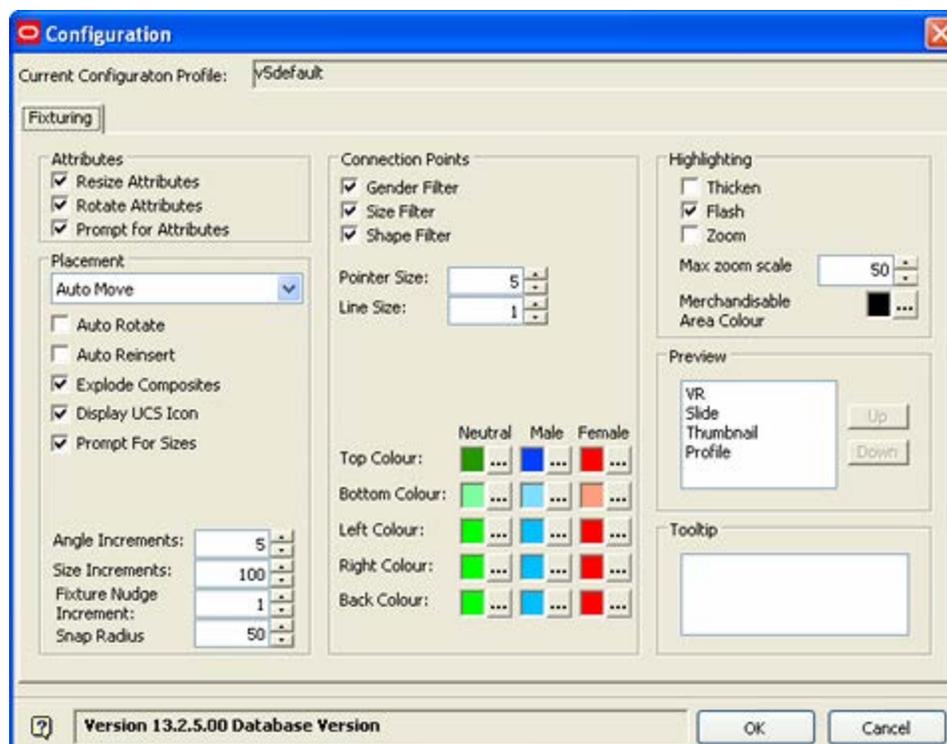
1. Type a text string into the text box
2. Click on the search Icon
3. Any fixtures with a name matching the search string will be listed
4. To select a fixture in the hierarchy, highlight it and click the OK button

Configuring Fixture Properties

The **Fixturing Options** can be accessed by clicking on the Properties icon on the Fixturing toolbar.



This will bring up the Fixturing Tab from the Configuration Module.



Full information is contained in the help for the Configuration module. For new users, the following settings are recommended:

- In the **Placement** frame, set the drop down list to **Auto Move** and uncheck **Auto Rotate** and **Auto Reinsert**. This will assist when adding fixtures.
- In the **Highlighting** frame, select a highlighting option. **Flash** is simplest for new users.

Refreshing Fixture Information

The **Refresh** option refreshes both Fixtures and Gondola information in the respective hierarchical trees.



Clicking on the Refresh button in the Fixturing tab will load the latest fixture information from the database into the Fixture hierarchy. At the same time, it will load the latest gondola information from the database into the Gondola Hierarchy.

Dragging and dropping a fixture from the appropriate hierarchy after the refresh button has been pressed will add that fixture to the drawing using the latest definition from Fixture Studio. Similarly, using the Add button will also add a fixture to the drawing using the latest definition from Fixture Studio.

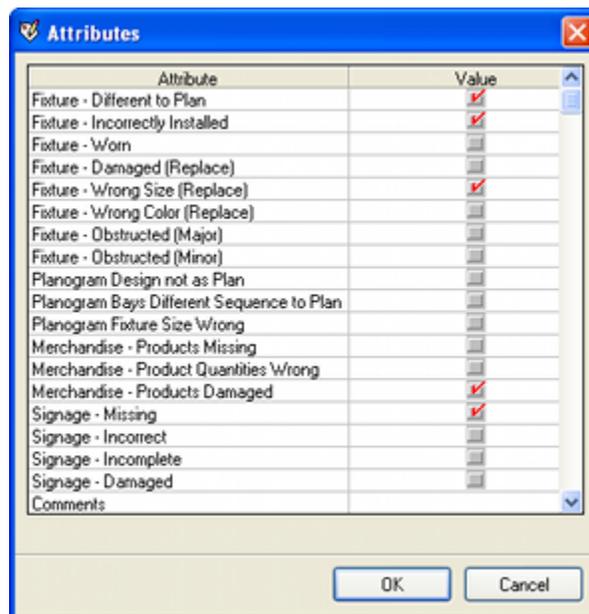
If a drawing is already open then fixtures already placed in the drawing will not use any changes loaded during the refresh operation until the drawing is closed and reopened. However, new fixtures added to the open drawing will use the new data.

Fixture Attributes

Fixture Attributes can be assigned by selecting a fixture or fixtures and clicking on the Fixture Attribute icon in the toolbar.



This will bring up the Fixture attributes dialogue box. If multiple fixtures are selected, only fields with common data will display information. The list of Fixture Attributes that are displayed is configured in Fixture Studio and can be customized to suit an individual retailer's requirements.



Fixture attributes can have many uses. In the above screen shot, the fixture attributes are configured to check on in-store compliance. Macro Space Management's sister product in the Macro Space Planning suite (In-Store Space Collaboration) can be used on the floor of a store enabling a user to walk around and physically examine the fixtures. Fixtures that have problems relative to the current version of the floor plan can have the check boxes ticked.

The same data is visible in Macro Space Management (MSM) and In-Store Space Collaboration (ISSC). After a store survey using ISSC, MSM users can run a KPI to determine which fixtures have attributes assigned. This enables the floor plan to be updated by taking into account what is physically present in a store.

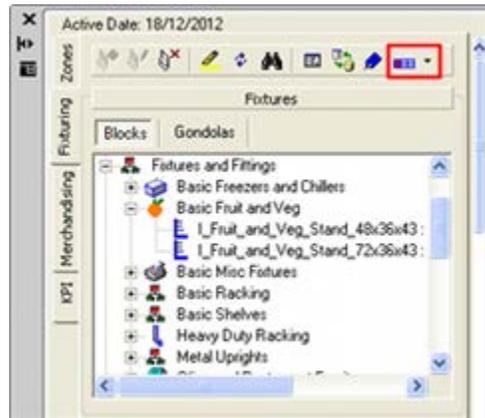
Promotional Fixtures

Certain fixtures with a store are known to generate high levels of profits. Examples include end caps on gondolas and displays by the checkout designed to increase impulse buying. Macro Space Planning allows specific fixtures in a floor plan to be designated as Promotional Fixtures. These fixtures can then be readily identified. They can then be used for special offers, promotions or the introduction of new products, etc.

Some retail chains also have a specific team responsible for merchandising promotional fixtures - designating the fixtures as such assists in identifying which fixtures that team is responsible for the merchandise on.

Assigning Promotional Fixtures

Once fixtures have been placed in a floor plan, they can be designated as promotional fixtures by using the **Promotional Fixtures** option from the Blocks toolbar of the Fixturing tab of the Object Browser.



Identifying Promotional Fixtures

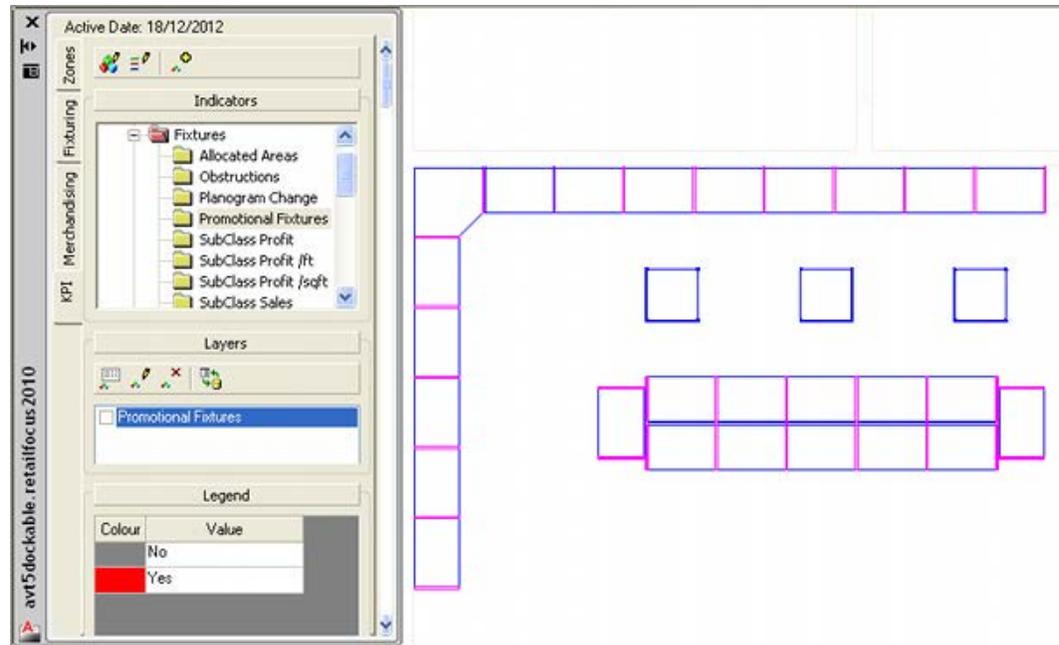
Once promotional fixtures are assigned, they can be identified in two ways in a floor plan.

Highlight

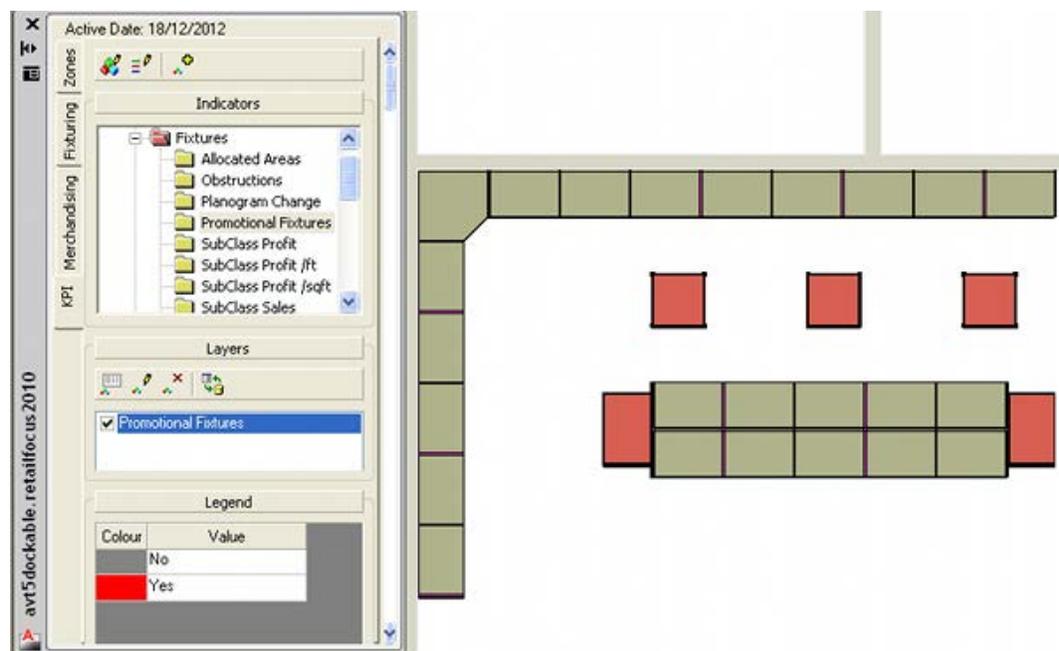
The **Promotional Fixtures** option includes a highlight option in the drop down list of options. This will cause any fixtures that have been designated as Promotional fixtures to be highlighted in the floor plan. The exact highlighting method will depend on the options selected in the Merchandising Tab of the configuration module.

Key Performance Indicator

Another way of identifying promotional fixtures is with KPI's. Without the KPI selected, the Promotional Fixtures are difficult to identify.



With the KPI active, the promotional fixtures are readily apparent. In this case the end caps and three bins in the aisle have been designated as promotional fixtures.



Note: one of the easiest ways of seeing fixture KPI's is to use the **Conceptual Visual Style** option from AutoCAD's **Visual Styles** toolbar. This causes the entire fixture to color, not just the outlines.

Using Promotional Fixtures

There are a number of ways of using promotional fixtures. One possible method is:

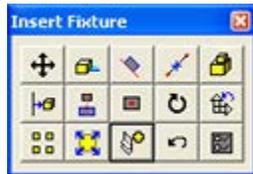
1. Identify fixtures that have a high visibility to shopper traffic. Such fixtures include end caps on gondolas, display on checkout, power wings and bins in the centre of aisles.
2. Use the Promotional Fixture on the Object Browser to designate those fixtures as promotional fixtures.
3. Bay number these fixtures differently from other fixtures in the floor plan - possibly with a P suffix.
4. It is then possible to report on and merchandise those fixtures separately to the other fixtures in the store - for example it would be possible to produce a weekly store plan showing promotional fixtures only that would allow a constantly changing program of special offers.

The Insert Fixture Dialog Box

Overview of Insert Fixture Dialogue Box

Options in the Insert Fixture Dialog Box

The **Insert/Edit Fixture** dialogue box appears when the Add Fixture icon is clicked on the Fixtures toolbar.



Note: The availability of some of these options depends on settings within the Fixturing tab of the Configuration Module. For example the arraying option will not be available if the Auto Reinsert option is checked.

This dialogue box contains a series of options for manipulating the fixture during placement.

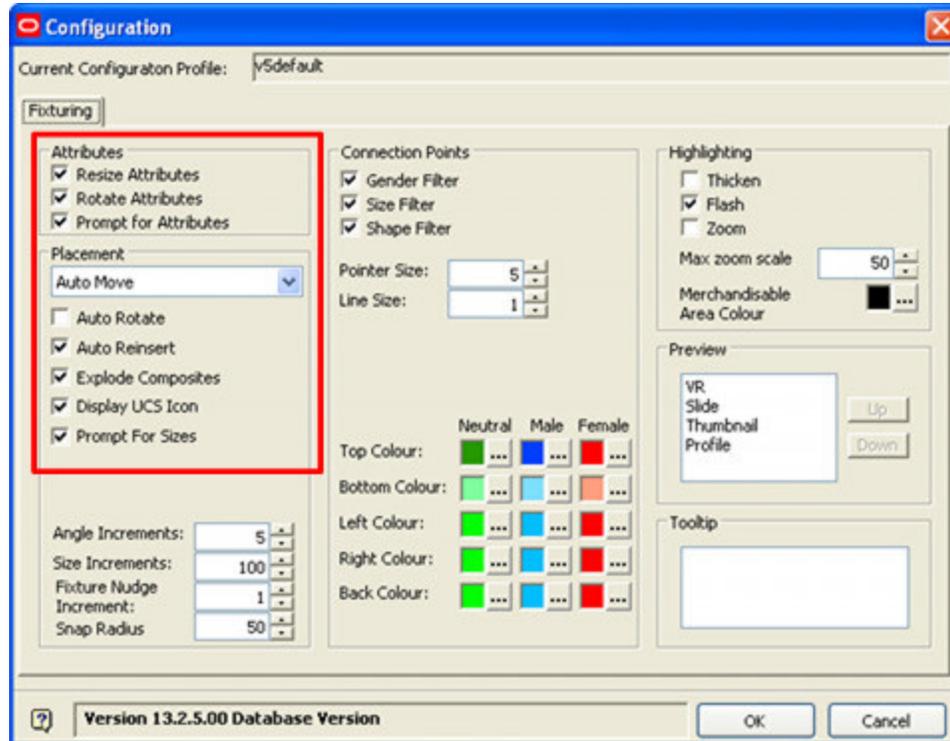
Icon	Description
	Move Fixture
	Attach Fixture to Another
	Move and Align Fixture
	Move Fixture to be between others
	Place Fixture on Top of Another
	Offset the Fixture
	Place Fixture In-Line with Another
	Change Justification
	Rotate the Fixture

Icon	Description
	Rotate the UCS
	Create an Array of Fixtures
	Change the Size of the Fixture
	Add the same fixtures as the last added
	Undo the last change
	Modify the Options for this Fixture

The Insert Fixture dialog box is used by toggling on the required option. Click on each button to activate the required option. When that operation is completed, select the next option if one is required. When the fixture placement options is satisfactory; complete insertion by clicking on the cross in the upper right corner of the Insert/Edit Fixture dialogue box, or press <Escape>.

Configuring Operation of the Insert Fixture Dialog Box

The exact way the Insert Fixture dialog box behaves is configured in the Fixturing Tab of the Configuration module. This can be accessed by clicking the Properties icon in the Fixturing toolbar on the Object Browser.



Placement Options

Placement Options determine which button in the Insert Fixture dialog box is active when it is first activated. There are three options in the drop down list:

- **Auto Move** makes the move button active.
- **Auto Attach** makes the Attach button active.
- **Auto Align** makes the Align button active.

Other Options

Other options can be selected by means of the check boxes.

- **Auto Rotate** requires the user to specify a rotation angle when the fixture is first inserted.
- **Auto Reinsert** allows the user to add additional copies of the fixture by left clicking in the floor plan.
- **Explode Composites** causes all blocks specified as composites in Fixture Studio to be exploded into their component blocks when inserted into the floor plan. (This feature is not currently active)
- **Display UCS Icon** controls display of the UCS icon in the floor plan. (This feature is not currently active).
- **Prompt for Sizes** will cause a dialog box to appear when a stretchable block is placed in the floor plan. This allows the user to select the specific size for the block.

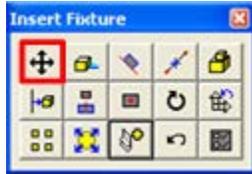
Recommended Options

New users may find the following settings easiest to use when first using the Insert Fixture dialog box.

- Placement option set to **Auto Move**.

- **Auto Rotate** and **Auto Reinsert** set to off.
- **Explode Composites**, **Display UCS Icon** and **Prompt for Sizes** set to on.

Move Fixture option

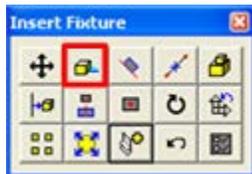


This option will be active when the Insert Fixture dialog box first opens if the Auto Move option has been chosen in the Fixturing tab of the configuration module.

If toggled on, the fixture being currently inserted will place in the floor plan where the cursor is left clicked. Clicking in the floor plan will also turn the move option off in the dialog box. If it is desired to move the fixture again, the Move button should be toggled on, whereupon the fixture can be moved and repositioned by right clicking in the floor plan again.

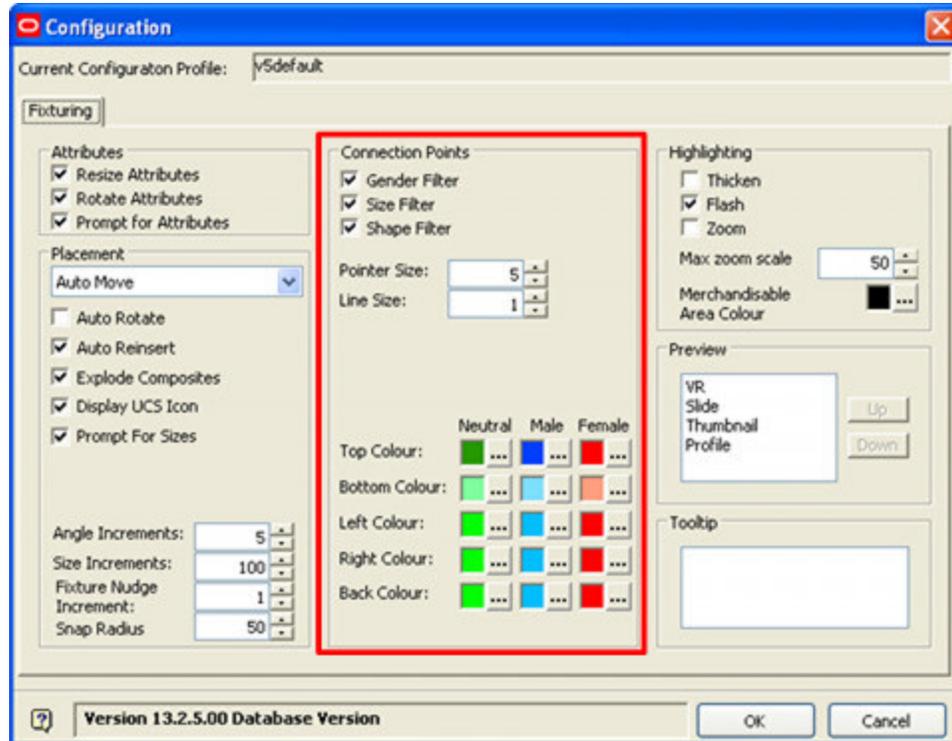
If, there are no further operations to carry out, placement is completed by clicking on the x in the upper right part of the Insert/Edit Fixtures dialogue box, or pressing <Escape>.

Attach Fixture to Another option



This option will be active when the Insert Fixture dialog box first opens if the Auto Attach option has been chosen in the Fixturing tab of the configuration module.

Auto Attach allows two fixtures to be snapped together in a precise alignment by means of connection points. Connection points are assigned to fixtures in the Connections Tab in the Block Details dialog box in Fixture Studio - see the Fixture Studio help file for more information. The behavior of the connection points is controlled by settings in the Fixturing tab of the Configuration module. This can be accessed by clicking the Properties icon in the Fixturing toolbar on the Object Browser.



The behavior of the connection points is provided by the three filtering options provided.

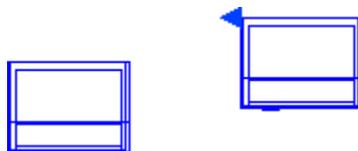
- If the **Gender filter** is on, male will only connect to female or neutral gender. Male (for example) cannot connect to male.
- If the **Size filter** is on, only connection points of similar or overlapping sizes will connect together. (This feature is currently not active).
- If the **Shape filter** is on, only connection points of similar shapes will connect together.

The appearance of the connection points is governed by further options.

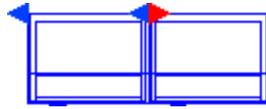
- The **Pointer Size** allows the display size of the connection points to be adjusted.
- **Line Size** affects the size of connection lines. This feature is only active in the Merchandise module.
- The colors affect the visual appearance of the connection point.

Using the Attach Fixture Option

In order to use the Attach Fixture option, there must already be at least one fixture with compatible connection points present in the floor plan. The default connection point will be active on the fixture being placed:



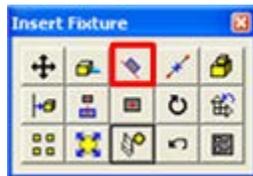
When the active fixture comes within a set proximity of any other fixture with compatible connection points, the two fixtures will snap together in an alignment determined by the position of the connection points.



If, there are no further operations to carry out, placement is completed by clicking on the x in the upper right part of the Insert/Edit Fixtures dialogue box, or pressing <Escape>.

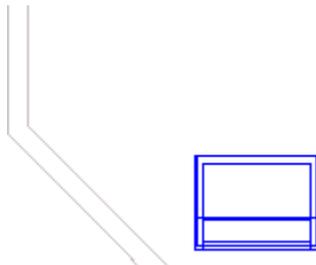
Move and Align Fixture Option

Note: Move and Align can be used in conjunction with the Offset the Fixture option. See the section on this option for more information.

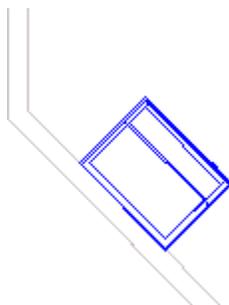


This option will be active when the Insert Fixture dialog box first opens if the Auto Align option has been chosen in the Fixturing tab of the configuration module.

This allows the fixture to be aligned with lines in the floor plan. An example of its use would be to align a fixture with a line representing a wall. In the example below, the fixture being placed in the floor plan is first brought into proximity with the line representing the wall. (In this instance the wall is in an associated architectural plan).

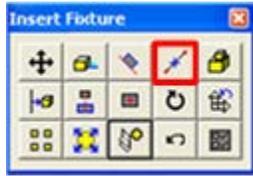


When the fixture reaches a sufficiently close proximity to a suitable line, it will automatically align to that line.



If there are no further operations to carry out, placement is completed by clicking on the x in the upper right part of the Insert/Edit Fixtures dialogue box, or pressing <Escape>.

Move Fixture to Between Others Option



This option can only be selected after the fixture has been placed in the floor plan by another command from the Insert Fixture dialog box. It is used to place the fixture midway between two selected points.

Note: This command works well in conjunction with the AutoCAD Object Snap (OSNAP) option.

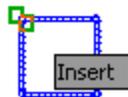
In this instance it is desired to place a fixture midway between the two existing fixtures in the floor plan.



After selecting the **Move Fixtures Between Others** option in the dialog box, it is then necessary to click once in the floor plan to return focus to the floor plan. A prompt will appear in the command line asking the user to select the starting point of the line from which the midpoint will be selected.

```
Move To?
Choose a position to calculate offset from ?
```

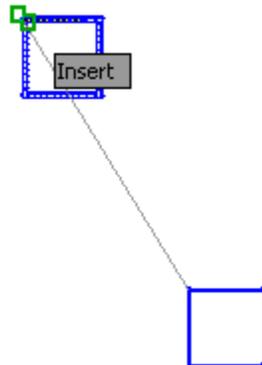
Clicking on this icon will bring up a dialogue at the cursor asking for the start position of the line on which the fixture will be placed at the midpoint. In this instance the insertion point of the first fixture has been selected by left clicking it.



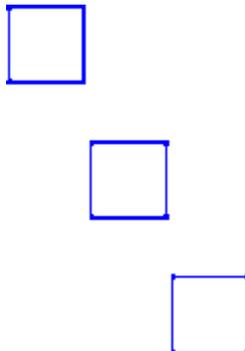
Another prompt will appear in the command line asking the user to select the end point of the line from which the midpoint will be selected.

Choose a position to calculate offset from ?
Choose a position to calculate offset to ?

The insertion point of the second fixture is selected by left clicking it.

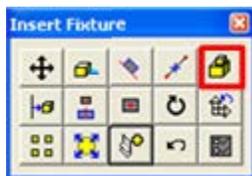


The insertion point of the fixture being placed will then be positioned exactly midway between the two selected points.

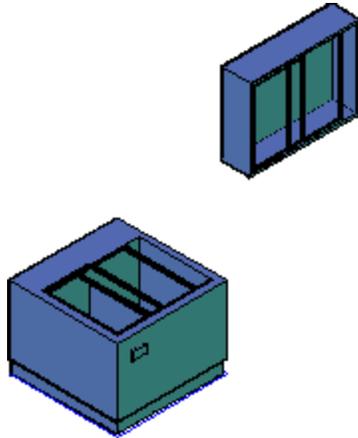


If there are no further operations to carry out, placement is completed by clicking on the x in the upper right part of the Insert/Edit Fixtures dialogue box, or pressing <Escape>.

Place Fixture on Top of Another Option



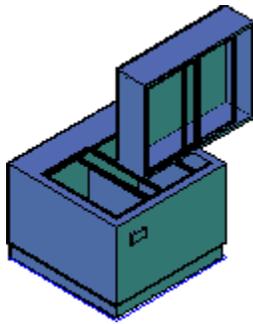
This option can only be selected after the fixture has been placed in the floor plan by another command from the Insert Fixture dialog box. It is used to place the active fixture on top of a selected object. In the example below, it is intended to place the condiment cabinet on top of the freezer.



After selecting the **Place Fixture on Top of Another** option, left click in the floor plan to transfer the focus to the floor plan. A prompt will appear in the command line

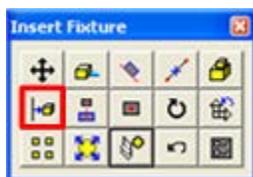
```
Move To?
Select an object.
```

On left clicking an object to select it, the insertion point of the object being placed on top will be placed in the centre of the selected object.



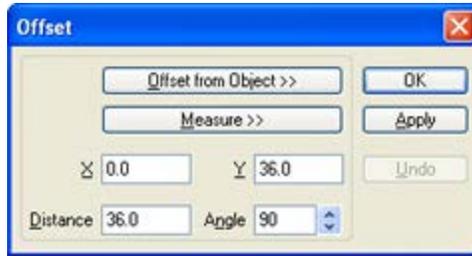
Note: In cases like the above example, further operations may be necessary to complete positioning the fixture.

Offset the Fixture option

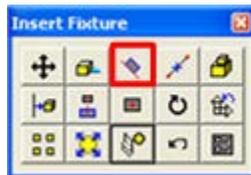


The Offset the Fixture option is used in conjunction with the Move and Align function. Move and Align will align the fixture being placed in the floor plan with a physical fixture such as wall. Additional use of the Offset the Fixture allows the user to align at a specific distance from the selected object.

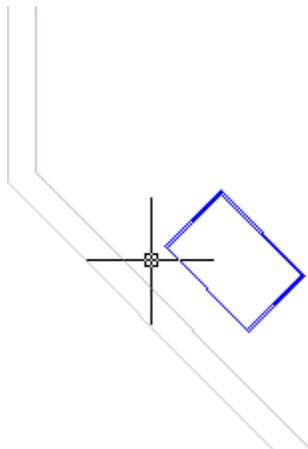
The initial stage is to place the fixture in the floor plan with a left click to temporarily position it. Clicking the Offset the Fixture icon will bring up the Offset dialog box.



This allows the required offset to be entered - all offsets being relative to the front. In the above example an offset of 36" in the Y axis will place the fixture 36" away from the wall that will be selected using the **Move and Align** option. Click OK and then select Move and Align.

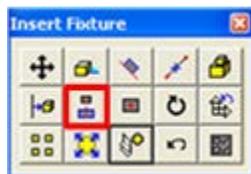


When the mouse cursor is close to a wall or other line, it will align relative to that wall at the specified offset. Left click to place the fixture.

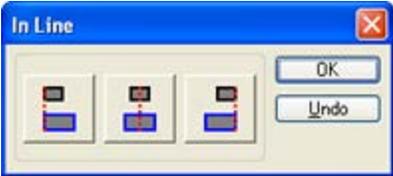


If there are no further operations to carry out, placement is completed by clicking on the x in the upper right part of the Insert/Edit Fixtures dialogue box, or pressing <Escape>.

In-Line the Fixture Option



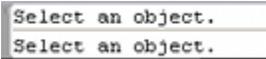
The In-Line the Fixture option allows users to align the fixture currently being placed with another fixture already in the floor plan. Clicking in In-Line the Fixture icon brings up the In-Line dialogue box.



The functionality is used as follows: in the example below, it is desired to align the blue fixture (in the process of being placed) with the already placed red fixture. Accordingly, one of the alignment buttons in clicked in the In-Line dialog box.



This will result in a prompt to select a fixture.



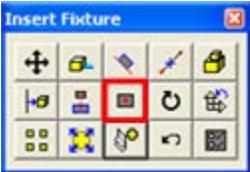
Click in the floor plan to change focus there and then click on the outline of the required fixture. The fixtures will be moved so they are in the desire alignment.



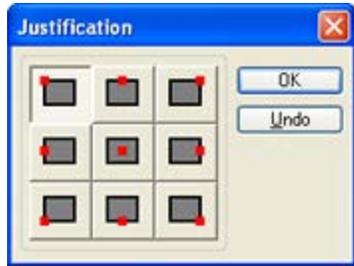
Control will also be returned to the In-Line dialog box. Click the OK button to confirm the placement and return to the Insert Fixture dialog box.

If there are no further operations to carry out, placement is completed by clicking on the x in the upper right part of the Insert/Edit Fixtures dialogue box, or pressing <Escape>.

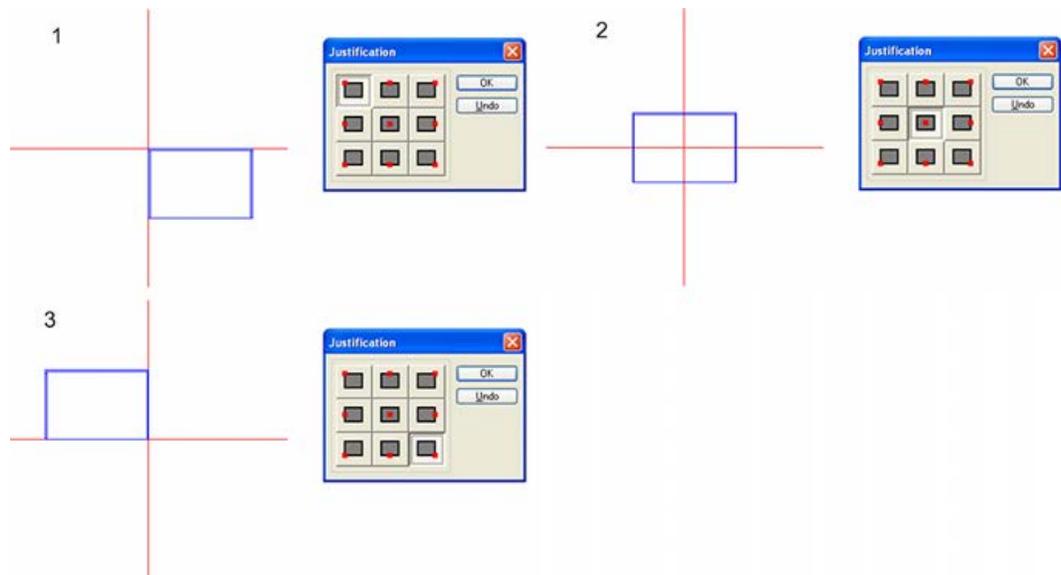
Change Justification Option



Clicking on the Change Justification icon brings up the Justification dialogue box.

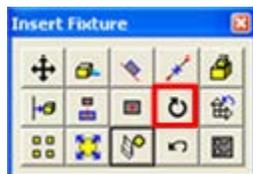


This dialog box allows the datum used for inserting the fixture to be temporarily modified. In diagram 1 below, a fixture with a 'back-left' insertion point has been inserted using the centre of the red cross as a datum. In diagram 2, the justification has been changed to 'centre' and the centre of the fixture has moved over the datum point. Similarly, in diagram 3, the justification has been changed to front right and the location of the fixture has changed again.

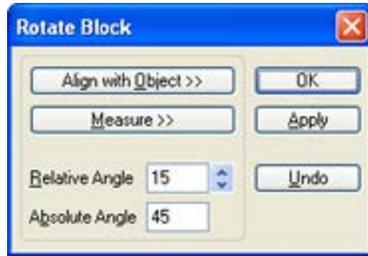


The Undo button will not be active until at least one change in justification has been made. Clicking undo will then return the fixture to its previous justification. Clicking OK will confirm the placement of the fixture and return the user to the Insert Fixture dialog box.

Rotate the Fixture Option



The rotate fixture option allows a fixture to be rotated during placement. Clicking the rotate icon brings up the Rotate Block dialog box.

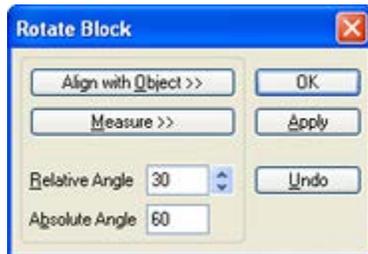


Relative and Absolute Angles

The **Relative Angle** is the angle the fixture will be rotated through each time the apply button is clicked. The **Absolute Angle** is the angle relative to the WCS that the fixture will be rotated to. Altering one of the values causes the result of the change to be reflected in the second value.

- **Relative Angle**

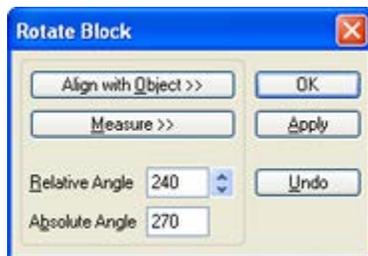
If the relative angle is set, the value for the absolute angle is the angle of the fixture relative to the WCS after the rotation has been executed by clicking the Apply button.



In the above example a 30 degree relative rotation will be applied. After the rotation the UCS will be at a 60 degree angle to the WCS.

- **Absolute Angle**

If the absolute angle is set, the relative angle is the angle the fixture will be rotated through to get to the specified absolute angle relative to the WCS.



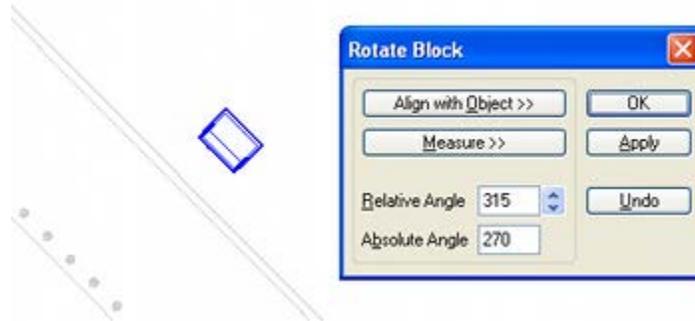
In the above example, the UCS is to be set to an absolute angle of 270 degrees relative to the WCS. This will require a relative rotation of 240 degrees from its present position.

Align with Object

The usual use of the Align with Object option is to align with an object such as a wall in an architectural plan. In order to do so:

1. Click the Align with Object Button.
2. Click once in the floor plan to change the focus to the floor plan.
3. Click on an object to set the alignment for the fixture.

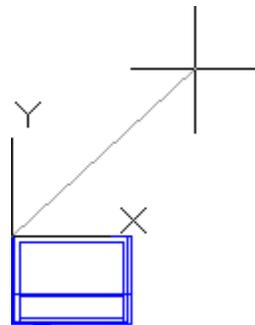
4. The fixture will rotate with the front face parallel to the selected object.



In the above example, the wall in the architectural plan has been used for alignment purposes, causing the fixture to rotate accordingly.

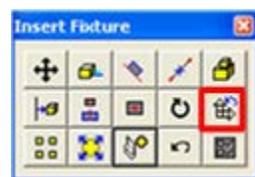
Measure

Clicking the **Measure** button allows the user to manually draw a line defining the rotation angle for the block. The initial point of the line has its origin at the insertion point of the block. The user sets the other end by left clicking at another point in the floor plan.



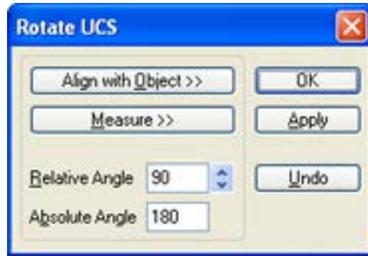
If there are no further operations to carry out, placement is completed by clicking on the x in the upper right part of the Insert/Edit Fixtures dialog box, or pressing <Escape>.

Rotate the UCS Option



This option allows users to rotate the UCS (Universal Coordinate System). Planner has a World Coordinate System (WCS) that has a fixed set of orientations. Using the UCS allows the user to set a custom set of XY coordinate specific to the fixture placement. An example would be aligning relative to a wall.

Clicking the Rotate the UCS icon brings up the Rotate UCS dialog box.

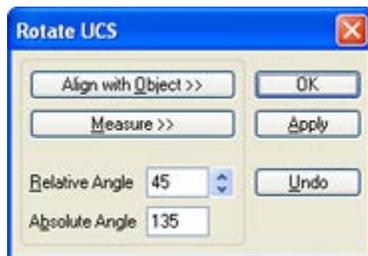


Relative and Absolute Angles

The **Relative Angle** is the angle the UCS will be rotated through each time the apply button is clicked. The **Absolute Angle** is the angle relative to the WCS that the UCS will be rotated to. Altering one of the values causes the result of the change to be reflected in the second value.

- **Relative Angle**

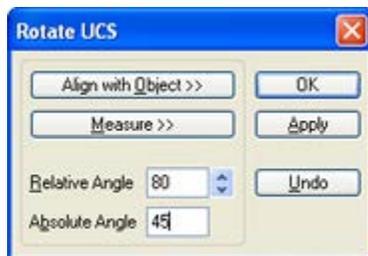
If the relative angle is set, the value for the absolute angle is the angle relative to the WCS after the rotation has been executed by clicking the Apply button.



In the above example a 45 degree relative rotation will be applied. After the rotation the UCS will be at a 135 degree angle to the WCS.

- **Absolute Angle**

If the absolute angle is set, the relative angle is the angle the present UCS will be rotated through to get to the specified absolute angle relative to the WCS.



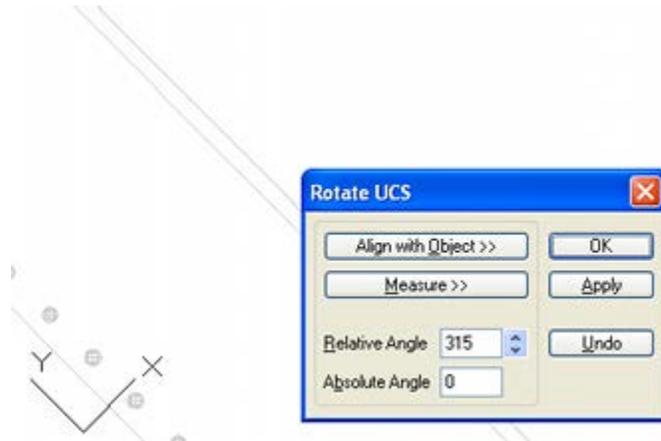
In the above example, the UCS is to be set to an absolute angle of 45 degrees relative to the WCS. This will require a relative rotation of 80 degrees from its present position.

Align with Object

The usual use of the Align with Object option is to align with an object such as a wall in an architectural plan. In order to do so:

1. Click the **Align with Object** Button.
2. Click once on the floor plan to change the focus to the floor plan.
3. Click on an object to set the alignment for the UCS.

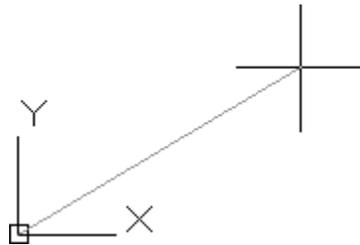
- The UCS will be set with the X axis perpendicular to the selected object and the Y axis parallel to it.



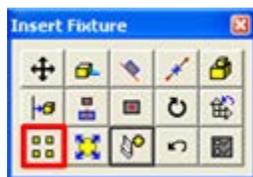
In the above example, the wall in the architectural plan has been used for alignment purposes, causing the UCS (lower left) to rotate accordingly.

Measure

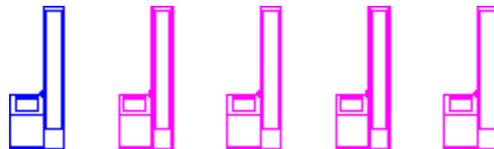
Clicking the **Measure** button allows the user to manually draw a line defining the X axis of the revised UCS. The initial point of the line has its origin at 0, 0 in the floor plan. The user sets the other end by left clicking at another point in the floor plan.



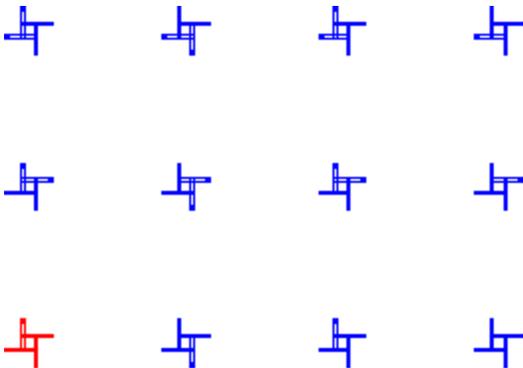
Create an Array of Fixtures Option



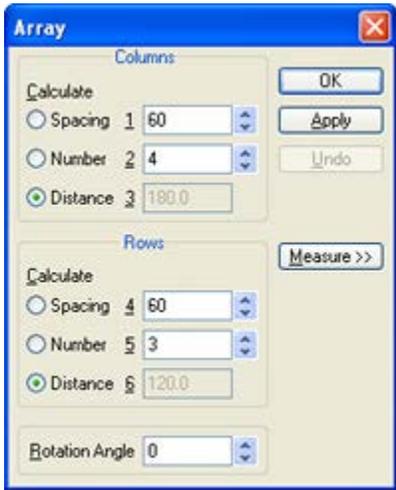
The Create an Array of fixtures option allows users to insert a single fixture into the floor plan then create a regular array of that fixture. In the example below the original checkout (in blue) has been arrayed to form a line of checkouts.



In the second example, a single 4-Way clothing fixture (red) has been inserted into the floor plan and then arrayed to lay out part of a clothing department.

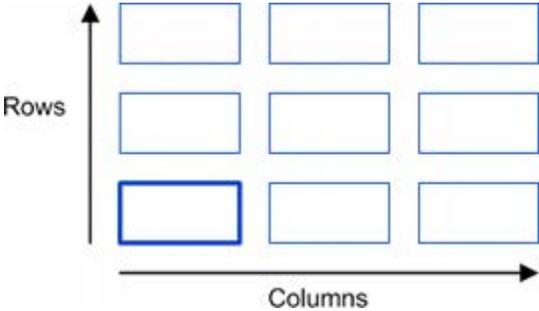


To create an array, first place a single fixture into the floor plan. On clicking the **Create an Array of Fixtures** option, the Array dialog box will appear.



Columns and Rows

Row and columns refers to the number or rows and columns of fixtures that will be present after the array has been created.



Apply Button

The apply button will result in the current settings in the Array dialog box being applied to create a temporary array in the floor plan. Changing the setting in the Array dialog box and clicking apply again will result in the displayed array being changed to match the new settings.

Undo Button

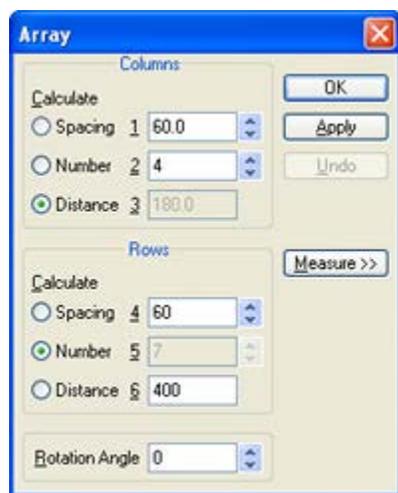
The Undo button will not be active until at least one trial version of an array has been placed in a floor plan. Clicking undo will take the user back to the previous version of the placed array. Clicking the Undo button will not change the settings in the Array dialog box.

OK Button

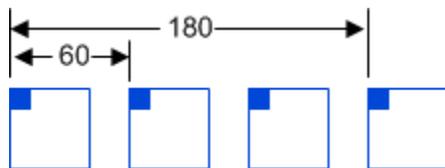
The apply button places a temporary version of the array in the floor plan. The OK button will make that array permanent and return the user to the Add Fixtures dialog box.

Spacing, Number and Distance

Spacing, number and distance are inter-related. The radio button selects the field that is the result of multiplying the other two fields together.

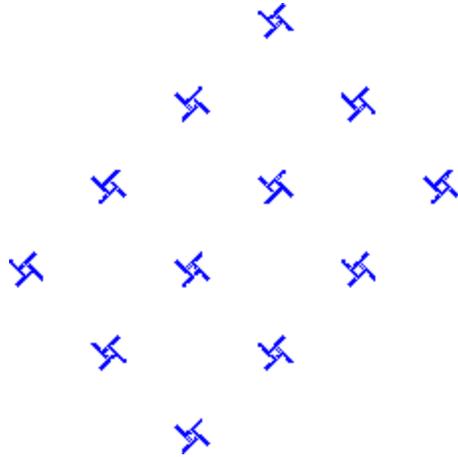


- **Spacing** is the distance between successive insertion points. If the fixture is 24 inches long and the spacing is 60 inches, the insertion points will be 60 inches apart with a 36 inch gap between fixtures.
- **Number** is the number of fixtures in that direction.
- **Distance** is the total distance the insertion points will occupy - this value does not take into account the dimensions of the fixture. Four fixtures with a spacing of 60 inches will therefore occupy a distance of 180 inches.



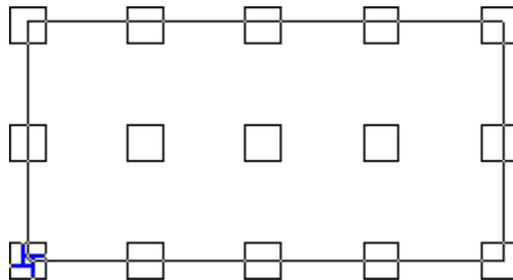
Rotation Angle

The rotation angle allows the array to be drawn at a specified angle.



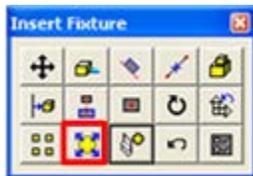
Measure

Measure allows the user to select an area to draw the array in. The fixtures will be spaced according to the current settings in the array dialog box. On clicking the Measure button, the user will be taken to the floor plan. The user can then draw a rectangle from the fixture that is the origin of the array. Fixture outlines will automatically populate the rectangle. On left clicking to specify the final dimensions of the rectangle, the user will be taken back to the Insert Fixture dialog box. Simultaneously, the distance values in the dialog box will be updated. The user should then click the Apply or OK buttons to draw the array.

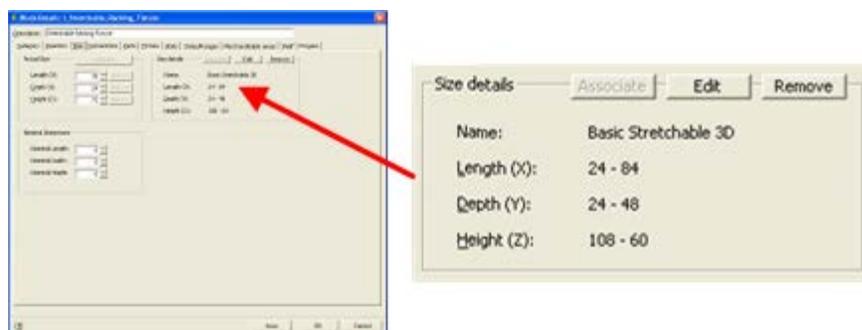


If there are no further operations to carry out, placement is completed by clicking on the x in the upper right part of the Insert/Edit Fixtures dialogue box, or pressing <Escape>.

Change the Size of the Fixture Option



This button will allow the fixture to change in size during insertion. This will only work for specific fixtures - those that have a size assigned in the Sizes tab of the Block Details dialog box in Fixture Studio. Such blocks are called stretchable.



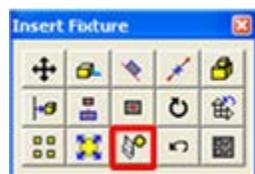
If the block being inserted is stretchable and the **Change the Size of the Fixture** option is active, the Size dialog box will appear. This allows the user to set the size of the stretchable fixture to any value within the parameters configured in Fixture Studio.



On clicking OK, the user will be returned to the floor plan with the Insert Fixture dialog box active.

If there are no further operations to carry out, placement is completed by clicking on the x in the upper right part of the Insert/Edit Fixtures dialogue box, or pressing <Escape>.

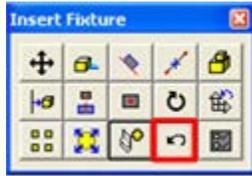
Insert a Copy of the Current Fixture



This option allows the user to insert another instance of the last block to be inserted by simply clicking on the icon. This removes the need to re-select the fixture from the Object Browser. On clicking the Insert a Copy of the Current Fixture icon, another instance of the fixture will appear in the floor plan and the button selected will default to that selected in the Placement options of the Fixturing tab of the Configuration module.

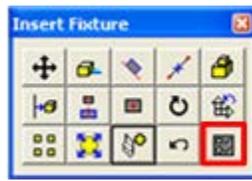
If there are no further operations to carry out, placement is completed by clicking on the x in the upper right part of the Insert/Edit Fixtures dialogue box, or pressing <Escape>.

Undo the Last Change option

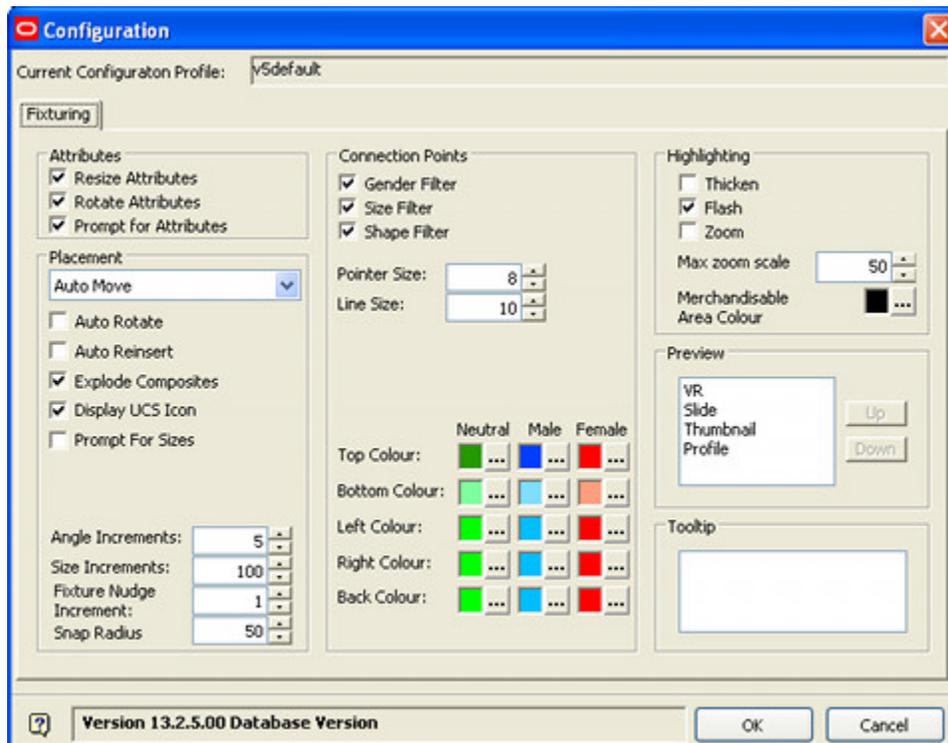


The Undo the Last Change option undoes the effect of the last action carried out in the Insert Fixture dialog box. It will not be active until the first action has been completed.

Modify the Options for this Fixture



Selecting this option brings up the Fixturing Tab from the Configuration Module.



This allows users to configure some options determining how the Insert Fixtures dialog functionality will behave while the dialog box is active. Once changes have been made to the tab, it can be closed and another option selected on the Add Fixture dialog box.

Fixture Swap and Manipulation

Overview of Fixture Manipulation

The Planner module is integrated with AutoCAD. Experienced AutoCAD users can make use of the majority of AutoCAD functionality to lay out floor plans in the Planner module. However, AutoCAD is a complex program and some users carrying out store planning tasks may not be familiar with AutoCAD functionality. Accordingly, Planner has been provided with some Fixture Manipulation tools. These enable users to perform a variety of operations including moving, rotating and aligning fixtures. One way of accessing these is from the Fixturing toolbar.



Fixture Manipulation and Child Objects

One of the advantages of using the Fixture Manipulation tools is that they control child objects. The Planner floor plan is divided into layers, each containing a particular type of object - such as fixtures or zone annotation. The display or selection of objects is often controlled by turning off or locking layers. If purely AutoCAD tools are used, objects on the turned off or locked layers are not included in the selection. This can result in some objects being moved, while their child objects are left in their original location.

Another problem that can occur when using AutoCAD selection tools is that it is possible to select objects that it is not intended to move. For example the selection set could include blocks representing pillars or columns in a store. Fixture Manipulation filters the selected objects so that only fixtures and merchandise are moved, together with their associated annotation and bay numbers.

The available Fixture Manipulation options are:

Group On or Group Off for Fixtures

Gondolas are items of equipment placed in a precise relationship to each other. When manipulating gondolas it is some times useful to manipulate them as a whole and it is sometimes useful to manipulate individual parts of a gondolas. If Fixture Grouping is On, selecting one part of a gondola will select all parts of that gondola. If Fixture Grouping is Off, individual parts of a gondola can be selected without selecting the whole.

Move Fixtures

Move fixtures enables the user to move the selected items of equipment (together with any merchandise and annotation) any direction in the X and Y axes. The elevation of the equipment remains unchanged.

Slide Fixtures

Slide fixtures enables the user to move the selected items of equipment (together with any merchandise and annotation) at 90 degree increments to the present orientation and position of the fixture. This enables the user to move the selected fixtures left, right, forward or back. The elevation of the equipment remains unchanged.

Offset Fixtures

Align fixtures enables the user to take a selected set of equipment (and its merchandise and annotation) and align it relative to another object in the floor plan. It is also spaced a selected distance (offset) from that object. This might be used to take a gondola and place it a specific distance from a wall.

Match Rotation

Match Rotation enables the user to take a selected set of equipment (and its merchandise and annotation) and align it relative to another object in the floor plan.

Cut

Cut removes the selected equipment (and its merchandise and annotation) from the floor plan and pastes them to the clipboard. If a planogram has been 'exploded' (shows full detail of shelves and merchandise), this detail will also be pasted to the clipboard.

Copy

Copy takes details of the selected equipment (and its merchandise and annotation) from the floor plan and pastes the information into the clipboard. If a planogram has been 'exploded' (shows full detail of shelves and merchandise), this detail will also be pasted to the clipboard.

Paste

Pastes takes the information from the clipboard and inserts it into the floor plan. If a planogram has been 'exploded' (shows full detail of shelves and merchandise), this detail will also be pasted to the floor plan.

Delete

Delete removes the selected equipment (and its merchandise and annotation) from the floor plan.

Rotate

Rotate takes the selected equipment (and its merchandise and annotation) and allows it to be rotated by any angle about the geometric center of the selected objects.

Rotate 90 Degrees Clockwise

Rotate 90 Degrees Clockwise takes the selected equipment (and its merchandise and annotation) and gives it a clockwise 90 degree rotation about the geometric center of the selected objects.

Rotate 90 Degrees Anti-clockwise

Rotate 90 Degrees Anti-clockwise takes the selected equipment (and its merchandise and annotation) and gives it an anti-clockwise 90 degree rotation about the geometric center of the selected objects.

Rotate 180 Degrees

Rotate 180 Degrees takes the selected equipment (and its merchandise and annotation) and gives it a 180 degree rotation about the geometric center of the selected objects.

Mirror

Mirror produced a mirror image of a selected set of equipment, merchandise and annotation. The selected objects are 'reflected' about a specified axis.

Array

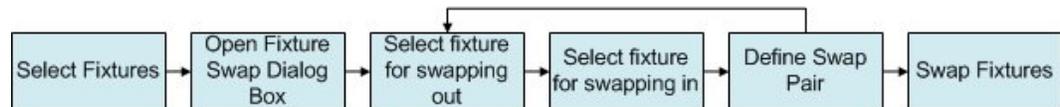
Array takes a selected set of equipment, merchandise and annotation and generates additional rows and columns of that set of objects.

Overview of Fixture Swap

The **Fixture Swap** functionality allows users to automatically swap selected fixtures in the active floor plan for replacements of a different type. Fixture Swap can be called from the Command Line (AVT_FIXTURESWAP) or from the Fixturing toolbar.



The process works as follows:

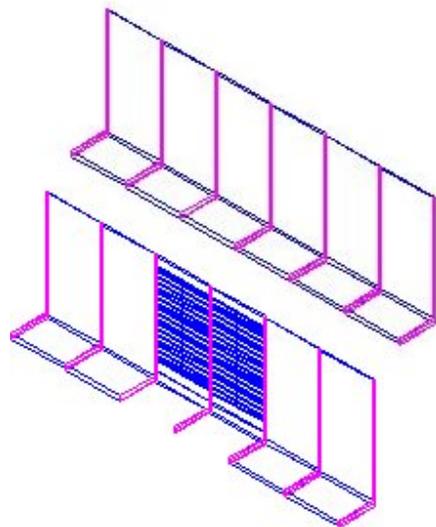


1. The Fixtures it is desired to swap in the floor plan are selected.
2. The Fixture swap dialog box is selected and will populate with the selected fixtures.
3. A fixture is selected to be swapped out.
4. The fixture to be swapped in (replacement fixture) is selected.
5. The two fixtures (in and out) are defined as a swap pair.
6. The user continues to define swap pairs as required.
7. When all swap pairs have been defined, the fixtures are swapped.

Note: it is possible to reverse the first two steps - i.e. open the dialog box first, then select the required fixtures.

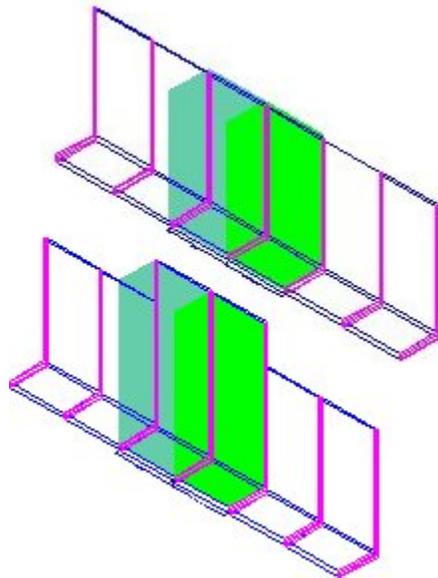
Examples of Fixture Swaps

One example of Fixture Swap is shown below, where it has been decided to replace two racking fixtures with slatwalls - allowing planograms involving hung products to be placed in the future.



Fixture swap also changes the size of planogram placeholders if they are on the fixtures being swapped. In the example below, the original planograms are shown on the rear

gondola run. Two fixtures have been resized - and the planogram placeholders have changed size accordingly. This can be seen in the front gondola run.



Accessing Fixture Swap and Manipulation Options

Fixture Swap

Fixture Swap can be initiated in the following ways:

- From the command line by typing AVT_FIXTURESWAP and pressing **Return**.
- From the Fixturing Toolbar



Fixture Manipulation

Fixture Manipulation can be accessed in the following ways:

1. **From the command line by typing in individual commands and pressing Return.**

Option	Command
Group On/Off	None
Move Fixtures	AVT_MOVE
Slide Fixtures	AVT_SLIDE
Offset Fixtures	AVT_OFFSET
Match Rotation	AVT_MATCH_ROTATION
Cut Fixtures	AVT_CUT
Copy Fixtures	AVT_COPY
Paste Fixtures	AVT_PASTE
Rotate Fixtures	AVT_ROTATE

Option	Command
Rotate Fixtures 90 Degrees Clockwise	AVT_ROTATE_90
Rotate Fixtures 90 Degrees Anticlockwise	AVT_ROTATE_270
Rotate Fixtures 180 Degrees	AVT_ROTATE_180
Mirror Fixtures	AVT_MIRROR
Array Fixtures	AVT_ARRAY

2. As a keyboard shortcut

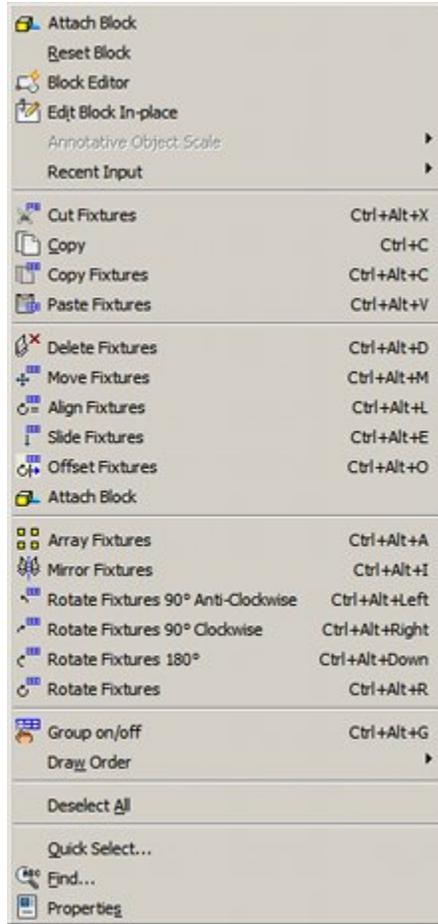
Option	Shortcut
Group On/Off	Ctrl + Alt + G
Move Fixtures	Ctrl + Alt + M
Slide Fixtures	Ctrl + Alt + E
Offset Fixtures	Ctrl + Alt + O
Match Rotation	Ctrl + Alt + L
Cut Fixtures	Ctrl + Alt + X
Copy Fixtures	Ctrl + Alt + C
Paste Fixtures	Ctrl + Alt + V
Delete Fixtures	Ctrl + Alt + D
Rotate Fixtures	Ctrl + Alt + R
Rotate Fixtures 90 Degrees Clockwise	Ctrl + Alt + Right Cursor Arrow
Rotate Fixtures 90 Degrees Anticlockwise	Ctrl + Alt + Left Cursor Arrow
Rotate Fixtures 180 Degrees	Ctrl + Alt + Down Cursor Arrow
Mirror Fixtures	Ctrl + Alt + I
Array Fixtures	Ctrl + Alt + A

3. From the Fixturing toolbar.

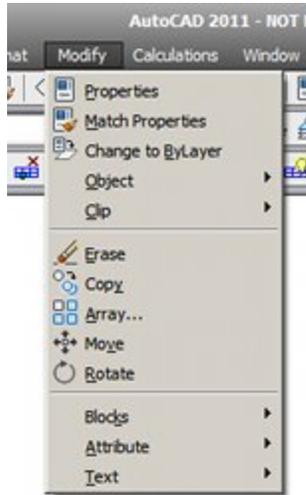


Option	Icon
Group On/Off	
Move Fixtures	
Slide Fixtures	
Offset Fixtures	
Match Rotation	
Cut Fixtures	
Copy Fixtures	
Paste Fixtures	
Delete Fixtures	
Rotate Fixtures	
Rotate Fixtures 90 Degrees Clockwise	
Rotate Fixtures 90 Degrees Anticlockwise	
Rotate Fixtures 180 Degrees	
Mirror Fixtures	
Array Fixtures	

4. From the right click menu accessed in the floor plan



Note: these commands should not be confused with the pure AutoCAD commands available from (for example) the Modify menu.



Turning Grouping On or Off

Grouping affects how objects are selected for Fixture Manipulation or Fixture Swap. Grouping is Toggled on or Off using the icon on the Fixturing toolbar.



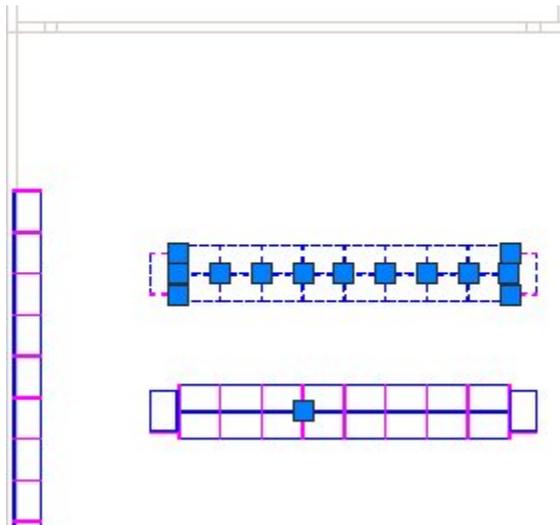
Grouping On

If Grouping is turned on, selecting a single item of equipment in a gondola selects all items of equipment in that gondola.

Grouping Off

If Grouping is turned off, items of equipment within a gondola must be individually selected; either by clicking on them, or by using Windows or Crossing selection boxes.

In the example below, one fixture in the upper double sided gondola has been clicked while grouping was turned on - resulting in all fixtures and fittings in the gondola being selected. Grouping was then turned off, and a single fixture clicked in the bottom double sided gondola. Because grouping was turned off, only a single fixture was selected.



Toggling Grouping On or Off has a significant effect on what is selected.

Factors Affecting Fixture Swap and Manipulation

Technicalities of Fixture Swap and Manipulation

Synchronization

Synchronization is used to ensure that the information in the database matches that held in the Planner floor plan. There are three forms of synchronisation.

- **Auto-Synchronization** which can be used to ensure a floor plan is correctly synchronised when it is opened.
- **Dynamic Synchronization** which can be used to automatically write changes made by some AutoCAD commands immediately back to the database.
- **Manual Synchronization** which allows the user to select objects to synchronize and where the data is to be written.

Note: More information on these options can be found in the section on Synchronization.

Prior to carry out any fixture swap or manipulation operations, it is suggested the user ensure that synchronization is up to date.

Selection Sequence

There are generally two ways a command can be executed:

1. Select the objects first then issue the command.
2. Issue the command and then select the objects.

The examples given in this section are all based on selecting the objects first, then issuing the command. Issuing the command first, then selecting the objects is an equally valid way of working.

In this case the command is invoked from the Fixturing toolbar. In the example below, the Move command has been selected.



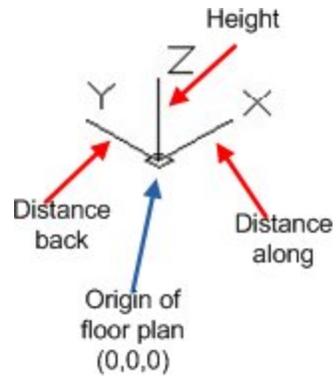
A prompt then appears in the command line. This identifies the command that has been invoked and prompts the user to select the objects the command is to be applied to.

```
Command: AVT_MOVE
Select objects:
```

Once the objects have been selected, the rest of the command is executed in a similar manner to when the objects were selected first and then the command invoked.

Object Height

The position of an object can be described relative to the origin of the floor plan by three coordinates:



The origin of the floor plan is by convention always (0, 0, 0).

1. The X axis is the distance along (to the left or right) of the origin.
2. The Y axis is back of or in front of the origin.
3. The Z axis is the height above or below the origin.

So, if an object is 20 feet to the left of the origin, 10 feet back from it and 3 ft above it, it would have Cartesian coordinates (expressed in feet) of

(20, 10, 3).

Note: Cartesian coordinates are often expressed in inches or millimeters. If expressed in inches, the example above would be (240, 120, 36).

All the Fixture Manipulation and Fixture Swap operations will affect the distance along from and back from the origin (X and Y coordinates). They will not affect the height (Z coordinate).

Fixture Manipulation and XData

Fixture Manipulation relies on the block (fixture) having been registered in a specific manner in Fixture Studio. When saving a block, there is an option to Write Block Files.



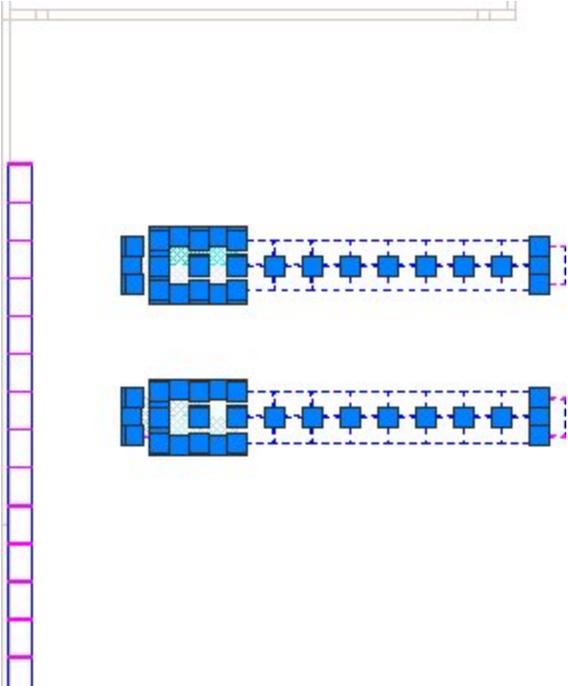
Note: Users require the appropriate permissions to access Fixture Studio.

This writes additional information into the block in the form of Extended Object Data (XData). XData is then referenced by the software when the fixture is manipulated by a user in the floor plan. If this data is absent - for example because the fixture is a raw AutoCAD block - then the fixture manipulation functionality will not be effective for that fixture.

Note: XData is embedded into the fixture in a way that is not accessible to users. If the fixture manipulation commands are failing for some blocks, it is recommended that the block be saved again from fixture studio ensuring that the **Write Block Files** option is used. See the *Fixture Studio User Guide* for more information on how to create fixtures.

Selection Methods

Before carrying out Fixture Manipulation or Fixture Swap operations, users must be able to select objects in the floor plan. Selected objects have a dotted outline and the insertion point shows as a small blue square.

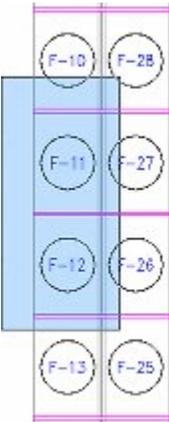


Individual Selection

Individual objects can be selected by left clicking a line belonging to that object. Additional objects can be added to the selection set by continuing to left click lines in other items in the drawing. When all objects have been selected, the selection is completed by right clicking in the floor plan with the mouse.

Window Selection Box

One way of selecting multiple fixtures is to use a window selection box. To do this click on a point in the floor plan, hold down the left mouse button and move the cursor to the right of the first point. A blue box will result. All objects completely enclosed by the box will be selected.

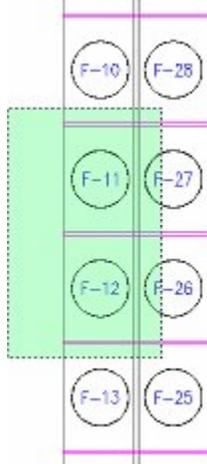


In the above example, fixtures F-11 and F-12 will be selected because they are completely enclosed, but fixtures like F-27 that are not completely enclosed will not be selected.

Multiple windows selection boxes may be used to select objects. The selection is completed by right clicking in the floor plan with the mouse.

Crossing Selection Box

One way of selecting multiple fixtures is to use a window selection box. To do this click on a point in the floor plan, hold down the left mouse button and move the cursor to the left of the first point. A green box will result. All objects fully or partially enclosed by the box will be selected.



In the above example, fixtures F-10, F-11, F-12, F-13, F-25, F-26, F-27, and F-28 will be selected because they are fully or partially enclosed.

Multiple crossing selection boxes may be used to select objects. The selection is completed by right clicking in the floor plan with the mouse.

De-Selecting Fixtures

Any existing selection set can be de-selected by hitting the escape key.

AutoCAD's Object Snap Functionality

AutoCAD has Object Snap functionality. This can be toggled on or off by clicking the button on the AutoCAD status bar.



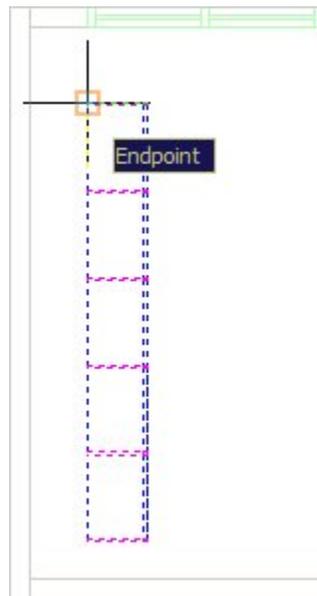
Right clicking the Object Snap icon and selecting **Settings** enables the settings to be defined. Check boxes can be ticked to specify points that the cursor can snap to when carrying out fixture manipulation options.



When carrying out a Fixture Manipulation command (for example Move), the user will be prompted to pick a base point in the selected objects.

```
Command: AVI_MOVE
Command: 11 found
Specify base point or [Displacement] <Displacement>:
```

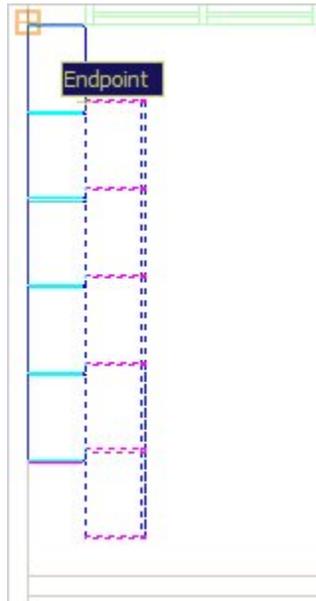
If Object Snap is on, the cursor will snap to any points that have been specified in the Settings dialog box. In the example below an Endpoint has been selected by clicking it.



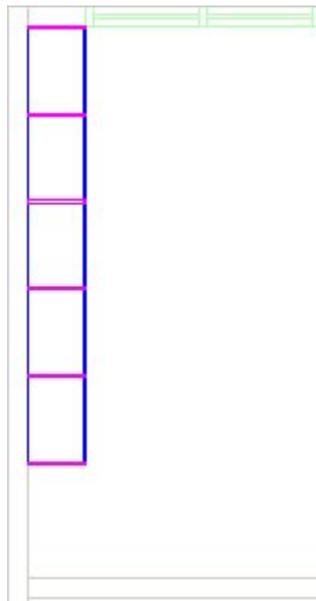
Once the first Object Snap point has been selected, the user will be invited to select a point to move to.

```
Specify base point or [Displacement] <Displacement>: Specify second point or <use first point as displacement>:
```

The user can then select another Object Snap point. In the example below, the corner of the wall in the architectural plan has been selected.



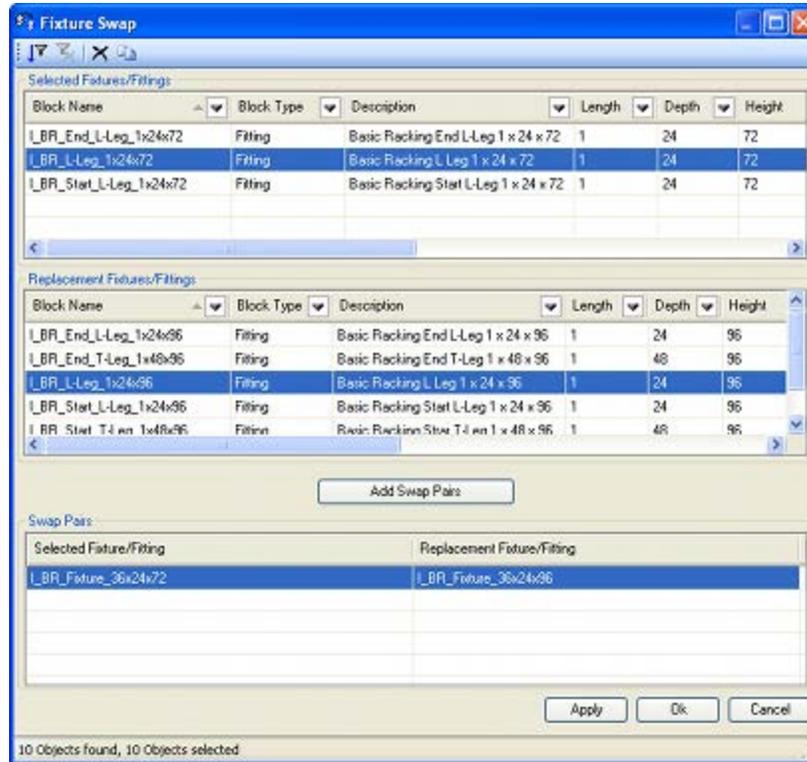
On clicking the second Object Snap point the selected objects will be moved to that point. In the example below, the fixtures have been moved precisely into the corner of the wall.



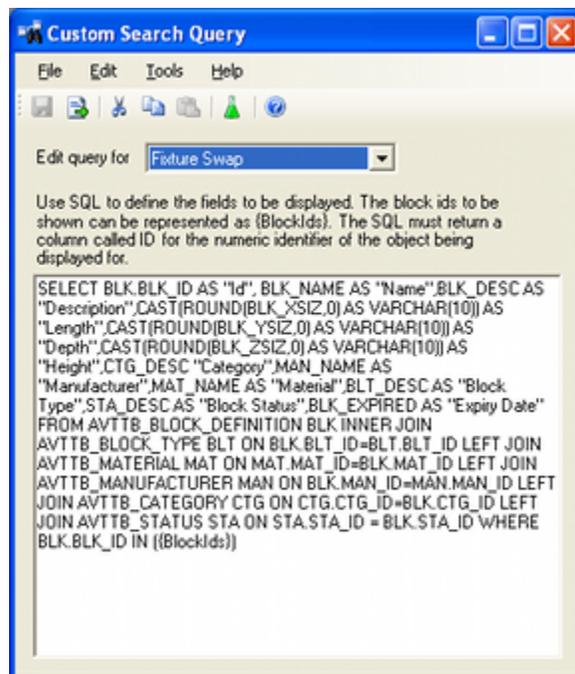
Note: for more information on using Object Snap or 3D Object Snap see the AutoCAD help material.

Fixture Swap and Custom SQL

The information in the **Fixture Swap dialog box** is controlled by via the Administration Module. For example, columns can be added or removed.



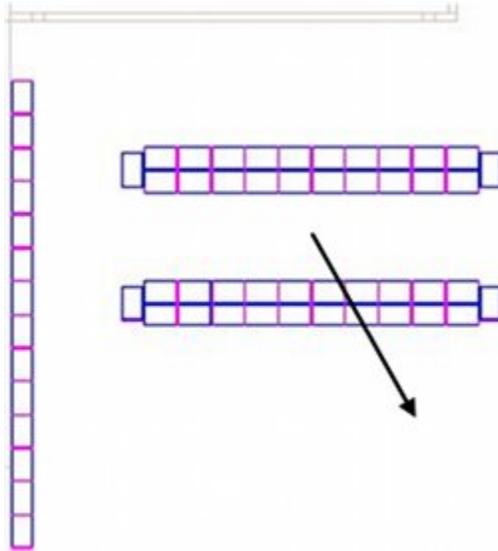
Modifying the list of information in the Fixture Swap dialog box is carried out in the Custom Query dialog box in the Administration module. This is accessed from the General menu.



Fixture Manipulation Commands - Move

Move Fixtures

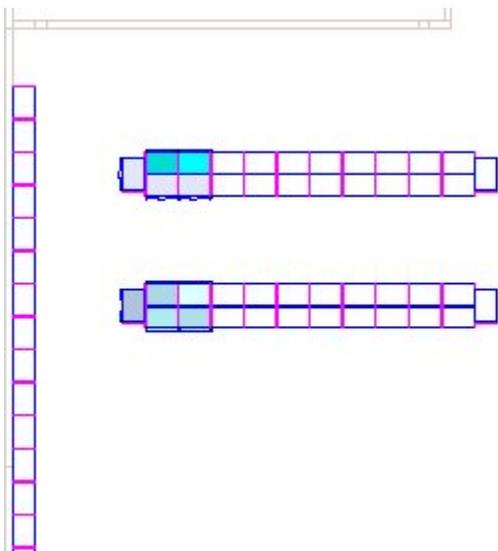
Move Fixtures allows the user to move the selected set of equipment, merchandise and annotation from one point to another in the floor plan.



The command is invoked from the **Move** option on the Fixturing toolbar.



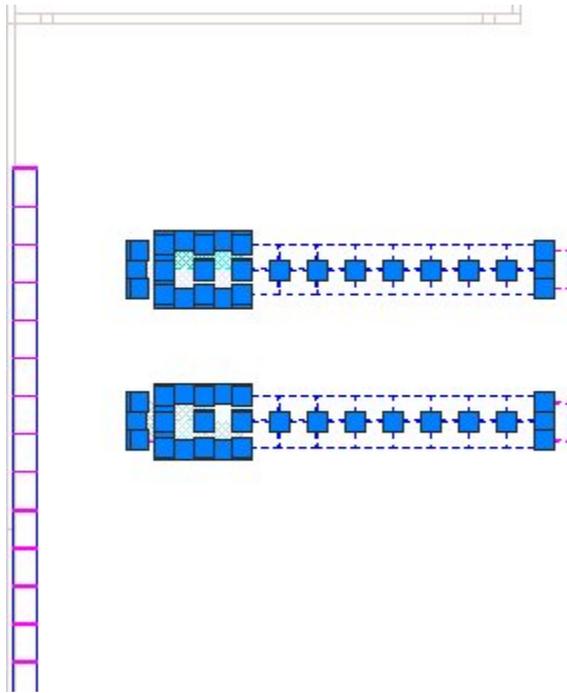
In the example below, the double sided gondolas are to be moved relative to the single sided gondolas along the wall.



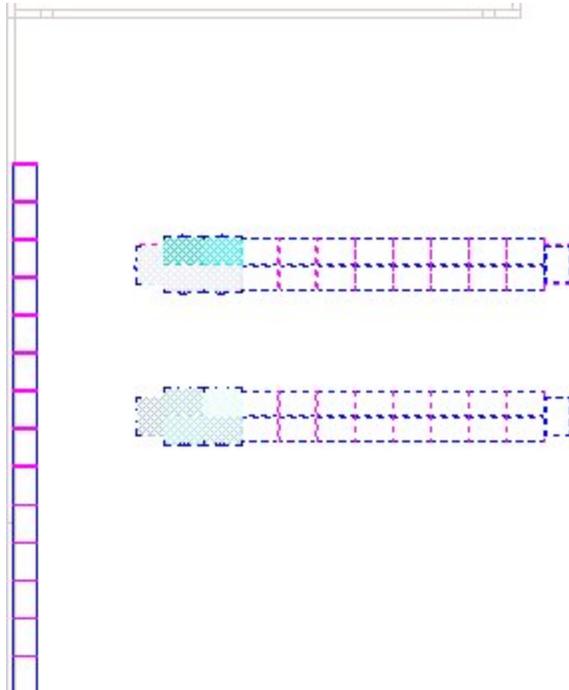
The initial stage is to select the gondolas to be moved. The outlines of the fixtures will turn dotted and the insertion points will show as blue boxes. (If using individual fixture

selection, the selection set must be completed by clicking the right mouse button. If using Windows or crossing selection boxes, continue selecting until all required objects are in the selection set).

Note: Selection behavior will also be affected by whether **Grouping** is On or Off.



The user can then click the **Move** icon on the Fixturing toolbar. The Insertion points will disappear, but the fixtures will still remain as dotted outlines.



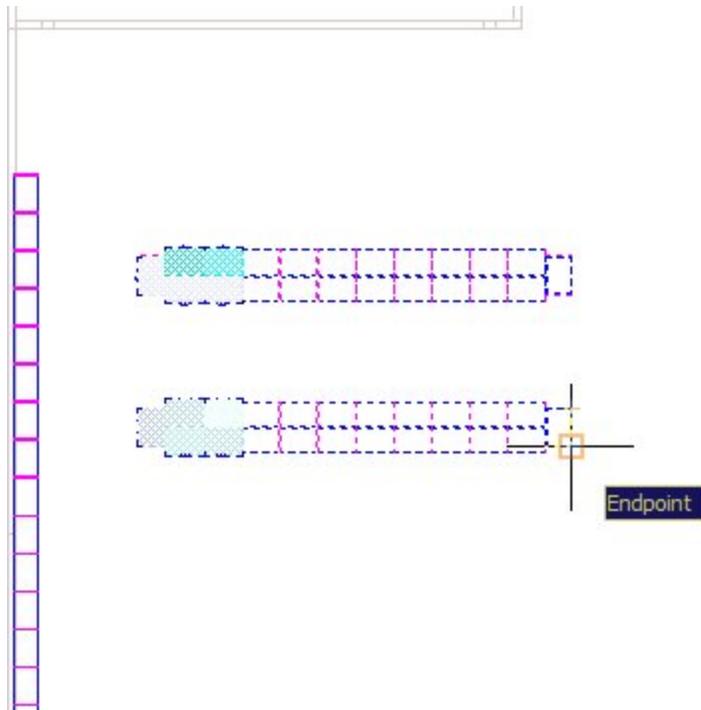
At the same time, the user will be prompted (via the command line) to select a base point for the move.

```
Command: 94 found  
Specify base point or [Displacement] <Displacement>:
```

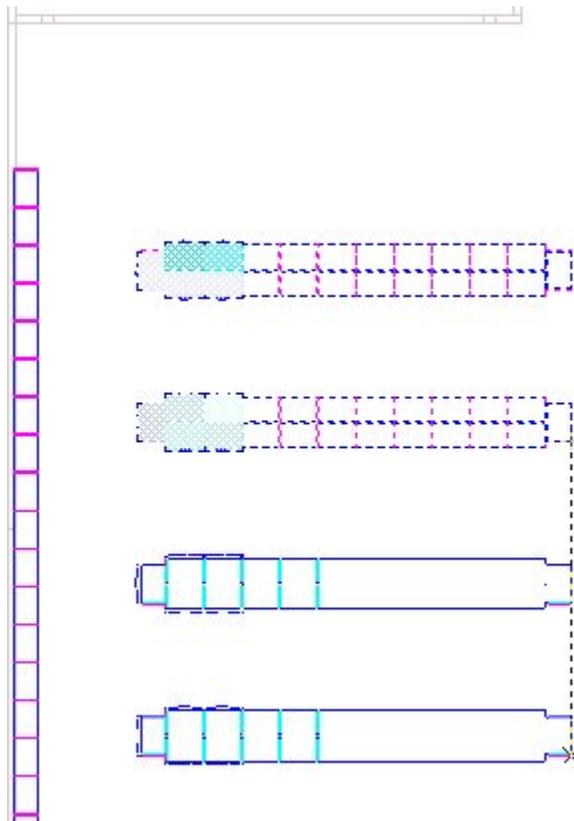
If Object Snap is turned on in the Status Bar, the user can 'snap' the cursor to a convenient point on one of the selected fixtures.



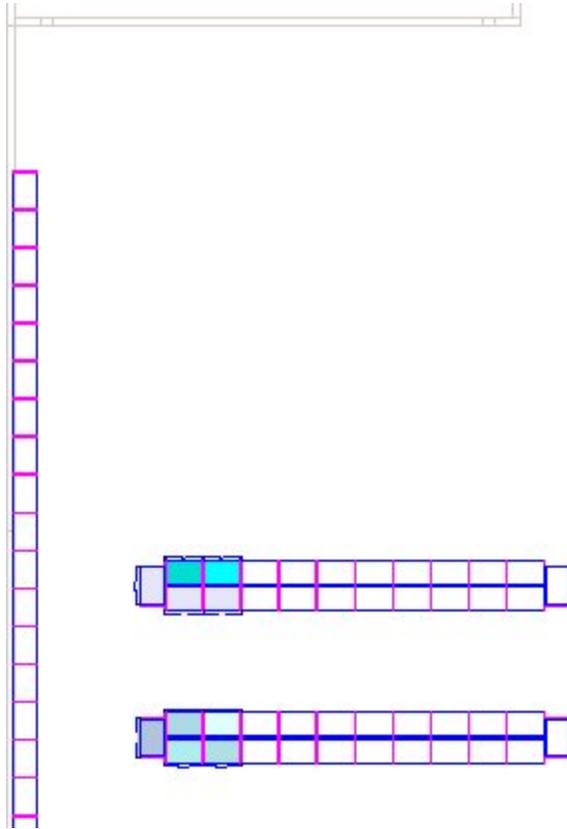
The cursor will then snap to a selected point on the fixture.



The fixtures can then be moved via the cursor to the point they are required in the floor plan. The fixtures will appear as a 'ghost' outline until finally placed.

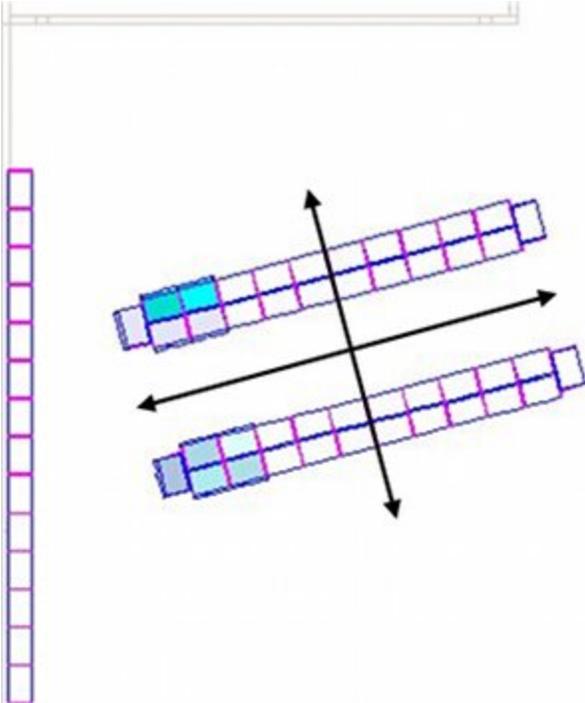


On left clicking at the selected point in the drawing, the fixtures will be moved to that point.



Slide Fixtures

Slide Fixtures allows the user to move the selected set of equipment, merchandise and annotation from one point to another in the floor plan.

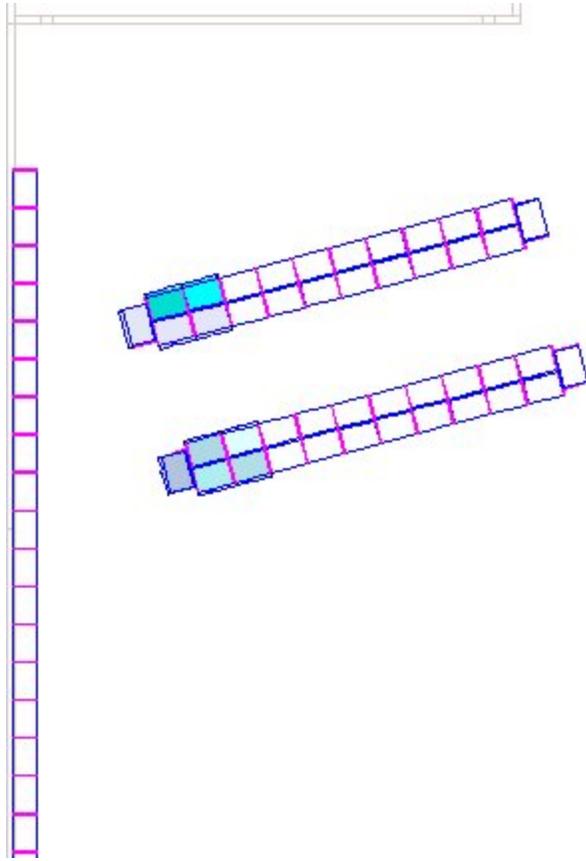


The command is invoked from the **Slide** option on the Fixturing toolbar.



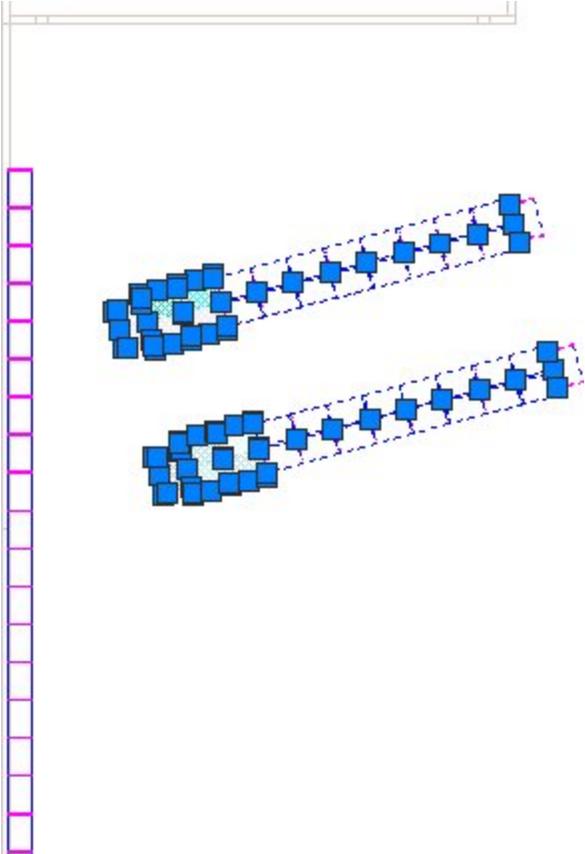
The Slide option is a more restricted form of the Move command. Fixtures can only be moved at 0, 90, 180 or 270 degrees relative to the selected fixtures. If it is desired to move the fixtures a precise distance in the specified direction, this distance can be entered into the AutoCAD command line.

In the example below, the double sided gondolas are to be 'slid' relative to the single sided gondolas along the wall.

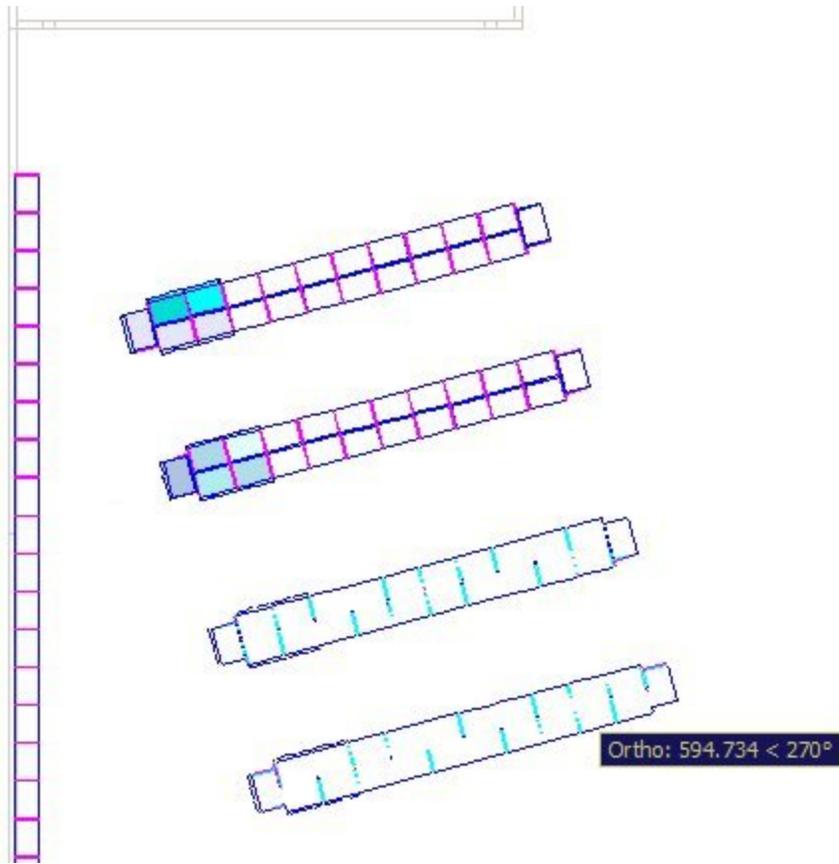


The initial stage is to select the gondolas to be moved. The outlines of the fixtures will turn dotted and the insertion points will show as blue boxes. (If using individual fixture selection, the selection set must be completed by clicking the right mouse button. If using Windows or crossing selection boxes, continue selecting until all required objects are in the selection set).

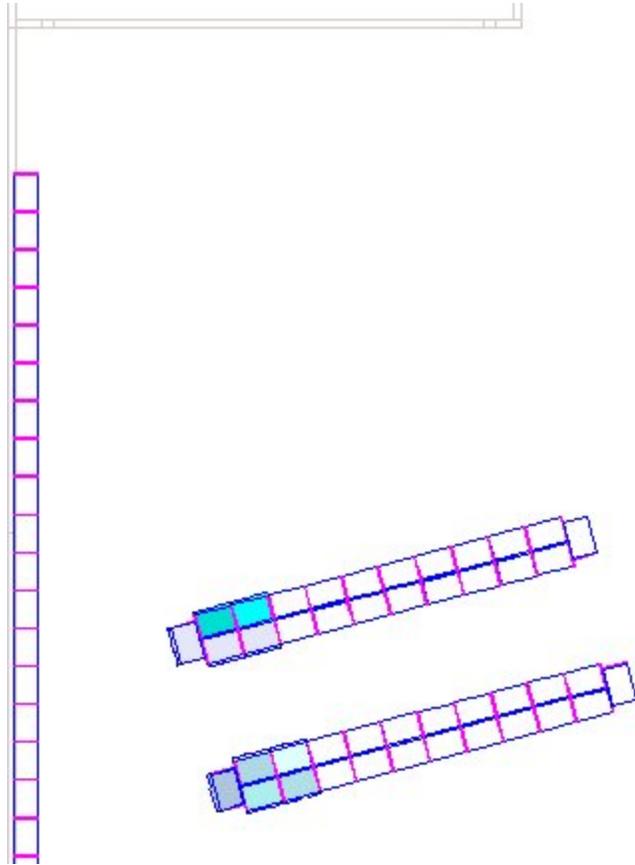
Note: Selection behavior will also be affected by whether **Grouping** is On or Off.



The user can then click the **Slide** icon on the Fixturing toolbar. The selected fixtures can be 'slid' along the permitted axes until they are in the correct position. The fixtures will appear as a 'ghost' outline until finally placed.

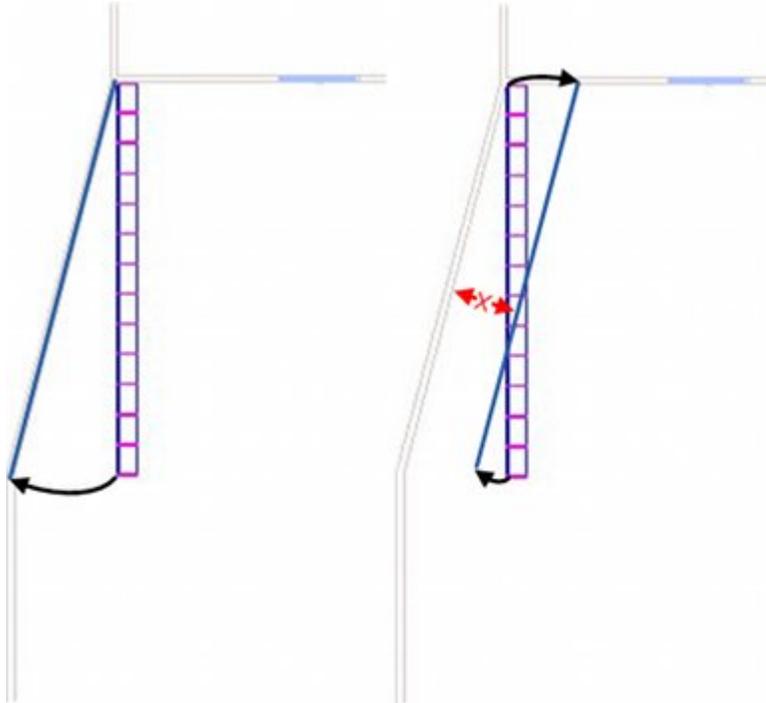


On left clicking at the required point, the fixtures will be repositioned.



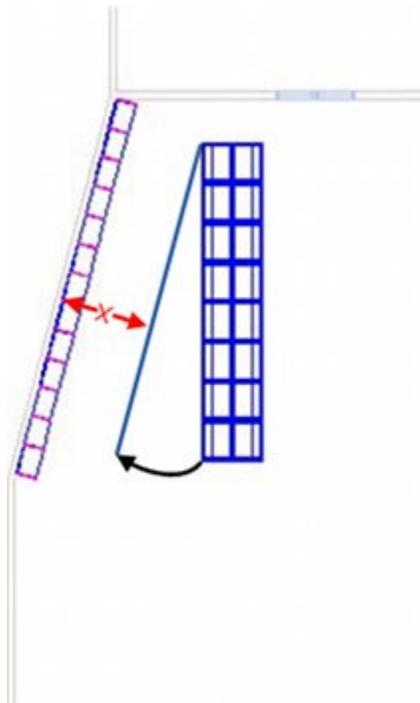
Offset Fixtures

Offset Fixtures allows the user to align the selected set of equipment, merchandise and annotation a set distance from a line (for example a wall) in the floor plan.



In the above diagram, the left hand example shows the effect of selecting a wall to offset from and setting an offset of 0: the selected objects will align directly along the wall. The right hand sample shows the effect of a positive offset: the selected objects have aligned a specific distance from the wall.

In the diagram below, the double gondola is to be moved parallel to and 8 feet from the single gondola along the wall.

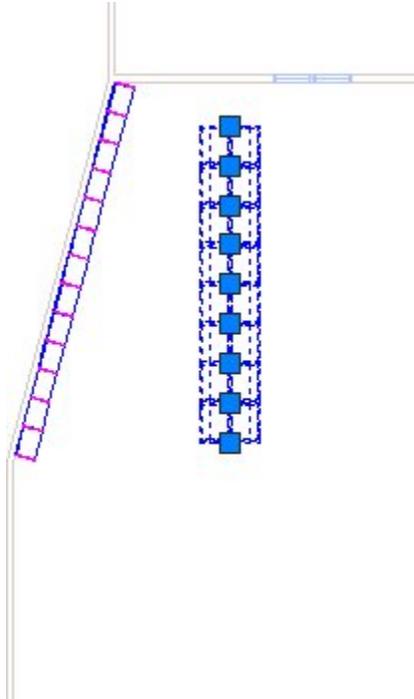


The command is invoked from the **Offset** option on the Fixturing toolbar.



The initial stage is to select the gondolas to be moved. The outlines of the fixtures will turn dotted and the insertion points will show as blue boxes. (If using individual fixture selection, the selection set must be completed by clicking the right mouse button. If using Windows or crossing selection boxes, continue selecting until all required objects are in the selection set).

Note: Selection behavior will also be affected by whether **Grouping** is On or Off.



The user can then click the **Offset** icon on the Fixturing toolbar. The user will then be prompted to set the Offset distance - the distance the gondola will be from the selected wall, etc.

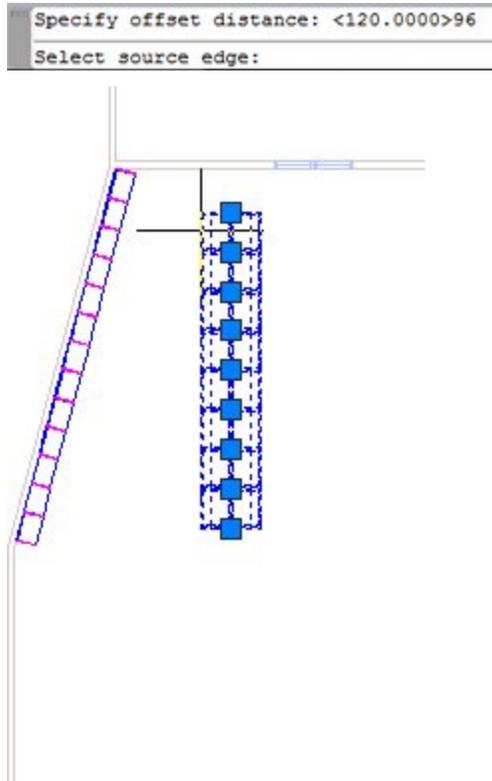
```
Command: AVI_OFFSET
Specify offset distance: <120.0000>96
```

Alternatively, click two successive points in the floor plan. After clicking the first point, the user will be invited to click a second:

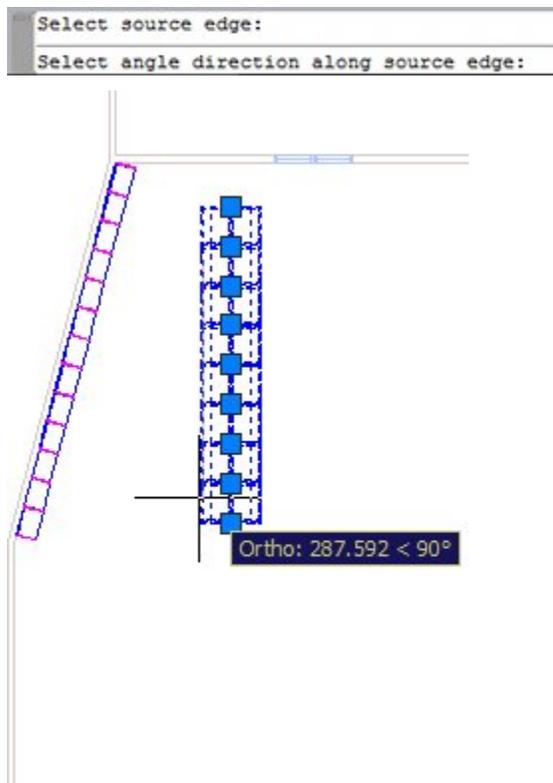
```
Command: AVI_OFFSET
Specify offset distance: <120.0000> Specify second point:
```

This method can be used to measure an existing distance between two objects in the floor plan (for example a gap between two other gondolas) and use it for the offset.

The user will then be invited to select a source edge. This is the edge of the gondola that will be moved relative to another object.



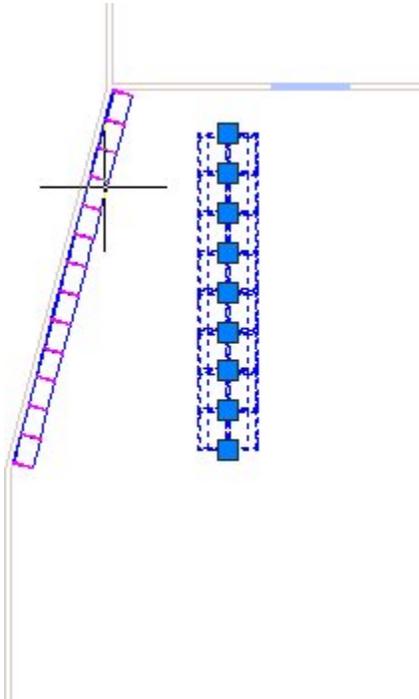
The user will then be invited to select an angle along the source edge. This is done by clicking another point on the face of the gondola.



The user will then be invited to select an edge of the object to be aligned with.

Select angle direction along source edge:
Select reference edge:

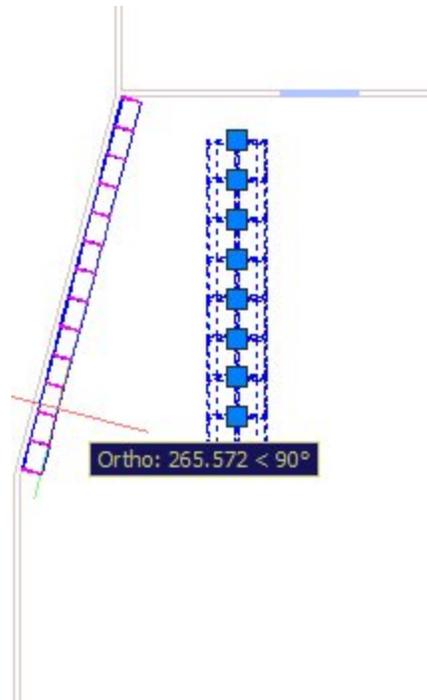
In the example below, the user has selected the front edge of the single gondola along the wall.



The user will then be invited to select an angle along the reference edge.

Select reference edge:
Select angle direction along reference edge:

This is done by clicking on another point on the front edge of the single gondola along the wall.

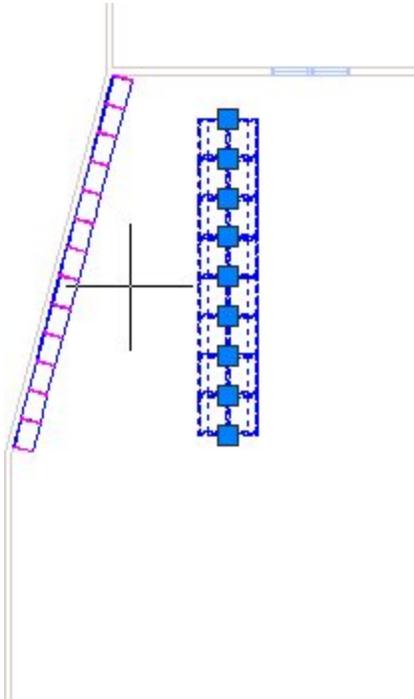


The user will be invited to select the side of the reference line the double gondola is to be offset to.

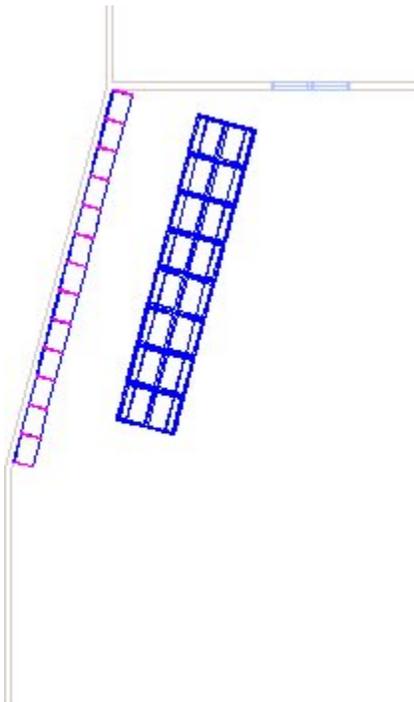
Select angle direction along reference edge:

Specify which side of the reference edge to offset objects:

This is done by clicking on the side of the single gondola we wish the double gondola to be offset to.

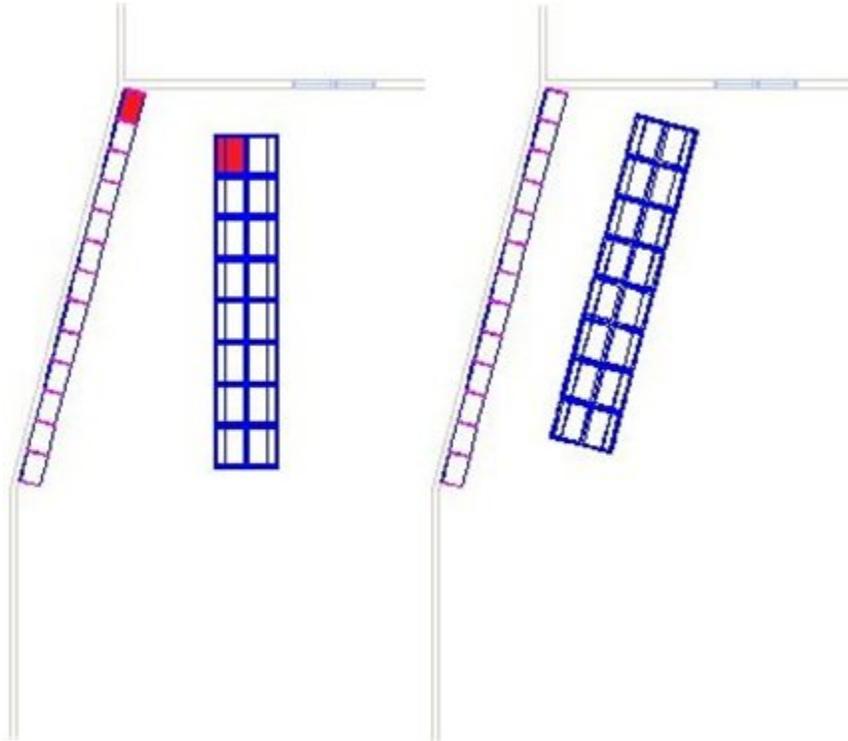


As soon as this point is clicked, the selected equipment, merchandise and annotation will rotate until they are aligned with the selected edge.

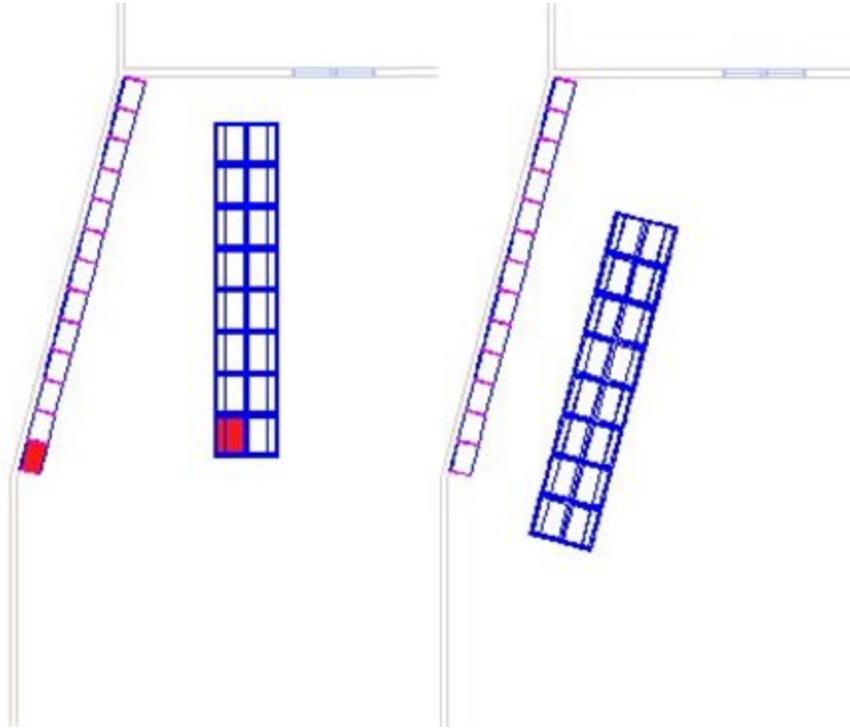


If Grouping is On, how the offset fixtures line up to their datum fixtures depends on the fixture clicked on to select the fixtures to offset and the fixture selected to specify the fixtures to offset to. When the fixtures to be offset move, the insertion points of the two selected fixtures will align.

In the example below, the top left fixture of the double gondola was clicked when selecting the objects to offset, and the top fixture was selected in the gondola to offset to (left hand diagram). The result is shown in the right hand diagram.



In the example below, the bottom left fixture of the double gondola was clicked when selecting the objects to offset, and the bottom fixture was selected in the gondola to offset to (left hand diagram). The result is shown in the right hand diagram.

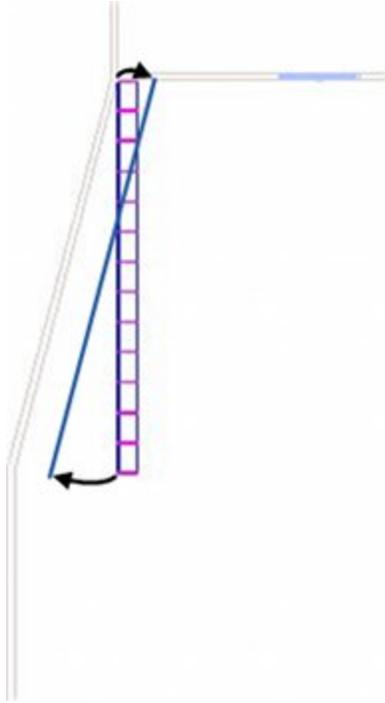


Match Rotation

Match Rotation allows the user to align the selected set of equipment, merchandise and annotation with a line (for example a wall) in the floor plan.

Note: If it desired to align the selected equipment, merchandise and annotation against a wall, etc., use the **Offset** command with an Offset of 0.

In the example below, the single sided gondola is to be aligned with the wall behind it.

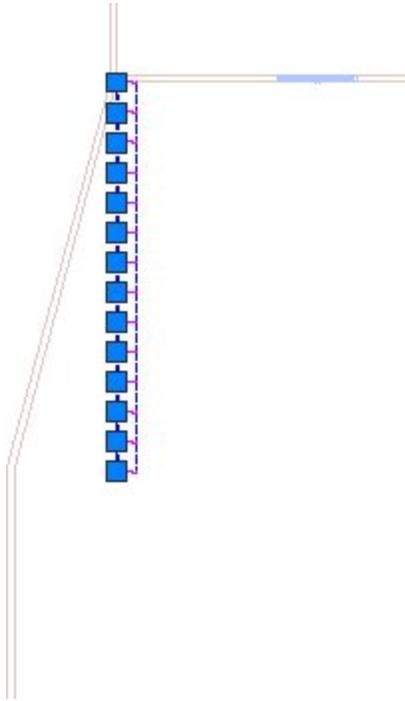


The command is invoked from the **Match Rotation** option on the Fixturing toolbar.



The initial stage is to select the gondolas to be moved. The outlines of the fixtures will turn dotted and the insertion points will show as blue boxes. (If using individual fixture selection, the selection set must be completed by clicking the right mouse button. If using Windows or crossing selection boxes, continue selecting until all required objects are in the selection set).

Note: Selection behavior will also be affected by whether **Fixture Grouping** is On or

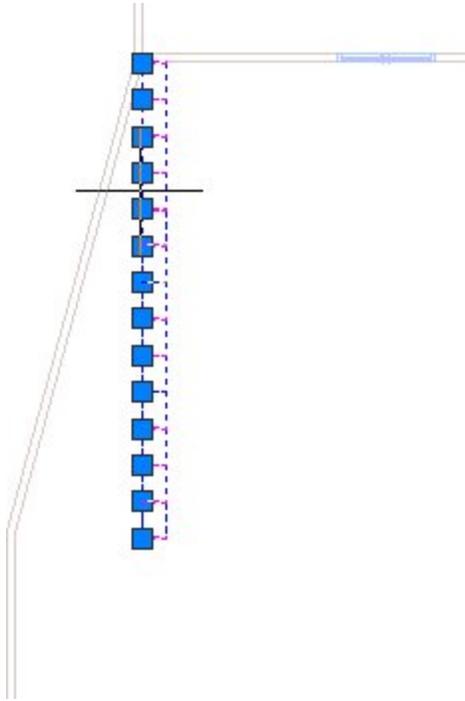


The user can then click the **Match Rotation** icon on the Fixturing toolbar. The user will then be invited to select a source edge. This is the edge of the gondola that will be rotated relative to another object.

```
Command: AVI_MATCH_ROTATION
Select source edge:
```

This is done by clicking a point on the required edge of the gondola.

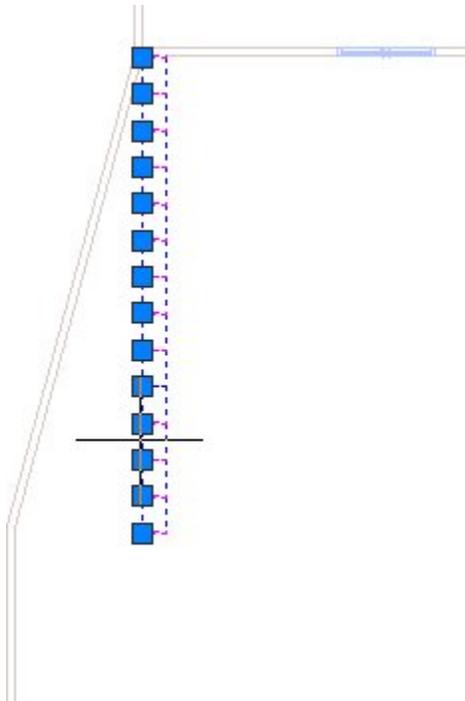
Note: It is not possible to select an edge by clicking an insertion point. You must click on an edge of a fixture.



The user will then be invited to select an angle along the source edge. This is done by clicking another point on the face of the gondola.

Select source edge:

Select angle direction along source edge:

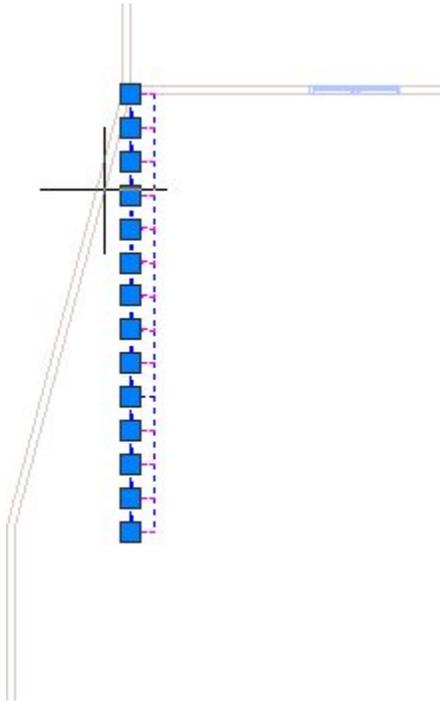


The user will then be invited to select an edge of the object to be aligned with.

Select angle direction along source edge:

Select reference edge:

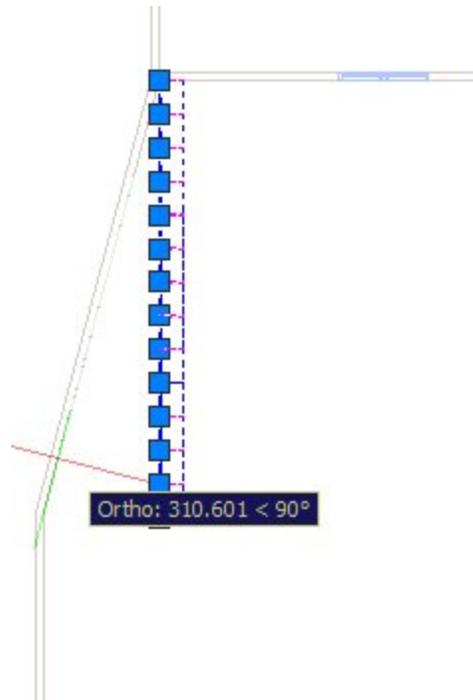
In the example below, the user has clicked on the face of the wall the gondola run is to be aligned to.



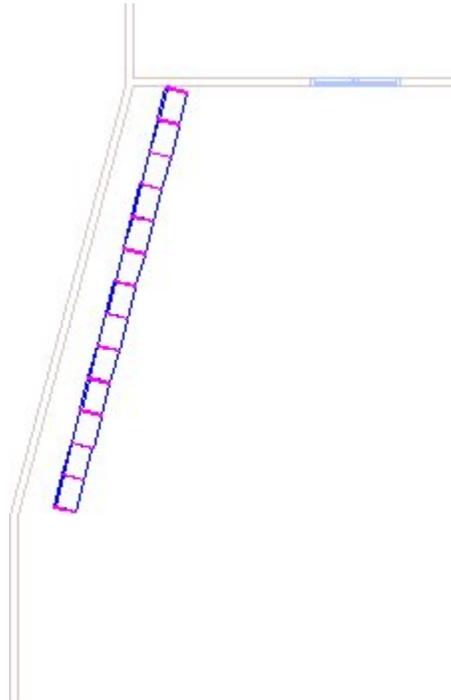
The user will then be prompted to select the direction for the edge.

Select reference edge: _____
Select angle direction along reference edge: _____

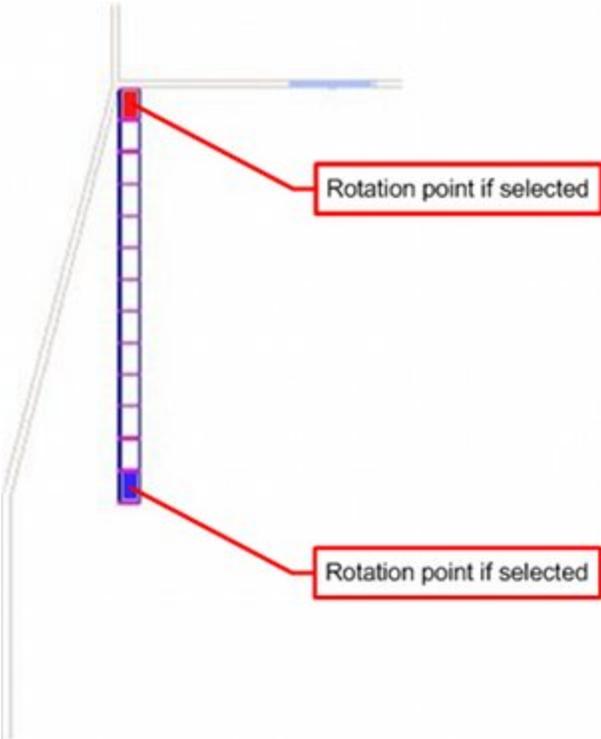
This is done by clicking on another point on the face of the wall.



As soon as the second point is clicked, the selected equipment, merchandise and annotation will rotate until they are aligned with the selected edge.



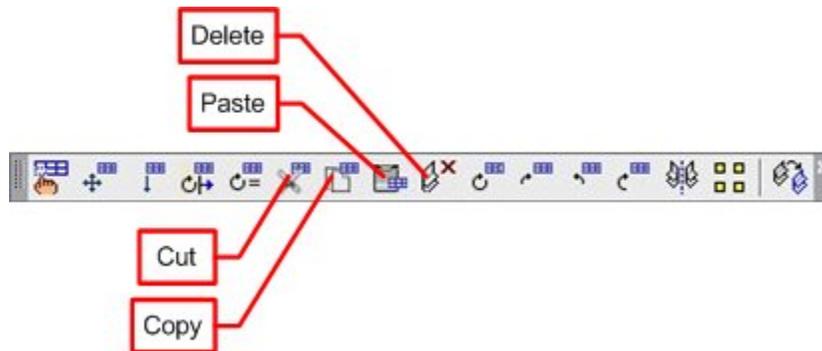
If **Grouping** is **On** and the required fixtures are selected by clicking on an individual fixture, the insertion point of that fixture will serve as the point around which the fixtures will rotate. In the example below, if the top fixture (colored red in this example) is selected, the gondola will rotate about its insertion point. If the bottom fixture (colored blue in this example) is selected, the gondola will rotate about that insertion point.



Fixture Manipulation – Cut, Copy and Paste

Cut, Copy and Paste Commands

The **Cut**, **Copy** and **Paste** commands take a selected set of equipment, merchandise, annotation and bay numbers and move them to or from the clipboard. The **Delete** command removes the selected set of equipment, merchandise, annotation and bay numbers from the floor plan. The commands are invoked from the Fixturing toolbar.

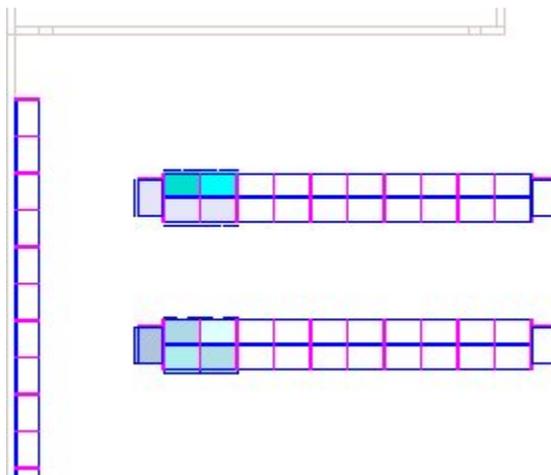


Cut or Copy Commands

The **Cut** Command removes the selected equipment, merchandise, annotation and bay numbers from the floor plan and places the information into the clipboard. Any previous information in the clipboard is overwritten.

The **Copy** Command takes a copy of the selected equipment, merchandise, annotation and bay numbers from the floor plan and places the information into the clipboard. Any previous information in the clipboard is overwritten.

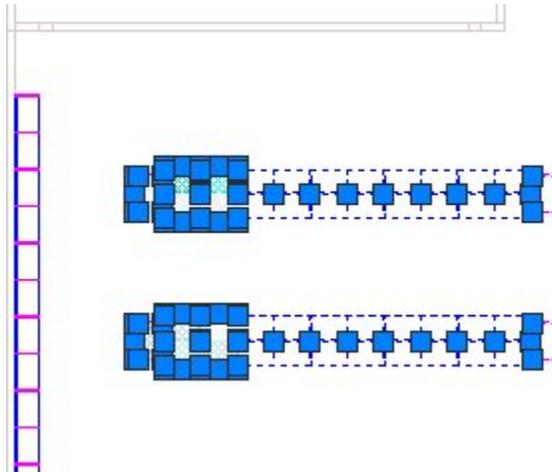
In the example below, the two double sided gondolas are to be either cut or copied from the floor plan and placed on the clipboard.



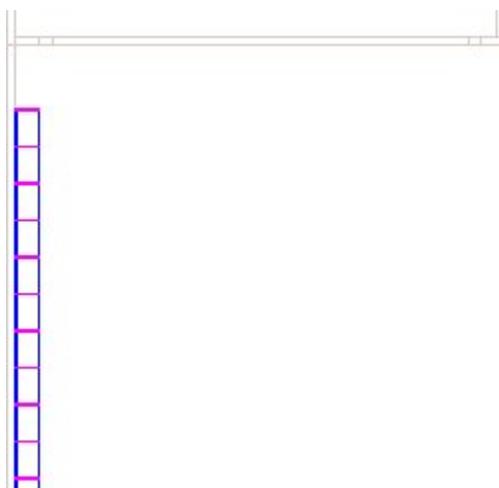
The initial stage is to select the required fixtures. The outlines of the fixtures will turn dotted and the insertion points will show as blue boxes. (If using individual fixture selection, the selection set must be completed by clicking the right mouse button. If

using Windows or crossing selection boxes, continue selecting until all required objects are in the selection set).

Note: Selection behavior will also be affected by whether **Grouping** is On or Off.



If the **Cut** command is clicked on the fixturing toolbar, the selected equipment, merchandise, annotation and bay numbers will be removed from the floor plan and placed into the clipboard. Any previous information in the clipboard is overwritten.

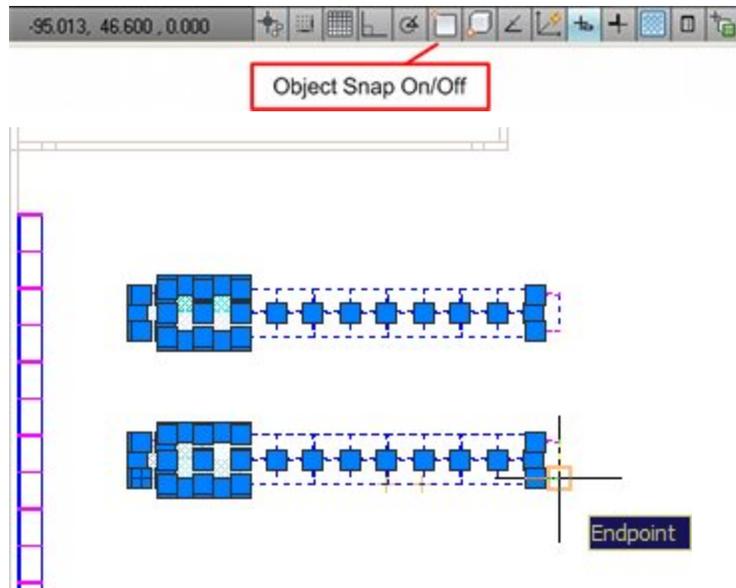


If the **Copy** command is clicked on the fixturing toolbar, the command Line will prompt the user to specify a base point.

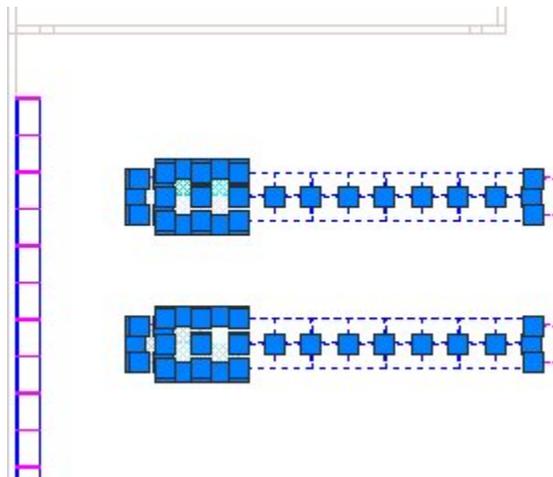


```
Command:
Command: AVI_COPY
Command:
Specify base point:
```

If Object Snap is turned on in the Status Bar, the user can 'snap' the cursor to a convenient point on one of the selected fixtures.



After clicking on the selected point, a copy of the selected equipment, merchandise, annotation and bay numbering will be taken from the floor plan and placed into the clipboard. Any previous information in the clipboard is overwritten. In addition, the equipment, merchandise and annotation remains in the floor plan and remains selected.



Paste

Paste takes the information from the clip board and inserts it into the floor plan. The **Paste** command is invoked from the Fixturing toolbar.



After clicking the **Paste** button, the equipment, merchandise, annotation and bay numbering will be taken from the clip board and placed in the floor plan relative to the mouse cursor.



Copying Between Floor Plans

The **Copy** function also allows users to take information from one floor plan and transfer it to another floor plan. This is done as follows:

1. Open or make active the floor plan it is desired to take the information from.
2. Select the required equipment and merchandise
3. Use the Cut or Copy commands to place a copy of the information in the clipboard. This information will include annotation, bay numbering, etc.
4. Open or make active the floor plan it is desired to transfer the information into
5. Use the paste command to add the information into the floor plan.

The information will automatically be synchronized with the information in the database.

Delete Command

The **Delete** command can be used to delete fixtures, together with their associated shelves, merchandise, annotation and bay numbers. This is because the display or selection of objects is often controlled by turning off or locking layers. If purely AutoCAD tools are used, objects on the turned off or locked layers are not included in the selection. This can result in some objects being moved, while their child objects are left in their original location.

The Delete function is found on the fixturing toolbar.



In order to delete fixtures and their associated child objects:

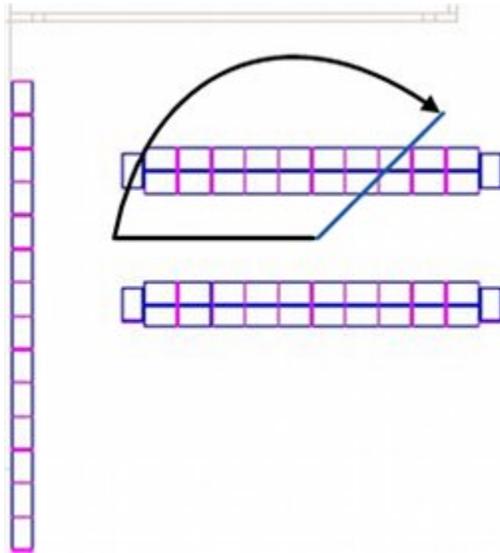
1. Select the required fixtures in the floor plan
2. Click the Delete command on the Fixturing toolbar or on the Toolbar of the Fixturing Tab of the Object Browser

-
-
3. The fixtures and their child objects will then be deleted.

Fixture Manipulation – Rotate Commands

Rotate Fixtures

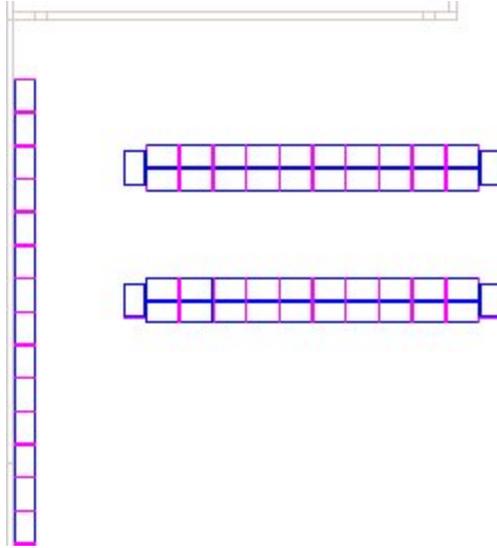
Rotate Fixtures takes a selected set of equipment, merchandise and annotation and rotates them about the center of the selected objects.



The command is invoked from the **Rotate** option on the Fixturing toolbar.

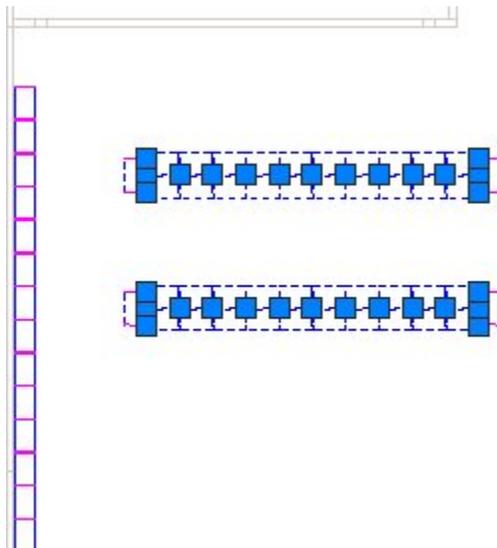


In the example below, the double sided gondolas are to be rotated through 80 degrees relative to the single sided gondola along the wall.

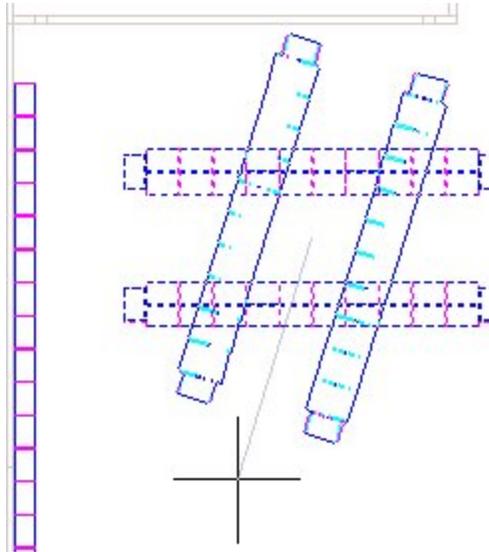


The initial stage is to select the gondolas to be rotated. The outlines of the fixtures will turn dotted and the insertion points will show as blue boxes. (If using individual fixture selection, the selection set must be completed by clicking the right mouse button. If using Windows or crossing selection boxes, continue selecting until all required objects are in the selection set).

Note: Selection behavior will also be affected by whether **Grouping** is On or Off.



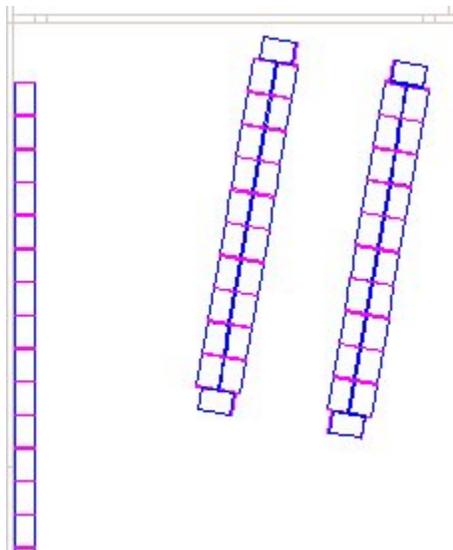
Once the fixtures have been selected and the **Rotate** button has been clicked on the Fixture Manipulation toolbar, they can be rotated around the center of the selected objects by means of the mouse cursor. The new position of the fixtures will be shown as a 'ghost' outline. If this method of rotating the fixtures is being used, the fixtures will be drawn in their final position after a left mouse click in the floor plan.



Alternatively, a precise rotation angle can be entered into the Command line. If this method of rotating the fixtures is being used, the fixtures will be drawn in their final position when Return is pressed.

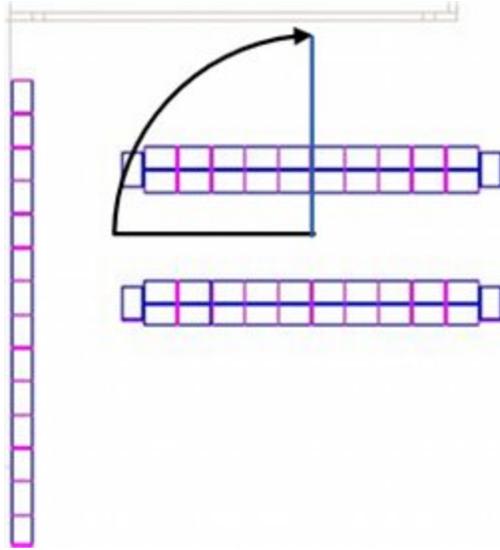
```
Current positive angle in UCS: ANGDIR=counterclockwise ANGBASE=0
74 found
Specify base point:
Specify rotation angle or [Copy/Reference] <310>: 80
```

The fixtures have been rotated as required. Other options (such as the **Move** or **Slide** commands can then be used to further adjust their position).



Rotate Fixtures 90 Degrees Clockwise

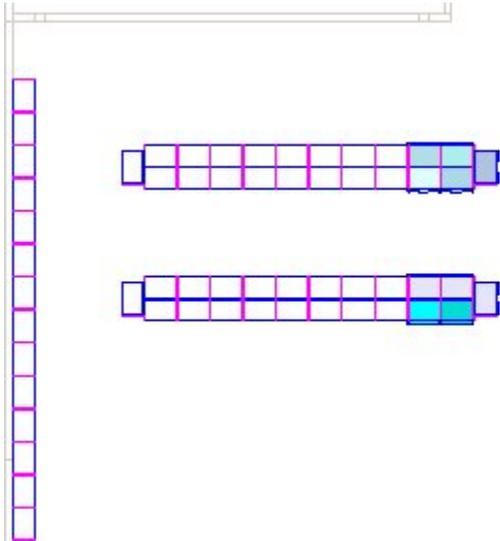
Rotate Fixtures 90 Degrees Clockwise takes a selected set of equipment, merchandise and annotation and rotates them 90 degrees clockwise about the center of the selected objects.



The command is invoked from the Rotate 90 degrees Clockwise option on the Fixturing toolbar.

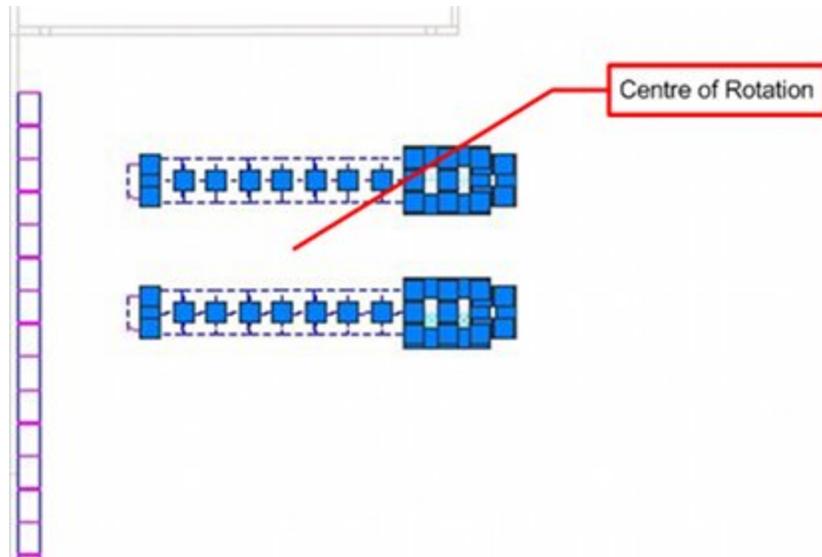


In the example below, the double sided gondolas are to be rotated 90 degrees clockwise.

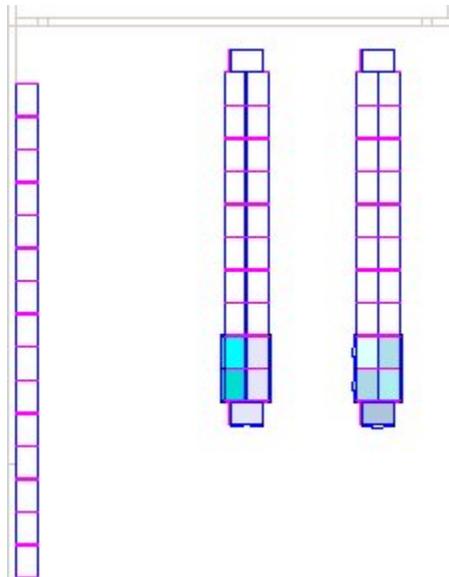


The initial stage is to select the gondolas to be rotated. The outlines of the fixtures will turn dotted and the insertion points will show as blue boxes. (If using individual fixture selection, the selection set must be completed by clicking the right mouse button. If using Windows or Crossing selection boxes, continue selecting until all required objects are in the selection set). The fixtures will rotated about the center of the selected objects.

Note: Selection behavior will also be affected by whether **Grouping** is On or Off.

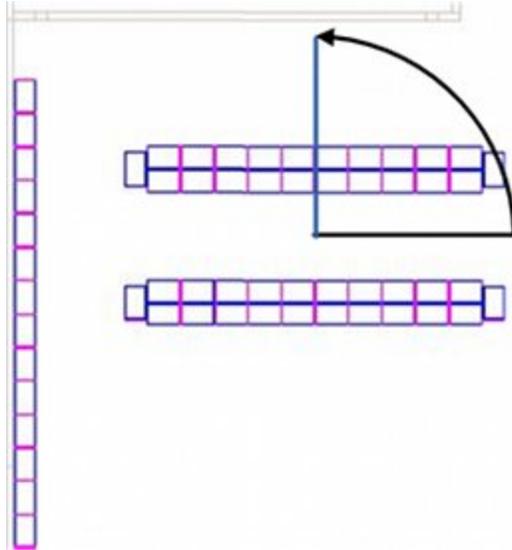


Once the fixtures have been selected, the **Rotate 90 Degrees Clockwise** button is clicked on the Fixture Manipulation toolbar. The fixtures will then be drawn in their final position in the floor plan.



Rotate Fixtures 90 Degrees Anticlockwise

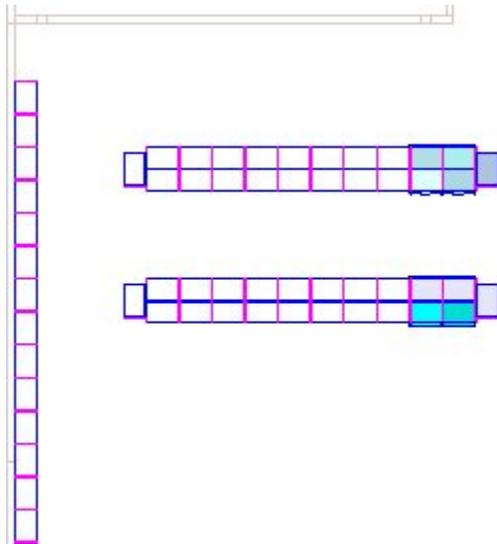
Rotate Fixtures 90 Degrees Anticlockwise takes a selected set of equipment, merchandise and annotation and rotates them 90 degrees anticlockwise about the center of the selected objects.



The command is invoked from the Rotate 90 degrees anticlockwise option on the Fixturing toolbar.

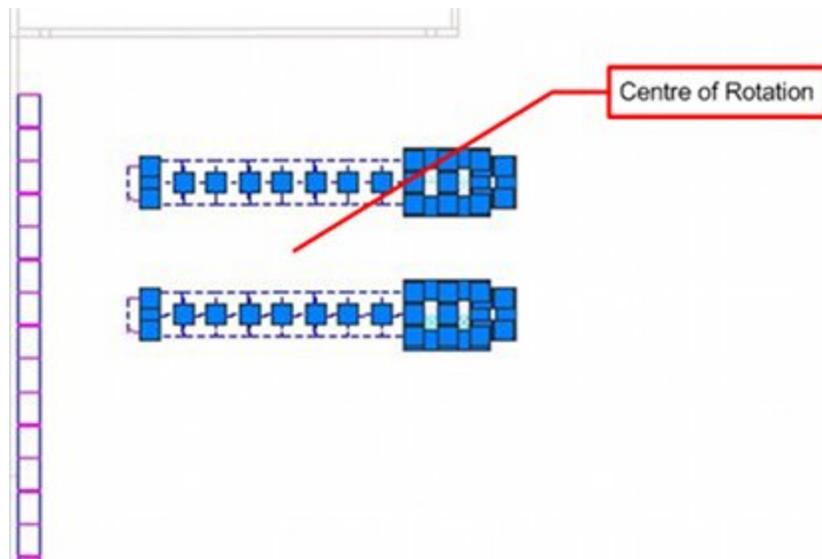


In the example below, the double sided gondolas are to be rotated 90 degrees clockwise.

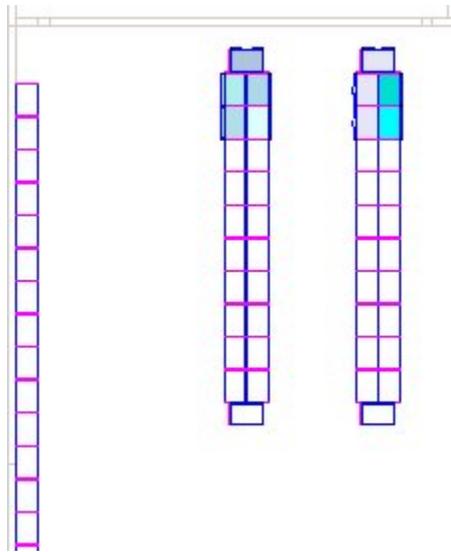


The initial stage is to select the gondolas to be rotated. The outlines of the fixtures will turn dotted and the insertion points will show as blue boxes. (If using individual fixture selection, the selection set must be completed by clicking the right mouse button. If using Windows or crossing selection boxes, continue selecting until all required objects are in the selection set). The fixtures will rotated about the center of the selected objects.

Note: Selection behavior will also be affected by whether **Grouping** is On or Off.

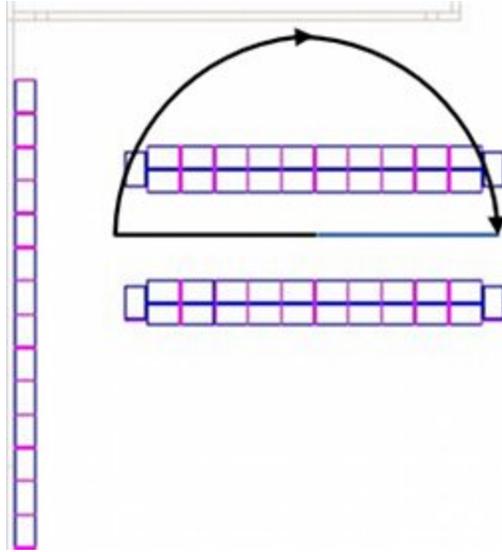


Once the fixtures have been selected, the **Rotate 90 Degrees Anticlockwise** button is clicked on the Fixture Manipulation toolbar. The fixtures will then be drawn in their final position in the floor plan.



Rotate Fixtures 180 Degrees

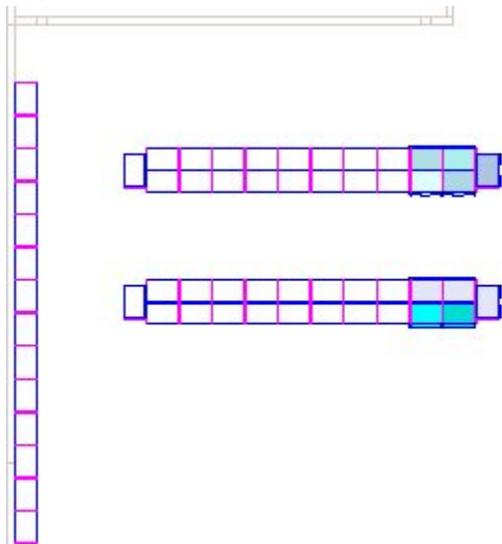
Rotate Fixtures 180 Degrees takes a selected set of equipment, merchandise and annotation and rotates them 180 degrees about the center of the selected objects.



The command is invoked from the Rotate 180 degrees option on the Fixturing toolbar.

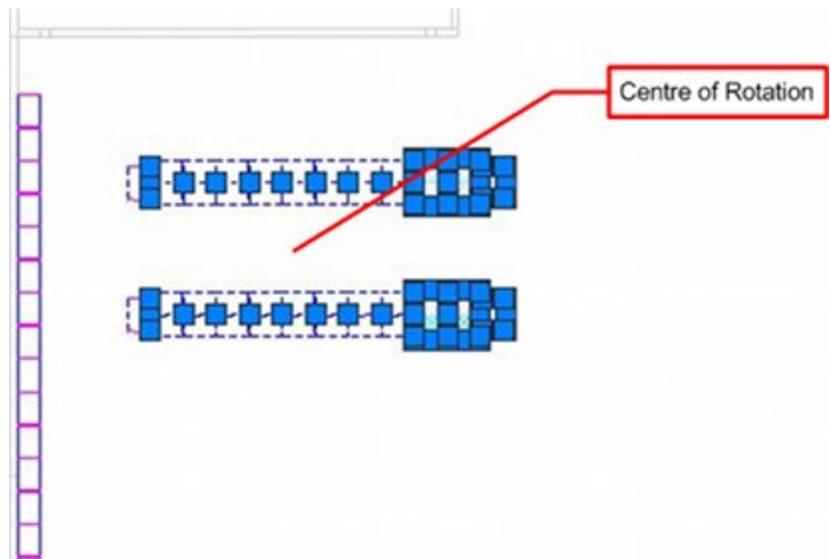


In the example below, the double sided gondolas are to be rotated 180 degrees.

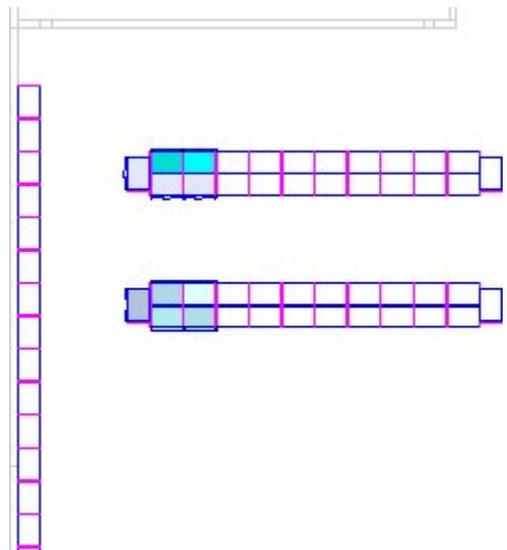


The initial stage is to select the gondolas to be rotated. The outlines of the fixtures will turn dotted and the insertion points will show as blue boxes. (If using individual fixture selection, the selection set must be completed by clicking the right mouse button. If using Windows or crossing selection boxes, continue selecting until all required objects are in the selection set). The fixtures will rotated about the center of the selected objects.

Note: Selection behavior will also be affected by whether **Grouping** is On or Off.



Once the fixtures have been selected, the **Rotate 180 Degrees** button is clicked on the Fixture Manipulation toolbar. The fixtures will then be drawn in their final position in the floor plan.

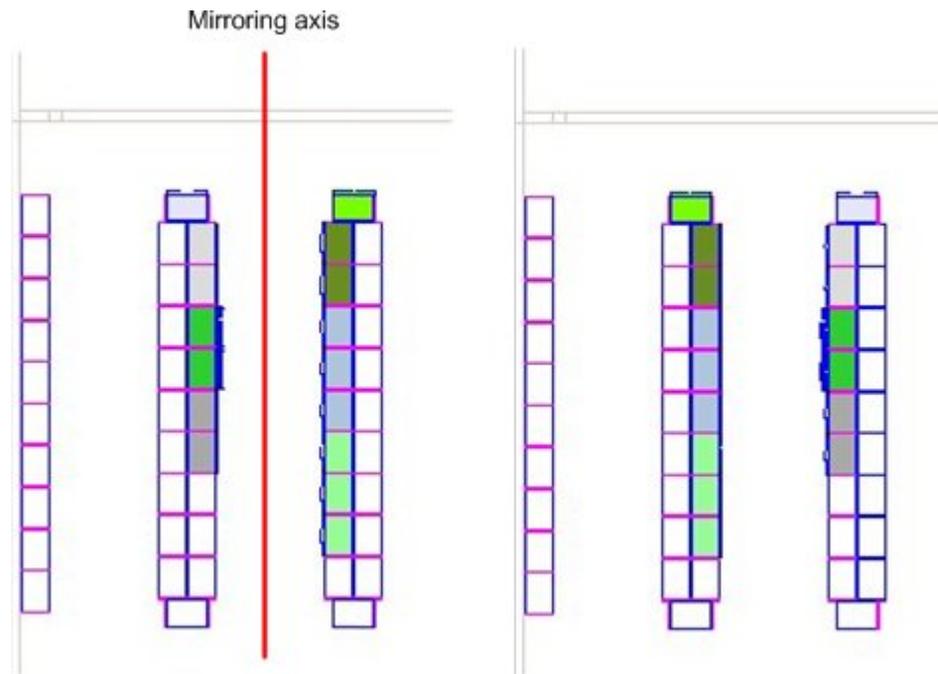


Fixture Manipulation – Other Commands

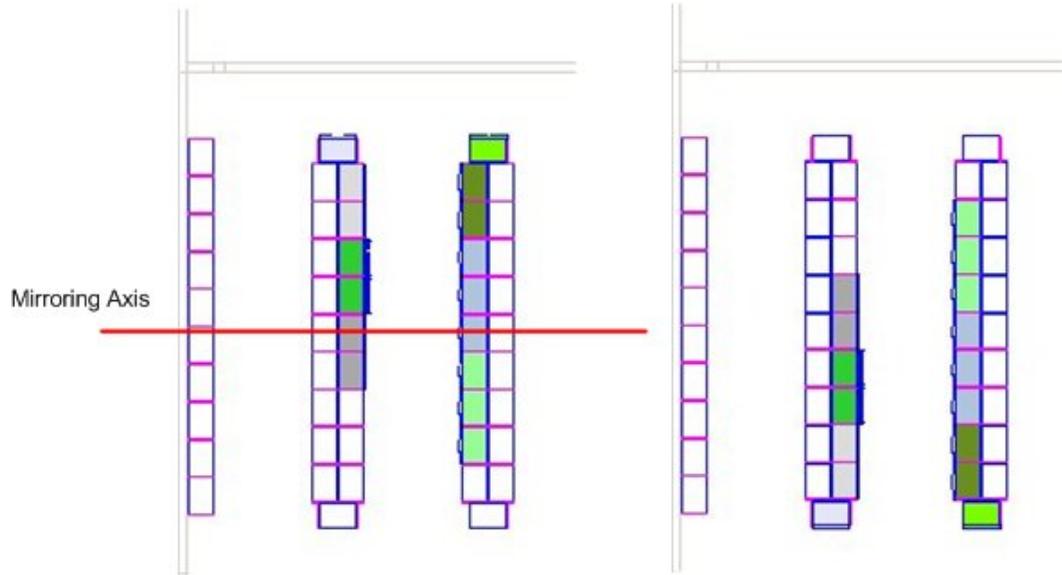
Mirror Fixtures

Mirror Fixtures enables users to produce a mirror image of the selected fixtures.

In the example below, the merchandiser has decided to swap the equipment and merchandise to opposite sides of the aisle. The left hand side of the diagram below shows the aisle before mirroring and the axis about which the aisle will be mirrored. The right hand side of the diagram shows the aisle after mirroring.



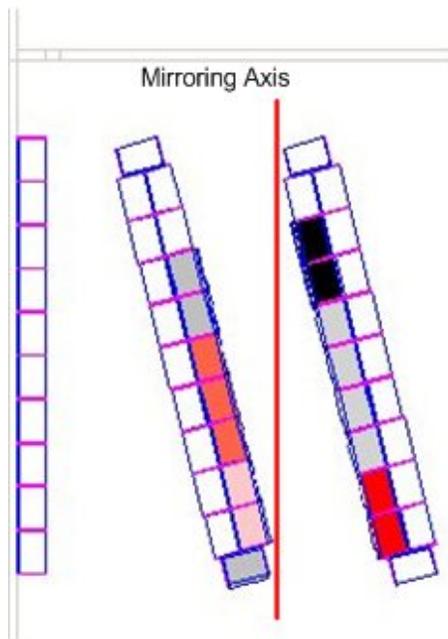
In the example below, the merchandiser has decided to swap the equipment and merchandise about the center of the aisle. The left hand side of the diagram below shows the aisle before mirroring and the axis about which the aisle will be mirrored. The right hand side of the diagram shows the aisle after mirroring.



The command is invoked from the **Mirror** option on the Fixturing toolbar.

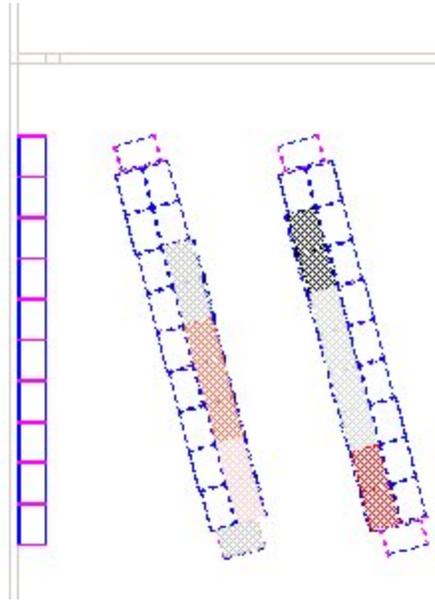


In the example below, the equipment and merchandise in the two double gondolas is to be mirrored about the specified axis.



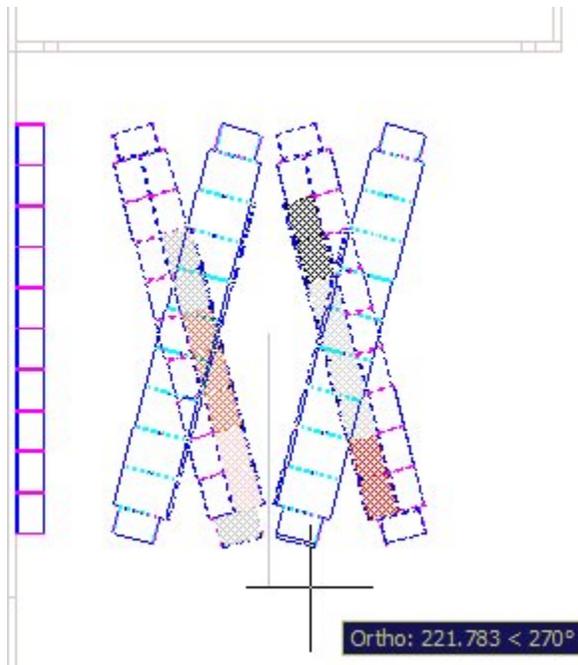
The initial stage is to select the objects to be mirrored. The outlines of the fixtures will turn dotted and the insertion points will show as blue boxes. (If using individual fixture selection, the selection set must be completed by clicking the right mouse button. If using Windows or Crossing selection boxes, continue selecting until all required objects are in the selection set). The fixtures will be mirrored about the center of the selected objects.

Note: Selection behavior will also be affected by whether **Grouping** is On or Off.

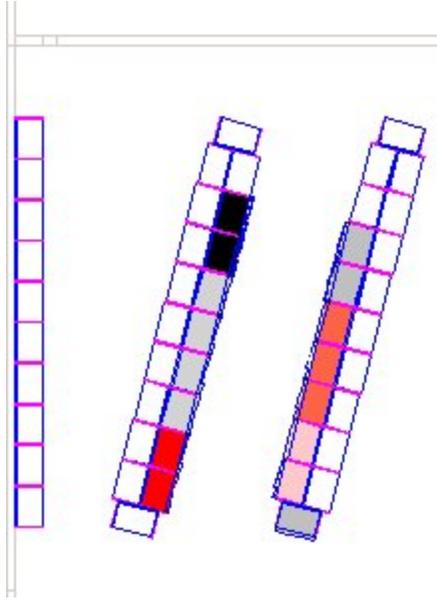


Note: Care must be taken to select only the fixtures and merchandise it is intended to mirror.

Click the **Mirror** command on the fixturing toolbar. The cursor will be returned to the floor plan and (if not already on) the AutoCAD Ortho command will be turned on. This restricts the permissible angle the fixtures can be mirrored through to 0, 90, 180 and 270 degrees. Moving the cursor about will select the varying possible angles. At the same time a 'ghost' image will show where the fixtures are to be mirrored to.



On left clicking in the floor plan, the selected objects will be mirrored.



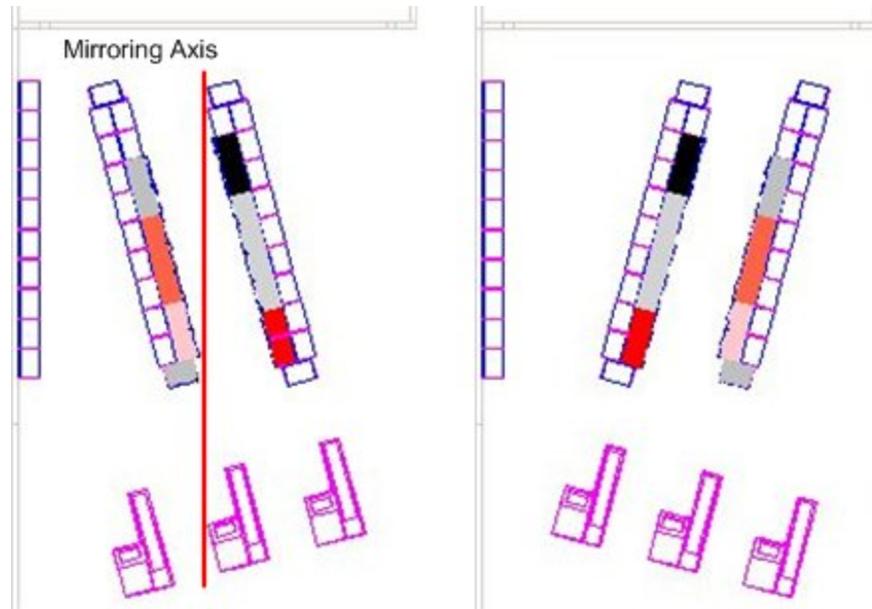
Note: if it is desired to mirror at any other angle than 0, 90, 180 and 270 degrees, it is possible to manually turn off the AutoCAD Ortho command during the mirroring operation. The blocks can then be mirrored about any specified angle.

Fix Mirrored Blocks

Because the blocks have been mirrored, they are a precisely inverted reflection of the original block. This includes the insertion points. The **Mirror** command automatically calls the Fixed Mirrored Blocks command and (provided the block is symmetrical) the insertion points are adjusted to the correct position.

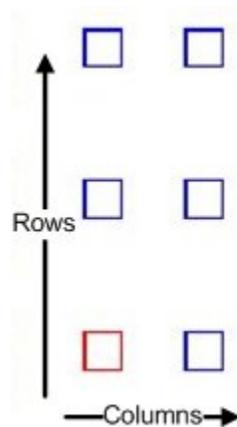
Non-Symmetrical Objects

The functionality is unable to fully mirror non symmetrical objects. An example would be the checkouts seen in the bottom of this diagram. The Mirroring axis is shown in the left hand part of this diagram. When the double sided gondolas and checkouts are mirrored, the double sided gondolas become a mirror image of each other. However, because the checkout are not symmetrical, they are 'reflected' to the new position, but the block itself remains 'un-reflected'.



Array Fixtures

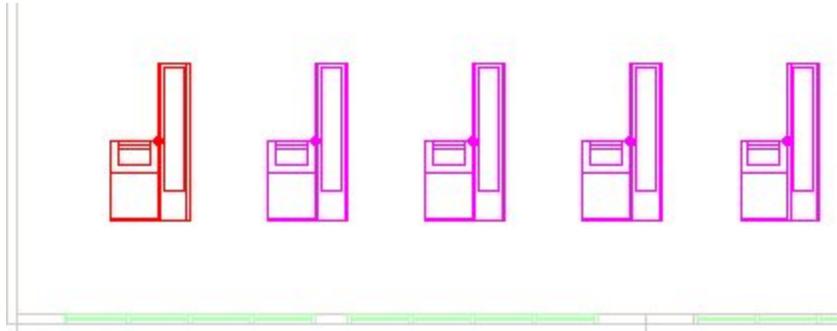
Array takes a selected set of equipment, merchandise and annotation and generates additional rows and columns of that set of objects. In the diagram below, the original red fixture has been used as the basis for an array of three rows and two columns of similar fixtures.



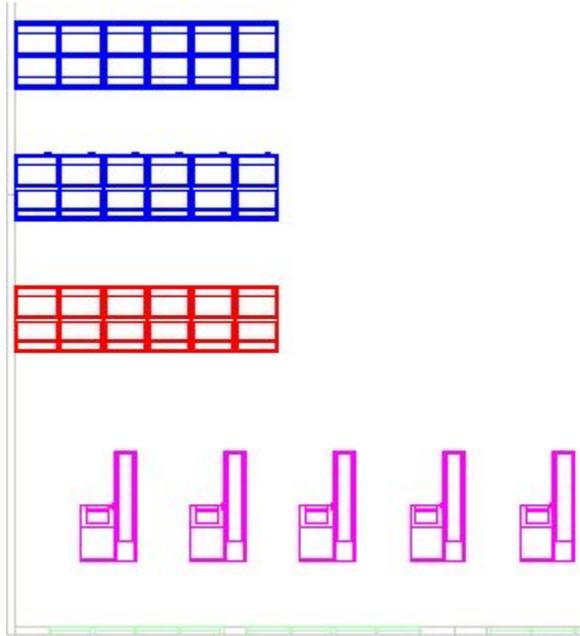
The command is invoked from the array option on the Fixturing toolbar.



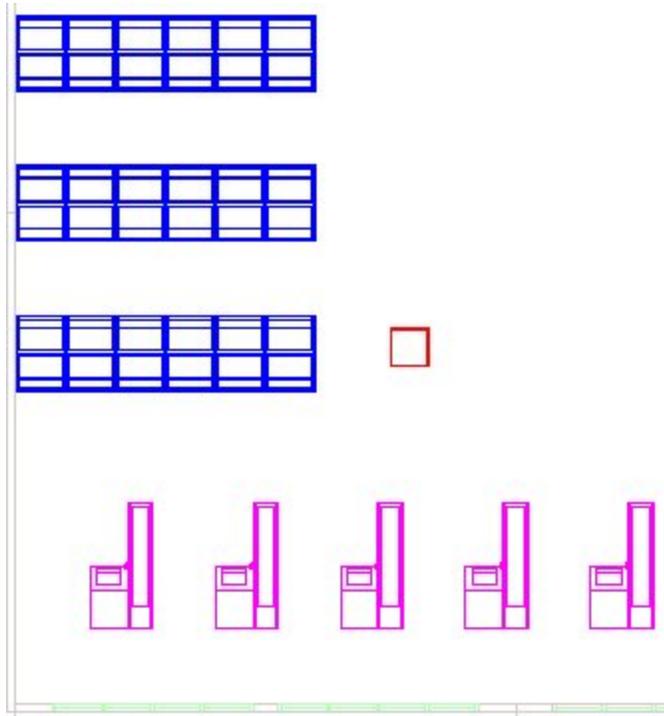
Arraying can be used to speed up laying out the arrangement of equipment in a store. In the example below, the original checkout (shown in red for clarity), has been extended into a row of checkouts by means of the array command.



Similarly, in the example below, the original gondola (shown in red for clarity), has been copied twice by means of the array command.

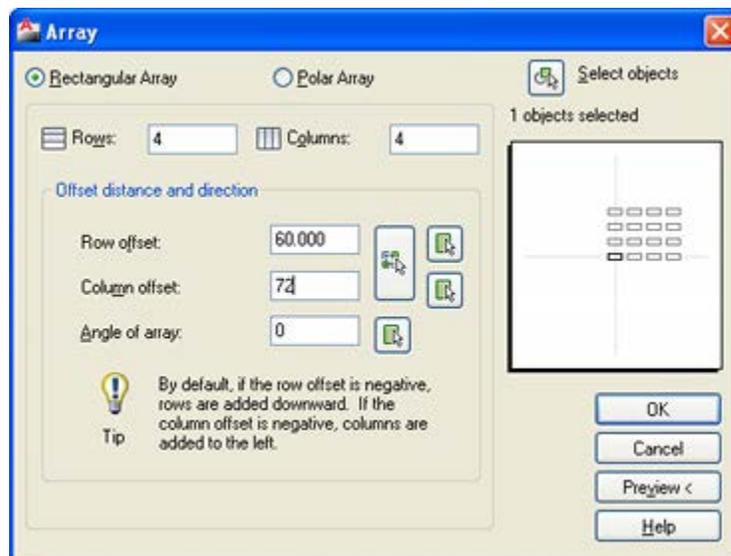


To use the array command, consider the following example:



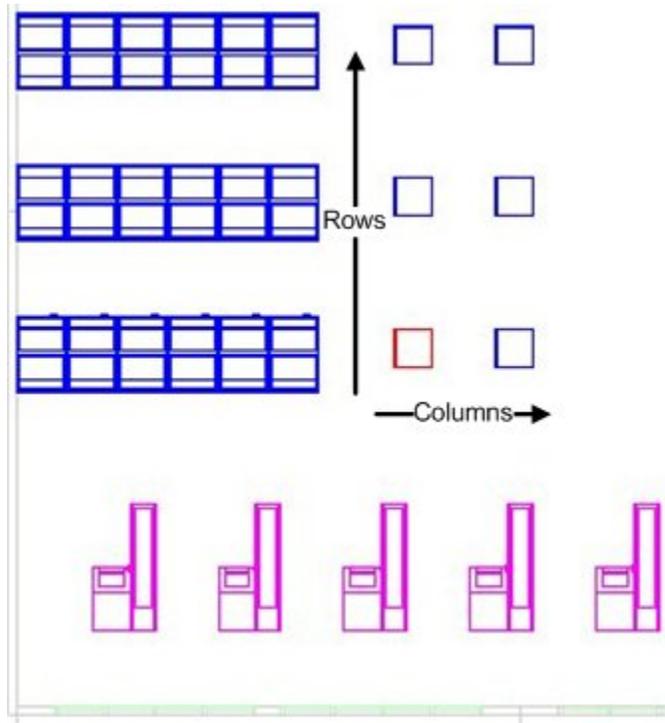
Having laid out some initial checkouts and gondolas, it has been decided to put down an array of bins for special offers. The initial bin (shown in red for clarity) has already been placed. The array command can then be used to space additional bins. The steps are as follows:

1. Establish the dimensions of the bin. In this example it is 36 inches square.
2. Establish the X and Y dimensions for the array. In this case it has been decided to leave a 5 ft gap between adjacent bins in the X axis, and to align the bins with the ends of the gondolas in the Y axis. The gondola runs are 12 ft between centers.
3. Select the bin and then click the **Array** command on the fixturing toolbar. This will cause the Array dialog box to appear.



4. The number of columns is set to 3 (to match the number of gondolas) and the row offset is set to 144 (to match the centers of the gondola runs).

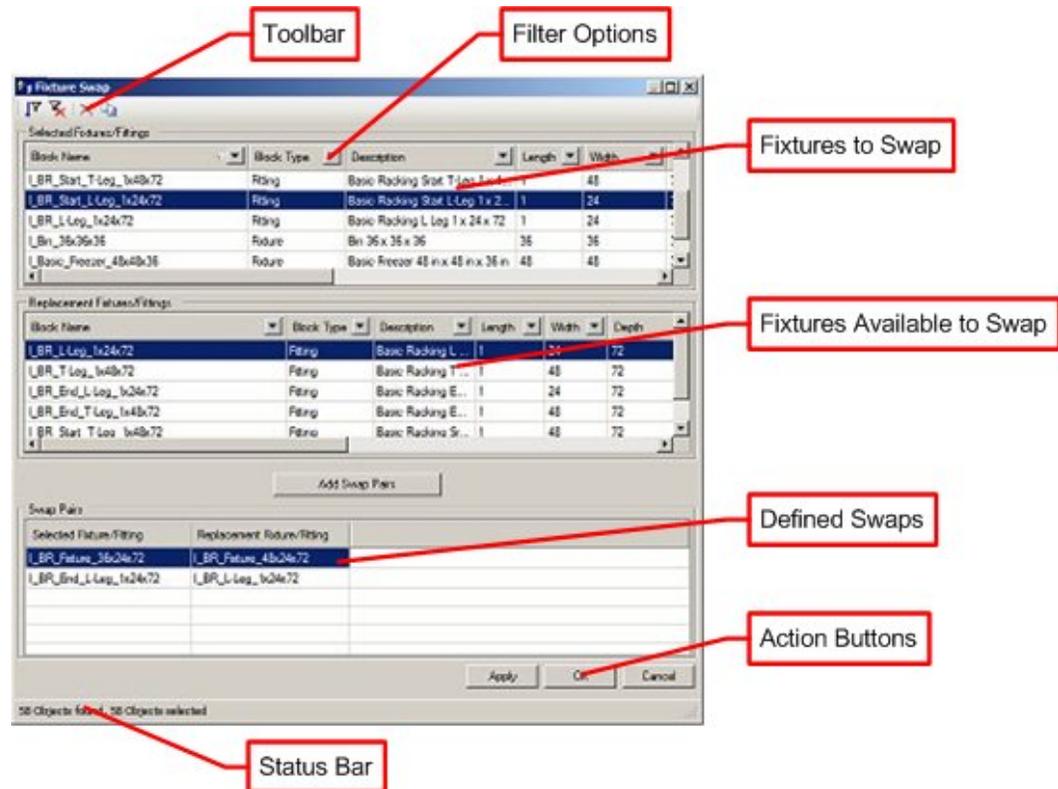
5. The number of rows is set to 2. As we want to leave 5 ft (60 inches) between the bins, the column offset is set to 96 (36 inches for the bin, plus 60 inches for the gap between them).
6. Clicking the **Preview** button will show a preview of the arrayed fixtures. Pressing **Escape** will return the user to the Array dialog box. Pressing **Return** will place the arrayed fixtures in the floor plan.



Fixture Swap

The Fixture Swap Dialog Box

The Fixture Swap dialog box is made up of a number of parts.



Toolbar

The toolbar allows users to mirror (copy) and delete filter settings. It also allows users to delete defined swaps and to copy information to the clipboard.

Filter Options

Each column in the Selected Fixtures and Replacement Fixture sections of the dialog box can be filtered to refine the list of available data.

Fixtures to Swap

The Selected Fixtures/Fittings section contains a list of all equipment that was selected in the floor plan when the Fixture Swap dialog box was activated.

Fixtures Available to Swap

The Replacement Fixtures/Fittings section contains a list of all equipment that could be used to replace the equipment in the floor plan.

Defined Swaps

This section of the dialog box contains a list of all the fixture swaps that have been defined.

Action Buttons

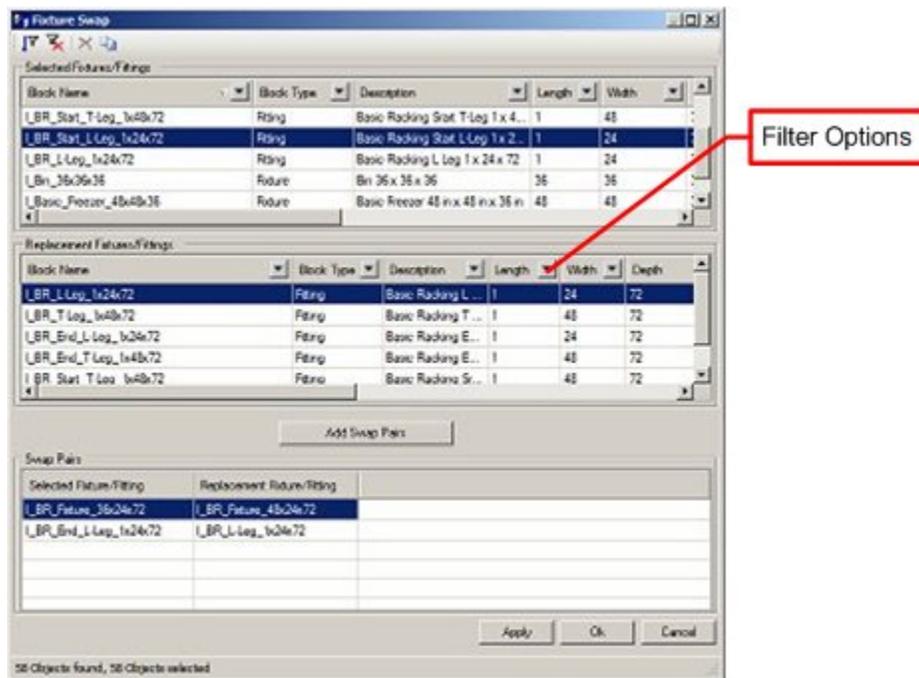
The action buttons allow the user to execute the currently defined swaps, execute the currently defined swaps and exit, and cancel the currently defined swaps and exit.

Status Bar

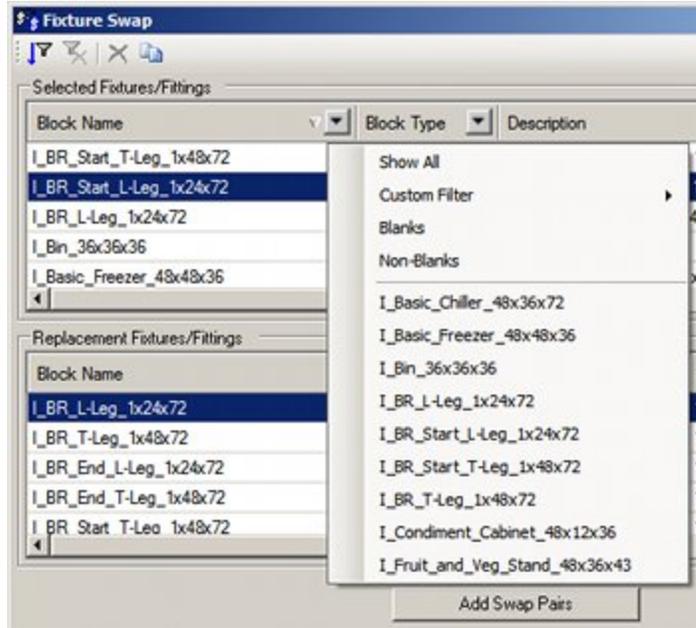
The status bar gives information in the number of objects found in the drawing, and the number selected.

The Fixture Swap Filters

Filters are available to reduce the number of fixtures displayed for selection in the Selected Fixtures/Fittings and Replacement/Fixtures/Fittings frames of the Fixture Swap dialog box. They can be activated by clicking on the arrow head by each column of data.



This will bring up a drop down menu with a number of options.

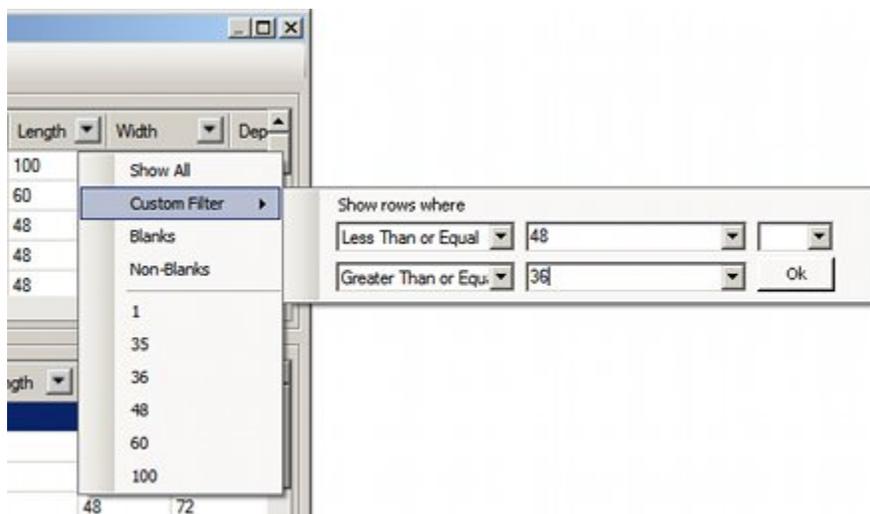


- Selecting **Show All** will remove the filters and show all rows of data.
- **Selecting Custom Filter** will bring up a custom filter allowing Boolean operations on the data (see below).
- **Selecting Blanks** will reduce the data to those rows that have blank values in that column.
- **Selecting Non-Blanks** will reduce the data to those rows that have a value in that column.

In addition, the lower part of the drop down menu contains a list of the individual items of data in that column. Clicking an item reduces the rows to that item of data.

Custom Filters

The custom filter option is invoked from the filter drop down menu.



It enables users to use Boolean logic. In the above example (with numerical data selected), the lengths will be filtered to find all fixtures with lengths between 36 and 48 inches. (This filtering logic also applied to Date values).

Condition	Description
Equals	Values must be exact: for example select all rows with a value of 48
Does Not Equal	Values will exclude that value: for example select all rows that do not have a value of 48.
Greater Than	Selects all values above a specific value: for example Greater Than 48 will return 49, 50, 51, etc.
Less Than	Selects all values below a specific value: for example Less Than 36 will return 35, 34, 33, etc.
Greater Than or Equal	Selects all values equal to or above a specific value: for example Greater Than or Equal to 48 will return 48, 49, 50, etc.
Less Than or Equal	Selects all values equal to or below a specific value: for example Less Than or Equal to 36 will return 36, 37, 38, etc.

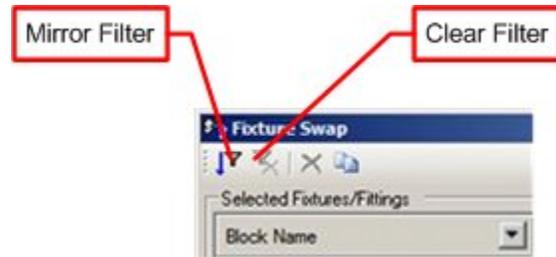
If a text value is selected, a different set of Boolean logic applies

Condition	Description
Equals	Values must be exact: will return rows that are an exact match for the entered text.
Does Not Equal	Values will exclude that value: will return rows that do not match the text string
Contains	Will return rows where part of the data matches the text string. (Uses implied wild cards).
Does Not Contain	Will return rows where no part of the data matches the text string. (Uses implied wild cards).
Begins With	Will return rows where the text string is an exact match for the start of the data.
Does Not Begin With	Will return rows where the text string is an exact match for the end of the data.
Ends With	Will return rows there the text string is not an exact match for the start of the data.
Does Not End With	Will return rows there the text string is not an exact match for the end of the data.

Boolean logic also includes the use of **And** or **Or**.

- **And** means that both conditions must be met. **A and B** means the data returned must contain both A and B.
- **Or** means either condition can be met. **A or B** means the data returned can contain either A or B. It does not need to contain both.

Mirroring and Clearing Filters



1. Mirroring Filters

The Selected Fixtures/Fittings and Replacement Fixtures/fittings frames contain identical columns. If a filter is set in (for example) the Fixture Length column in the Selected Fixtures/Fittings frame, clicking **Mirror Filter** will also set that filter in the Replacement Fixtures/fittings frame. (The reverse case also applies).

2. Clearing Filters

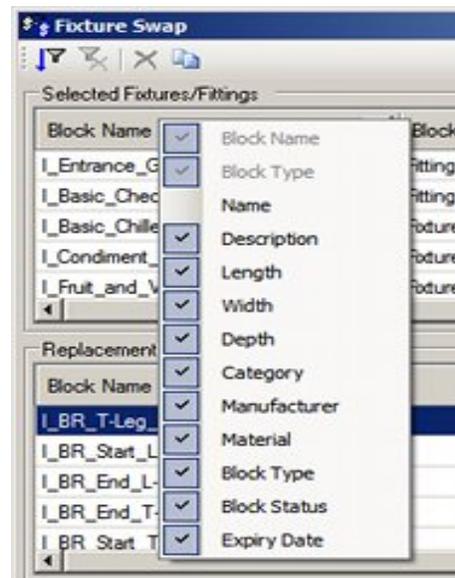
Clicking the **Clear Filters** icon will clear all the filters set in the Fixture Swap dialog box.

Other Data Manipulation Options

There are two other ways data can be ordered in the dialog box.

Selecting Columns to Display

Right clicking on the column header area in either the Selected Fixtures Fitting or the replacement Fixtures/fittings frames allows the users to select which columns of data are displayed.

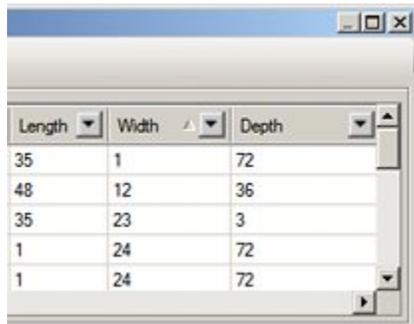


Note: Block Name and Block Type are mandatory columns and cannot be deselected.

Sorting Columns of Data

Columns of data can be sorted in ascending or descending order by clicking the header. When the data in a column has been sorted, a small triangle will appear in the header -

the direction of the triangle indicating whether the data is sorted ascending or descending.



Length	Width	Depth
35	1	72
48	12	36
35	23	3
1	24	72
1	24	72

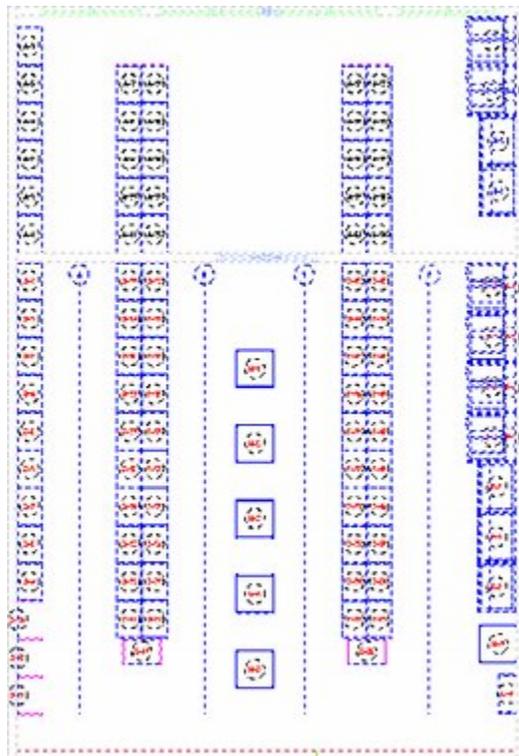
In the above example, the Width column has been sorted in ascending order.

Note: the Width column can be compared to the Length column, where data has not been sorted.

Carrying Out Fixture Swaps

Carrying out Fixture Swaps is achieved as follows:

1. The Fixtures are selected



2. Fixture Swap is called

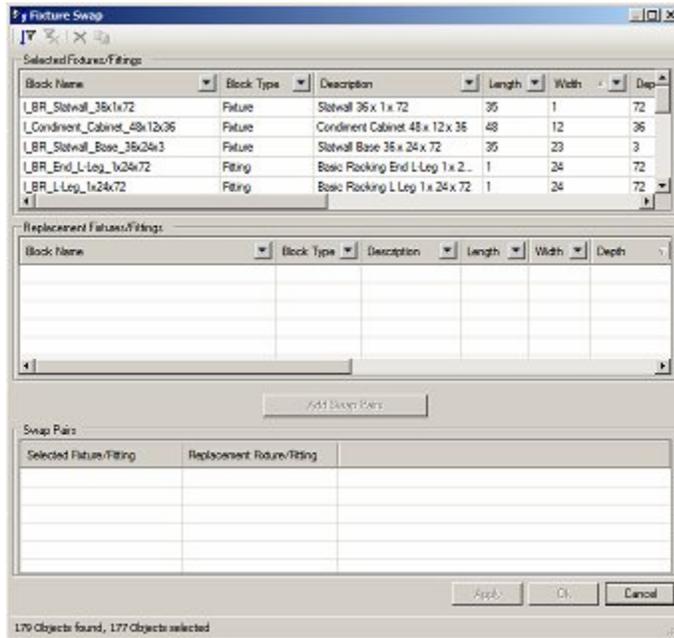
This can be done from the Command Line (AVT_FIXTURESWAP) or from the Fixturing toolbar.



Note: Selecting the Fixtures and Invoking Fixture Swap can be done in either order.

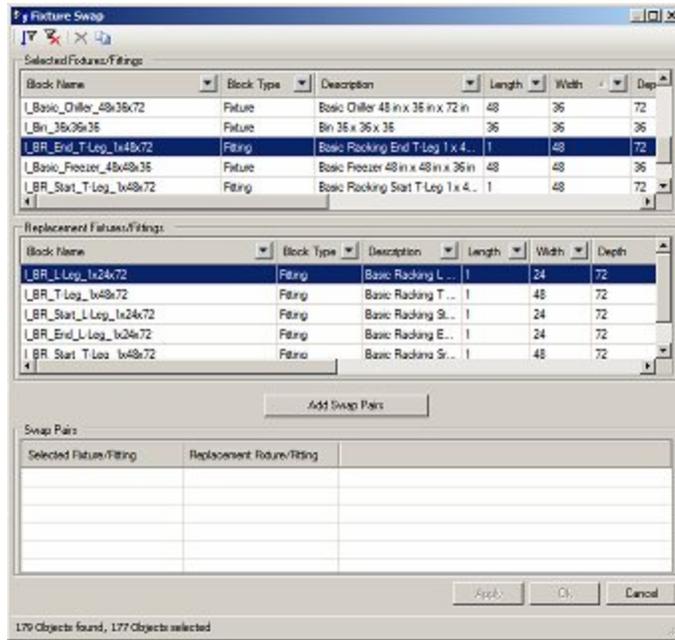
3. The Fixture Swap dialog box will open

When the Fixture Swap dialog box opens, only the Selected Fixtures/Fittings list of data is populated. Filters can be used to refine the list.



4. Select the Fixture or Fitting to be replaced

The fixture or fitting to be replaced is selected in the list of Fixtures and fittings. This causes the list of replacement fixtures and fittings to populate.

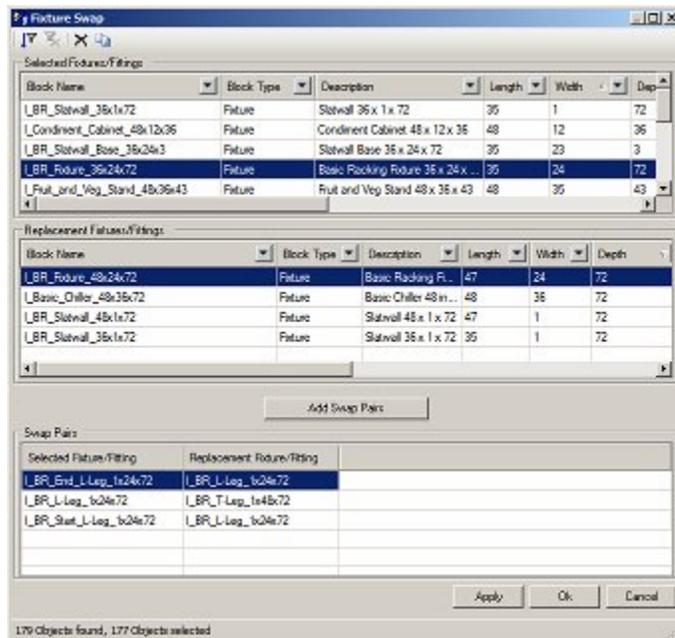


It is possible to select multiple fixtures for replacement by holding down the Control Key and left clicking on additional rows.

5. Select the Replacement Fixture or Fitting

A replacement fixture or fitting is selected. (Filters can be used to refine the list of available replacements). Clicking the **Add Swap Pairs** button causes the Swap Pairs pane to populate.

One a fixture has been added to a swap pair, the entry will be removed from the top (Selected Fixtures/Fittings) frame to prevent multiple swap types being defined for that fixture. If the swap pair is subsequently deleted, the fixture will be added back to those in the Selected Fixtures/Fittings frame.



6. Make the Swap

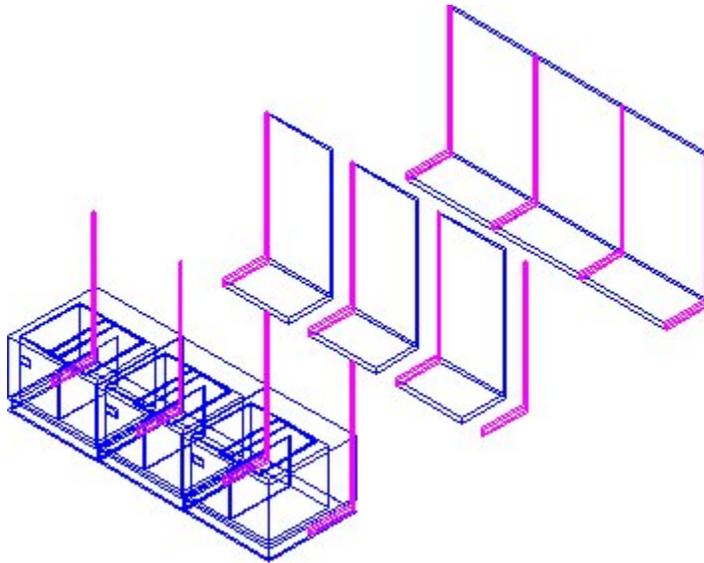
Click the **Apply** button to cause all the defined swaps to execute and leave the dialog box open to define further swaps. Click the **OK** button to make all the defined swaps and exit the dialog box.

Limitations of Fixture Swap

The Fixture Swap functionality is useful for making large scale changes to equipment within a store plan, but there are some limitations on what it can achieve. These limitations are explained below.

Size and Type

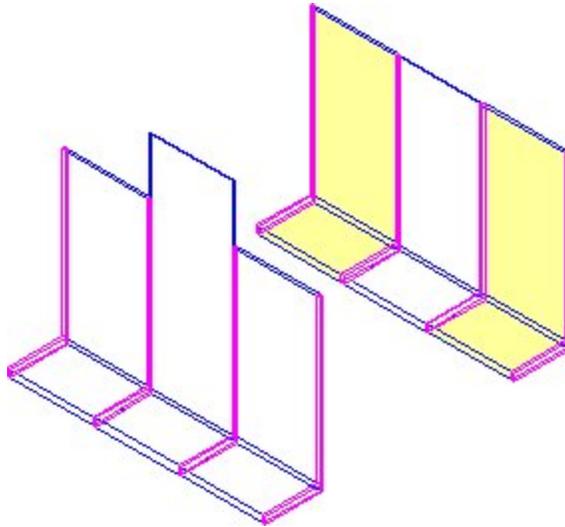
Fixture Swap does not place any restrictions on the size of the equipment that can be swapped. In the example below, the back gondola run is the original gondola. The middle gondola run represents what would happen if 4 foot long fixtures were replaced by 3 ft long ones. The front gondola run shows what would happen if fixtures are replaced by inappropriate ones: in this instance racking has been replaced by freezer units.



Effect of Planograms

If exploded (3D) planograms have been placed on fixtures in Merchandiser, they will not be visible in Planner. However, as the information is held in the database on what fixtures do contain exploded planograms, fixture swaps will not be carried out on those fixtures.

In the example below, the back gondola run has two planograms. The fixtures containing these planograms have been color coded yellow in this diagram. It would not be immediately apparent to a user in Planner that these fixtures contain planograms because they will not contain product blocks - unlike if the planogram was in 2D (imploded) form.



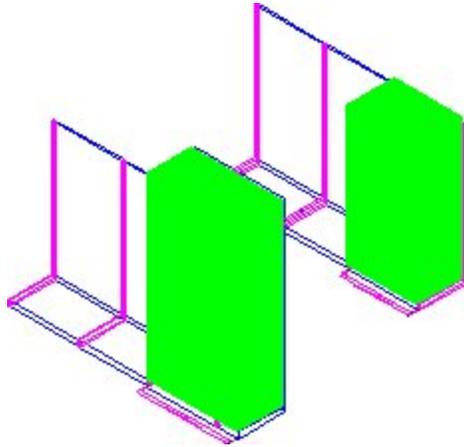
If the fixtures are selected for a fixture swap operation, only the fixture that does not have a planogram placed will be swapped, despite all fixtures being included in the selection. The effect of this can be seen in the front gondola run. The user will be given a warning in the AutoCAD command line - although the fixtures containing planograms are not identified.

```
These fixtures contain child shelves or display style products and cannot be swapped using the Fixture Swap feature.  
7 Objects found, 7 Objects selected
```

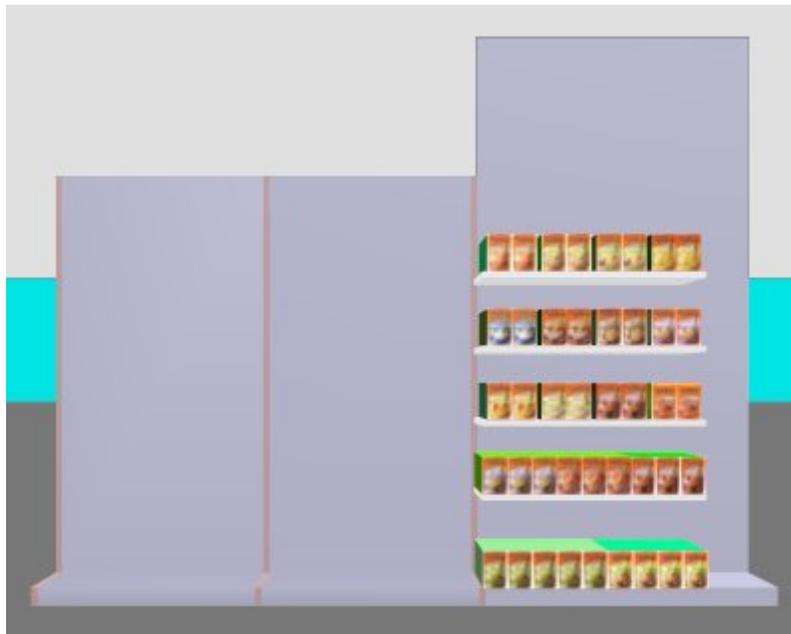
Note: one solution for this limitation is to create a KPI (Key Performance Indicator) to color code all fixtures containing planograms. It is then possible to determine which planograms are not merchandised (and which can be subjected for Fixture Swap) and which are merchandised and cannot be swapped.

Effect on Planograms

If planograms are present as placeholders (2D form), they are visible in the Planner module. If a fixture is swapped for one of a different size, the planogram placeholder is scaled to suit. However, the planogram design is not changed. In the example below, the rear gondola run has the planogram placed on a fixture of the intended size. In the front planogram run, the correctly sized fixture has been swapped for one that is both higher and wider.



The effect of this can be seen when the planogram is viewed in exploded (3D) form in the merchandiser module. As can be seen in the example below, both the shelving and merchandise fail to correctly fill the larger fixture that was swapped in.



When swapping fixtures, it may be necessary to subsequently swap the existing planograms for ones of a more appropriate size for the replacement fixture.

Note: planograms on inappropriately sized fixtures can be identified by means of KPI's and Reports.

Gondola Operations

Overview of Gondolas

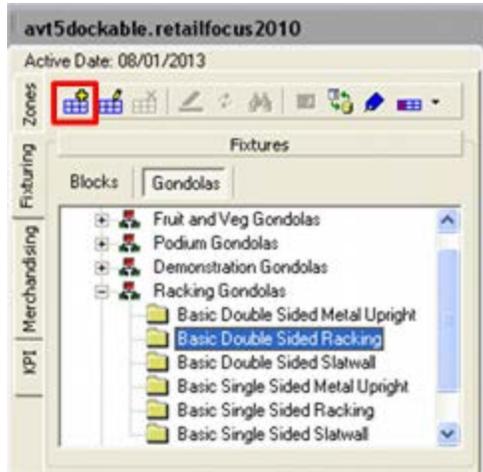
Gondolas are pre-defined arrangements of fixtures and fittings. This enables long runs of fixtures to be put down quickly, making it easy to lay out or modify equipment in a floor plan.

Fixture Studio

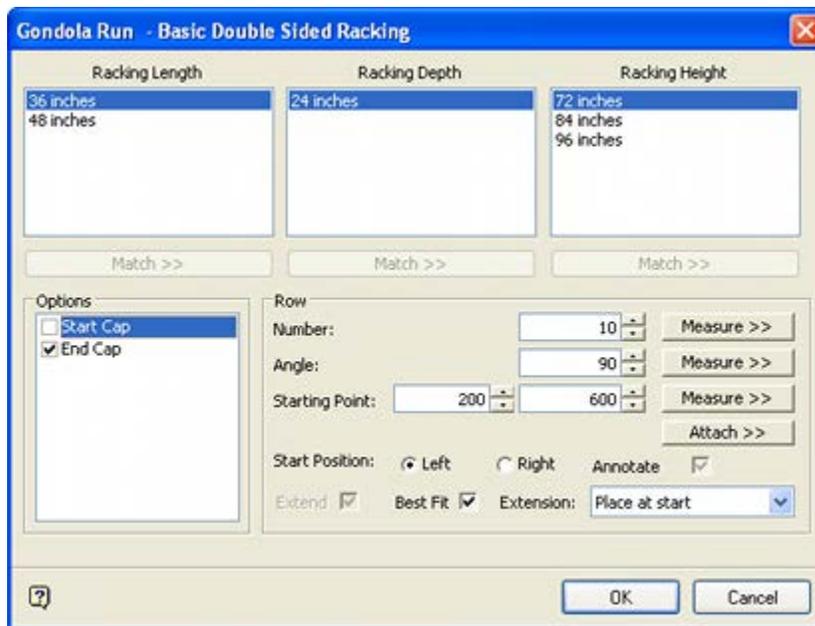
Gondolas are configured in the Fixture Studio Module in the Gondola Definitions dialog box. This enables all details of the gondola to be configured including which options will appear in the Add Gondola dialog box in the Planner and Merchandiser modules.

Planner Module

Gondolas are placed in the Planner module by selecting a Gondola from the Object Browser and clicking the Add Gondola option on the toolbar.



After being invited to select a start position, the Add Gondola dialog box will appear.



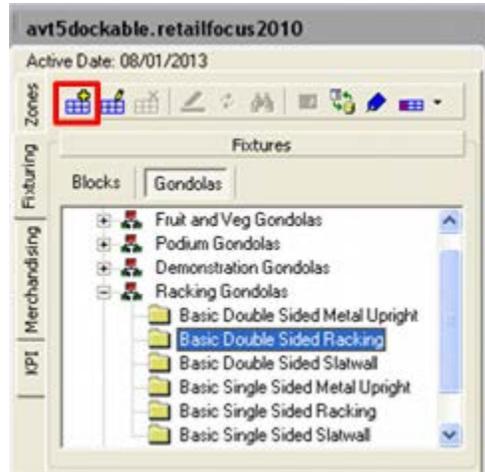
Users can select from a variety of options including:

- **Gondola Dimensions:** in the above example users can select from six combinations of length and height.
- **Number of Bays:** Users can select the number of bays to place.
- **Optional Parts:** Some parts may be optional. In the above example users can opt whether to have Start and End Caps.
- **Origin and Placement Angle:** Users can select where the gondola starts from and what angle to place it at.

After selecting the appropriate options, click **OK** and the gondola will be placed.

Placing a Gondola - Basic Options

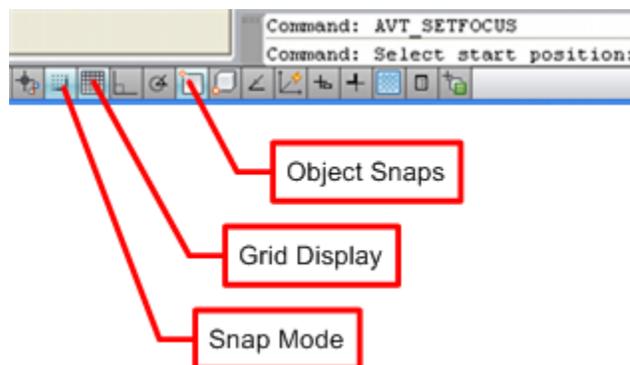
Gondolas are placed in the Planner module by selecting a Gondola from the Object Browser and clicking the Add Gondola option on the toolbar. Alternatively, a gondola can be selected from the hierarchy, then 'dragged and dropped' into the floor plan.



Users will then be invited to select a start position in the AutoCAD command line.

```
Command: AVT_SETFOCUS
Command: Select start position:
```

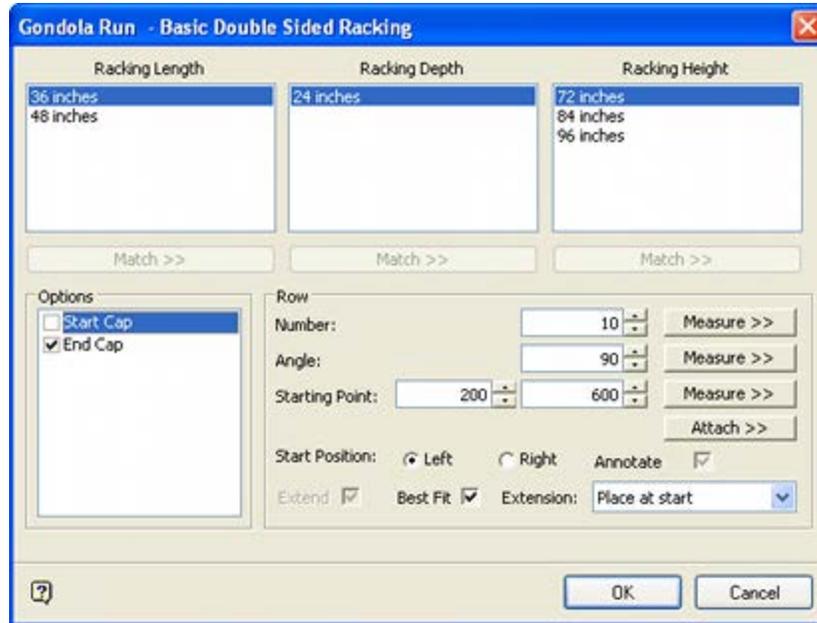
Some AutoCAD options may help in selecting the start point.



- The Snap Mode can be turned on or off. If turned on, the cursor will snap to a grid of points in the floor plan.
- The Grid Display turns display of the snap grid on or off.
- Object Snaps (OSNAP) allows the cursor to snap to specific points in the floor plan (like the corner of another fixture).

Note: See the AutoCAD help file for more information.

Once the Start Position has been selected, the Add Gondola dialog box will appear.



Gondola Dimensions

Users can select the dimensions of the fixtures for the gondola. For many gondolas, the option will exist to select length, depth and height - although other options are possible. If a combination of sizes is selected that does not reference an existing fixture, an error message will appear.



Note: This problem can be prevented by careful configuration of the gondola options when defining the gondola in Fixture Studio.

Options

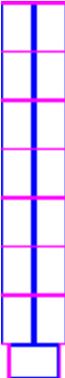
Some gondola parts can be made optional. These parts can be selected or deselected by means of the check boxes in the Options frame.

Number and Angle

The number of bays can be selected using the spin control, while the angle the gondola will be drawn at can also be specified.

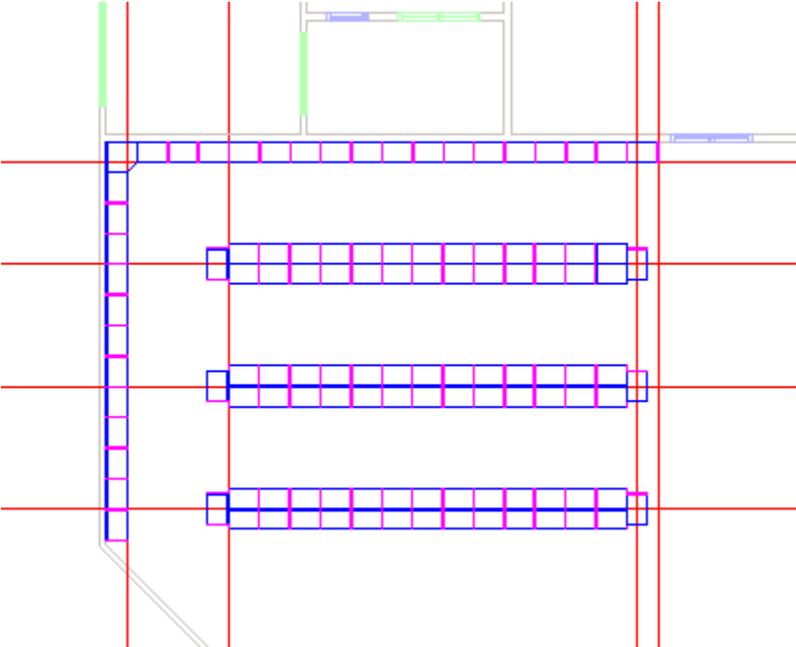
Placing the Gondola

Click the OK button to place the gondola. It will then draw in the floor plan.



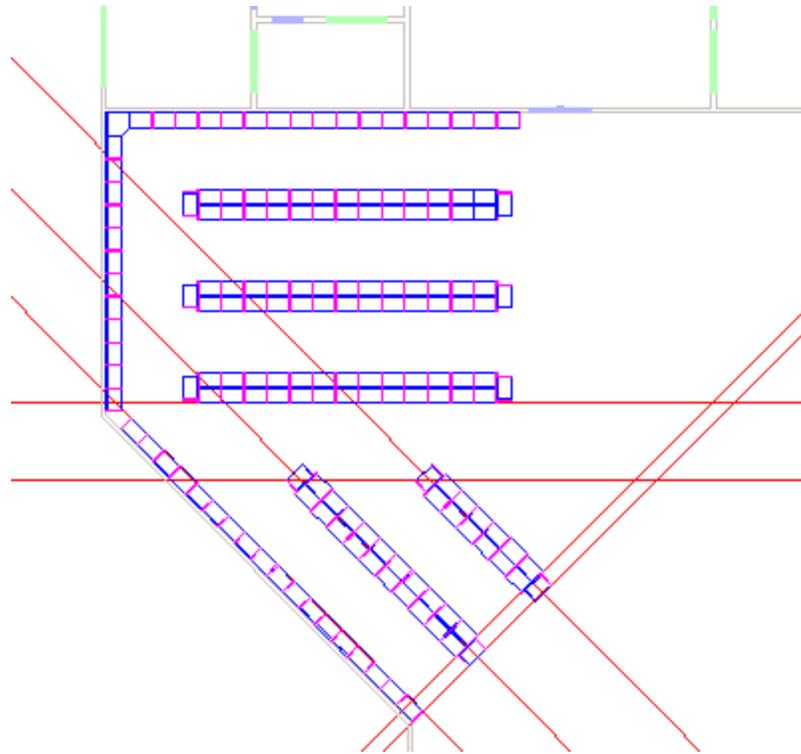
Placing Island Gondolas

Island Gondolas are placed using similar techniques. One useful technique is using AutoCAD construction lines and offsets.

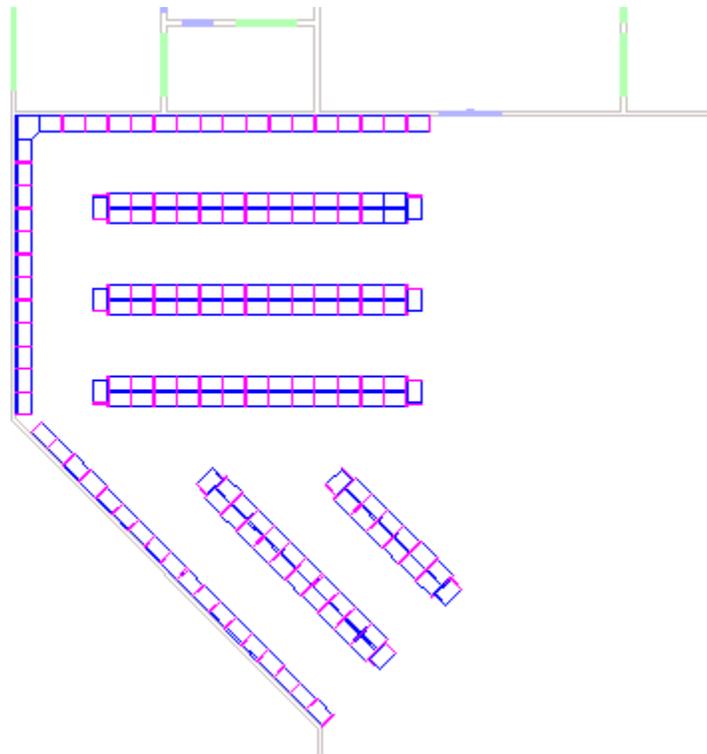


In the example above, construction lines (the red lines in the screen shot) were drawn along the edges of the wall gondolas. Additional construction lines were then offset from the originals to give the correct spacings. In the above example, the construction lines were used to ensure the aisles were a precise 8 feet in width. After the gondolas have been placed, the construction lines will be deleted.

Similar construction lines have been used to place the next sequence of gondola runs.

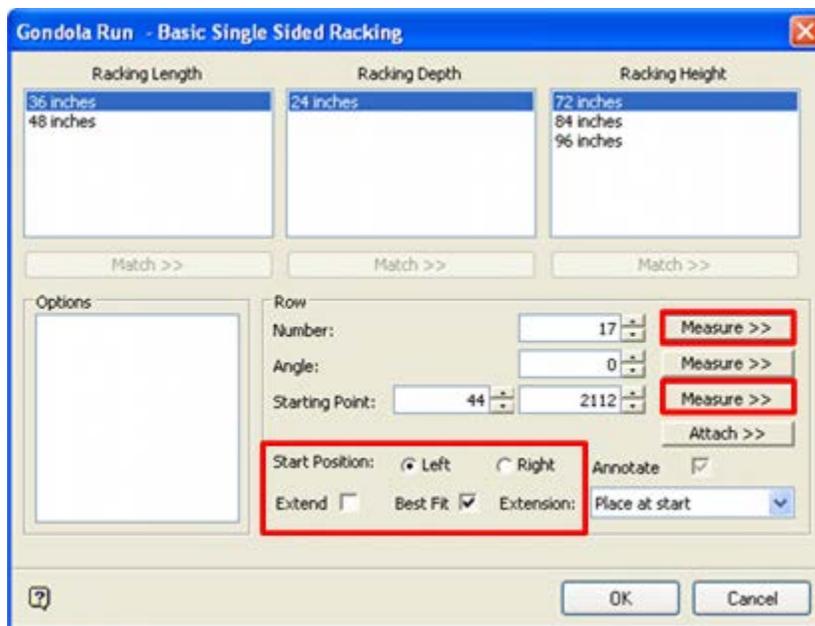


After the construction lines are deleted, this leaves the new gondola runs precisely positioned with minimum aisle widths maintained.



Placing a Gondola - Advanced Options

Gondolas running along walls will often require the specific number of bays required to fill a specified distance - for example from the corner of a wall to the edge of a door frame. The measure options allow users to place that gondola run quickly and accurately.



- **Number (Measure)** allows the user to draw a line in the floor plan. This specifies the length of the gondola and which end of the line the first bay of the gondola will be drawn at.
- **Starting Point (Measure)** enables the user to specify point in the drawing which will be the origin from where the gondola will be drawn.
- **Start Position (left or right)** specifies whether the first bay of gondola at the left end or right end of the gondola run.
- **Extend or Best Fit** determines whether the number of bays drawn will fit entirely inside the line or partially extend outside of the line.

Once these options are understood, it is simple to draw gondolas fast and accurately in plan view. When learning how to use the options, it is sometimes easier to draw some gondolas in isometric view to see how those options work.

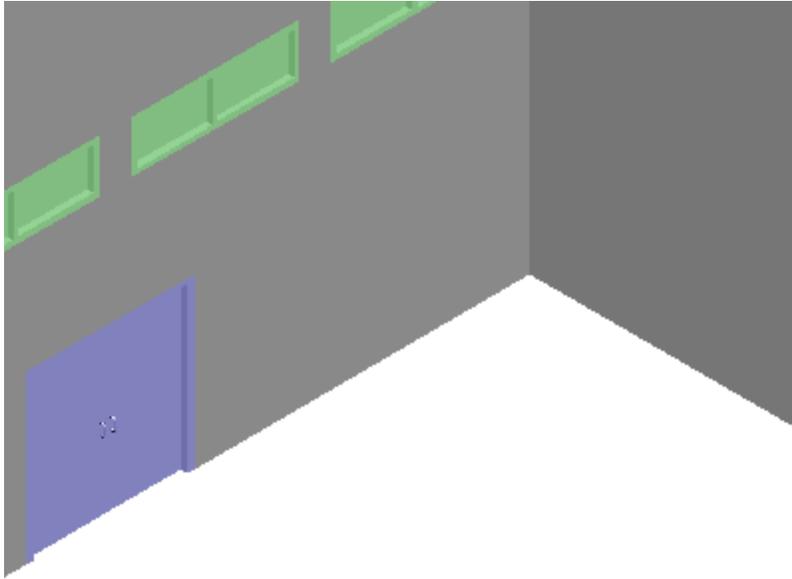
Worked Example

AutoCAD Settings

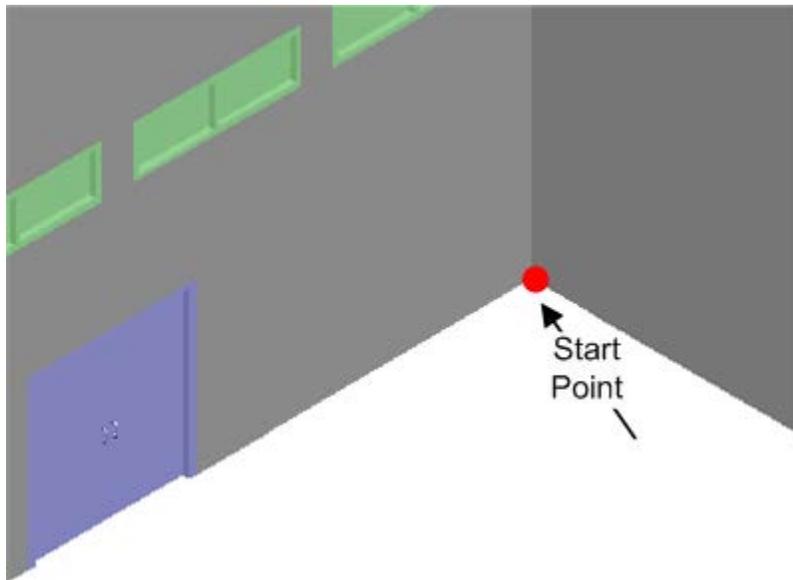
It is suggested that AutoCAD's Object Snaps (OSNAP) are turned on. This makes it easy to select corners, adjacent fixtures, etc as the starting point for the gondola. Ortho can be used if it is desired to draw the gondola at precise right angles in the floor plan. The snap grid and other options should be turned off.

Placing the Gondola

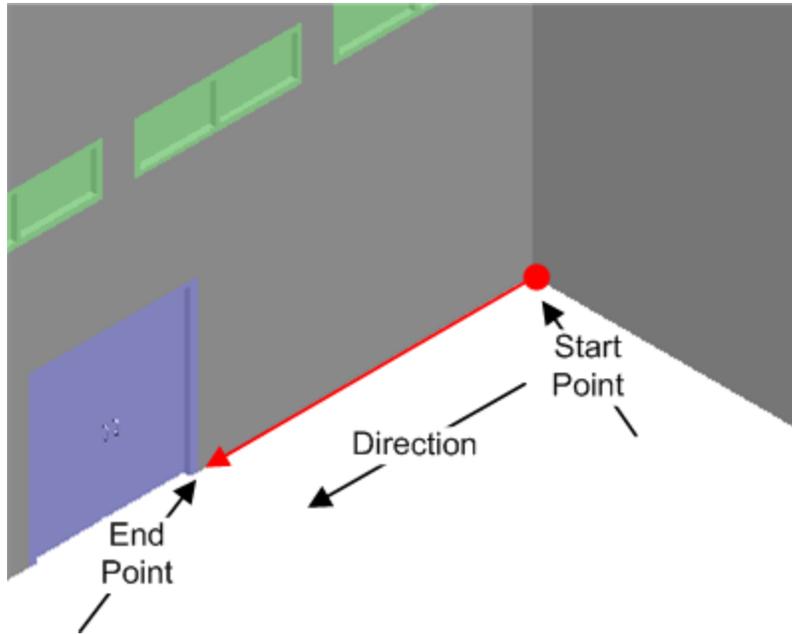
In the worked example below, it is desired to draw a gondola with its start point in the corner of the wall and extending up to the edge of the door.



Select the required gondola in the object browser and click the Add Gondola icon. The user will be taken to the floor plan and requested (AutoCAD command line) to pick a start point. Click in the corner of the wall. This sets the coordinates for the starting point.

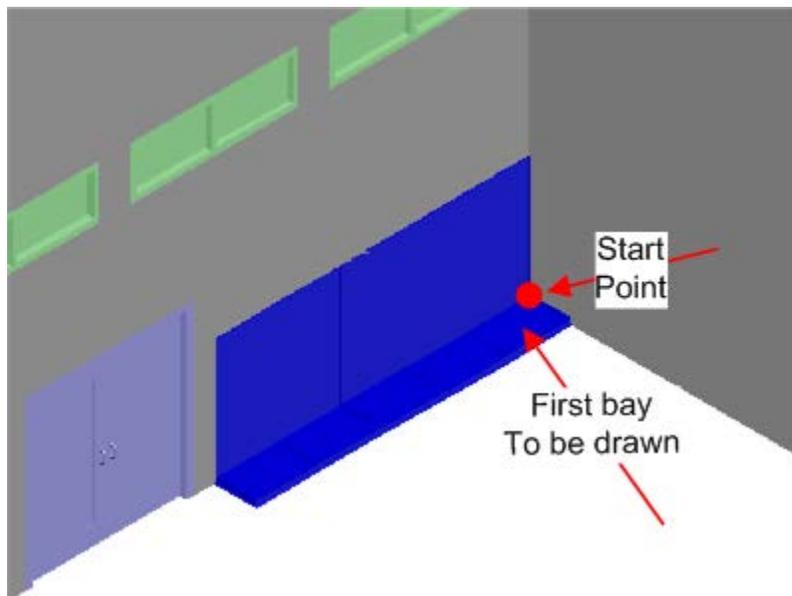


The Add Gondola dialog box will then appear. The initial stage is to click the **Number (Measure)** button. The user will be taken back to the floor plan. It is then necessary to click two points that will define the start point and end point of the gondola.

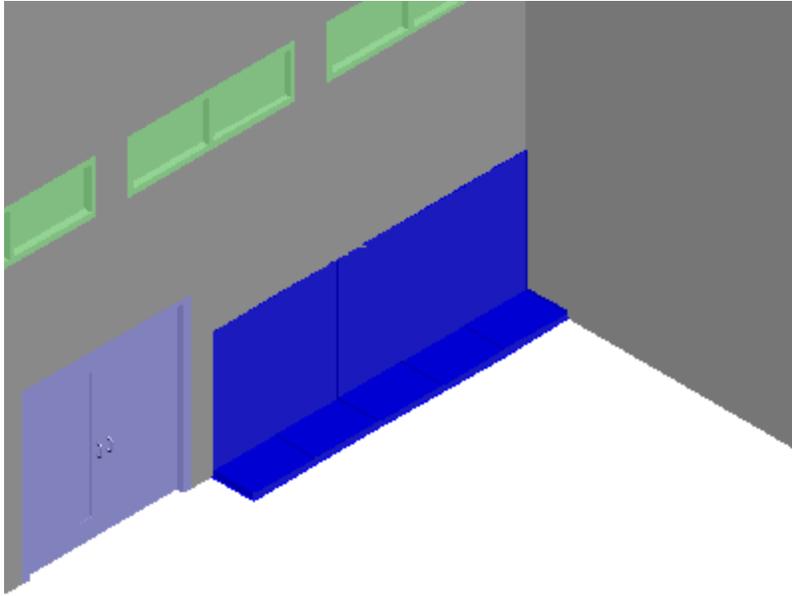


On clicking the end point, the user will be returned to the Add Gondola dialog box. The Best Fit check box should be selected because that will ensure the maximum number of gondola bays will be drawn without obstructing the door.

The other option to be selected is the Left/Right button for the start point. This is determined by which bay of the gondola will be drawn first. It will be at the start point of the line that was drawn to define the gondola length. In this case **viewed from the front of the gondola** the first bay to be drawn is on the right hand end of the gondola.

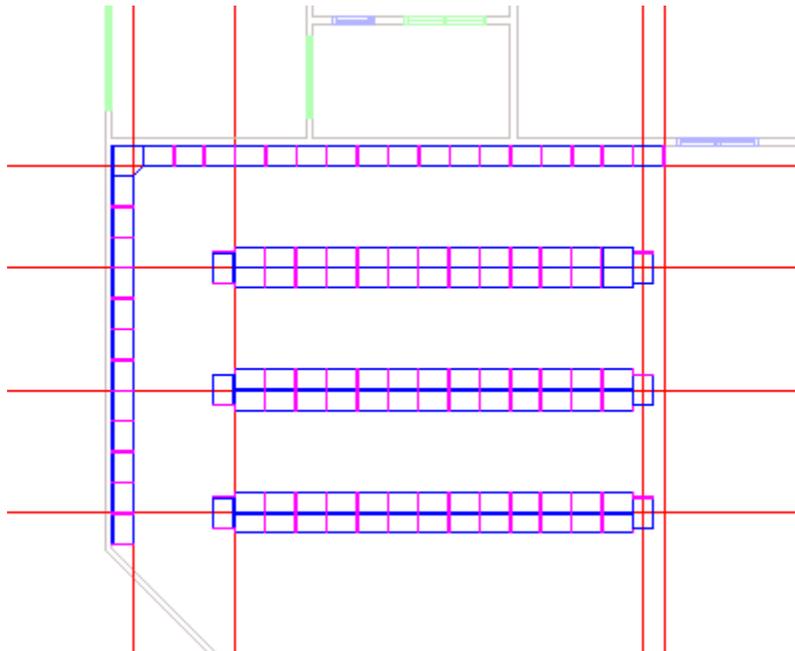


The start point is set to **Right**. On clicking the OK button the gondola will be drawn.

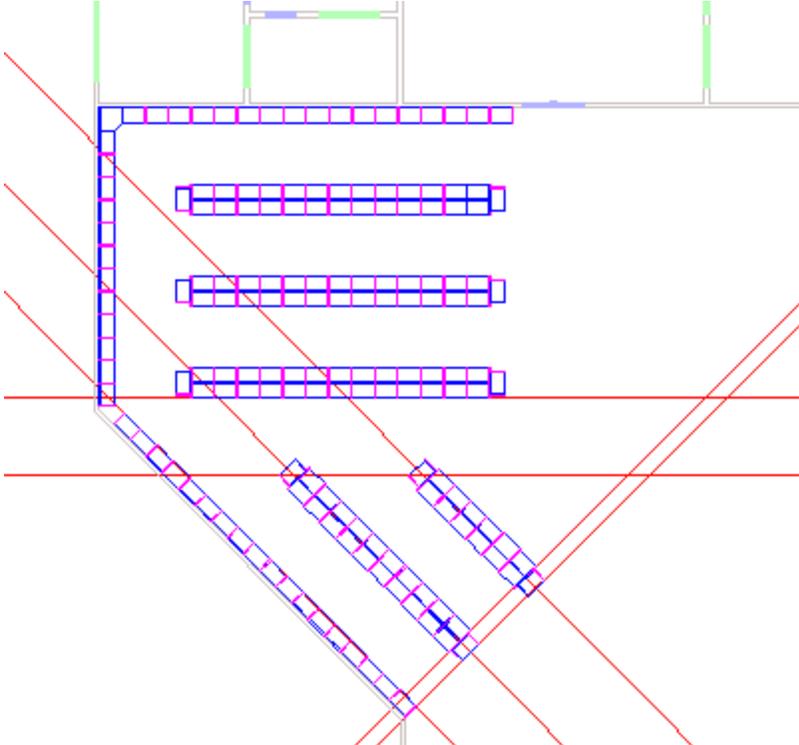


Placing Island Gondolas

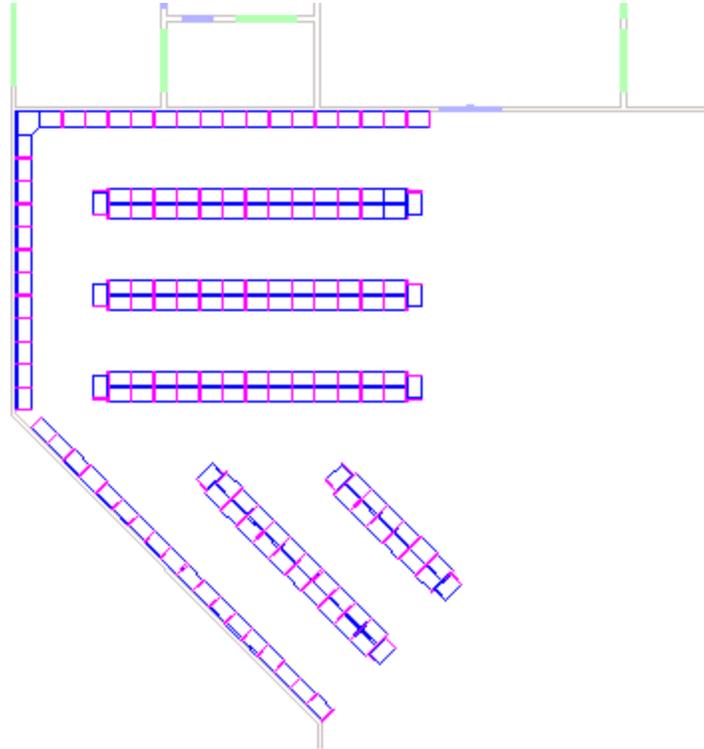
One useful technique for placing island gondolas is using AutoCAD construction lines and offsets.



In the example above, construction lines (the red lines in the screen shot) were drawn along the edges of the wall gondolas. Additional construction lines were then offset from the originals to give the correct spacings. In the above example, the construction lines were used to ensure the aisles were a precise 8 feet in width. The intersections of the construction lines can be used to specify the start and end points of the line defining the gondola position that is required after the **Measure** button is clicked in the **Add Gondola dialog box**. After the gondolas have been placed, the construction lines will be deleted. Similar construction lines have been used to place the next sequence of gondola runs.



After the construction lines are deleted, this leaves the new gondola runs precisely positioned with minimum aisle widths maintained.

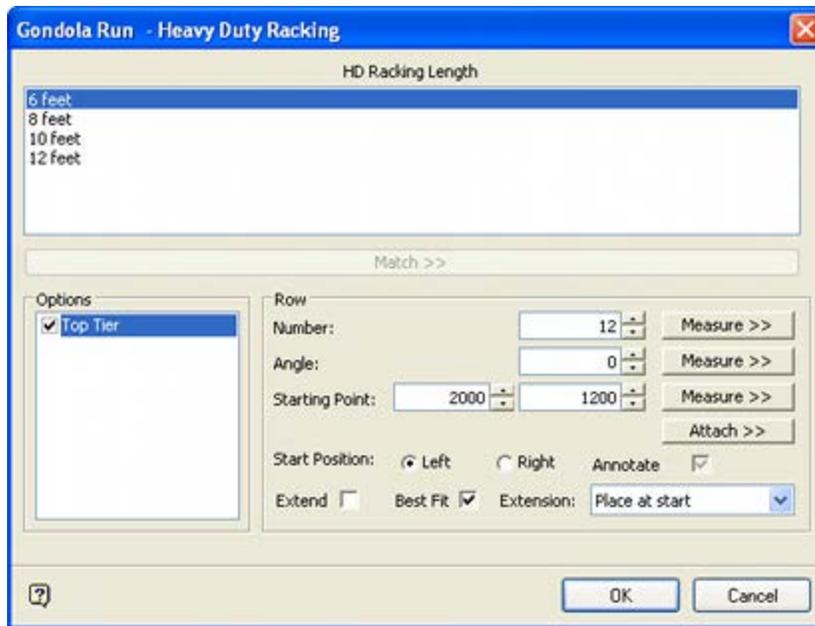


Placing a Gondola - Other Considerations

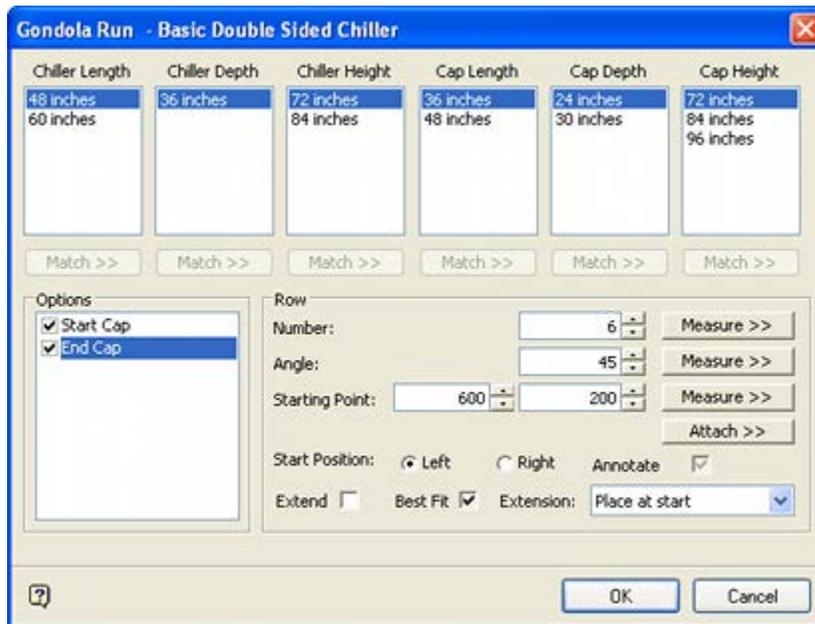
The section of help explains the more advanced options for gondola placement. This section should be read in conjunction with the section on basic options.

Dimensions

Gondolas can be assigned varying numbers of dimensions. The gondola definition in the example below is used to draw heavy duty racking used in storage areas. This racking comes in a standard depth and height, but in varying lengths. Accordingly, store planners are only required to select the length.



More complex gondolas can have up to six dimensions. In the example below the dimensions of both the main part of the gondola and the start and end caps can be specified.



Dimensions do not have to be confined to physical sizes. In the example below, a gondola has been configured to allow the store planner to select the material as well as the physical dimensions. This would only be effective if the gondola parts come in similar sizes but different materials.

Extend and Best Fit

Extend and best fit determine the number of bays that will be drawn for a specific measured length.

- **Best Fit:** the number of bays drawn will be the maximum where the total length does not exceed the measured length.
- **Extend:** the number of bays drawn will be the maximum where the start position of the last bay is inside the measured length.

Extend will generally result in one more bay being drawn than best fit.



In the above example, the red line represents the measured length. The gondola at the top was drawn using Best Fit, the one at the bottom with Extend.

Gondolas and In-Store Space Collaboration

There is a limitation on placing gondolas in the In-Store Space Collaboration application (a companion application to Macro Space Management). It can only place gondolas with three dimensions of Length, Depth and Height. Accordingly, more complex gondolas should be placed in Macro Space Management. Their position can then be adjusted if necessary in In-Store Space Collaboration.

Editing and Deleting Gondolas

Editing Gondolas

Grouping

Once gondolas are placed, they effectively become a collection of associated fixtures. The behavior of a gondola for editing is determined by whether grouping is on or off. This is set using the Grouping option on the fixturing toolbar.



If grouping is on, selecting a single fixture on the gondola will automatically select all fixtures. If grouping is off, individual fixtures in the gondola can be selected.

Fixture Manipulation

Once gondolas have been selected, their position can be modified by use of some of the Fixture Manipulation tools such as slide, move and rotate.

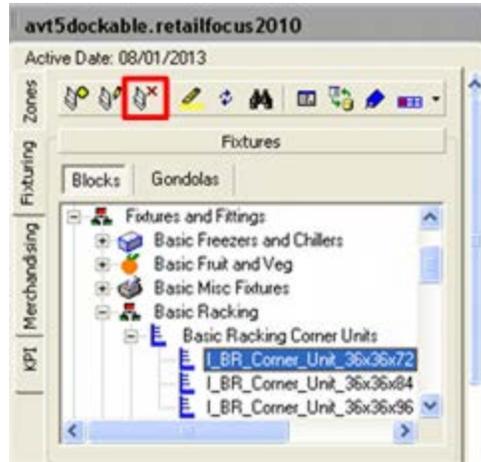
Note: Fixture Manipulation tools are most useful for users not familiar with AutoCAD functionality.

Editing using AutoCAD

Once placed, fixtures can be moved and rotated using standard AutoCAD functionality. If AutoCAD functionality is used for this purpose it may be necessary to use synchronization afterwards to ensure the information in the floor plan and database is identical.

Deleting Gondolas

Because Gondolas become a collection of associated fixtures when they are placed, there is no Delete Gondola option on the Gondola toolbar on the Object Browser. The way to delete gondolas using Macro Space Management tools is to turn on grouping on the fixturing toolbar, select the gondola required for deletion and then use the Delete fixture option on the Fixturing toolbar of the Object Browser.



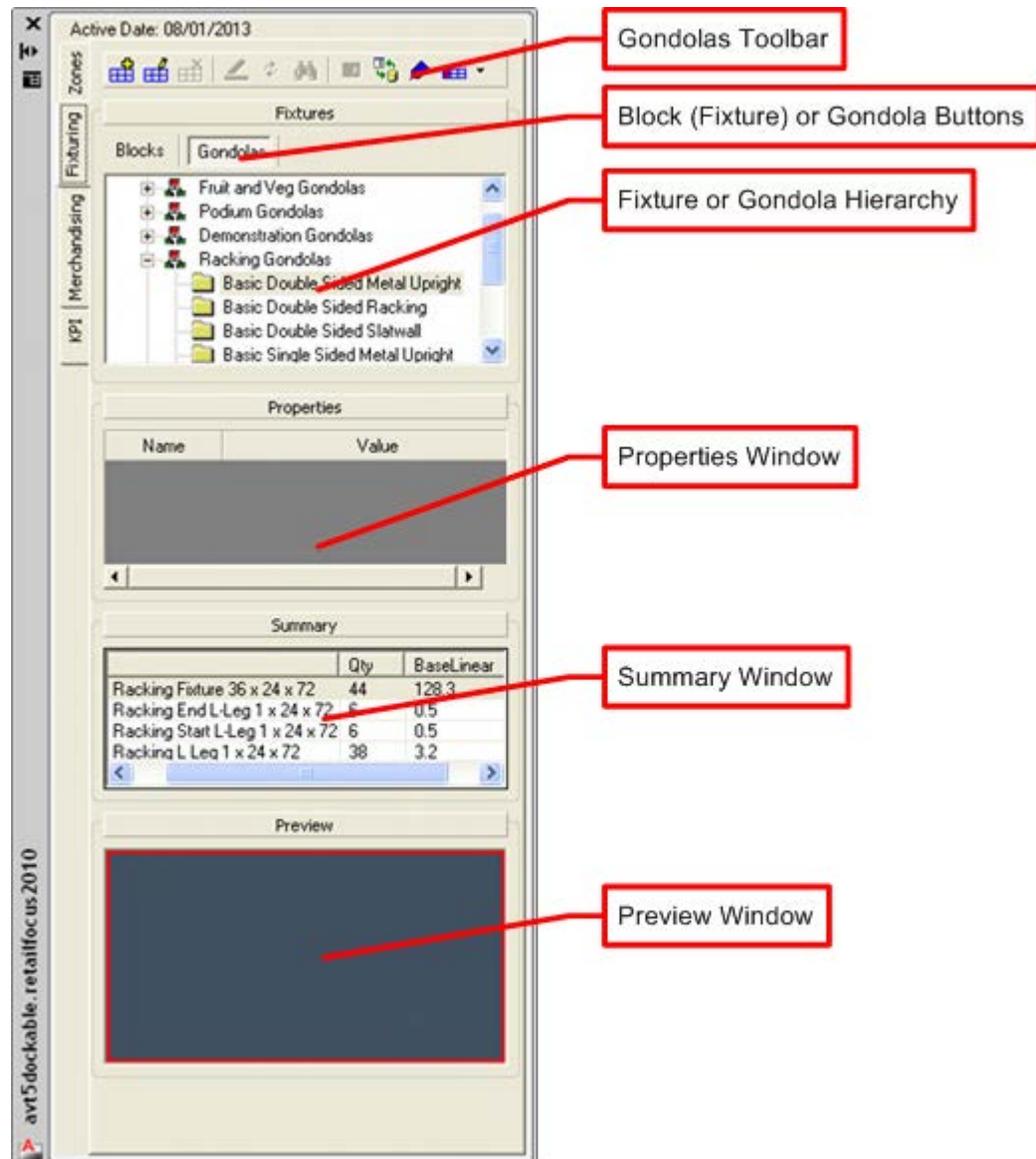
Deleting using AutoCAD tools

It is also possible to delete gondolas using standard AutoCAD functionality. It may then be necessary to use synchronization afterwards to ensure the information in the floor plan and database is identical.

Gondolas on the Object Browser

Overview of Gondolas on the Object Browser

Clicking on the Fixturing Tab on the Object Browser brings up a series of options for adding, editing and deleting Fixtures and Gondolas.



- The **Toolbar** gives access to a series of options concerning gondolas.
- The **Buttons** allow the user to toggle between Fixtures (Blocks) and Gondolas.
- The **Hierarchy Window** allows users to select fixtures (or gondolas) from the list available.

- The **Properties Window** shows the properties assigned to the selected fixture. This will be blank for gondolas.
- The **Summary Window** shows the number of instances of the selected fixture placed in the drawing. It will not show data specific to gondolas.
- The **Preview Window** will be blank for gondolas.

Using the Object Browser for Gondola Operations

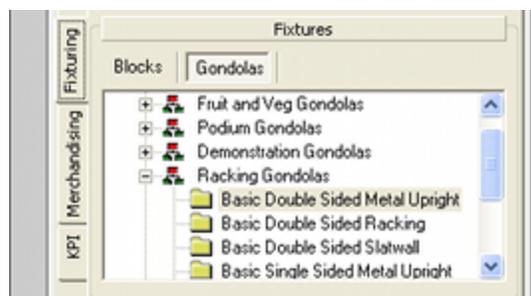
The **Gondolas tool bar** is found on the Object Browser. It is selected by clicking on Gondolas in the Fixturing window.



It contains a series of icons allowing various operations to be carried out on Fixtures. Some may be greyed out if they are not available for that operation.

Icon	Description
	Add Gondola
	Edit Gondola
	Delete Gondola
Not available for Gondolas	Highlight selected item in view
Not available for Gondolas	Highlight selected item in tree
Not available for Gondolas	Search
Not available for Gondolas	Configuration Options
	Refresh
	Attributes
	Promotional Fixtures On or Off

The **Gondola Hierarchies Window** shows a hierarchical tree of all the available fixtures or gondolas.



The tree can be expanded or contracted by clicking on the + or – icons.
 The Fixturing window can be minimized by clicking on the splitter bar.



The Blocks or Gondolas buttons immediately above the window determines whether the hierarchical tree shows fixtures or gondolas.

The hierarchical tree can be configured in Fixture Studio.

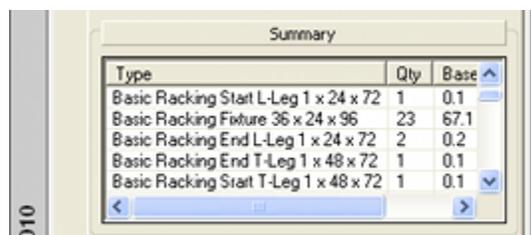
The Properties Window will be blank for gondolas.



The Properties window can be minimized by clicking on the splitter bar.



The Summary Window will show a user defined list of fixtures placed in the drawing. As gondolas are added or deleted, the list of fixtures will be modified accordingly, but no gondola specific information will be available.



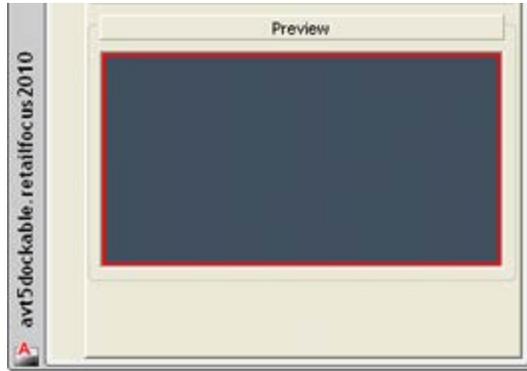
Clicking on a column heading will re-order that column. Clicking again will reverse the sort order.

The Summary window can be minimized by clicking on the splitter bar.



Note: Information in this window is controlled from Custom SQL in the AVTTB_CUSTOM_SQL table. Administrators can customise the information that appears in the Summary Window by modifying the Custom SQL.

The **Preview Window** will be blank for gondolas.

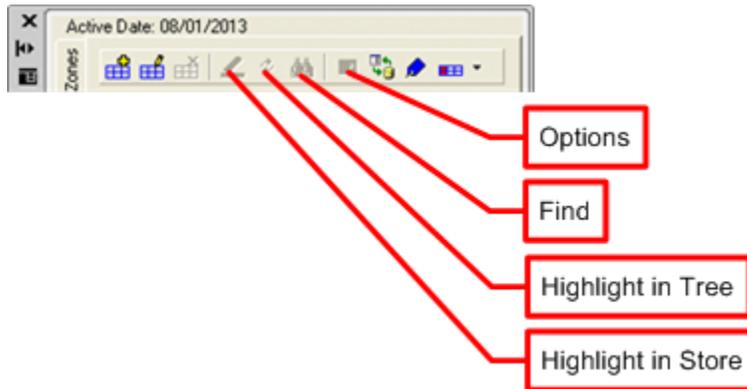


The Preview window can be minimized by clicking on the splitter bar.



Non Functional Options for Gondolas

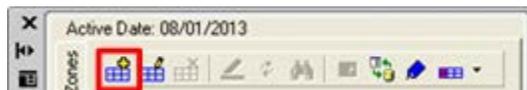
Several options are grayed out and non-available for gondolas.



This is because gondolas are treated as collections of fixtures once placed in a floor plan. In addition they can be modified by addition, changing or deletion of fixtures once placed. The Highlight in Store, Highlight in Tree, Find and Options icons are thus not appropriate for gondolas and have been disabled.

Functional Options for Gondolas

Add Gondola



This option allows users to add a gondola by highlighting it in the hierarchy and clicking the Add button.

Edit Gondola



The Edit Gondola option allows users to edit the **Gondola Definition** in Fixturing Studio. To use it, highlight a gondola in the hierarchy and click the edit icon.

Changes made to a Gondola while in Fixturing Studio will affect further placements of that type.

Refresh

The **Refresh** option refreshes both Fixtures and Gondola information in the respective hierarchical trees.

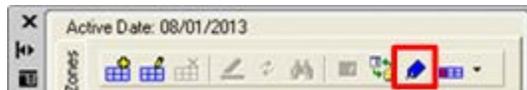


Clicking on the Refresh button in the Fixturing tab will load the latest fixture information from the database into the Fixture hierarchy. At the same time, it will load the latest gondola information from the database into the Gondola Hierarchy.

If a gondola definition has been updated in Fixturing Studio, all gondolas placed after refresh will use the new information. However, any gondolas already placed in the floor plan will still conform to the old definition.

Attributes

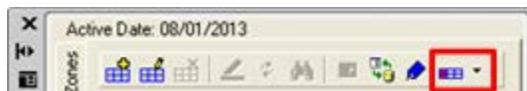
Attributes only apply to fixtures.



The option is available on the Gondolas toolbar as fixtures may require attributes to be assigned as part of the workflow immediately after the gondola has been placed in a floor plan.

Promotional Fixtures

Promotional Fixtures can be assigned by selecting a fixture or fixtures and clicking on the Promotional Fixture icon in the toolbar.



The option is available on the Gondolas toolbar as fixtures (such as end caps) may be required to be designated as promotional fixtures as part of the workflow immediately after the gondola has been placed in a floor plan.

Bay Numbering

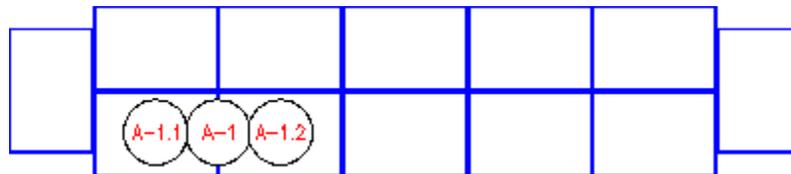
Overview of Bay Numbering and Bay Groups

Bay Numbering (used in conjunction with **Bay Groups**) allows each fixture within the floor plan to be assigned a unique identification code for reporting and identification purposes.

Note: Only fixtures can be assigned bay numbers. Fittings and shelves are automatically excluded from any selections made.

Bay Groups

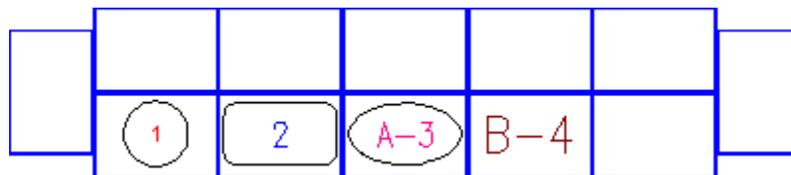
Bay Groups are a preliminary action before bay numbering is applied. They enable a group of fixtures to be treated as a single bay with sub-numbers applied to the individual fixtures.



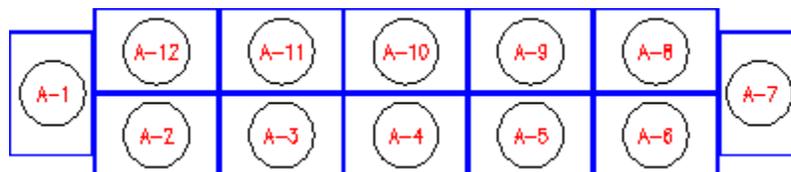
In the example above, two fixtures have been grouped together for bay numbering purposes. When bay numbering was applied, the fixtures were given a master bay number (A-1) and two sub numbers (A-1.1 and A-1.2)

Bay Numbering

Bay Numbering applies an identification number to a fixture or bay group. These have a number of different shapes, colors and prefixes.



When applied, bay numbering provides an easy way of locating specific fixtures in an electronic or printed copy of a floor plan.



Gondola Numbering

Gondola numbering is an alternative to bay numbering.

	1/4/0/5	1/4/0/4	1/4/0/3	1/4/0/2	1/4/0/1	
1/1/0/1						1/3/0/1
	1/2/0/1	1/2/0/2	1/2/0/3	1/2/0/4	1/2/0/5	

It is of the format: **Gondola Number/Gondola Side/Gondola Level/Fixture Number**. Thus 1/2/0/4 is gondola number 1 in the drawing, the second side of the gondola, level 0 (floor level) and the fourth fixture on that side.

Preparations for Bay Numbering

Synchronisation

Before bay numbering is carried out, it is recommended that the floor plan be synchronized to ensure information in the database matches the information in the floor plan. Several factors affect synchronization.

Auto-Synchronization

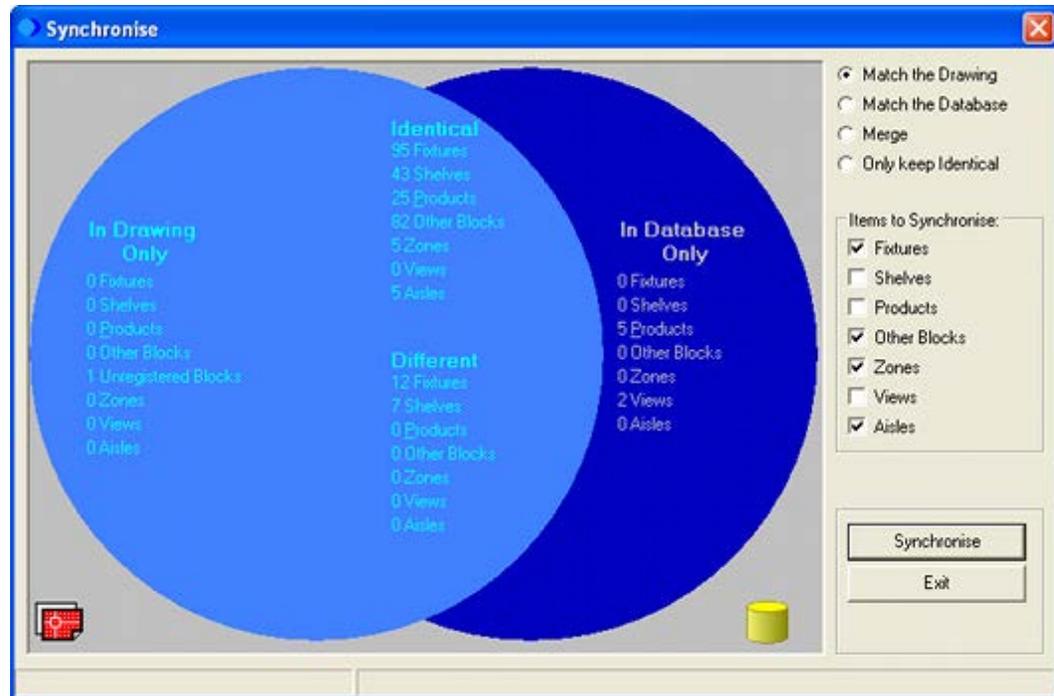
If auto-synchronization is on, the floor plan will automatically be synchronized when it is opened. Bay Numbering at this point will not require any further synchronisation.

Dynamic Synchronization

If dynamic synchronization is on, changes made to **fixtures, products, planograms** and **other blocks** made with AutoCAD tools will be immediately written back to the database. The floor plan will not generally require any further synchronization before bay numbering is carried out.

Manual Synchronization

If auto or dynamic synchronization are turned off (or if the user suspects some other form of problem), the floor plan can be manually synchronized in order to ensure information in the database matches the information in the floor plan. This is done by means of the Synchronization dialog box. This can be invoked from the file Menu or the Retail toolbar.



Note: See the help file section on Synchronization for further information.

Fixture Adjacency

Some features in the bay numbering dialog box rely on the Fixture Adjacencies to be up to date. To run Fixture adjacency, select Calculate Fixture Adjacency from the Calculations menu.

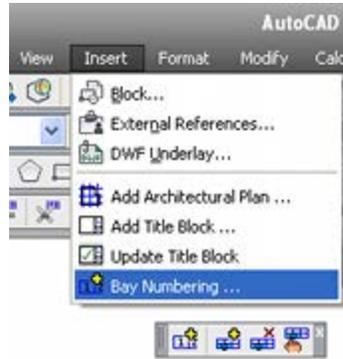


After the Fixture adjacencies have been updated, a confirmatory dialog box will appear.



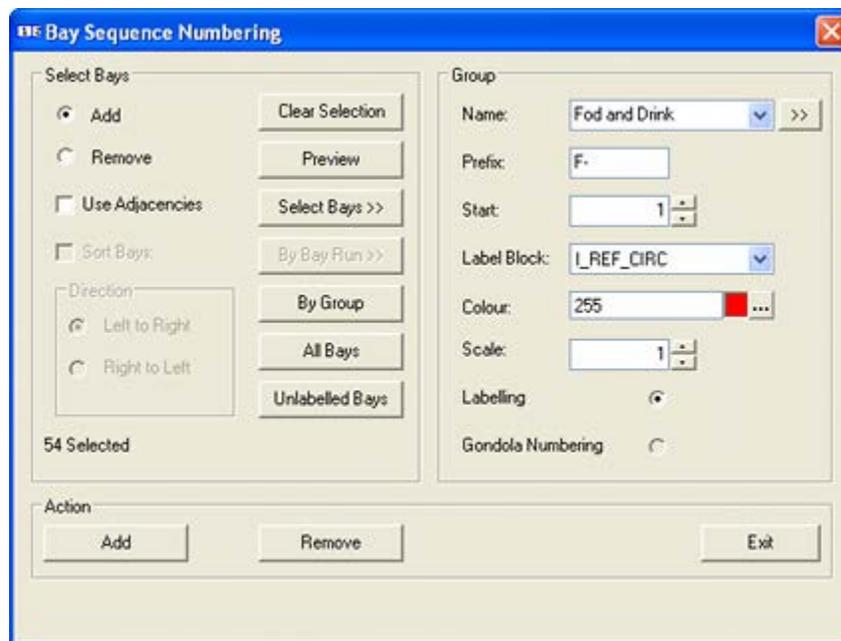
Accessing Bay Numbering

The Bay Numbering dialog box can be accessed from the Insert Menu. Alternatively, it can be accessed from the Bay Numbering toolbar.



The Bay Numbering Dialog Box

The Bay Numbering dialog box has three main parts:



- The **Select Bays** frame has the options for selecting some or all of the fixtures in the floor plan for bay numbering, together with some options as to the sequence they will be numbered in.
- The **Group** frame allows users to label sub-sets of fixtures and to specify the form of the text.
- The **Action** frame allows users to actually add or remove bay numbers.

Select Bays Frame

Add or Remove Radio Button

The **Add** or **Remove** radio button determines whether the next selection of fixtures will be added to or removed from any already selected fixtures. In the above example, 54 fixtures have already been selected. Because the Add radio button is selected, and fixtures selected in the floor plan will be added to this total.

Use Adjacencies

If the **Use Adjacencies** option is selected, this will use the Fixture Adjacency information to decide what sequence to add bay numbers in. In order to use this option the **Fixture Adjacency** option from the **Calculations** menu must first have been run. Once the Use Adjacencies check box has been selected, the Sort Bays and Direction options will become available.

- **Sort Bays** enables the direction radio button to become active
- The **Left to Right** or **Right to Left** radio button causes fixtures selected in bulk with AutoCAD windows or crossing selection boxes to be numbered in the sequence specified by the Fixture Adjacency calculation.

If fixtures have not been selected in a specific sequence (for example with an AutoCAD **Fence** command) and the Use Adjacencies command is not selected, fixtures will number in the sequence the information was written to the database when they were placed in the floor plan. This may result in apparently random bay numbering sequences in the floor plan.

Selection Options

- **Clear Selection** will de-select all currently selected fixtures.
- **Preview** will cause all currently selected fixtures to highlight in the drawing - the highlighting method will depend on the options chosen in the Fixturing tab of the Configuration module.
- **Select Bays** takes users to the currently active floor plan and allows users to select the fixtures to be bay numbered using AutoCAD selection methods.
- **By Bay Run** will not be active unless the **Use Adjacencies** check box has been checked. **Sort Bays** and either **Left to Right** or **Right to Left** should also be selected. Providing Fixture Adjacencies has been run from the Calculate menu first, clicking **By Bay Run** will allow the user to select a gondola by clicking a fixture in it. All fixtures in the gondola will then be bay numbered.
- **By Group** can be used if named groups of numbered bays are already present in the floor plan. Selecting the required name from the drop down list in the Group frame and clicking the By Group button will cause those fixtures to be selected.
- **All Bays** will select all fixtures in the floor plan.
- **Unlabeled Bays** will select all bays that have not yet been assigned a bay number.

Group Frame

- **Name** enables users to specify a reference name for a group of fixtures that will be assigned bay numbers. Example of names would be Food and Drink, Clothing, Health and Beauty. The button to the right of the drop down list will take users to the floor plan. Clicking on a bay number will return users to the Bay Sequence Numbering dialog box with the name for that sequence of bay numbers selected.
- **Prefix** enables users to specify a letter, number or symbol to be added before the bay number. Adding a prefix of A- will result in fixtures being numbered A-1, A-2, a-3 etc.
- **Start** is used to specify the number that numbering will start at. Bay numbers may not be duplicated, so two bay numbers cannot both have the number 10 assigned. A-10 and B-10 are not regarded as duplicates.

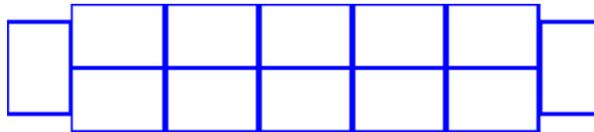
- **Label Block** specifies that shape of the outline that will surround the bay number.
- **Color** specifies the color for the text of the bay number. The color of the Label Block cannot be specified.
- **Scale** specifies the size of the text. The bay number can be made larger or smaller by adjusting this value.
- **Labelling/Gondola Numbering:** This radio button specifies whether to apply bay numbering or gondola numbering.

Action Frame

- **Add:** selecting this option will add the specified bay numbering to the selected fixtures.
- **Remove:** selecting this option will remove the existing bay numbering from the selected fixtures.
- **Exit:** This option will close the Bay Numbering dialog box.

Adding Basic Bay Numbering

This worked example shows how to add basic bay numbering to a gondola.

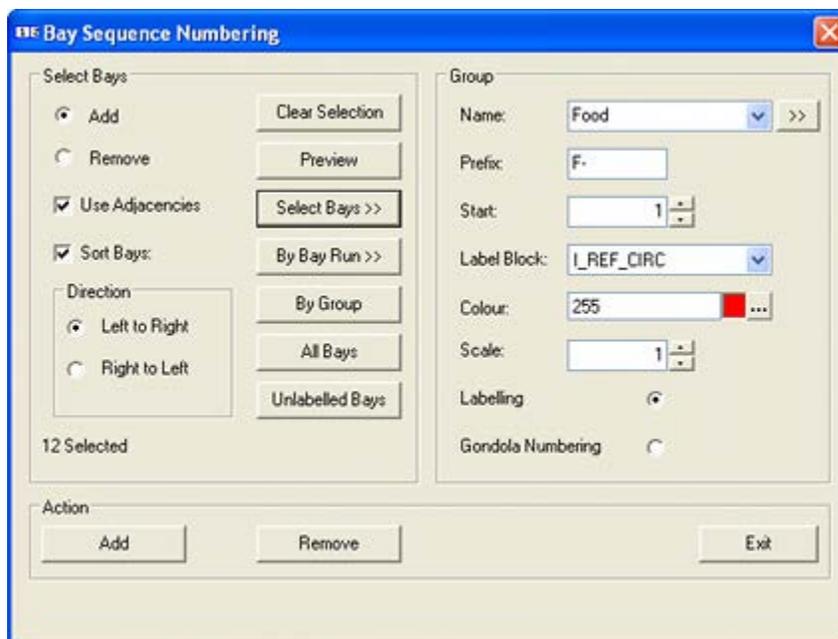


Running the Fixture Adjacency Calculation

To ensure the bay numbering follows a neat sequence, the first stage is to run the **Calculate Fixture Adjacencies** option from the **Calculations** menu. This ensures that the database contains current information on which fixtures are to the left, right, behind or above each other.



Operations in the Bay Numbering Dialog Box



Select Bays Frame - Options

The first stage is to set how the bays will be numbered when selected.

- The radio button is set to **Add**. At this stage there will be 0 bays selected. When we add bays at a later stage, we want them to be added to the selection.
- The **Use Adjacencies**, **Sort Bays** and **Left to Right** options are selected. This will ensure bay number in a logical sequence.

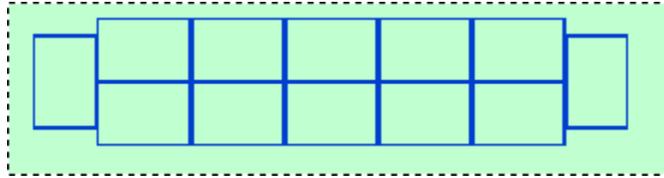
Group Frame

The next stage is to set some information as to the appearance of the bay numbering.

- The **Name** is what this group of bay numbers will be called. In this example it is Food. If it is intended to apply bay numbers to other gondola later, this set of bay numbers might be given a name like clothing.
- The **Prefix** will go before the bay number - in this case it will result in the fixtures being numbered F-1, F-2, F-3, etc.
- **Start** is the value of the first bay number. In this case the numbers will start at 1.
- The **Label Block** will result in a circular outline, while the **Color** for the text is set to Red.
- The **Scale** is left at 1 as this is a good size for the text, while **Labelling** is selected to place Bay Numbers.

Select Bays Frame - Selecting the Bays

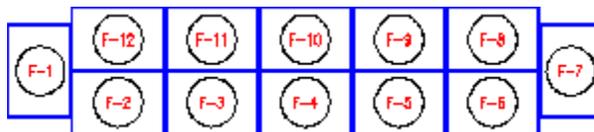
The next Stage is to select the bays. To do this, click the **Select Bays** button. This will take the user to the floor plan. Select the fixtures by standard AutoCAD methods and right click to finish the selection. In the example below, the fixtures are being selected by a Crossing Selection Box.



On right clicking to complete the selection, the user will be returned to the Bay Numbering dialog box.

Action Frame

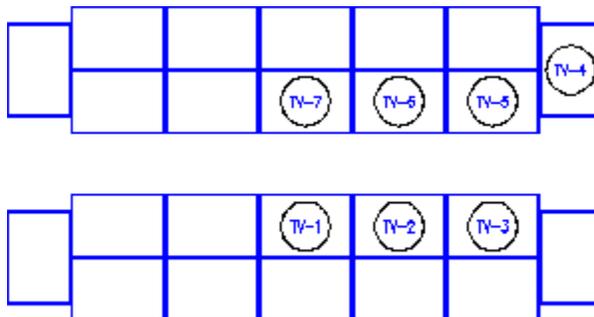
The Bay Numbering can now be added by clicking the **Add** button in the Action frame.



Advanced Bay Numbering

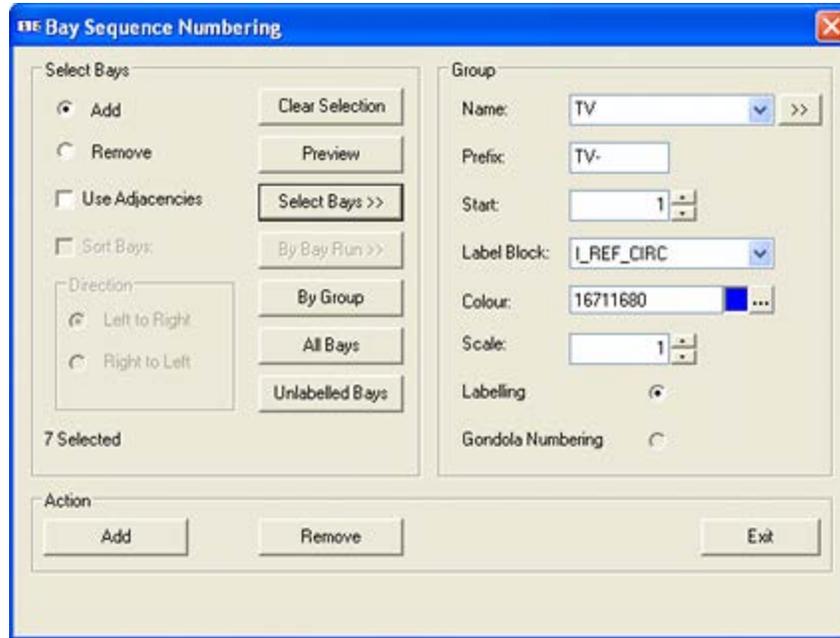
Note: Please refer to the **Adding Basic Bay Numbering** topic first before following this worked example.

It is possible to use the AutoCAD **Fence** command to exert precise control over the bays selected and the sequence they will number in. In the example below, a limited number of fixtures have been selected for numbering.



Bay Numbering Dialog Box

The first stage is to bring up the Bay Numbering dialog box.



Note: there is no need to run the Fixture Adjacency calculation - in this example the bays will be numbered in the sequence they are selected with the **Fence** command.

Select Bays Frame - Options

The first stage is to set how the bays will be numbered when selected.

- The radio button is set to **Add**. At this stage there will be 0 bays selected. When we add bays at a later stage, we want them to be added to the selection.
- The **Use Adjacencies** option is not selected. This will ensure that the fixtures bay number in the order they are selected.

Group Frame

The next stage is to set some information as to the appearance of the bay numbering.

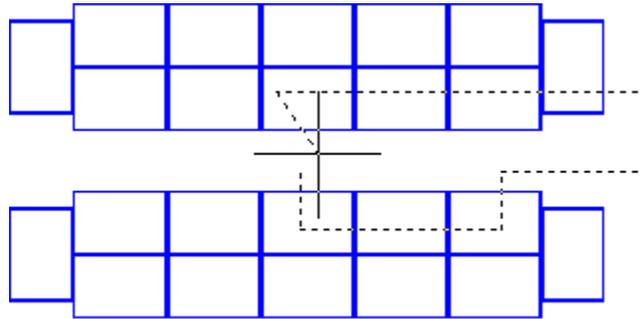
- The **Name** is what this group of bay numbers will be called. In this example it is TV. If it is intended to apply bay numbers to other gondola later, this set of bay numbers might be given a name like clothing.
- The **Prefix** will go before the bay number - in this case it has been set as TV-.
- **Start** is the value of the first bay number. In this case the numbers will start at 1.
- The **Label Block** will result in a circular outline, while the **Color** for the text is set to Blue.
- The **Scale** is left at 1 as this is a good size for the text, while **Labelling** is selected to place Bay Numbers.

Select Bays Frame - Selecting the Bays

The next Stage is to select the bays. To do this, click the **Select Bays** button. This will take the user to the floor plan. Type the word **Fence** into the AutoCAD command line.

```
Command:
Select objects: fence
```

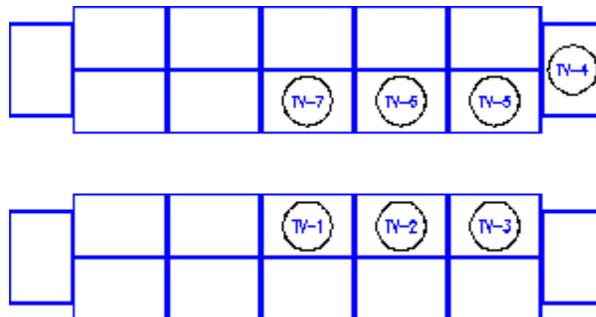
A fence is a line. Any fixtures the line passes through will be selected. The fence must start outside of the first fixture, only pass once through any selected fixture and finish outside of the last fixture.



Once the fence has been drawn, press **Return** to indicate the fence is complete and right click to complete the selection set. The user will be returned to the Bay Numbering dialog box. It will show 7 fixtures have been selected.

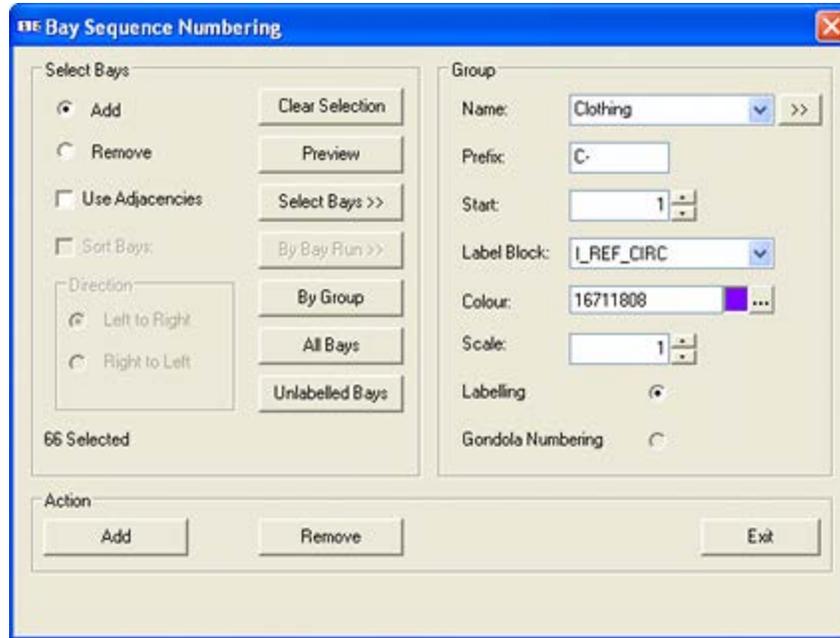
Action Frame

The Bay Numbering can now be added by clicking the **Add** button in the Action frame.



Removing Bay Numbering

Removing bay numbering is the reverse of adding it. Bay Numbering can be removed in various ways.



All Bays Option

This is the simplest way of removing bay numbers. Simply click the **All Bays** button in the Select Bays Frame. This will select all fixtures in the currently active floor plan. Click **Remove** in the Action frame and all bay numbering in the floor plan will be removed.

Select Bays Option

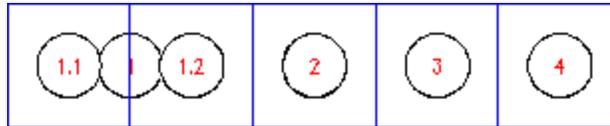
The **Select Bays** option allows the user to use standard AutoCAD selection methods such as windows and crossing selection boxes or the fence command. Once the required fixtures have been selected click **Remove** in the Action frame and the bay numbering will be removed from the specified fixtures.

Name Option

This method relies on the fact that specific bay numbers are associated with a name in the Name drop down list in the Group frame. The first stage is to set the name to that required. This can be done by manually setting the name to that required or by clicking the button to the right of the name drop down list. This will take the user to the floor plan. Click on a bay number and this will select its parent name. Next click the **By Group** button to select all fixtures associated with that name. Finally, click **Remove** in the Action frame and the bay numbering will be removed from the specified fixtures.

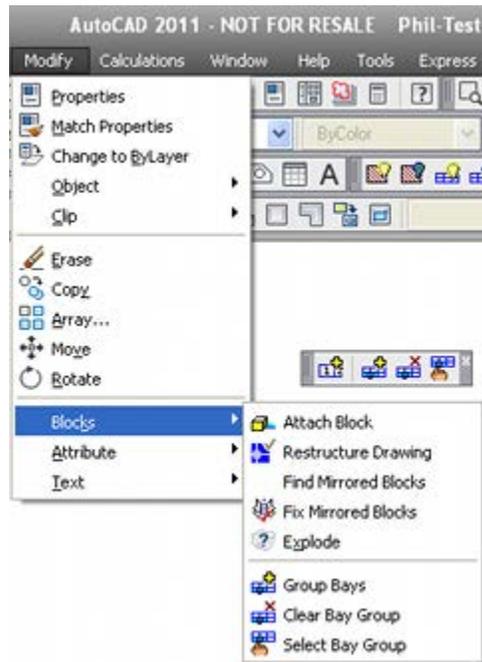
Bay Groups

Bay Groups can be used to group several fixtures together for reporting purposes. An example of this would be fixtures holding long products such as wooden dowel or electrical conduit in a DIY store. In the example below, the two left-most fixtures have been combined into a bay group with master bay number of 1 and sub bay numbers of 1.1 and 1.2.



Accessing the Bay Group Options

Bay Group options can be accessed from the Modify > Blocks menu or the Bay Numbering toolbar.



These give access to three options:

- Group fixtures (bays) to make them into a bay group.
- Clear the bay group so it reverts to individual fixtures for bay numbering purposes.
- Select the bay group by clicking on a member to show all other members.

Bay Group Operations

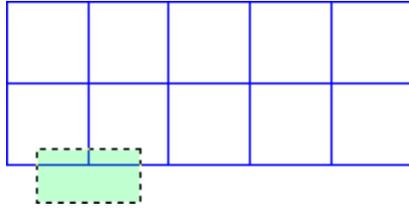
Grouping Fixtures to make them into a Bay Group

To make Bay Groups from Fixtures

1. From the Modify >Blocks menu, click the Group Bays option. Alternatively use the Group Bays option from the Bay Numbering toolbar.
2. A prompt will appear in the command line asking the user to select the required fixtures.

```
Command: Select blocks to be grouped:
Select objects:
```

3. Fixtures can be selected by standard AutoCAD selection methods including individual selection, selection windows or a fence. Selection must be terminated by the standard AutoCAD method of a right click.



The selected fixtures will now be treated as a bay group.

Clearing Bay Groups

To remove a bay group is done as follows:

1. From the **Modify > Blocks** menu, click the **Clear Bay Group** option. Alternatively use the **Clear Bay Group** option from the **Bay Numbering** toolbar.
2. A prompt will appear in the command line asking the user to select a fixture.

```
Command:
Command: Select a block
```

3. A single fixture can be selected by clicking it. This will cause the fixtures forming the bay group to be de-selected.

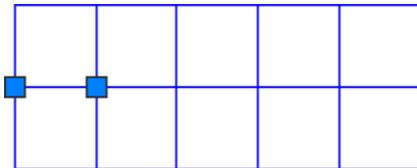
Selecting a Bay Group

Selecting the fixtures forming a bay group is done as follows:

1. From the **Modify > Blocks** menu, click the **Select Bay Group** option. Alternatively use the **Select Bay Group** option from the **Bay Numbering** toolbar.
2. A prompt will appear in the command line asking the user to select a fixture.

```
Command:
Command: Select a block
```

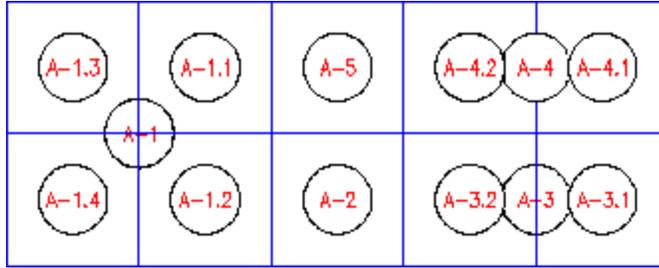
3. A single fixture can be selected by clicking it. This will cause all other fixtures in the bay group to be selected.



Note: It would also be possible to use a KPI to show fixtures in bay groups. The simplest way to do this would be to reference the `FIX_BAYGROUP` field in the `AVTTB_FIXTURE` table.

Bay Numbering and Bay Groups

When fixtures are bay numbered, fixtures associated with a bay group will receive a master bay number and sub bay-numbers for individual fixtures. In the example below, there is one bay group of 4 fixtures; two bay groups of two fixtures each and two single bays.

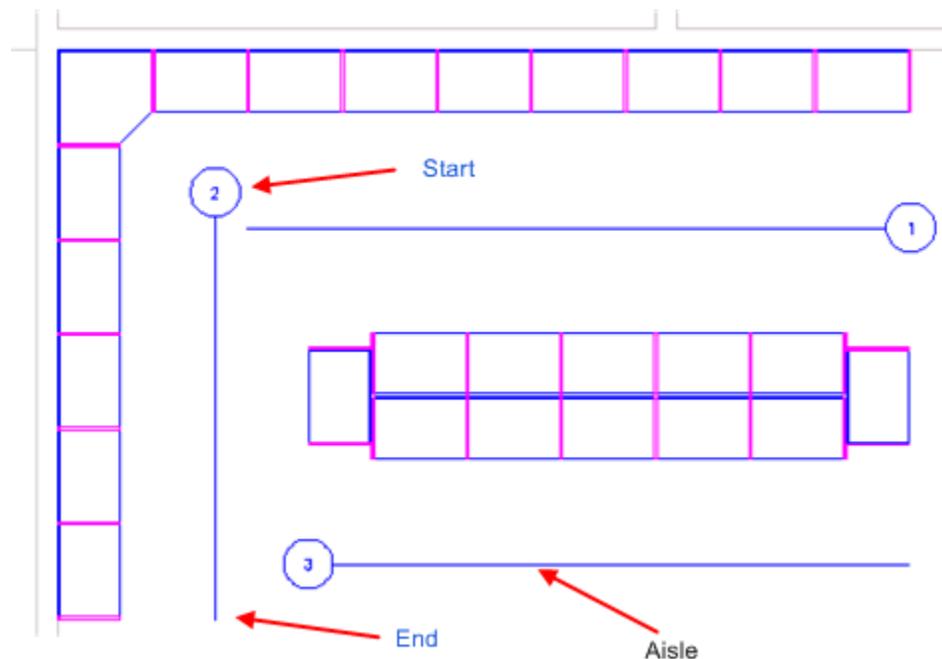


Aisles in Planner

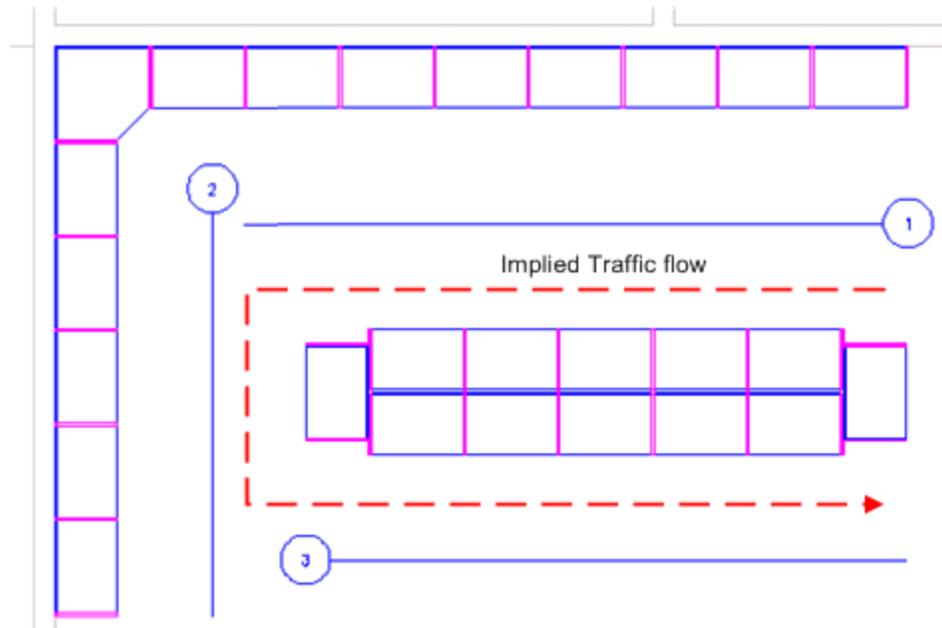
Overview of Aisles

Aisles are lines drawn in Planner to represent actual aisle in stores: They serve several purposes:

- They allow actual aisles in stores to be identified in a floor plan.
- They allow traffic flows to be specified
- They allow reports to be created showing the performance of specific aisles.



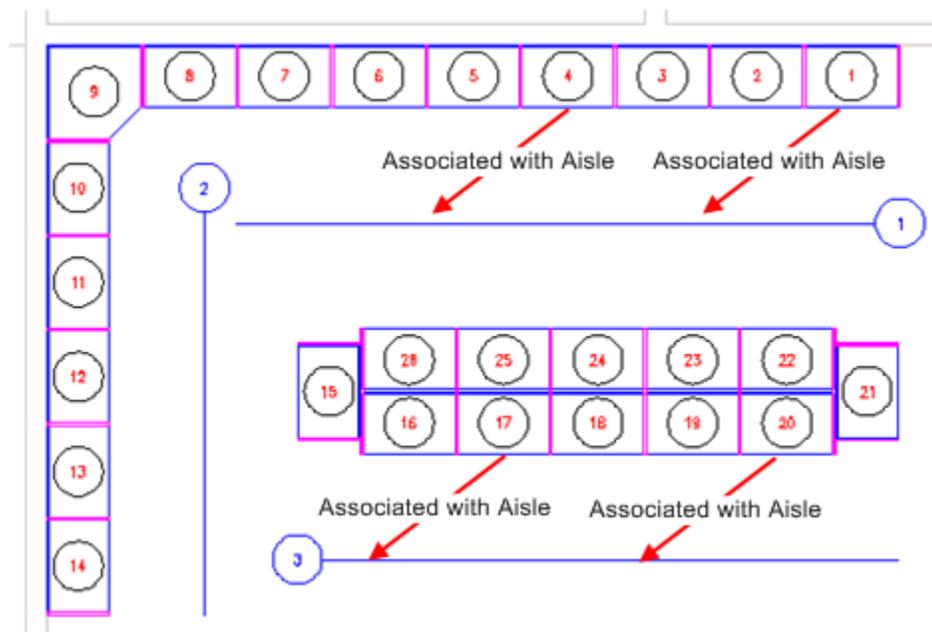
In the above diagram, each aisle is represented by a line identified by a number, letter or simple word. In the above diagram there are three aisles; numbered 1, 2 and 3. Aisles can be used to identify the general direction of traffic flow through a store. Shoppers are defined as starting at the head of an aisle and moving towards its end.



In the above diagram, the implied traffic flow is specified by the aisles placed in the floor plan.

Note: Actual traffic flows in a store will have to be determined by observation - possibly by use of observers or reviewing security camera footage.

After the aisles have been drawn, the **Calculate Aisle Adjacency** function (available from the Calculations menu) will cause fixtures to be associated with the nearest aisle within a specific distance.



In the above diagram the fixtures have been bay numbered for clarity. Each fixture (identifiable by its bay number) will associate itself with the nearest aisle. Once fixtures have been associated with aisles, this information can be used for reporting purposes. For

example, it would be possible to report on the performance of all planograms sharing an aisle.

Adding, Editing and Deleting Aisles

Adding, Editing and Deleting Aisles is controlled from the Aisles toolbar.

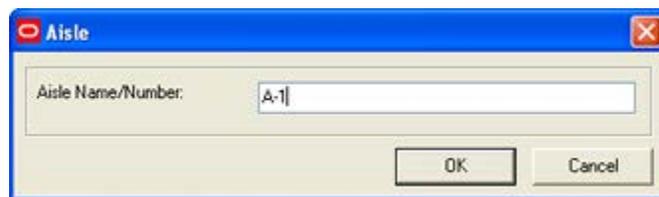


Adding Aisles

Adding Aisles is initiated by clicking **Add Aisle** on the Aisles toolbar.



The Aisle dialog box will appear, allowing the name of the aisle to be specified.



After entering the aisle name and clicking OK, the command line will invite the user to select the start point.

```
Command: AVT_SETFOCUS
Command: Specify start point:
```

After specifying the start point the user will be invited to select the next point.

```
Command: AVT_SETFOCUS
Command: Specify next point or [Arc/Undo]:
```

The user may draw a straight aisle using just two points, or they may opt to add additional segments. Pressing Return will cause the aisle to be drawn.



Useful Ways of Drawing Aisles

Many of the standard AutoCAD methods can be used to draw aisles. Two useful ones are:

Mid of 2 Points (m2p)

The AutoCAD **Mid of 2 Points** command is initiated by entering m2p into the command line.

```
Command: AVT_SETFOCUS
Command: Specify start point: m2p
```

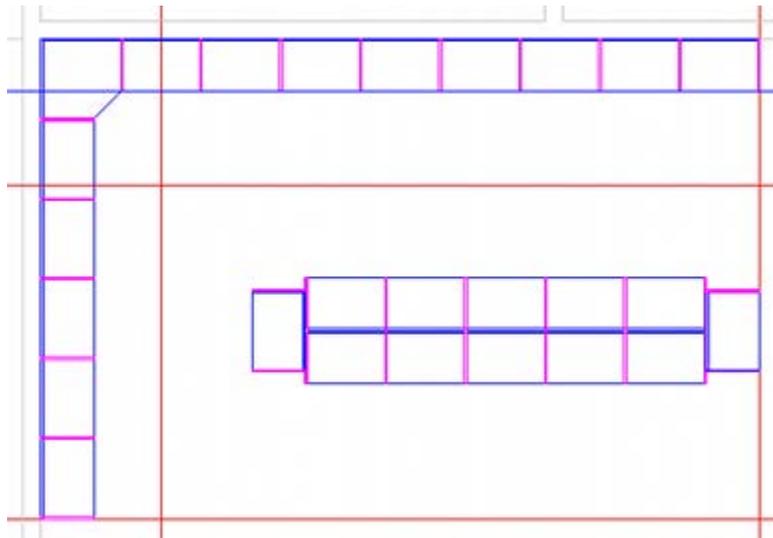
This will result in the user being invited to select 2 points. The aisle will be drawn initiating from the centre of a line connecting those two points.



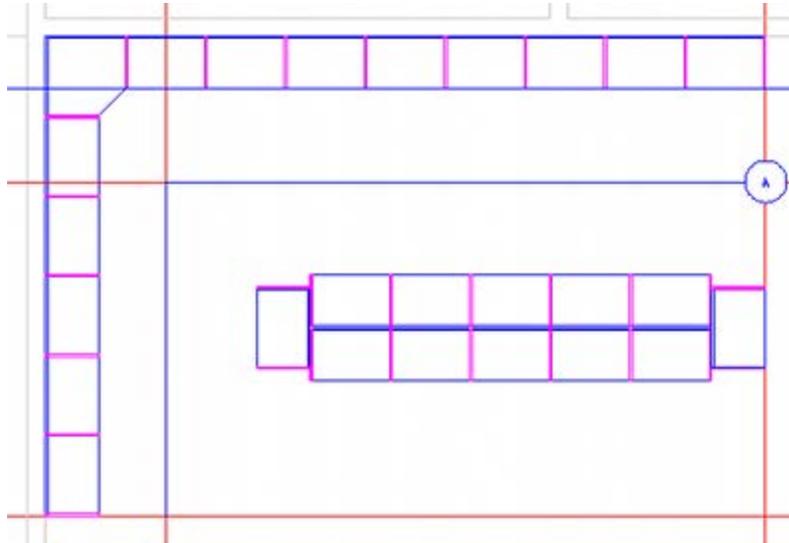
In the above example, the m2p command has been used for the start and the end of the aisle, resulting in an aisle drawn equidistant from both gondolas and neatly aligned with the ends.

Construction Lines

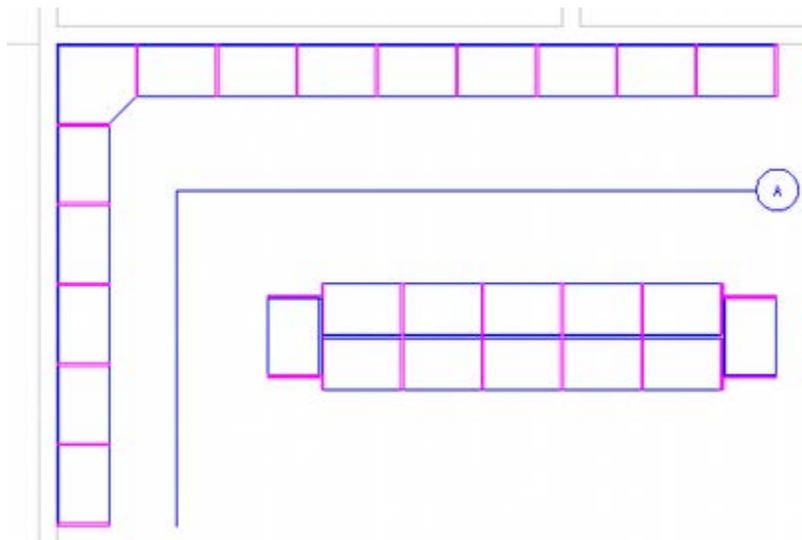
AutoCAD allows the use of construction Lines - infinitely long straight lines. There (in conjunction with other AutoCAD functionality such as Offsets and Object snaps) can be used to accurately lay out aisles. In the example below, construction lines have been added to the floor plan using Offsets and Object snaps.



The Aisle can then be drawn by snapping to the intersections.



When the construction lines are deleted, an accurately positioned aisle remains.

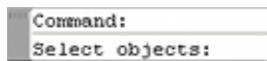


Editing Aisles

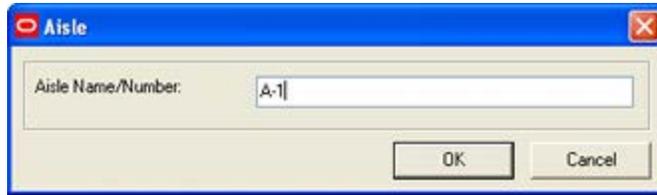
Editing Aisles is initiated by clicking **Edit Aisle** on the Aisles toolbar.



The command line will then invite a user to select an aisle.



This can be selected by left clicking on it to select it then right clicking (standard AutoCAD method to end selection). The aisle dialog box will then appear.



The name of the aisle can then be edited.

Editing Aisle Positions

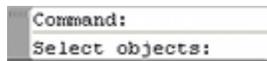
Aisle positions cannot be edited by Macro Space Management (MSM) functionality. Instead AutoCAD functionality must be used. For example, the position could be changed by means of the **Move** command. After the move command has been used, the MSM **Synchronize** functionality must be used to ensure the changes are written back to the database.

Deleting Aisles

Editing Aisles is initiated by clicking **Delete Aisle** on the Aisles toolbar.



The command line will then invite a user to select an aisle.



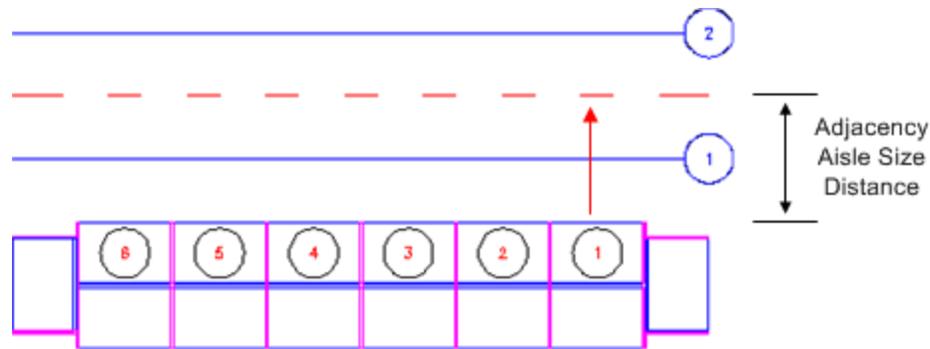
This can be selected by left clicking on it to select it then right clicking (standard AutoCAD method to end selection). Upon right clicking, the selected aisle or aisles will be deleted without further confirmation.

Aisles and Aisle Adjacency

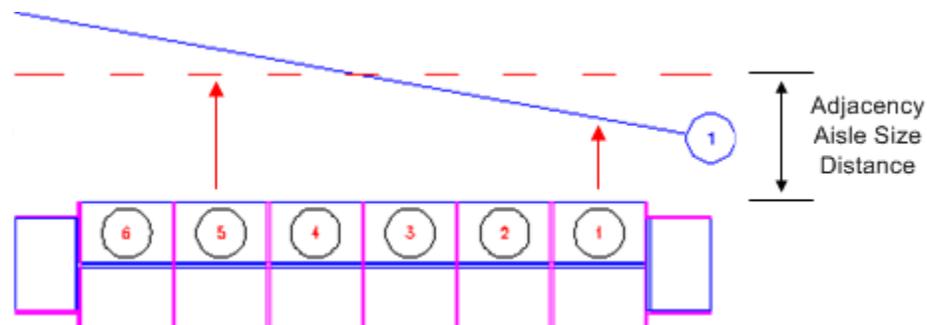
After aisles have been drawn in a floor plan, the **Calculate Aisle Adjacency** option (Calculations menu) will associate fixtures with aisles. This section of help explains that process.

ADJACENCY_AISLESIZE System Variable

The **ADJACENCY_AISLESIZE** system variable (set in the System Variables dialog box in the **Administration Module**) determines the maximum distance a fixture can be from a file and still be associated with it. When the **Calculate Aisle Adjacency** option is run, the distance perpendicular to the front of each fixture will be determined. Each fixture will be associated with the nearest aisle - provided its is within the maximum distance set by the **ADJACENCY_AISLESIZE** system variable



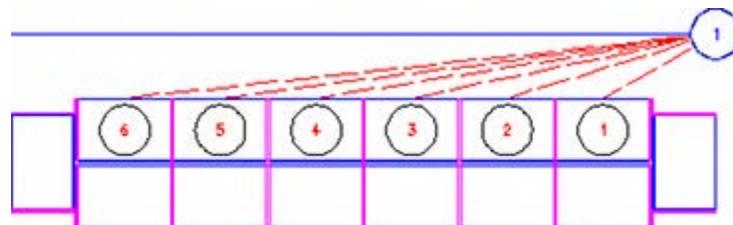
In the diagram above, the fixtures will be associated with Aisle 1 because that is the closest and within the maximum distance specified by the **ADJACENCY_AISLESIZE** system variable. If Aisle 1 did not exist, the fixtures would not be associated with Aisle 2 because that is outside the maximum distance specified in the **ADJACENCY_AISLESIZE** system variable



Care needs to be taken if the aisle is not parallel to the front of the fixtures. In the above example, Fixture 1 will associate with Aisle 1, but Fixture 5 (which is outside the **ADJACENCY_AISLESIZE** distance) will not.

Ordering Fixtures for Reporting Purposes

Once the **Calculate Aisle Adjacencies** functionality has been run, information will be written to the **AVTTB_AISLE_ADJACENCIES** table. This contains several pieces of information useful for reporting including the distance from the start of the aisle and whether the fixture is on the left or right of the aisle.



Distance from Start

The distance from the start is measured from the start of the aisle to the centre of the front face of the fixture. In the above diagram, Fixtures 1 - 6 can be ranked in their sequence along the aisle.

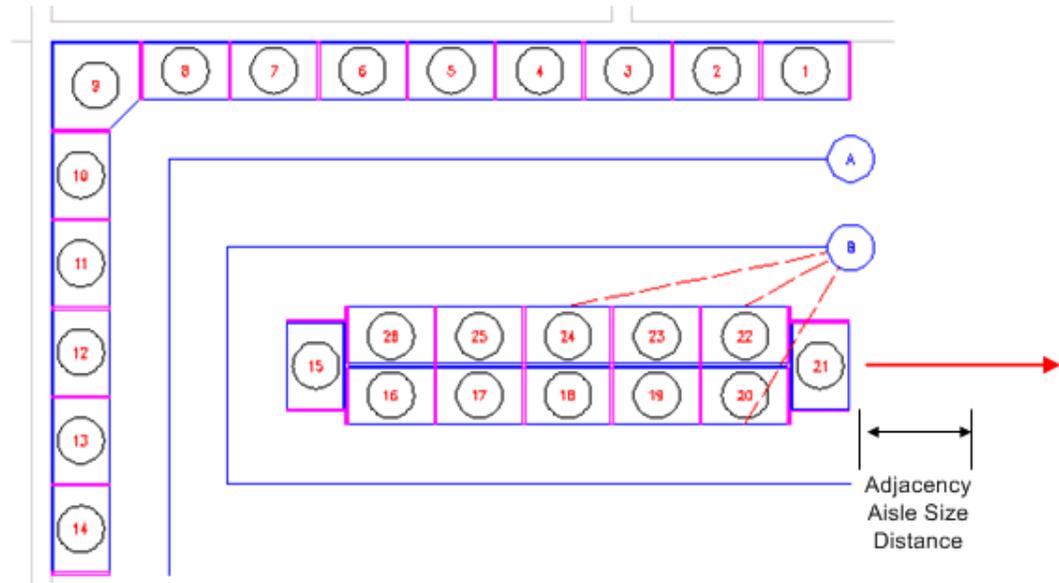
Location to Left or Right

Aisles are drawn to show the general direction of travel of shoppers. The start of the aisle is shown by the location of its name, with direction of travel towards the other end.

Fixtures associated with an aisle are shown to the left or right relative to the direction of travel.

Potential Problems with Aisle Adjacency

The diagram below shows a correctly drawn aisle and one with potential problems.



Aisle A

Aisle A has all fixtures within the distance specified within the `AVTTB_AISLE_ADJACENCIES` system variable and can be used for accurate reporting.

Aisle B

There are two problems with Aisle B:

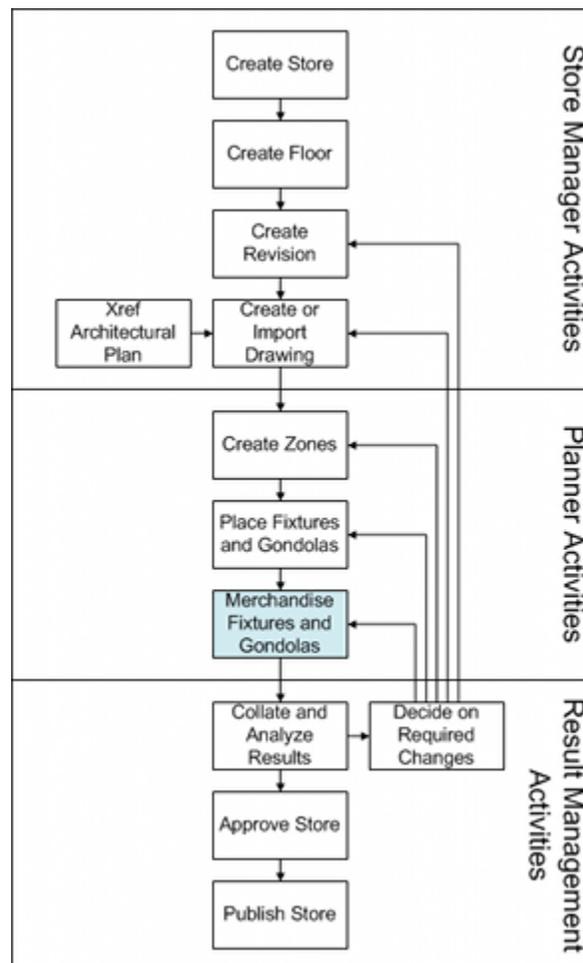
- The aisle is in a 'U' shape. As distances are measured from the start of the aisle to the centre of the front of the fixture, Fixture 22 will be closest to the start. However, Fixture 20 will be shown as closer to the start than Fixture 24, leading to reports ranking the fixtures in an incorrect sequence along the length of the aisle.
- One end cap (Fixture 21) is not pointing at the aisle. It will 'feel out' to the maximum distance specified in the `AVTTB_AISLE_ADJACENCIES` system variable, fail to find the aisle and not be included in reports associated with that aisle.

When drawing aisles, care needs to be taken to ensure that fixtures will correctly associate with the pertinent aisles and the sequence they are reported on is correct.

Merchandise in Planner

Overview of Merchandising in Planner

The merchandising options in Planner allow users to place planograms or products.



Planner can be used to merchandise a store at placeholder level - it cannot be used to merchandise at display style level. Two forms of placeholders are possible:

- Products: Placeholders can be at any level in the hierarchy from SKU upwards.
- Planograms

In both cases, the placeholders indicate the presence of specific items of merchandise exists on a fixture. However, the placeholders themselves do not hold any information on the product quantity, position or orientation.

Using External Information to Plan Merchandise

Store planning is not done in isolation. A key objective is to take optimized data from other applications and use it to translate a list of tabulated requirements into an optimized spatial arrangement.

Product Targets and Prototype Stores

The flowchart below shows one method to achieve this.



1. Data on the quantities of required products is generated by an external application.
2. This information is imported into Macro Space Planning's AVTTB_PRODUCT_TARGET table.
3. The product targets are used to create (or update) a **prototype store**. This translates a tabulated list of information into a spatial arrangement of products and planograms.
4. The prototype store is used as a basis for comparison for other stores. For example, stores in a specific cluster in Store Manager could be validated against the prototype before being put into service.

Using Product Targets

The Macro Space Planning Database contains a table called AVTTB_PRODUCT_TARGET.

COLUMN_NAME	DATA_TYPE
PRD_ID	NUMBER(19,0)
STR_ID	NUMBER(10,0)
SSN_ID	NUMBER(10,0)
PDT_MANDATORY	NUMBER(1,0)
PDT_PRIORITY	FLOAT
PDT_SIZE	FLOAT
PDT_MIN_SIZE	FLOAT
PDT_MAX_SIZE	FLOAT
UNT_ID	NUMBER(10,0)
PDT_RE_OPT_SIZE	FLOAT
PDT_GROSS_MARGIN	FLOAT

This table can be used to hold information from another application - such as Category Management. It can be populated imported data for base linear or shelf linear lengths for products at Category, Sub-Category or Segment level. This information can be both store and season specific, allowing the table to hold optimized information.

Product Targets and Quick Reports

Quick Reports can be accessed from the View menu. They are designed to give a continually updated view of specific aspects of the currently active floor plan. Macro Space Planning is supplied with a standard set of Quick Reports, but retailers can develop their own customized quick reports to suit their specific business processes. (This can be done by implementors or administrators making changes to the AVTTB_CUSTOM_SQL table in the database).

In the example below a Quick Report has been developed to show the product targets for the currently active floor plan. It shows the **base linear** for products at Segment level, together with the average gross margin for those segments. This data can then be compared with data for merchandise actually placed in the store to ensure that the broad quantities of products placed fall within calculated criteria.

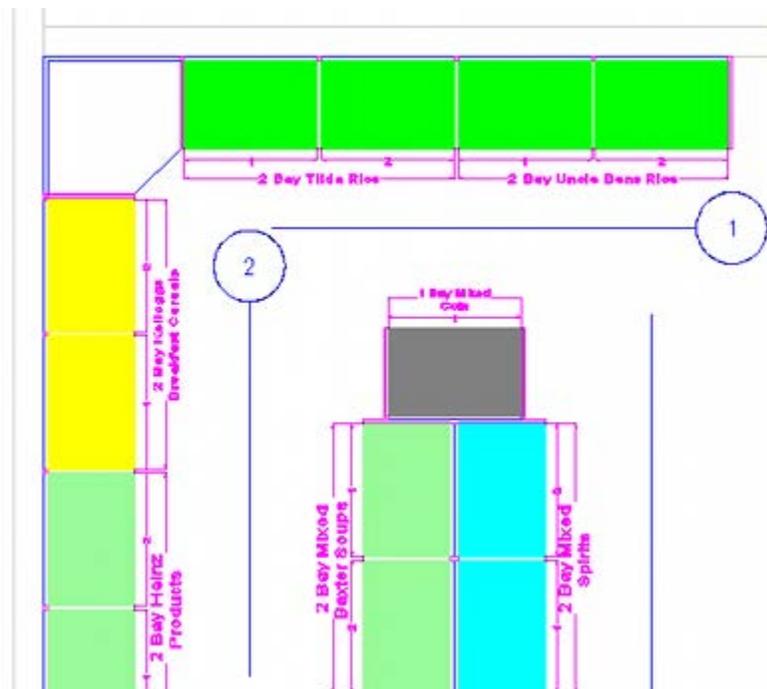
PRODUCT NAME	SEASON	MANDATORY	PRIORITY	CURRENT LENGTH	MIN LENGTH	MAX LENGTH	TARGET	GROSS MARGIN
Beers, Lagers and Ciders	All Seasons	YES	1	32 FT	28 FT	36 FT	32 FT	29.67%
Breakfast Cereals	All Seasons	YES	1	16 FT	16 FT	36 FT	24 FT	76.31%
Carbonated Drinks	Spring 2013 Season	NO	2	32 FT	32 FT	36 FT	36 FT	41.99%
Condiments	Spring 2013 Season	YES	1	36 FT	36 FT	40 FT	38 FT	96.23%
Newspapers	All Seasons	YES	1	36 FT	36 FT	36 FT	36 FT	37.04%
Rice	All Seasons	NO	3	24 FT	24 FT	36 FT	30 FT	59.65%
Spirits	Spring 2013 Season	NO	3	24 FT	20 FT	24 FT	22 FT	65.13%
Tinned Soup	All Seasons	YES	1	20 FT	12 FT	20 FT	16 FT	82.64%

110 Item(s) Spring 2013.D\WG

Using Prototype Stores

Placing Merchandise

Prototype stores can be used to convert a list of product targets into a specific spatial arrangement. In the example below, aisles have been drawn to indicate traffic flow and planograms placed to meet the base linear targets. This information can be used by other store planners as a comparison when planning their stores. In the example below, once the prototype has been selected or planned, other store planners can see which planograms belong in which aisle and which sequence they are placed in.



Comparing with Quick Reports

It is also possible to use Quick Reports for comparison purposes: for example it is possible to produce a custom quick report that compares the base linear values of merchandise in the prototype store with that in the current store.

PRD ID	PRODUCTS	STORE	PROTOTYPE
1276	Batteries	3 FT	3 FT
13	Beers, Lagers and Ciders	18 FT	12 FT
17	Bread	6 FT	6 FT
138	Breakfast Cereals	18 FT	18 FT
1536	Carbonated Drinks	12 FT	12 FT
1639	Condiments	FT	8 FT
94	Frozen Pizza	4 FT	4 FT
1687	Newspapers	FT	3 FT
50	Rice	12 FT	12 FT
15	Spirits	24 FT	12 FT
81	Tinned Soup	12 FT	18 FT
20	Tinned Vegetables	12 FT	12 FT

13 Item(s) Summer 2013 Revision.d

Comparing with Store Comparison

The Store Comparison option can be used to establish what is the same, different, missing or present in larger quantities in one store compared to another.

Category	Planogram	Template	Store Base	Difference
Tinned Soup	0000051	70	35	Under
Beers, Ciders and Lager	0000037	35	70	Over
Beers, Ciders and Lager	0000040	35	70	Over
Tinned Soup	0000054	70	35	Under
Books and Newspapers	0000036	37	0	Missing
Sauces	0000026	48	0	Missing
Sauces	0000025	48	0	Missing
Spirits	0000024	0	140	Illegal
Wines	0000005	0	70	Illegal

Planogram Differences: Prototype Store :Sum 9 Items

Planogram Forms

Planograms can exist in several forms in a floor plan.



In the above diagram:

- The planogram on the left is in 2D form. This is purely a placeholder and the database will not hold floor plan specific information on the position of the shelves or products in the planogram.
- The planogram in the centre is in 2.5D form. The shelves are accurately represented by the products are in placeholder form with no information on quantity, position or orientation.
- The planogram on the right is in 3D form. Shelves are accurately represented, as is the quantity, position and orientation of the products.

Planogram Placement in Planner

Planograms in Planner always place in 2D form. They can be exploded to 3D form in the Merchandiser module if full planogram details are required to be visible.

If the planogram is in 2D form, it can be viewed in **Schematic Preview** in **In-Store Space Collaboration**, while if it is 3D form it can be viewed in **Front Graphical View**.

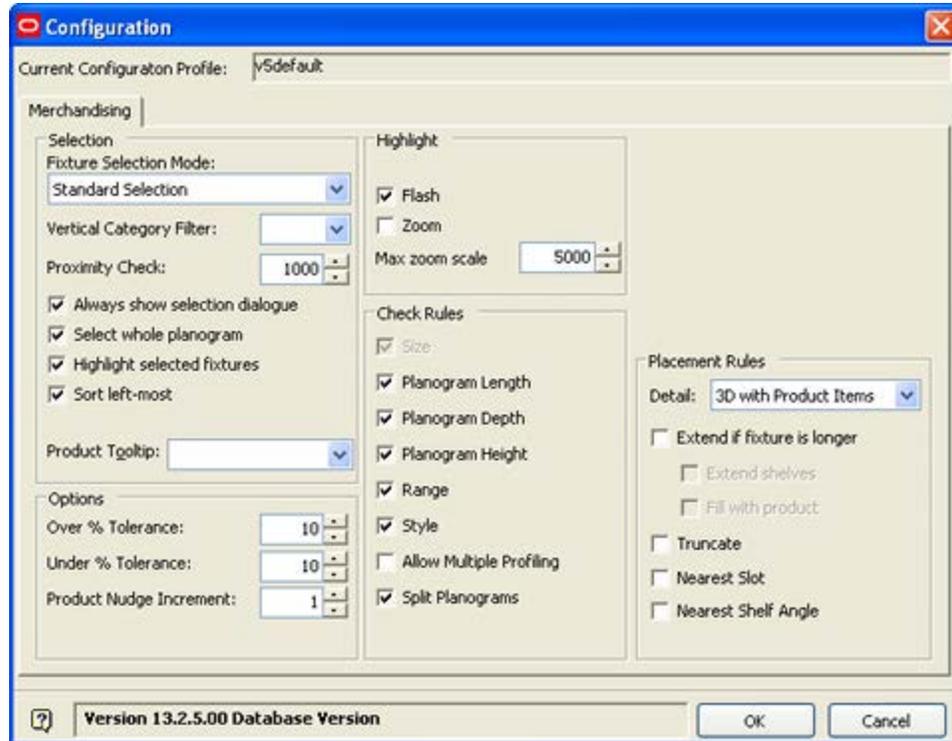
Shelf and Product KPI's and Reports

KPIs and reports need to take into account the form of the planogram. If it is in 2D form, full planogram details can only be found in the AVTTB_PLANO table (and its Child tables). If the planogram has been exploded in Merchandiser, the KPI reports can use other tables in the database - for example the AVTTB_SHELF and AVTTB_PRODUCT tables.

The form of the KPIs reports is thus dependent on how the application was configured when it was implemented.

Effect of Settings in Configuration Module

Settings in the Merchandising tab of the Configuration module can have a significant effect on the way merchandise places.



Full information on each setting can be found in the Configuration Module User Guide, but the following basic settings are helpful for new users:

Selection Frame

This frame controls how fixtures are selected for placing merchandise on. Set the following:

- Fixture Selection Method to **Standard Selection**.
- Always Show Selection Dialog to **On**.
- Select Whole Planogram to **On**.
- Sort left-most to **On**.

Highlight Frame

This frame controls how merchandise is highlighted in the floor plan.

- Set highlight method to **Flash**.

Check Rules Frame

This frame controls the advisory warnings that occur when placing planograms.

- Set all Check Rules to **On** with the exception of Allow Multiple Profiling.

The Floor Plan Active Date

Overview of Floor Plan Active Date

The **Active Date** is intended as a filter to ensure that only appropriate merchandise is placed in a floor plan. It is visible at the top of the Object Browser



It is set by double clicking on it. This will bring up the Change Date dialog box.



This can be set to one of three options:

- **Effective Date.** The Effective Date is the date the floor plan is scheduled to come into service. If the Effective Date has been set in the File Properties dialog box for the floor plan in Store Manager, the Active Date of the floor plan will be set to reflect this.
- **Current Date.** If selected, the active date will be set to today's date.
- **Other Date.** If selected, this allows the Active Date to be set to any required date.

MERCH_TREE_EFFECTIVE_DATE System Variable

The effect of the Active date can be turned on or off by means of the MERCH_TREE_EFFECTIVE_DATE system variable in the Administration Module. If turned on all products and planograms that have an Effective date after the Active Date of the currently active floor plan will be grayed out and unavailable for selection from the Object Browser.

Using the Floor Plan Active Date

If the MERCH_TREE_EFFECTIVE_DATE system is On, merchandise with:

- An **Effective Date** after the **Active Date** set for the floor plan will be grayed out and unavailable for placement. This is because the product or planogram is not scheduled to be available until after the date the floor plan is scheduled to go into service.
- An **Expiry Date** before the **Active Date** set for the floor plan will be grayed out and unavailable for placement. This is because the product or planogram will be removed from the list of available merchandise before the floor plan comes into service.

Limitations of the Floor Plan Effective Date

If a file has not been given an effective date, all products will be available. If products are copied from one drawing to another, they will be placed in the drawing even if their product dates are not valid for this file.

Display Style Products and Exploded Planograms

There are two forms of product that can be placed in the Merchandiser module, but which are not visible in the Planner module.

Products at Display Style Level

There are a number of possible levels in the product hierarchy. The lowest is Display style, represented in the screen shot below by the **Big Button 100 - Boxed** and **Big Button 100 - Display** options.



Some placed display styles can be seen in the screen shot below. They allow individual products to be placed. For example, there are four products on the top shelf, three on the lower and a TV on the base of the fixture. The dimensions and orientations of these products can also be taken into account.



Planner can only display products down to SKU level using product placeholders. It cannot display products at Display Style level. Accordingly, Display Style level products in Merchandiser will not be visible. This can result in an apparently empty fixture in Planner actually containing merchandise.

Planogram Form

Planograms can exist in several forms in a floor plan.



In the above diagram taken from the Merchandiser module:

- The planogram on the left is in 2D form. This is purely a placeholder and the database will not hold floor plan specific information on the position of the shelves or products in the planogram.
- The planogram in the centre is in 2.5D form. The shelves are accurately represented by the products are in placeholder form with no information on quantity, position or orientation.
- The planogram on the right is in 3D form. Shelves are accurately represented, as is the quantity, position and orientation of the products.

Planogram Placement in Planner

Planograms in Planner always place in 2D form. They can be placed in 2D, 2.5D form or 3D form in Merchandiser. 2D and 2.5D planograms can also be exploded to 3D form. When in 2.5D or 3D form, the planograms will not be visible in Planner. This can result in an apparently empty fixture in the Planner module actually containing shelves and products.

Use of KPIs

Although neither display style products, nor 2.5D or 3D planograms show in the Planner module, the information exists in the database. It is therefore possible to create KPI's that will highlight apparently empty fixtures in planner that have in fact been populated in the Merchandiser module.

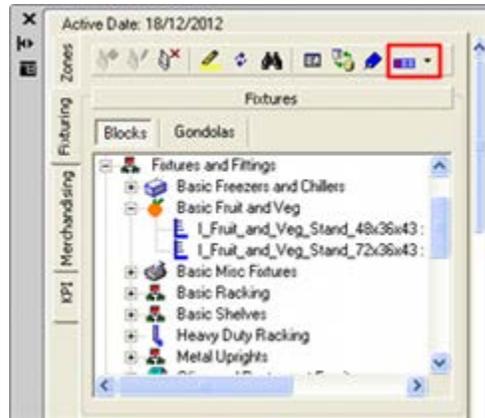
Promotional Fixtures

Certain fixtures with a store are known to generate high levels of profits. Examples include end caps on gondolas and displays by the checkout designed to increase impulse buying. Macro Space Planning allows specific fixtures in a floor plan to be designated as Promotional Fixtures. These fixtures can then be readily identified. They can then be used for special offers, promotions or the introduction of new products, etc.

Some retail chains also have a specific team responsible for merchandising promotional fixtures - designating the fixtures as such assists in identifying which fixtures that team is responsible for the merchandise on.

Assigning Promotional Fixtures

Once fixtures have been placed in a floor plan, they can be designated as promotional fixtures by using the **Promotional Fixtures** option from the Blocks toolbar of the Fixturing tab of the Object Browser.



Identifying Promotional Fixtures

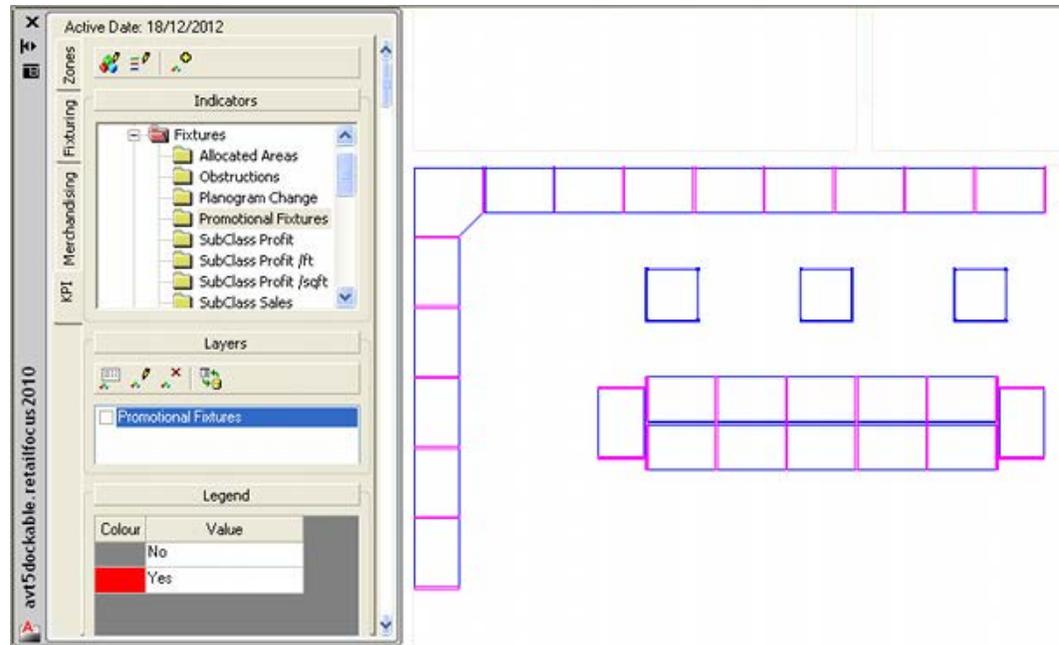
Once promotional fixtures are assigned, they can be identified in two ways in a floor plan.

Highlight

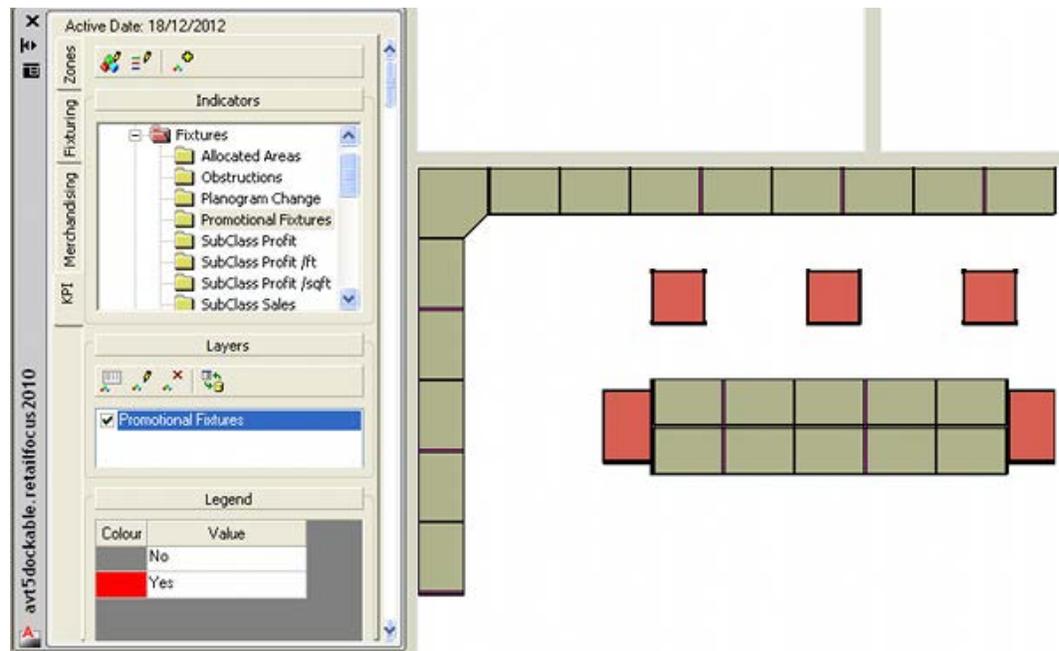
The **Promotional Fixtures** option includes a highlight option in the drop down list of options. This will cause any fixtures that have been designated as Promotional fixtures to be highlighted in the floor plan. The exact highlighting method will depend on the options selected in the Merchandising Tab of the configuration module.

Key Performance Indicator

Another way of identifying promotional fixtures is with KPI's. Without the KPI selected, the Promotional Fixtures are difficult to identify.



With the KPI active, the promotional fixtures are readily apparent. In this case the end caps and three bins in the aisle have been designated as promotional fixtures.



Note: one of the easiest ways of seeing fixture KPI's is to use the **Conceptual Visual Style** option from AutoCAD's **Visual Styles** toolbar. This causes the entire fixture to color, not just the outlines.

Using Promotional Fixtures

There are a number of ways of using promotional fixtures. One possible method is:

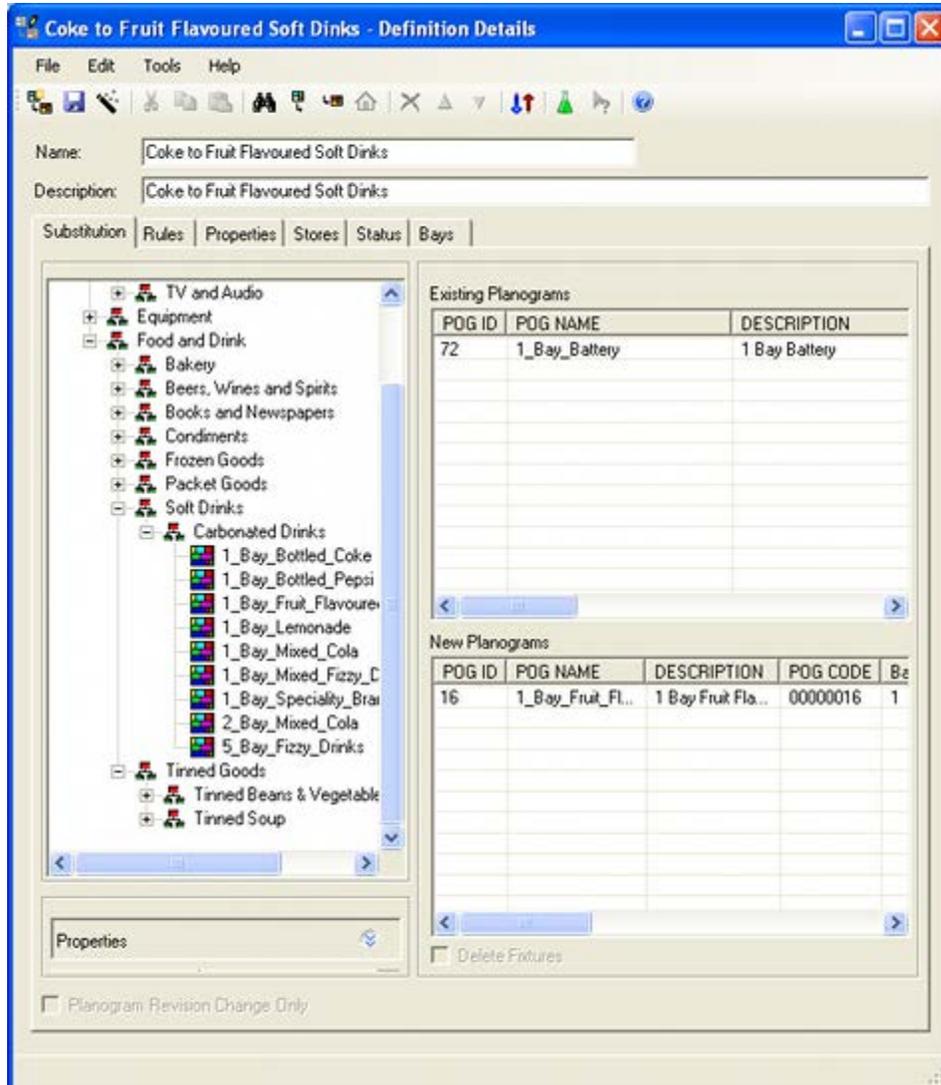
1. Identify fixtures that have a high visibility to shopper traffic. Such fixtures include end caps on gondolas, display on checkout, power wings and bins in the centre of aisles.
2. Use the Promotional Fixture on the Object Browser to designate those fixtures as promotional fixtures.
3. Bay number these fixtures differently from other fixtures in the floor plan - possibly with a P suffix.
4. It is then possible to report on and merchandise those fixtures separately to the other fixtures in the store - for example it would be possible to produce a weekly store plan showing promotional fixtures only that would allow a constantly changing program of special offers.

Planogram Substitutions

Planogram Substitutions can be used to automatically swap one planogram for another in single or multiple stores across the retail chain.

Configuring Planogram Substitutions

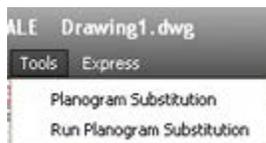
Planogram substitutions are configured in the Administration module - using the option assessed from the Merchandising menu.



Many planogram substitutions are then executed automatically using batch processes to modify the information held in the database. If this is the case, the Planner floor plan may require synchronization so that the information in it matches that held in the database.

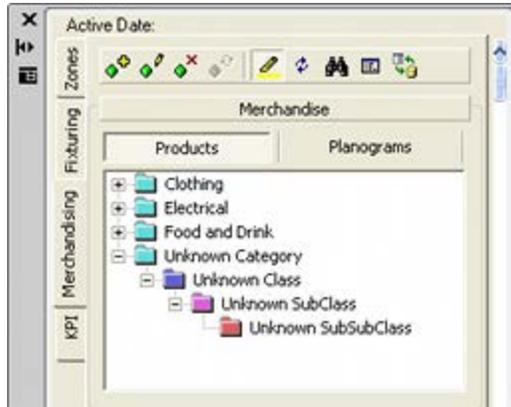
Manually Running Planogram Substitutions

Users with the correct privileges can also manually run planogram substitutions from the Tools menu for the currently active floor plan.



Unknown Category

The Product hierarchy in the Object Browser contains the products of "unknown" type.

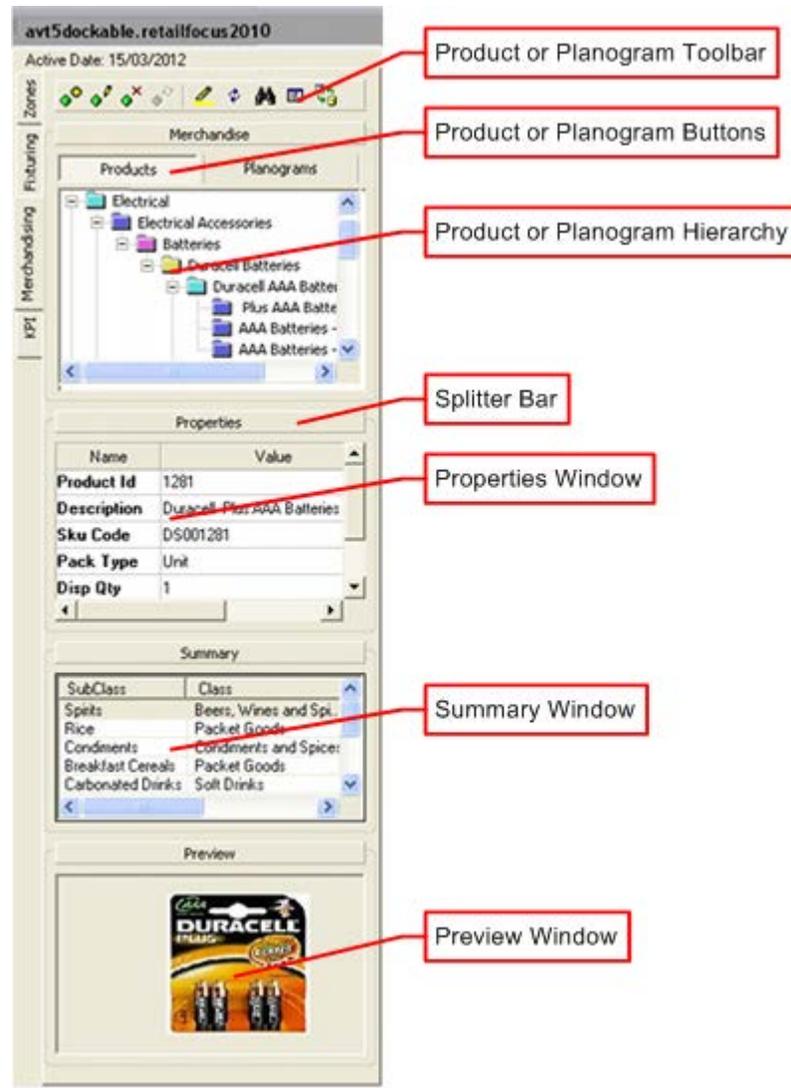


These products are in the hierarchy as defaults for the planogram import process and should play no role in merchandising floor plans.

Merchandise on the Object Browser

Overview of Merchandising on the Object Browser

The **Merchandising Tab** can be used to add and delete products or planograms in the currently active floor plan. It can also be used for other operations involving merchandise including highlighting products or planograms in the hierarchy.

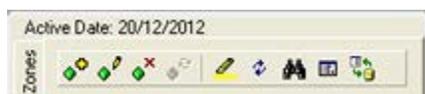


- The **Merchandising Toolbar** contains a series of icons used to control operations concerning products or planograms. There are two toolbars - which is visible will be determined by whether the Products or Planograms button has been selected.
- The **Products** or **Planograms Buttons** toggle the Object Browser between product or planogram operations.

- The **Hierarchy** displays the available products or planograms. There are two hierarchies - which is visible will be determined by whether the Products or Planograms button has been selected.
- Clicking on the **Splitter Bars** will open or close individual windows on the Object browser.
- The **Properties Window** has information on the product or planogram currently highlighted in the hierarchy.
- The **Summary Window** has information on the merchandise currently placed in the floor plan.
- The **Preview Window** will show an image if a product at display style level is selected and the display style has previously had an image associated with it.

Using the Object Browser for Merchandising Operations

The **Products toolbar** is found on the Merchandising Tab of the Object Browser. It is active when the Products button is selected.



It contains a series of icons allowing various operations to be carried out on Products.

Icon	Description
	Add to Selected Fixture
	Edit Definition
	Remove from Fixture
	Move between Fixtures
	Highlight where used in store
	Highlight Selected Item in Tree
	Find Product or Planogram
	Show Merchandising Options
	Refresh

The **Planograms toolbar** is found on the Merchandising Tab of the Object Browser. It is active when the Planograms button is selected.



It contains a series of icons allowing various operations to be carried out on Planograms.

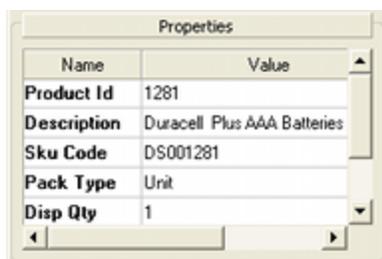
Icon	Description
	Add to Selected Fixture
Not available for Planograms	Edit Definition
	Remove from Fixture
	Reverse Planogram Placement Direction
	Highlight where used in store
	Highlight Selected Item in Tree
	Find Product or Planogram
	Show Merchandising Options
	Refresh

The **Hierarchy Window** is found immediately below the toolbar. It will show the product or planogram hierarchy dependent on whether the Products or Planograms button has been selected.



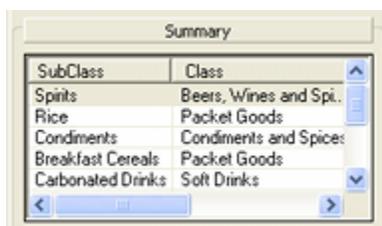
The Product hierarchy can be imported or configured in Product Studio. The planogram hierarchy can be imported or configured in the Merchandiser Module.

The **Properties Window** gives details of the product or planogram that has been selected in the hierarchy.



Note: Information in this window is controlled from Custom SQL in the AVTTB_CUSTOM_SQL table. Administrators can customise the information that appears in the Properties Window by modifying the Custom SQL.

The **Summary Window** contains details of merchandise within the currently active drawing.



The information typically includes information on products, base linear and quantities.

Note: Information in this window is controlled from Custom SQL in the AVTTB_CUSTOM_SQL table. Administrators can customise the information that appears in the Summary Window by modifying the Custom SQL.

The Preview Window contains an image if a product at display style level is selected and the display style has previously had an image associated with it.



Product Operations

Factors Affecting Product Operations

A number of factors affect product placement.

Object Browser and Object Grid

Products can either be added from the **Object Browser** or **Object Grid**. Which one will result in more efficient product addition depends both on the situation it is being used in and user preferences.

Active Date

The active date can be seen at the top of the Object Browser.

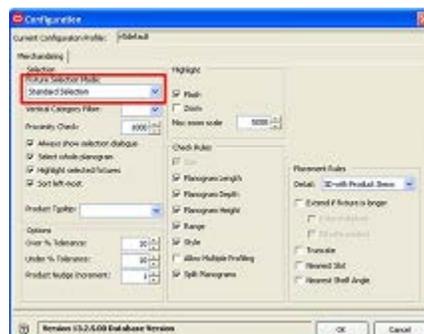


If the MERCH_TREE_EFFECTIVE_DATE system variable (Administration module) is set to on, this will place constraints on what products can be added:

- If the Effective Date of the product is after the Active date of the floor plan, the product cannot be placed because it will not be available when the floor plan is implemented.
- If the Expiry Date of a product is before the Active Date of the floor plan, the product cannot be placed because it will no longer be available when the floor plan is implemented.

Fixture Selection

There are two possible fixture selection methods. These can be set in the Merchandising Tab of the configuration module - accessed by clicking the Properties Icon on the Products toolbar of the Object Browser.



There are two methods. **Standard Selection** is suggested for new users.

Grouping

When the fixtures were placed in the floor plan, if more than one fixture was placed at one (for example if a gondola was placed) it is possible to select all fixtures that were placed together, or individual fixtures. This is controlled by the Grouping option on the Fixturing toolbar.



It is recommended that Grouping be turned Off while placing products. That way, individual fixtures can be selected. If Grouping is left On, when an individual fixture is selected from a gondola, all fixtures and fittings in that gondola will be simultaneously selected.

Fixtures and Fittings

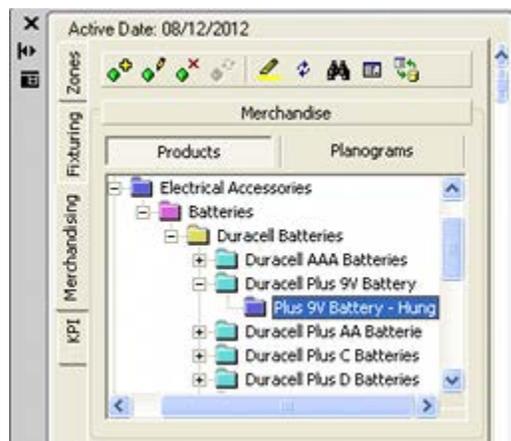
The floor plan can contain a mixture of fixtures and fittings. Only fixtures can accept merchandise. If an attempt is made to merchandise a fitting, a warning will appear in the command line.

```
No valid empty fixtures were found in the database within the tolerance.
Command:
```

Product Form

In Planner, products can only be added as placeholders. The floor plan will indicate that a specific type of product is present on the fixture, but no information on quantity, size or orientation can be determined from it. Product placeholders can be added from any level on the product hierarchy from SKU upwards. An example of use would be adding category level placeholders to get some preliminary reports on a new floor plan.

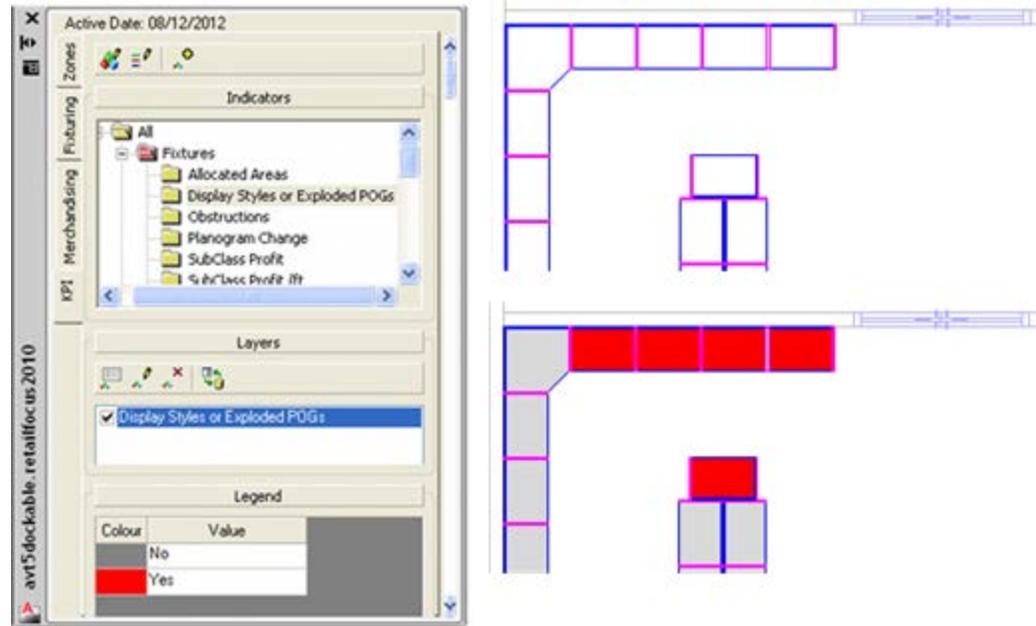
Merchandiser allows a floor plan to be merchandised with an additional level of detail - Display Styles. These allow information on quantity, size or orientation for a specific product to be associated with a floor plan.



Display Styles are visible in the Object Browser in Planner but cannot be placed. Instead, selecting the Display Style (Hung Plus 9V Batteries in the above example) will result in the parent SKU (Duracell Plus 9V Battery) being placed.

Visibility of Display Styles

If products are placed at Display Style level in Merchandiser (or if Planograms are exploded to 3D form), these forms of merchandise will not be directly visible in Planner.



Macro Space Management has the capacity to create custom KPI's. In the above example, a KPI has been created to show fixtures populated with display styles and exploded planograms. In the floor plan to upper right, the fixtures are apparently unpopulated. When the KPI has been used (lower right), the populated fixtures become visible.

Adding Product Placeholders from the Object Browser

Sequence of Actions Required

There are two potential ways of adding products. The first is to select the required fixture first.

1. Select required fixture or fixtures.
2. Select Product in Hierarchy in Object Browser or in List in Object Grid
3. Click the Add icon

The alternative is to select the product first.

1. Select Product in Hierarchy in Object Browser or in List in Object Grid
2. Click the Add icon
3. Select required fixture or fixtures.

Either way is valid. This example will use the latter option of selecting the product first and the fixtures last.

Adding Product Placeholders

Adding products can be carried out as follows:

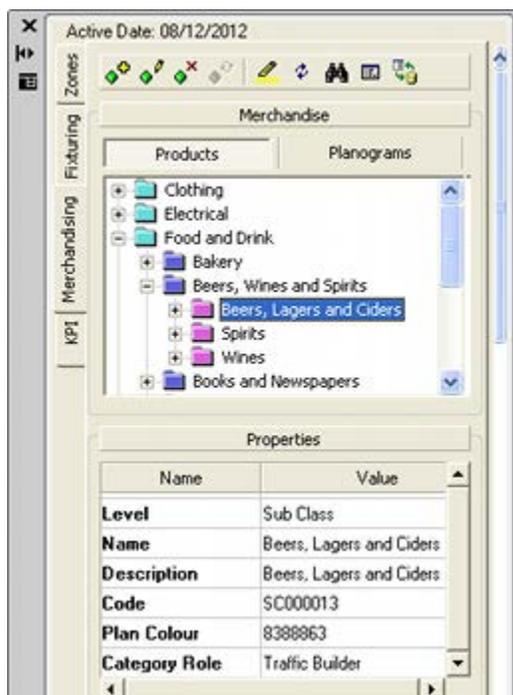
1. **Select the Products Button on the Merchandising tab of the Object Browser**



2. Select Required Product from Hierarchy

The initial stage is to select the required product from the hierarchy. In this example, the Beers, Lagers and Ciders placeholder is to be added. Useful information is displayed in the properties window. For example, this product is at sub-class (sub-category) level and the category role is that of a Traffic Builder product.

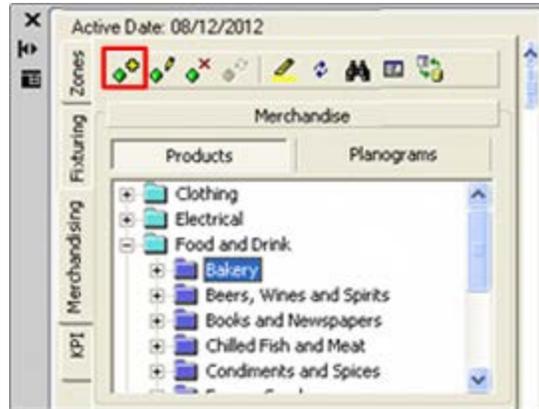
Note: Category Roles are derived from Category Management and explain the purpose the retailer is using that sub-class of product for. In this case, the retailer is using Beers, Lager and Ciders to try and increase the number of customers using the store.



Note: If products cannot be found by means of a manual search, there is a Find option available. (See below).

3. Select Add Option from Toolbar

The next stage is to click **Add Product** on the toolbar.



4. Selecting Fixtures

On clicking Add Product, the command line in Planner will prompt users to select fixtures.

```
Command:
Select objects:
```

These can be selected by standard AutoCAD methods including left clicking individual fixtures or using window and crossing selection boxes. In this instance, four fixtures have been selected by left clicking, the information being reflected in the command line.

```
Select objects: 1 found, 4 total
Select objects:
```

On completing the selection with a right click (the standard AutoCAD way of finishing selecting objects) the selected fixtures will be populated with placeholders.

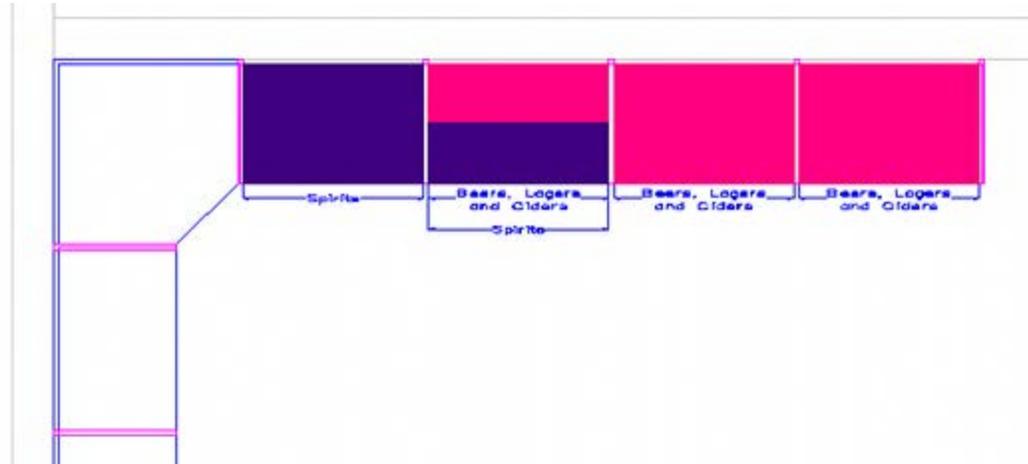


At the same time as the fixtures are populated, they will annotate with information on what products have been placed.

Note: Annotation is controlled using the Text Styles option accessed from the Planning Menu in the Administration Module.

Adding Multiple Product Placeholders to a Fixture

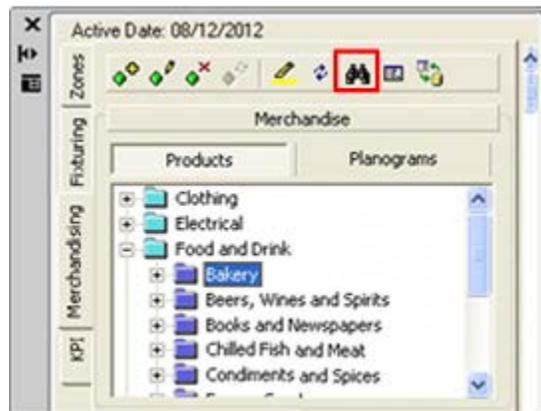
It is possible to add multiple Product placeholders to a single fixture. Once the fixture has been merchandised with the first placeholder, it can be merchandised with a second placeholder by following exactly the same procedure.



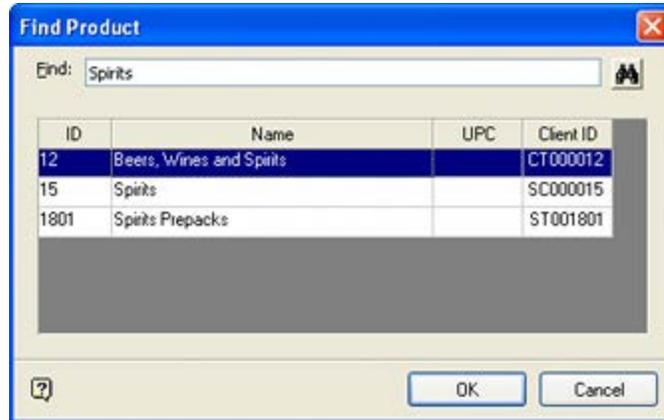
The second fixture from the left has been merchandised with a combination of Beers, Lagers and Ciders and Spirits placeholders. This situation might occur if a store planner was considering having the upper shelves on a fixture devoted to spirits and the lower to beers, lagers and ciders. The annotation can be set of offset so that the annotation for the second placeholder does not overwrite that for the first.

Using the Find Option

The **Find** option can be found on the Products toolbar. It can be used if a store planner does not know how to manually navigate to the required product.



On clicking the Find icon, the **Find Product** dialog box will appear.



To use this dialog box:

1. Type a search string into the Find text box. (The text string used implied wild cards).
2. Click the Find icon
3. Highlight a product in the list returned.
4. Click OK to be taken to that product in the product hierarchy in the Object Browser.

Adding Product Placeholders from the Object Grid

Sequence of Actions Required

There are two potential ways of adding products. The first is to select the required fixture first.

1. Select required fixture or fixtures.
2. Select Product in Hierarchy in Object Browser or in List in Object Grid
3. Click the Add icon

The alternative is to select the product first.

1. Select Product in Hierarchy in Object Browser or in List in Object Grid
2. Click the Add icon
3. Select required fixture or fixtures.

Either way is valid. This example will use the latter option of selecting the product first and the fixtures last.

Adding Product Placeholders

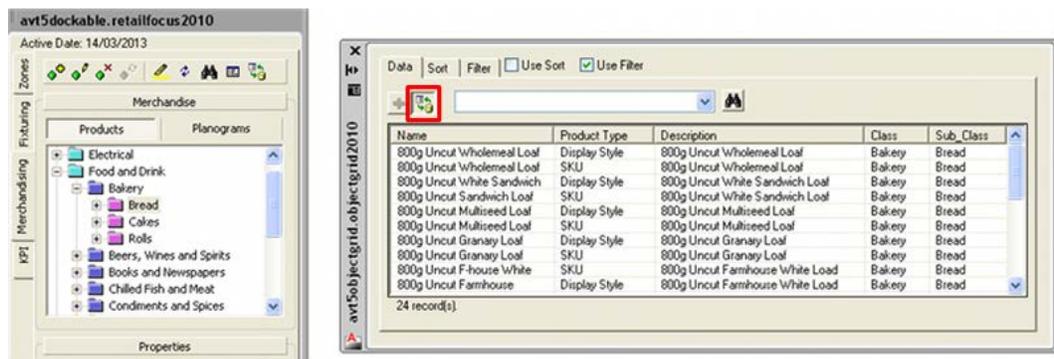
Adding products can be carried out as follows:

1. **Select the Products Button on the Merchandising tab of the Object Browser**



2. Select Required Product Group in the Hierarchy

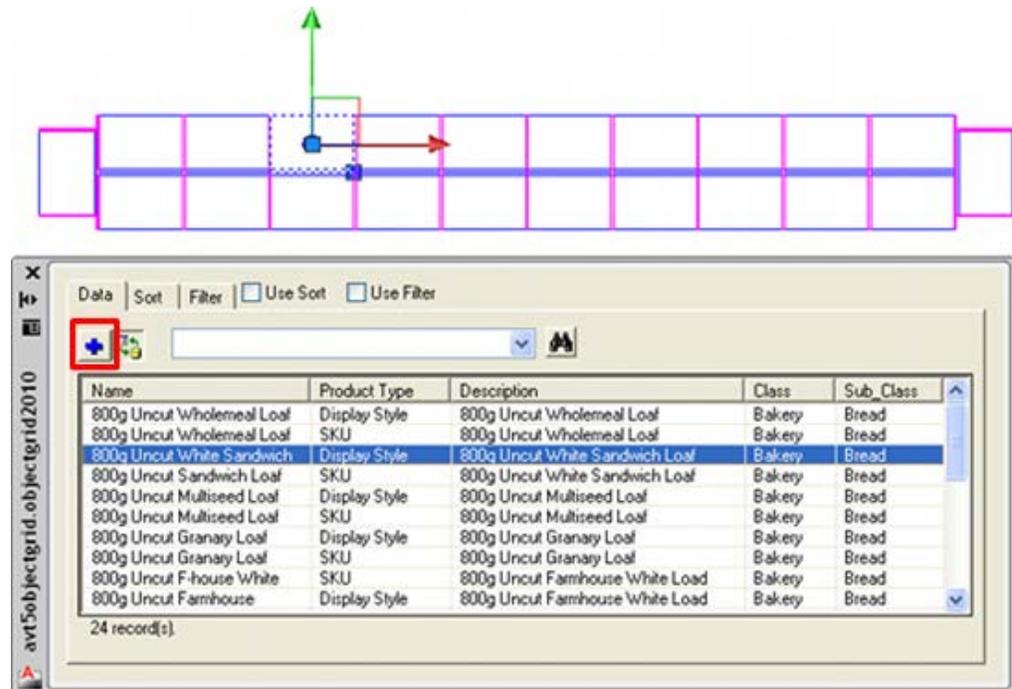
The initial stage is to highlight the required product group in the hierarchy.



toggling the Refresh button on in the Object Grid will then populate the Object Grid with a list of products associated with that Product Group. This list can be refined using the options in the Filter and Sort options in the Object Browser.

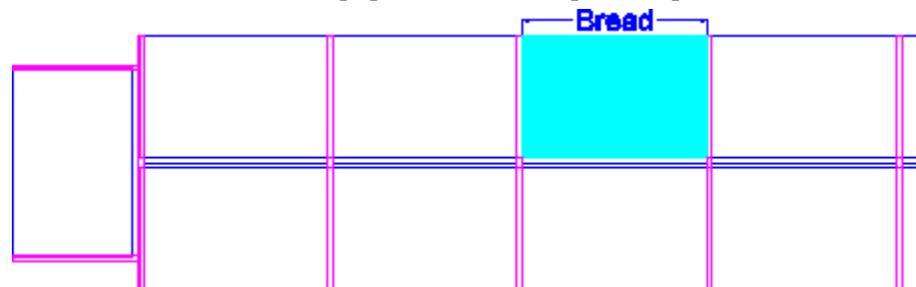
3. Adding the Product

To add the product, highlight the fixture the product will be added to, highlight the required product in the Object Browser and click the Add button. The product will then be added.



Note: If a fixture has not been selected, the user will be able to select it in the floor plan using standard selection methods.

The selected fixtures will be populated with the product placeholder.



Note: Annotation is controlled using the Text Styles option accessed from the Planning Menu in the Administration Module.

Deleting Product Placeholders

Deleting Products can only be done from the Object Browser

Sequence of Actions Required

There are two potential ways of deleting products. The first is to select the required fixture first.

1. Select required fixture or fixtures.
2. Click the Delete icon
3. Confirm in the delete Planograms dialog box.

The alternative is to select the delete option first.

1. Click the Delete icon
2. Select required fixture or fixtures.
3. Confirm in the delete Planograms dialog box.

Either way is valid. This example will use the latter option of selecting the delete option first and the fixtures last.

Deleting Products

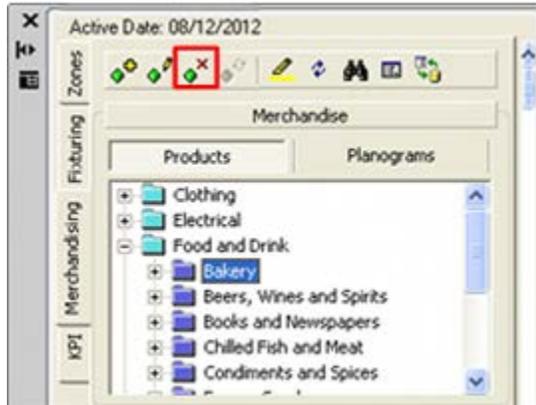
Deleting products can be carried out as follows:

1. Select the **Products Button** on the **Merchandising** tab of the **Object Browser**



2. Select the **Delete** option from the **Toolbar**

The next stage is to click **Delete Product** on the toolbar.



3. **Selecting Fixtures**

On clicking Delete Product, the command line in Planner will prompt users to select fixtures.

```
Command:
Select objects:
```

These can be selected by standard AutoCAD methods including left clicking individual fixtures or using window and crossing selection boxes. In this instance, four fixtures have been selected by left clicking, the information being reflected in the command line.

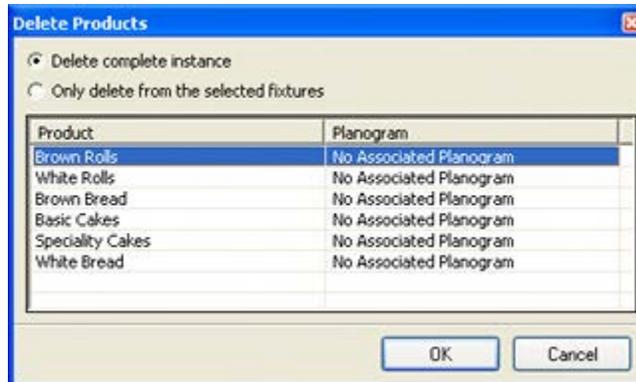
```
Select objects: 1 found, 4 total
Select objects:
```

Note: Clicking on the products themselves will not be effective - deleting products requires the user to select the parent fixtures for the products. Accordingly, users should left click on the fixture itself or use window and crossing selection boxes that encompass both the product and its parent fixture.

On right clicking to complete the selection, the Delete Products dialog box will appear.

4. Delete Products Dialog Box

The Delete Products dialog box allows users to confirm which products to delete.



- The Radio Button specifying whether to **Delete complete instance** or **Only delete from the selected fixtures** only applies to planograms.
- Select the required products to delete
- Click **OK** to delete the specified products.
- The specified products will be deleted and the Delete Products dialog box will close.

Note: The Delete Products dialog box will always appear if two or more products are selected. It will also appear if a single product is selected if the **Always show selection dialog** option is checked in the Merchandising tab of the Configuration module.

Editing Product Placeholders

Product Placeholders can be edited by clicking the Edit Product icon on the toolbar. This icon will only be active if the user belongs to a user group with access rights to Product Studio.



On clicking Edit Product, the user will then be taken to Product Studio. If a product is highlighted in the product hierarchy at the time the Edit product Icon is clicked, this product will be open for editing in Product Studio.

Planogram Operations

Factors Affecting Planogram Operations

A number of factors affect planogram placement.

Object Browser and Object Grid

Planograms can either be added from the **Object Browser** or **Object Grid**. Which one will result in more efficient product addition depends both on the situation it is being used in and user preferences.

Active Date

The active date can be seen at the top of the Object Browser.

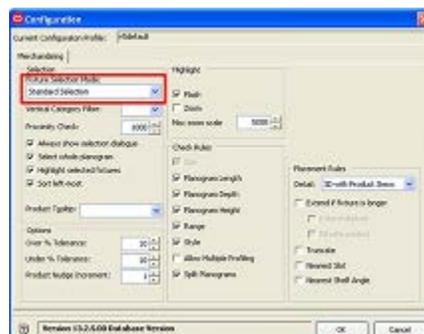


If the **MERCH_TREE_EFFECTIVE_DATE** system variable (Administration module) is set to on, this will place constraints on what products can be added:

- If the Effective Date of the planogram is after the Active date of the floor plan, the planogram cannot be placed because it will not be available when the floor plan is implemented.
- If the Expiry Date of a planogram is before the Active Date of the floor plan, the planogram cannot be placed because it will no longer be available when the floor plan is implemented.

Fixture Selection

There are two possible fixture selection methods. These can be set in the Merchandising Tab of the configuration module - accessed by clicking the Properties Icon on the Products toolbar of the Object Browser.



There are two methods. **Standard Selection** is suggested for new users.

Grouping

When the fixtures were placed in the floor plan, if more than one fixture was placed at one (for example if a gondola was placed) it is possible to select all fixtures that were placed together, or individual fixtures. This is controlled by the Grouping option on the Fixturing toolbar.



It is recommended that Grouping be turned Off while placing products. That way, individual fixtures can be selected. If Grouping is left On, when an individual fixture is selected from a gondola, all fixtures and fittings in that gondola will be simultaneously selected.

Fixtures and Fittings

The floor plan can contain a mixture of fixtures and fittings. Only fixtures can accept merchandise. If an attempt is made to merchandise a fitting, a warning will appear in the command line.

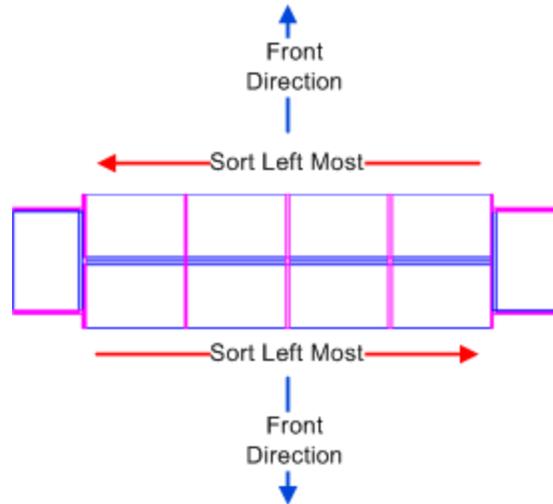
```
No valid empty fixtures were found in the database within the tolerance.
Command:
```

Sort Left Most

When selecting fixtures, if selecting by individual left clicks, the fixtures are added to the selection in the sequence they are selected. If the fixtures are selected by a Windows or Crossing selection box, the fixtures in the selection are ordered in the sequence they were placed in the drawing. For multi-bay planogram placement it is generally necessary to place the bays in a specified sequence; functionality called **Sort Left Most** can be activated from the Merchandising tab of the Configuration module. (This tab can be accessed by clicking the Properties icon on the Planogram toolbar on the Object Browser).



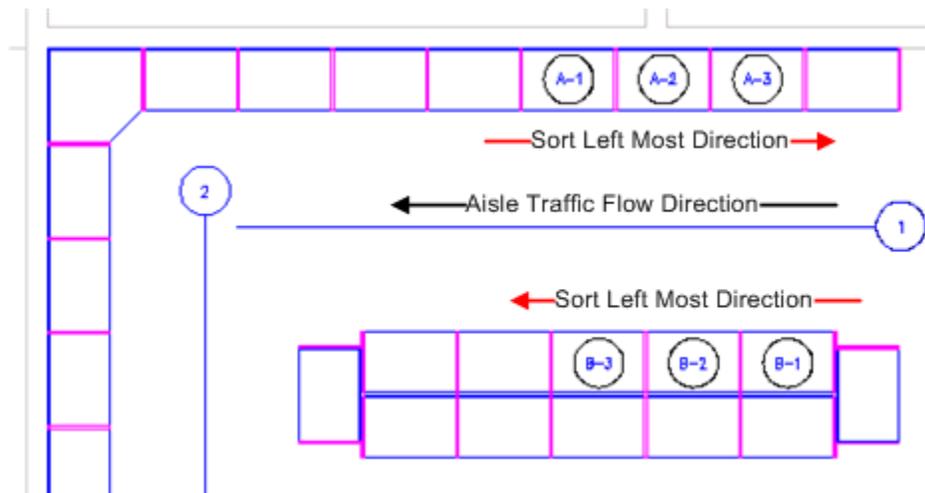
The selected fixtures will then be populated left most first.



The left-most fixture is based on when the fixtures are viewed from the front. The apparent front direction will change when the back face of a gondola is considered relative to the front.

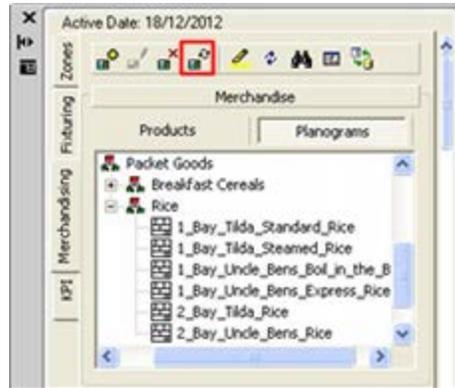
Planogram Reversal

Some multi-bay planograms are designed to be viewed from a specific direction. How the bays are placed depends on the traffic flow along an aisle.



When aisles are drawn, they can be used to show the direction of traffic flow along an aisle. It is from the head of the aisle (denoted by its name or number), to the other end. In the above diagram, traffic predominately flows from right to left. If it is desired to place a 3 bay planogram with Bay 1 the first to be viewed by shoppers, then how it is placed will depend on which side of the aisle it is placed. If it is placed on the island gondola (Bays B-1, B-2 and B-3) with sort left most on, it can be placed in its normal sequence.

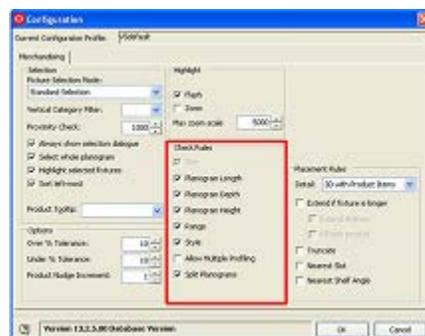
If it is placed on the wall gondola (Bays A-1, A-2 and A-3) the effect of sort left most will be to place the first bay at A-1, where it will be the last bay to be seen by a customer following the normal direction of travel along an aisle. This can be corrected by using the Reverse Planogram option on the planogram toolbar.



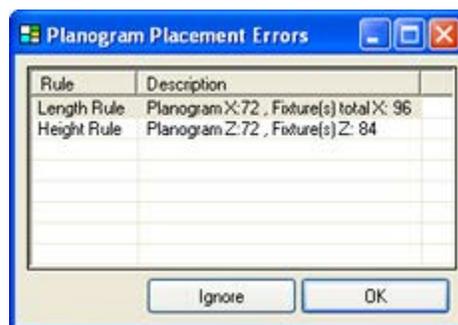
The effect of this is to reverse the sequence the bays are placed, with Bay 3 being placed first. Bay 1 will thus end up on fixture A-3 and will be the first bay seen by a customer.

Check Rules

Check Rules are used when planograms are placed. They provide a series of warnings if a planogram is being placed on inappropriate fixtures. The selection of the check rules is in the Merchandising tab of the Configuration module (accessed from the Properties button on the Planogram toolbar).



Depending on the selections made, warnings will be given during planogram placement if the fixtures do not match the ones the planogram was designed from.



Exploded Planograms

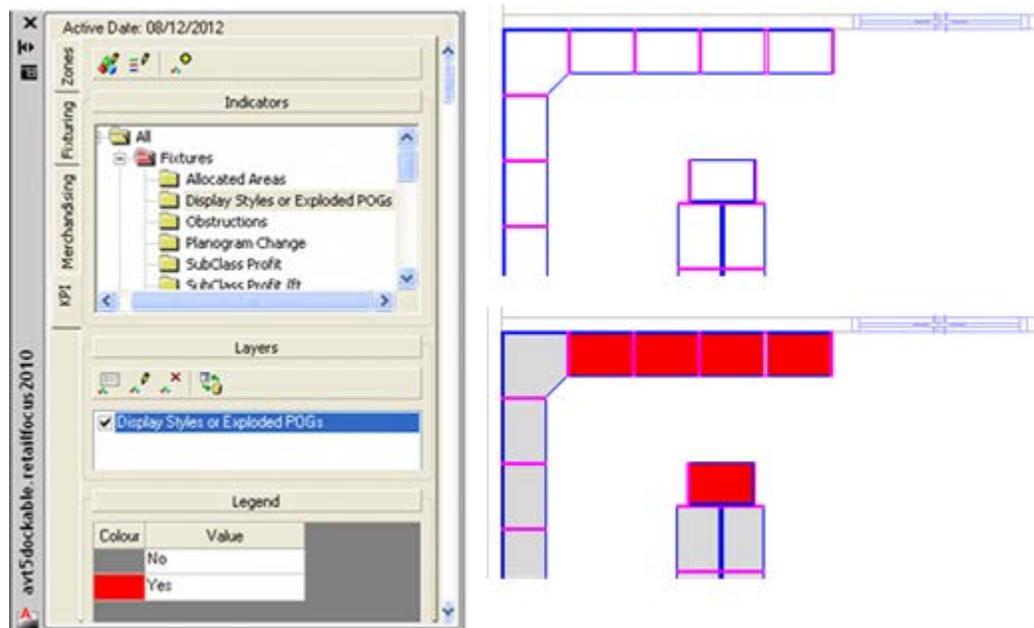
Planograms can be placed in two main forms: 2D (imploded) and 3D (exploded). In the diagram below, the planogram on the left is in 2D form and the one on the right is in 3D form.



Planograms placed in the planner module are always placed in 2D form, with no details of products or shelves visible. Planograms in the Merchandiser module can be toggled between 2D and 3D form. If exploded to 3D form in Merchandiser, the planograms will no longer be directly visible in Planner.

Visibility of Exploded Planograms

If products are placed at Display Style level in Merchandiser (or if Planograms are exploded to 3D form), these forms of merchandise will not be directly visible in Planner.



Macro Space Management has the capacity to create custom KPI's. In the above example, a KPI has been created to show fixtures populated with display styles and exploded planograms. In the floor plan to upper right, the fixtures are apparently unpopulated. When the KPI has been used (lower right), the populated fixtures become visible.

Adding Planograms from the Object Browser

Sequence of Actions Required

There are two potential ways of adding planograms. The first is to select the required fixture first.

1. Select required fixture or fixtures.
2. Select Planogram in Hierarchy in Object Browser or in List in Object Grid
3. Click the Add icon

The alternative is to select the planogram first.

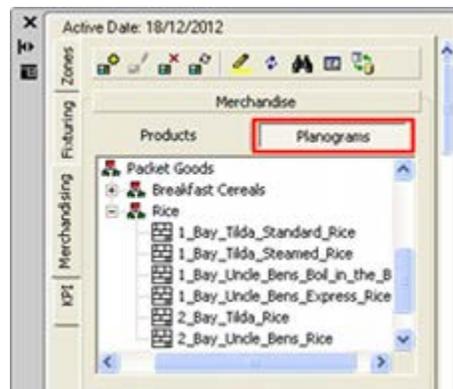
1. Select Planogram in Hierarchy in Object Browser or in List in Object Grid
2. Click the Add icon
3. Select required fixture or fixtures.

Either way is valid. This example will use the latter option of selecting the planogram first and the fixtures last.

Adding Planogram Placeholders

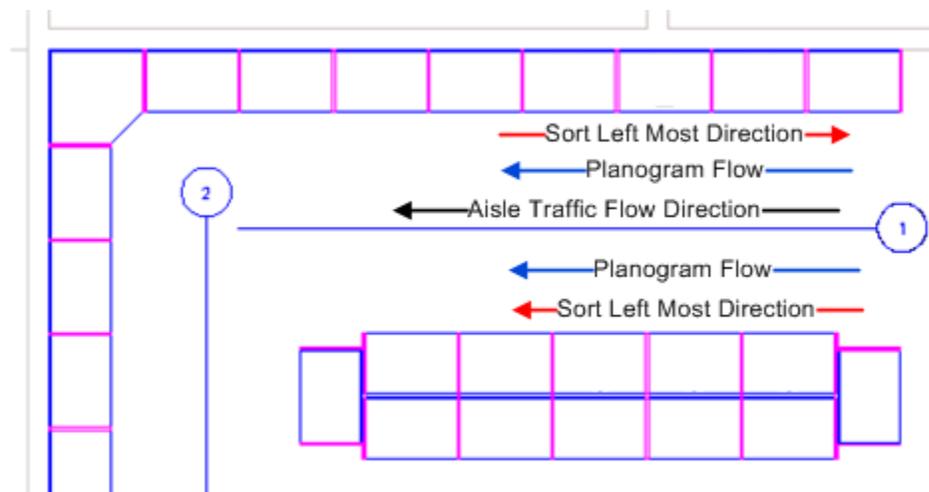
Adding planograms can be carried out as follows:

1. Select the Planograms Button on the Merchandising tab of the Object Browser



2. Decide if Planogram is to be placed Normally or Reversed

When multi-bay planograms are designed, they sometimes take traffic direction into account.

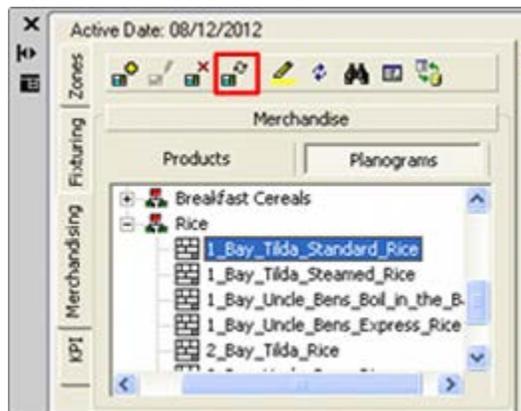


If Planner aisles have been drawn, these can be used to identify the predominant traffic flow in the real life aisle. In the above example traffic is flowing from right to left. If Sort Left Most is On (Merchandising tab in Configuration Module) the selected fixtures will be populated with the left most fixture first (as viewed from the front of the fixture).

In the above example, if the planogram is to be placed match its flow instructions, it can be placed normally on the lower (island) gondola, but must be placed reversed on the upper (wall) gondola.

3. Select Reverse Planogram if Required

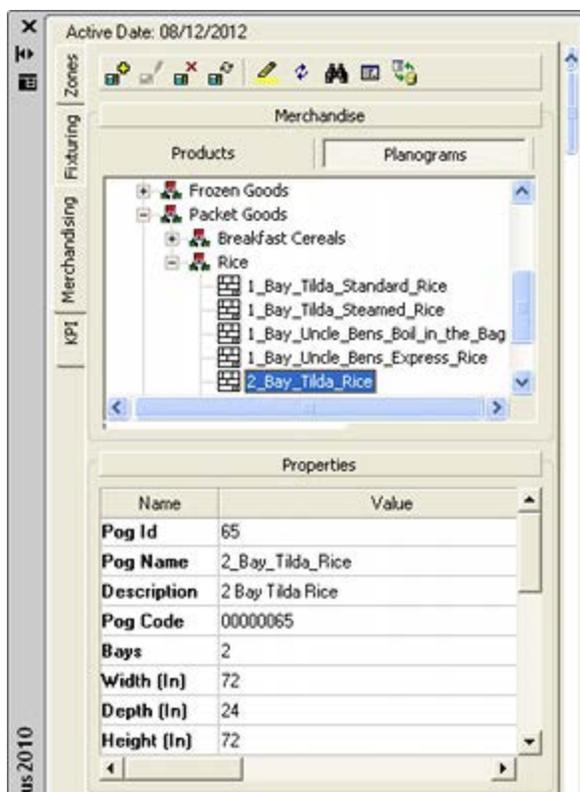
If it is necessary to reverse the planogram, the Reverse Planogram option must be toggled **On** by depressing the icon on the toolbar.



Note: When the Reverse option is no longer needed it should be toggled off. This will prevent planograms being placed reversed when not required.

4. Select Required Planogram from Hierarchy

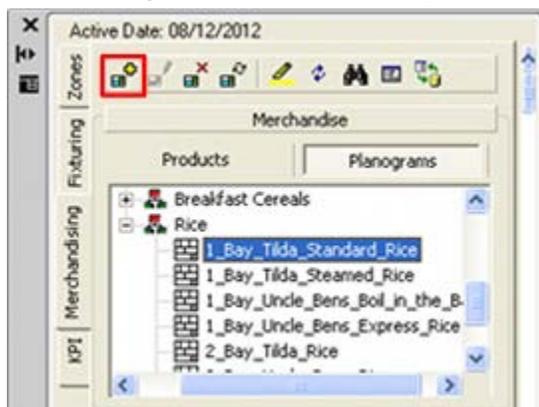
The initial stage is to select the required planogram from the hierarchy. In this example, the 2 Bay Tilda Rice Planogram is to be added. Useful information is displayed in the properties window.



Note: If planograms cannot be found by means of a manual search, there is a Find option available. (See below).

5. Select Add Option from Toolbar

The next stage is to click **Add Planogram** on the toolbar.



6. Selecting Fixtures

On clicking Add Planogram, the command line in Planner will prompt users to select fixtures.

```
Command:
Select objects:
```

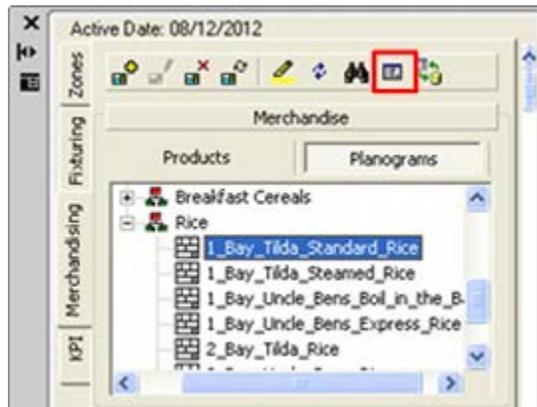
These can be selected by standard AutoCAD methods including left clicking individual fixtures or using window and crossing selection boxes. In this instance, four fixtures have been selected by left clicking, the information being reflected in the command line.

```
Select objects: 1 found, 4 total
Select objects:
```

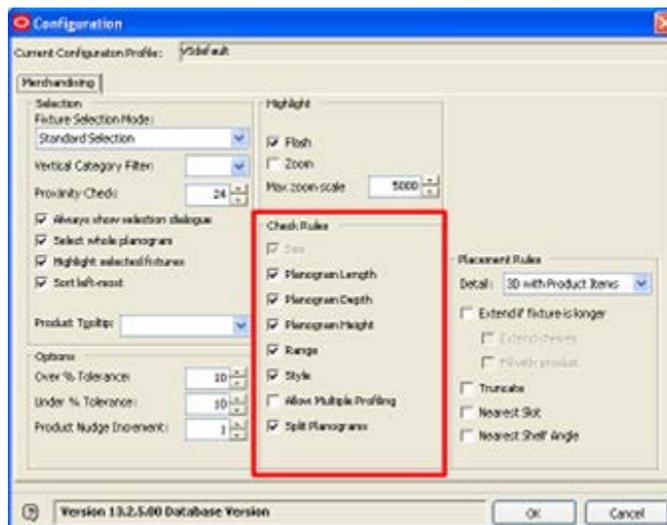
On completing the selection with a right click (the standard AutoCAD way of finishing selecting objects) the selected fixtures will be validated against information in the planogram design.

7. Check Rules

The check rules are set in the Merchandising Tab of the Configuration Module. This can be accessed by clicking Properties on the Planogram toolbar.



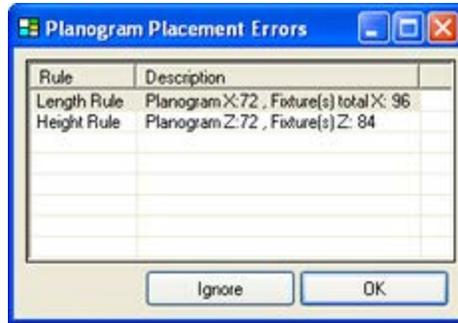
This will bring up the Merchandising Tab from the Configuration Module. This allows the Check Rules to be set - settings being individual to each user.



Note: See the *Configuration Module Help File* for detailed information on these settings.

These settings determine which validation rules are applied. Any violations come up in the **Planogram Placement Errors** dialog box, otherwise the planogram is placed.

8. Planogram Placement Errors

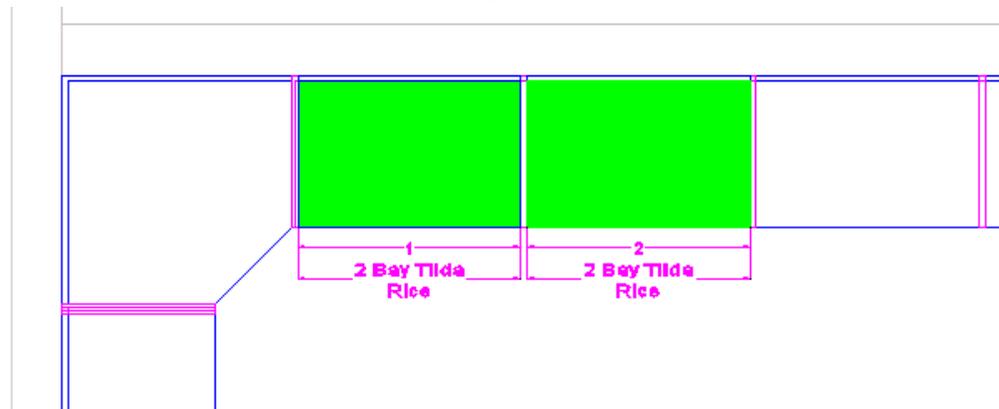


If the validation process identifies problems, the **Planogram Placement Errors** dialog box will appear. This will identify problems based on the check rules selected. The user then has two options:

- Click **OK**. The planogram will not be placed.
- Click **Ignore**. The warnings will be overridden and the planogram placed.
- Store planners should exercise caution when overriding the warnings. This will result in a planogram being placed on an inappropriate fixture in the real life store. Some of the potential consequences of this include:
 - Planogram being placed on fixture of different dimensions to what it was designed for. The number of facings and total quantities of products on the shelf could be incorrect. For example, if there are fewer products on the shelves than the planogram designer intended, there could be frequent **out of stocks** and loss of sales.
 - Planograms being placed on inappropriate fixtures - for example by overriding temperature warnings. If the planogram is designed for a chiller unit at standard chill temperature (0 - 1 degrees centigrade) and it is placed on a chiller set to a different temperature, product life should be shortened and losses incurred by having to throw away spoiled produce.
 - Turning off the **Multiple Profiling** warning could result on two planograms being placed on a fixture when only one was intended.
 - Turning off the **Split Planograms** warning could result in inappropriate planogram placement. For example a 2 bay planogram could be placed either side of a 3 feet wide pillar, impacting on sales for that planogram.

9. Planogram Placement

If there are no check rule violations, or if the Check Rule warnings are overridden, the planograms will be placed in the floor plan.



At the same time as the fixtures are populated, they will annotate with information on what planograms have been placed.

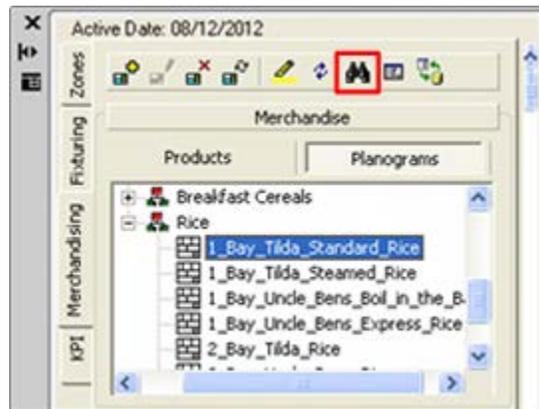
Note: Annotation is controlled using the Text Styles option accessed from the Planning Menu in the Administration Module.

There are two forms of annotation in the above example:

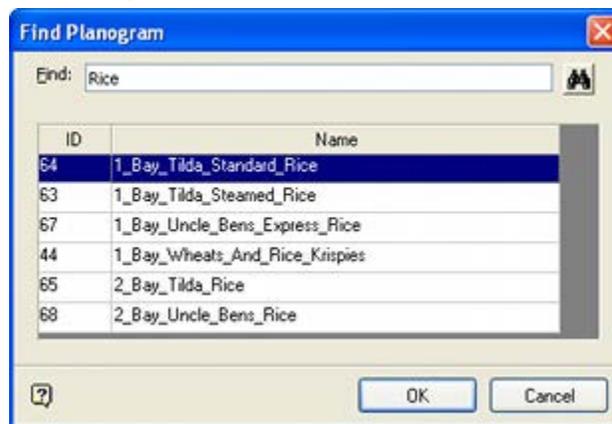
- **Profile Annotation:** These are numbers identifying the **Bay** of the planogram. These numbers can be used in conjunction with any aisles drawn in the floor plan to determine whether a planogram has been placed in normal or reversed order.
- **Planogram Annotation:** This is information identifying the planogram. A common way of doing this is via the planogram name.

Using the Find Option

The **Find** option can be found on the Planograms toolbar. It can be used if a store planner does not know how to manually navigate to the required planogram.



On clicking the Find icon, the **Find Planogram** dialog box will appear.



To use this dialog box:

1. Type a search string into the Find text box. (The text string used implied wild cards).
2. Click the Find icon
3. Highlight a planogram in the list returned.
4. Click OK to be taken to that planogram in the planogram hierarchy in the Object Browser.

Deleting Planograms

Deleting Products can only be done from the Object Browser

Sequence of Actions Required

There are two potential ways of deleting planograms. The first is to select the required fixture first.

1. Select required fixture or fixtures.
2. Click the **Delete** icon
3. Confirm in the delete Planograms dialog box.

The alternative is to select the delete option first.

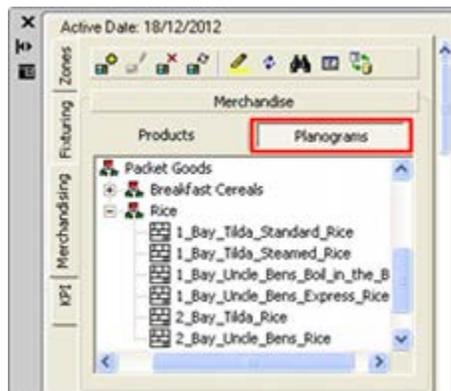
1. Click the **Delete** icon
2. Select required fixture or fixtures.
3. Confirm in the delete Planograms dialog box.

Either way is valid. This example will use the latter option of selecting the delete option first and the fixtures last.

Deleting Planograms

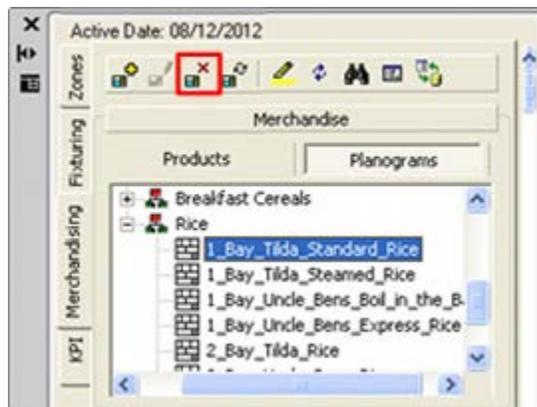
Deleting planograms can be carried out as follows:

1. Select the **Planograms Button** on the **Merchandising** tab of the **Object Browser**



2. Select the **Delete** option from the **Toolbar**

The next stage is to click **Delete Planogram** on the toolbar.



3. **Selecting Fixtures**

On clicking Delete Planogram, the command line in Planner will prompt users to select fixtures.

```
Command:
Select objects:
```

These can be selected by standard AutoCAD methods including left clicking individual fixtures or using window and crossing selection boxes. In this instance, four fixtures have been selected by left clicking, the information being reflected in the command line.

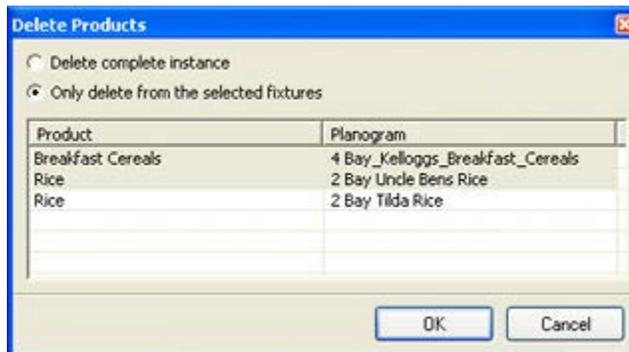
```
Select objects: 1 found, 4 total
Select objects:
```

Note: Clicking on the planograms themselves will not be effective - deleting planograms requires the user to select the parent fixtures for the planograms. Accordingly, users should left click on the fixture itself or use window and crossing selection boxes that encompass both the planogram and its parent fixture.

On right clicking to complete the selection, the Delete Planograms dialog box will appear.

4. Delete Planograms Dialog Box

The Delete Planograms dialog box allows users to confirm which planograms to delete.



- The Radio Button specifying whether to **Delete complete instance** or **Only delete from the selected fixtures** only applies to planograms.
- If **Delete complete instance is selected**, the entire planogram will be deleted, even if just a single bay of a multi-bay planogram has been selected.
- If **Only delete from the selected fixtures is selected**, only those parts of the planogram on the selected fixtures will be deleted.

Note: Caution should be used when selecting the **Only delete from the selected fixtures** option. This could result in some bays of a multi-bay planogram being left in the floor plan while others are deleted.

- Select the required planograms to delete
- Click **OK** to delete the specified planograms.
- The specified planograms will be deleted and the Delete Planograms dialog box will close.

Note: The Delete Planograms dialog box will always appear if two or more planograms are selected. It will also appear if a single planogram is selected if the **Always show selection dialog** option is checked in the Merchandising tab of the Configuration module.

Operations Common to Products and Planograms

Highlighting Options for Merchandise

There are two highlighting options available for merchandise.

- Highlight Where Used in Store
- Highlight Selected Item in Tree

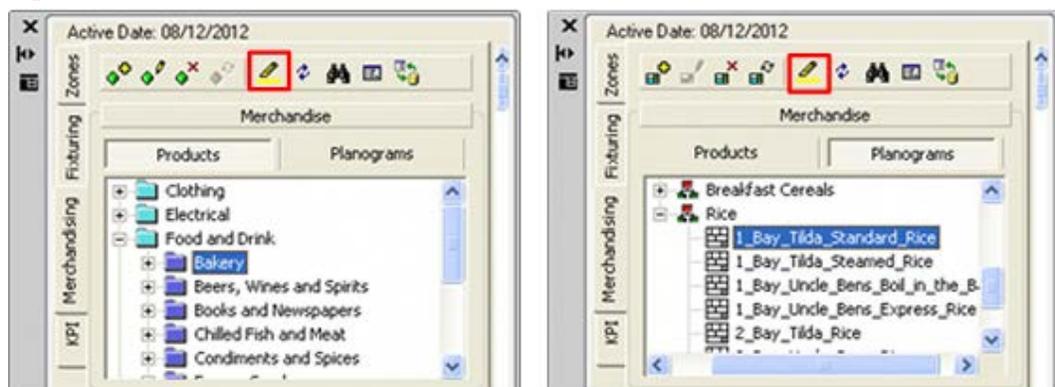
Selecting Products or Planograms to Highlight

Selecting whether to highlight products or planograms is done by clicking the appropriate button in the Merchandising tab.



Highlight Where Used In Store

Highlight zone allows a user to find a product or planogram in the floor plan. The option has to be turned on by toggling the icon on the product or planogram toolbar so it is depressed.



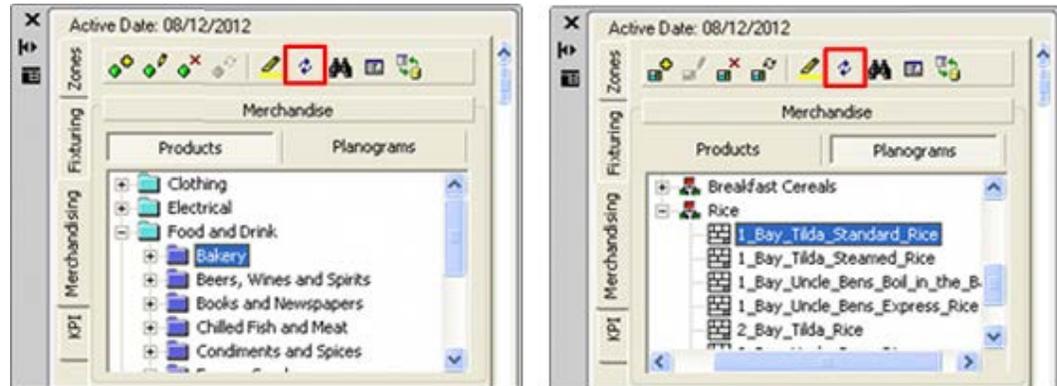
After the icon has been toggled on, highlighting any product in the product hierarchy will cause the selected product to be highlighted in the floor plan. Similarly, highlighting any planogram in the product hierarchy will cause the selected planogram to be

highlighted in the floor plan The highlighting method will depend on setting in the Merchandising tab of the Configuration module.

Note: It is recommended that the Highlight Where Used in Store option be left off until needed - leaving it on may have a marginal impact on performance in the floor plan.

Highlight Selected Item in Tree

Highlight Selected Item in Tree allows a user to select a product or planogram in the floor plan and have it highlighted in the appropriate hierarchy in the Object browser. The option has to be turned on by toggling the icon on the Product or Planograms toolbar so it is depressed.



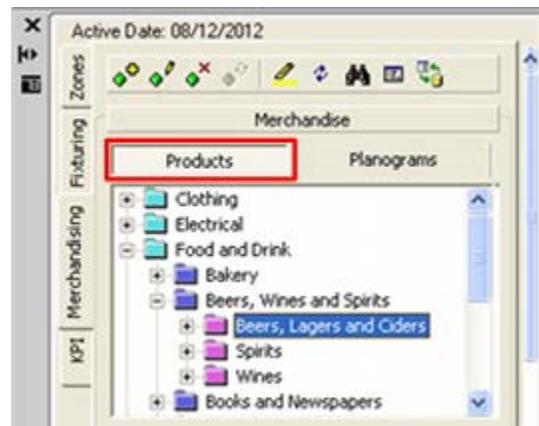
Clicking on a product or planogram in the floor plan will then cause that object to be highlighted in the hierarchy.

Note: It is recommended that the Highlight Selected Item in Tree option be left off until needed - leaving it on may have a marginal impact on performance in the floor plan.

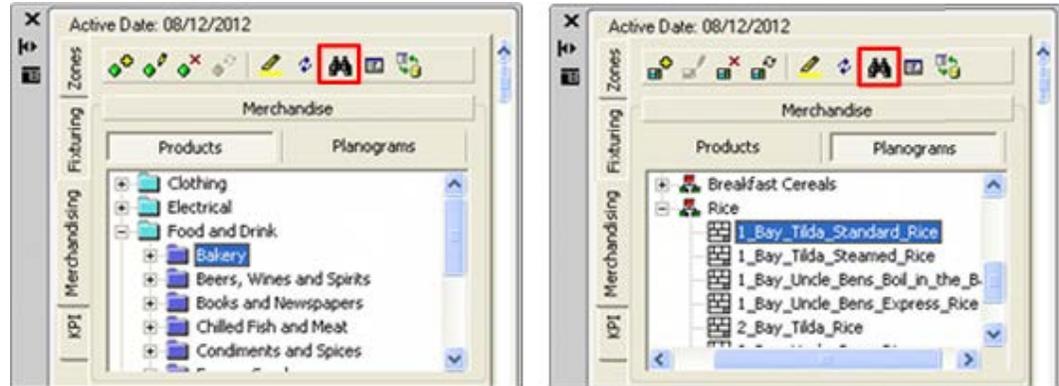
Find Merchandise in Tree

Selecting Products or Planograms to Find

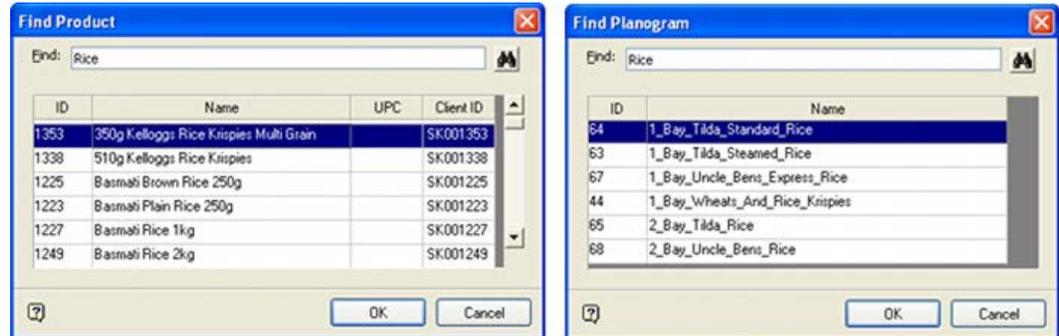
Selecting whether to find products or planograms is done by clicking the appropriate button in the Merchandising tab.



Find in Tree allows users to search for product or planogram names in their respective Hierarchies.



Clicking the icon will bring up the respective Find dialogue boxes.

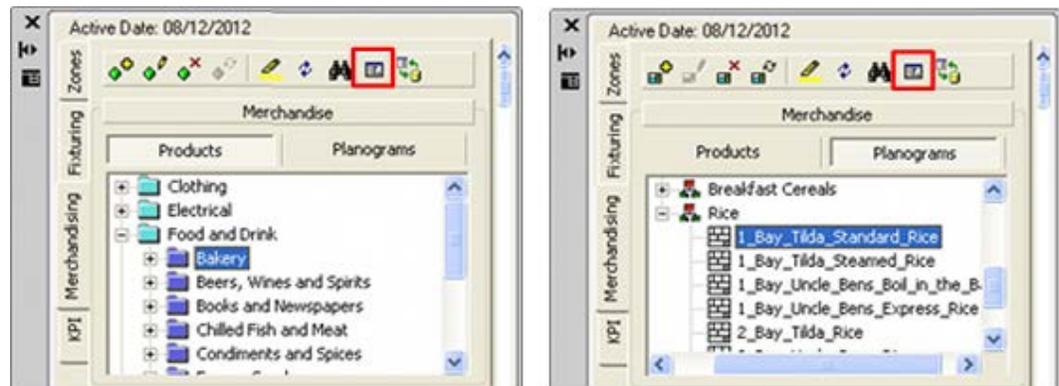


To use the dialogue box:

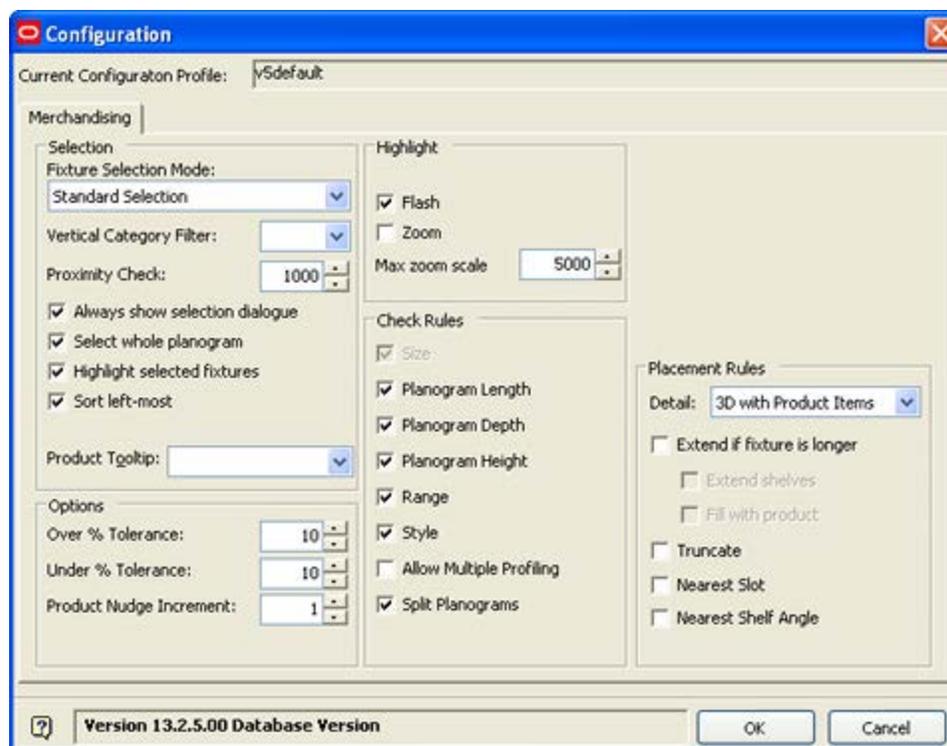
1. Type a text string into the text box
2. Click on the search Icon
3. Any product or planogram with a name matching the search string will be listed
4. To select a product or planogram in the hierarchy, highlight it and click the OK button

Configuring Merchandise Behavior

The way zones behave can be configured in the Configuration module. To access the Zones tab, click **Properties** on either the Products or Planograms toolbar.



This will bring up the Merchandising tab of the Configuration module. Settings in this tab can have a significant effect on the way merchandise places.



Full information on each setting can be found in the Configuration Module User Guide, but the following basic settings are helpful for new users:

Selection Frame

This frame controls how fixtures are selected for placing merchandise on. Set the following:

- **Fixture Selection Method to Standard Selection.**
- **Always Show Selection Dialog to On.**
- **Select Whole Planogram to On.**
- **Sort left-most to On.**

Highlight Frame

This frame controls how merchandise is highlighted in the floor plan.

- Set highlight method to **Flash**.

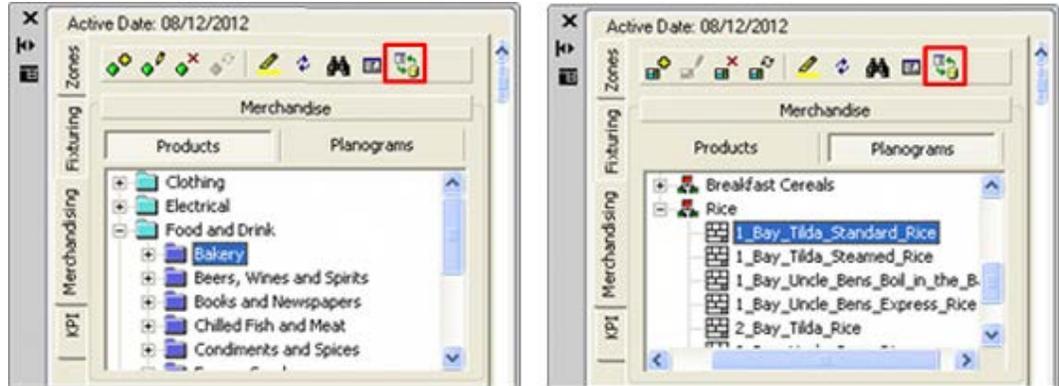
Check Rules Frame

This frame controls the advisory warnings that occur when placing planograms.

- Set all Check Rules to **On** with the exception of allow Multiple Profiling.

Refreshing Merchandise Information

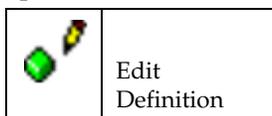
The **Refresh Option** causes the respective hierarchical tree in the products or planograms window to be updated with any information in the database that has been added or edited since the Planner module was opened for the current session. (This is useful if work is being carried out in parallel in any other module).



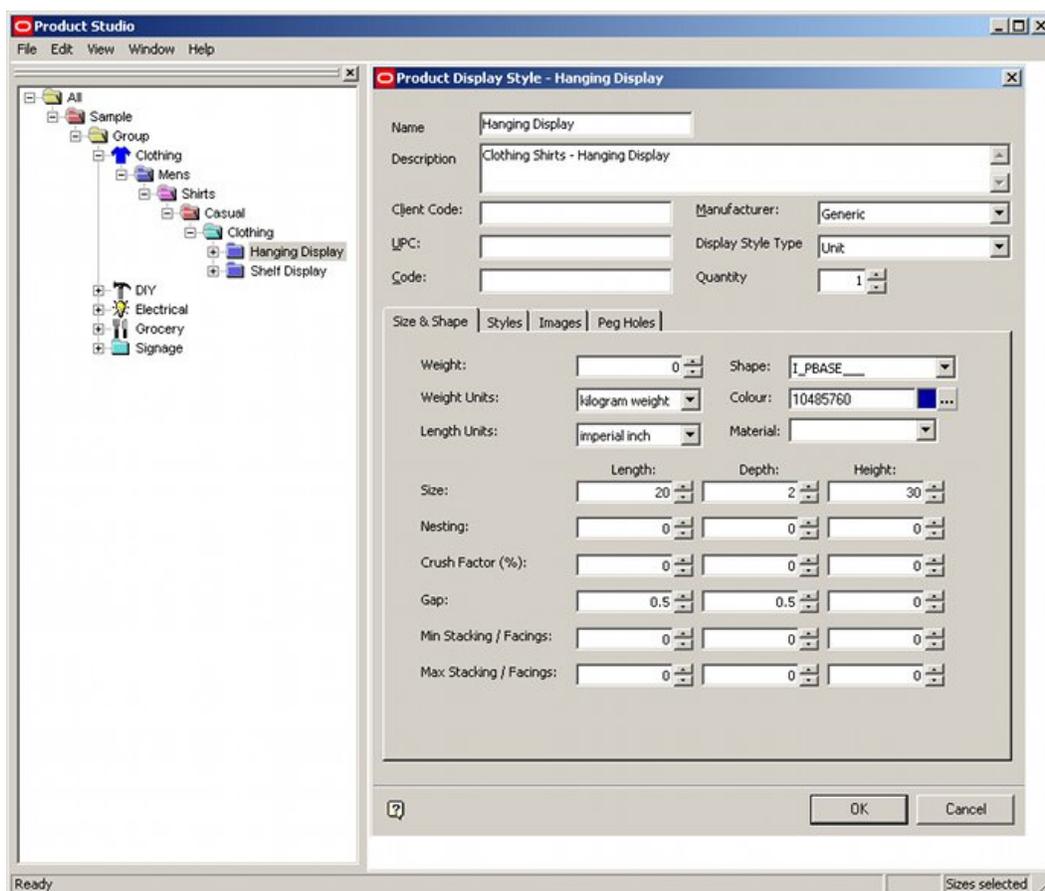
Other Information

Product Studio

Product Studio can be invoked using the Edit Definition option in the toolbar in the Merchandising Tab of the Object Browser. It is used to configure the product placeholders that can be placed in the Planner Module.

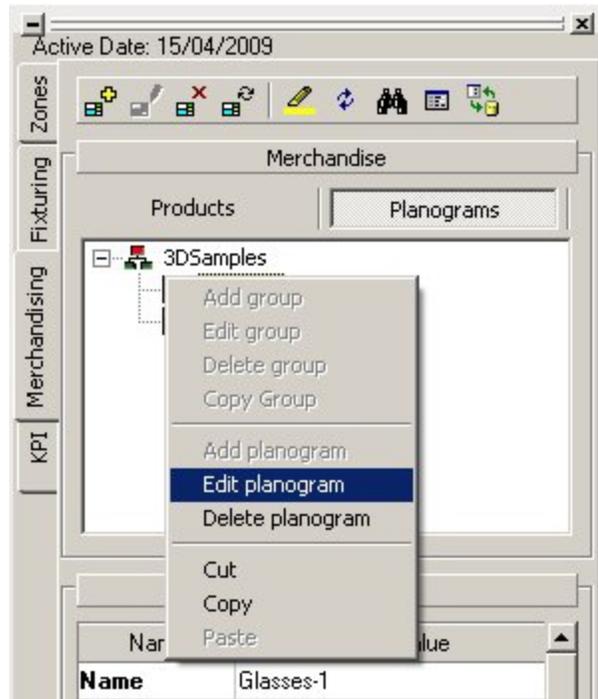


Product Studio allows the design and editing of product images. These images can be arranged in a hierarchy and subsequently used to populate a store. Options within the module allow attributes to be assigned to each product, giving it intelligent properties.



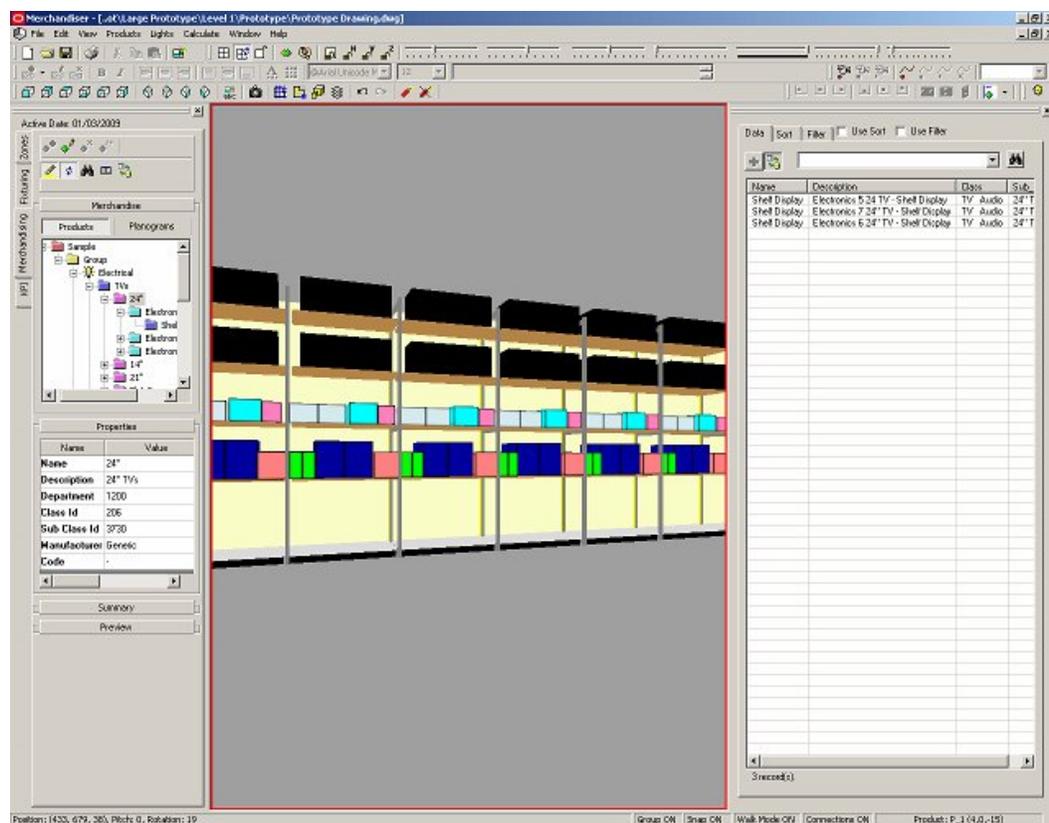
Merchandiser

Merchandiser can be invoked from the Edit Planogram option from the pop-up menu in the Object Browser.



Merchandiser allows the planograms, and the fixtures on which they have been placed, to be viewed in a Virtual Reality (VR) 3D environment. Using the provided controls, the Macro Space Management user can 'fly' round the VR store.

Merchandiser is also used to design and edit planograms (and to place them in a 3D environment).



Planograms can be designed in varying levels of detail. These planograms can be arranged in a hierarchy and subsequently used to populate a store.

System Variables Used in the Merchandising Tab

There are six **system variables** that affect the Merchandising Tab:

1. **DEFAULT_MERCH_BLOCK** specifies the block to be used as the default when populating fixtures in 2D in the Planner environment.
2. **FINGER_GAP** specifies the practical tolerance to be allowed above products for placing those products on shelves. For example, if the vertical distance between shelves is 500 mm, a small gap has to be left for the stackers fingers when they place boxes, etc on that shelf.
3. **MERCH_DB_DETAIL** specifies whether 2D, 3D or full 3D information should be saved to the DB (Merchandising). The more detail that is specified, the more data storage capacity will be required.
4. **MERCH_DWG_DETAIL** specifies whether 2D, 3D or full 3D information should be saved to the drawing. Specifying more detail will result in larger drawing files.
5. **MERCH_TOLERANCE_OVER** specifies how much larger a planogram can be relative to the nominal size of a fixture and still be placed.
6. **MERCH_TOLERANCE_UNDER** specifies how much larger a planogram can be relative to the nominal size of a fixture and still be placed.

Note: The **MERCH_DB_DETAIL** system variable should be defined during the implementation stage and not changed frequently.

Note: Some of these system variables can be changed in both the Administration and Configuration Modules.

Annotation in Planner

About Annotation

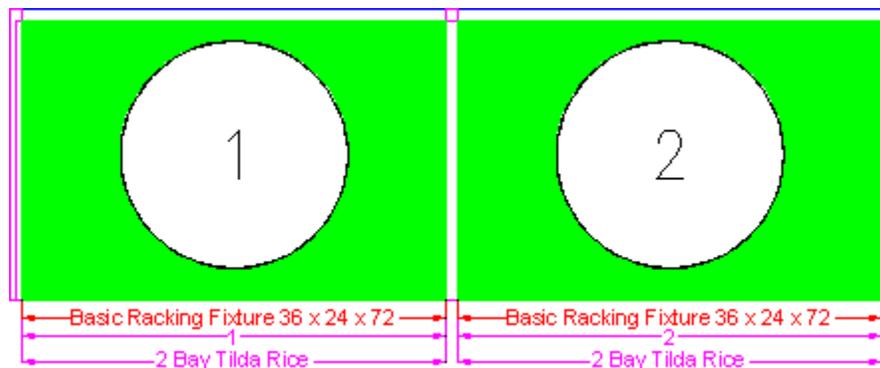
Annotation is used to label objects with text within a floor plan. This information then assists anyone reading the floor plan with identifying those objects. The example below is annotation for a zone.

Food and Drink Zone 20000 sqft



The example below shows two bay numbered fixtures that have been labelled with three forms of information:

- The fixture name
- The planogram
- The bay number for the planogram



The form of the annotation is configured using the **Text Styles Administration Tool** dialog box from the Planning Menu in the Administration Module.



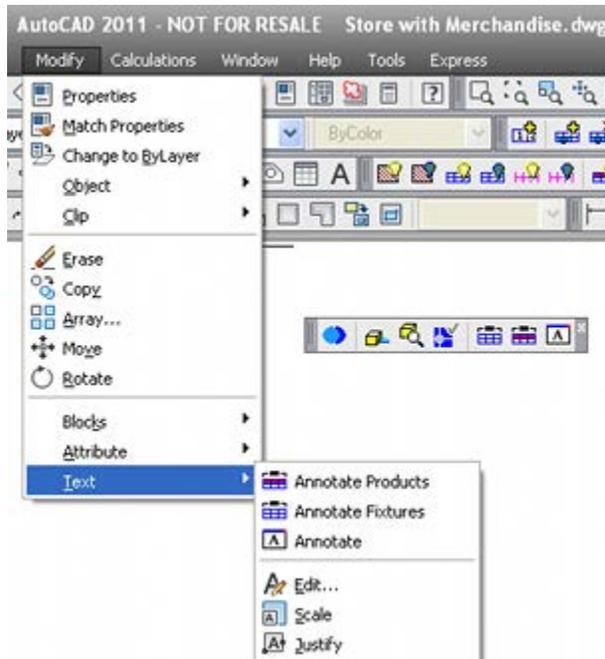
ID	Name	Description	Font	Bold	Italics	Colour	Layer Alias	Auto
1	General	General Notes	Arial				NOTES-TEXT	None
2	Dept	Dept Zones	Arial				DEPT-TEXT	Department Zone
3	Internal	Internal Zones	Arial				INTERNALZONE-TEXT	Internal Zone
4	Zone	General Zones	Arial				DEPT-TEXT	Zone
5	Product	Product Description	Arial				PRODUCT-TEXT	Product Placeholder
6	Planogram	Planogram Details	Arial				PLANOGRAM-TEXT	Planogram
7	Profile	Profile Details	Arial				PRODUCT-TEXT	Planogram
8	10 BayNumbering	Bay Numbering	Arial				BAYNUMBERING	None
9	11 Fixture	Fixture Details	Arial				FIXTURE-TEXT	Fixture

Note: See the *Administration Module User Guide* for information on how to configure Text Styles.

Using Annotation

Note: For fixtures to annotate, the **Include in Fixture Annotation** check box must be selected for that item of equipment in the Category tab of the Block Details dialog box in Fixture Studio.

Annotations can be selected from the **Modify>Text** menu. Alternatively, the same options can be selected from the retail toolbar.



Annotate Fixtures

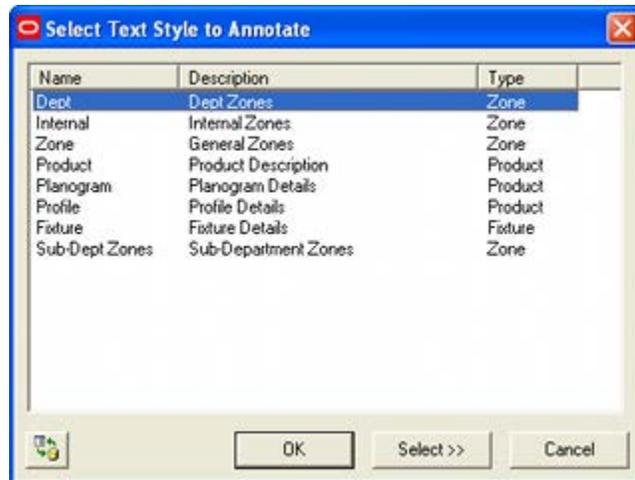
Fixtures do not automatically annotate when placed in a floor plan. If the **Include in Fixture Annotation** check box has been checked in Fixture Studio, clicking the **Annotate Fixtures** option will cause all valid fixtures to annotate or refresh.

Annotate Products

Clicking Annotate Products will cause annotation associated with products and planograms to refresh.

Annotate

Clicking **Annotate** will bring up the Annotate dialog box.



- The **Refresh** button ensures that all recent changes to the annotation rules made in the Administration module are updated in Planner.
- Highlighting an annotation style causes that specific style to be selected for updating.
- The **Select>>** button takes the user to the floor plan where standard AutoCAD methods can be used to select a specific subset of objects for updating.
- The **OK** button causes the selected objects to update.

Drawing Comparison

Overview of Drawing Comparison

Drawing Comparison can be used to compare the equipment, planograms and product categories in two floor plans. This can be done in one of two ways:

- Comparison between the currently active floor plan and any designated **prototype store** for that floor plan.
- Comparison between the currently active floor plan and any other currently active floor plan.

Accessing Drawing Comparison

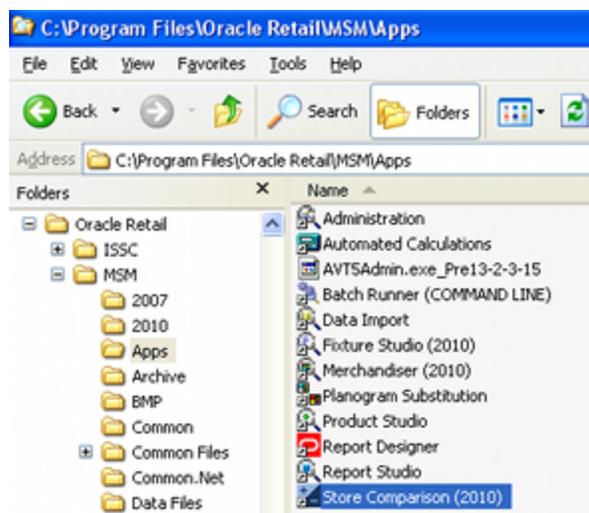
Drawing Comparison can be accessed in two main ways:

From the View Menu in Planner

Drawing Comparison can be accessed from the View Menu.



Alternatively, it can be accessed from the local **C:\Program Files\Oracle Retail\MSM\Apps** directory.



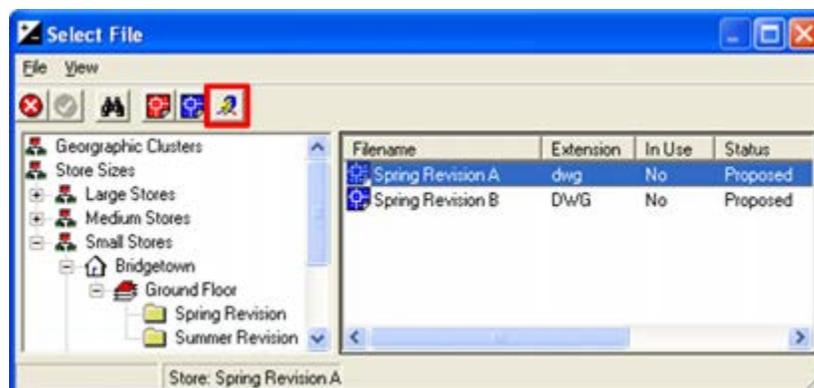
Opening Floor Plans with Store Comparison

Opening Directly from Directory

If opened directly from the local **C:\Program Files\Oracle Retail\MSM\Apps** directory, there are two ways Store Comparison can behave. These depend on whether the Planner Module is open or not.

Opening without the Planner module being open

If the Planner module is not open, the Select File dialog box will appear. Highlight



Using Drawing Comparison

Once the floor plans have been selected, the **Drawing Comparison** dialog box will appear. This can be used to show differences between the selected floor plan and the template/prototype store it is being compared with.

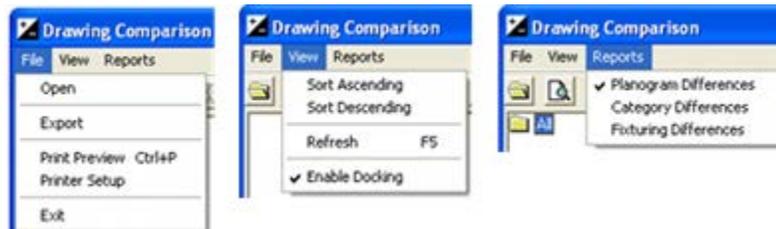
Category	Planogram	Template	Store Base	Difference
Tinned Soup	00000051	70	35	Under
Beers, Ciders and Lager	00000037	35	70	Over
Beers, Ciders and Lager	00000040	35	70	Over
Tinned Soup	00000054	70	35	Under
Books and Newspapers	00000036	37	0	Missing
Sauces	00000026	48	0	Missing
Sauces	00000025	48	0	Missing
Spirits	00000024	0	140	Illegal
Wines	00000005	0	70	Illegal

Planogram Differences Prototype Store : Sum 9 Items

Menus and Toolbar

Menu Bar

There are three Menus - **File**, **View** and **Reports**



File Menu

This contains the following options:

- **Open** opens the Select File dialog box, allowing users to select floor plans to compare.
- **Export** exports the current set of results to an Excel spreadsheet.
- **Print Preview** brings up the Print Preview dialog box. This gives a preview of the information to be printed. Users can opt to print the information or exit the option.
- **Printer Setup** brings up a dialog box for changing the default printer and options for that printer.
- **Exit** causes store Comparison to close.

View Menu

This contains the following options:

- **Sort Ascending** sorts the data into ascending order. It will be based on the column containing the currently highlighted cell.
- **Sort Descending** sorts the data into descending order. It will be based on the column containing the currently highlighted cell.
- **Refresh** updates the results with any changes made in the floor plans since Drawing Comparison was opened. One circumstance where Refresh could be used was if a store planner was manually changing planograms in a floor plan so that it conformed to those in the prototype store. Refreshing at intervals would keep the list of current differences between the floor plans updated.

- **Enable Docking** can be toggled on and off. If docking is On, the Drawing Comparison dialog box will dock to the left of Planner, displacing Planner to the right to make room. If docking is Off, the Drawing Comparison dialog box can be positioned in any convenient location.

Reports Menu

The Reports menu allows users to toggle between one of three report modes:

- Report on difference in placed **Planograms** between the two selected floor plans.
- Report in differences in placed **Categories** between the two selected floor plans.
- Report in differences in placed **Fixtures** between the two selected floor plans.

Note: Reporting on differences between Categories is not currently operational.

Toolbar

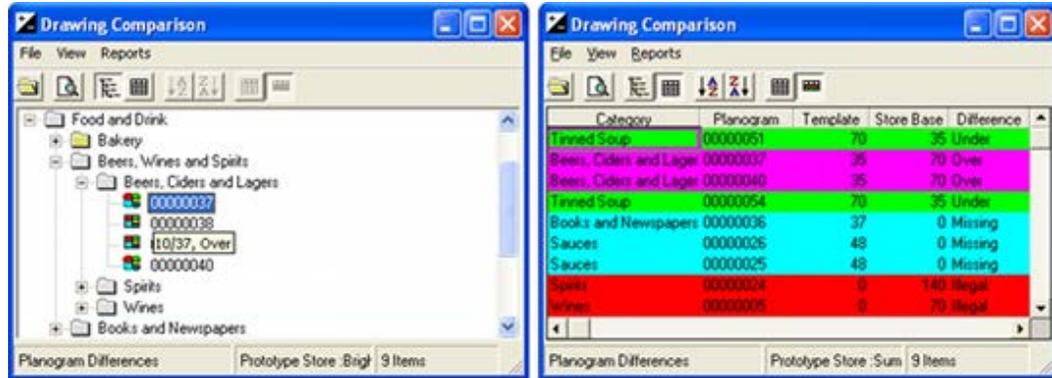
The toolbar contains the following options

Icon	Description	
	Select Drawings to Compare	This option will open the Select Drawings to Compare dialog box. The user can then select the floor plans for comparison.
	Print Preview	This option will bring up the Print Preview dialog box. Users can opt to print the information or exit the option.
	Display Tree View	This option will cause information to be displayed in a tree (or hierarchical) view.
	Display List View	This option will cause information to be displayed in a list (tabular form).
	Sort Column in Ascending Order	This will sort the data into ascending order. It will be based on the column containing the currently highlighted cell.
	Sort Column in Descending Order	This will sort the data into descending order. It will be based on the column containing the currently highlighted cell.
	Show All Values	This will show all data from the two floor plans being compared. It will include data that is identical.
	Only Show Differences	This will only show data that differs between the two floor plans being compared.

Using Drawing Comparison

Tree and List View

The information may be viewed in one of two modes depending on user preference. These are Tree View (left in the screen shot below) and List View.

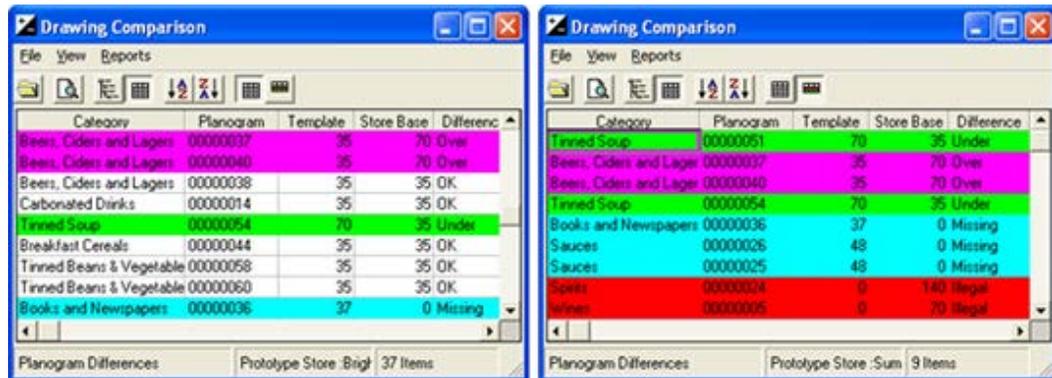


Users can toggle between the two views by using the appropriate icon in the toolbar.

Note: In Tree view, the icons change if there are differences between the store and the template/prototype. In the screen shot above, the tooltip contains the ID of the Planogram Group, the last two digits of the planogram code and the form of the difference.

Show All Values or Only Show Differences

Users can select the amount of information displayed. This can be all items (left in the screen shot below) or only the items that differ.



Possible Differences

There are four types of potential differences between the two selected floor plans. These are:

- **Under:** The quantity on the store is smaller than the quantity in the template/prototype.
- **Over:** The quantity on the store is greater than the quantity in the template/prototype.
- **Missing:** An object is present in the template/prototype that is not present in the store.
- **Illegal:** An object is present in the store that is not present in the template/prototype.

These differences can apply to:

- **Equipment Placed**
- **Planograms Placed**

- **Categories Placed** (not operational at present).

Validating Floor Plans

Validating Floor Plans

Prior to authorizing a floor plan, it should be validated to see if it is optimum.

Reasons for Validating Floor Plans

Merchandise Placement Errors

Compliance is a key issue for retailers. Placing planograms on incompatible fixtures can lead to errors in product placement immediately the planogram is set. These placement errors can lead to the performance of the planogram being misinterpreted. For example, if there are few facings placed than designed for a product, its financial performance will be below that intended. An analyst looking at planogram performance might then be misled when the planogram is redesigned.

Merchandise Optimization

Planograms will generally be placed within a floor plan to meet an overall set of targets. An example would be the profitability of categories, aisles, departments and the overall floor plan. Forecast results could be calculated and compared to target. Any areas of the store falling short of target could then be replanned.

Other Forms of Validation

Retailers may have other reasons for validating floor plans meet the overall strategic plan. An example if this would be if the retailer was stocking a particular range of products as an image builder for the chain. Retailers might then want to validate that the placement of these image building products met requirements.

Methods of Validating Floor Plans

There are several methods of validating floor plans.

Quick Reports

Quick Reports (accessed from the View menu in both Planner and Merchandiser) enable the user to get specified results back from the floor plan. Macro Space Management comes with a set of pre-configured quick reports that can be used to check either for errors or for ways to further optimize the floor plan.

- Example Quick Reports that can be used to check for errors are those for multi-placed planograms or unpopulated fixtures.
- Example Quick Reports that can be used to optimize floor plans include results for financial performance - for example planogram space measures. It is then possible to check forecast planogram performance against location in the floor plan.

In addition to the pre-configured reports that are supplied, it would be possible to configure Quick Reports to meet retailer specific requirements. For example it would be possible to create a Quick Report identifying seasonal planograms and their expiry dates. It would then be possible to validate that there is a minimum period (say 4 weeks)

between the floor plan going into service and the first seasonal planogram requiring replacement.

Key Performance Indicators

KPIs can be used to visually indicate performance in the current floor plan. As with KPIs, MSM comes with a set of pre-configured KPIs that can be used to check either for errors or for ways to further optimize the floor plan.

- Example KPIs that can be used to check for errors are those for planograms on fixtures of incorrect length, depth of height.
- Example KPIs that can be used to optimize floor plans include results for financial performance - for example it is possible to show forecast profit and see if the high profit planograms are in physical locations that would justify those forecasts.

In addition to the pre-configured KPIs that are supplied, it would be possible to configure KPIs to meet retailer specific requirements. For example it would be possible to create a KPI identifying all planograms with particular User Defined Attributes. An example of this would be UDAs identifying planograms that contain organic food products. It would then be possible to visually check the location of all organic products within the floor plan to see if they are logically placed in relation to each other.

BI Publisher Reports

BI Publisher reports are configured independently of MSM but could be used to give overview data on the floor plan. For example, historical data can be used to forecast the profitability of each planogram. It would be possible to use this forecast profitability to summarize profitability for the floor plan by category, aisle, department and overall. Each of these profit results could then be compared to pre-determined targets to see if the results are acceptable.

Business Process for Validating Floor Plans

The business process for validating floor plan will vary from retailer to retailer. One option is to put in a specific status (customizable in the Administration module) indicating the floor plan is awaiting validation. After the floor plan has been developed, it could be set to **ready to validate** status. If the floor plan meets requirements, the status could then be set to **authorized** and the floor plan set on the road to going into service.

Overview of Merchandiser

Overview

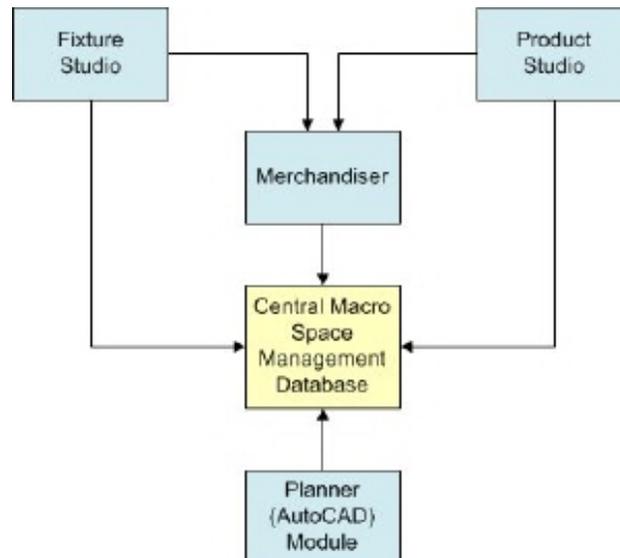
Merchandiser can be used to create, edit and review 3D Virtual Reality Stores.

Merchandiser integrates with other modules in Macro Space Management to enable the user to control all aspects of operating a retail organization.

- Fixtures and fittings can be created and edited in Fixture Studio.
- Similarly products can be created and edited in Product Studio.
- Planograms can be either imported or created in Merchandiser.

Merchandiser can then be used to add, edit or delete equipment in a 3D Virtual Reality store. Similarly, Merchandiser can be used to add edit or delete merchandise in a 3D Virtual Reality store.

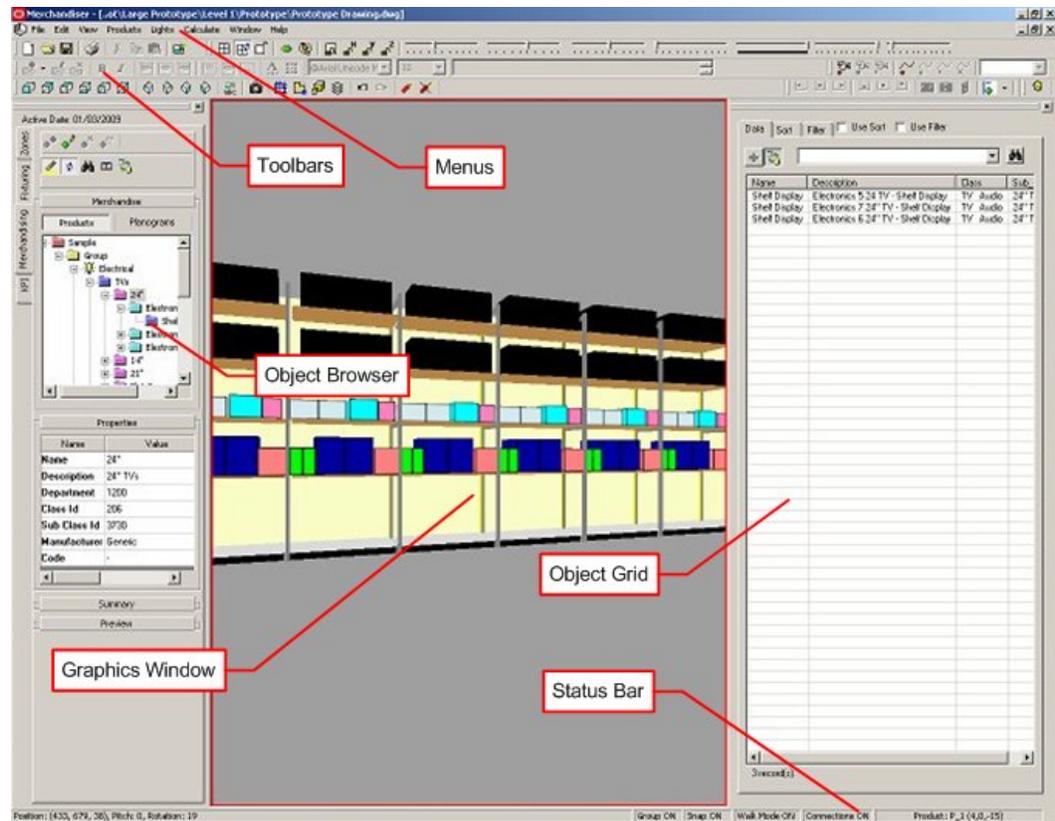
The results of these activities are stored in the Macro Space Planning database.



Note: The Macro Space Planning database is also used by the Planner (AutoCAD) module, which provides an alternative way to create and edit store layouts. Macro Space Management users may therefore work in which environment they find most convenient as the results of activities in either environment are stored in the central database and are available to the other environment.

The Merchandiser Window

The Merchandiser Window has six main parts.



The **Menu Bar** gives access to a series of drop down menus that control many of the operations in Merchandiser.

The **Toolbars** give access to a further series of commands.

The **Object Browser** controls fixturing and merchandising operations, together with the display of KPI's.

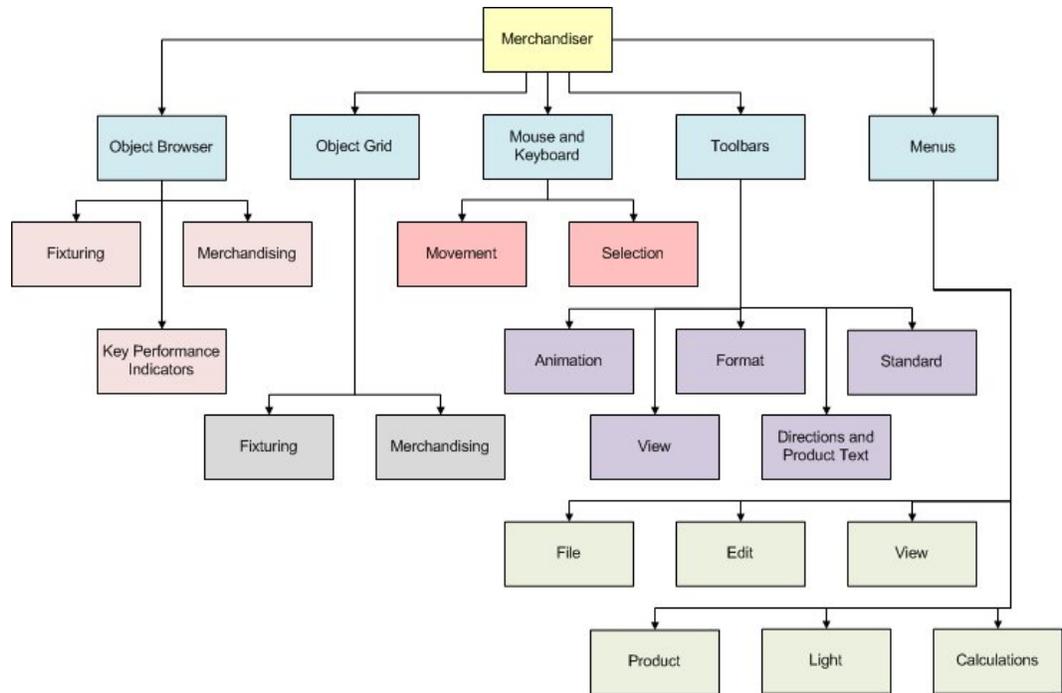
The **Object Grid** provides an alternative way to place equipment and merchandise.

The **Graphics Window** displays a 3D plan of the selected store.

The **Status Bar** gives information on current operations.

Merchandise Components

The varying operations within Merchandiser are controlled in one of four ways: from the Object Browser and Object Grid, from the Menu Bar, from the toolbars, or using the mouse and keyboard.



Controls in Merchandiser

Shortcut Keys

Shortcut keys are available. These provide alternatives to calling the required function from pull down menus of toolbars.

General Shortcuts

Shortcut Keys	Also available from:	Function
<Ctrl> + O	File pull down Menu or Standard Toolbar	Open Drawing (Via Store Manager)
<Ctrl> + P	Standard Toolbar	Show Print Preview
<Ctrl> + <Shift> + C	File pull down menu	Show Configuration Module
<Ctrl> + S	File pull down menu	Save Drawing
<Ctrl> + Q	File pull down menu	Quit Application
<Ctrl> + N	File pull down menu	Create New Planogram
F8	View Menu	Show/Hide Object Browser
Delete	N/A	Delete all selected objects

Display Shortcuts

Shortcut Keys	Also available from:	Function
<Ctrl> + F	Edit pull down menu	Display Find Dialogue
<Ctrl> + L	Directions and Product Text Toolbar	Display Layers Dialogue
F12	View Menu	Take snapshot of Virtual Reality Store

Editing Shortcuts

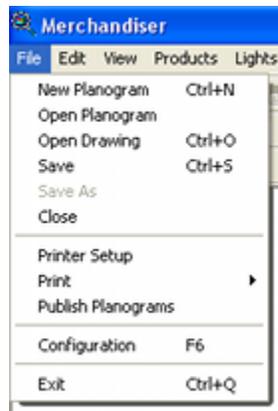
Shortcut Keys	Also available from:	Function
<Ctrl> + G	Edit pull down menu	Toggle Group On or Group Off
<Ctrl> + A	Edit pull down menu	Select All
<Ctrl> + E	Edit pull down menu	Empty selected fixture/shelf of products

Shortcut Keys	Also available from:	Function
<Ctrl> + C	Edit pull down menu	Copy the Selected Products to the Clipboard
<Ctrl> + X	Edit pull down menu	Cut the Selected Products and Paste on Clipboard
<Ctrl> + V	Edit pull down menu	Paste the Selected Products onto the selected fixture/shelf
<Ctrl> + Z	Edit pull down menu	Undo last action
<Ctrl> + D	Edit pull down menu	Deselect all selected objects
<Shift> + up or down cursor keys	N/A	Move selected shelf up or down on parent object

Menu Options

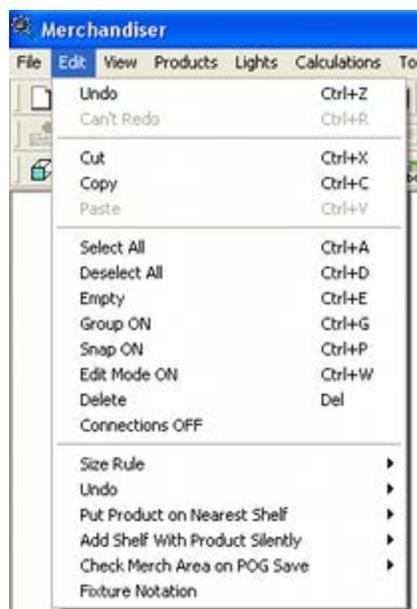
File Menu

The File menu gives access to several options. The most important of these are the creating and editing of planogram definitions, accessing Store Manager, Printing and accessing the Configuration Module.



Edit Menu

The Edit down menu give access to a series of options mainly concerned with editing.



The Undo and Redo options allow the user to undo or redo recent actions.

Cut, Copy and Paste allow the user to carry out those operations on objects in the drawing.

Select all, De-select all, Empty and Delete enable the user to carry out bulk operations on the drawing.

Group On or Group Off determines how Families and Groups are selected.

Size Rule allows the user to specify whether or not product size is to be taken into account when placing products on shelves.

View Menu

The View Options pull down menu allows the user to specify a number of options affecting the view on screen.



Find enables the user to find an object in the drawing.

Record Path, **Stop Record Path**, **Replay Path** and **Delete Path** allow the user to configure a path specified through the drawing for the purpose of making a Virtual Reality movie of the store layout.

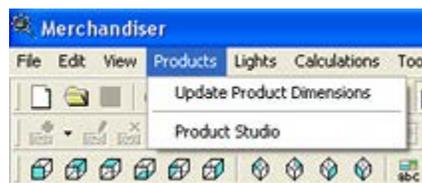
Start Animation Recording, **Stop Animation Recording** and **Replay Last Recorded Animation** are options concerned with Virtual Reality movies of the store layout.

Set 4 ViewPorts or **Set 1 ViewPort** determines how many views of the virtual store are available.

Pivot Around Selected Object enables the user to select an object in the drawing to rotate around.

Products Menu

The Product pull down menu enables Product Dimensions to be updated. It also allows access to Product Studio.

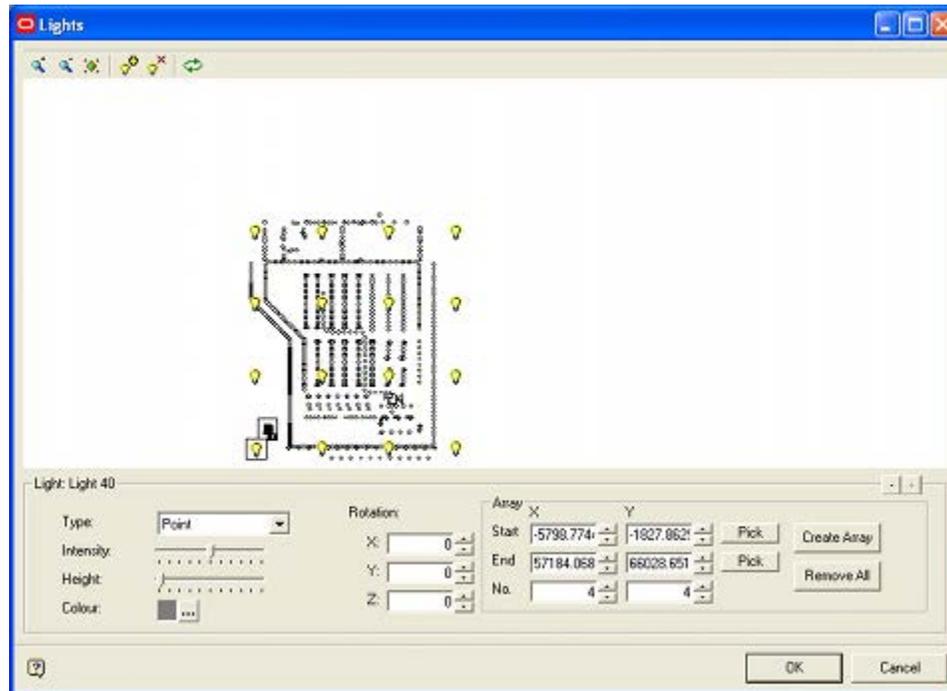


Lights Menu

The Lights pull down menu calls up the Lights dialogue box

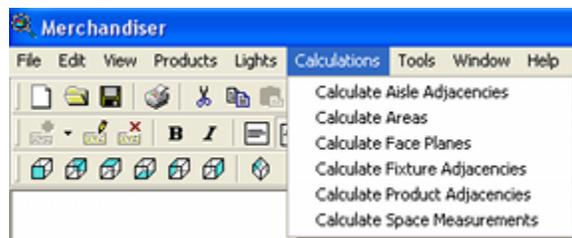


This allows the user to specify the lighting arrangements for the store.



Calculate Menu

The Calculate pull down menu gives access to calculations required for accurate reporting.



Calculate Aisle Adjacencies

This enables the user to determine which merchandise shares an aisle.

Calculate Areas

This gives determines how efficiently space in the store has been allocated.

Calculate Face Planes

Calculate Face Planes enables users to calculate the respective frontal area of products in planograms.

Calculate Fixture Adjacencies

This is used to determine which fixtures are next to which. The information is used for calculation and reporting purposes.

Calculate Product Adjacencies

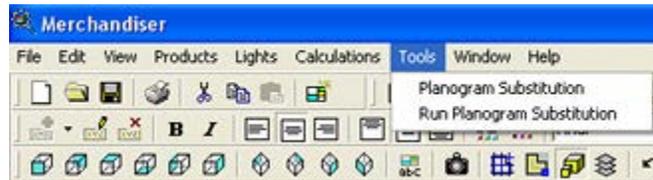
This is used to determine which fixtures are next to which. The information is used for calculation and reporting purposes.

Calculate Space Measurements

Calculate Space Measurements enables users to calculate the respective volumes of products in planograms.

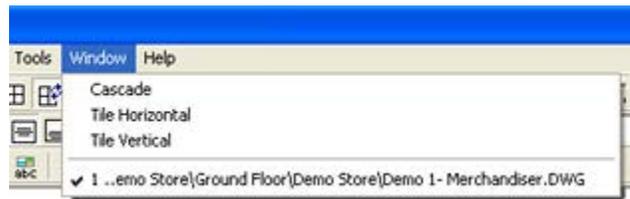
Tools Menu

The Tools menu gives access to Planogram Substitution functionality.

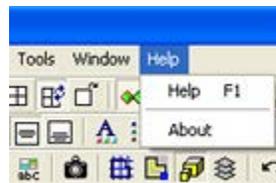


Window Menu

The Window menu allows users to arrange multiple store plans (if open) and to select the store plan they wish to be active.



The **Help Options menu** gives access to this help file.



It also allows the version of the software to be checked.

The Align Products Toolbar

The **Align Products toolbar** allows shelves or products to be aligned.



Icon	Description
	Align Left
	Align Center

Icon	Description
	Align Right
	Align Front
	Align Middle
	Align Back
	Justify in X plane
	Justify in Y plane
	Justify in Z Plane
	Select shelf or product to justify (Icon toggles)

The Animation Toolbar

The **Animation Toolbar** enables the user to make define and store walk through paths for taking movies. It also allows users to record movies of the store layout in the Virtual Reality Environment.



Icon	Description
	Start Recording AVI
	Stop Recording AVI
	Play Recorded AVI
	Start Recording Path
	Stop Recording Path
	Replay Path

Icon	Description
	Delete Path
	Available Recorded Paths

The varying Path options allow the user to set, edit or delete a path along which a recording will take place.

The Recording options allow users to make movies of the Virtual Reality store, either by controlling the camera directly, or by setting it to follow a predefined path.

The Directions and Product Text Toolbar

The **Directions and Product Text** Toolbar is mainly concerned with views of selected objects.



Icon	Description
	Front view of selected object
	Back view of selected object
	Top view of selected object
	Bottom view of selected object
	Left view of selected object
	Right view of selected object
	NW isometric view of selected object
	NE isometric view of selected object
	SE isometric view of selected object
	SW isometric view of selected object
	Show product text

Icon	Description
	Show product text
	Show grid lines form
	Show zones form
	Size rule (Toggle On or Off)
	Layers
	Undo
	Redo
	Explode
	Implode

After an object (or objects) have been selected it may viewed from any of six axes or four isometric directions.

Other options specify whether zones, grid lines, etc., display.

The Formatting Toolbar

The **Formatting Toolbar** has a whole series of options concerning the appearance of annotation in the Virtual Reality store.



Icon	Description
	Add Label
	Edit Selected
	Delete Selected Label
	Bold Text

Icon	Description
	Italic Text
	Left Justify Text
	Center Justify Text
	Right Justify Text
	Top Justify Text
	Middle Justify Text
	Bottom Justify Text
	Text Color
	Background Color
	Font Type
	Font Size
	List of Current Labels

The Standard Toolbar

The **Standard toolbar** enables the user to carry out a series of common actions.



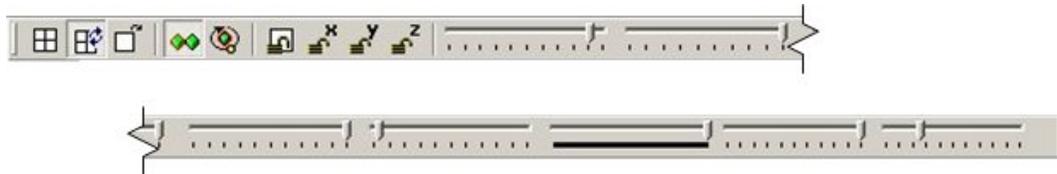
Icon	Description
	New Planogram
	Open Store Manager
	Save Drawing
	Print Options

Icon	Description
	Cut
	Copy
	Paste
	AutoFill

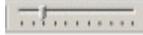
Options include creating a new planogram, opening Store Manager, Saving and Printing the drawing, etc.

The View Toolbar

The **View Toolbar** enables the user to set varying options for viewing the Virtual Reality environment.



Icon	Description
	Toggle between 1 and 4 ViewPorts
	Synchronize
	Next view
	Clash detection
	Pivot around selected object
	Lock view position
	Lock X axis movement
	Lock Y axis movement

Icon	Description
	Lock Z axis movement
	Set movement speed
	Set texture quality
	Set level of detail
	Set front clipping plane
	Set back clipping plane
	Light Intensity
	2D Label Viewing Distance

Options include setting the number of ViewPorts, pivoting around selected objects, locking movement in various directions and setting the level and type of detail visible in the drawing.

Note: There are no tooltips for the Movement Speed, Texture Quality, Level of Detail, Front Clipping Plane and Back Clipping Plane sliders. Instead, they show as prompts towards the right hand end of the status bar.

The Status Bar

The Status Bar contains a number of options and some useful information



Camera Position

This is on the left of the status bar. It gives the Cartesian coordinates of the current camera position, together with the angle the camera is pointing up or down and the horizontal direction it is pointing.

Floor Plan Options

These are in the middle position on the status bar.

- **Group On/Off**

Turning Grouping on or off determines the behavior when groups of fixtures (for example Gondola runs) are selected. If grouping is On, selecting a single fixture

will select all associated fixtures - for example an entire gondola run. If Grouping is Off, fixtures can be selected one at a time without selecting the whole group.

- **Snap On/Off**

Turning Snap On or Off determines whether the currently selected fixtures will attach to the Snap Grid (Grid lines option - View menu) or not.

- **Edit Mode/Walk Mode**

Toggling between Edit Mode and Walk Mode determines whether the user can move in the floor plan. If Edit Mode is selected, the user will be fixed to one spot in the floor plan. This is convenient for editing shelves and merchandise. If Walk Mode is on, then the user can move in the floor plan via the mouse buttons and mouse wheel.

- **Connections On/Off**

If Connections are On, connection points will be displayed in the floor plan. If Connection Points are Off, then connection points are hidden.

Note: If Connection Point display is turned off (after being turned on), then the connection points can be hidden by pressing the Escape key.

Selected Item of Equipment

This is on the right of the status bar. It shows the position of the selected fixture, shelf or product.

- If a fixture is selected, it will give the Fixture ID, together with the coordinates relative to the origin of the floor plan.
- If a shelf is selected, it will give the Shelf ID, together with the coordinates relative to the origin of the parent fixture.
- If a product is selected, it will give the Product ID, together with the coordinates relative to the origin of the parent shelf or fixture.

Movement with the Mouse

Note: to enable movement in the floor plan, Walk Mode in the status bar must be toggled on. If Edit Mode is selected, no movement will be possible.

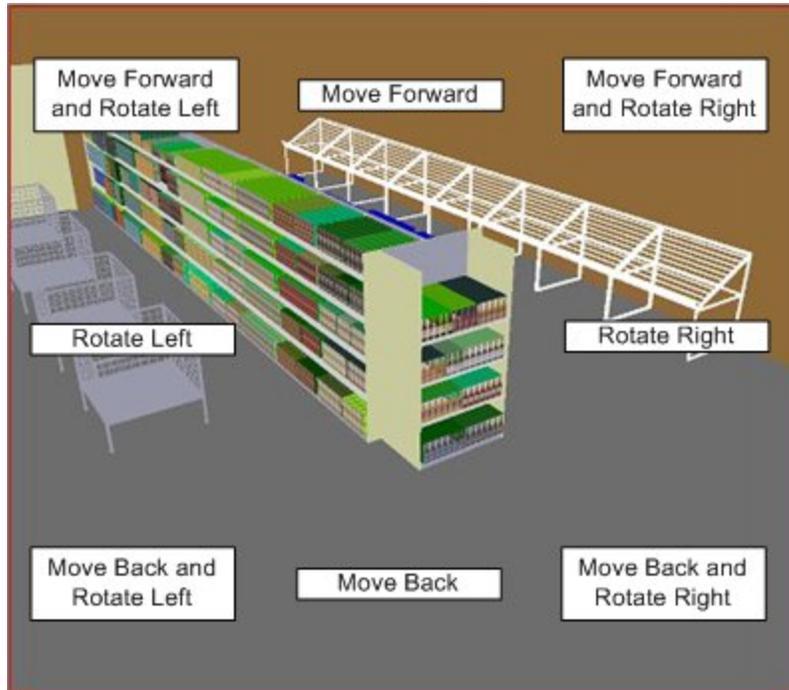
Movement Speed

Movement speed in the floor plan is determined by the setting in the Movement speed slider control.



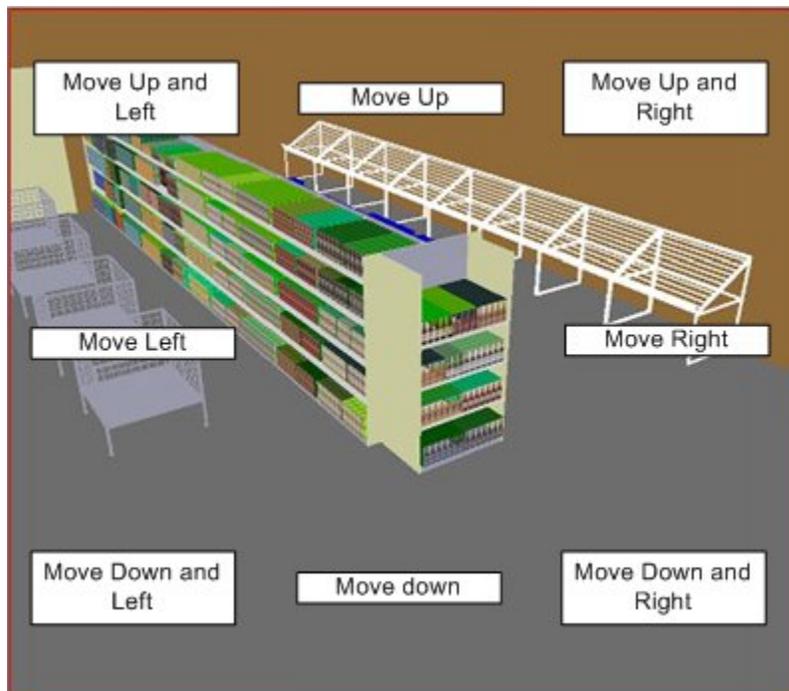
Left Mouse Button

The left mouse button enables users to move forward and back or rotate left and right in the floor plan. To do this position the mouse pointer at the appropriate position in the floor plan, then hold down the left mouse button.



Right Mouse Button

The left mouse button enables users to move up, down, left or right in the floor plan. To do this position the mouse pointer at the appropriate position in the floor plan, then hold down the right mouse button.



Mouse Wheel

How the mouse wheel operates depends on whether Walk or Edit mode has been selected in the status bar.

- In Walk mode, rotating the mouse wheel forward or back rotates the viewpoint up or down.
- In Edit mode, rolling the mouse wheel forward or back enables the user to move forward or back on the drawing along the currently selected axis of view.

Other Movement Options in the Floor Plan

Pivoting about a Selected Object

The Pivot About Selected Object option in the View toolbar enables the user to rotate about a specific point in the drawing. It is toggled On and Off by clicking on it.



Pivot about Selected Object will only work if one or more objects have been selected in the floor plan. Once selected, the user can pivot about the selected objects by holding down the left mouse button. They can move forward or back from the selected objects by rolling the mouse wheel backwards or forwards.

Viewing Objects from Specified Directions

Objects can be viewed from specified directions by clicking on the appropriate icons on the Directions and Product Text toolbar.



First, select the objects to be shown by left clicking on them. Next, click on an icon to show the specified viewpoint.

Depending on the icon selected, the selected objects can be shown from the front or back, above or below, or left and right. They can also be shown from one of four isometric views.

Locking Movement in Specified Planes

The View Toolbar contains several controls for restricting the available movement in the drawing.



Icon	Meaning
	Lock View Position
	Lock X Axis Movement
	Lock Y Axis Movement
	Lock Z Axis Movement

The options can be toggled on and off by clicking on them.

- **Lock View Position** will freeze the drawing with no movement possible

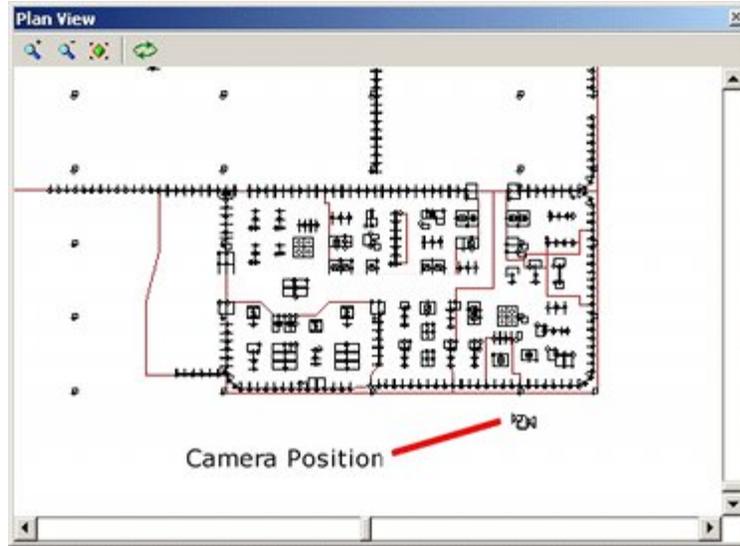
- **Lock X Axis Movement** will freeze the drawing with respect to left and right movement.
- **Lock Y Axis Movement** will freeze the drawing with respect to forward and back movement.
- **Lock Z Axis Movement** will freeze the drawing with respect to vertical movement.

Plan View

The Plan View Option can be activated from the Plan View option on the View pull down menu.



This brings up the Plan View window.



This shows a plan view of the store and the current position of the camera within the store.

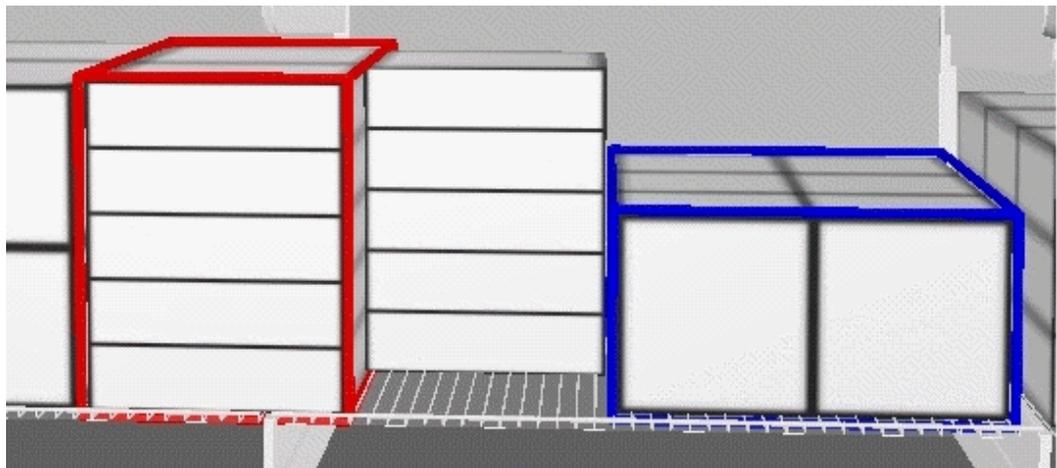
The camera position can be repositioned by holding down the left mouse key and dragging it to its new position.

Selecting and De-selecting Objects

Objects are best selected when in Edit Mode (status bar). With the user 'fixed' at one specific point in the floor plan, objects can be selected by left clicking them.

Standard Selection Set

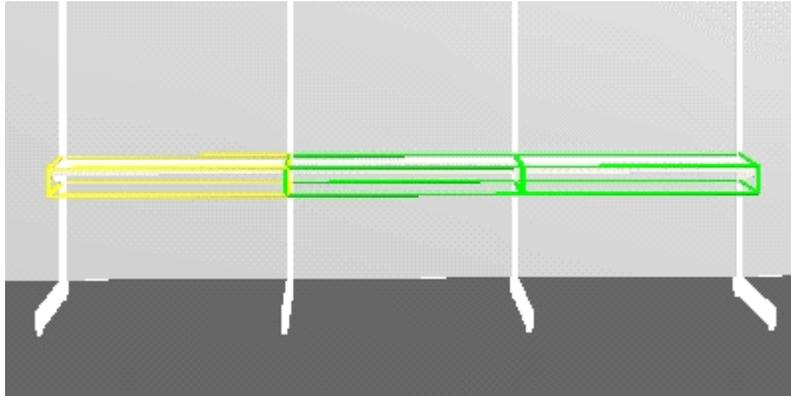
Standard Selection Sets occur when the objects are not in a Group or Family. The first object selected for a Standard Selection Set will be enclosed in a red frame. Subsequent objects selected for a set of objects will be enclosed in blue frames.



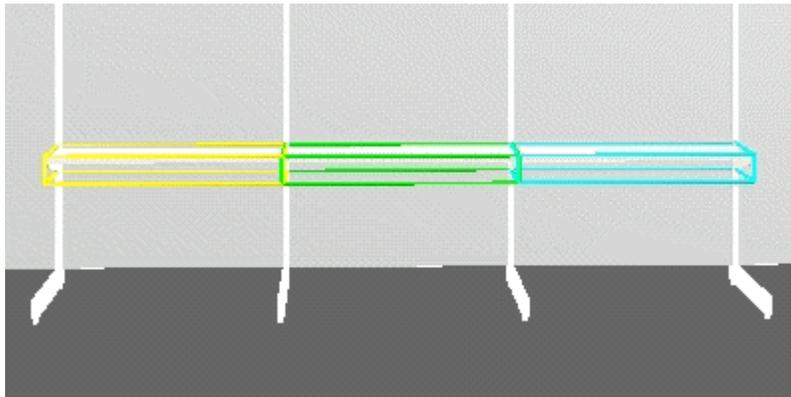
Individual objects can be de-selected by left clicking on them with the mouse for a second time. All objects in the Standard Selection Set can be de-selected by clicking on the first selected object (red frame) for a second time.

Family and Group Selection Sets

Objects that have been put into Families or Groups will be enclosed by yellow and green frames.



If Grouping is Off it is also possible that cyan frames will be visible.



If Grouping is On, then all objects in the set can be selected or de-selected by clicking on any member of the set. If Grouping is Off, individual objects can be de-selected by left clicking on them with the mouse for a second time. All objects in the set can be de-selected by clicking on the first selected object (yellow frame) for a second time.

General De-Selection

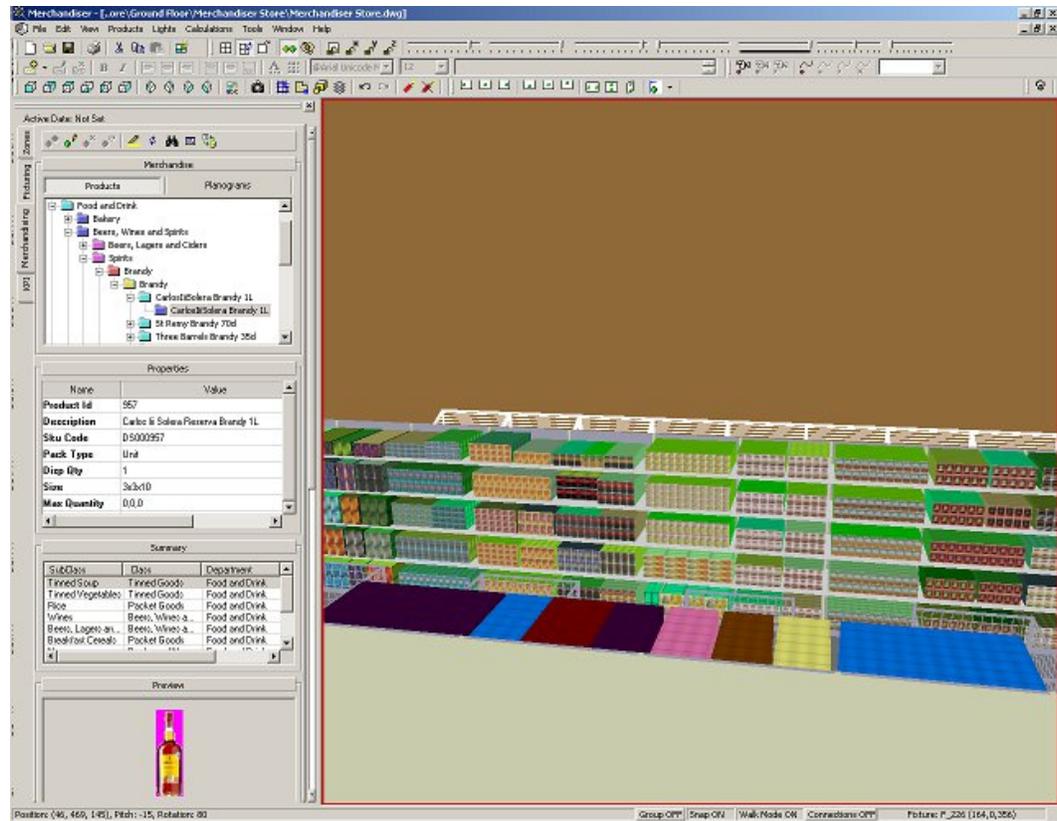
All currently selected objects can be de-selected by <Ctrl + D>.

Floor Plan Display Options

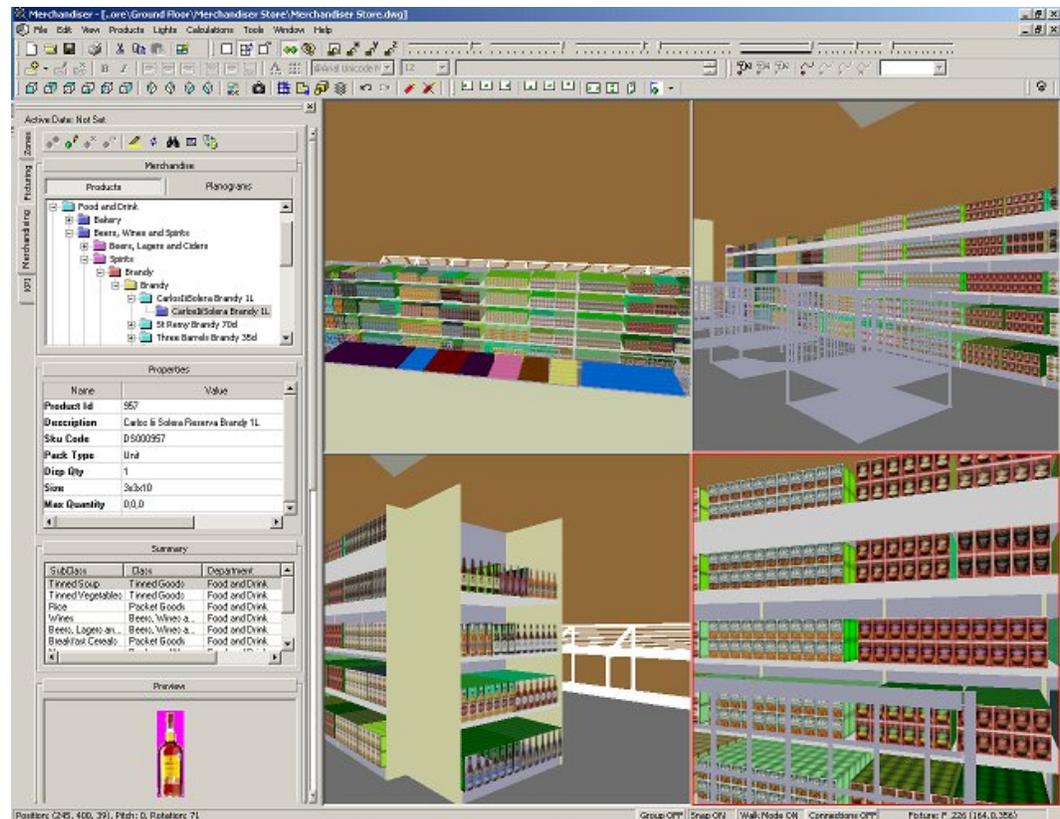
Overview of Single and Four ViewPorts

Merchandise can be viewed using single or multiple ViewPorts.

A single ViewPort will just show one image of the floor plan.



Changing to 4 ViewPorts will show four images of the floor plan.



These 4 ViewPorts can either be treated as separate entities or they can be synchronized. If used as separate entities, they can be used, for example, to move merchandise from one set of shelves to another.

If used while synchronized they can be used, for example to show three different KPI's (Key Performance Indicators), for the same part of the store.

Setting Up and Switching Between ViewPorts

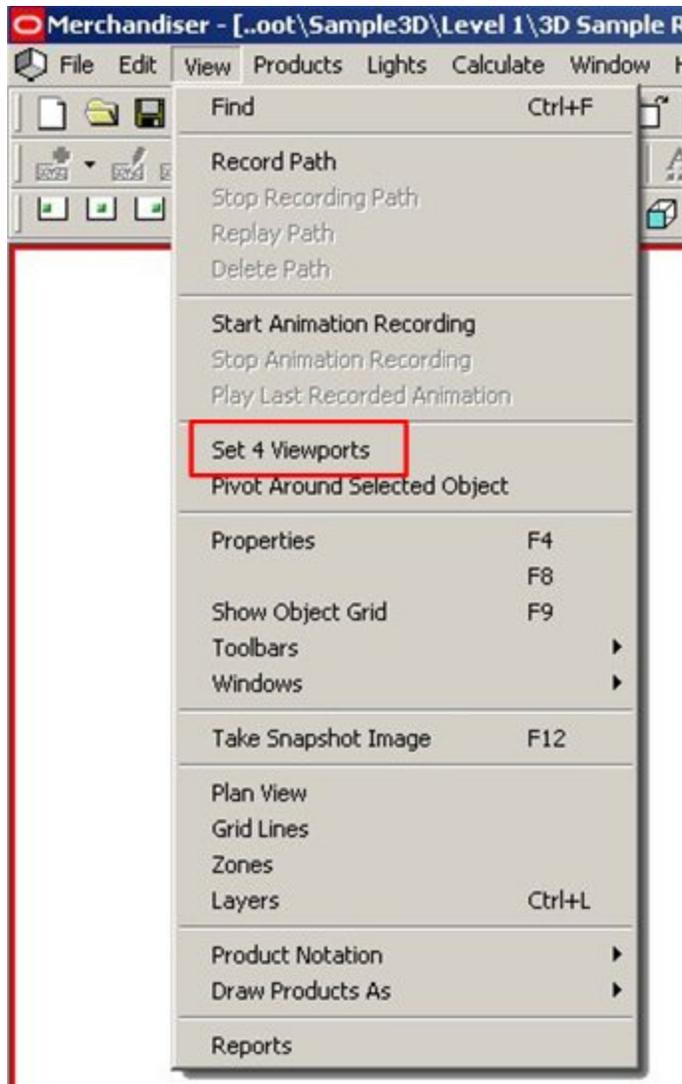
When the drawing opens, it will show a single view of the store plan.

(If 4 ViewPorts were enabled when the drawing was last saved and closed, the top left ViewPort will be displayed when the drawing is re-opened).

Starting/returning to the 4 ViewPorts option can be achieved using the menus or toolbars.

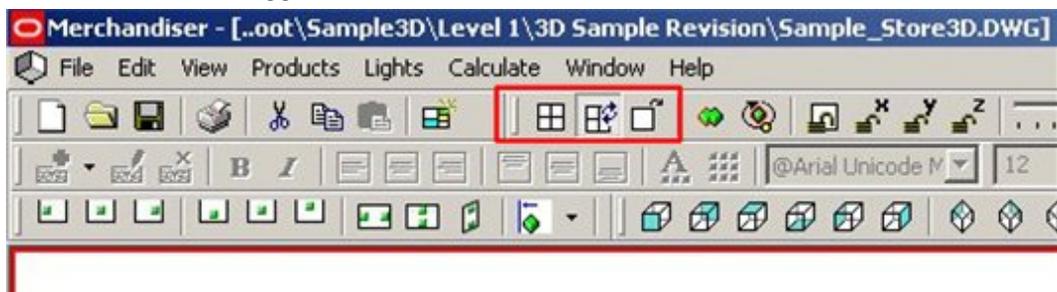
If using the View pull down menu, clicking on Set 4 ViewPorts will change the display from one to four viewpoints.

If the user is already using four viewpoints, then the pull down menu will read Set 1 view point, enabling the user to toggle back to a single view point.



Alternatively, the user can click on the appropriate icon in the toolbar. These will toggle between Show 4 ViewPorts and Show 1 viewport.

The Next View icon toggles between the available views.

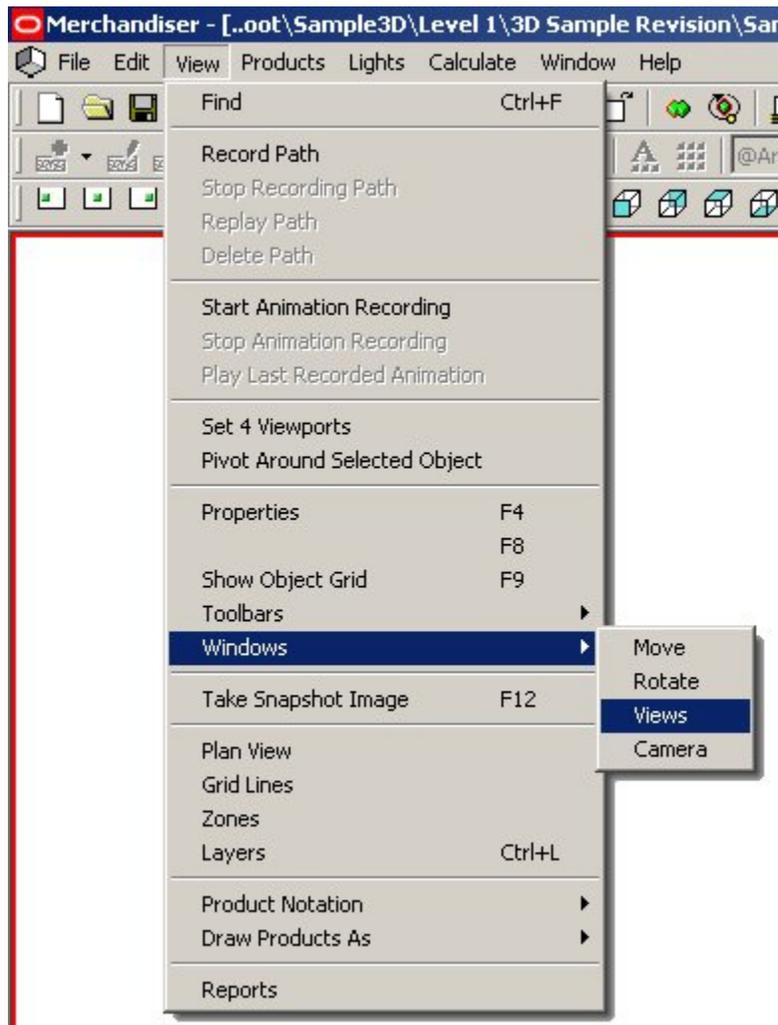


Icon	Description
	Switch to 4 ViewPorts

Icon	Description
	Switch to 1 ViewPort
	Next view

Saving and Restoring ViewPorts

While working in a Virtual Reality store, it is possible to **save ViewPorts** for later restoration. To do this, the user should select the Windows > Views option from the View pull down menu.



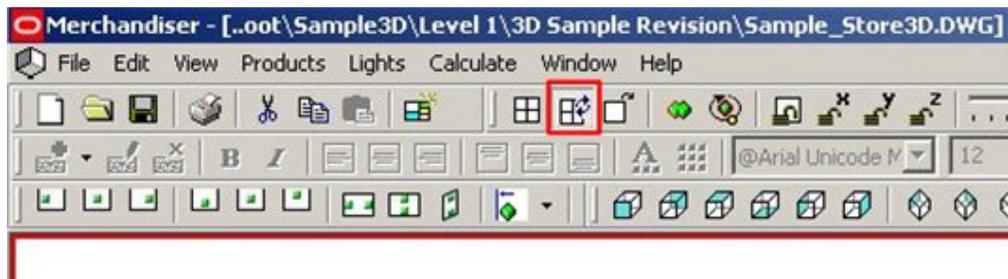
This will bring up the Views dialogue box.



This enables users either to save or restore specific ViewPorts

Synchronizing ViewPorts

The views in the 4 ViewPorts can be **synchronized** if required. This is achieved from the toolbar.



Clicking on the Synchronize icon will immediately switch all four viewpoints to that they mirror the viewpoint in the currently active window.

Clicking on the Synchronize icon again will desynchronize the four viewpoints so that they can be manipulated independently.

Note: If the user has toggled from Show 1 Viewport to Show 4 ViewPorts and 3 ViewPorts are blank, clicking on the synchronize icon is a quick way of populating the blank ViewPorts with views.

Overview of Object Display

The way objects display in a store plan can be changed in three ways in Merchandiser.

The drawing is subdivided into layers and each class of object (fixture, fitting, product, etc), has its own specific layer. By changing the properties of the layer, the user can change how the objects on that layer display.

Locking the Layer

Locking the layer prevents objects on that layer being moved or deleted.

Changing the Visibility

It is possible to turn layers on or off. If a layer is turned on objects on it are visible. If a layer is turned off, they are hidden.

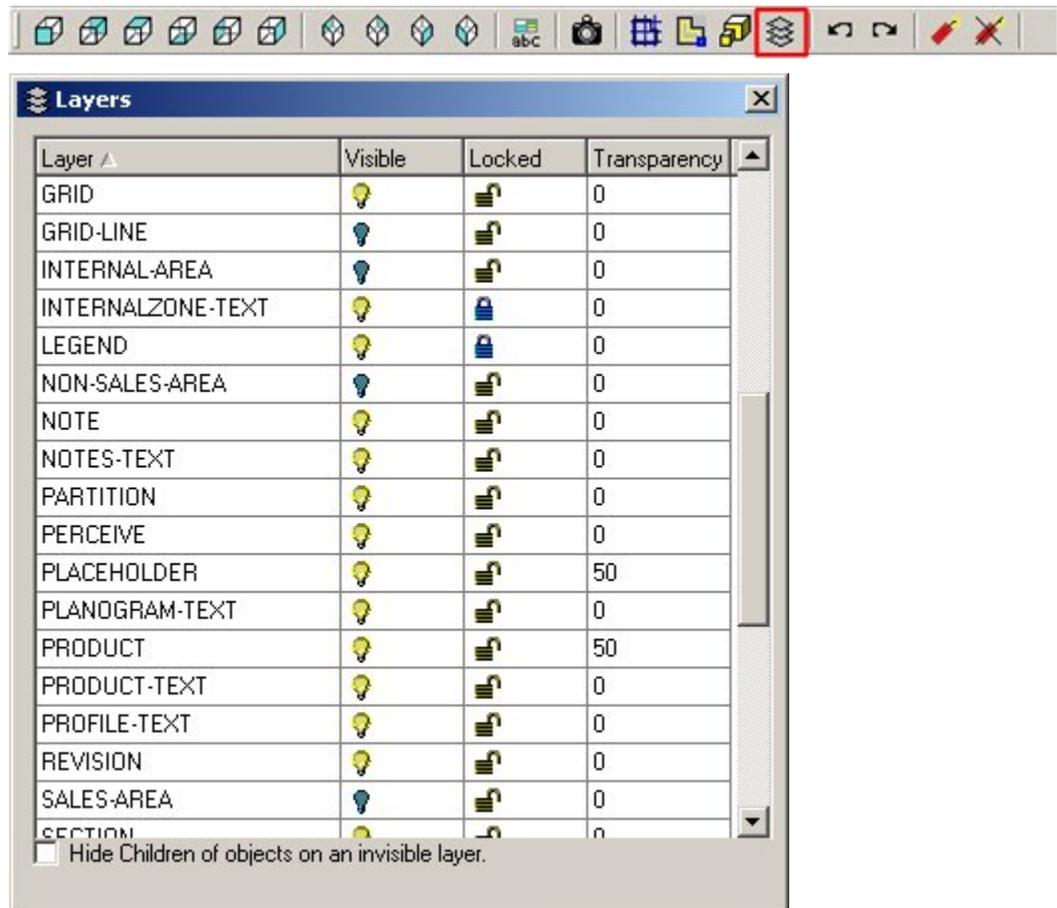
Changing the Transparency

The transparency values for a layer (and the objects on that layer) can be changed anywhere within a range of 0% - 100%. If the transparency is set to 0%, objects are completely opaque. If the transparency is set to 100% objects are completely transparent.

Overview of Locking Objects

It is possible to **lock objects** so that they cannot be altered when in place in the Merchandiser environment.

This is done by using the locking option in the Layers dialogue box, accessible from the View toolbar



This shows the layers and whether they are locked or not.

Icon	Description
	Layer unlocked
	Layer locked.

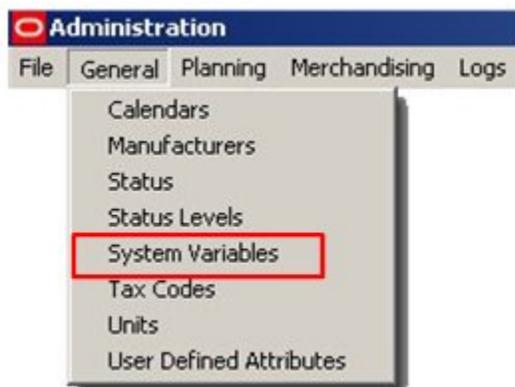
The lock for each layer can be toggled on or off by clicking on the appropriate icon.

Note: Depending on the system variable settings, some layers will be automatically locked depending on which Object Browser tab the user is in.

If the system variable is enabled, when in the Fixturing Tab, all layers associated with merchandising are locked. Similarly, when in the Merchandising Tab, all layers associated with fixturing are locked.

LOCK_OBJECTS_ON_TAB_CHANGE System Variable

The LOCK_OBJECTS_ON_TAB_CHANGE system variable is accessed from General Menu in the Administration Module.



This brings up the System Variables dialogue box.

 A screenshot of the 'System Variables' dialog box. It contains a table with the following data:

Name	Description	Type	Value	Data Type	Active	Category
ADJACENCY_AISLESIZE	Aisle Size Tolerance	System	200	Double	<input checked="" type="checkbox"/>	In Store
ADJACENCY_FIXTURESIZE	Fixture Size Tolerance	System	5	Double	<input checked="" type="checkbox"/>	In Store
ADJACENCY_FRONTBACK	Front Back Tolerance	System	10	Double	<input checked="" type="checkbox"/>	In Store
ADJACENCY_LATERALGAP	Lateral Gap Tolerance	System	30	Double	<input checked="" type="checkbox"/>	In Store
ADJACENCY_MAX_ANGLE	Max Angle Tolerance	System	30	Double	<input checked="" type="checkbox"/>	In Store
ADJACENCY_OVERLAP	Overlap Tolerance	System	1	Double	<input checked="" type="checkbox"/>	In Store
ADJACENCY_SEARCH	Search Tolerance	System	240	Double	<input checked="" type="checkbox"/>	In Store
ADJACENCY_TOLERANCE	Tolerance	System	1	Double	<input checked="" type="checkbox"/>	In Store

LOCK_OBJECTS_ON_TAB_CHANGE can be set to 0 or 1.

If set to 0, the layers will not be locked when changing from the Fixturing to the Merchandising Tabs and vice versa.

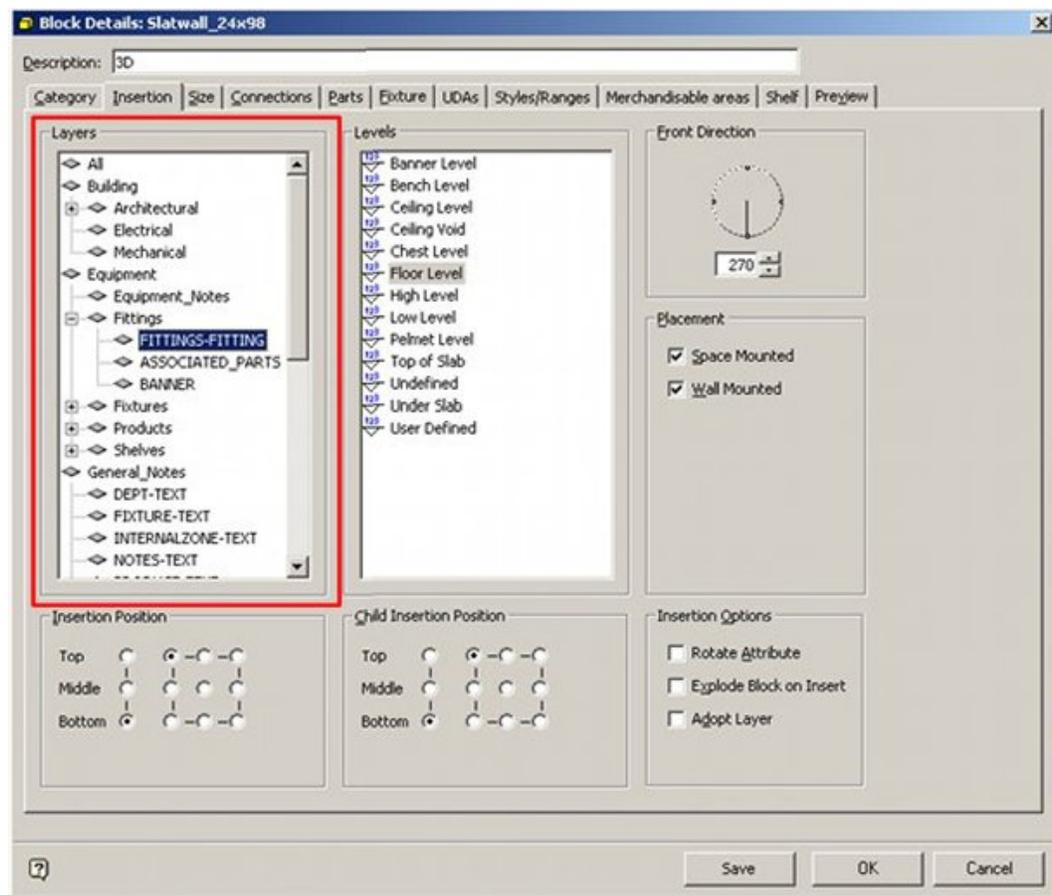
If set to 1, the layers will be automatically locked.

Note: Changing (and especially deleting) system variables can have a significant effect on the way Macro Space Management operates. It is recommended that Macro Space Management users consult their System Administrator or consult Oracle's Technical Support Team.

Locking Objects

Locking of specific classes of objects is achieved by locking the layers that those objects are placed on.

The layer for the majority of objects, such as fixtures, fittings and shelves, will be determined when the object is created in Fixture Studio:



Note: Layers selected for classes of objects should be consistent. If they are not then only some of the class of objects will be locked when a specific layer is turned off.

Layers for zones will be determined by the Zone Type.

Fixtures and fittings should be placed on specifically defined and consistent layers.

Products are placed on their own specific layer.

Locking layers is particularly useful for any object that is on the building layer, i.e. pillars, which should not be modified in the Merchandiser environment.

Locked objects can still be selected, so that properties can be determined, etc.

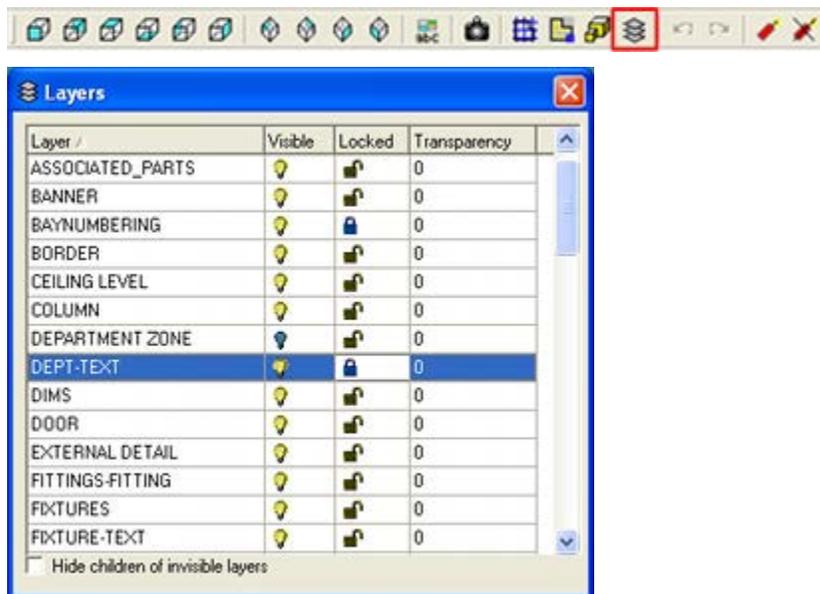
When locked objects are selected, a small warning will appear at the bottom of the screen.



Note: If objects are locked, then they cannot be deleted, moved, etc. If it is desired to do this, the layer must first be unlocked.

Changing the Transparency and Visibility of Objects

The transparency and visibility of objects can be changed in the floor plan. This is done by using the options in the Layers dialogue box, accessible from the View toolbar.



Changing the Visibility of Objects

When objects are placed in a Merchandiser floor plan they go onto a specific layer in that floor plan. For example fixtures go on the FIXTURES layer, Fixture Text on the FIXTURE-TEXT layer. The layer can be turned on or off. If the layer is turned off, that layer and all the objects on it will no longer be visible in the floor plan. They can be restored to view by turning the layer back on.

Icon	Description
	Layer turned on
	Layer turned off

If it is desired to show fixtures without any accompanying text, the FIXTURES layer can be left turned on, while the FIXTURE-TEXT layer can be turned off. The fixture text can be returned to view at any time by turning the FIXTURE-TEXT layer back on.

Changing the Transparency of Objects

The transparency of objects can also be modified in the Layers dialog box. Each specific layer can have its transparency set to any value from 0 (completely opaque) to 100 (completely transparent). In the example below, a fixture and its shelves and products are shown fully opaque and then 75% transparent.

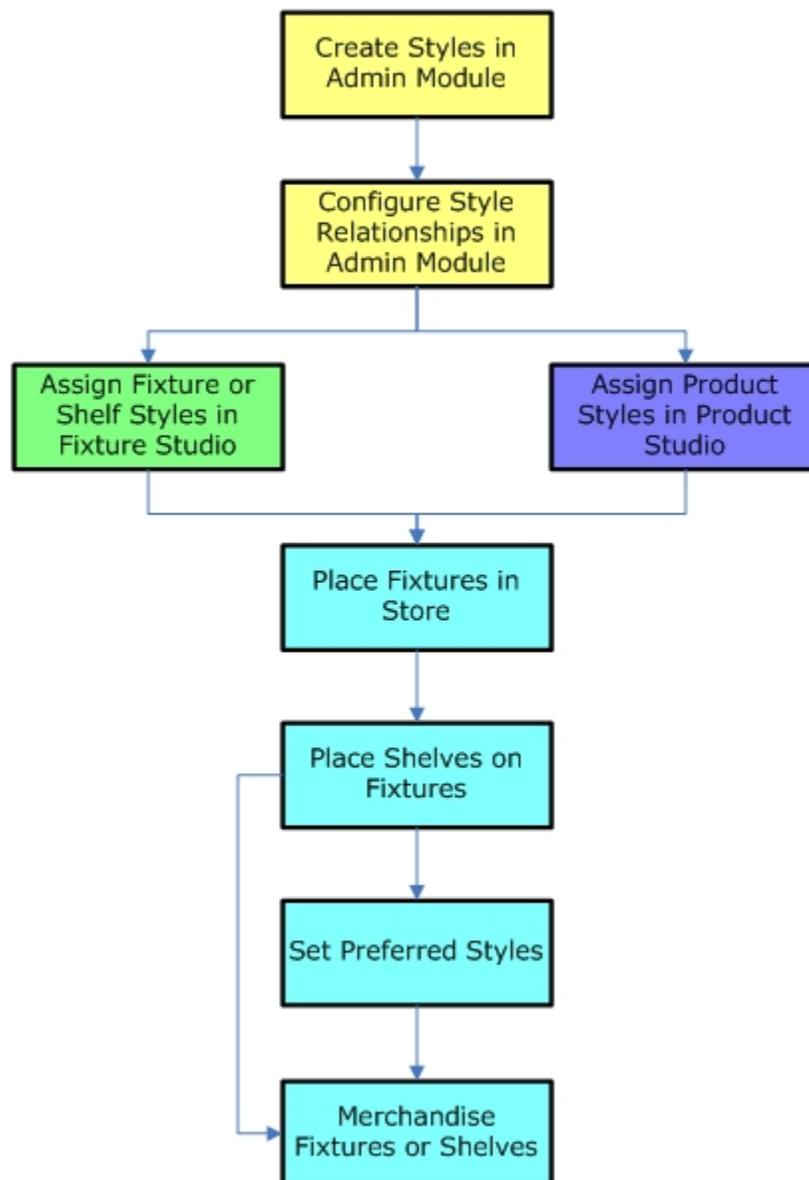


Styles in Merchandiser

Overview of Styles

Styles are used to define whether different types of objects fit together. They can be used to specify (for example) whether a shelf will fit on a fixture, or whether a product can be placed on a shelf.

Using Styles in Merchandiser requires settings to be configured in the Administration, Fixture Studio and Product Studio Modules, as well as in Merchandiser.



Each of these steps is discussed in more detail in the following topics.

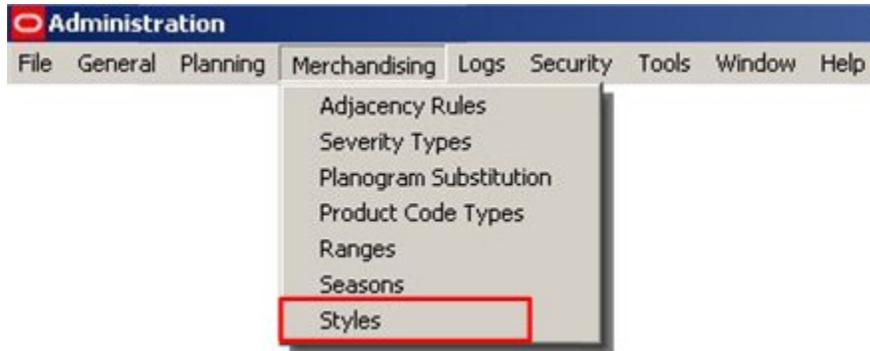
Configuring Styles

Configuring Styles

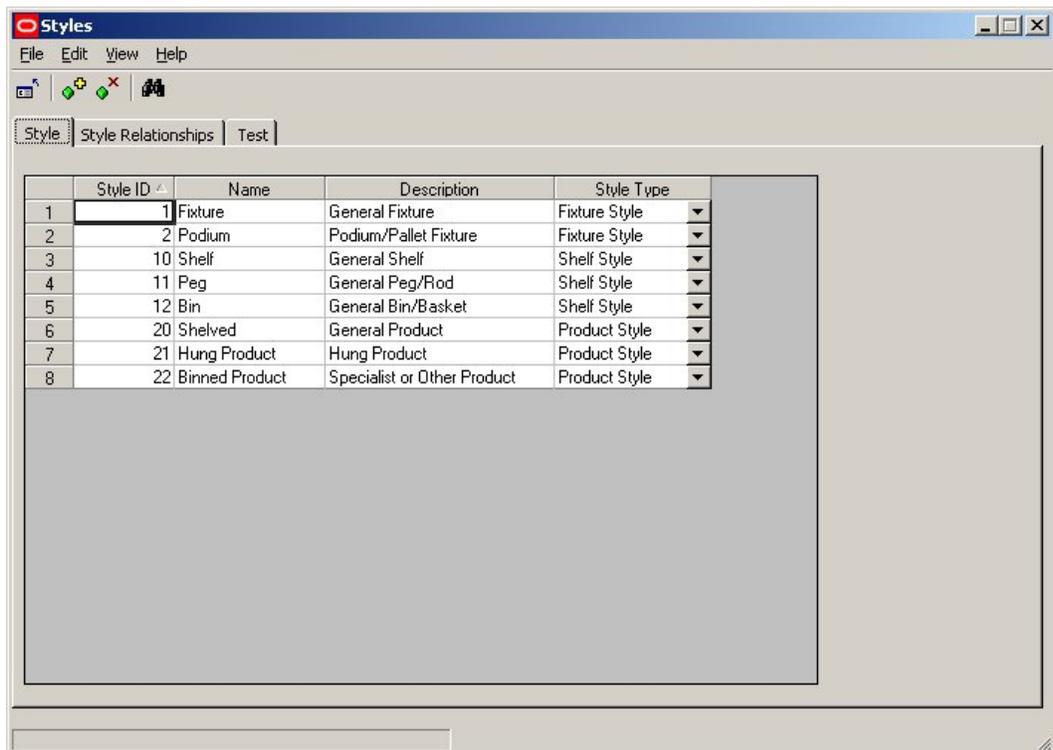
Styles can be configured from within the Administration Module.

Note: The Administration Module is only accessible to those with Administrator's privileges.

To access Styles, select the Styles option from the Edit pull down menu.



This will bring up the Styles dialogue box, which can be used to configure styles and the relationships between them.



Styles Tab

This allows Styles to be added or deleted from the list of available styles.

Style Relationships Tab

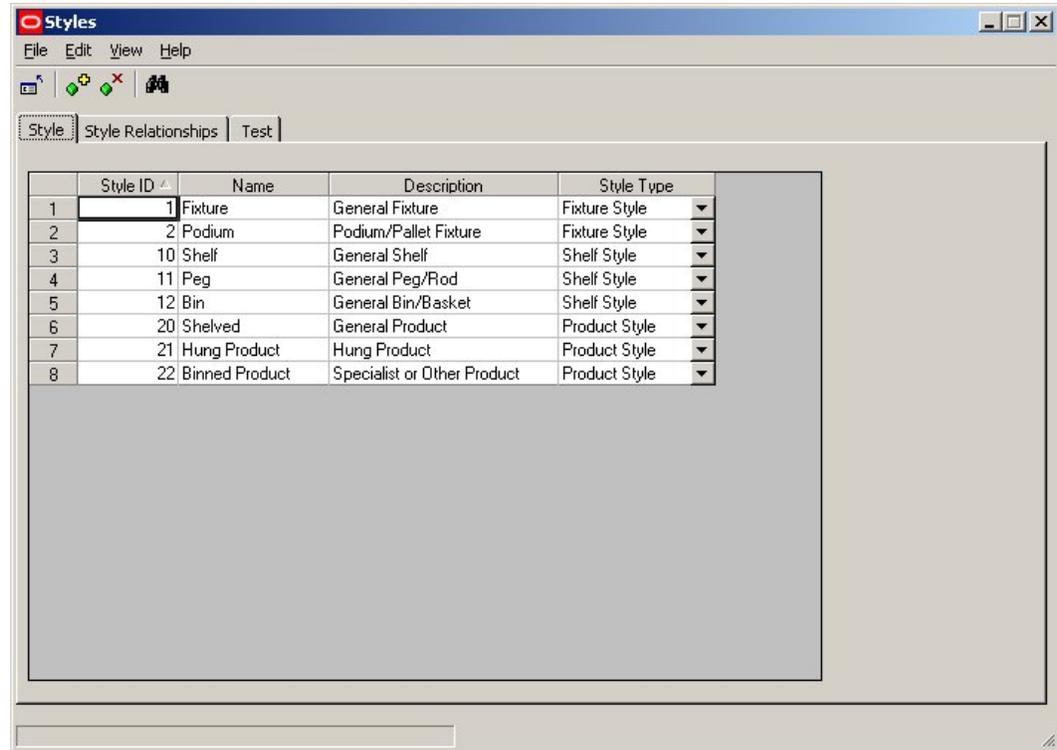
This allows relationships to be set up between different types of styles.

Test Tab

This is used to test what product styles can be placed on equipment and what equipment specific products can be placed on.

Adding and Deleting Styles

Adding or Deleting Styles is done by using the Style tab in the Styles dialogue box accessed from the Administration Module.



Icon	Description
------	-------------

	Add style
---	-----------

	Delete style
---	--------------

Adding a Style

To add a style, click on the Add Style icon. A new line will be added in the styles table.

The Style ID is a fixed, sequential number allocated when the style is created.

The Name and Description will initially read Style11 and Description21, where the number is that of the style being created. These can be edited to the style name and description required.

The Style type can be selected from a drop down list.

10	14	Multi	Multipacks allowed	Shelf Style
11	16	Consumer Pack	Consumer Pack	Product Style
12	17	Multipack	Multipack	Product Style
13	18	Pallet box	Pallet box	Product Style
14	20	Fixture pallet	Fixture only holds pallet boxes	Fixture Style

Module
 Fixture Style
 Shelf Style
 Product Style

Tip: Fixture, Shelf and Product styles are in current use. Module style has yet to be implemented.

Deleting a Style

Styles can be deleted by highlighting a style and clicking on the Delete Style icon. If not in use, the style will be deleted. If in use, a warning will appear.



Adding and Deleting Style Relationships

Style Relationships can be added and deleted by using the Style Relationships tab in the Styles dialogue box accessed from the Administration Module.

Styles				
File Edit View Help				
Style Style Relationships Test				
	Style ID	Name	Description	Style Type
1	1	Fixture	General Fixture	Fixture Style
2	2	Podium	Podium/Pallet Fixture	Fixture Style
3	10	Shelf	General Shelf	Shelf Style
4	11	Peg	General Peg/Rod	Shelf Style
5	12	Bin	General Bin/Basket	Shelf Style
6	20	Shelved	General Product	Product Style
7	21	Hung Product	Hung Product	Product Style
8	22	Binned Product	Specialist or Other Product	Product Style
9	23	Style23	Description23	Module

Icon	Description
	Add style relationship
	Delete style relationship

Adding a Style Relationship

To add a style relationship, first select the style types which it is desired to set up a relationship with.

This can be done from the drop down lists – for example it might be required to associate a Shelf style with a Product style.

Next, select the specific types of styles from the lists provided – for example it might be required to associate the Pallet Shelf Style with the Multipack product style.

Finally, click on the Add Style Relationship icon to add the relationship. It will then appear in the list of current relationships.

Deleting a Style Relationship

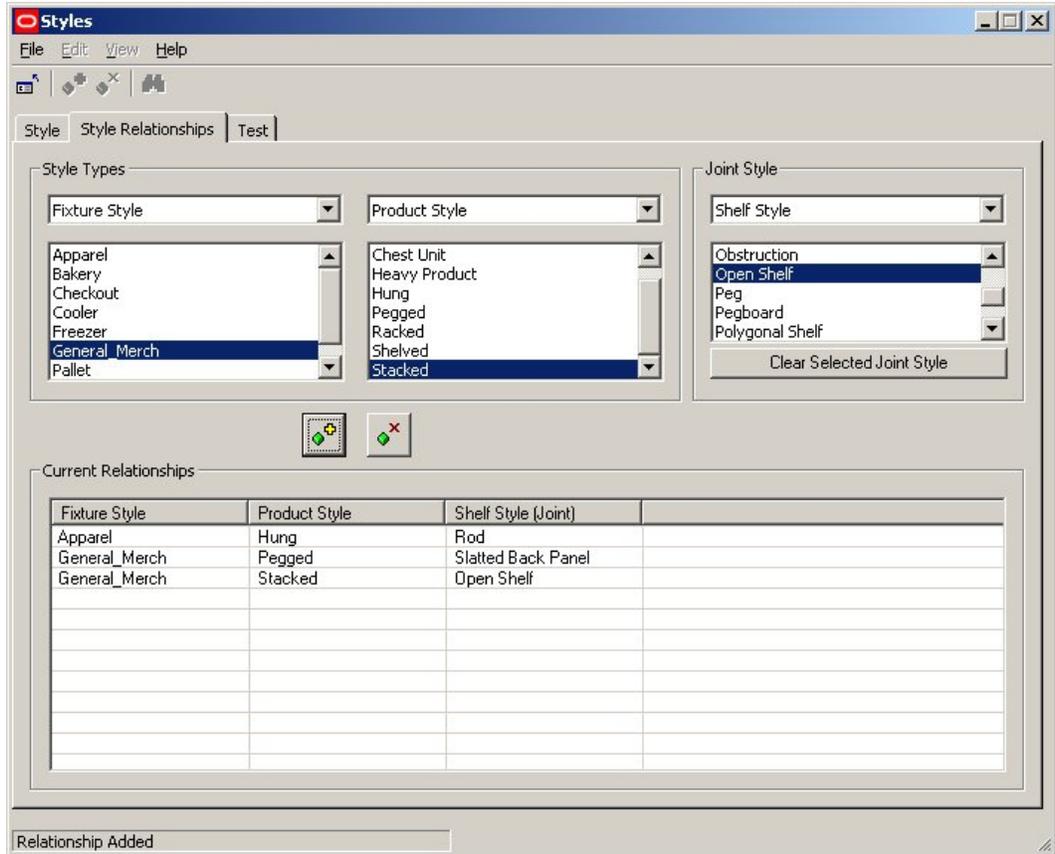
Styles relationships can be deleted by highlighting a style and clicking on the Delete Style Relationship icon.

Note: Style relationships in use can be deleted without any warning being given.

This will not affect any objects placed before the relationship was deleted, but if further objects are to be placed using this relationship, it must be reinstated before they are.

Adding and Deleting Joints

Adding and Deleting Joints is done by using the Style Relationships tab in the Styles dialogue box.



Icon	Description
	Add joint relationship
	Delete joint relationship

Adding a Joint

To add a joint, first select the style types which it is desired to set up a relationship with. First select Fixture Style in the left hand drop down list. Next select Product Style in the central drop down list. Finally select Shelf Style in the right hand drop down list. Next highlight the required styles in each of the three lists. (For example Metal as a Fixture Style; Hung as a Display Style and Peg as a Shelf Style. Finally, click on the Add Joint Relationship icon to add the relationship. It will then appear in the list of current relationships.

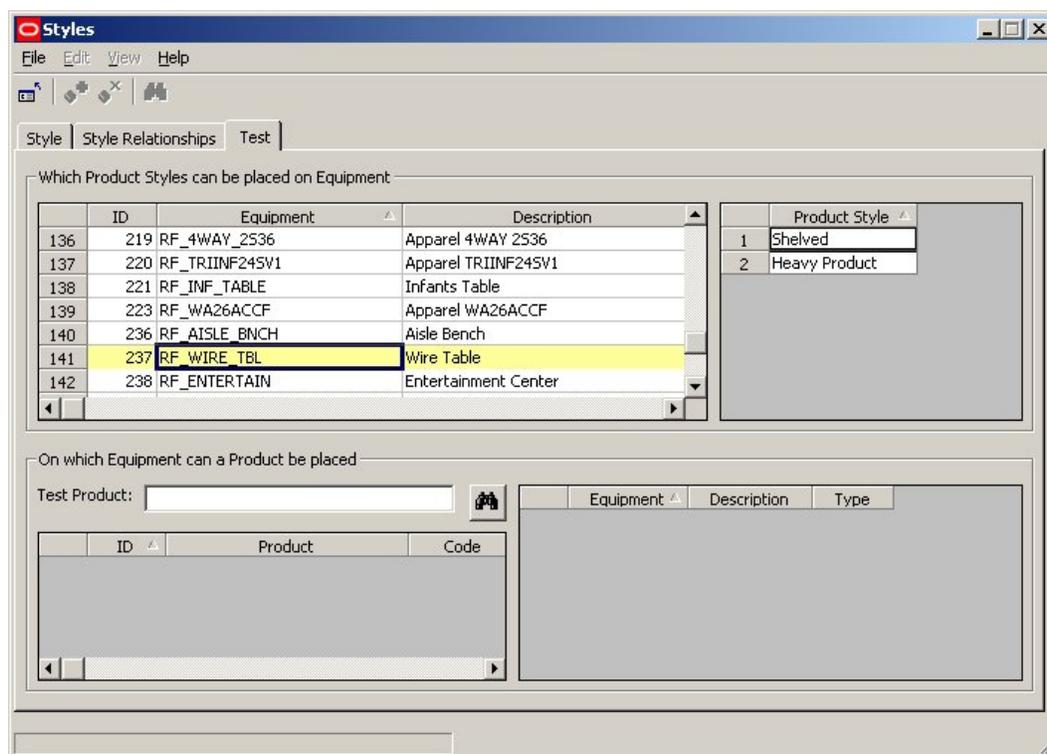
Deleting a Joint

Joints can be deleted by highlighting a style and clicking on the Delete Style Relationship icon.

Note: Joints in use can be deleted without any warning being given. This will not affect any objects placed before the relationship was deleted, but if further objects are to be placed using this relationship, it must be reinstated before they are.

Testing Style Relationships

Testing Style Relationships is done by using the Test tab in the Styles dialogue box.



Equipment

To see which product styles are associated with an item of equipment, click on that item of equipment in the list of available equipment.

The list of associated product styles will then display.

Note: The list of equipment can be sorted in ascending or descending order by clicking on the column headers.

Products

To see which equipment styles are associated with a product, click on that product in the list of available products.

The list of associated equipment styles will then display.

Products can be found by entering the product name or code and clicking on the search icon.

Note: The list of products can be also sorted in ascending or descending order by clicking on the column headers.

Joints

Joints can only be tested by trail placements on equipment.

Assigning Fixture, Shelf and Product Styles

Types of Styles

There are three broad classes of style (although others can be defined).

- Fixture styles
- Shelf styles
- Product styles

In additions there are:

- Joints

FIXTURE

Fixture style	Shelf style	Product style
Fixtures must have one or more fixture styles. The Fixture Style Relationships determine what shelves and products it can accept.	If shelving is to be placed on the fixture then a style relationship must exist between the assigned fixture style and the required shelf style.	For products to be placed a fixture, a style relationship must exist between the assigned Fixture Style and the required Product Style.

SHELF

Fixture style	Shelf style	Product style
For shelves to be placed on a fixture, a style relationship must exist between the assigned Shelf Style and the required Fixture Style.	Shelves must have one or more Shelf Styles. The Shelf Style Relationships determine what equipment the shelf can be placed on and what products it can accept.	For products to be placed on the shelf, a style relationship must exist between the assigned Shelf Style and the required Product Style.

PRODUCT

Fixture style	Shelf style	Product style
For products to be placed a fixture, a style relationship must exist between the assigned Fixture Style and the required Product Style.	For products to be placed on the shelf, a style relationship must exist between the assigned Shelf Style and the required Product Style.	Products must have one or more product styles. The Product Style Relationships determine what equipment and shelves the product can be placed on.

Note: Products can only be assigned styles at the Display Level. They cannot be assigned styles at SKU level and above.

JOINT

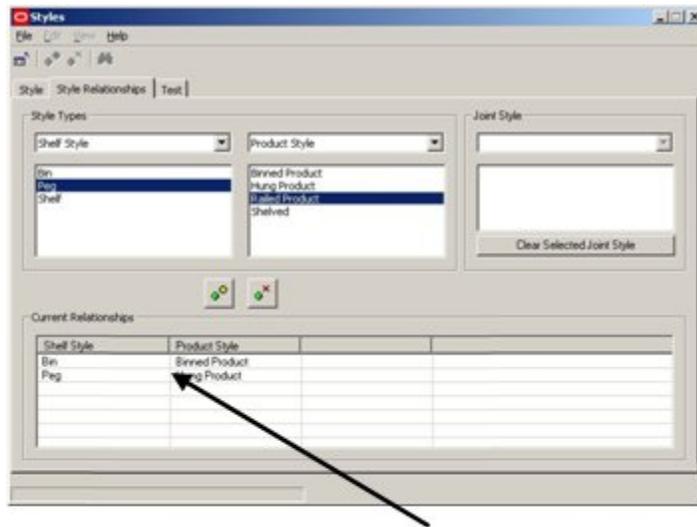
Allows products to be placed directly on fixtures, placing at the same time the associated shelf object.

Fixture style	Product style	Shelf style
For products to be placed a fixture, a style relationship (using a joint) must exist between the assigned Fixture Style and the required Shelf style.	For products to be placed on the shelf, a style relationship (using a joint) must exist between the assigned Shelf Style and the required Product Style.	Products must have one or more product styles. The Product Style Relationships determine what equipment and shelves the product can be placed on.

When creating a joint, if a fixture-shelf style relationship similar to the type being defined already exists it must be deleted before the joint (a combination of fixture, product and shelf styles) can be created.

Example

In the following Style Relationship (created in Administration) fixtures that have a Fixture Style of Metal assigned can accept shelves that have had an Open Shelf, Heavy Duty Shelf or Lateral Rod Shelf Style assigned.



Conversely, if a shelf has only had a Peg Slatted Style assigned it cannot be placed on a Fixture that has only has a Fixture Style of Metal assigned.

Fixture Styles

Each fixture should be associated with one or more Fixture Styles.

An example of a fixture style might be 'Metal'. This style might also be associated with fitting and shelves and can be used to indicate that particular items of equipment can be fitted together.

If product is to be placed directly on any fixture, it also requires a shelf style.

Shelf Styles

Each shelf must be associated with one or more Fixture Styles and also one or more Shelf Styles.

The Fixture Style is used to ensure the shelf fits onto a compatible fixture.

The Shelf Style only allows products with compatible styles to be placed.

Product Styles

Each product must be associated with one or more product styles. These product styles will determine the compatible shelves the product can be placed on.

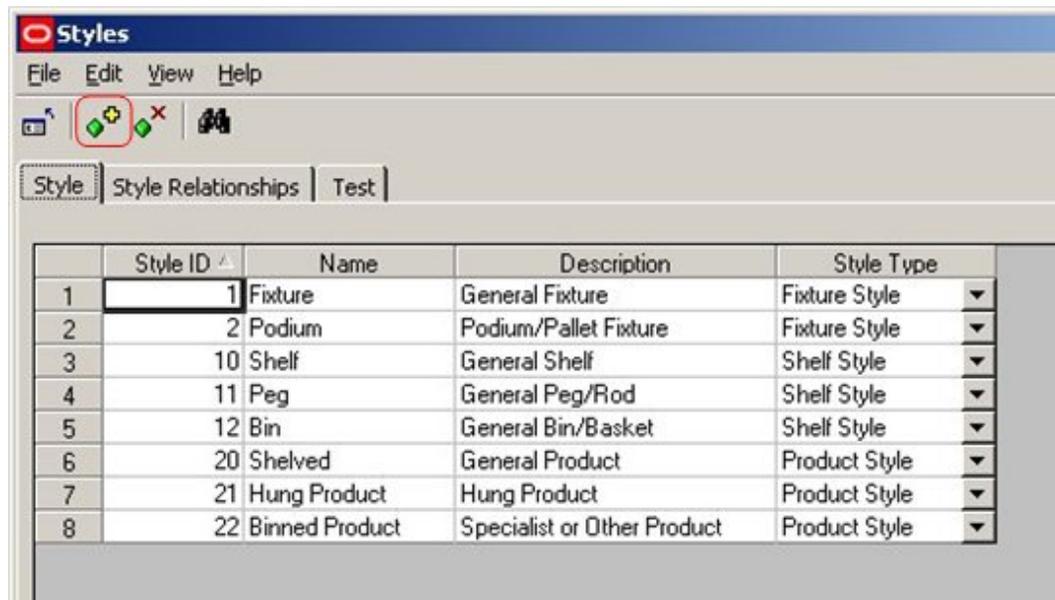
For example shirts could be available in both Hung and Folded Product (Display) Styles.

If a product is dragged into a shelf at item level then it will automatically select the correct Product Style. For example if shirts are dragged into an open shelf, they will be placed as Folded Shirts. If shirts are dragged onto a peg or bar, then they will be placed as Hung Shirts.

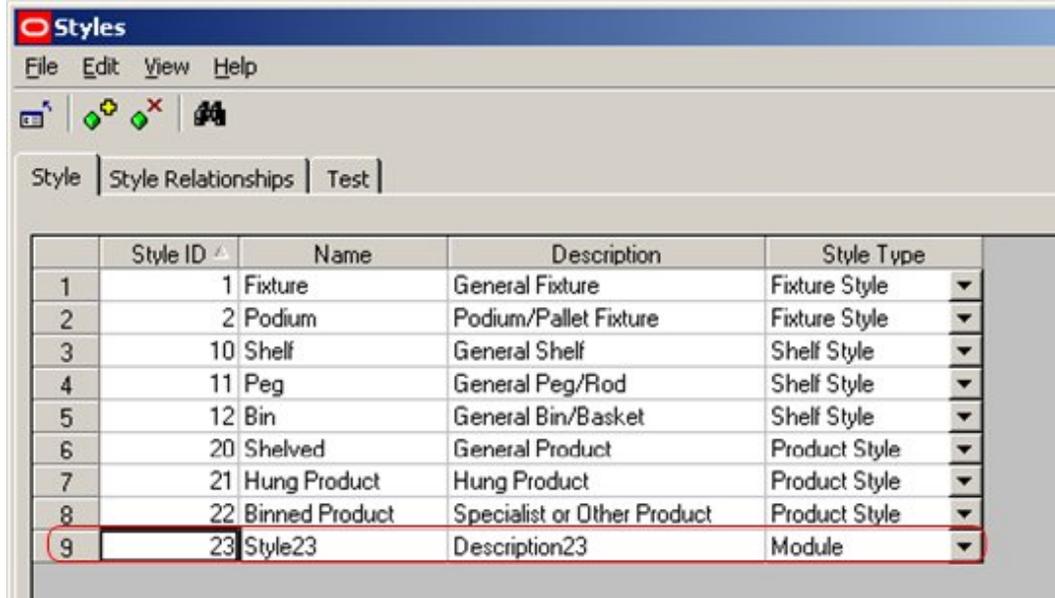
If product is dragged onto a shelf at Display Level then it can only be placed on equipment compatible with that style. For example Folded shirts cannot be placed onto a bar.

Adding Styles in Admin Module

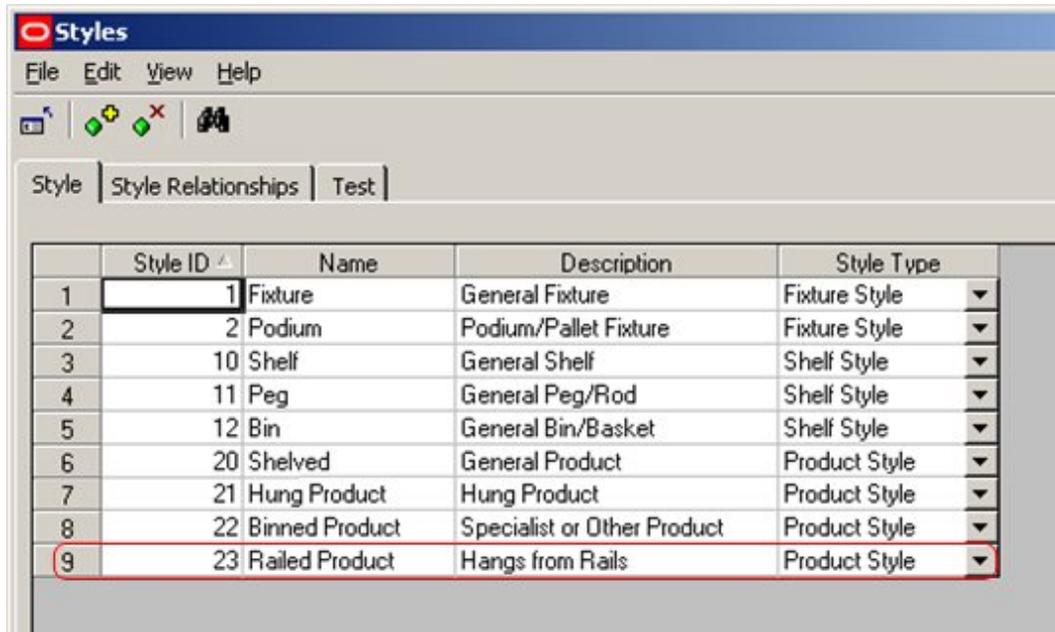
To add styles to the available list, open the Styles option in the Administration Module. Use the Style Tab and click on the Add Style Icon (circled).



This will add another line to the information grid (circled).



Edit this line until it has the desired information.

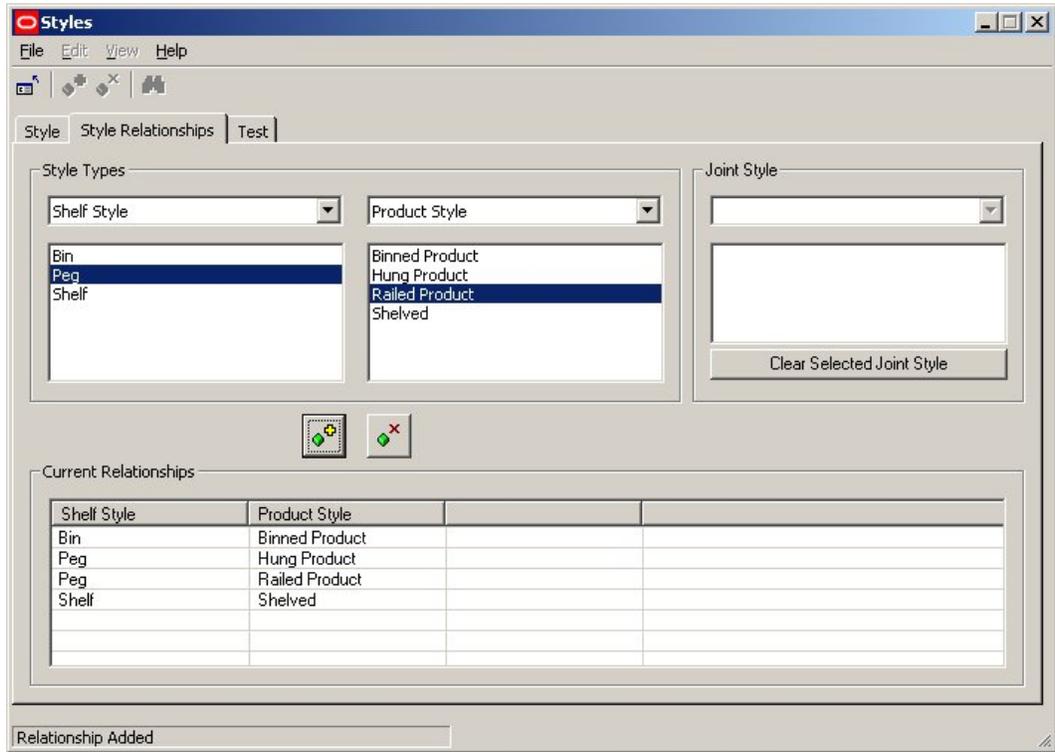


Other styles can be added as required. Finally, exit to save the styles.

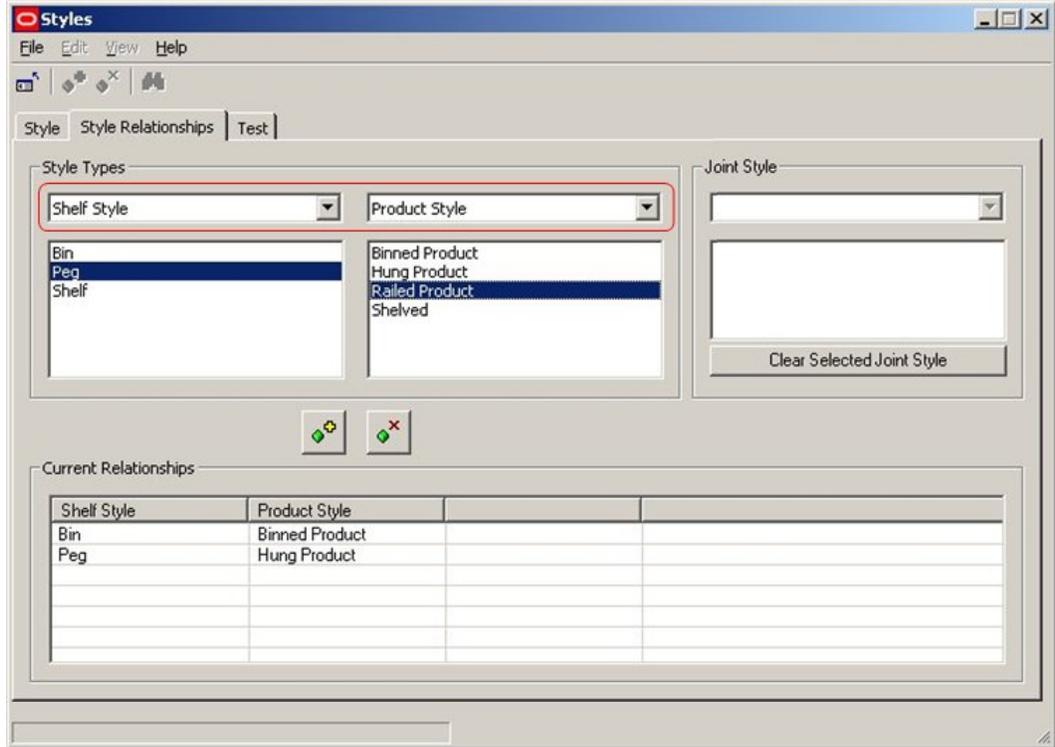
Warning: There is a known issue with the Styles option at present. Information is temporarily lost if a second style is added immediately after the first. To overcome this close the Styles dialogue box after each style is added and then re-open it to add the next.

Setting up Style Relationships in Admin Module

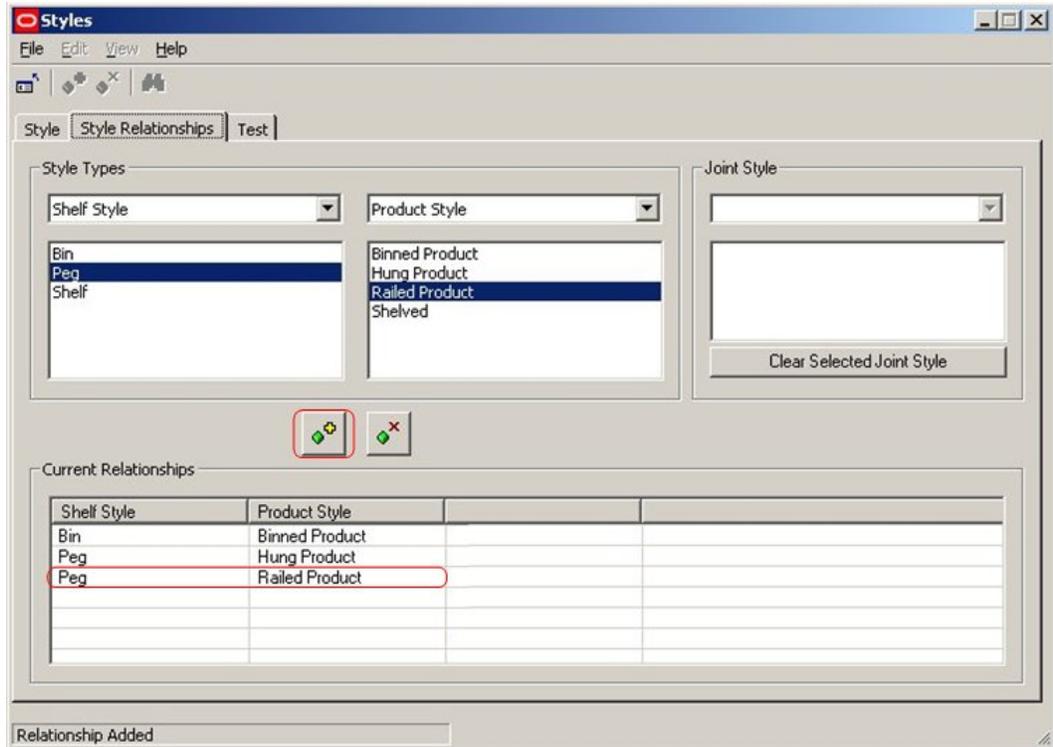
To **Add Style Relationships** to the available list, open the Styles option in the Administration Module. Click on the Style Relationship Tab.



Set the options as required.



Set the first of the Style Types to Shelf Style and the other to Product Style. Next, select the Peg style from the list of the available Shelf styles and the Railed Product style from the list of the available product styles. Finally, click on the Add Style Relationship icon. This will cause the Style to be added to the list of available Style relationships.



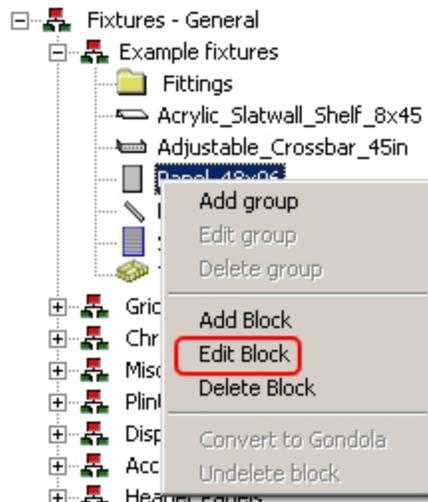
This means we can put these Railed Product styles of product onto any shelf object assigned the Peg style.

Note: If we need place products directly onto a fixture, a Style Relationship would be required between the Fixtures Style and the Product Style.

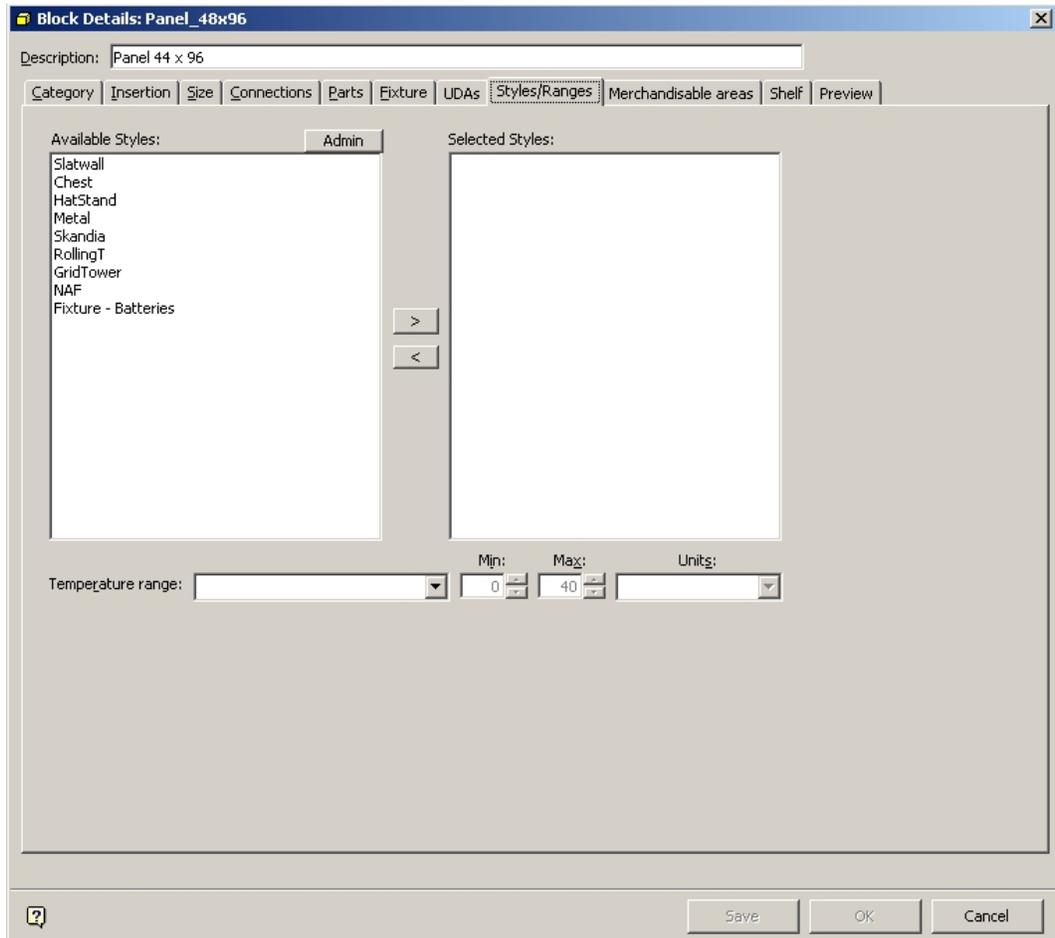
An example of this would be putting products of Boxed Style onto fixtures of Pallet Style.

Adding Style to Fixture in Fixture Studio Module

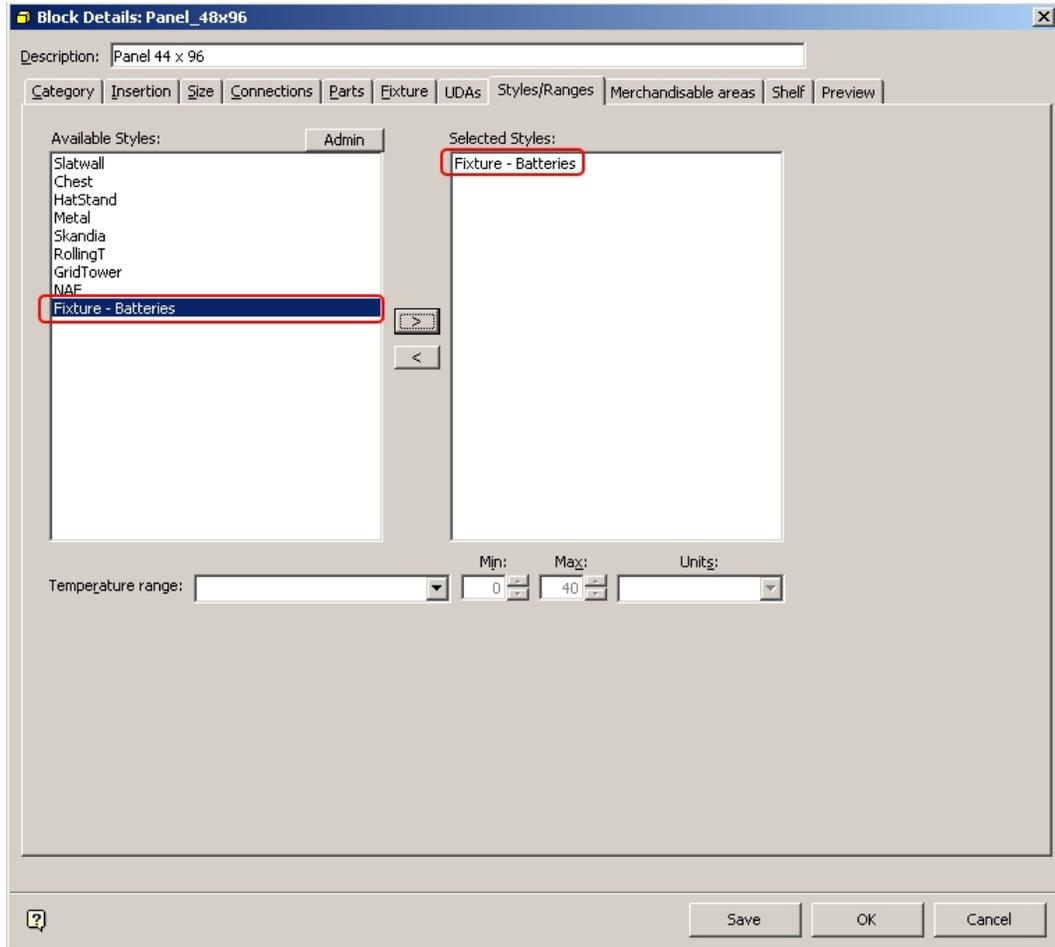
To Add a Fixture Style to a fixture, open Fixture Studio. Select the required fixture and right click to bring up the pop-up menu.



Click on Edit Block. This will bring up the block details dialogue box. Select the Fixture/Styles Tab.



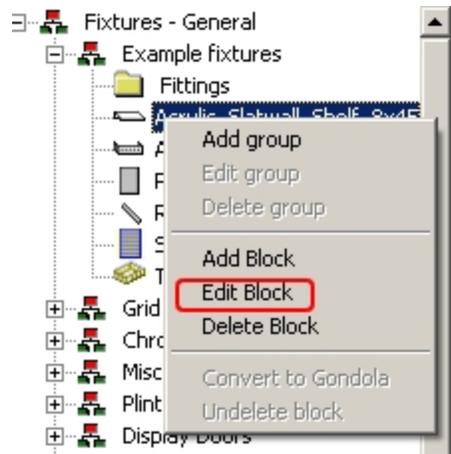
To add a Fixture Style (or styles) select the required style(s) from the list of available styles and move then over to the list of selected styles using the > arrow.



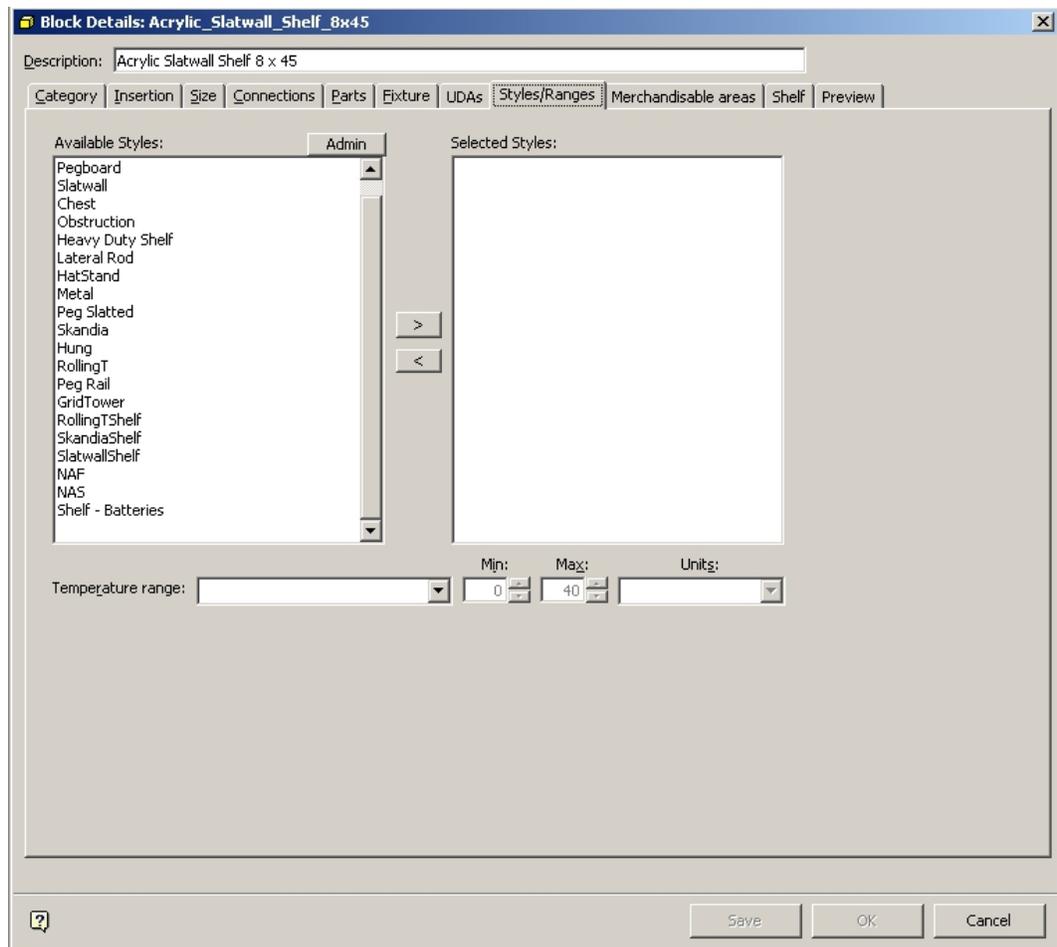
This means this fixture will now accept any shelves or products that have Style Relationships with the Fixture - Batteries Fixture Style.

Adding Styles to Shelf in Fixture Studio Module

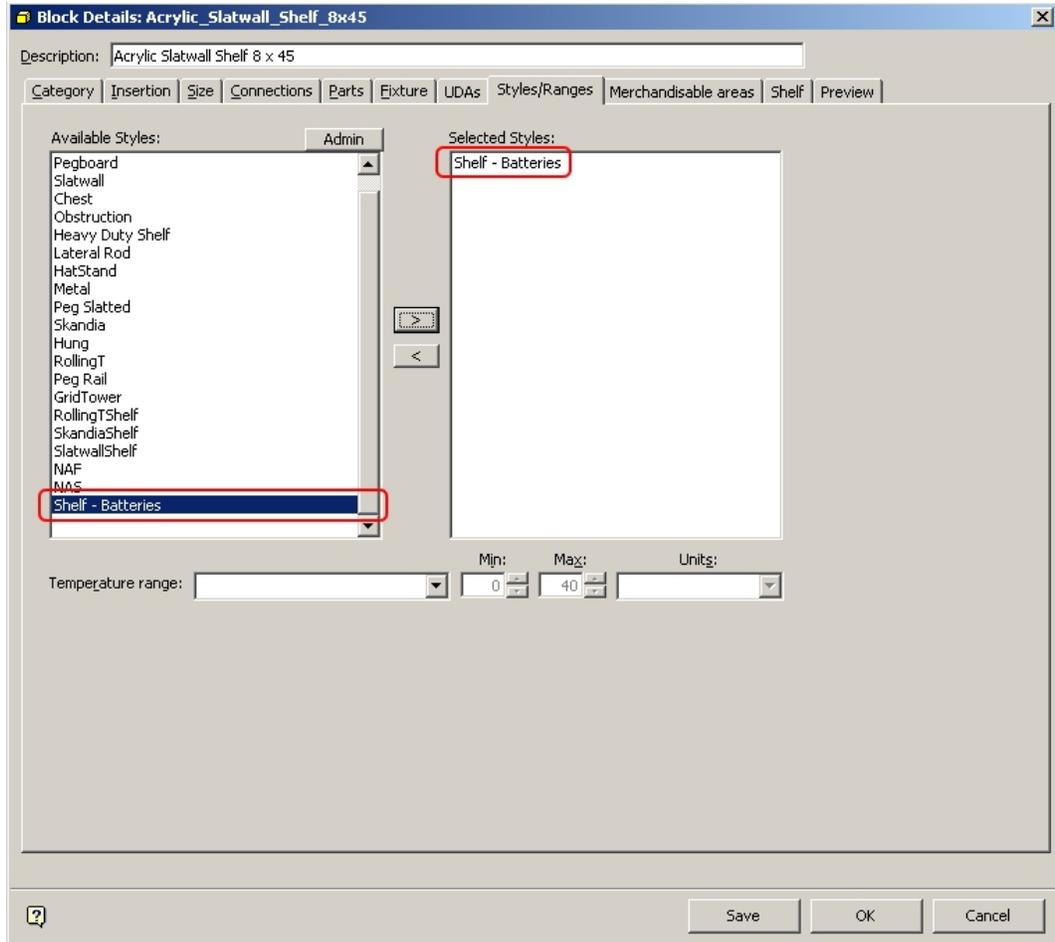
To Add Fixture and Shelf Styles to a shelf, open Fixture Studio. Select the required shelf and right click to bring up the pop-up menu.



Click on Edit Block. This will bring up the block details dialogue box. Select the Fixture/Styles Tab.



To add a Fixture Style (or styles) and a Shelf Style (or styles) select the required style(s) from the list of available styles and move them over to the list of selected styles using the > arrow.

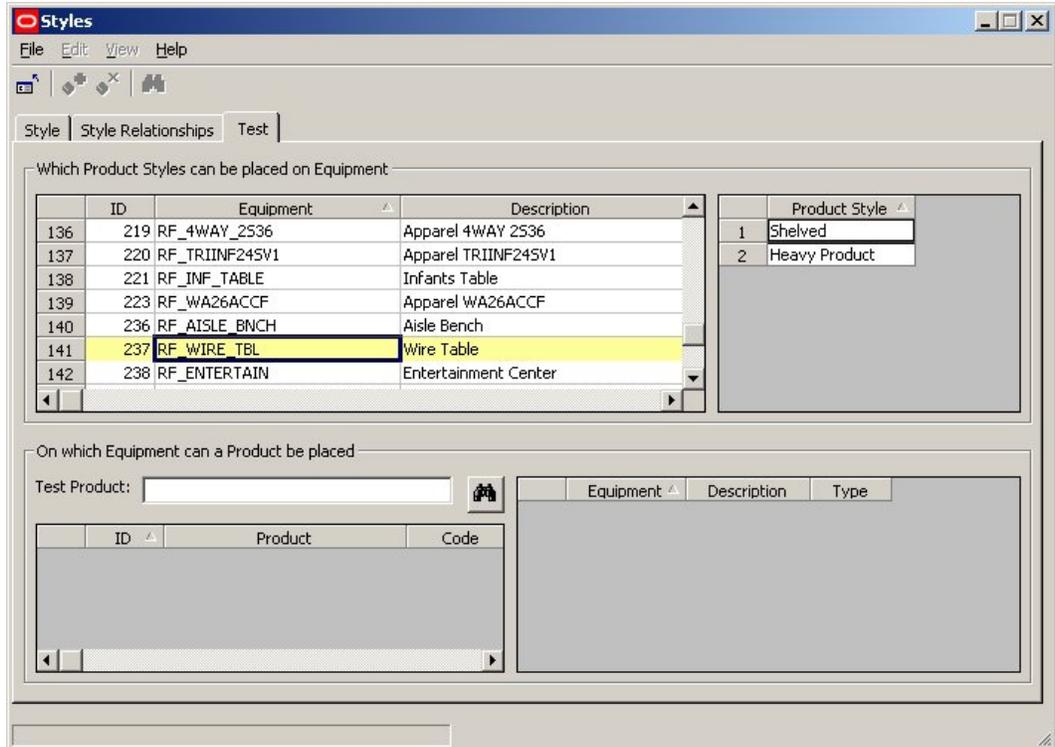


This means this shelf will now accept any fixtures or products that have style relationships with the Shelf - Batteries Shelf Style.

Similarly, a Fixture style can be selected to determine what fixtures the shelf can be placed on.

Testing Style Relationship

Testing Style Relationships is done by using the Test tab in the Styles dialogue box.



Equipment

To see which product styles are associated with an item of equipment, click on that item of equipment in the list of available equipment.

The list of associated product styles will then display.

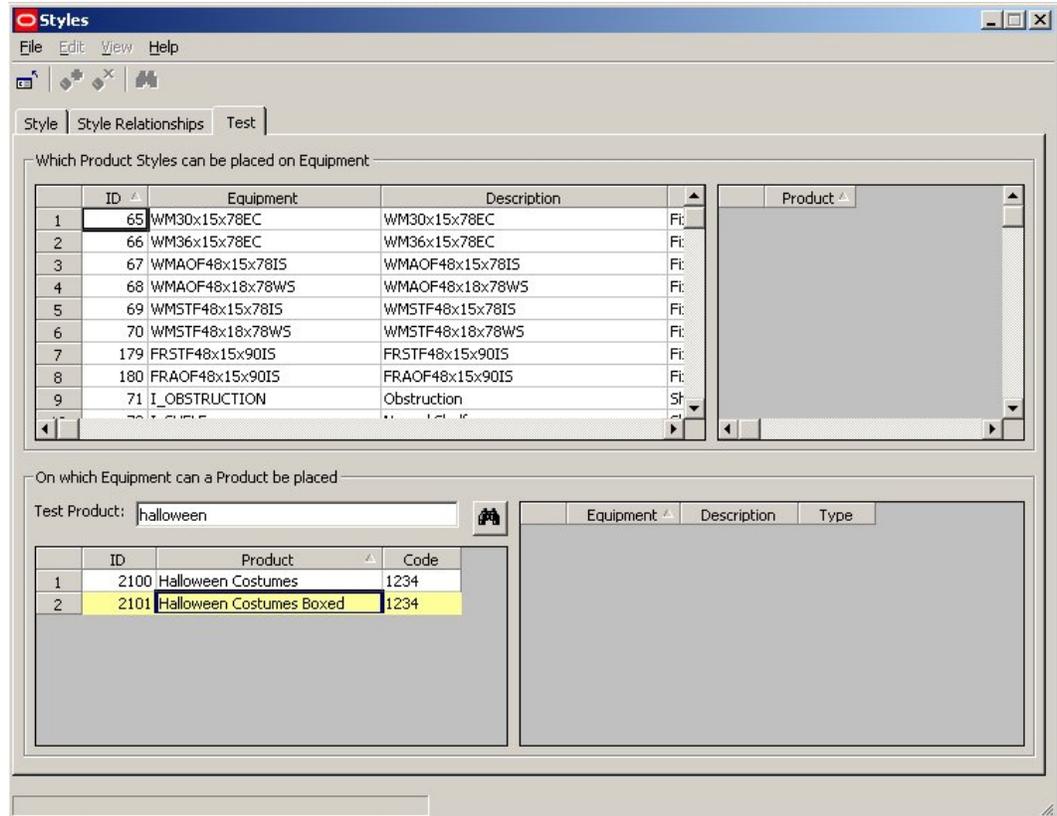
Note: The list of equipment can be sorted in ascending or descending order by clicking on the column headers.

Products

Product can be found by entering the product name or code and clicking on the search icon.

Note: Be as specific as possible in the search. The fewer items selected in the search, the faster the software will find the associated styles.

To see which equipment styles are associated with a product, click on that product in the list of available products.



The list of associated equipment styles will then display in the highlighted box to the right.

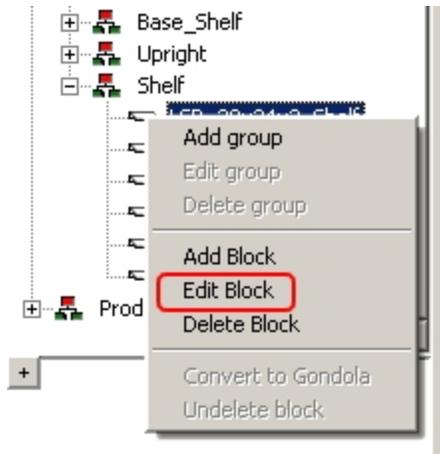
Note: The list of products can be also sorted in ascending or descending order by clicking on the column headers.

Joints

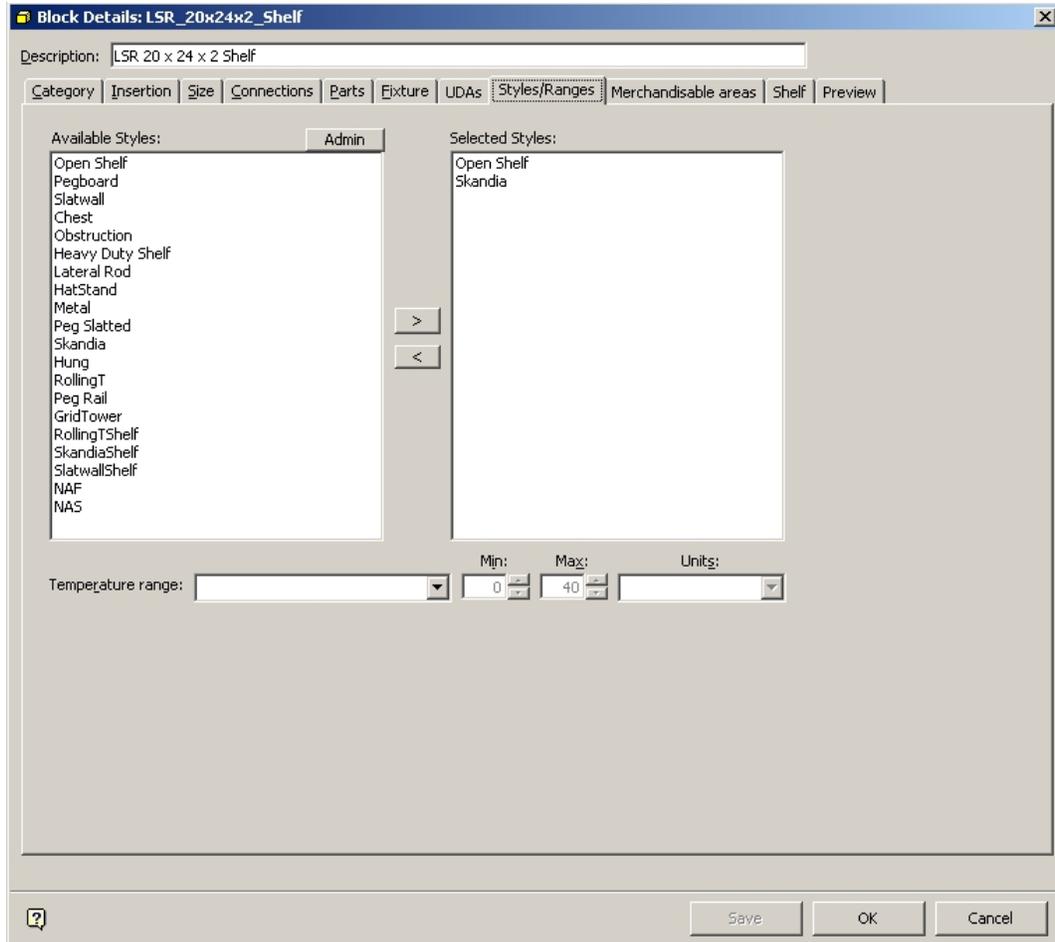
Joints cannot be tested in the Test Tab - they can only be verified by placing them on an item of equipment.

Assigning Fixtures and Shelf Styles

Styles can be assigned to fixtures and shelves from within Fixture Studio by highlighting them in the hierarchy and right clicking to bring up the pop up menu.



Clicking on Edit Block will bring up the Block Details dialogue box. The Styles/Ranges tab can then be used to specify the available styles for a particular object.



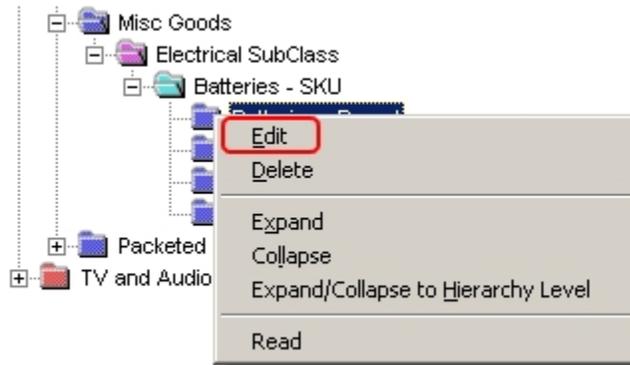
Styles can then be assigned or removed using the < and > arrows.

Note: A shelf object will require a fixture style to ensure it can be assigned to fixtures, and a shelf style to allow product to be assigned to it.

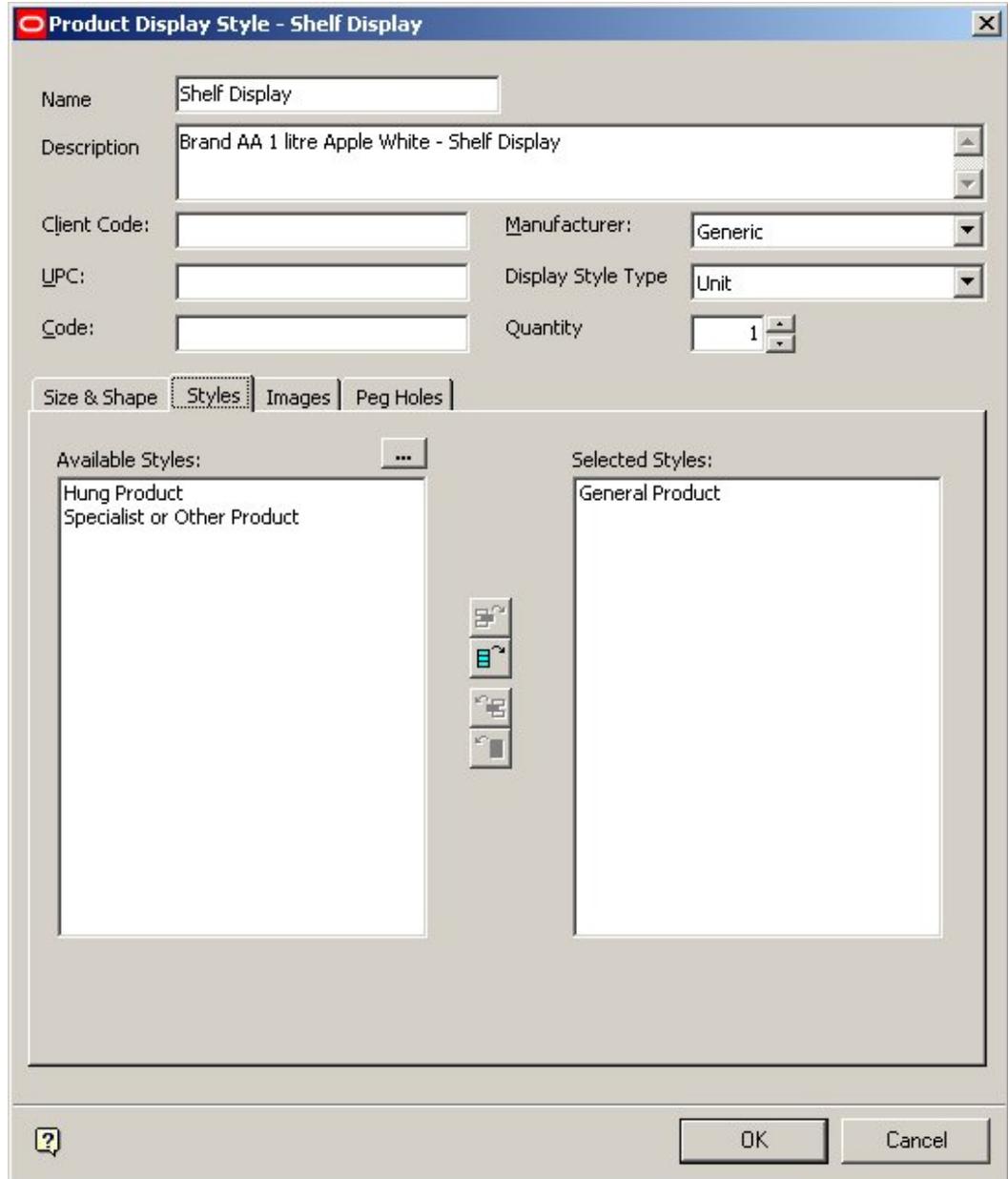
Adding Style to Product in Product Studio

To **Add a Product Style** to a product, open Product Studio. Select the required product and right click to bring up the pop-up menu.

Note: Products can only be assigned styles at the Display Level. They cannot be assigned styles at SKU level and above.



Click Edit. This will bring up the Product Display Style dialogue box. Select the Styles Tab.



To add a Product Style (or styles) select the required style(s) from the list of available styles and move then over to the list of selected styles using the appropriate icon.

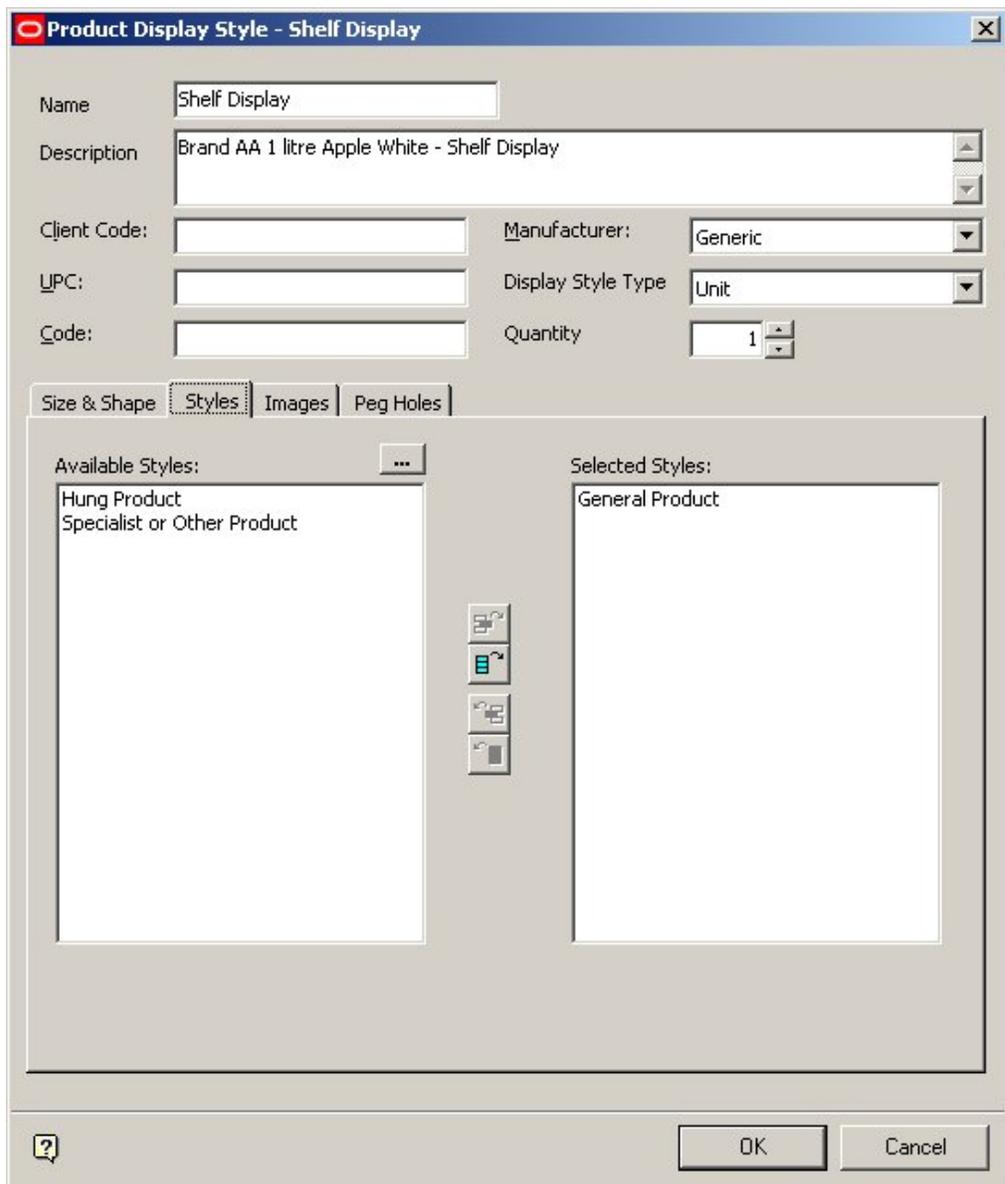
Assigning Product Styles

Note: Products can only be assigned styles at the Display Level. They cannot be assigned styles at SKU level and above.

Styles can be assigned to Products from within Product Studio by highlighting them in the hierarchy and right clicking to bring up the pop up menu.



Clicking on Edit will bring up the Product Display Style dialogue box. The Styles tab can then be used to specify the available styles for a particular product.



Styles can then be assigned or removed using the appropriate icons.

Using Styles in Merchandiser

Placing Fixtures

Primary Fixtures can be placed without reference to their assigned Styles. The only criteria for placing fixtures is that they have been assigned a primary object that places at floor level.

Placing Shelf Objects

Shelf Objects can only be placed if they meet two criteria.

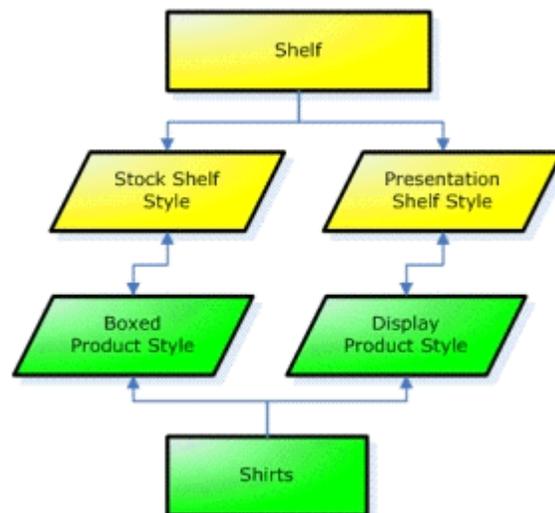
Connection Points	The connections points assigned to the shelf must be compatible with the connection points assigned to the fixture it is to be placed on.
Styles.	The Fixture Style assigned to the shelf must be compatible with the Fixture Style assigned to the fixture it is to be placed on.

Setting Preferred Styles

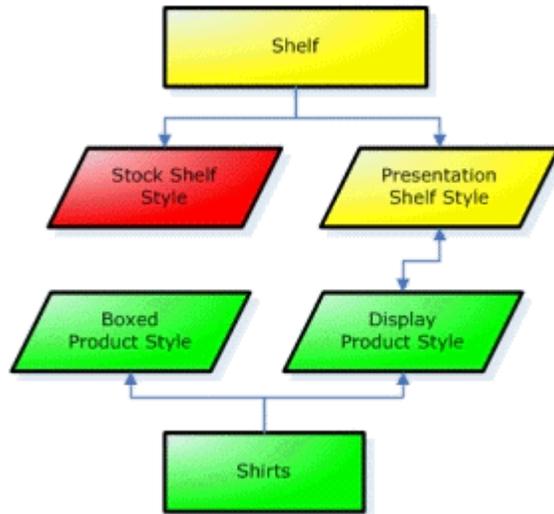
Because some objects can be associated with multiple styles, specific instances of shelves within the drawing can be given preferred styles.

For instance, a shelf could be associated with both a Stock shelf style as well as a Presentation shelf style; two display styles may then be defined for a particular product, a Display product style and a Boxed product style.

The Stock shelf style would be linked with the Boxed product style, and the Presentation shelf style would be linked with the Display product style. This would allow both the Boxed and Display version of the product to be placed on the shelf.

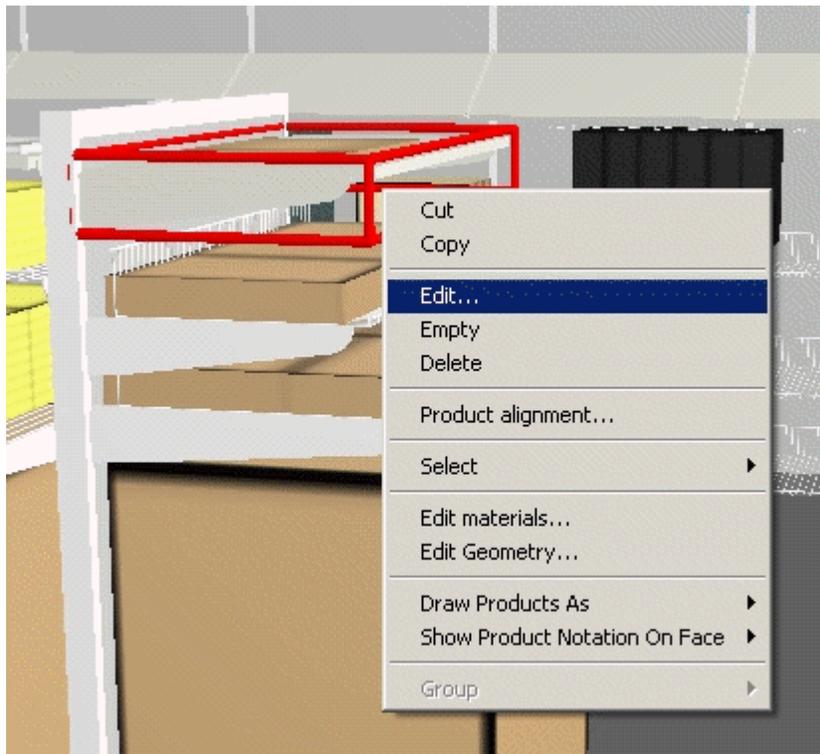


However, the user would be able to indicate the preferred style for a particular instance of a shelf as being Presentation, which would force the Display product to be placed for that particular shelf.



Using Preferred Styles

Preferred styles can be specified for a specific shelf or shelves by selecting those required. This is done by holding down the <Ctrl> key and left clicking on the desired shelves. The first instance of a selected shelf will be highlighted in Red, subsequent ones in blue.



Holding down the <Ctrl> key and right clicking will then bring up the pop-up Menu. Clicking on the Edit option will bring up the Edit Shelves dialogue box.

Edit shelf

Position:	Slot:	Angle:	Size: <input type="button" value="Default"/>
X: <input type="text" value="0"/>	<input type="text" value="0"/>	X: <input type="text" value="0.0"/>	X: <input type="text" value="900.00"/>
Y: <input type="text" value="0.00"/>		Y: <input type="text" value="0.0"/>	Y: <input type="text" value="385.00"/>
Z: <input type="text" value="573"/>	<input type="text" value="10"/>	Z: <input type="text" value="0.0"/>	Z: <input type="text" value="30.00"/>

Fixture - Height: 2900 Slots: 61 First Slot: 123 Spacing: 45
Width 900 Slots: 900 First Slot: 0 Spacing: 0

Material:

Preferred Style:

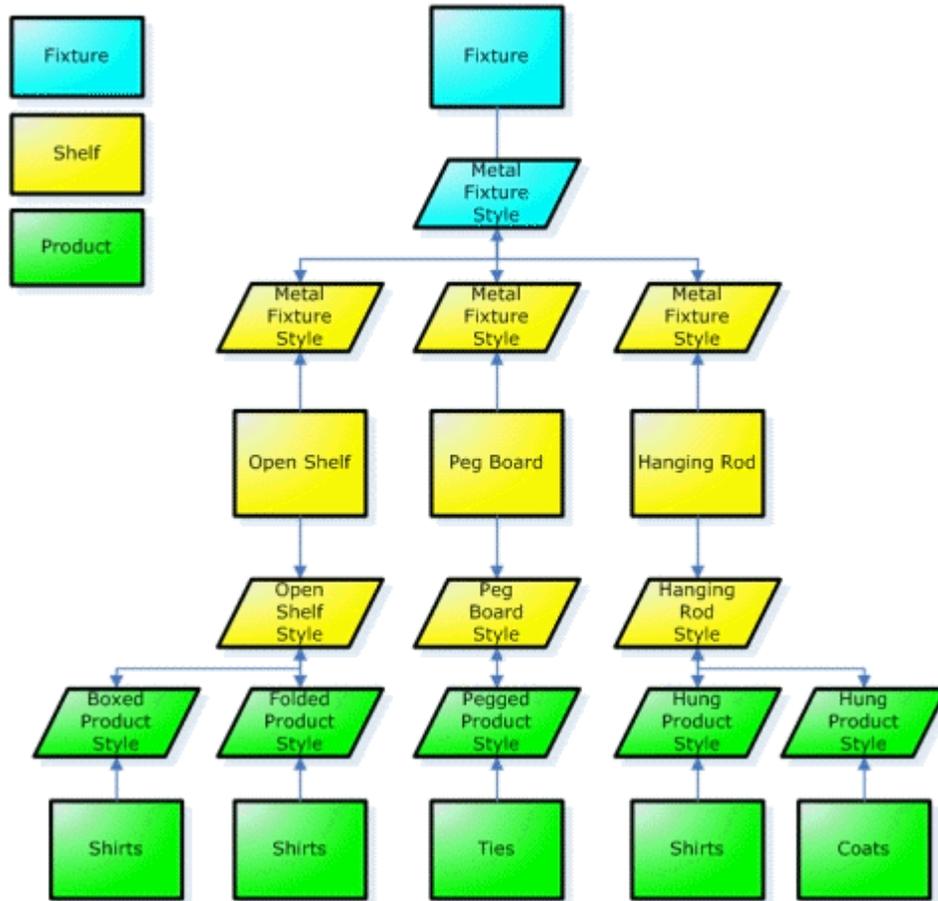
This can be used to set the preferences for that specific shelf or shelves.

If different types of shelves have been included in a multiple shelf selection, only preference types common to the different types will be shown.

If there are no common preference types, then the field in the preferences box will be blank.

Using Styles

The diagram below indicates how styles interrelate.



The fixture has been assigned a Metal Fixture Style.

The Open Shelf, Peg Board and Hanging Rod shelf objects have all been assigned Metal Fixture styles. This means any of these three types of shelf object can be placed on the fixture. If another type of shelf object (for example a slatted back panel) had been assigned the Lozier fixture style, it would not have a fixture style compatible with that assigned to the fixture itself, and could not be assigned to that fixture. The Open Shelf, Peg Board and Hanging Rod shelf objects have also all been assigned appropriate shelf styles.

The varying types of products have been assigned product styles. For example shirts have been assigned Boxed, Folded and Hung product styles. These styles determine what form of shelf object shirt can be placed on. For example shirts with a Hung product style can only be placed on Hanging Rods. Conversely, the Open Shelf has been configured to accept both Boxed and Folded shirt styles. Ties only have Pegged product style and are restricted to the Peg Board.

Note: Where an object has multiple styles they can set in order of preference using preferred styles.

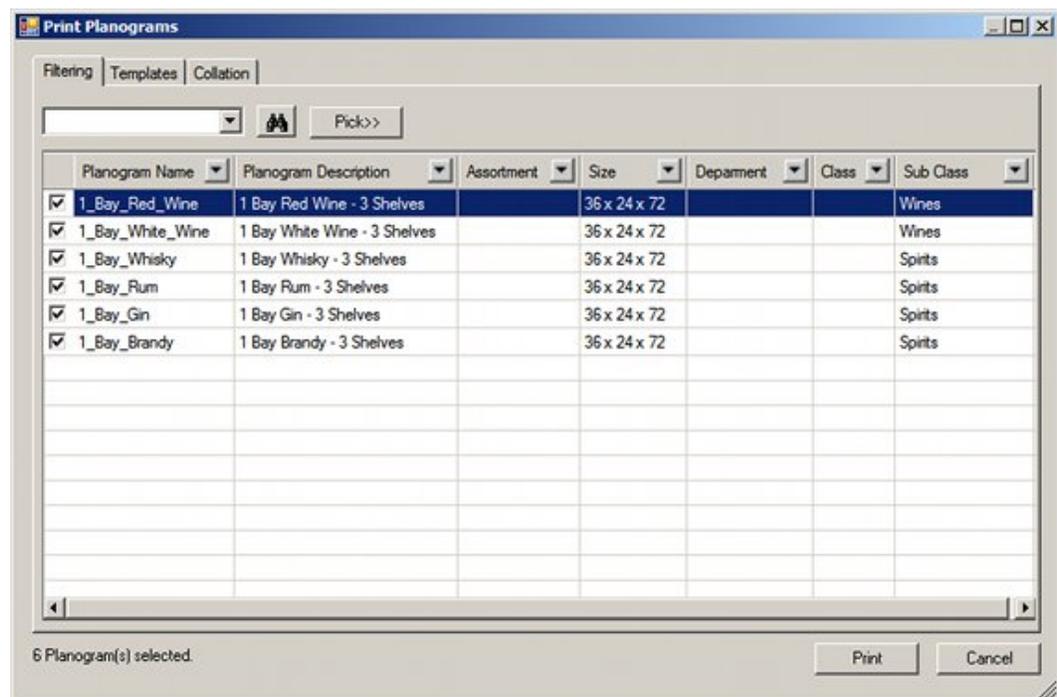
Planogram Printing

Overview of Planogram Printing

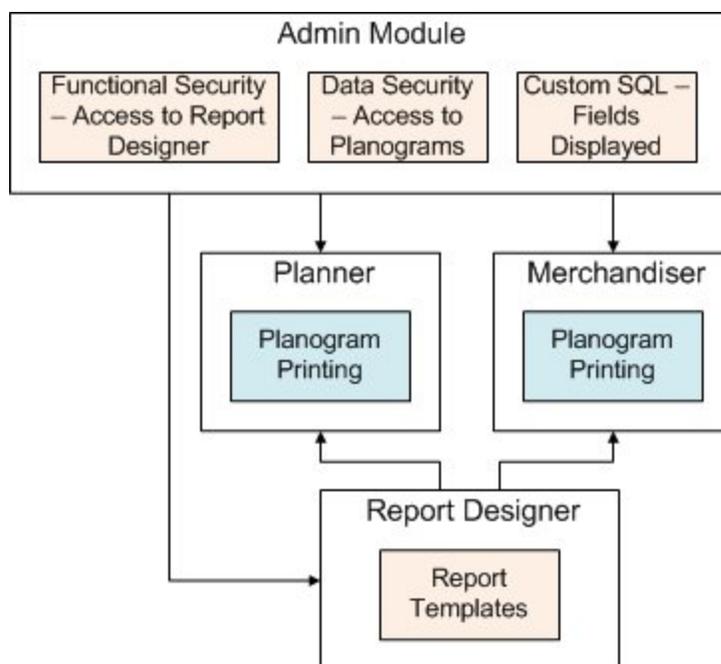
Planogram Printing allows users to select planograms in the currently active floor plan and print out information on the ones they have permissions to print.

Note: Users wishing to Publish the planogram design plan (output it in electronic or hard copy form with permanent changes) should use the Immediate Planogram Publishing option from the File menu.

Note: the default settings for this dialog box are derived from settings in the Planogram Publishing Configuration dialog box in the Administration module.



The basic method of operation is as follows:



1. Administration Module

Within the Administration Module:

- The planogram users have permissions to print are assigned in the Data Security dialog box - Planograms Tab.
- The fields that display in the Filtering Tab of the Print Planograms dialog box are configured in the Custom SQL dialog box.
- Planograms can be printed using report templates specified in the Report Designer module. Permission to access this module is specified in the Functional Security dialog box.

These settings determine what will appear in the Print Planograms dialog box (and the reports that will be available) when it is accessed in the Planner and Merchandiser modules.

Note: In order to access the Administration Module, users must have permission to do so.

2. Planner Module

The Print Planograms dialog box may be accessed from the File Menu - a floor plan containing planograms must previously have been opened. Users with permissions to access the Planner module automatically have permission to use the functionality.

3. Merchandiser Module

The Print Planograms dialog box may be accessed from the File > Print Menu - a floor plan containing planograms must previously have been opened. Users with permissions to access the Merchandiser module automatically have permission to use the functionality.

4. Report Designer

The Report Designer module is used to design report templates that can be specified for use in the Print Planograms dialog box. Permissions to access this module are assigned in the Functional Security dialog box in the Administration module.

Using Planogram Printing

The functionality is used as follows:

1. A floor plan containing planograms is opened in the Planner or Merchandiser module.
2. The Print Planogram option is selected from the File menu in the Planner or Merchandiser module.
3. The appropriate planograms are selected in the Filtering tab of the Print Planograms dialog box.
4. The report to use is specified in the Templates tab.
5. The sequence the selected floor plans are to be printed in is specified in the Collation Tab.
6. On clicking the Print button, the selected planogram reports will be printed on the default printer associated with the user's computer.

Accessing the Print Planogram Functionality

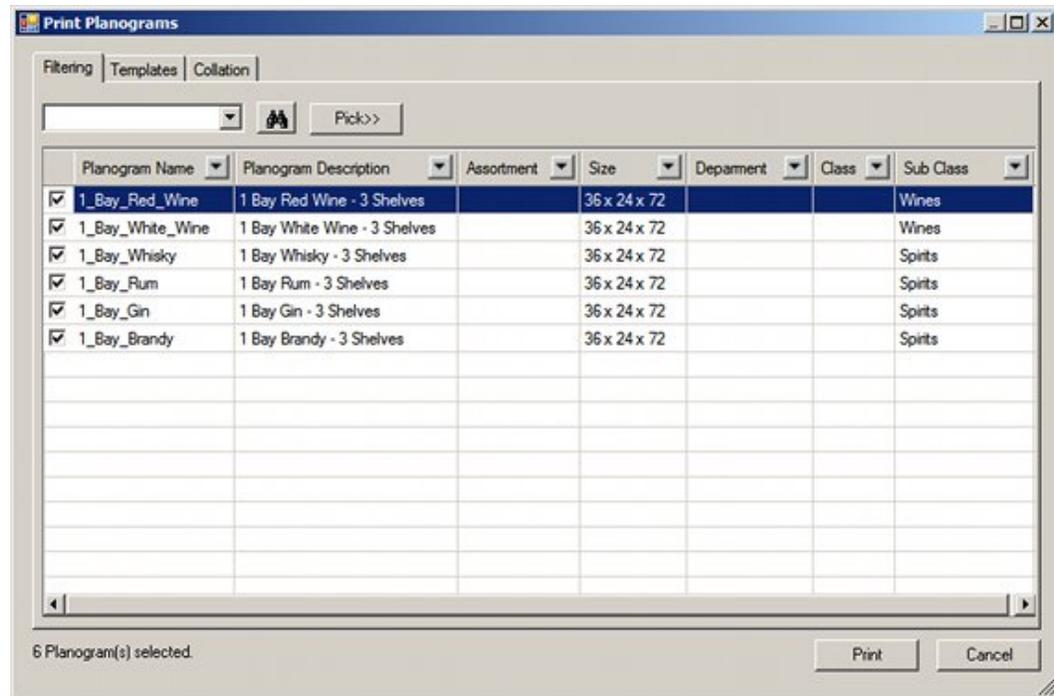
Note: before accessing the Print Planogram functionality, users should open a floor plan containing planograms.

The Print Planogram functionality is accessed from the File Menu > Plot option. Users with permissions to access the Planner module will automatically have permission to use the functionality.



Opening State of Functionality

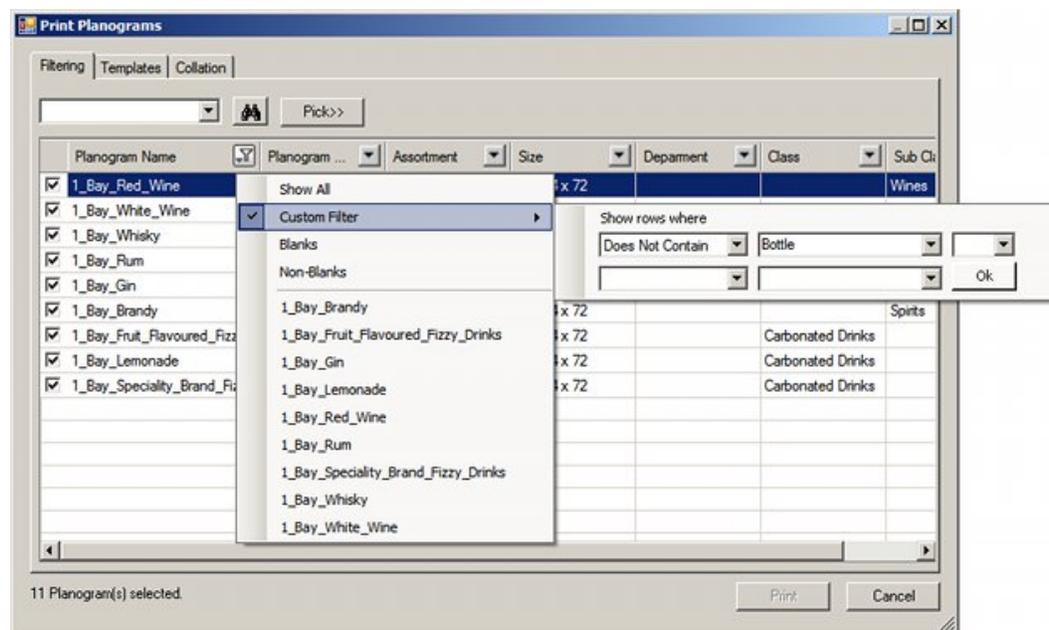
When the Print Planogram dialog box opens it will be populated with all planograms in the currently active floor plan. By default, they will be checked for selection.



Note: the columns that are displayed in the dialog box are configurable in the Custom SQL option available from the General Menu in the Administration module.

Using Filters in the Filtering Tab

The **Filtering Tab** is provided with a series of filters on each column. Setting a filter on one column will affect data in all other columns.



They are used as follows:

1. **Show All** - this option shows all results.

2. **Custom Filter** - this option allows users to set filters using Boolean logic. The options are:
 - **Equal to:** will return rows that are an exact match for the entered text.
 - **Not Equal to:** will return rows that do not match the text string
 - **Contains:** will return rows where part of the data matches the text string. (Uses implied wild cards).
 - **Does not contain:** will return rows where no part of the data matches the text string. (Uses implied wild cards).
 - **Begins with:** will return rows where the text string is an exact match for the start of the data.
 - **Ends with:** will return rows where the text string is an exact match for the end of the data.
 - **Does not begin with:** will return rows where the text string is not an exact match for the start of the data.
 - **Does not end with:** will return rows where the text string is not an exact match for the end of the data.
3. **Blanks** - column will be filtered to only show rows with null values.
4. **Non-Blanks** - column will be filtered to only show rows containing a value
5. **Results** - column will be filtered to only show the selected result.

The Templates Tab

The **Templates Tab** allows users to specify the template format to be used when printing planogram designs.

IMPORTANT NOTE: There is a known issue with planogram templates. The Planogram Publishing Configuration dialog box in the Macro Space Management Administration Module has an option to print associated planogram documents. At present this option is not available in the Print Planogram dialog box. Accordingly, the Template Tab in the Planogram Publishing Configuration dialog box should have the option set to **Use Template**.

Print Planograms

Filtering | **Templates** | Collation

Options

Use associated planogram document

Raise error if associated planogram document is missing

Use template if associated planogram document is missing

Use template

Use planogram's preferred template, if defined

Use selected templates from list below

Report Templates

▼ [Icon]

Name	Paper Type	Paper Name	Orientation	Created	Created By	Modified
<input checked="" type="checkbox"/> Basic Planogram Report	9	A4	P	02/11/2010	Phil Wells	02/11/2010
<input checked="" type="checkbox"/> Planogram Equipment Report	9	A4	P	01/06/2011	Phil Wells	01/06/2011
<input checked="" type="checkbox"/> Planogram Product Report	9	A4	P	01/06/2011	Phil Wells	01/06/2011

Print Cancel

The user can use a radio button to specify the form the report will take: an imported 'associated planogram document' or a template that is configured in the Report Designer Module.

1. Use Associated Planogram document - this option publishes the planogram design information using a pre-generated report using one of the following file formats: BMP, GIF, JPEG, JPG, PDF, PNG, TIFF or WMF. This report will be imported when a planogram is imported using Oracle Data Integrator (ODI). The Associated Document (if available) is specified in the Associated Document text box in the Details tab of the Planogram Design dialog box in the Merchandiser module.

There are two options (selected using the radio button) for when the pre-generated report is missing.

- a. Write an error to the AVTTB_PUBLISH_POG_LOG table. Information in this table can be read by means of a BI Publisher report or similar.
 - b. Use the default Report Designer template.
2. **Use Template** - this option allows the user to define the way the template from the Report Designer module is selected. There are two options (selected using the radio button):
- a. **Use Planograms preferred template, if defined** - this option is specified in the Preferred Template drop down list in the Details tab of the Planogram Design dialog box in the Merchandiser module.
 - b. **Use Selected Template from List Below** - this option can be set by checking items in the list of available templates. One or more templates may be selected. If multiple templates are selected, the name of the template will be added to the file name in brackets - for example 1_Bay_Mixed_Fizzy_Drinks (Basic Planogram Report).pdf

If necessary, the list of templates can be searched by entering a text string into the drop down list, then clicking the **Find** button. (Actual or implied wild cards can be used). Each click of the Find button will cause the search engine to move forward through the matching results until no results are left.

Note: The last 10 text searches can be selected using the drop down list in the text box.

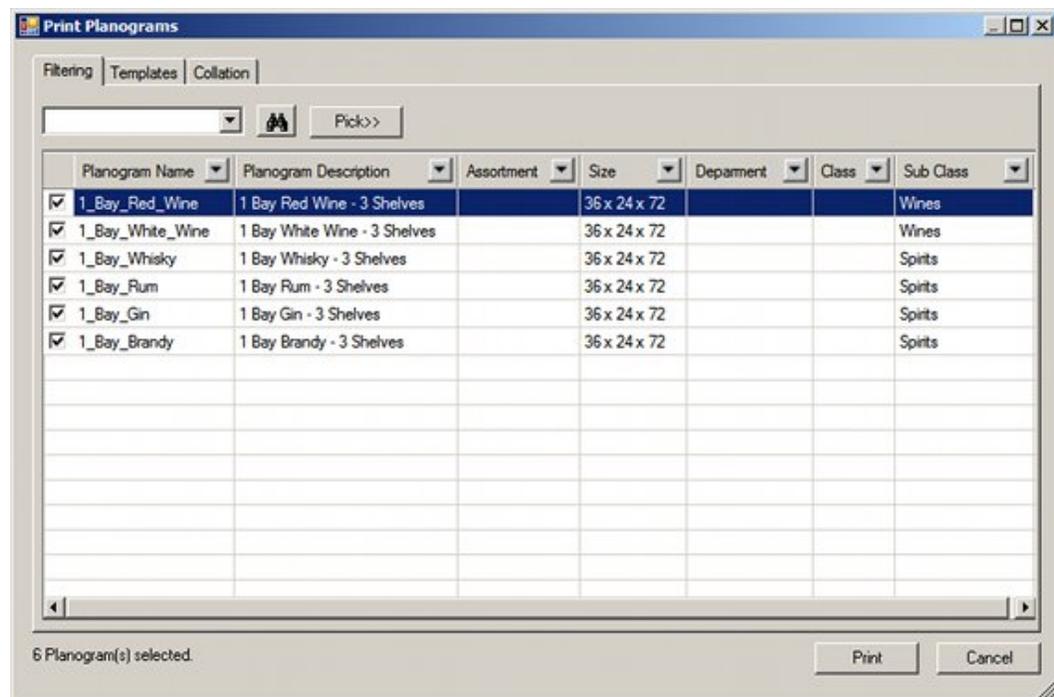
The Filtering Tab

The **Filtering tab** enables the user to select the Planograms to print. It will populate with all planograms in the currently active floor plan.

Note: If there are multiple instances of a planogram in a floor plan, only a single entry will appear in the list of planograms.

The Filtering tab returns a list of all planograms in the database. If only specific zones have been loaded into the floor plan when it was opened, the Filtering tab will also contain the planograms in the zones that were not loaded.

Note: The option to only load specific zones is controlled by the Express Load option in the Merchandiser tab of the Configuration module.



Find

The Find option can be used by typing text into the text box then clicking the Find icon. Each successive click will move the user to the next floor plan matching the text being searched for. When no more matches are available, a confirmatory dialog box will appear.



Find operates with explicit or implied wild cards. The explicit wild cards are:

Wild Card	Description
*	Any characters
?	Any character in this position
#	Any number in this position

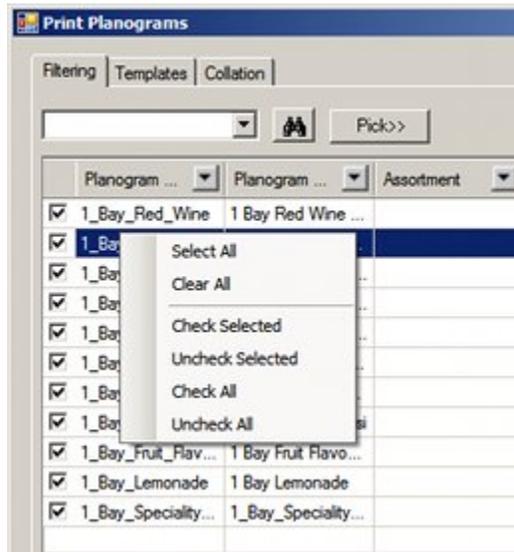
If explicit wild cards are not used, implicit wild cards will be assumed. For example the text entry 'Wine' will be treated as '*wine*' and will find I Bay Red Wine, 1 Bay White Wine, etc.

Pick (Planner Only)

Pick takes the user to the currently active floor plan. They can then use AutoCAD selection methods to select specific planograms. When the AutoCAD selection is completed with a right mouse click, the user will be returned to the Print Planogram dialog box and the dialog box will populate with the selected planograms.

Right Click Menu

The right click menu provides a quick way of modifying the selected items.



- **Select All** will select (but not check) all rows of data
- **Clear All** will deselect (but not uncheck) all rows of data
- **Check Selected** will check all rows of selected data
- **Uncheck Selected** will uncheck all rows of selected data
- **Check All** will check all rows of data
- **Uncheck All** will uncheck all rows of data
- **Paste** allows users to paste a carriage returned list of floor plan identifiers from the Windows clipboard. All rows in the dialog box that match the pasted information will be checked.

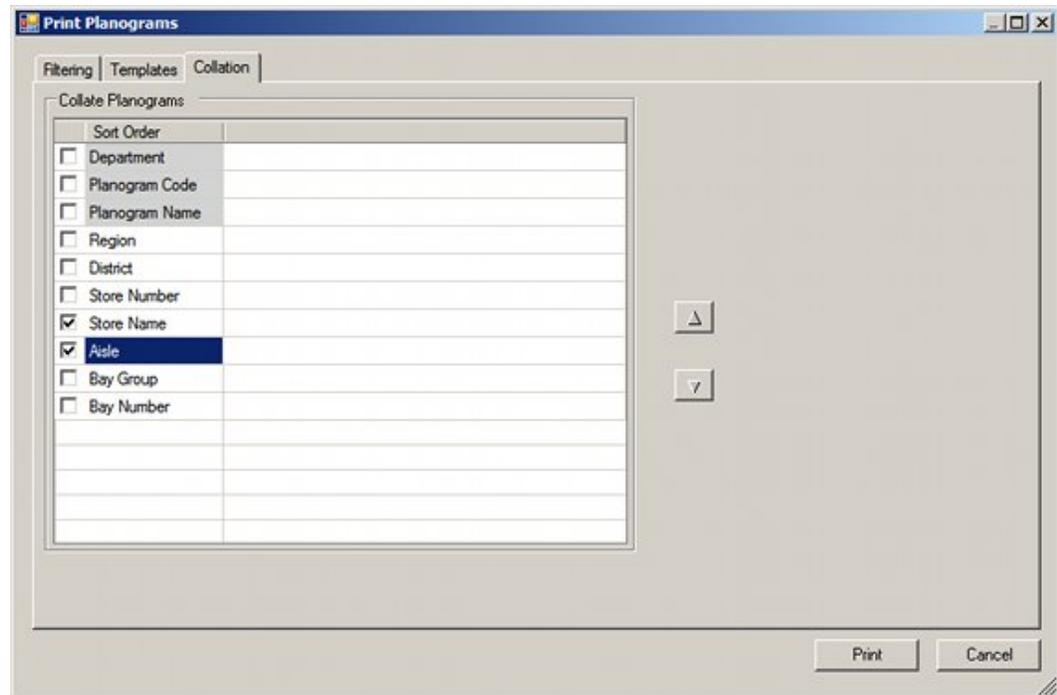
Selecting Planograms to Print

Planograms may be selected for printing by ticking the appropriate check box.

The Collation Tab

The Collation Tab allows users to specify the sequence the planogram designs will be published or printed in. Its main use is in printing hard copy versions of the designs where the sequence they are printed in makes it easier to sort and distribute them after printing.

At least one collation option must be selected, or the tab will show as having an error.



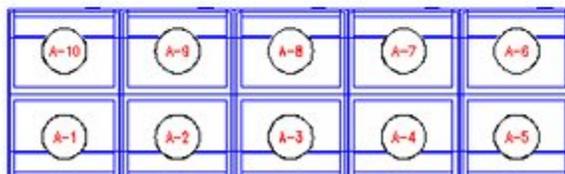
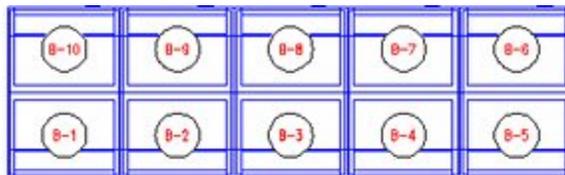
The available options can be ordered by highlighting them, then using the up or down arrows. The options are made active by using the check boxes.

- **Region** is a specific type of cluster set in the Cluster type drop down list in the Cluster dialog box in Store Manager.
- **District** is a specific type of cluster set in the Cluster type drop down list in the Cluster dialog box in Store Manager.

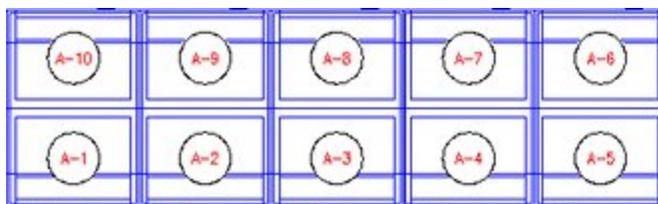


- **Store Number** is the Store Code in the Store dialog box in Store Manager.
- **Store Name** is the Store Name in the Store dialog box in Store Manager.

- **Department** is the department (zone) in the floor plan the planogram is associated with.
- **Aisle** is the aisle the planogram is associated with. For this option to operate, aisles must first be drawn in the floor plan in the Planner module. In the example below, Aisle F-1 has been drawn between two runs of fixtures.



- **Bay Number** is the bay number associated with the fixtures the planogram is placed on. For this option to operate, the fixtures in the floor plan must previously have been bay numbered.



- Bay Group is the Name assigned to a number of fixtures sharing a common characteristic. It is assigned in the Name field of the Bay Numbering dialog box in the Planner module.

- Planogram Name** is the name of the planogram. This is set in the Name field of the Planogram Design dialog box in Merchandiser.
- Planogram Code** is the code for the planogram. This is set in the Client Code field of the Planogram Design dialog box in Merchandiser.

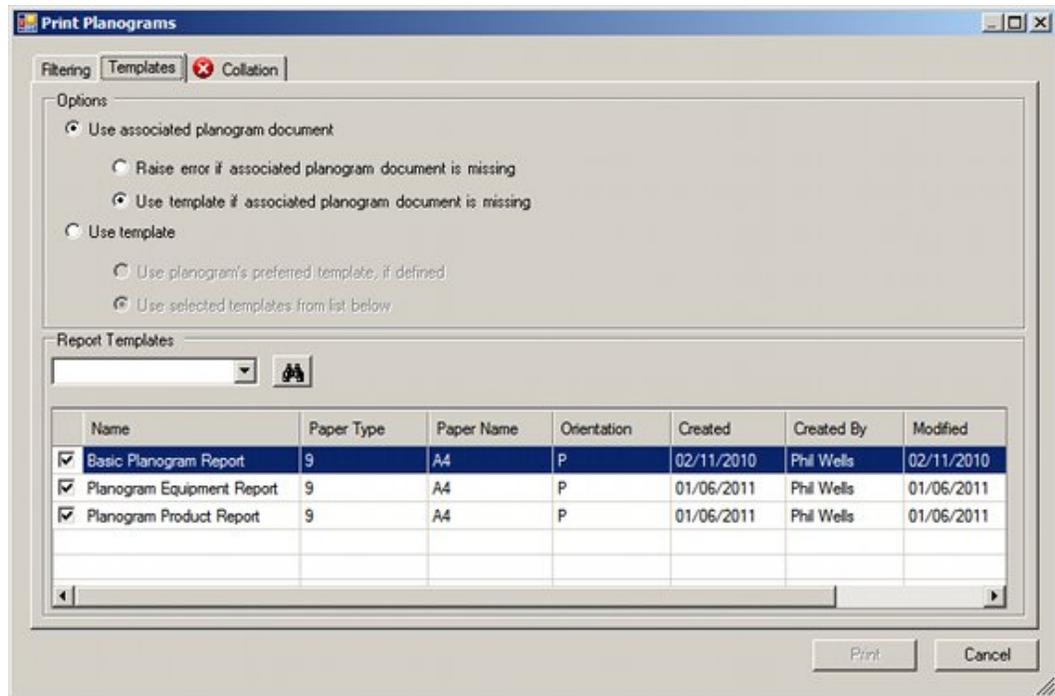
The screenshot shows a software dialog box titled "Planogram: 1_Bay_Mixed_Fizzy_Drinks". It features a tabbed interface with the following tabs: Details, Properties, Stores, Seasons, Fixture Styles, Design, Financial, and UDAs. The "Details" tab is currently selected and contains the following fields and controls:

- Name:** 1_Bay_Mixed_Fizzy_Drinks
- Revision:** 1
- Description:** 1 Bay Mixed Fizzy Drinks
- Associated Document:** (empty field with a browse button)
- Size Description:** 36 x 24 x 72
- Status:** Current (dropdown)
- Client Code:** Example
- Family Code:** EXAMPLE
- Buddy Family Code:** EXAMPLE
- Assortment Code:** EXMAPLE
- Units:** imperial inch (dropdown)
- Temperature Range:** Ambient Goods (dropdown)
- Time Units:** standard hour (dropdown)
- Weight Range:** < No Ranges Selected > (dropdown)
- Manpower Set Time:** 4.00 (spin box)
- Publish Date:** (empty dropdown)
- Manpower Dismantle Time:** 2.00 (spin box)
- Effective Date:** 11 May 2011 (dropdown)
- Category Role:** Routine (dropdown)
- Expiry Date:** 31 December 2999 (dropdown)
- Inventory Model:** EXAMPLE
- Stock Type:** Normal (dropdown)
- Bank:** 0 (spin box)
- Autofill Rule:** < No Rule Selected > (dropdown)
- Traffic Flow:** Left to Right (radio button selected), Right to Left (radio button)
- Preferred Template:** Basic Planogram Report (dropdown)
- Requires Power:** (checkbox, unchecked)
- Can be Split:** (checkbox, unchecked)

At the bottom of the dialog are three buttons: OK, Save As, and Cancel.

Errors and Results

If any settings in the Print Planograms dialog box will lead to errors during printing, an error symbol will be displayed on the tab containing the data with the problem. The Print button will also be grayed out and unavailable.



Users must correct the problems before the Print button will activate.

The results from Floor Plan printing are stored in two tables within the database. These results can be viewed via reports generated from BI Publisher (or similar software).

Planogram Publishing

Overview of Planogram Publishing

Note: The way that planogram publishing performs in the Planner and Merchandiser modules is dependent of settings in other modules. This section is included so that users of the Planogram Publishing Functionality can discuss requested changes with the Administrators.

Note: the default settings for the Planogram Publishing dialog box are derived from settings in the Planogram Publishing Configuration dialog box in the Administration module.

The purpose of publishing a planogram is to disseminate information on the type, quantity and location of shelves and merchandise to those tasked with implementing the change. Publishing a planogram design can be done in hard copy or electronic format. The date at which this is executed depends on the Publish Date set in the Details tab of the Planogram Design dialog box in the Merchandiser module.

The screenshot shows a software window titled "Planogram: 1_Bay_Bottled_Coke" with a tabbed interface. The "Details" tab is active, displaying various configuration fields for a planogram. The fields are organized into two columns:

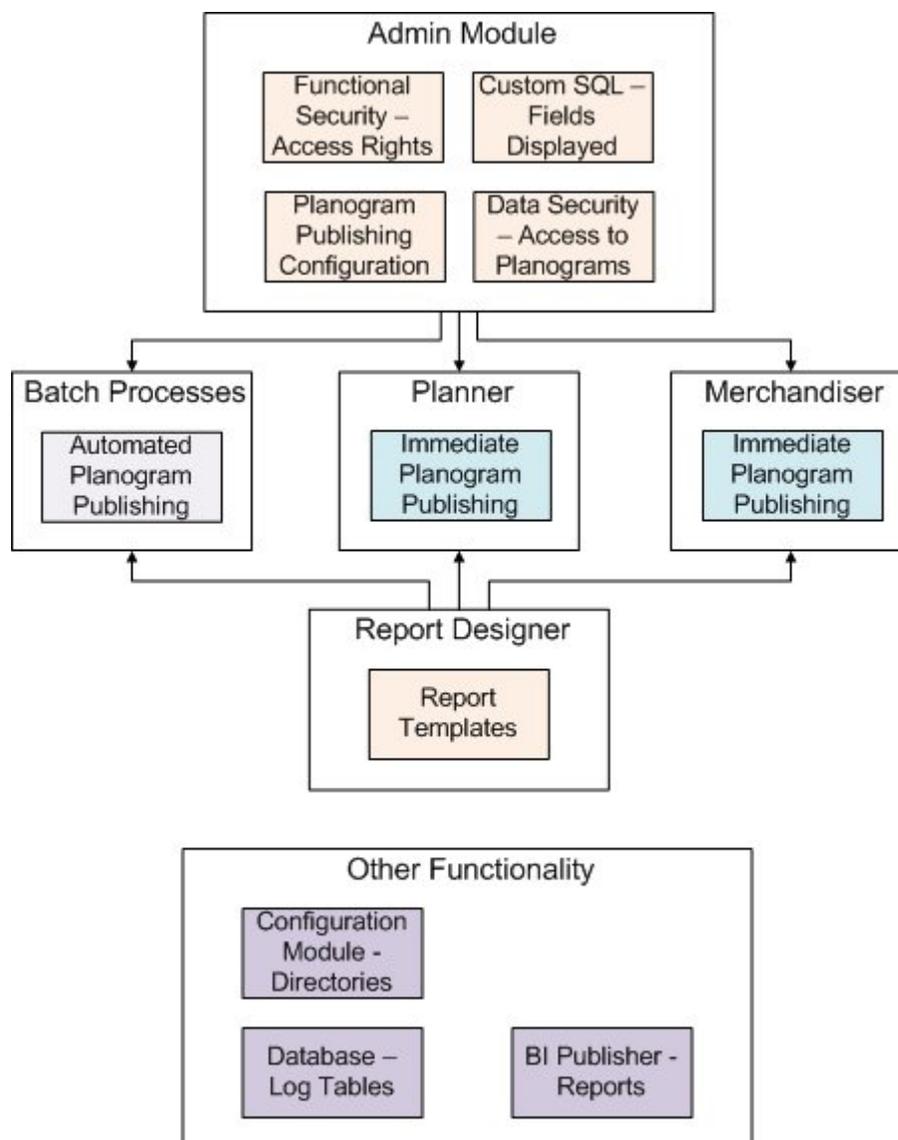
- Left Column:**
 - Name: 1_Bay_Bottled_Coke
 - Description: 1 Bay Bottled Coke - 3 Shelves
 - Associated Document: (empty)
 - Size Description: 36 x 24 x 72
 - Status: Current
 - Family Code: (empty)
 - Assortment Code: (empty)
 - Temperature Range: Ambient Goods
 - Weight Range: < No Ranges Selected >
 - Publish Date: 28 April 2011
 - Effective Date: 10 May 2011
 - Expiry Date: 31 December 2999
 - Stock Type: Normal
 - Autofill Rule: < No Rule Selected >
 - Preferred Template: < No Template Selected >
 - Can be Split:
- Right Column:**
 - Revision: 1
 - Client Code: (empty)
 - Buddy Family Code: (empty)
 - Units: imperial inch
 - Time Units: standard hour
 - Manpower Set Time: 4.00
 - Manpower Dismantle Time: 2.00
 - Category Role: Routine
 - Inventory Model: (empty)
 - Rank: 0
 - Traffic Flow: Left to Right, Right to Left
 - Requires Power:

At the bottom of the window are three buttons: "OK", "Save As", and "Cancel".

The Planogram Publishing functionality is used to disseminate planogram designs to specified printers or Windows folders to facilitate implementing those planogram designs.

Note: a retail organization will still need a method of distributing the planogram designs from the printer or Windows folder to the end user.

The basic method of operation is as follows:



1. Administration Module

The Administration module is used to configure access to the different parts of the functionality. It is also used to assign permissions to print or publish specific floor plans and planograms. Finally, it is used to configure how the batch processes for publishing floor plans will work. There are three options that affect publishing and printing of floor plans.

- The **Functional Security** option (Security menu) allows Administrators to control who can run Planogram Publishing as a batch process. It also controls who can access Immediate Planogram Publishing in the Planner Module. It also allows Administrators to control who can access Report Designer to create report templates for publishing planogram designs.
- The **Data Security** option (Security menu) allows Administrators to control what planograms a user can print or publish from in the Planner and Merchandiser modules (and in In-Store Space Collaboration).

- The **Custom Query** dialog box allows an Administrator to specify what fields will appear in the **Immediate Planogram Publish** dialog box in the Planner module.

Configuring Outputs for Batch Process

The outputs for the batch process output of Planograms are configured in the administration module using the **Planogram Publishing Configuration** dialog box.

2. Running as a Batch Processes

Planogram Publishing can be run as a batch process - typically run overnight so that this processor hungry tasks can be executed without affecting the manual users of the system. The settings determining how this operates are set in the **Planogram Publishing Configuration** dialog box.

The rights to do this are set in Functional Security in the Administration Module.

3. Planner Module

Within the Planner module, the Immediate Publishing of Floor Plans functionality can only be used by users for whom permissions have been granted in the Administration module.

4. Merchandiser Module

Within the Merchandiser module, the Immediate Publishing of Floor Plans functionality can only be used by users for whom permissions have been granted in the Administration module.

5. Report Designer

Report Designer can be used to create report templates that determine the format the planogram design is published in.

6. Other Functionality

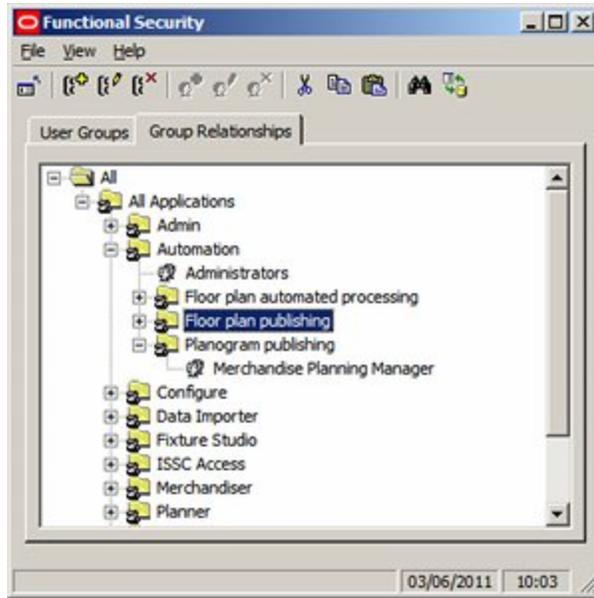
There are three other items of functionality that affect planogram publishing.

- **Configuration Module** - the Directories tab allows users to specify where the root folders holding published planograms are located. Sub-folders holding specific planograms will be created as children of this root folder.
- **Tables in the Macro Space Planning database** hold the results of planogram publishing operations.
- **BI Publisher** (or a similar application) can be used to generate reports based on the information held in the database - for example the names and results of planograms that have been published.

Permissions to Run Immediate Planogram Publishing

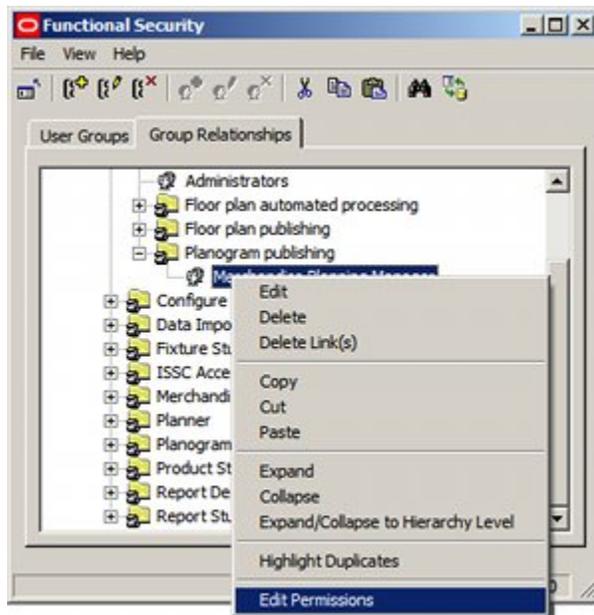
Before a user can run Immediate Planogram Publishing, they must first have been assigned the appropriate permissions in the Administration module. This is done using the Functional Security dialog box accessed from the Security menu.

Note: this dialog box will only be accessible to users with access rights to the Administration Module.



Users assigned to the Automation Command Group (such as the Administrator User Group) can run all Automation Functionality. User Groups assigned to the child Command Groups (Floor plan automated publishing, Floor plan publishing, Planogram publishing) have the ability to use that functionality. In the example above, the Merchandise Planning Manager User Group has been assigned permission to use the Planogram Publishing functionality.

The User Groups precise rights depend on settings in the Permissions dialog box. This is accessed from the right click menu in the Functional Security dialog box.



This will bring up the Permissions dialog box.



- If the User Group belongs to a Command Group higher in the Command Group hierarchy, by default it will inherit the permissions from that higher Command Group. This permission can be varied at the lower level by changing the selections made using the check boxes.
- If the User Group only exists at this level in the hierarchy, the Permissions dialog box will initially have all check boxes blank. The Administrator must then assign Allow or Deny permissions.

Dates Planograms will be Published

The purpose of publishing a planogram is to disseminate information on the type, quantity and location of shelves and merchandise to those tasked with implementing the change. Publishing a planogram design can be done in hard copy or electronic format. The date at which this is executed depends on the Publish Date set in the Details tab of the Planogram Design dialog box in the Merchandiser module.

Note: the Publish Date operates purely on the date only and takes no account of the time of day. Publish Dates are stored in Date/Time format in the database, but the functionality only references the Date.

Planogram: 1_Bay_Bottled_Coke

Details Properties Stores Seasons Fixture Styles Design Financial UDAs

Name: 1_Bay_Bottled_Coke Revision: 1

Description: 1 Bay Bottled Coke - 3 Shelves

Associated Document: []

Size Description: 36 x 24 x 72

Status: Current Client Code: []

Family Code: [] Buddy Family Code: []

Assortment Code: [] Units: imperial inch

Temperature Range: Ambient Goods Time Units: standard hour

Weight Range: < No Ranges Selected > Manpower Set Time: 4.00

Publish Date: 28 April 2011 Manpower Dismantle Time: 2.00

Effective Date: 10 May 2011 Category Role: Routine

Expiry Date: 31 December 2999 Inventory Model: []

Stock Type: Normal Rank: 0

Autofill Rule: < No Rule Selected > Traffic Flow: Left to Right Right to Left

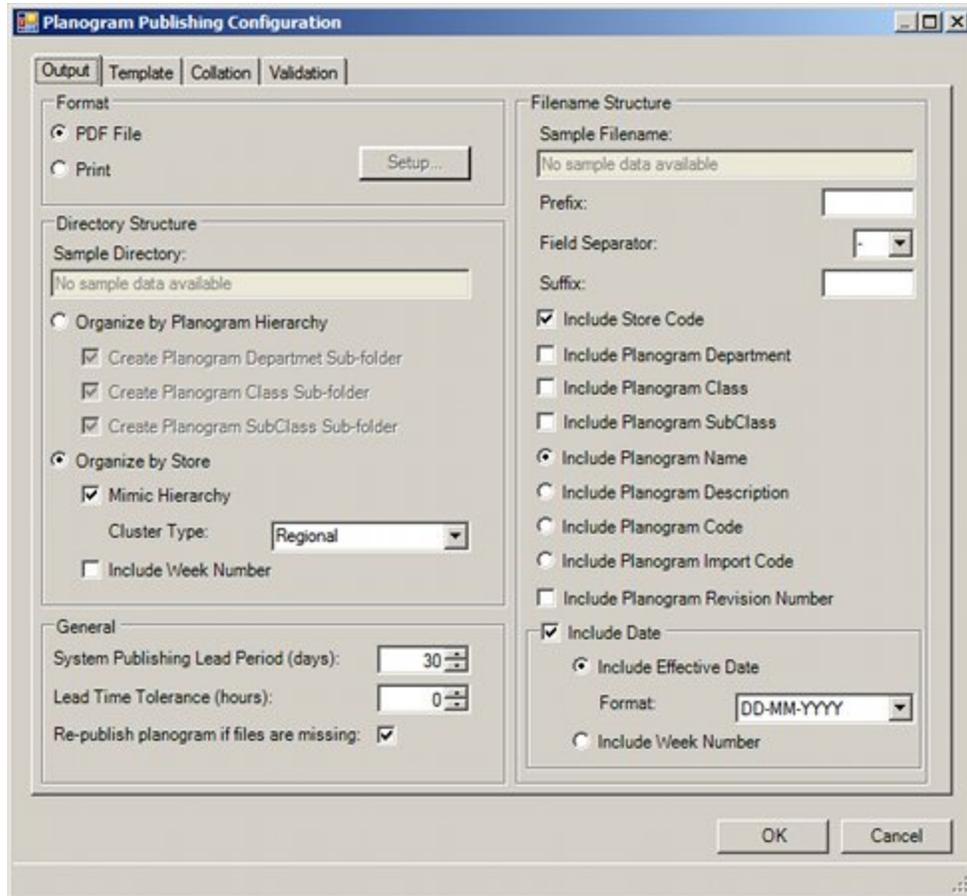
Preferred Template: < No Template Selected > Requires Power:

Can be Split:

OK Save As Cancel

Another factor affecting the date at which at which planograms will be published is the **Lead Time Tolerance (Hours)** setting on the Output tab of the Planogram Publishing Configuration dialog box in the Administration Module.

Note: this dialog box will only be accessible to users with access rights to the Administration Module.



Batch processes can be set to start at any time of the day. For example, the batch process might initiate at 8 p.m. (20.00 hrs) in the evening to allow the maximum number of batch processes to be run before users come in for work again the following morning. However, the Publish date for the floor plan might be set for when the following day begins at midnight. The **Lead Time Tolerance (Hours)** setting allows for this.

For example, if batch process is run on the 2nd June at 20.00 hrs in the evening and has no lead time tolerance, a planogram that has a Publish Date of 3rd June would be ignored for publishing purposes by this run of the batch process. If however, the **Lead Time Tolerance (Hours)** setting is set to 5 hours, this will be added onto the Date and Time for the batch process and cause the batch process to operate as if it were running at 01.00 hrs in the morning of 3rd June. All planograms with a Publish Date of 3rd June would then be published.

Criteria for Publishing Planograms

There are two criteria for publishing planograms:

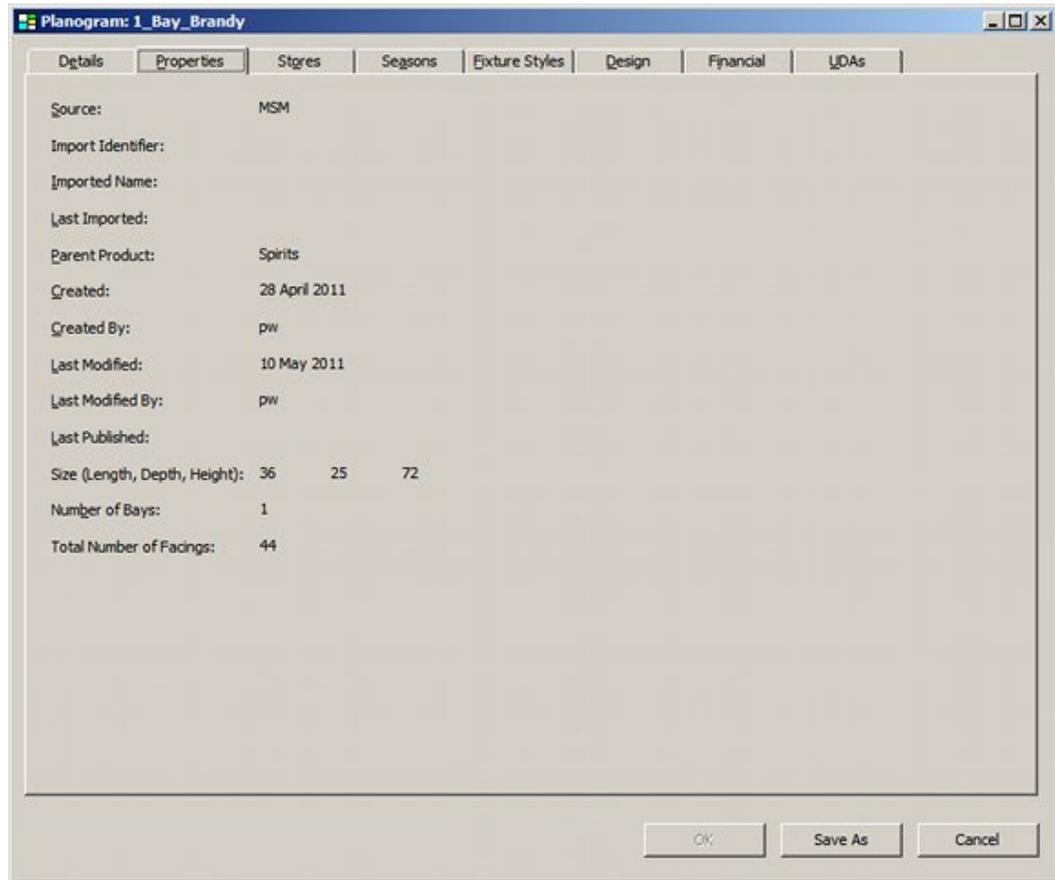
1. Publish Date has been exceeded

If the Publish Date set in the Planogram Design dialog box in Merchandiser exceeds the current date (taking into account the Lead Time Tolerance (Hours) setting), the floor plan will be published.

2. Planogram has been Updated since it was Published

It is possible that the floor plan may have been modified after it was last published - for example of a later revision has been created. The condition for this is that the Last

Modified date is greater than the Last Published Date. These can be seen on the Properties tab of the Planogram Design dialog box in the Merchandiser module.



Note: Planograms may also be republished if the **Republish planogram if files are missing** option has been checked in the Planogram Publishing Configuration dialog box.

Locations Planogram Designs will be Published To

The locations Planogram designs will published to and the file names that will be used are specified in the Output tab of the Planogram Publishing Configuration dialog box in the Administration module.

Note: this dialog box will only be accessible to users with access rights to the Administration Module.

Planogram Publishing Configuration

Output | Template | Collation | Validation

Format

PDF File Print

Directory Structure

Sample Directory: No sample data available

Organize by Planogram Hierarchy

- Create Planogram Department Sub-folder
- Create Planogram Class Sub-folder
- Create Planogram SubClass Sub-folder

Organize by Store

- Mimic Hierarchy
- Cluster Type:
- Include Week Number

General

System Publishing Lead Period (days):

Lead Time Tolerance (hours):

Re-publish planogram if files are missing:

Filename Structure

Sample Filename: No sample data available

Prefix:

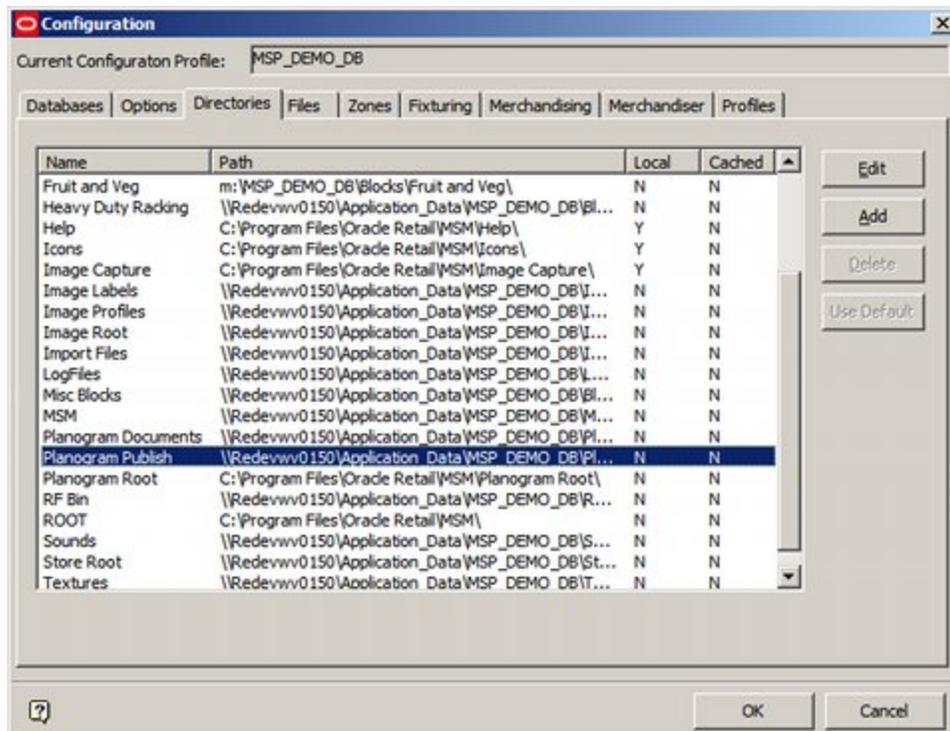
Field Separator:

Suffix:

- Include Store Code
- Include Planogram Department
- Include Planogram Class
- Include Planogram SubClass
- Include Planogram Name
- Include Planogram Description
- Include Planogram Code
- Include Planogram Import Code
- Include Planogram Revision Number
- Include Date
 - Include Effective Date
 - Format:
 - Include Week Number

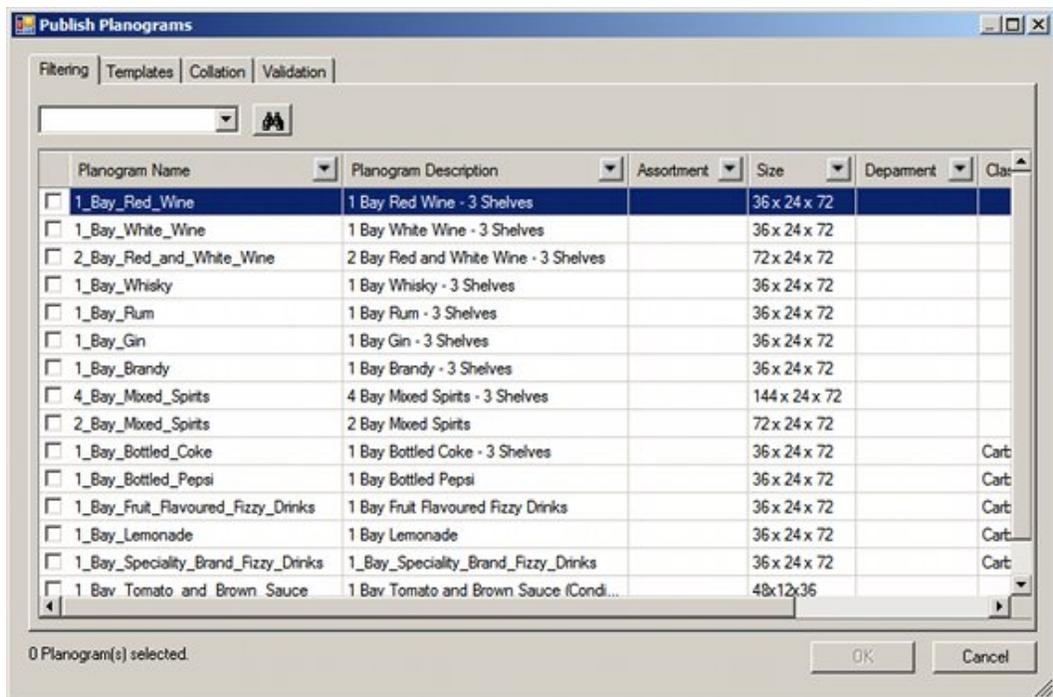
This dialog box allows Administrators to specify the directory structure, file format and file name that will be used when planogram designs are published.

The starting point for the location planograms will be published to in electronic form can be seen in the details for the Planogram Publish system directory specified in the Directories Tab of the Configuration module.



The Filtering Tab

The Filtering Tab is used to select the planograms to publish.



Find

The Find option can be used by typing text into the text box then clicking the Find icon. Each successive click will move the user to the next planogram matching the text being

searched for. When no more matches are available, a confirmatory dialog box will appear.



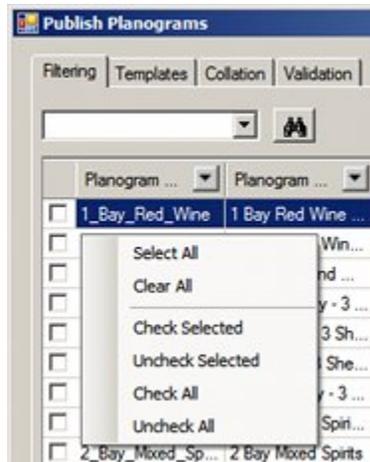
Find operates with explicit or implied wild cards. The explicit wild cards are:

Wild Card	Description
*	Any characters
?	Any character in this position
#	Any number in this position

If explicit wild cards are not used, implicit wild cards will be assumed. For example the text entry 'Wine' will be treated as '*Wine*' and will find White Wine, Red Wine, etc.

Right Click Menu

The right click menu provides a quick way of modifying the selected items.



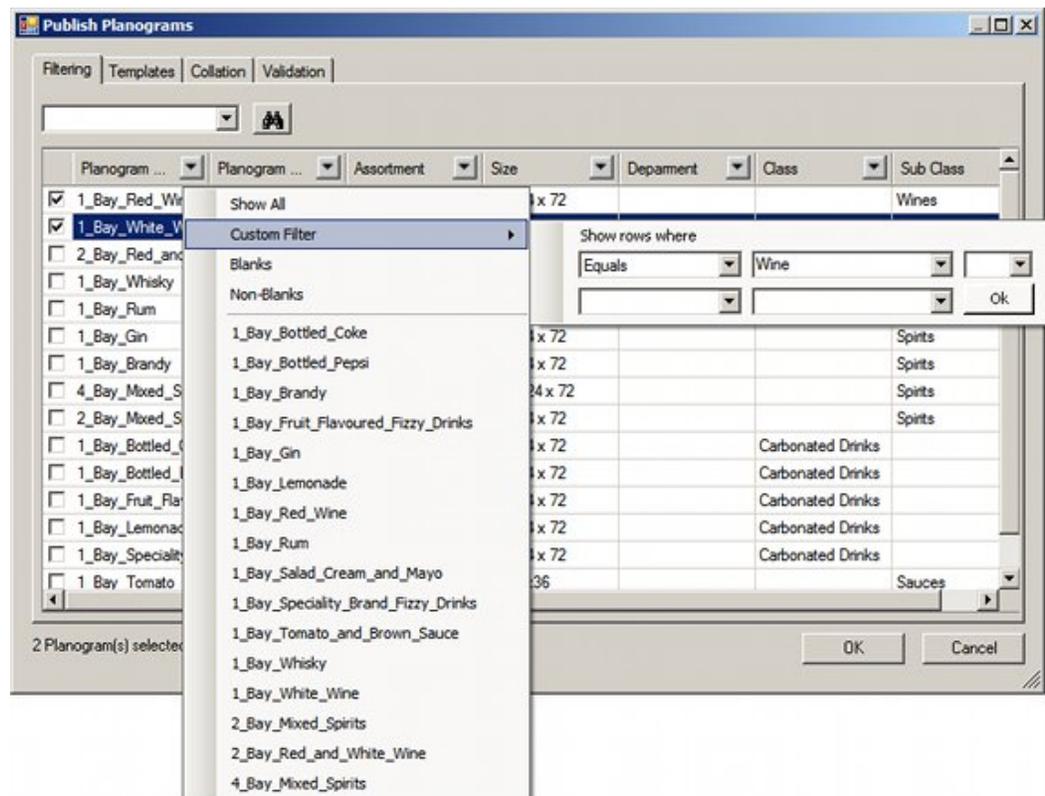
- **Select All** will select (but not check) all rows of data
- **Clear All** will deselect (but not uncheck) all rows of data
- **Check Selected** will check all rows of selected data
- **Uncheck Selected** will uncheck all rows of selected data
- **Check All** will check all rows of data
- **Uncheck All** will uncheck all rows of data
- **Paste** allows users to paste a carriage returned list of planogram identifiers from the Windows clipboard. All rows in the dialog box that match the pasted information will be checked.

Selecting Planograms to Process

Planograms may be selected for printing by ticking the appropriate check box.

Using Filters in the Filtering Tab

The **Filtering Tab** is provided with a series of filters on each column. Setting a filter on one column will affect data in all other columns.



They are used as follows:

- **Show All** - this option shows all results.
- **Custom Filter** - this option allows users to set filters using Boolean logic. The options are:
 - **Equal to:** will return rows that are an exact match for the entered text.
 - **Not Equal to:** will return rows that do not match the text string
 - **Contains:** will return rows where part of the data matches the text string. (Uses implied wild cards).
 - **Does not contain:** will return rows where no part of the data matches the text string. (Uses implied wild cards).
 - **Begins with:** will return rows where the text string is an exact match for the start of the data.
 - **Ends with:** will return rows where the text string is an exact match for the end of the data.
 - **Does not begin with:** will return rows there the text string is not an exact match for the start of the data.
 - **Does not end with:** will return rows there the text string is not an exact match for the end of the data.

- **Blanks** - column will be filtered to only show rows with null values.
- **Non-Blanks** - column will be filtered to only show rows containing a value
- **Results** - column will be filtered to only show the selected result.

The Template Tab

The **Template Tab** is used so specify the type of report that will be used to output details of the planogram design.

Print Planograms

Filtering | **Templates** | Collation

Options

Use associated planogram document

Raise error if associated planogram document is missing

Use template if associated planogram document is missing

Use template

Use planogram's preferred template, if defined

Use selected templates from list below

Report Templates

Name	Paper Type	Paper Name	Orientation	Created	Created By	Modified
<input checked="" type="checkbox"/> Basic Planogram Report	9	A4	P	02/11/2010	Phil Wells	02/11/2010
<input checked="" type="checkbox"/> Planogram Equipment Report	9	A4	P	01/06/2011	Phil Wells	01/06/2011
<input checked="" type="checkbox"/> Planogram Product Report	9	A4	P	01/06/2011	Phil Wells	01/06/2011

Print Cancel

The user can use a radio button to specify the form the report will take: an imported 'associated planogram document' or a template that is configured in the Report Designer Module.

1. Use Associated Planogram document - this option publishes the planogram design information using a pre-generated report using one of the following file formats: BMP, GIF, JPEG, JPG, PDF, PNG, TIFF or WMF. This report will be imported when a planogram is imported using Oracle Data Integrator (ODI). The Associated Document (if available) is specified in the Associated Document text box in the Details tab of the Planogram Design dialog box in the Merchandiser module.

The screenshot shows the 'Planogram: 1_Bay_Mixed_Fizzy_Drinks' dialog box with the 'Details' tab selected. The dialog contains the following fields and values:

- Name: 1_Bay_Mixed_Fizzy_Drinks
- Revision: 1
- Description: 1 Bay Mixed Fizzy Drinks
- Associated Document: (empty)
- Size Description: 36 x 24 x 72
- Status: Current
- Client Code: Example
- Family Code: EXAMPLE
- Buddy Family Code: EXAMPLE
- Assortment Code: EXMAPLE
- Units: imperial inch
- Temperature Range: Ambient Goods
- Time Units: standard hour
- Weight Range: < No Ranges Selected >
- Manpower Set Time: 4.00
- Publish Date: (empty)
- Manpower Dismantle Time: 2.00
- Effective Date: 11 May 2011
- Category Role: Routine
- Expiry Date: 31 December 2999
- Inventory Model: EXAMPLE
- Stock Type: Normal
- Rank: 0
- Autofill Rule: < No Rule Selected >
- Traffic Flow: Left to Right (selected)
- Preferred Template: Basic Planogram Report
- Requires Power: (unchecked)
- Can be Split: (unchecked)

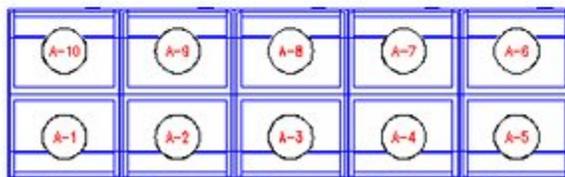
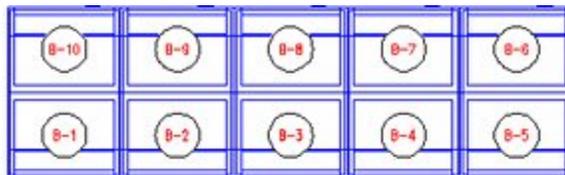
There are two options (selected using the radio button) for when the pre-generated report is missing.

- a. Write an error to the AVTTB_PUBLISH_POG_LOG table. Information in this table can be read by means of a BI Publisher report or similar.
 - b. Use the default Report Designer template.
2. **Use Template** - this option allows the user to define the way the template from the Report Designer module is selected. There are two options (selected using the radio button):
- **Use Planograms preferred template, if defined** - this option is specified in the Preferred Template drop down list in the Details tab of the Planogram Design dialog box in the Merchandiser module.
 - **Use Selected Template from List Below** - this option can be set by checking items in the list of available templates. One or more templates may be selected. If multiple templates are selected, the name of the template will be added to the file name in brackets - for example 1_Bay_Mixed_Fizzy_Drinks (Basic Planogram Report).pdf

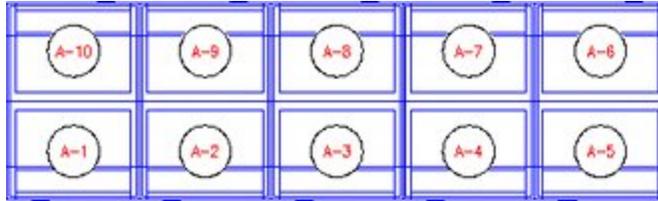
If necessary, the list of templates can be searched by entering a text string into the drop down list, then clicking the **Find** button. (Actual or implied wild cards can be used). Each click of the Find button will cause the search engine to move forward through the matching results until no results are left.

Note: the last 10 text strings can be selected using the drop down list in the text box.

- **Department** is the department (zone) in the floor plan the planogram is associated with.
- **Aisle** is the aisle the planogram is associated with. For this option to operate, aisles must first be drawn in the floor plan in the Planner module. In the example below, Aisle F-1 has been drawn between two runs of fixtures.



- **Bay Number** is the bay number associated with the fixtures the planogram is placed on. For this option to operate, the fixtures in the floor plan must previously have been bay numbered.



- **Bay Group** is the Name assigned to a number of fixtures sharing a common characteristic. It is assigned in the Name field of the Bay Numbering dialog box in the Planner module.

- **Planogram Name** is the name of the planogram. This is set in the Name field of the Planogram Design dialog box in Merchandiser.
- **Planogram Code** is the code for the planogram. This is set in the Client Code field of the Planogram Design dialog box in Merchandiser.

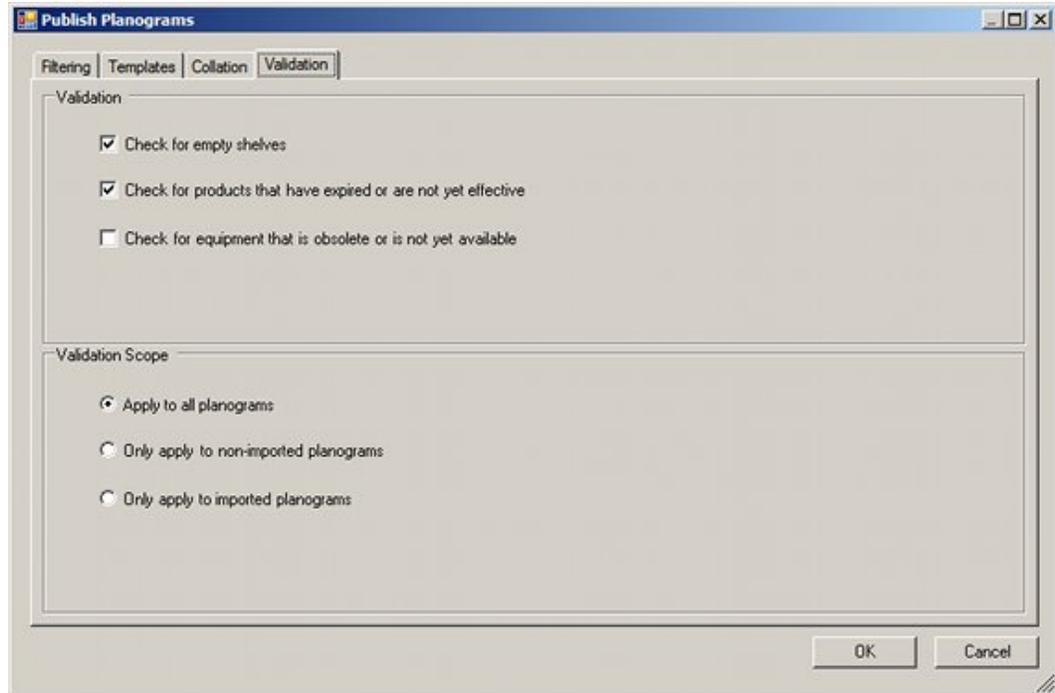
The screenshot shows a software dialog box titled "Planogram: 1_Bay_Mixed_Fizzy_Drinks". It has several tabs at the top: "Details", "Properties", "Stores", "Seasons", "Fixture Styles", "Design", "Financial", and "UDAs". The "Details" tab is currently selected. The dialog contains the following fields and controls:

- Name:** 1_Bay_Mixed_Fizzy_Drinks
- Revision:** 1
- Description:** 1 Bay Mixed Fizzy Drinks
- Associated Document:** (empty field with a browse button "...")
- Size Description:** 36 x 24 x 72
- Status:** Current (dropdown)
- Client Code:** Example
- Family Code:** EXAMPLE
- Buddy Family Code:** EXAMPLE
- Assortment Code:** EXMAPLE
- Units:** imperial inch (dropdown)
- Temperature Range:** Ambient Goods (dropdown)
- Time Units:** standard hour (dropdown)
- Weight Range:** < No Ranges Selected > (dropdown)
- Manpower Set Time:** 4.00 (spin box)
- Publish Date:** (empty dropdown)
- Manpower Dismantle Time:** 2.00 (spin box)
- Effective Date:** 11 May 2011 (dropdown)
- Category Role:** Routine (dropdown)
- Expiry Date:** 31 December 2999 (dropdown)
- Inventory Model:** EXAMPLE
- Stock Type:** Normal (dropdown)
- Rank:** 0 (spin box)
- Autofill Rule:** < No Rule Selected > (dropdown)
- Traffic Flow:** Left to Right (radio button selected), Right to Left (radio button)
- Preferred Template:** Basic Planogram Report (dropdown)
- Requires Power:** (checkbox, unchecked)
- Can be Split:** (checkbox, unchecked)

At the bottom right, there are three buttons: "OK", "Save As", and "Cancel".

The Validation Tab

The Validation tab enables users to set a series of validation checks that must be satisfied before the planogram design is published. If any of the checks are failed, the details will be written to the AVTTB_PUBLISH_POG_LOG table. Information in this table can be read by means of a BI Publisher report or similar.



1. **Check for empty shelves** - this option will check the parent fixture and associated shelf objects. It will raise an error report if:
 - The fixture and associated shelf objects can be populated with product placeholders, but no product placeholder has been placed.
 - The fixture and associated shelf objects can be populated with display styles, but no display styles have been placed.
2. **Check for products that have expired or are not yet effective** - this option will check all products in the planogram against the effective date of the planogram. It will raise an error report if:
 - The Product Effective Date is after the Planogram Effective Date - i.e. the product is not yet available to place in the planogram.
 - The Product Expiry Date is before the Planogram Effective Date - i.e. the product will expire while the planogram is still in service.

The check will be ignored if the product effective or expiry date is undefined.
The Planogram Effective Date is set in the Details tab of the Planogram Design dialog box in Merchandiser.

The screenshot shows a dialog box titled "Planogram: 1_Bay_Mixed_Fizzy_Drinks" with a "Details" tab selected. The dialog contains the following fields and values:

Name:	1_Bay_Mixed_Fizzy_Drinks	Revision:	1
Description:	1 Bay Mixed Fizzy Drinks		
Associated Document:	[Empty field]		
Size Description:	36 x 24 x 72		
Status:	Current	Client Code:	Example
Family Code:	EXAMPLE	Buddy Family Code:	EXAMPLE
Assortment Code:	EXMAPLE	Units:	imperial inch
Temperature Range:	Ambient Goods	Time Units:	standard hour
Weight Range:	< No Ranges Selected >	Manpower Set Time:	4.00
Publish Date:	[Empty field]	Manpower Dismantle Time:	2.00
Effective Date:	11 May 2011	Category Role:	Routine
Expiry Date:	31 December 2999	Inventory Model:	EXAMPLE
Stock Type:	Normal	Rank:	0
Autofill Rule:	< No Rule Selected >	Traffic Flow:	<input checked="" type="radio"/> Left to Right <input type="radio"/> Right to Left
Preferred Template:	Basic Planogram Report	Requires Power:	<input type="checkbox"/>
Can be Split:	<input type="checkbox"/>		

At the bottom of the dialog are three buttons: "OK", "Save As", and "Cancel".

The Product Effective and Expiry dates are set in the Details tab of the SKU dialog box in Product Studio.

Product SKU - Example SKU

Details | Physical | Financial | Custom

Name: Example SKU

Description: Example SKU

UPC Type: Anything

Code: 12345678

UPC:

Category Role: Routine

Strategy: Standard Product

Manufacturer: Generic Product

Supplier: Generic Product

Status: Active

Icon: Product SKU

Brand: Example

Sub-brand: Example 2

Client Code: ABCDEF

Client Barcode: 12345678

Publish Date: 31 March 2011

Effective Date: 07 April 2011

Expiry Date: 01 January 2012

Rank: 0

Import Identifier: 0

Import Name:

Import Date:

Creation Date: 31 March 2011

Created By: pw

Last Modified Date: 31 March 2011

Last Modified By: pw

OK Cancel

3. **Check for equipment that is obsolete or not yet available** - this option will check all equipment in the planogram against the effective date of the planogram. It will raise an error report if:

- The **Equipment Effective Date** is after the **Planogram Effective Date** - i.e. the equipment is not yet available for the planogram.
- The **Equipment Expiry Date** is before the **Planogram Effective Date** - i.e. the equipment will be taken out of service while the planogram is still in use.

The check will be ignored if the equipment effective or expiry date is undefined.

The Equipment Effective and Expiry dates are set in the Category tab of the Block Details dialog box in Fixture Studio.

4. **Validation Scope** - this controls when to apply the validation checks. There are three options - selectable by the radio button.
- Apply to all planograms.
 - Apply to non-imported (manually created) planograms.
 - Apply to imported planograms.

The application will automatically distinguish between imported and manually created planograms by means of the information held in the Macro Space Planning database.

Zones in Merchandiser

Overview of Zones

Important Note: Zones can only be added, edited and deleted in the Planner environment. Zones can be viewed but not altered in Merchandiser. Based on the floor layout specified by an architectural drawing; a Zone defines a section of floor that is used for a specific and clearly defined purpose. The Zone might define an area used for sales, it might define an area used for storing stock, or it might define areas used for non-sales purposes such as offices, corridors or toilets.

From a technical standpoint, a Zone is a Macro Space Management block that allows additional information to be put into a Store Plan. This subsequently allows more structured Macro Space Management reports to be produced on the associated layout of fixtures, fittings and Planograms within that drawing.

A Zone is defined by a Planner Polyline enclosing a specific section of floor. Further Polyline within the Zone can be used to define pillars or other obstructions.

The designation of pillars and other obstacles allows them to be taken into account when calculating sales areas. This results in a more accurate calculation of the area of usable floor, enabling sales performance analysis to take into account the effect of obstructions.

The Zone is used to assign a specified part of the total floor area to a specific function. Such functions include allocating to specific types of retail goods, (for example electrical goods), or designating the area as a non-sales area; for example a manager's office or a corridor.

Zones thus allow the total floor area in the store to be split into sales and non-sales areas and then further sub-divided as to purpose.

This sub-division of the store allows Planograms and fixtures to be filtered by Zone, allowing the store planner to rapidly establish which goods and which fixtures are in a specific part of the store.

Zones can also be designated as being excluded from certain types of reports. This allows fixtures and Planograms that have been placed in a storage area to be excluded from any calculations or reports on the performance of that part of the store.

Many of the characteristics of Macro Space Management Zones can be configured within the Administration Module.

Object Crossing Zone Boundaries

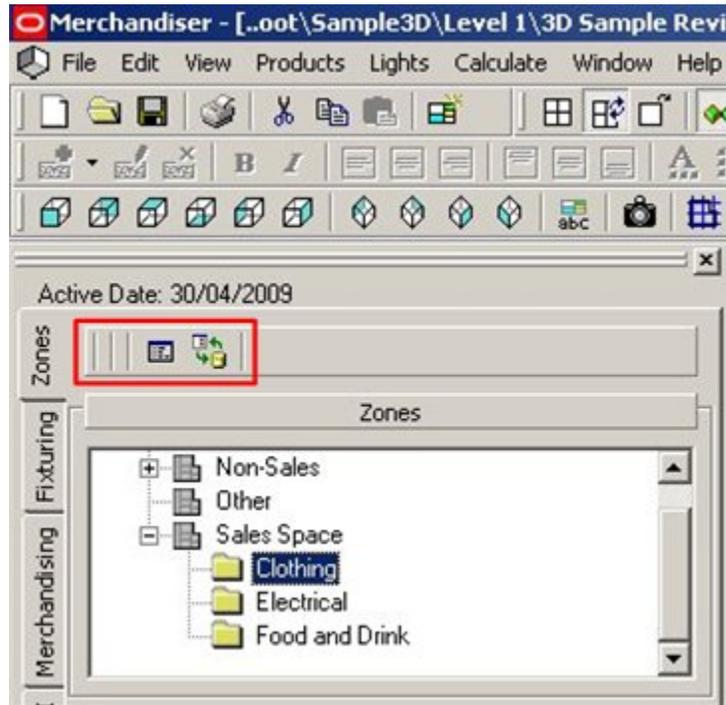
If only some of the available zones are enabled, some fixtures and fittings from the non-enabled zones may overlap the boundaries of the selected zones.

The user will be able to see these overlapping fixtures and fittings, together with their associated shelves and products.

These overlapping fixtures, fittings, shelves and products will not be locked, and the user will not be prevented from editing, moving or otherwise modifying these objects.

The Zones Toolbar

The **Zones Toolbar** is found on the Object Browser.



It contains two icons allowing operations to be carried relative to Zones.

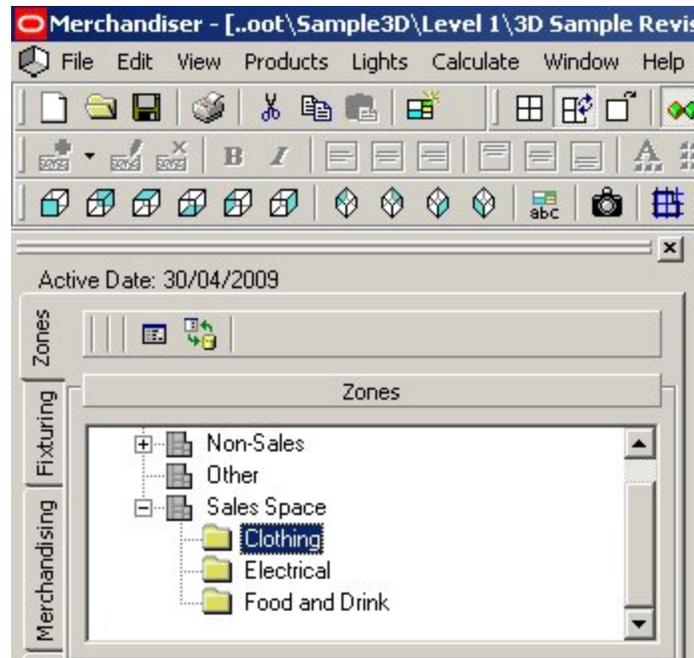
Icon	Description
	Configuration Options
	Refresh

Configuration Options invokes the Zones tab in the configuration module.

Refresh refreshes the Zones Hierarchy to reflect any changes made in the Administration Module since Merchandiser was opened for the current session.

The Zones Hierarchy Window

The **Zones Hierarchy Window** is found immediately below the toolbar.



It contains a Hierarchical Tree giving a list of all the available Zone types. A zone selected in the drawing will be highlighted in the hierarchical tree.

Note: Zone types and descriptions can be added, edited or deleted using the Administration module.

The Properties Window

The **Properties Window** gives information on the selected Zone Definition.



The Zone Type and Area Properties are read only and cannot be edited.

The Summary Window

The **Summary Window** contains details of Zones within the drawing.

Summary			
Zone Name	Gross Area	Net Area	Zone Type
Other	3486.91	3486.91	Sales Area
Allocates Sales space area	40635.55	40635.55	Sales Area
Allocates Non-Sales space area	18116.38	18116.38	Sales Area

The information typically includes Zone Name, Zone Description, and Gross and Net Areas.

(Information displayed can be customized by Oracle – contact Technical Support if necessary).

Zone Names and Zone Descriptions can be sorted by clicking on the column headings.

Overview of Express Loading

Express Loading is used to load only some of the zones available in the drawing.

This allows Macro Space Management users to load just the sections of the store plan that are of interest to them.

This reduces the amount of detail in the drawing that the user has to view.

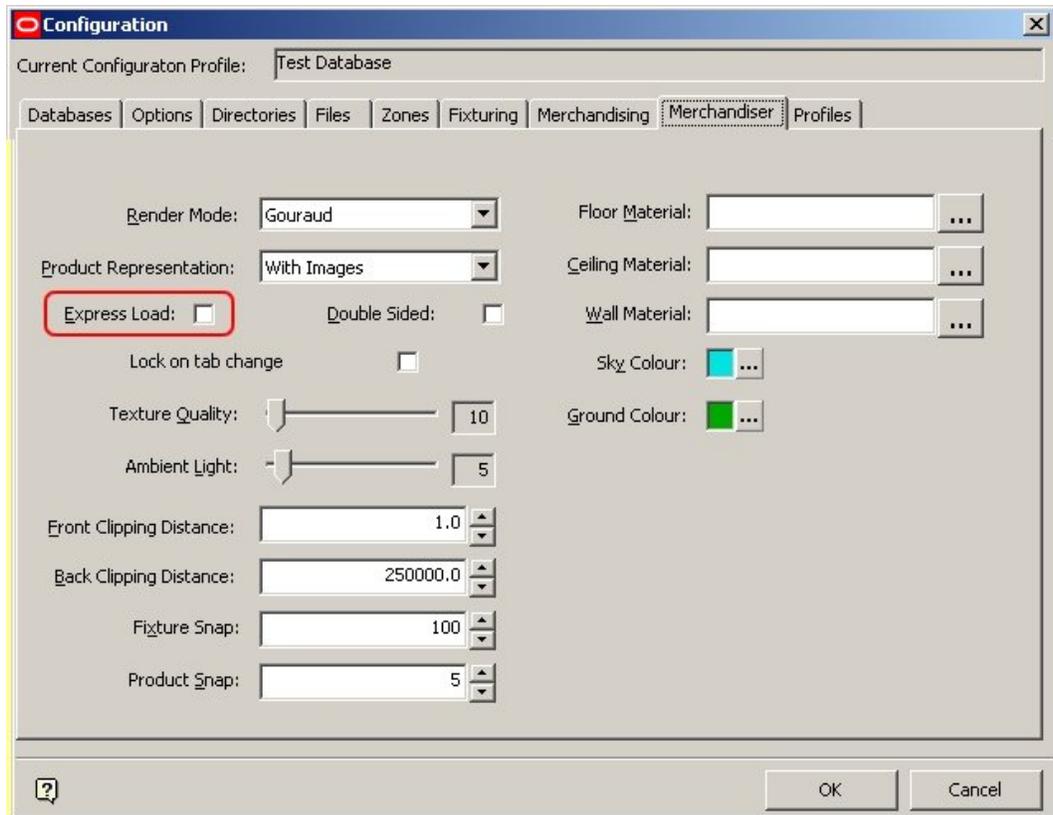
It will also slightly speed up movement in the Virtual Reality environment as less data is being manipulated when the user's viewpoint moves.

Drawings that are express loaded with only some of the available Zones will still be checked out to the user, preventing anyone from working on the Zones that have not been loaded.

Activating Express Loading

Express Loading is enabled in the Configuration Module.

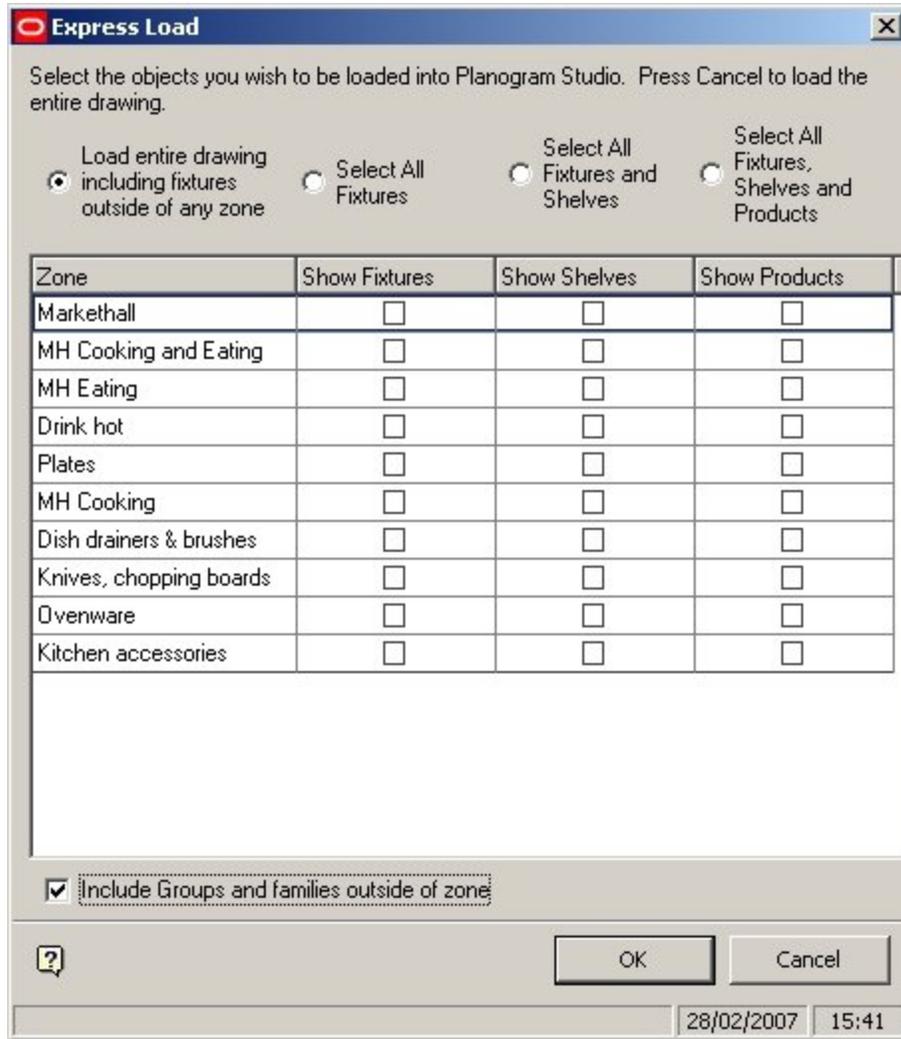
The Merchandiser Tab contains an Express Load checkbox.



If the checkbox is ticked, Express Loading will be enabled.

The Express Loading dialogue box

The **Express Load dialogue box** allows the user to select which Zones, Fixtures, Shelves and Products will be loaded.



The four radio buttons at the top of the dialogue box control what is loaded in the selected zones.

Load entire drawing results in every zone in the drawing being loaded. This will include any fixtures not included within a zone.

Select all Fixtures will select the fixtures in every zone in the drawing.

Select all Fixtures and Shelves will select the fixtures and shelves in every zone in the drawing.

Select all Fixtures, Shelves and Products will select the fixtures, shelves and products in every zone in the drawing.

Note: Using the Select all Fixtures, Select all Fixtures and Shelves and Select all Fixtures, Shelves and Products options will not select from Fixtures, Shelves or Products that are not in a zone.

Alternatively, the requirements for Individual Zones can be set by checking or unchecking the respective boxes for Fixtures, shelves and Products for those zones.

Objects that are not at floor level (for example banners) are still associated with the zone they are within and will be displayed accordingly - i.e. the level of an object does not affect whether it is associated with a zone.

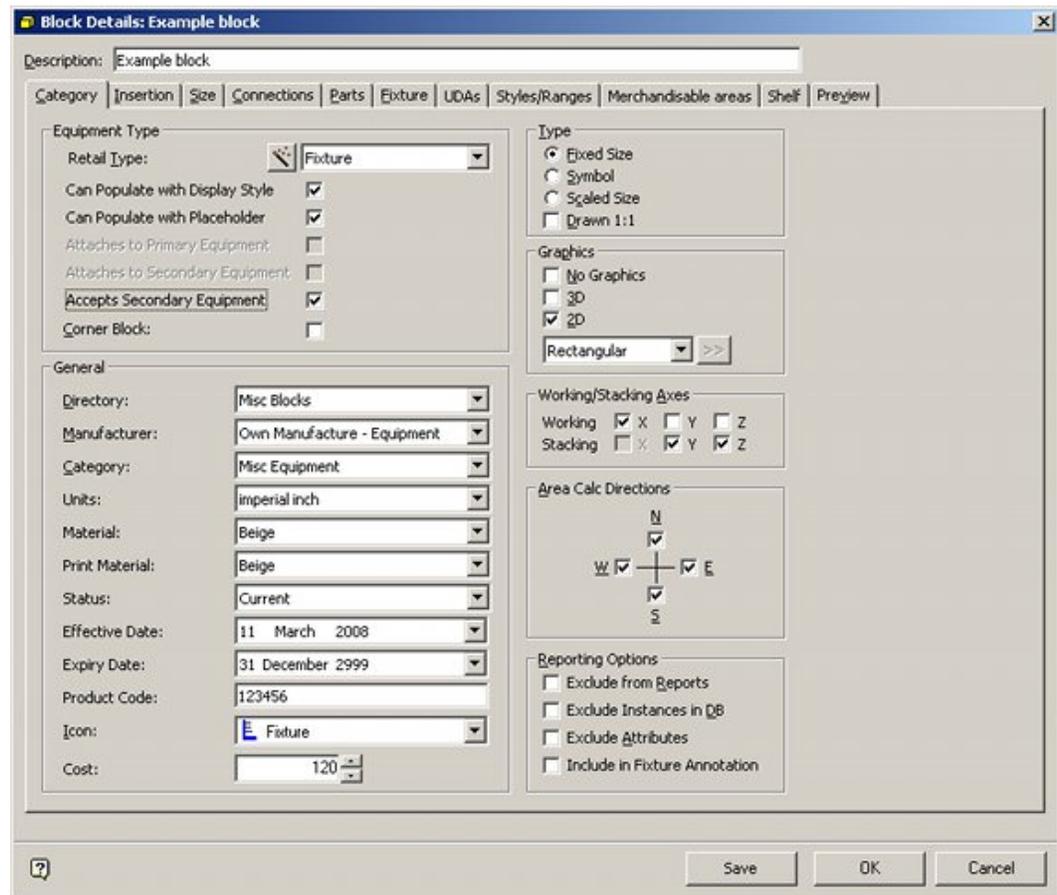
The Include Groups and Families outside of the Zone checkbox (if selected) will result in all fixtures (and their associated shelves and products) belonging to a group or family that extend outside the selected zones being displayed.

If this option is not checked, then only fixtures (and their associated shelves and products) that cross the boundary of the selected zones will be displayed.

Factors Affecting Equipment in Merchandiser

Parameters Set in Fixture Studio

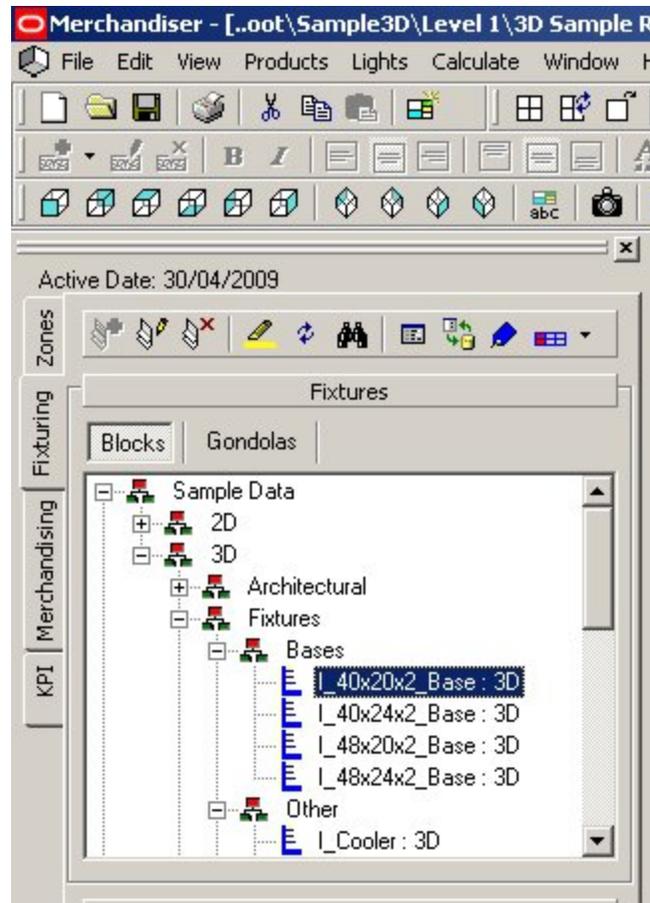
Fixtures (and gondolas) often behave in a specific way in the Merchandiser module. Much of this behavior is determined by settings in Fixture Studio. Specifically, the behavior is governed by options set in the Block Details dialog box.



Note: See the Fixture Studio Help File for more information.

Gondola and Fixture Hierarchies

Gondolas and Fixtures for use in Merchandiser are selected from a hierarchy in the Object Browser.

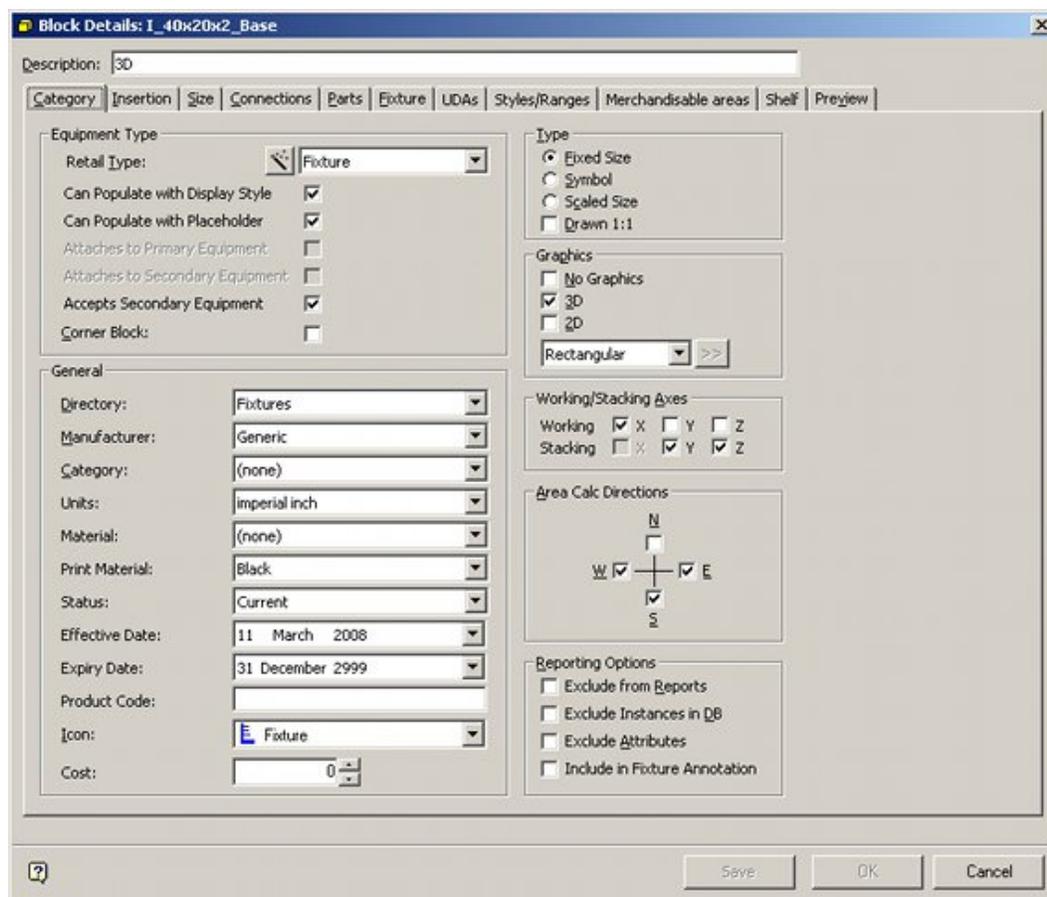


There is one hierarchy for fixtures and another for gondolas. Users can switch between the two by clicking on the Blocks or Gondolas button while in the Fixturing Tab. They are made up of groups and fixtures (or gondolas). Groups are the equivalent of windows folders and serve to hold fixtures (or gondolas) of a specific type.

The fixture and gondola hierarchies cannot be altered in Merchandiser, only in Fixture Studio. In Fixture Studio groups can be added, edited and deleted, as can fixture and gondola definitions. This allows the hierarchy to be customized to suit the user.

Fixture Properties

Fixture Properties are defined in the Block Details definition box in Fixture Studio.



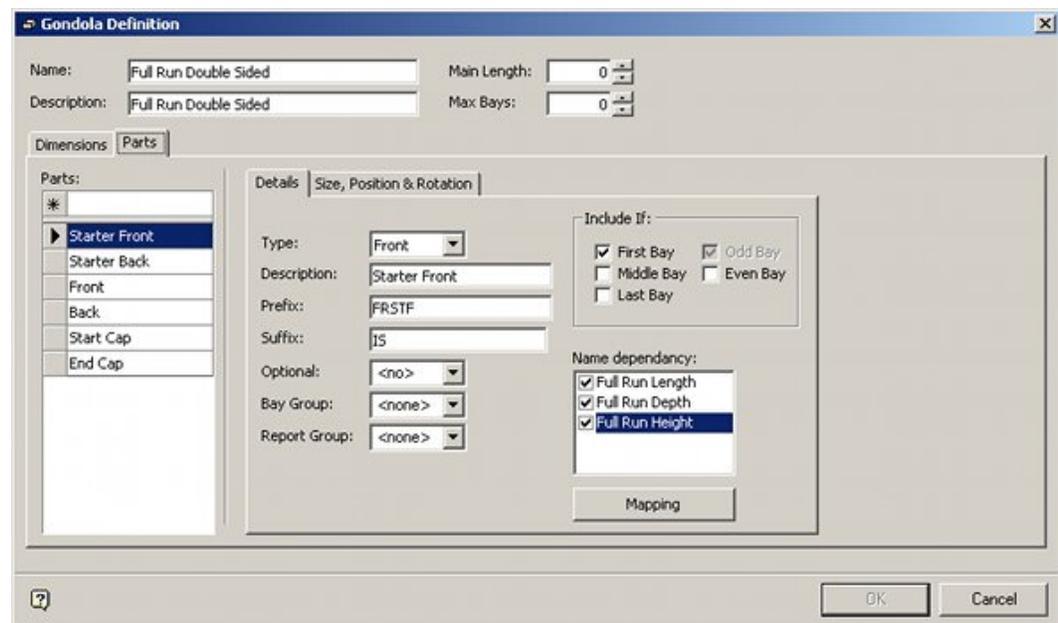
It contains a series of tabs that allow intelligent properties to be assigned to the graphic that appears in the drawing.

Tab	Options
Category Tab	Basic parameters for the fixture including data on materials, manufacturer, how products fit onto the equipment, etc.
Insertion Tab	How the fixture is inserted into the drawing including the height above floor level and what direction the front of the fixture faces.
Size Tab	The dimensions of the fixture, including additional floor area assigned to allow for extra equipment to be placed on the fixture.
Connections Tab	Specifies which equipment can be connected to what other equipment.
Parts Tab	Specifies what a list of parts for the equipment; for example bolts and castors required.
Fixture Tab	
UDA Tab	Allows User Defined Attributes (text based information) to be assigned to the fixture. These UDA's can then be viewed in Merchandiser.

Tab	Options
Styles/Ranges Tab	
Merchandisable Areas Tab	Defines the volume that merchandise is allowed to occupy.
Shelf Tab	Sets the default angle for any shelving to be attached to the equipment
Preview Tab	For use within Fixture Studio - it allows users to visually check connection points, merchandisable areas, etc.

Gondola Definitions

Gondolas are defined using the Gondola Definitions dialogue box in Fixture Studio.



They allow gondolas to be defined from the available fixture blocks. Options include:

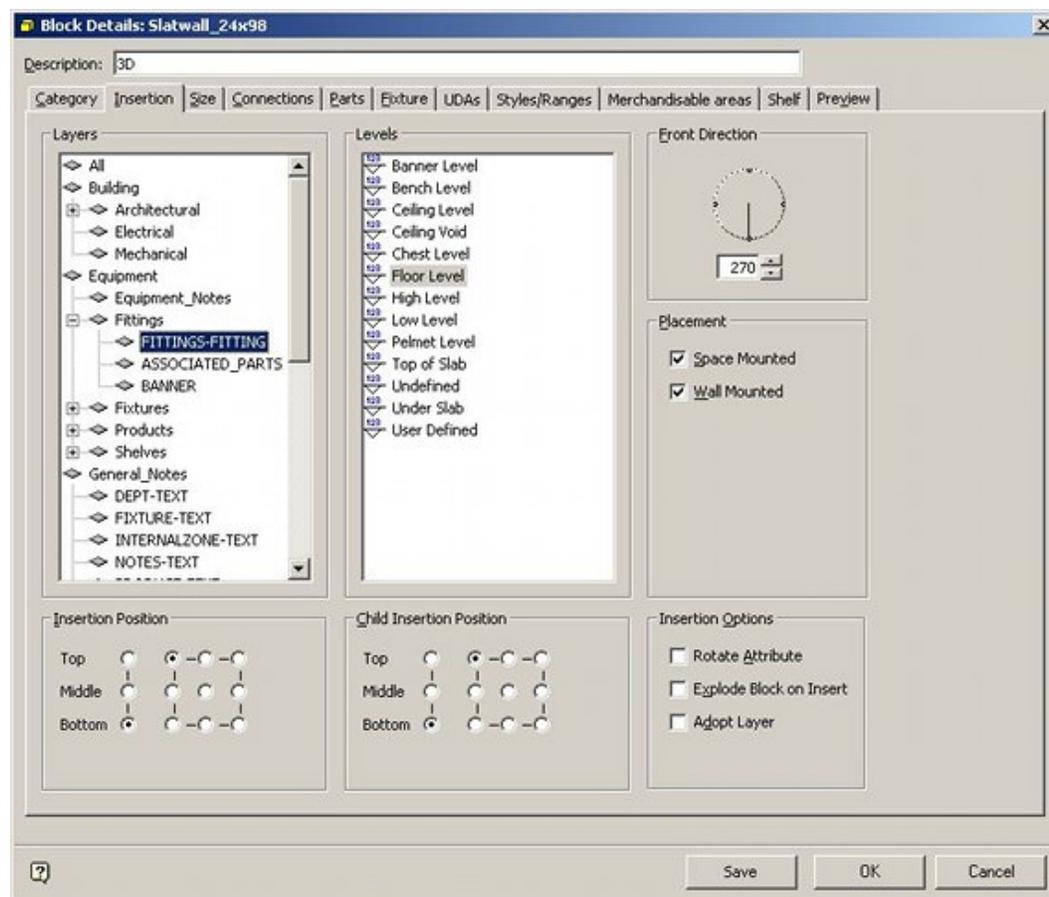
Gondola Parts The list of parts that go to make up a gondola, including which are optional.

Gondola Dimensions The permissible dimensions for the gondola.

Specifying Insertion Points

Insertion points can be specified within Fixture Studio. First select the block to be modified then select the Edit Block command.

This will open the block Details dialogue box. The Insertion Tab allows the Insertion Position and Child Insertion Position to be specified.



Note: The Insertion Position in this dialog box is a Macro Space Management insertion position. The original insertion position is an AutoCAD or 3D Studio graphics insertion position and the Macro Space Management Insertion Position is specified to match.

If the Macro Space Management Insertion Position is changed, the AutoCAD or 3D Studio insertion position must also be modified by changing the graphic or vice versa. Failure to do this will result in differences between the AutoCAD/3D Studio insertion position and the Macro Space Management Insertion Position. This may result in misalignment when objects are placed in Macro Space Management. It will also result in errors when calculating adjacencies, etc.

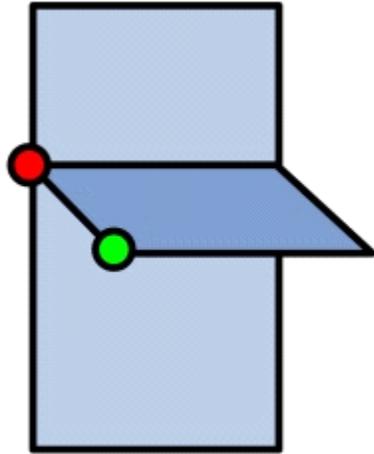
Child Insertion Points

Child Insertion Points are used to provide a datum for product being inserted onto a fixture or shelf object.

They are different from Insertion Points.

Insertion points are used to specify the location of an object (fixture, shelf object, etc) within a Virtual Reality store.

Child Insertion Points are used by Macro Space Planning to align product being placed on that fixture, shelf object, etc.



In the above diagram the shelf has an insertion point (red). This has been used to align the shelf relative to the back panel it has been placed on.

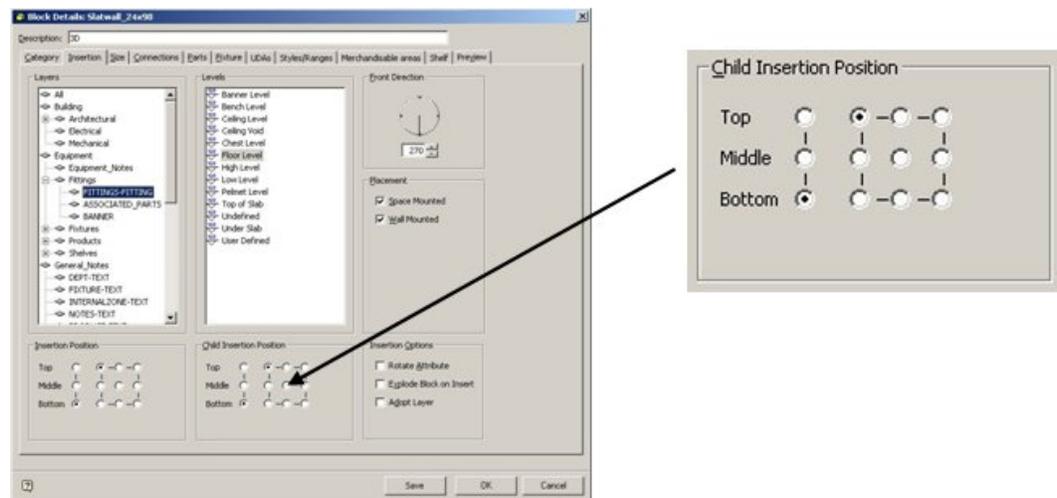
Any moving or editing operations for the shelf will be carried out relative to this insertion point.

The shelf also has a child insertion point (green). This will be used to align any product placed on the shelf.

Any moving or editing operations for products placed will be carried out relative to this insertion point.

Setting Child Insertion Points

Child Insertion Points are set in Fixture Studio.



The Child Insertion Position can be set to any one of nine positions in a specific X – Y plane, and to any of three positions in the Z axis. This gives 27 options for the child insertion position.

Important: Wherever possible, child insertion positions should be standardized for particular classes of object. This will prevent misalignment problems.

Overview of Equipment Types

Equipment is categorized under three types:

Fixtures: Equipment that can be placed on the floor and can be populated with shelves and/or products.

Fittings: Equipment that can be placed on the floor, but can't be populated.

Shelves: Equipment that is placed on a fixture and can optionally hold product.

In addition, there is a fourth class of objects:

Other: Any other item that is not equipment, e.g. an architectural column.

Attachment Options

The equipment used in building a store layout falls into three categories: Primary, Secondary and Tertiary.

Primary Equipment indicates the most fundamental form of equipment. All Primary Equipment is capable of being placed directly on the floor.

Examples of Primary Equipment include Metal Uprights, Back Panels, Pallets and Fittings, (such as legs).

Some Primary Equipment is capable of accepting subsidiary equipment, (Secondary Equipment).

Secondary Equipment indicates items of equipment that attach directly to Primary Equipment. Secondary equipment cannot be placed directly on the floor.

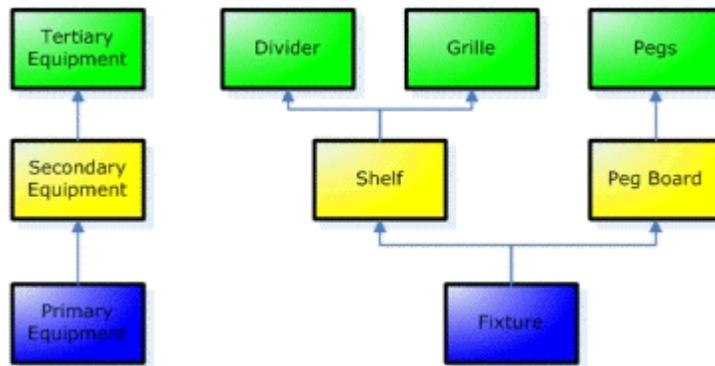
Examples of Secondary Equipment include shelves, peg boards and slatted back panels

Some Secondary Equipment is capable of accepting further subsidiary equipment, (Tertiary Equipment).

Tertiary Equipment indicates equipment that is attached to Secondary Equipment.

Examples of Tertiary Equipment include pegs, rods and dividers.

Equipment can therefore be arranged in a hierarchy.



All Secondary Equipment must have an item of Primary Equipment as a parent.

Similarly, every item of Tertiary Equipment must have an item of Secondary Equipment as its respective parent.

Depending on the design, some items of Primary, Secondary and Tertiary Equipment can accept merchandise. Others cannot.

Working and Stacking Axes

Working and Stacking Axes define how product is placed onto fixtures and shelf objects. Fixtures and shelf objects that do not have at least one working and one stacking axis defined cannot accept product.

Working Axis

When products are placed onto a shelf object they have to be aligned with each other during placement.

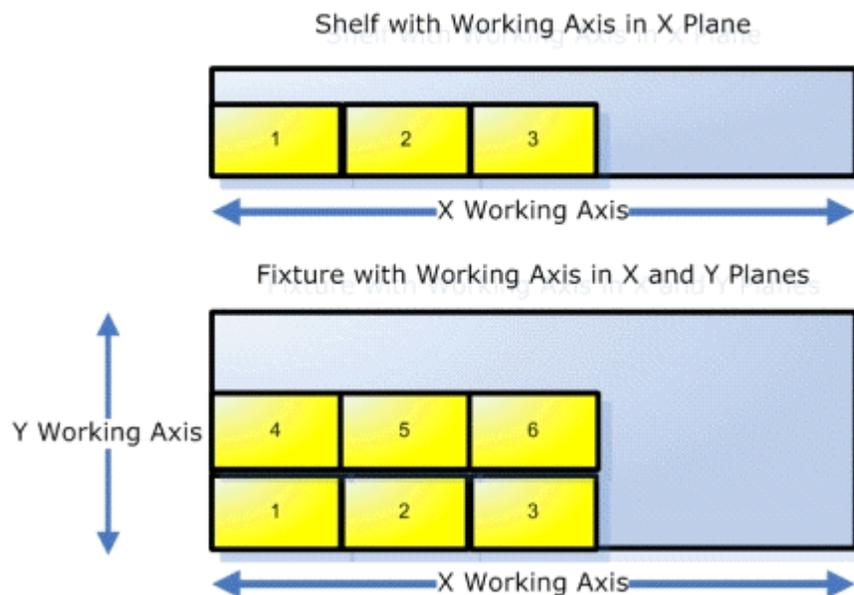
The working axes of an item of shelf equipment are the axis's which product that is being sequentially placed is aligned along.

- The X working axis is from left to right.
- The Y working axis is from front to back.
- The Z working axis is used for vertical placement.

The working axis set should be appropriate for the type of fixture or shelf object.

For example a shelf will normally have only an X working axis as product is normally placed along the length of a shelf.

A freezer cabinet might have an X and a Y working axis as product is placed both along the length of the cabinet and from back to front

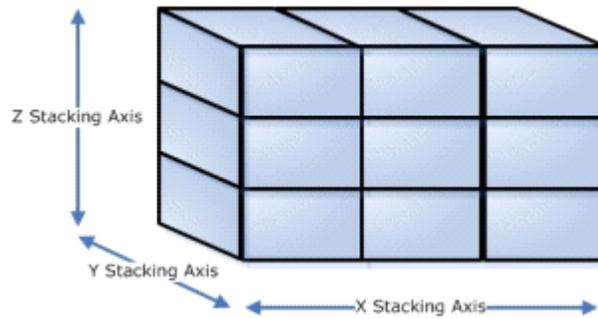


The working axis set should be appropriate for the type of fixture or shelf object.

Stacking Axis

The stacking axis (or axis's) is the direction(s) that products may be stacked on a fixture or shelf object.

- The X stacking axis is from left to right.
- The Y stacking axis is from front to back.
- The Z stacking axis is used for vertical stacking.



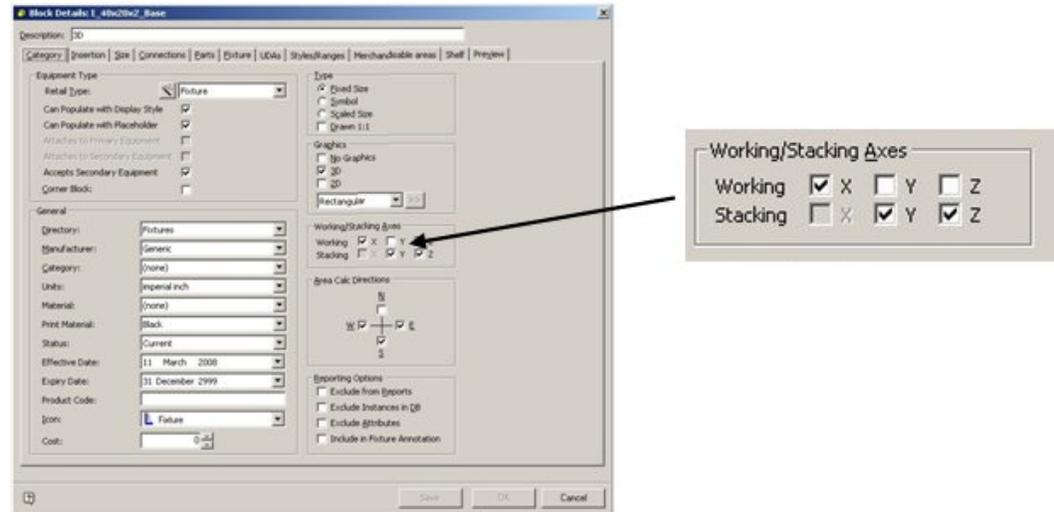
The stacking axis set should be appropriate for the type of fixture or shelf object.
Examples of the Working and Stacking Axis's of Fixtures and Shelf Objects
 An open shelf will have objects placed along the length of the shelf (X working axis).
 It can have objects stacked next to each other (X axis) behind each other (Y axis) and on top of each other (Z axis). Accordingly an open shelf should have all three stacking axes checked.

SHELF	X	Y	Z
Working	<input checked="" type="checkbox"/>		
Stacking	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>

A peg on the other hand can only have products placed along its length (Y working axis).
 A peg can only have products slid along its length – they are constrained so they can only move in that direction. Accordingly, a peg should only have its Y stacking axis enabled.

PEG	X	Y	Z
Working	·	<input checked="" type="checkbox"/>	
Stacking	·	<input checked="" type="checkbox"/>	·

Working and Stacking Axes are set in Fixture Studio.



The rotation of products is theoretically allowed in any axis. In practice this is constrained by the Working/Stacking axes of the shelf objects.

Aspects of Equipment

Overview of Macro Space Management Equipment

A Store in the Merchandiser environment is populated by equipment. This can include fixtures, fittings, shelves and many other items of store furniture.

The way these items behave is affected by the properties they have been assigned, how they are grouped together for collective manipulation and by what the System variables are set to.

Object Properties

Each of these items of equipment has been initially created as a graphic (using for example AutoCAD). The graphic contains basic properties such as dimensions and an insertion point.

The graphic has then been imported into Macro Space Management and turned into a Macro Space Management Block. During this process, the Macro Space Management Block is assigned additional properties that allow it to act in an 'intelligent' manner when in the Macro Space Management CAD and Virtual Reality Environments.

Knowledge of how these 'Intelligent Properties' affect the behavior of equipment within Macro Space Management is important in understanding the behavior of the software. Some of these properties are:

Characteristic	Definition
Insertion Points	Determine the locations at which equipment and merchandise is placed in Merchandiser
Child Insertion Points	Determine the justification which products are placed on fixtures and shelf objects
Connection options	Determines how one item of equipment connects to another.

Characteristic	Definition
Placement Options	Determines the alignment, etc, when product is placed onto open shelves, pegs and other shelf objects
Styles	Determines which items of equipment are compatible with another. Also determines which shelf objects products can be placed on.
Alignments	Determines how groups of products on shelf objects can be aligned (justified) relative to that shelf object.
Product Orientations	Individual product items can be placed in specified orientations, for example with the front, side or top of the packaging facing forward on the shelf object.

Grouping of Objects

Multiple objects (collections of either equipment or products) can be selected for collective operation. This is done by:

- Selection sets: used for a single collective operation.
- Groups: sets of objects in horizontal alignment that can repeatedly manipulated
- Families: sets of objects in vertical alignment that can repeatedly manipulated

System Variables

In addition there are a number of System Variables that affect Macro Space Management. These may be set to different values – each of which will cause a modification to the behavior of the Macro Space Management environment.

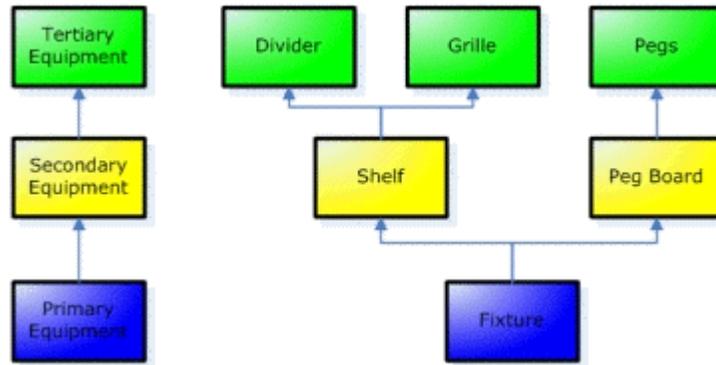
Overview of Equipment Types and Connection Points

The **equipment** used in building a store layout falls into three categories: Primary, Secondary and Tertiary.

Primary Equipment indicates the most fundamental form of equipment. All Primary Equipment is capable of being placed directly on the floor. Some Primary Equipment is capable of accepting subsidiary equipment, (Secondary Equipment). Only Primary Equipment has an Insertion Point that is directly placed in the floor plan of a store.

Secondary Equipment indicates items of equipment that attach directly to Primary Equipment. Secondary equipment cannot be placed directly on the floor. Some Secondary Equipment is capable of accepting further subsidiary equipment, (Tertiary Equipment). Secondary Equipment has an insertion point relative to the insertion point of its parent Primary fixture.

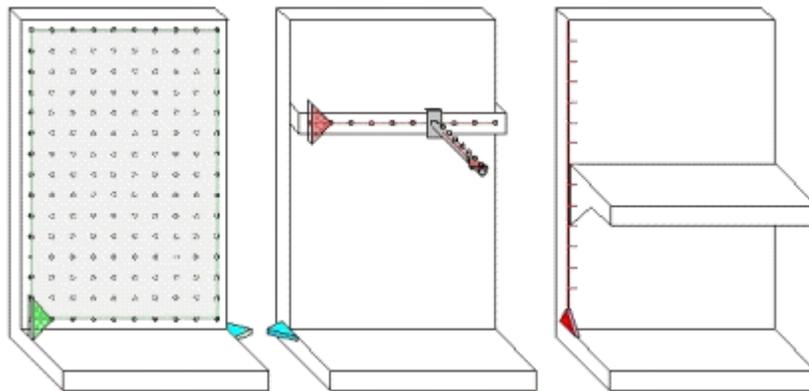
Tertiary Equipment indicates equipment that is attached to Secondary Equipment. Equipment can therefore be arranged in a hierarchy, as in the example below.



Within the Merchandiser environment, store furniture can be assembled in standard or custom configurations by joining together items of equipment.

For example, a back panel could be placed directly on the floor. This back panel could then have runs of shelving attached, and the shelves in turn have dividers placed on them.

Macro Space Management's internal rules determine exactly how items of equipment can connect together. Within the Merchandiser environment, connection points give visual indications as to how individual items of equipment can be assembled.



Overview of Location and Coordinate Systems

The central Macro Space Management database holds information on the location (and dimensions) of all objects placed on the floor of the Virtual Reality store. These will normally be a limited number of fixtures and fittings such as legs, pallets, etc.

Each object will be inserted at a specific Insertion Location with coordinates expressed in terms of X, Y and Z coordinates.

Each object to be inserted has two Insertion Points; a Graphical Insertion Point and a Macro Space Management Insertion Point. The graphical insertion point is created when the graphic is drawn (in for example AutoCAD). When the graphic is imported into Macro Space Management, the coordinates of the graphical insertion point are manually entered into the object details held by Macro Space Management. This manually entered data must match the original graphical insertion point, or misalignments will occur in the Virtual Reality environment.

All other objects, (equipment of merchandise) are connected to the fixtures and fittings that have been placed on the floor. These objects are known as children of their parent objects.

Children have their own insertion locations specified relative to the insertion location of their parent objects. They also have their own individual graphical and **Macro Space Management** insertion points. Again, these must match to prevent misalignments.

Overview of Connection and Placement Options

Objects in Macro Space Management can be split into several broad categories.

Two of these categories are Equipment and Products. They connect together in slightly different ways.

Equipment

Equipment connects together using Connections. These may be either points (which simply snap two items of equipment together), lines (which allow equipment to be connected at intervals defined along a line), or planes (which allow equipment to be connected at intervals defined in a 2 dimensional grid).

Products

Products connect together using Placement Options. These may be either Continuous Placement (where products can be placed anywhere within a specified boundary, for example an open shelf), or Point Placement (where products can be placed in clearly specified places, for example on an array of pegs).

Overview of Styles

Styles are used to specify which items of equipment are compatible with another, and which types of product can be placed on which shelf.

Equipment has Fixture Styles. Only equipment with compatible styles can be connected together.

Shelves have both Fixture Styles and Shelf Styles. The Fixture style must be compatible with the equipment it is being placed on. The shelf style must be compatible with the product that can be placed on it.

Product has a Product Style. The Product Style must be compatible with the shelf on which it is being placed or placement will not be allowed.

Overview of Alignments

When objects are placed on shelf objects, they may not be in the best possible alignment to display them, or there may be gaps between products leading to inefficient use of shelf space.

Macro Space Management has a series of alignment options so that selected products on pre-determined shelves can be aligned (justified) to customer specified requirements such as the left of the shelf, the back of the shelf, etc.

Overview of Product Orientations

Products are normally placed with the front of the packaging facing the front of the shelf object.

However, placing products in this orientation may not fill the shelf to its maximum capacity.

Macro Space Management thus allows products to be placed in other orientations, for example on their side, so that the number of products placed on a particular shelf object can be maximized.

Product placed in orientations other than the main one are known as caps.

Product Orientations

Overview of Product Orientations

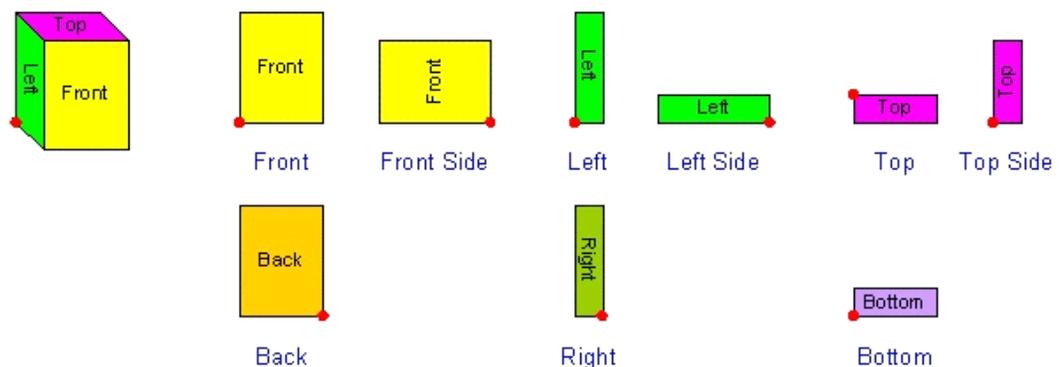
Products are normally placed with the front of the packaging facing the front of the shelf object. However, placing products in this orientation may not fill the shelf to its maximum capacity. Macro Space Management thus allows products to be placed in other orientations, for example on their side, so that the number of products placed on a particular shelf object can be maximized. Product placed in orientations other than the main one are known as caps.

Product Orientations

Product is normally placed on the shelves with the front of the packaging facing the customer. However, this orientation can be changed; either during placement or when a product is edited.



The nine possible orientations are as follows:



(The red dot indicates the insertion point).

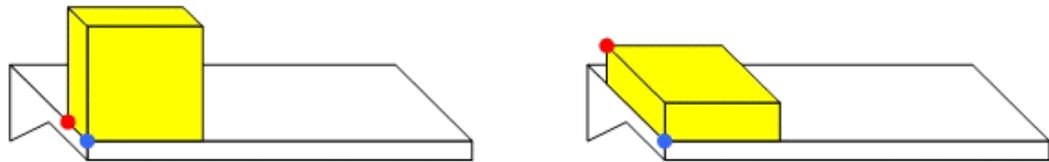
Front is the default orientation. The other orientations are achieved by the following rotations from the default.

Orientation	Rotation in X Axis	Rotation in Y Axis	Rotation in Z Axis
Front	None	None	None
Front Side	None	270°	None
Back	None	None	180°
Left	None	None	90°
Right	None	None	270°
Left side	None	270°	90°
Top	90°	None	None
Top side	90°	270°	None
Bottom	270°	None	None

Effect of Rotations

Then the object is rotated to change its orientation, it occupies the same relative position on its parent object. This is done by means of child insertion points.

In the example of the box on a shelf, the child insertion point (the datum for the boxes' position) is shown in blue. It is set at the front left of the shelf.



When the box is rotated, it is still aligned relative to the child insertion point, although the boxes' insertion point (shown in red) has moved

A similar effect can be seen in the example of a box being rotated relative to its parent peg.



The child insertion point (shown in blue) is at the front of the peg. When the box is rotated it remains in the same relative position to the child insertion point although its own insertion point has changed position.

Connection Points

Overview of Connection Points

Connections points are used to join items of equipment together. They can either be used singly, or aligned in lines, planes or boxes.

Connection Points are used to attach items of equipment together.

Connection Lines are used where items like crossbars have set positions along their length that can accommodate Tertiary Equipment such rods.

The position of the arrow indicates the position of the connection point.

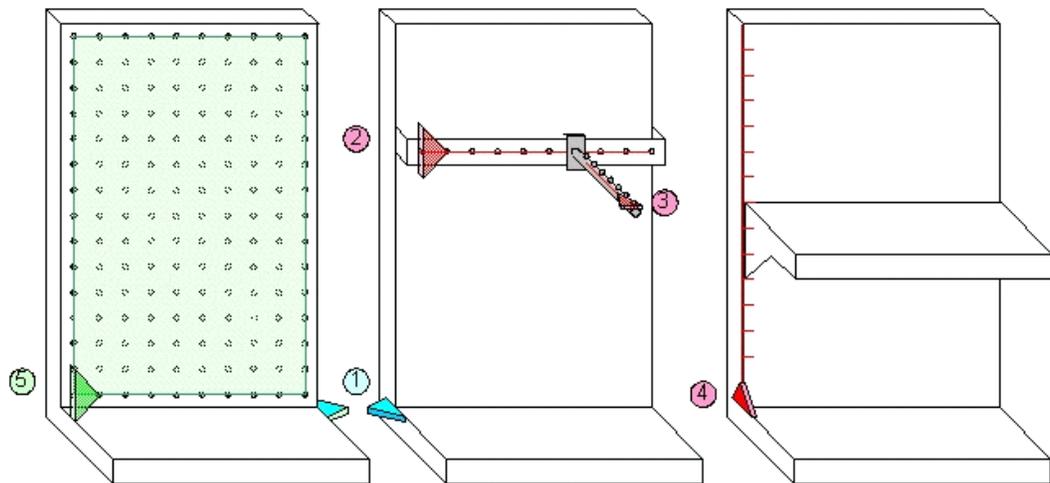
The increments between set positions along a connection line are defined in Fixture Studio.

The position of the connection arrow defines the leftmost position of the first point on the connection line.

Connection Planes are used where Secondary Equipment such as peg boards or slotted back panels have a 2 dimensional array of possible connection points for Tertiary Equipment such as pegs.

The increments between set positions in a connection plane are defined in Fixture Studio.

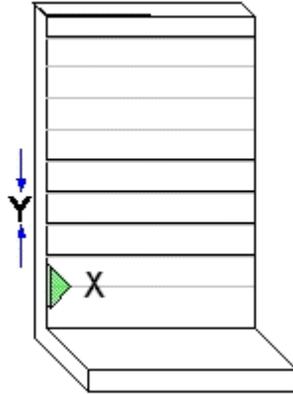
The position of the connection arrow defines the bottom left position of the first point on the connection plane.



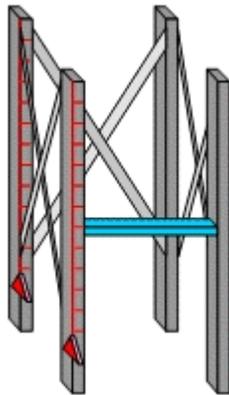
In the above diagram, blue arrows (1) represent Connection Points; red arrows (2, 3, and 4) represent Connection Lines and the green arrow (5) represents a Connection Plane.

The arrow direction indicates the X axis and the arrow lies in the X, Y plane.

Slatted back panels use a connection plane with the X spacing set to 0 so that rods can be slip to any position along the slot. The Y spacing is set to the distance between slots.



It is also possible to use more than one connection line, as for example with racking.



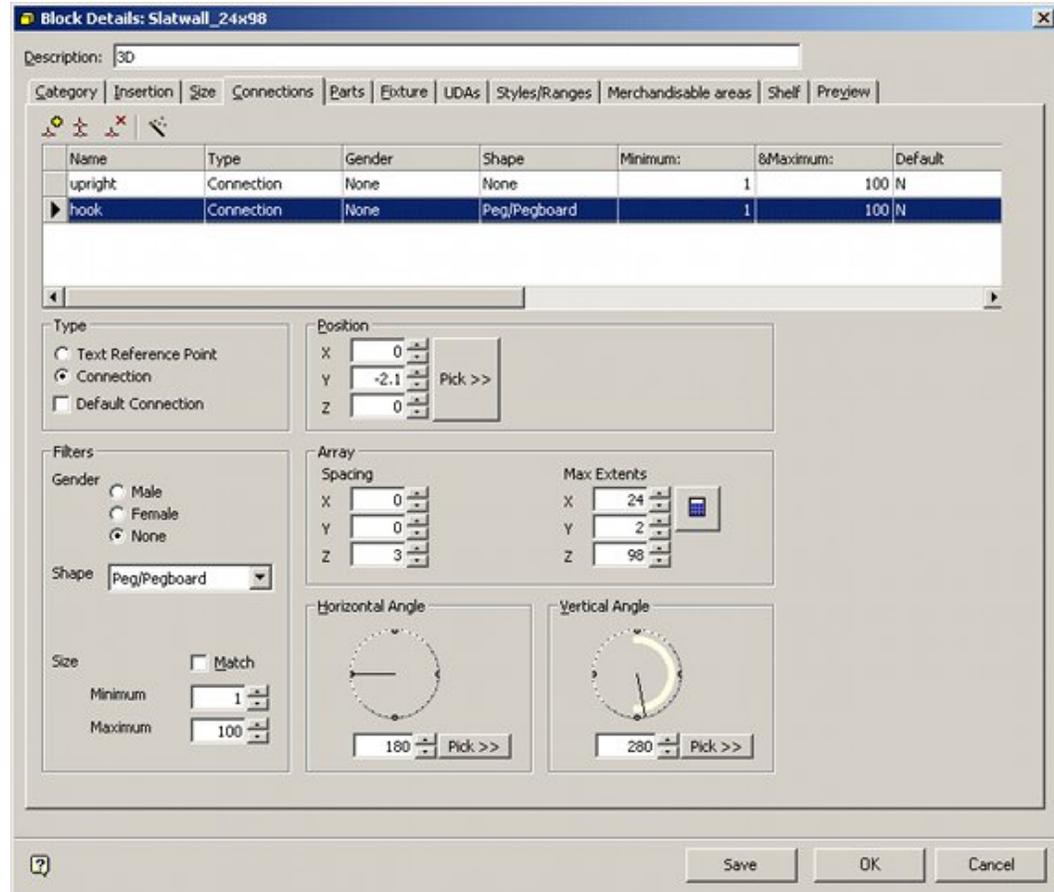
The fixture could be defined as two uprights (front and back), plus the cross-bracing. This would allow beams (blue) to be added to either the front or the back.

Macro Space Management will use the nearest connection arrow to the drop/pick point when deciding which to use.

Connection points are used to define the exact point on the dropped object (shelf or peg or rod) that attaches to the notch position. The connection line/plane filters must match the connection point filters. If no connection point is defined for the dropped object, it will use the insertion point of the shelf/peg.

The Connections Tab in Fixture Studio

The **Connections Tab** in the Block Details dialogue box in Fixture Studio lets the user specify the connection options for Macro Space Management blocks.



A small Toolbar at the top lets users Add, Copy and Delete connections, while the Wizard on the toolbar allows the user to add three basic connections.

The Connections List below the toolbar lists all current connections for the Macro Space Management Block.

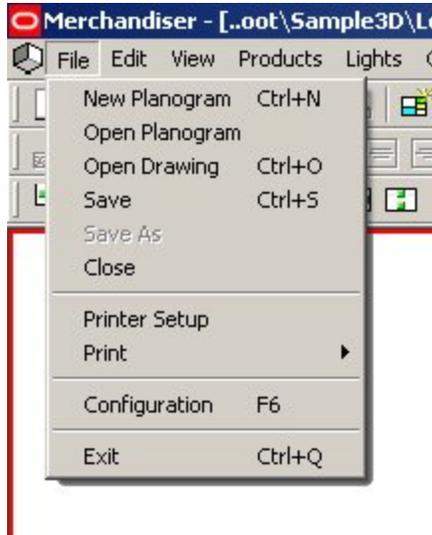
The defined connection points are the defaults for that fixture type and will be applied for every instance placed in the drawing.

Note: See the Fixture Studio Help File for more information.

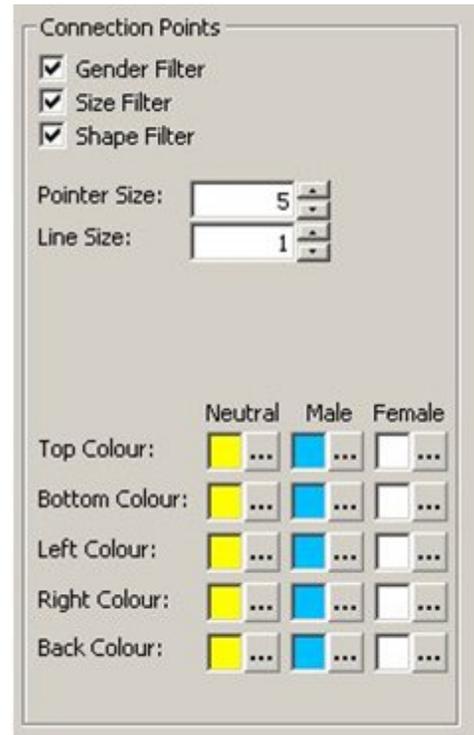
The Connections Tab and the Configuration Module

Settings in the Configuration Module can affect how connection points appear and behave. Settings are local and can be customized for the user.

Access the Configuration Module by selecting the Configure Option in the file pull down menu.



Within the Configuration module, select the Fixturing Tab. The Connection Points frame can then be used to change their appearance.



Pointer Size and **Line Size** affect the appearance of the connection points as displayed.

Colors for Neutral, Male and Female connection points can also be set.

A series of check boxes allow users to configure some aspects of how connection points operate:

- **Gender Filter** determines whether connection genders are taken into account when deciding if connections are compatible.
- **Size Filter** determines whether connection sizes are taken into account when deciding if connections are compatible.

- **Shape filter** options determine whether connection shapes are taken into account when deciding if connections are compatible.

These settings are local and will not affect other users of Macro Space Management.

Connection Details

Each **connection** needs the following information to be specified for it in Fixture Studio.

- Name
- Type
- Layer
- Gender
- Shape
- Size
- Whether it is the Default
- Position, Array and Angle settings

For one item of equipment to connect to another the following must be true.

	Requirement	Optional or Mandatory
Gender	The connection points must have compatible genders	This requirement can be disabled in the Configuration Module
Shape	The connection points must have the same shape	This requirement can be disabled in the Configuration Module
Size	The connection points must have compatible sizes	This requirement can be disabled in the Configuration Module

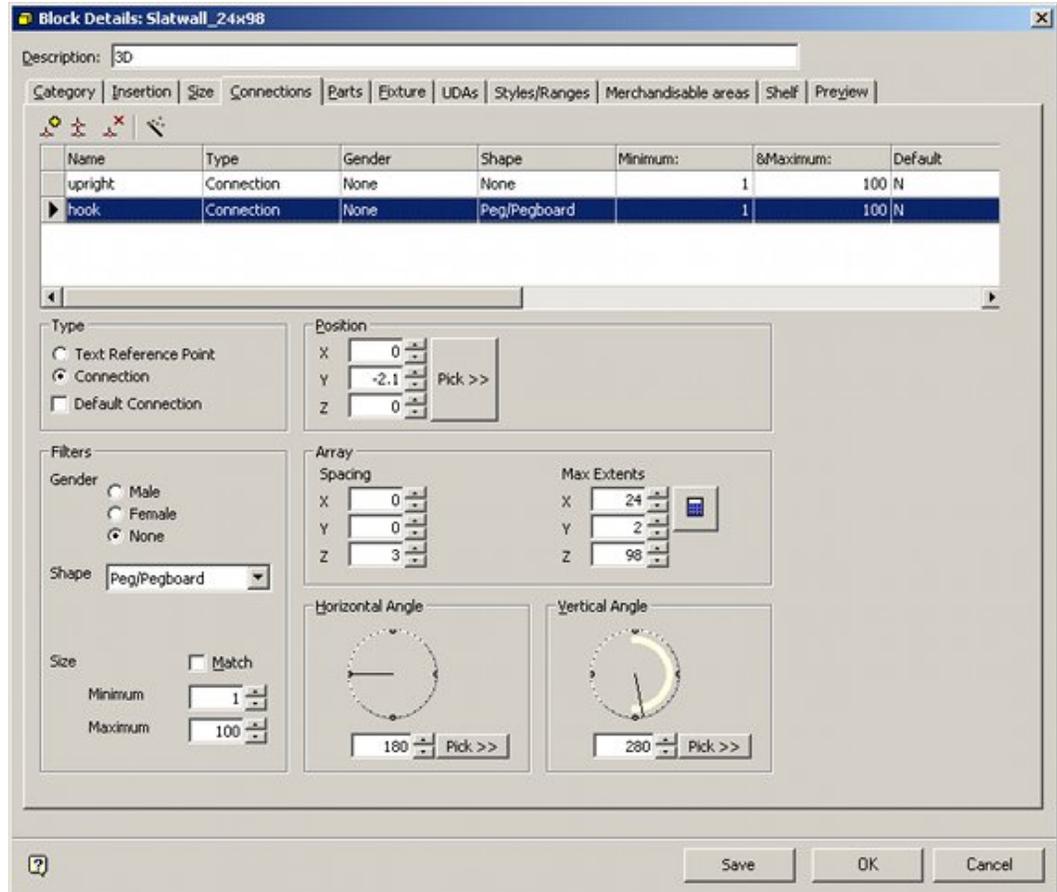
If any of these criteria are not true, then a connection cannot be made.

In addition, if the details of the connections are not correctly specified relative to each other, equipment may connect together in unintended alignments.

Connection Point Parameters

Setting Connection Point Parameters

The **Connection Point parameters** are set using the Block Details dialogue box in Fixture Studio.

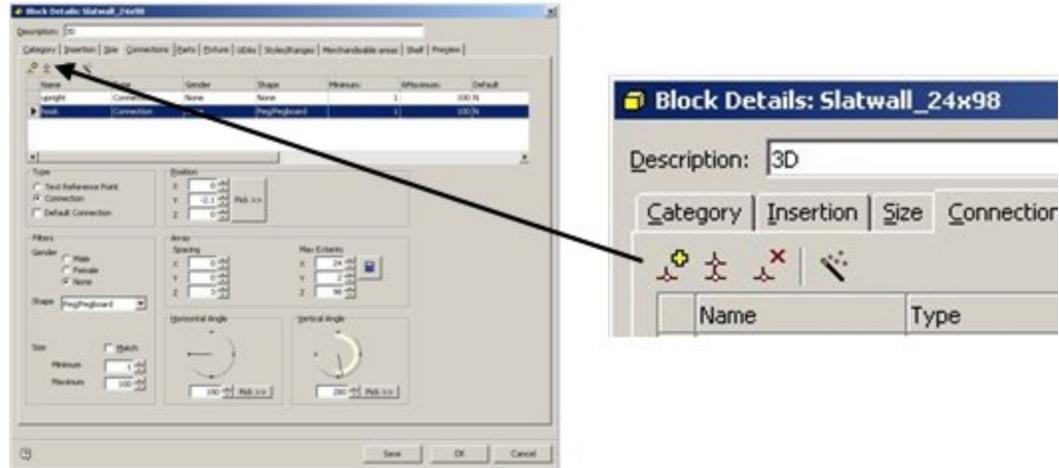


Brief details will be discussed in the following sections - see the Fixture studio help file for more detailed information.

The Connections Toolbar

The **Connections Toolbar** is found to the upper left of the Connections Tab in the Block Details dialogue box in Fixture Studio.

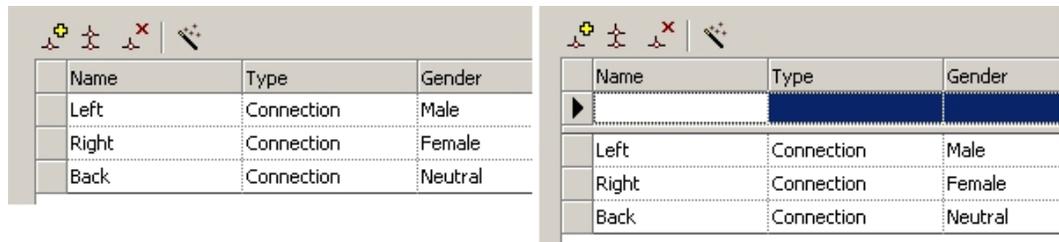
It allows users to Add, Copy and Delete Connections. It also allows the user to invoke the Connections Wizard.



Icon	Description
	Add a Connection
	Copy a Connection
	Delete a Connection
	Connection Point Wizard

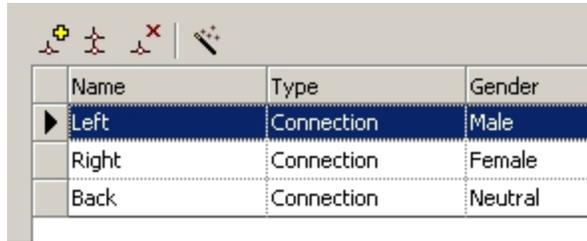
Add a Connection

Clicking on the Add a Connection icon causes a line to be added to the Connections List ready for further details of the connection to be added.



Copy a Connection

Clicking on the Copy a Connection icon causes a line to be copied again to the Connections List mirroring details of the connection to be added.



Name	Type	Gender
Left	Connection	Male
Right	Connection	Female
Back	Connection	Neutral

Before clicking the Copy icon, select the connection to be copied. Clicking on the icon will bring up the connection naming dialogue box.



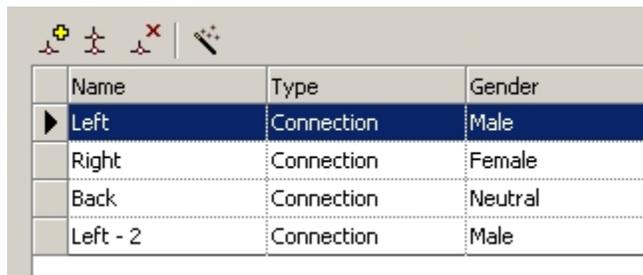
Copy connection point

Name:

OK Cancel

Edit the name to one suitable for the new connection. In the example Left has been edited to Left - 2.

On clicking OK, a duplicate connection will be added, save for the changed name.



Name	Type	Gender
Left	Connection	Male
Right	Connection	Female
Back	Connection	Neutral
Left - 2	Connection	Male

Delete a Connection

To delete a connection, highlight the connection to be deleted and click on the Delete icon.

The User will be asked to confirm deletion.



Fixture Studio

Are you sure you wish to delete this?

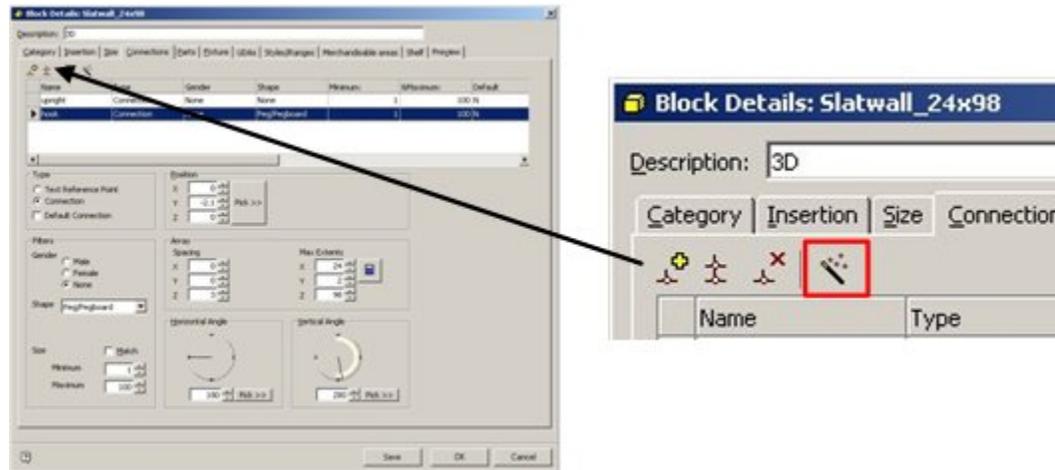
Yes No

Connection Wizard

The Connection Wizard is discussed in its own section here

The Connections Wizard

The **Connections Wizard** can be invoked from the Wizard icon in the toolbar in the Connections Tab in the Block Details dialogue box in Fixture Studio.



This will bring up the Connections Wizard dialogue box.



- **Checking the Add connection on Left** checkbox will add a Connection on the left.
- **Checking the Add connection on Right** checkbox will add a Connection on the right.
- **Checking the Add connection at Back** checkbox will add a Connection at the back.

The left connection is male and the right female so that fixtures can only attach when they are facing the same way. The left connection is additionally set to be the default.

The Back connection has no gender, so it will attach to any other connection.

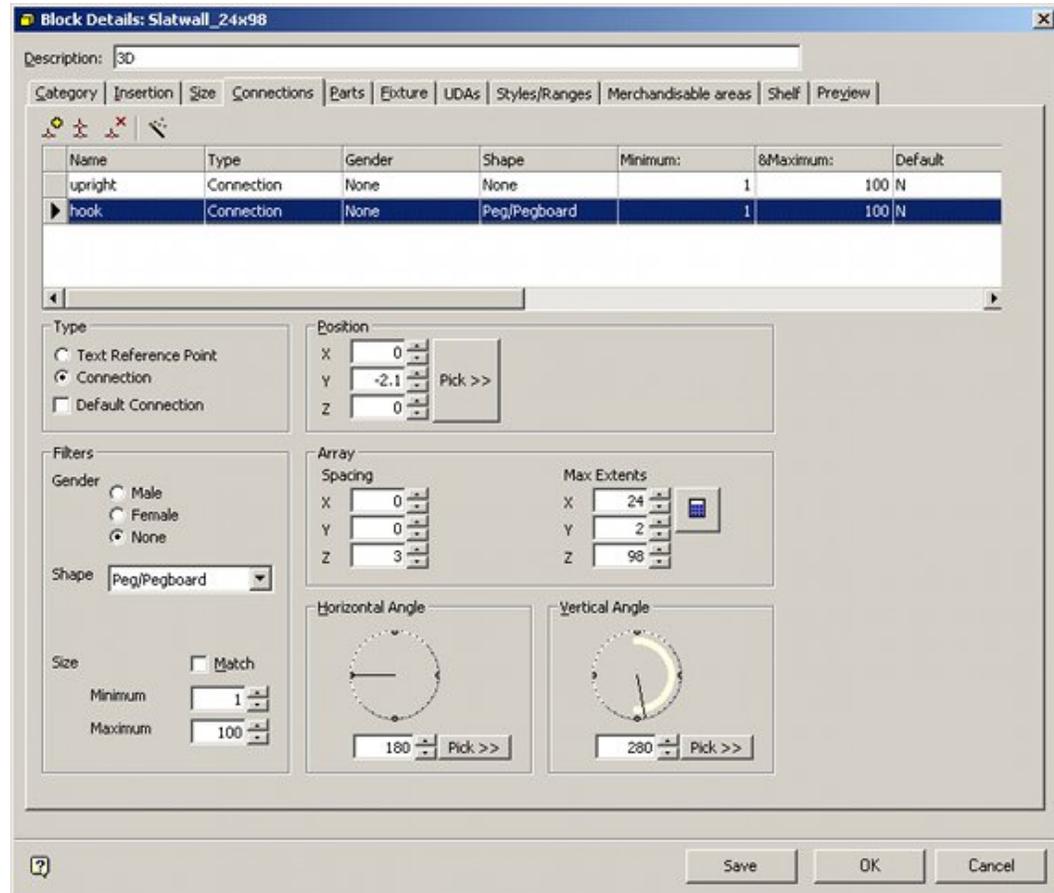
Checking the Clear Existing Blocks checkbox will remove any existing connections.

On clicking OK on the Wizard, the selected default connections will be added.

Name	Type	Gender	Shape	Default	Justifica
Left	Connection Point	Male	Triangular	True	Offset
Right	Connection Point	Female	Triangular	False	Offset
Back	Connection Point	None	Triangular	False	Offset

Other Connection Point Parameters

Other connection point parameters can be set in the Connections Tab in the Block Details dialogue box in Fixture Studio.

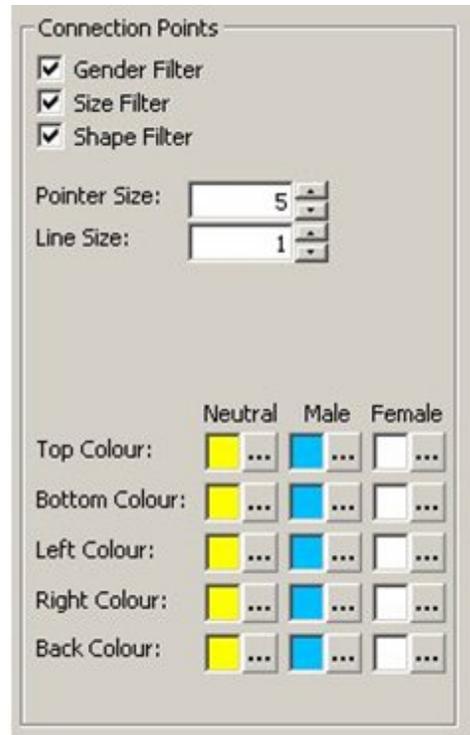


These include Type, Position, Array Spacing, Gender, Shape, Size, Horizontal Angle and Vertical Angle.

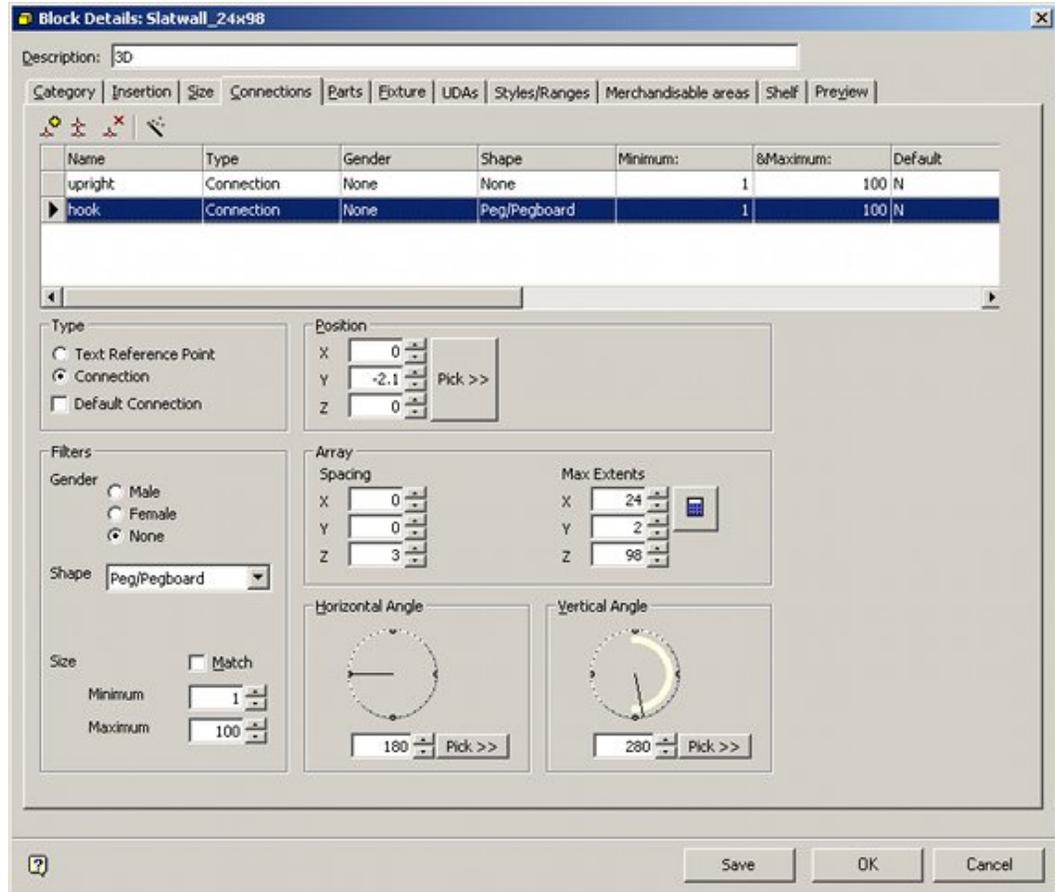
Using Connection Points

Overview of Using Connection Points

Connection points can be used to attach one piece of equipment to another. For the equipment to connect, the connection points must be compatible. Some factors affecting compatibility are set in the Configuration Module.



Other fixture specific factors are set in the Configuration Tab of the Block Details dialogue box in Fixture Studio.

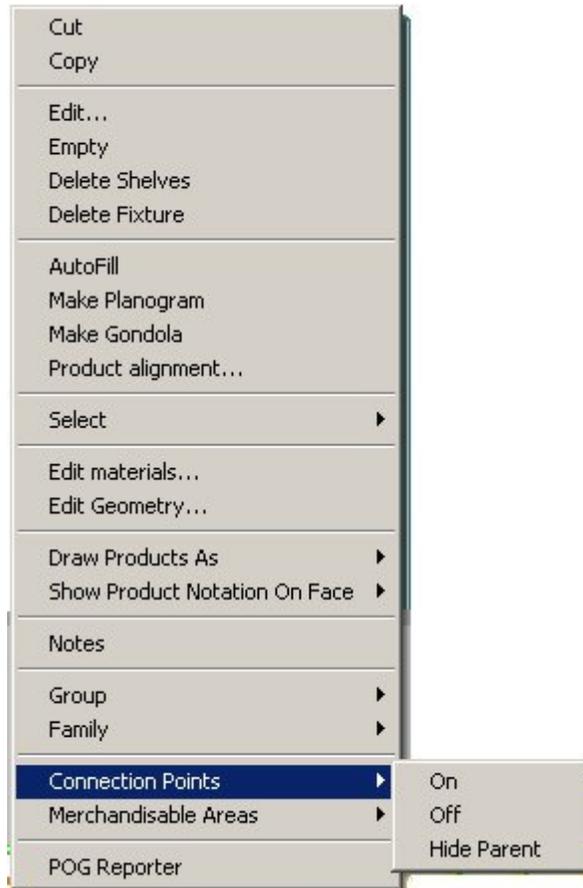


The combination of both sets of parameters will determine whether two connection points are compatible with each other.

Turning Connection Display On and Off

The **Connection Display** can be turned on and off for individual fixtures or a selection set of fixtures within the Merchandiser Module.

Select one or more fixtures, then move the mouse pointer inside a fixture and use <Ctrl> plus right click to bring up the pop-up menu.

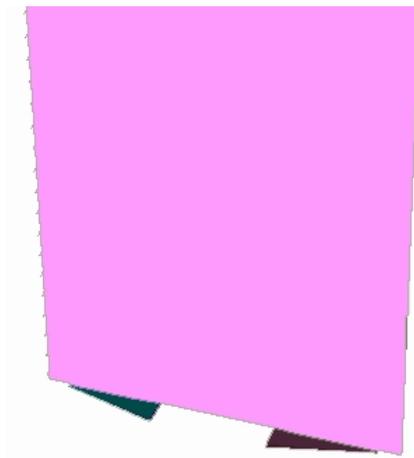


Clicking on the Connection points option in the pop-up menu allows connection display to be turned on and off.

Hide parent will turn off connection point display the parent fixture when (for example) a child object such as a shelf is selected.

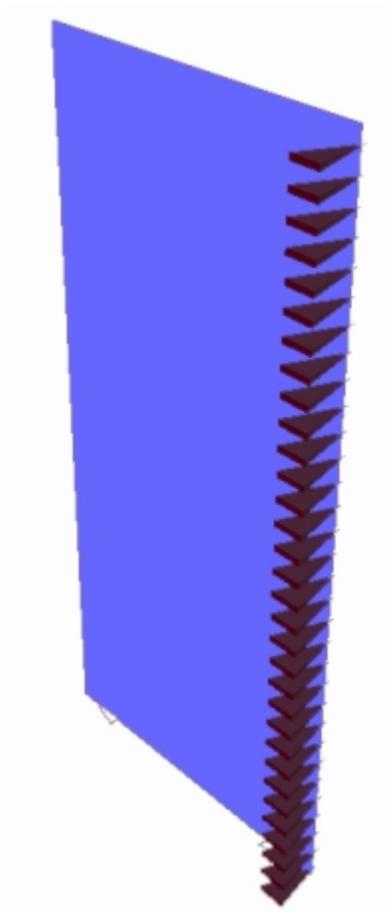
Connection Point Appearance

When visible, Connection Points are shown as triangles.



The color and size of the connection points can be specified in the Configuration Module.

Their angle, gender, etc, for a specific fixture can be defined in Fixture Studio. Connection Points can appear in lines and arrays, as well as discrete points. The example below shows a Connection Line.



Checklist for Compatibility

For one item of equipment to connect to another the following must be true.

	Requirement	Optional or Mandatory
Gender	The connection points must have compatible genders	This requirement can be disabled in the Configuration Module
Shape	The connection points must have the same shape	This requirement can be disabled in the Configuration Module
Size	The connection points must have compatible sizes	This requirement can be disabled in the Configuration Module

Gender

The gender of a connection determines whether that connection is compatible with another. There are three genders; male, female and neutral. They connect as follows:

Can connect with		
Male	Female	Neutral
Female	Male	Neutral
Neutral	Any other connection	

Shape

The shape of a point connection can be specified from a list provided by Oracle. They connect as follows:

Can connect with		
None	Any other connection shape	
Rectangle	Rectangle	None
Circle	Circle	None
Oval	Oval	None
Triangle	Triangle	None
Hexagonal	None	None

The shape of a connection point is a theoretical concept used to make it easier to remember what connects to what - i.e. fixtures with 'Oval' connection points can only connect to other fixtures with 'Oval' connection points.

(When displayed in Merchandiser, all connection points will appear visually as triangles).

Size

A maximum and minimum size for the connection can be set in Fixture studio

A pair of connection points must have compatible sizes to connect together.

If the Match check box is ticked, then the connections must have identical maximum and minimum sizes. If they are not identical, the connections will not mate.

If the Match check box is not ticked, then the connections must have overlapping size ranges. If they are not overlapping, the connections will not mate.

	Connection 1	Connection 2	Result
Size Range	0 - 50	25 - 75	Compatible
Size Range	0- 25	50 - 75	Incompatible

Connecting two objects in Edit Mode

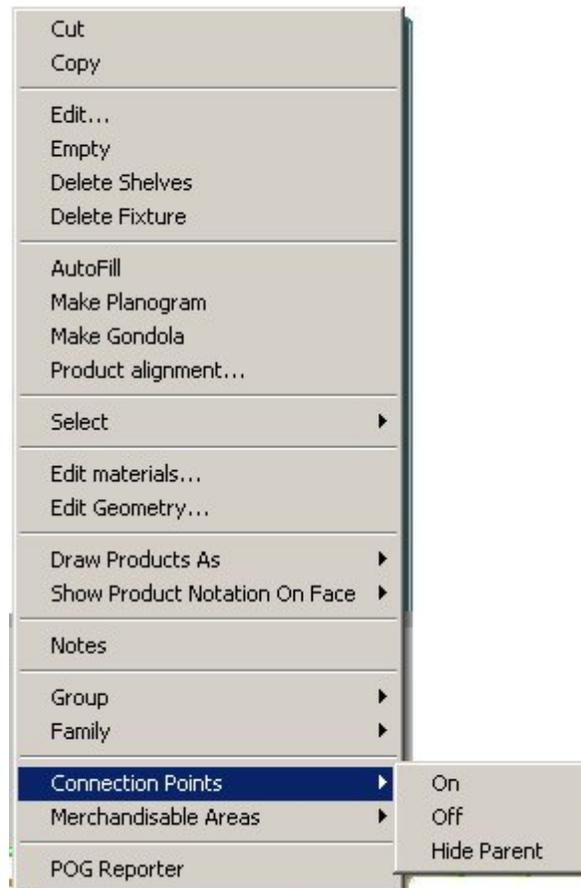
Swap to Edit Mode

To connect two objects in edit mode, first ensure that edit mode has been selected by toggling from Walk Mode to edit mode on the status bar.

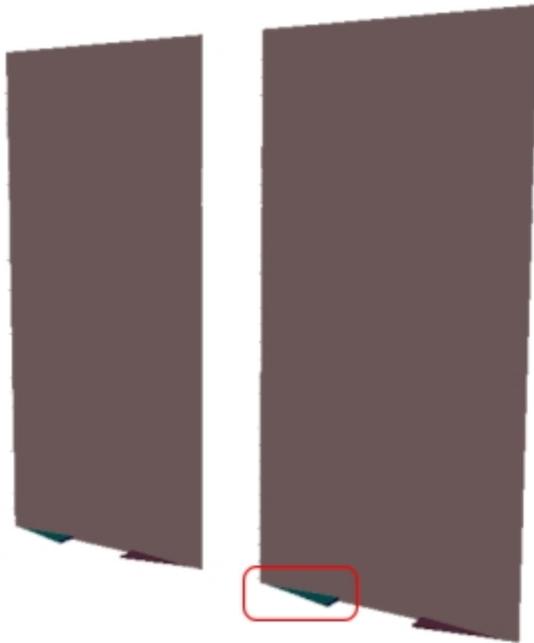


Turn Connection Points On

Next, ensure that the connection points have been toggled on by selecting a least two fixtures and use <Ctrl> plus right click to bring up the pop-up menu.



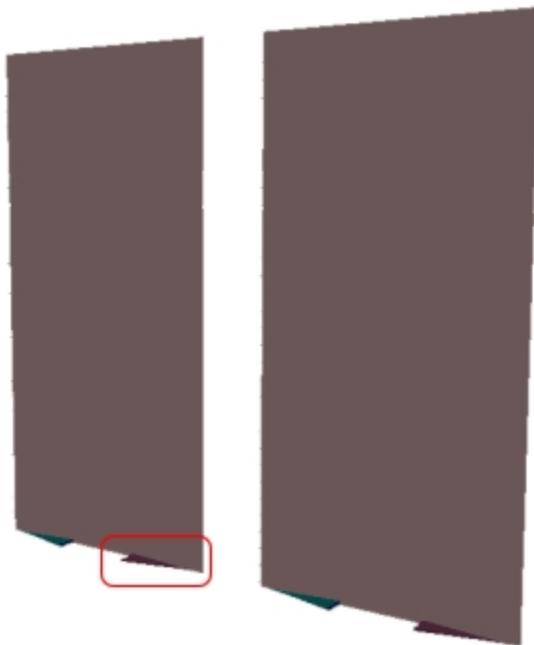
1. Turn connection points on and they will appear as triangles in the drawing.
2. Click First Connection Point and Follow Prompts
3. Click on the first connection point. (Circled in red in the image below)



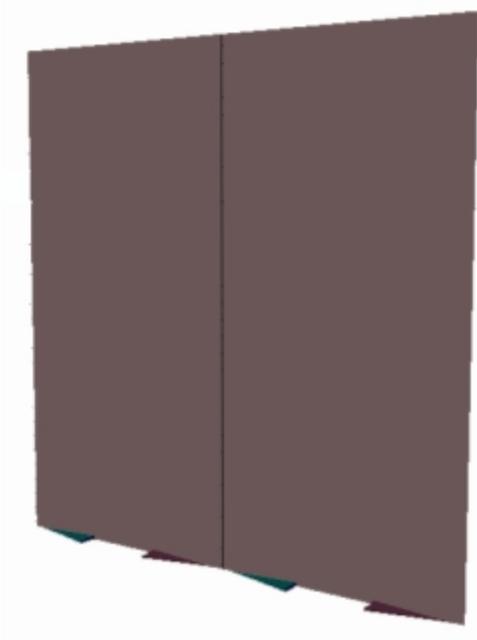
A prompt will then appear in the status bar asking the user to select the



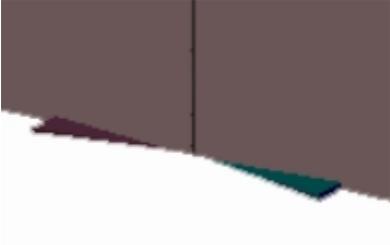
Select a connection point on the other fixture. (Circled in red in the image below).



As soon as the second connection point is clicked, the first object will be connected to the second one.



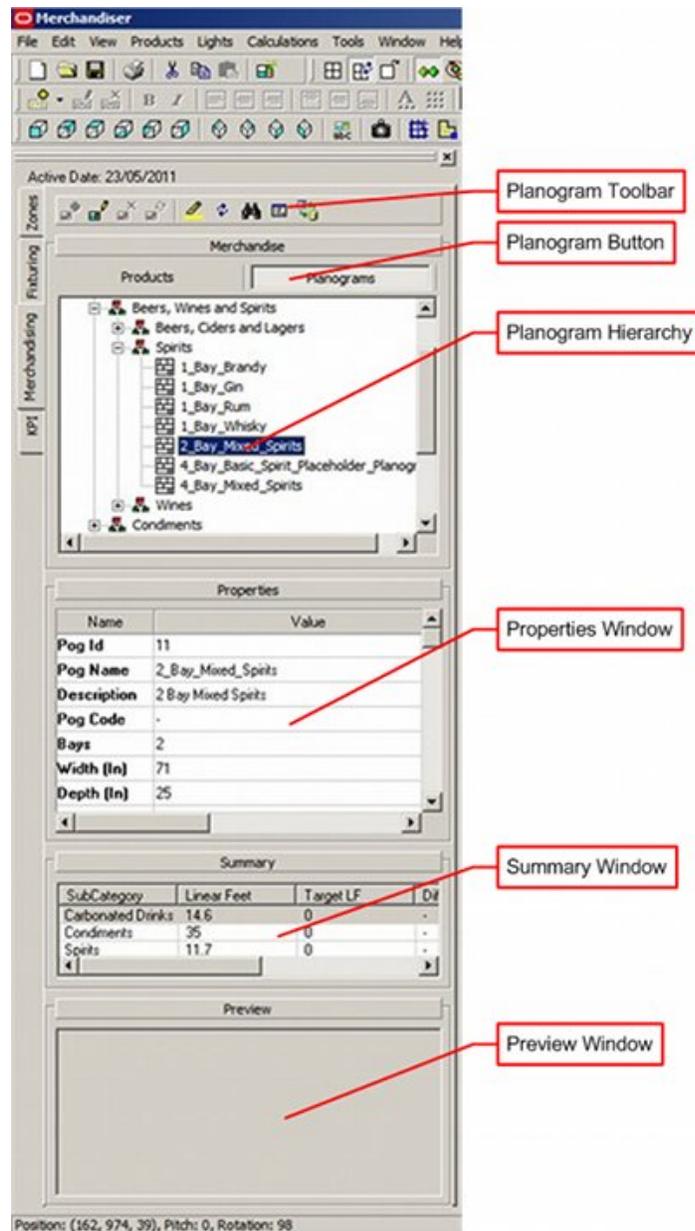
Note how the two connection points now meet:



Merchandise on the Object Browser

Overview of Merchandising on the Object Browser

Clicking on the Merchandising Tab on the Object Browser brings up a series of options for adding, editing and deleting Planograms.



The **Toolbar** gives access to varying options concerning Planograms. **Buttons** allow users to swap between product or planogram operations.

The **Hierarchy Window** allows users to see the list of available planograms. (The hierarchy showing will depend on which button is selected).

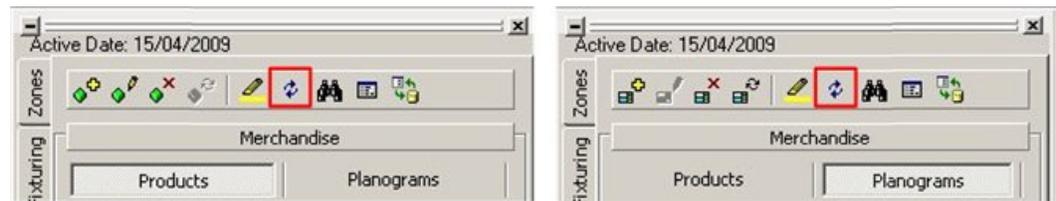
The **Properties Window** gives details of the currently selected object.

The **Summary Window** gives details of how many of the selected objects have been placed in the drawing.

The **Preview Window** gives a preview of the selected product or planogram (if available).

Highlight Selected Item from Tree

The **Highlight Selected Item from Tree** option enables products or planograms selected from the appropriate hierarchical tree to be highlighted when they are selected in the drawing.



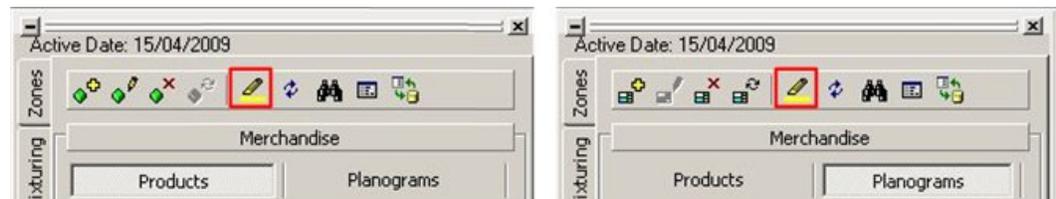
This is a feature that can be toggled On or Off. To toggle the option on, click on the icon. This will show as depressed on the toolbar. To toggle the option off, click on the icon again. It will no longer be depressed.

Note: It is recommended this option be only selected when required. When activated, (toggled on), it takes up processing capacity. Leaving this option toggled on when not required will slow other operations.

To highlight a product or planogram find the required item in the drawing and click on it. The item will then be highlighted in the hierarchical tree – the exact method of highlighting depending in the options selected in the Configuration Module.

Highlight Where Used in Store

The **Highlight where used in Store** icon enables products or planograms selected from the appropriate hierarchical tree to be highlighted on the drawing.



This is a feature that can be toggled On or Off. To toggle the option on, click on the icon. This will show as depressed on the toolbar. To toggle the option off, click on the icon again. It will no longer be depressed.

Note: It is recommended this option be only selected when required. When activated, (toggled on), it takes up processing capacity. Leaving this option toggled on when not required will slow other operations.

To highlight a product or planogram, find the required item in the hierarchical tree and click on it. The item will then be highlighted in the drawing – the exact method of highlighting depending in the options selected in the Configuration Module.

Editing Product Definitions

Clicking on the **Edit Definitions** Icon in the Products toolbar opens Product Studio.



(If Product Studio is already open, it will be made the active window). The currently selected product will then be presented for editing.

 A screenshot of a dialog box titled 'Product SKU - Apple White'. It has four tabs: 'Details', 'Physical', 'Financial', and 'Custom'. The 'Details' tab is active. The fields are:

- Name: Apple White
- Description: Brand AA 1 litre Apple White
- UPC Type: Anything
- Code: -1
- UPC: (empty)
- Manufacturer: Generic
- Supplier: Generic
- Status: Active
- Icon: Product SKU
- Brand: (empty)
- Client Code: (empty)
- Client Barcode: (empty)

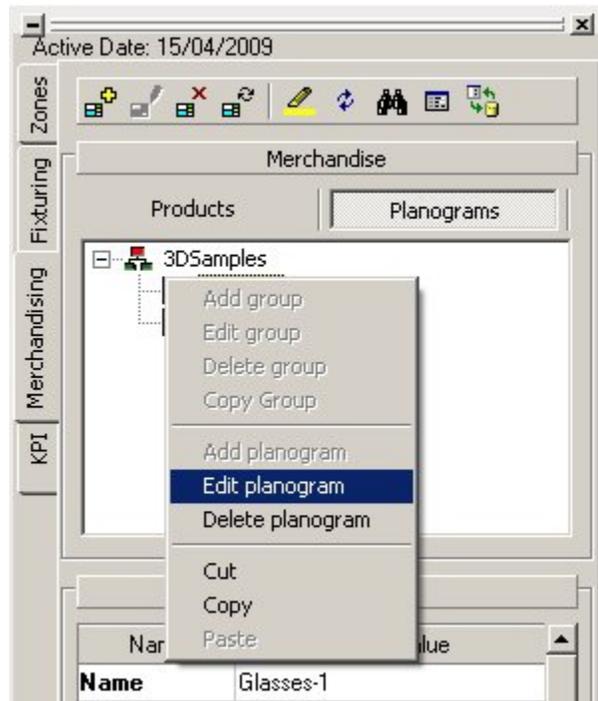
 At the bottom, there is a help icon (question mark in a square), an 'OK' button, and a 'Cancel' button.

Note: The Product Studio dialogue box that opens will depend on what level in the product hierarchy has been selected.

Once changes have been made and saved, they can be used within Merchandising after the Refresh option has been used on the Object Browser.

Editing Planogram Definitions

To Edit a Planogram, highlight the required planogram in the hierarchy and right click to bring up the pop-up menu.



(If the merchandiser module is already open, it will be made the active window). The currently selected Planogram will then be presented for editing.

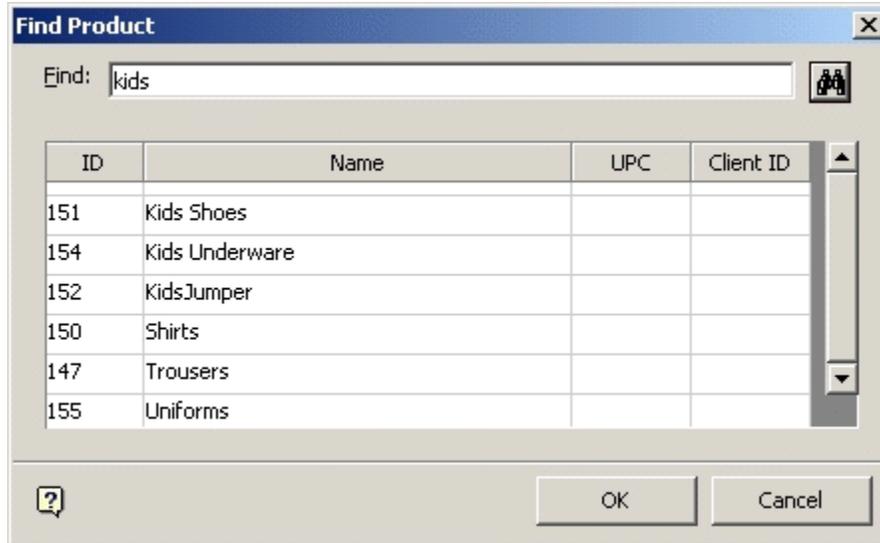
Once changes have been made and saved, they can be used within Merchandising after the Refresh option has been used on the Object Browser.

Find Product or Planogram

The **Find Product or Planogram** function is invoked by clicking on the Search icon in the Merchandising toolbar.



This will bring up the Find Product (or Find Planogram) dialog box.



This is used by typing the required search string into the Find box and clicking the Search icon to the right of it.

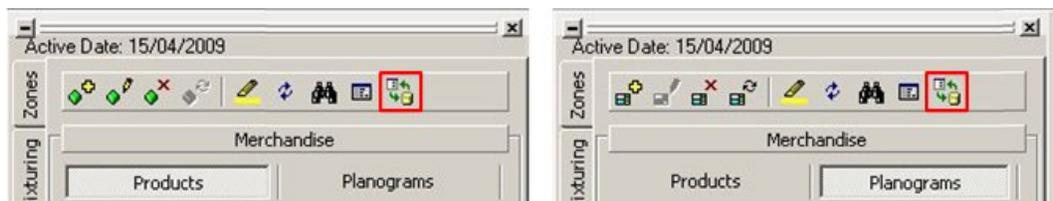


This will bring up a list of any blocks matching the search string.

Left clicking on any result will return the user to the Merchandising Products Window, where the selected Product or Planogram will be highlighted in the hierarchy tree.

The Refresh Option

The Refresh Icon refreshes the both Planogram and Product information in the hierarchical tree.



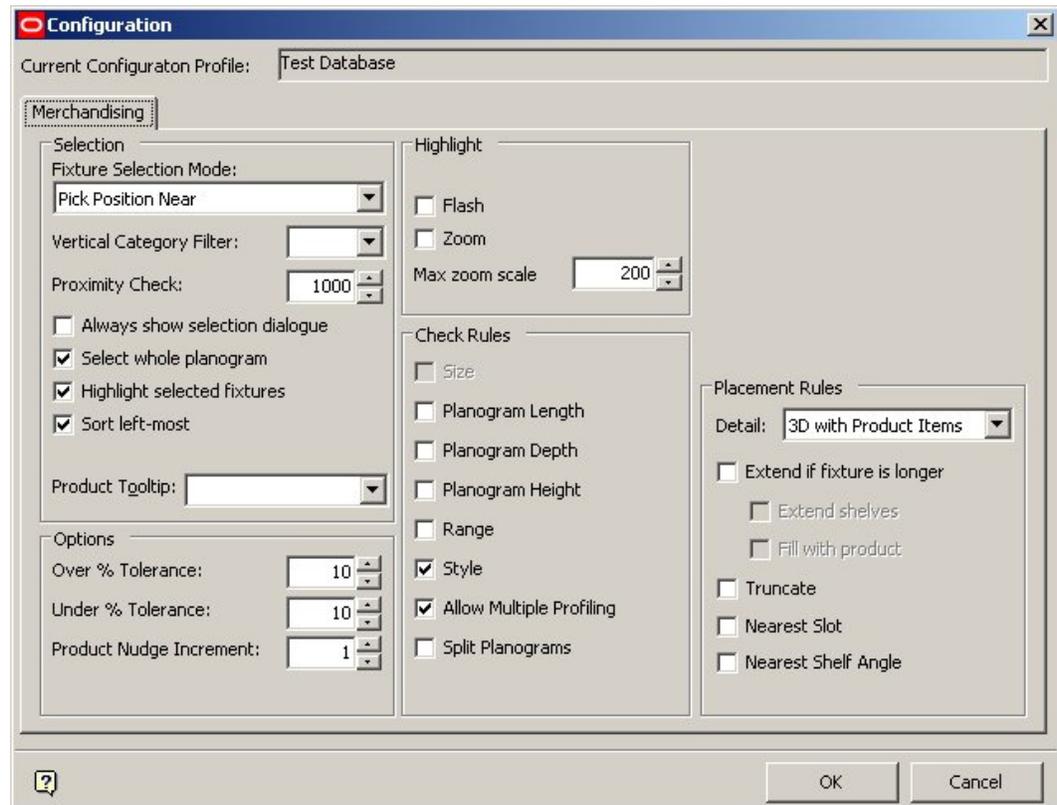
Using Refresh ensures that the information is brought up to date with any changes made in Merchandiser or Product Studio, both to the hierarchical tree and to any products or planograms added to, edited, or deleted from it.

Configuration Options

The Merchandising Tab in the Configuration Module can be called by clicking on the Configuration icon on the Merchandising toolbar. The options in this Tab are more fully explained in the section in the Configuration Module.



This will bring up the Merchandising Tab from the Configuration Module.



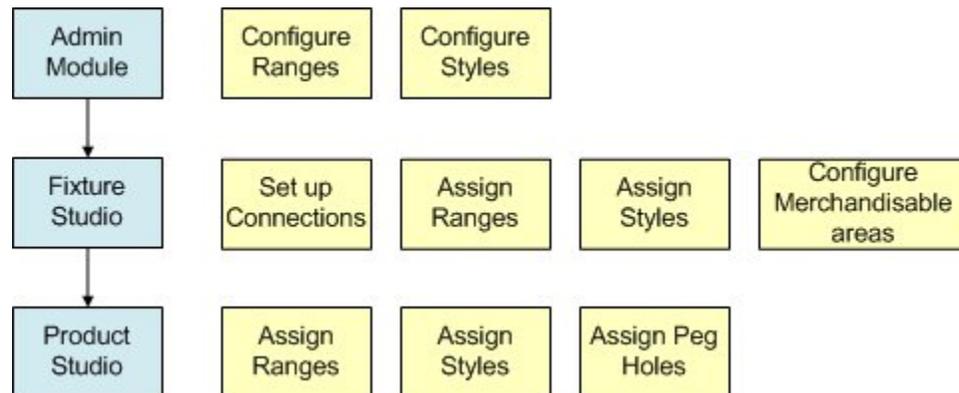
Adding Product items

Overview of Adding Products

Preliminary Actions

To add products in Merchandiser, a series of preparatory parameters must be set in the Administration Module, Fixture Studio and Product Studio.

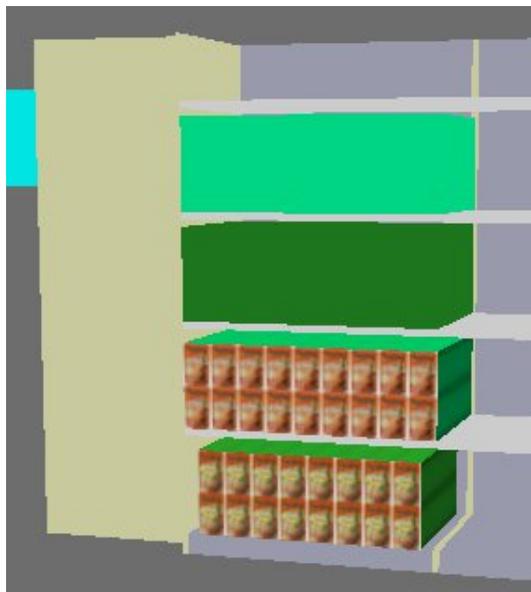
The process is as follows:



These parameters are generally set up on a 'one-off' basis when Macro Space Planning is implemented. They will not generally need significant change after that point.

Adding Products

Products can be placed with two levels of detail; placeholders and display styles.



In the above screen shot the upper two shelves are populated with placeholders, the lower two with display styles.

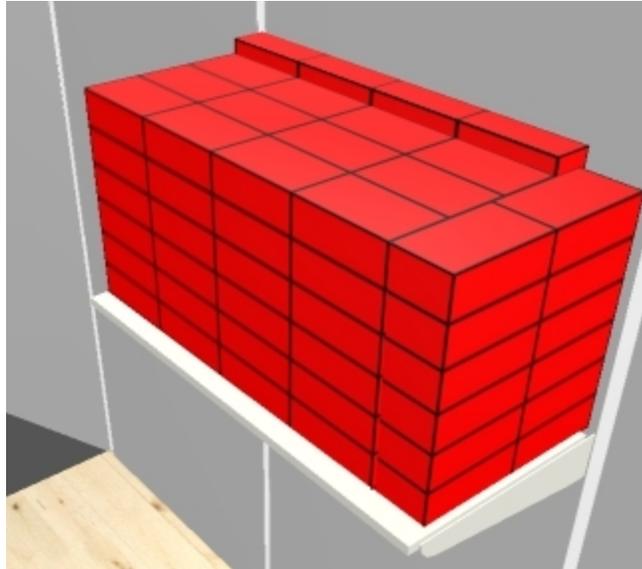
- Placeholders are used to indicate that a particular type of merchandise is on the shelf or fixture but give no information on product dimensions, quantities or orientation.
- Display Styles give full information on the SKU's place on the shelf or fixture including product dimensions, quantities or orientation.

Display styles can be placed in Merchandiser. They can then be added, edited and deleted in Front Graphical view in In-Store Space Collaboration. Display styles cannot be displayed (or seen) in the Planner module.

Products are added by dragging them from the window in the Merchandising tab on the Object Browser onto the fixture or shelf that they are intended to populate. Placeholders will be placed without taking into account the available dimensions. Display Styles can only be placed if the dimensions of the receiving fixture and fitting are of sufficient size and if the styles of the fixture or shelf are compatible with the product being placed on it. If Display Styles can be placed then the Add Products Dialogue box will appear.



This enables the Quantity, Alignment, Detail, Orientation and Properties to be specified. Product quantities and alignments can either be placed manually or calculated automatically. The latter option is particularly useful when using caps.



The above example has back and end caps. These could be placed manually, but this would be time consuming. They can be placed in a single operation when the quantity is calculated automatically.

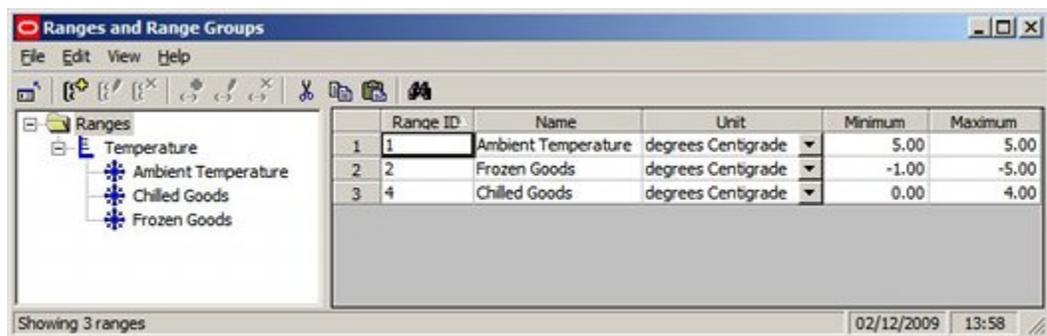
Note: prior to placing products on shelves or pegs, certain one-off configuration actions are required in the Administration Module, Fixture Studio and Product Studio.

Preliminary Actions required in the Admin Module

Prior to adding products onto shelves or pegs, some preliminary configuration may be required in the Administration module using the Styles dialog box accessed from the Styles option on the Merchandising Menu. These are one off actions - once completed during implementation of the application; they will not generally need to be repeated.

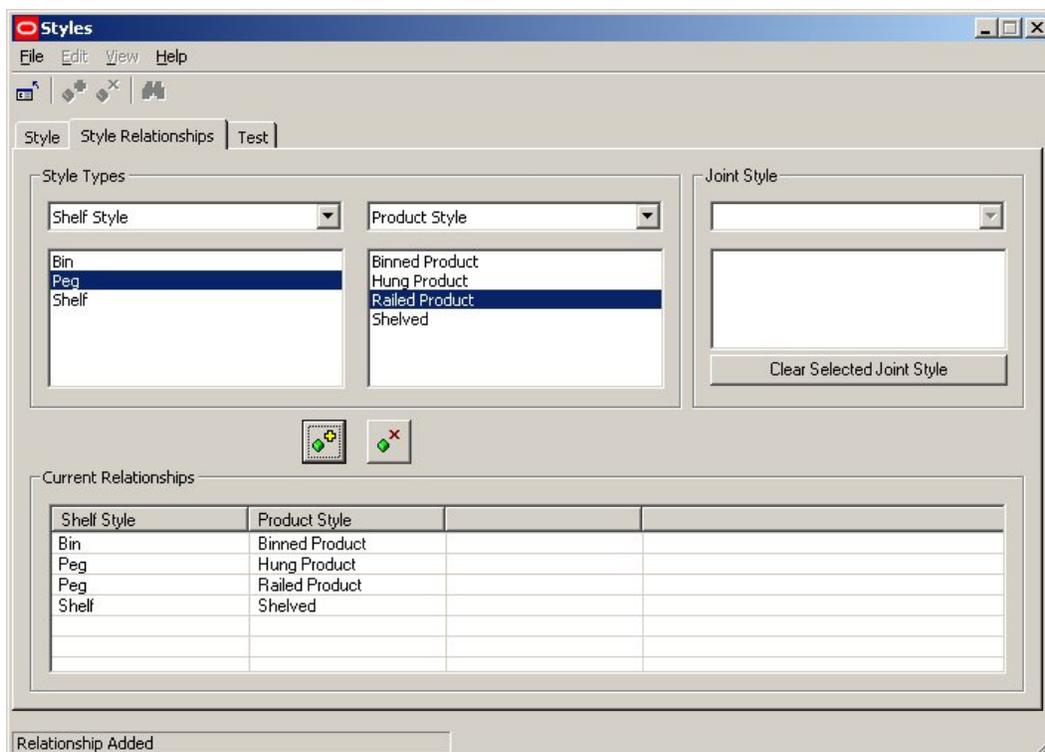
Ranges

Ranges are set in the Ranges dialog box accessed from the Ranges option on the Merchandising Menu.



Styles

Styles are set up using the Styles dialog box accessed from the Styles option on the Merchandising Menu.



First, Styles for the fixtures the pegs will go onto, the pegs themselves and the products that will go onto the pegs must be set up in the Style tab. Next, Style Relationships must be set up between the fixture the peg will go on and the Peg themselves. Finally, Style Relationships must be set up between the products and the pegs they will be hung from. Without these actions, product placement cannot take place in Merchandiser.

Note: For more detailed information see the Administration Module Help File.

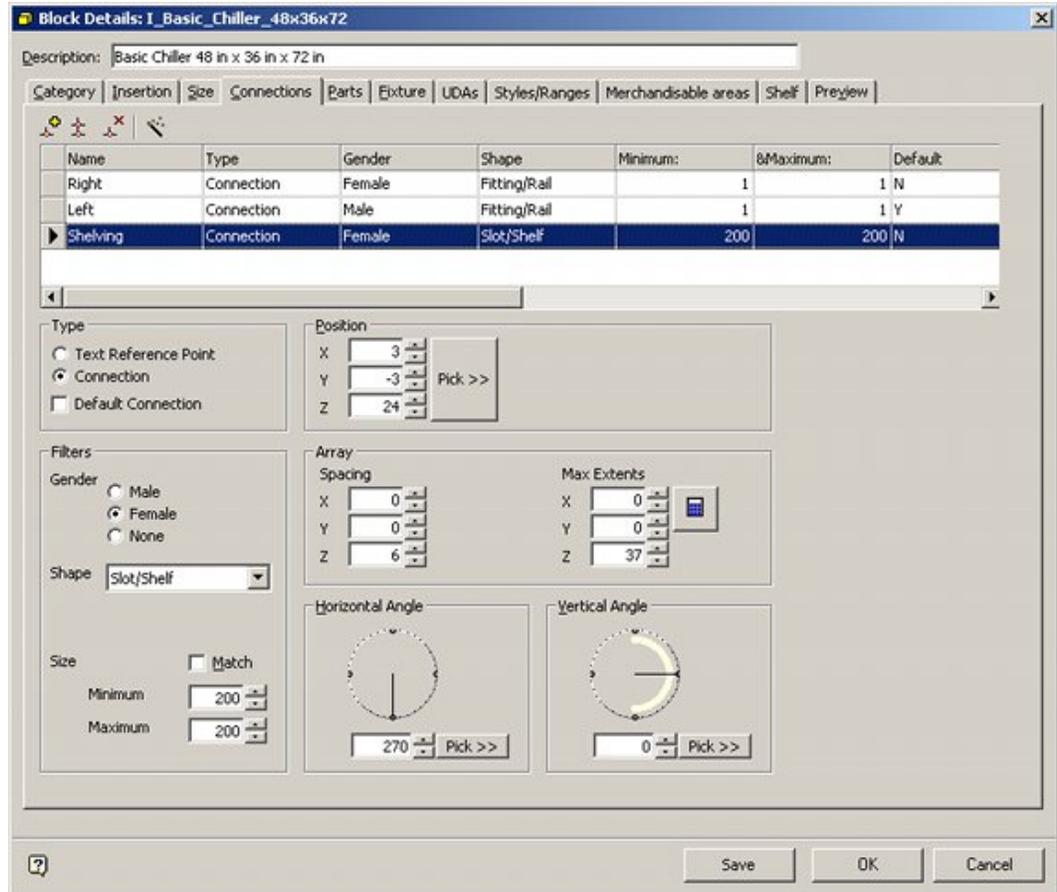
Preliminary Actions required in Fixture Studio

As preparation for placing products on shelves or pegs, certain preliminary actions may be required in Fixture Studio. These are normally set up during implementation of the software and will generally not need changing after that.

1. The shelves or pegs and their parent fixtures must have compatible connection points. This enables them to fit together.
2. The parent fixtures, shelves or pegs must have appropriate styles assigned.
3. The parent fixtures, shelves or pegs should have a range assigned.
4. The merchandisable area for the fixture, shelf or peg must be compatible with the product being placed.

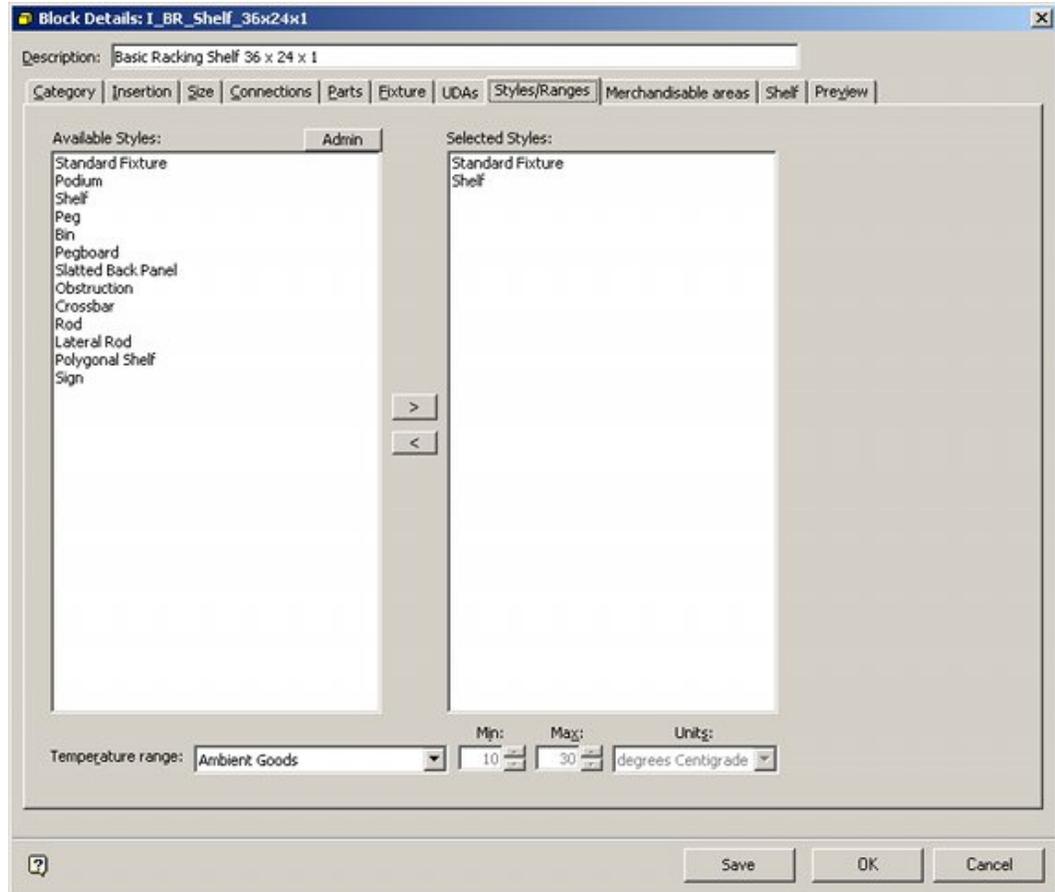
Connection Points

Connection points are assigned in the Connections tab of the Block Details dialog box in Fixture Studio.



Fixture and Shelf Styles/Temperature Ranges

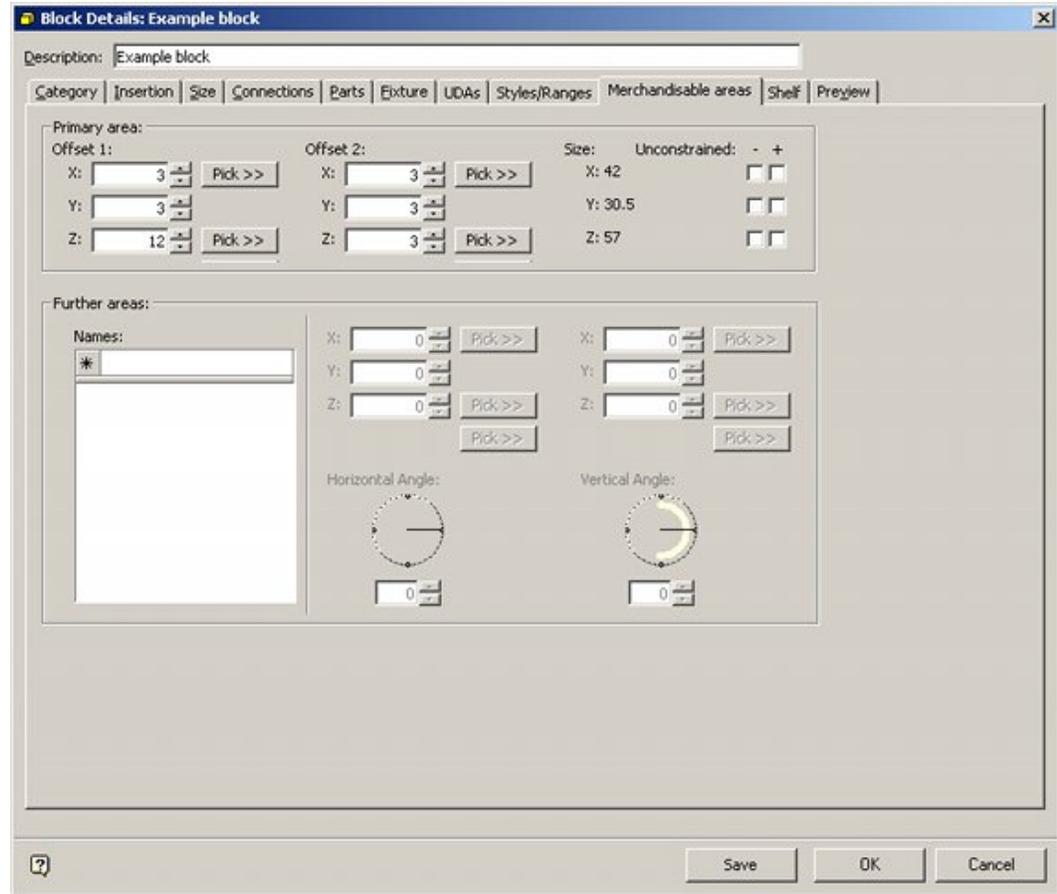
Fixture and Shelf styles are assigned in the Styles/Ranges tab of the Block Details dialog box in Fixture Studio. A Temperature range should also be assigned in this tab.



Note: Fixtures must have a Fixture Style assigned; shelves and pegs must have both a Fixture Style and a Shelf Style assigned.

Merchandisable Areas

Merchandisable Areas are assigned in the Merchandisable Areas tab of the Block Details dialog box in Fixture Studio.



Note: For more detailed information see the Fixture Studio Help File.

Preliminary Actions required in Product Studio

Before a product can be added onto a fixture, product or shelf at Display Style level, certain preliminary actions may be required in Product Studio. These are normally set up during implementation of the software and will generally not need changing after that.

1. The products should have been assigned a temperature range.
2. The products must have been assigned a Product Style
3. If the product is a hung product, it must have been assigned a Peg Position

Temperature Range

Temperature Ranges are assigned to display styles in Physical tab of the SKU dialog box for their parent SKU.

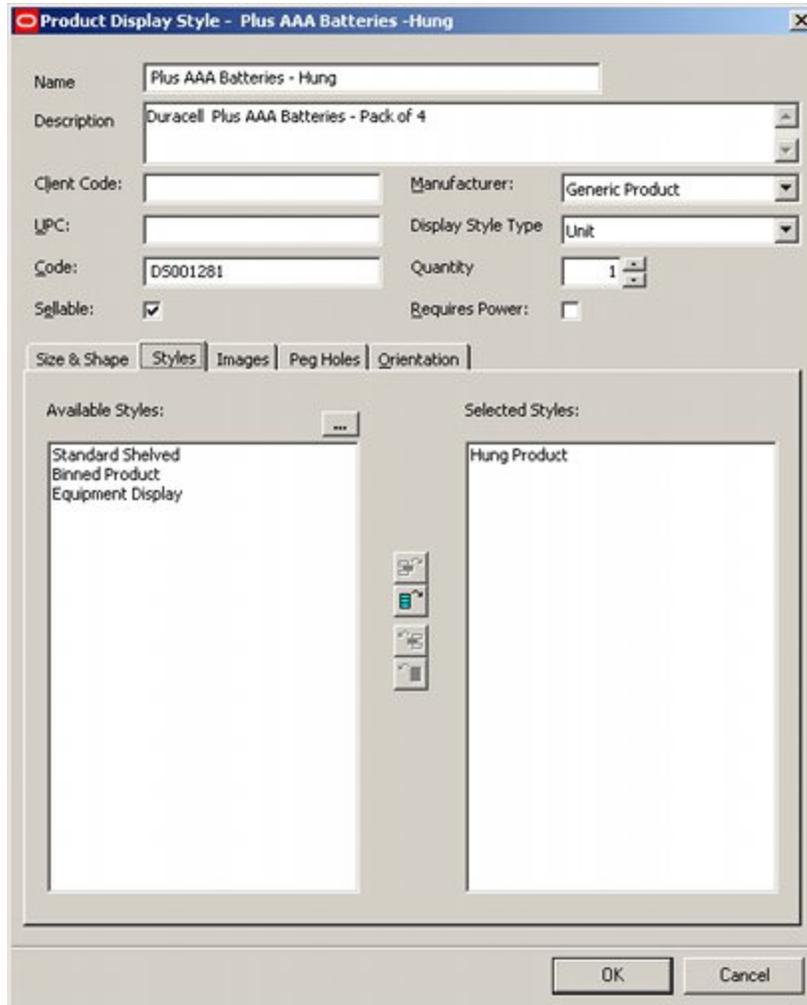
The image shows a software dialog box titled "Product SKU - Example SKU" with a close button (X) in the top right corner. The dialog has four tabs: "Details", "Physical", "Financial", and "Custom", with "Custom" currently selected. The "Custom" tab contains the following fields:

- Pack Size:** A numeric spinner box set to "1".
- Pack Units:** A dropdown menu showing "Pure number".
- Colour:** A text box containing "16711680" and a color selection button (blue square with "...").
- Nominal Colour:** A text box containing "Blue".
- Nominal Size:** A text box containing "Medium".
- Hatch Style:** A dropdown menu showing "Solid".
- Flavour:** A text box containing "N/A".
- Gender:** A text box containing "N/A".
- Temperature range:** A dropdown menu showing "Ambient Goods".
- Min:** A text box containing "10".
- Max:** A text box containing "30".
- Units:** A text box containing "degrees Centigrade".

At the bottom right of the dialog are "OK" and "Cancel" buttons.

Product Styles

Product Styles are assigned in the Styles tab of the Display Style dialog box.



Peg Positions

Peg positions are assigned in the Peg Holes tab of the display style dialog box.

Product Display Style - Plus AAA Batteries - Hung

Name: Plus AAA Batteries - Hung

Description: Duracell Plus AAA Batteries - Pack of 4

Client Code: Manufacturer: Generic Product

UPC: Display Style Type: Unit

Code: DS001281 Quantity: 1

Sellable: Requires Power:

Size & Shape | Styles | Images | Peg Holes | Orientation

	Width	Depth	Height	Style Filter
1	1.5	0	0	Standard Fixture

Width Offset (X): 1.5

Depth Offset (Y): 0

Height Offset (Z): 0

Style Filter: Standard Fixture

Top Down View

OK Cancel

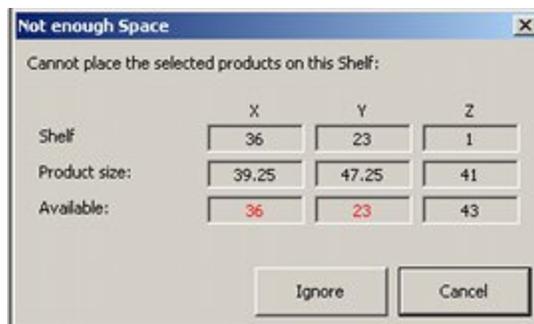
Note: For more detailed information see the Product Studio Help File.

Common Problems Experienced When Adding Products

Some common problems experienced when adding products include:

Insufficient Space

If the dimension of the display style product is larger than the available space on the parent fixture, shelf or peg, a warning will result.



If the error is minor, the problem can be overcome by reducing the space assigned to other display styles on the parent fixture, shelf or peg. If there is a serious mismatch of dimensions, an alternative item of equipment may be indicated.

Incompatible Styles

If the Styles assigned to the parent fixture, shelf or peg is incompatible with the Style assigned to the display style product, an error will result and the Display Style cannot be placed.



This can be corrected by ensuring that:

1. The correct style has been assigned to the parent fixture, shelf or peg in Fixture Studio.
2. The correct style has been assigned to the Display Style in Product Studio.
3. A Style Relationship exists between the parent fixture, shelf or peg and the display style that will be placed. This can be verified in the Administration Module.

Incompatible Ranges

If the Temperature Range assigned to the parent fixture, shelf or peg is incompatible with the Temperature Range assigned to the display style product, an error will result and the Display Style cannot be placed.



This can be corrected by ensuring that:

1. The correct temperature range has been assigned to the parent fixture, shelf or peg in Fixture Studio.
2. The correct temperature range has been assigned to the parent SKU for the display style in Product Studio.

The Add Product Dialog Box

The Quantity Tab - Setting by User

The **Quantity Tab** allows the user to specify the number of instances a product can be placed at display Style level.

Note: Two radio buttons allow the user to specify whether quantities are set manually by the user or set automatically by the program. This section of help discussed manually setting, automatic setting are discussed later on.



If the top radio button is selected (as in the above screen shot) then the user can manually select the product quantities.

Note: The product quantities may be affected by settings in the Orientation tab.

The user may specify values for the number of facings, depth and stack for the product.

Option	Definition
Facings	The number of times the product can be placed along the shelf (the X direction).
Depth	The number of times the product can be placed relative to the depth of the shelf (the Y direction).
Stack	The number off times product can be stacked on top of each other (the Z direction).

These quantities are constrained by the dimensions of the shelf or fixture. The minimum possible value in each direction is one, while the maximum number is determined by the dimensions of the product.

Note: the minimum and maximum values for facings, depth and stack can be limited by settings in the Size and Shape tab of the Display Style dialog box in Product Studio.

For each of the directions products can be placed, there are three options; initially specified by the pertinent radio buttons:

- One: a single instance of the product
- Fill: the shelf or fixture will be filled to its maximum capacity
- Other: the user can use the spin controls to set the quantity of any value between one to the maximum capacity of the shelf or fixture.

Note: Automatic setting by the program does not place caps, but only places the product in the primary orientation. If the user wants to place products with side, rear or top caps, it is recommended they select the Calculate option by clicking on the appropriate radio button - (2) in the annotated diagram above.

The **Grouped** check box determines whether products are placed as product groups, or as a stack of ungrouped items.

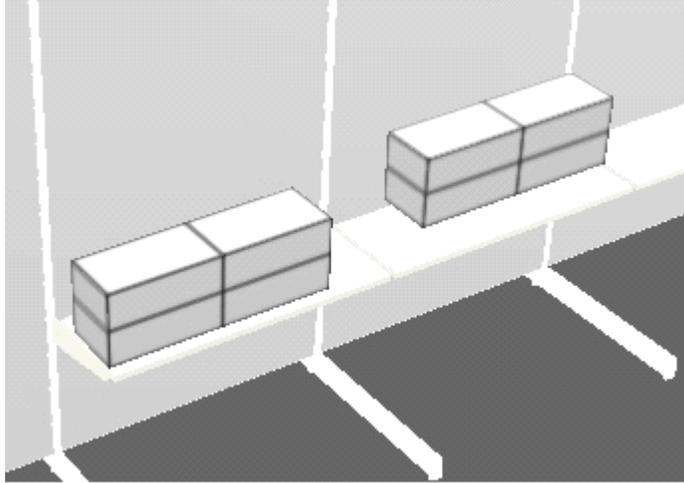
Note: It is recommended that products are placed as grouped items as they can then be manipulated as a single object. If they are placed as a stack of ungrouped items, then each item in the stack has to be manipulated individually. This increases the amount of time required from the user, the amount of information stored in the database and the amount of processor time required to display the products on screen.

The Alignment Tab

The **Alignment Tab** allows alignment of the initial product placement to be adjusted horizontally, i.e. in the X, Y plane.



In the example below, the products on the left hand shelf have been placed with a Left Front alignment, and the products on the right hand shelf have been placed with a Back Right alignment.



The Detail Tab

The **Detail Tab** gives information on dimensions and quantities.

Uncle Ben's Express Chinese Style Rice 250g			
Quantity	Alignment	Detail	Orientation
		X	Y
Size:		4	1
Gap:		0	0
Min Stack:		0	0
Max Stack:		9	23
Shelf capacity:		36	23
92 Chinese Style Rice 250g products.			
		OK	Cancel

Size is the size of one instance of the Product.

Gap is the gap between instances of the product. The gap is preset when the product is designed in Product Studio and may be necessary where merchandise like glass or crockery is concerned.

Min stack is the minimum quantity that can be placed.

Max Stack is the calculated maximum quantity that can be placed.

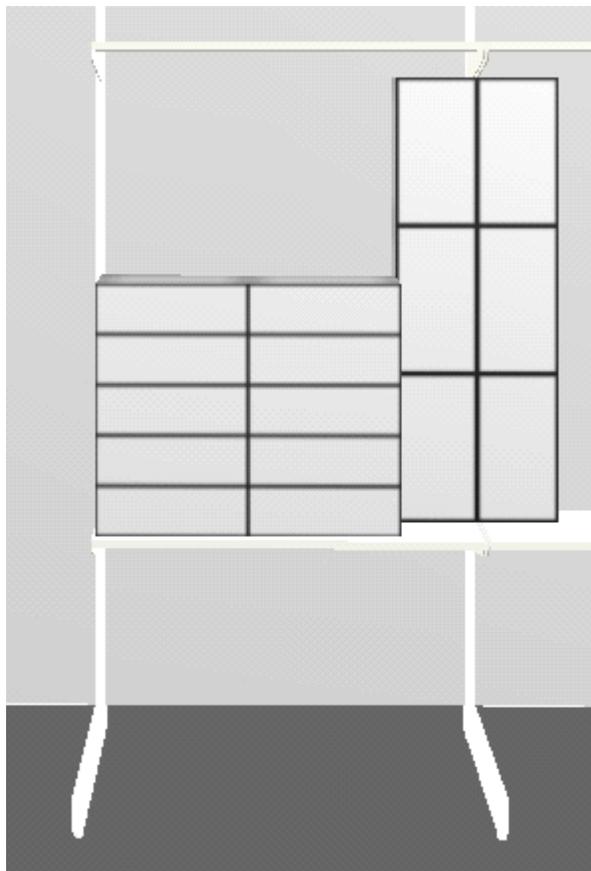
Shelf Capacity is the dimension of the shelf on which the products are being placed.

The Orientation Tab

The **Orientation Tab** allows the orientation of the product to be defined when it is placed on the shelf. It will by default be placed with the front of the product facing the front of the shelf or the fixture, but other orientations are possible. For example, the product could be placed with the right hand side facing the front of the shelf or the fixture.



The maximum amount placeable for each orientation will be shown, while non available orientations will be greyed out.



In the above example the product group on the left has been placed with the Front orientation. A second example of the same product group has then been placed to its right in the Top Side orientation.

Note: Changing orientation will also change the quantity on the Quantities Tab to the maximum possible in that orientation. This is to allow the user to see if changing the orientation will increase the quantities that can be placed on the shelf.

The Properties Tab

The **Properties tab** displays a customisable list of properties associated with the products being placed - the exact list of information displayed being dependent on information in the AVTTB_CUSTOM_SQL table. (This information can only be edited by Administrators with access to the database).



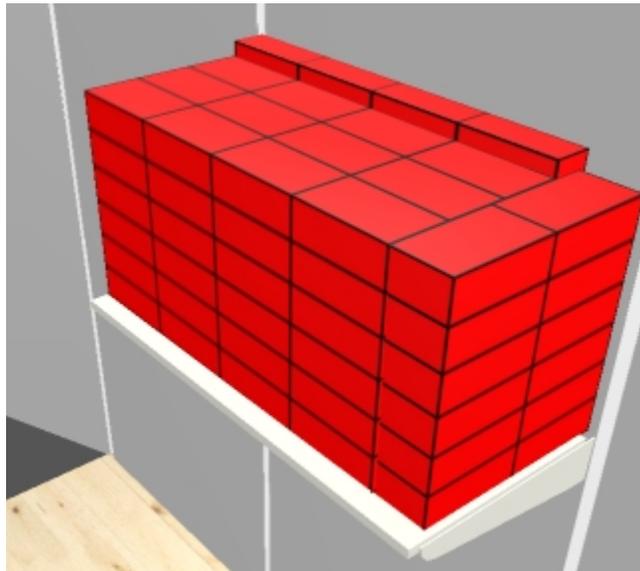
The information is intended to be of use to merchandisers populating the floor plan.

Overview of Calculation Option Method

This section of help details how the calculate option can be used to simplify maximizing the number of products placed on a shelf.

There are two options for adding products in Merchandiser; by manually adding them and by automatically adding them by using the calculate option.

To maximize the number of products on a shelf it is sometimes necessary to use end caps, as in the example below.

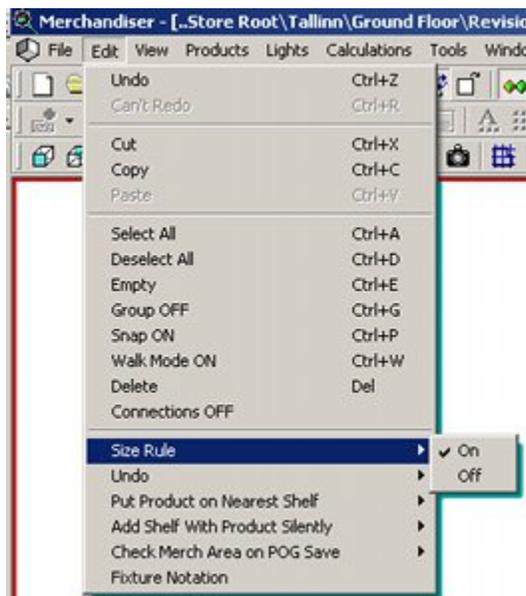


It is possible to achieve this manually by placing the main body of product, then placing the rear end cap and then the size end cap. This may require some time to achieve.

It is also possible to achieve this in a single operation using the Calculate option. This can result in considerable savings in time when populating shelves.

Size Rule

When placing product it is recommended the **Size Rule** is turned on, either from the edit menu or the icon on the toolbar.



This will restrict the number of products added to those permitted by the confines of the shelf.

If this option is not enabled, it is possible that product will overlap shelves to the left, right or above.

Using the Calculation Option

The **Add Products** dialogue box allows the user to control the calculated quantity and orientation of the product being placed.



To calculate a quantity:

1. Select the Calculate option by means of the appropriate radio button.
2. Use the spin control to set the total quantity to that above the total number of products the shelf (or fixture) can accommodate.
3. The Calculate Button can then be used to open the calculation screen.

After the **calculate button** is clicked, the calculation screen will appear.

Quantities Calculator

Required Quantity: 500

Quantity Tolerance: []

Main Orientation: Front

Direction	Priority	Fill	Allow Caps	Fixed Quantity
X - Width, Facings	1	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
Y - Depth	2	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
Z - Height, Stacking	3	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	

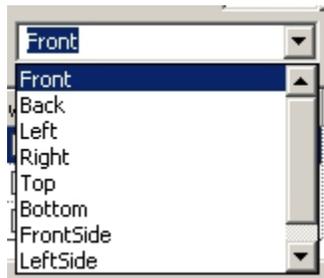
Proposed Solution:

Type	Orientation	Facings	Depth	Stack
Main	Front	9	23	2
Z Cap	Top	9	3	1

Can only place 441 in this configuration.

OK Cancel

4. The Required Quantity is that set in the preceding Add Products dialogue box. If necessary this can be edited to a different value while in the screen.
5. The Quantity Tolerance allows the user to set the permissible variation in quantity.
 - If set to 0, Macro Space Management will try and calculate an exact solution. If set to >0 Macro Space Management will accept the first calculated solution that comes inside the permissible range.
 - For example, if set to 60 ± 5 , the first calculated solution that falls in the range 55 – 65 will be accepted.
6. The Main Orientation of the product can be set from the drop down list.



This determines which part of the products' packaging faces the front of the shelf.

7. The Priority for the working axes can be set by clicking on the appropriate axis to highlight it then using the + and – buttons to change the order of priority.
8. Macro Space Management will calculate the quantities in the order the axes have been selected. For example, if the X axis has been chosen, the software will stack the maximum number of products along that axis then take the dimensions of those placed products in account when calculating how many products can be placed along the second priority axis.
9. If the Fill check box is selected, then Macro Space Management will place the maximum number of products in that direction. If the Fill checkbox is not selected, then a Fixed Quantity can be entered in the appropriate box. If a Fixed Quantity is entered, this will also disable the Allow Caps option as the fixed quantity only

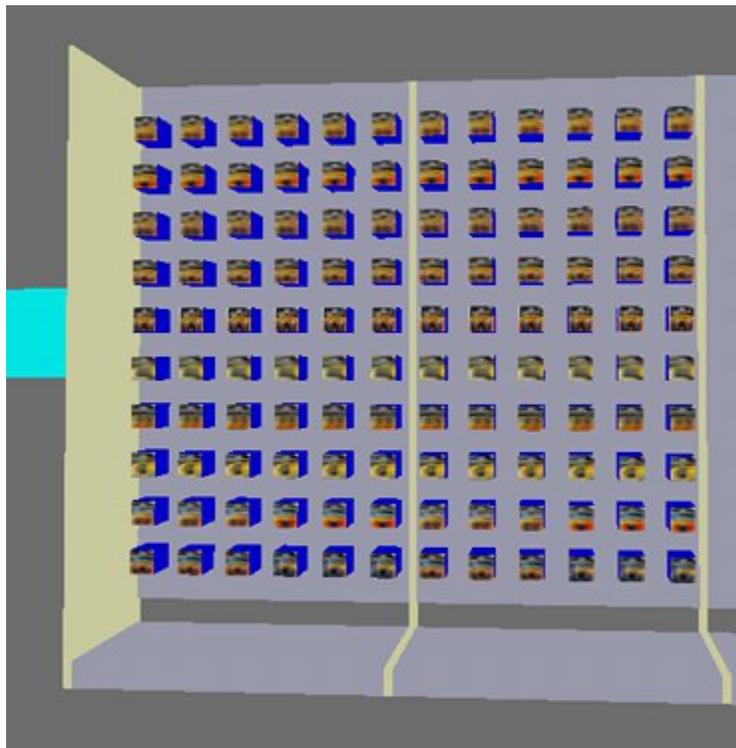
applies to products placed in the Main Orientation. If a quantity greater than the maximum number that will fit is entered then the number will default to the largest value possible.

10. End Caps can be allowed or prevented by selecting or un-selecting the check box as appropriate.
11. The results will show in the Proposed Solution frame. (A warning will appear if the number of products that can be placed is below that in the Required Number setting).
12. If the details are correct, click on the **OK** button to place the products.

Adding Products using Pegs

Adding Products using Pegs is similar to adding products to a shelf - the product is dragged and dropped onto an existing peg.

Note: if Joints have been set up in the Administration Module, products can be dragged onto a parent fixture (such as a slatwall or pegboard) and the peg will be added at the same time.



In the example above products have been placed on pegboard using pegs to hang them from.

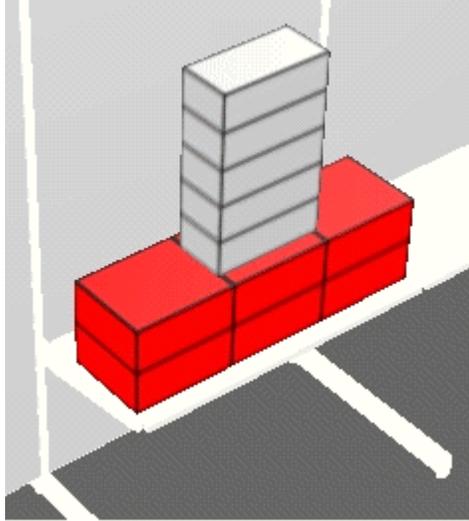
Additional Ways of Placing Products

There are a number of additional ways of placing products - they reflect ways that might be used in real life within stores. These ways are:

Placing on Product on top of Another

To place on product on top of another drag the required product from the options in the merchandising tab over to the product on top of which you wish to place it. Ensure the mouse cursor is just inside the object to be placed on top of, and release the mouse key. The desired products will then be placed on top. This might be used to place a 'display' version of a product on top of boxed versions of the same product.

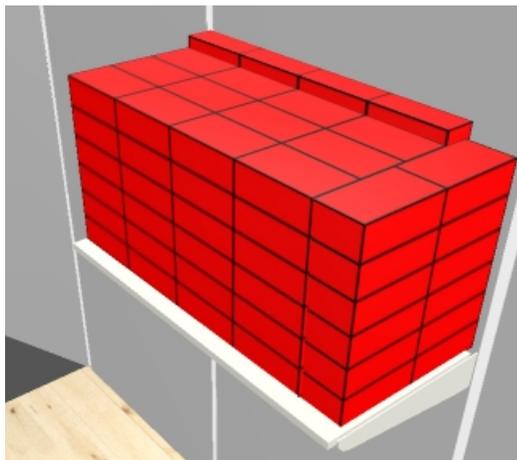
Note: If the mouse cursor is just above the object to be placed on top of when the key is released, then the object being placed will be inserted to one side, rather than on top.



The depth and number of facings of the object being placed on top cannot exceed those determined by the length and depth of the object of which it has been placed on top.

Caps

Caps are when the same product is placed over another product, using a different orientation, in order to fill space. This can be achieved manually, by placing several instances of the same product next to each in different orientations.

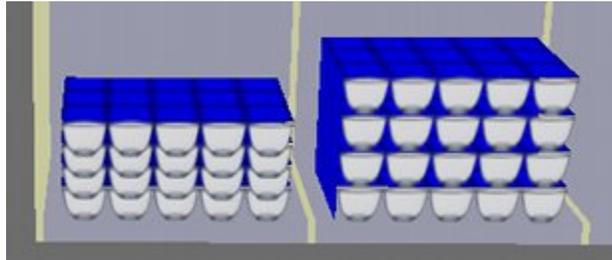


It can also be achieved automatically by making use of the Calculate option on the Add Products dialog box.

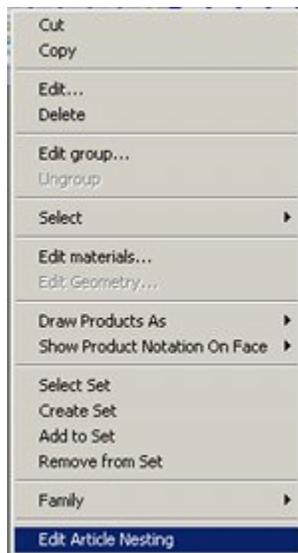


Nesting

Nesting allows you to take into account how products could be stacked inside each other. In the example below, the Pyrex bowls on the left are nested inside each other, the ones on the right are not. Nesting allows a more accurate determination of the number of products than can fit inside a specified volume.



Nesting can be specified in the Size and Shape tab of the Display Style dialog box in Product Studio. Alternatively, nesting can be manually set in the Merchandiser module. This can be done by taking two layers of products one product high and then selecting the Edit Article Nesting option from the right click menu.



Alignment

Overview of Alignment

Alignment defines the relative positions of product (and sometimes equipment) to each other.

In previous implementations of Macro Space Management alignment was automatically determined by the parent object on which the products were placed. In the current implementation of Macro Space Management, alignment is no longer automatic and the user can customize position using the various options available.

Products can be aligned with each other, or with their parent fixture or shelf, depending on what is selected. The alignment will work with equipment, as well as products. There are 9 options for alignment:

Aligning along length of shelf

	Align to Left
	Align to Center
	Align to Right

Aligning across depth of shelf

	Align to Front
	Align to Middle
	Align to Back

Distributing across volume of shelf

	Distribute Left/Right
	Distribute Front/Back
	Distribute Top/Bottom

Buttons for aligning along or across the shelf will only be enabled if at least one object is selected and the drawing is not read-only.

Buttons for distributing across the shelf will be enabled if at least 3 objects are selected and the drawing is not read-only.

Clash Detection

Clash Detection should be turned on when aligning; else products could overwrite each other.

- If Clash Detection is turned on, products will move until they are in contact.

- If Clash Detection is turned off, products can be moved so they occupy the same physical space.

Clash detection is toggled On or Off by clicking on the clash Detection Icon in the Views toolbar



Sequential Operations

Each alignment operation only works on one plane at a time; i.e. it only works in the X, Y or Z plane for that particular operation.

It is thus possible to use sequential alignment operations to achieve the desired effect. For example it is possible to use the Align to Left operation (X axis) followed by the Align to Back operation (Y axis).

This will result in all selected products being aligned to the left and rear of the selected shelf.

Align to Left

Align to Left

If one or more shelves/fixtures are selected before clicking the Align to Left button, then all child products will be aligned to the left. Alignment towards the front or back of the shelf will not be affected.

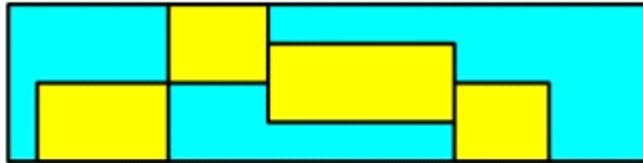
Products will first be sorted in order of position along the length of the shelf. The first product will then be placed at the left hand end of the shelf. The next product will be placed adjoining the first such that it is adjacent, but does not overlap. Successive products will be placed in a similar manner until all have been placed in a left justified alignment.

The manner of the alignment will depend on whether only products are selected, whether the shelf and some of its products are selected, or whether the shelf/fixture alone is selected.

Products Selected

If only products are selected, then they will be aligned so that left-hand side of each product matches the right-hand side of the preceding product in the selection set.

Justify Left – Product: View from Top



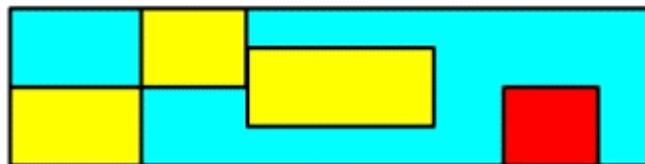
Justify Left – Product: View from Front



Shelf/Fixture and Products Selected

If the shelf/fixture, plus some of its child products are selected, then only those products will be aligned with the shelf, rather than all the products on the shelf.

Justify Left – Product and Shelf: View from Top



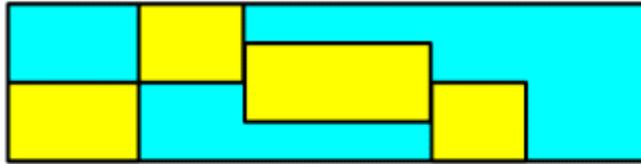
Justify Left – Product and Shelf: View from Front



Shelf/Fixture Selected

If the shelf is selected (and no products) and the alignment button is pressed, then it will assume all child objects are selected and align them to the shelf.

Justify Left – Shelf: View from Top



Justify Left – Shelf: View from Front



Note: It is recommended that Clash Detection be turned on. This will avoid one product being placed on top of another if only some of the products on a shelf are selected for alignment.

Align to Center

Align to Center

If one or more shelves/fixtures are selected before clicking the Align to Center button, then all child products will be aligned to the center. Alignment towards the front or back of the shelf will not be affected.

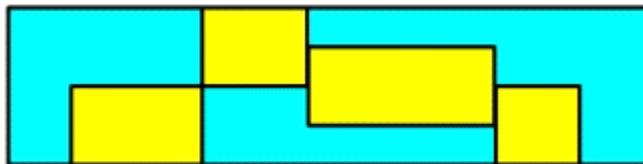
When all products have been aligned to center, there will be an equal unoccupied space to either side.

The manner of the alignment will depend on whether only products are selected, whether the shelf and some of its products are selected, or whether the shelf/fixture alone is selected.

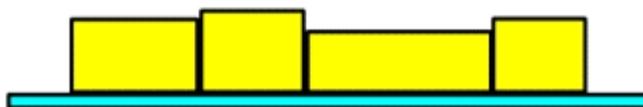
Products Selected

If only products are selected, then they will be aligned so that centre-hand side of each product matches the centre-hand side of the first product in the selection set.

Justify Centre – Product: View from Top



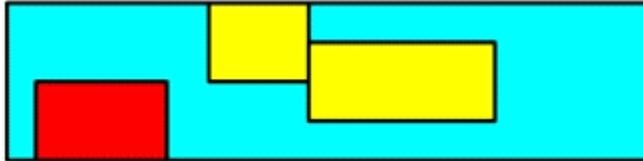
Justify Centre – Product: View from Front



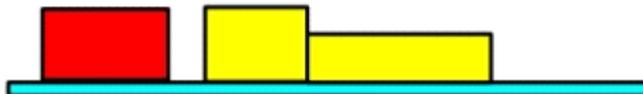
Shelf/Fixture and Products Selected

If the shelf/fixture, plus some of its child products are selected, then only those products will be aligned with the shelf, rather than all the products on the shelf.

Justify Centre – Product and Shelf: View from Top



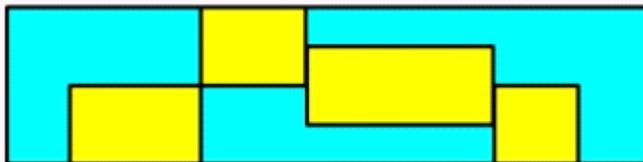
Justify Centre – Product and Shelf: View from Front



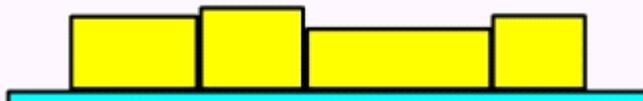
Shelf/Fixture Selected

If the shelf is selected (and no products) and the alignment button is pressed, then it will assume all child objects are selected and align them to the shelf.

Justify Centre – Shelf: View from Top



Justify Centre – Shelf: View from Front



Note: It is recommended that Clash Detection be turned on. This will avoid one product being placed on top of another if only some of the products on a shelf are selected for alignment.

Align to Right

Align to Right

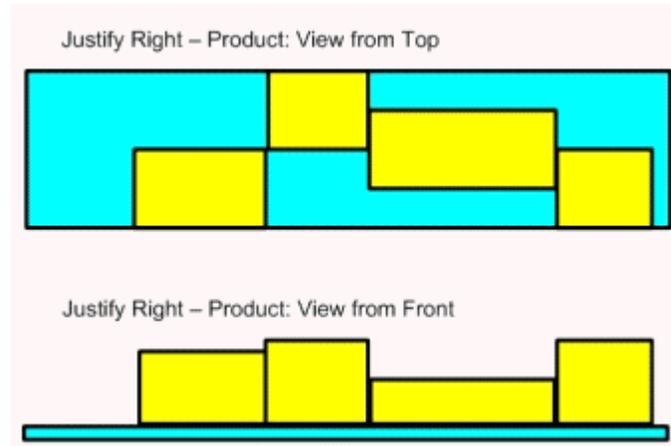
If one or more shelves/fixtures are selected before clicking the Align to Right button, then all child products will be aligned to the right. Alignment towards the front or back of the shelf will not be affected.

Products will first be sorted in order of position along the length of the shelf. The first product will then be placed at the right hand end of the shelf. The next product will be placed adjoining the first such that it is adjacent, but does not overlap. Successive products will be placed in a similar manner until all have been placed in a right justified alignment.

The manner of the alignment will depend on whether only products are selected, whether the shelf and some of its products are selected, or whether the shelf/fixture alone is selected.

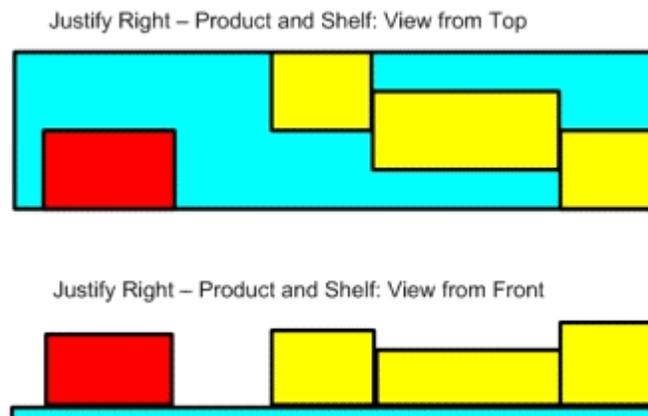
Products Selected

If only products are selected, then they will be aligned so that right-hand side of each product matches the right-hand side of the first product in the selection set.



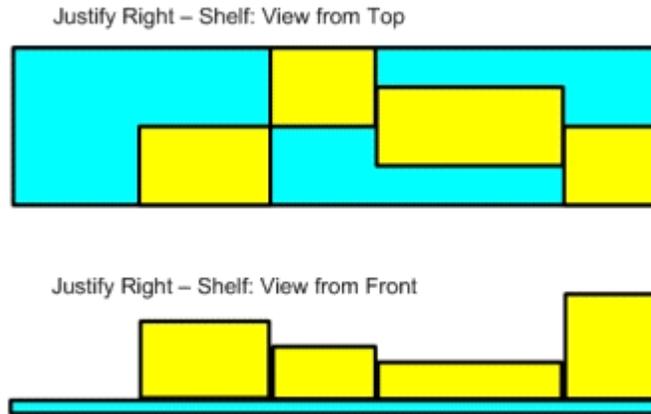
Shelf/Fixture and Products Selected

If the shelf/fixture, plus some of its child products are selected, then only those products will be aligned with the shelf, rather than all the products on the shelf.



Shelf/Fixture Selected

If the shelf is selected (and no products) and the alignment button is pressed, then it will assume all child objects are selected and align them to the shelf.



Note: It is recommended that Clash Detection be turned on. This will avoid one product being placed on top of another if only some of the products on a shelf are selected for alignment.

Align to Front

Align to Front

If one or more shelves/fixtures are selected before clicking the Align to Front button, then all child products will be aligned to the front. Alignment towards the left or right of the shelf will not be affected.

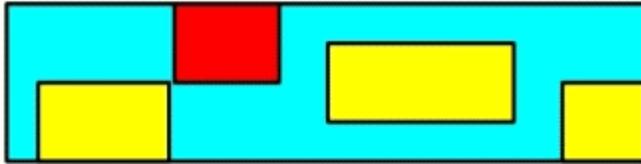
Products will first be sorted in order of position along the depth of the shelf. The first product will then be placed at the front edge of the shelf. The next product will be placed adjoining the first such that it is adjacent, but does not overlap. Successive products will be placed in a similar manner until all have been placed in a front justified alignment.

The manner of the alignment will depend on whether only products are selected, whether the shelf and some of its products are selected, or whether the shelf/fixture alone is selected.

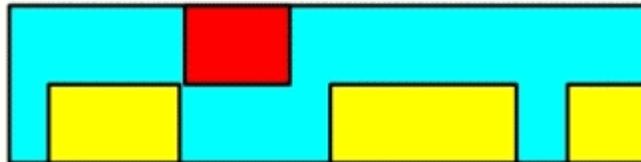
Products Selected

If only products are selected, then each selected product will be aligned so that front edge of each matches the front edge of the shelf.

Align to Front – Product: View from Top Before



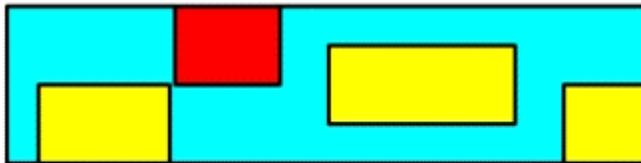
Align to Front – Product: View from Top After



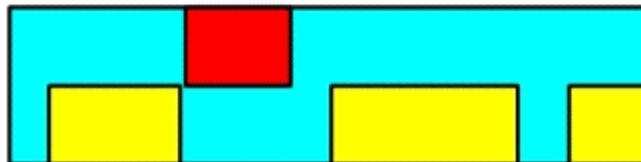
Shelf/Fixture and Products Selected

If the shelf/fixture, plus some of its child products are selected, then only those selected products will be aligned with the front of the shelf, rather than all the products on the shelf.

Align to Front – Shelf and Product: View from Top Before



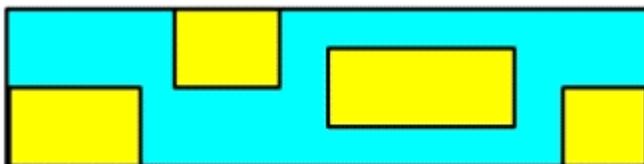
Align to Front – Shelf and Product: View from Top After



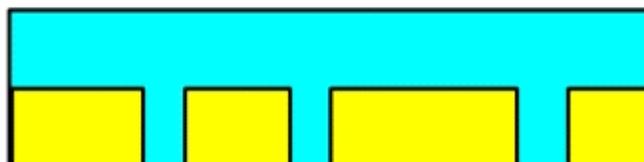
Shelf/Fixture Selected

If the shelf is selected (and no products) and the alignment button is pressed, then it will assume all child objects are selected and align them to the front of the shelf.

Justify Front – Shelf: View from Top Before



Justify Front – Shelf: View from Top After



Note: It is recommended that Clash Detection be turned on. This will avoid one product being placed on top of another if only some of the products on a shelf are selected for alignment.

Align to Back

Align to Back

If one or more shelves/fixtures are selected before clicking the Align to Back button, then all child products will be aligned to the back. Alignment towards the left or right of the shelf will not be affected.

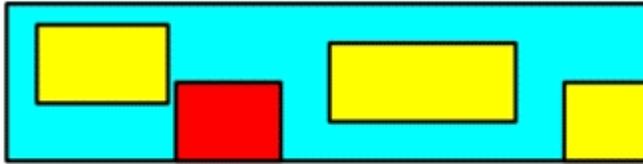
Products will first be sorted in order of position along the depth of the shelf. The first product will then be placed at the back edge of the shelf. The next product will be placed adjoining the first such that it is adjacent, but does not overlap. Successive products will be placed in a similar manner until all have been placed in a back justified alignment.

The manner of the alignment will depend on whether only products are selected, whether the shelf and some of its products are selected, or whether the shelf/fixture alone is selected.

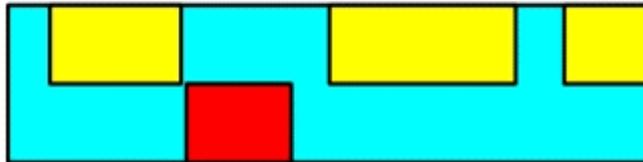
Products Selected

If only products are selected, then each selected product will be aligned so that back of each matches the back of the shelf.

Align to Back – Product: View from Top Before



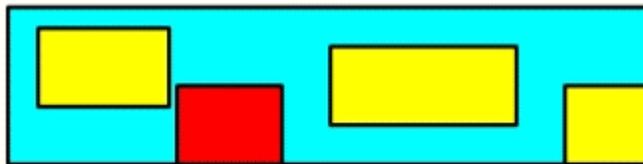
Align to Back – Product: View from Top After



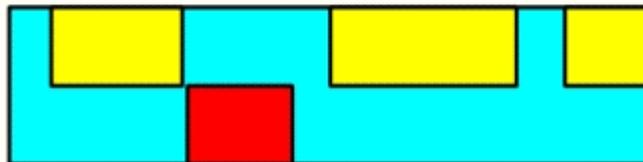
Shelf/Fixture and Products Selected

If the shelf/fixture, plus some of its child products are selected, then only those selected products will be aligned with the back of the shelf, rather than all the products on the shelf.

Align to Back – Product and Shelf: View from Top Before

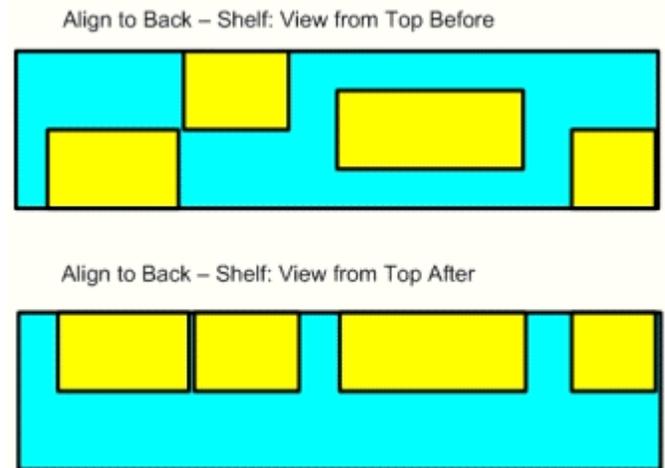


Align to Back – Product and Shelf: View from Top After



Shelf/Fixture Selected

If the shelf is selected (and no products) and the alignment button is pressed, then it will assume all child objects are selected and align them to the back of the shelf.



Note: It is recommended that Clash Detection be turned on. This will avoid one product being placed on top of another if only some of the products on a shelf are selected for alignment.

Align to Middle

Align to Middle

If one or more shelves/fixtures are selected before clicking the Align to Middle button, then all child products will be aligned to the middle. Alignment towards the left or right of the shelf will not be affected.

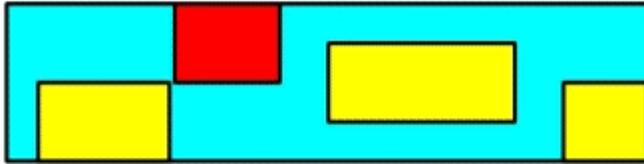
When all products have been aligned to the middle, there will be an equal unoccupied space to the front and rear.

The manner of the alignment will depend on whether only products are selected, whether the shelf and some of its products are selected, or whether the shelf/fixture alone is selected.

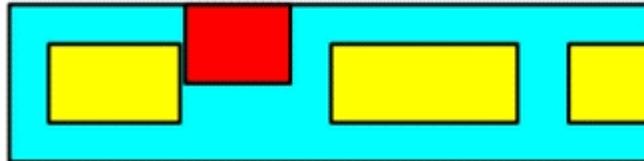
Products Selected

If only products are selected, then each selected product will be aligned so that middle of each matches the middle of the shelf.

Align to Middle – Product: View from Top Before



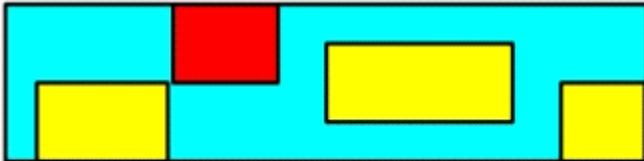
Align to Middle – Product: View from Top After



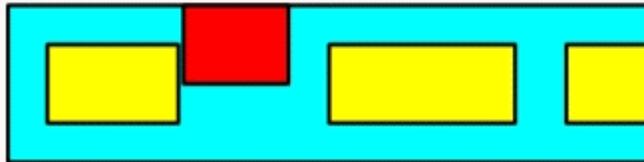
Shelf/Fixture and Products Selected

If the shelf/fixture, plus some of its child products are selected, then only those selected products will be aligned with the middle of the shelf, rather than all the products on the shelf.

Align to Middle – Product and Shelf: View from Top Before

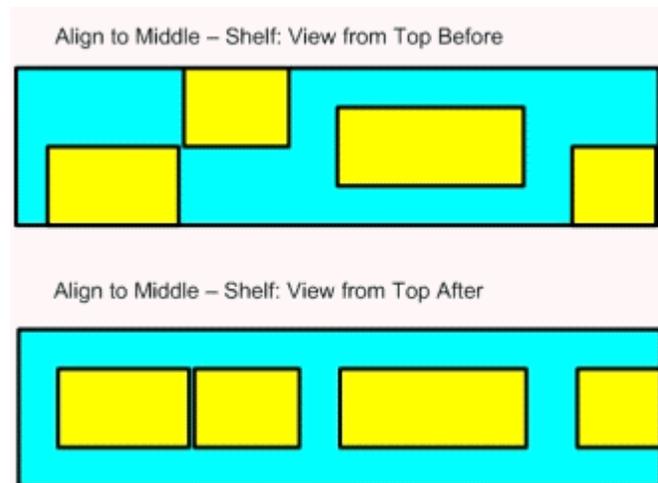


Align to Middle – Product and Shelf: View from Top After



Shelf/Fixture Selected

If the shelf is selected (and no products) and the alignment button is pressed, then it will assume all child objects are selected and align them to the middle of the shelf.



Note: It is recommended that Clash Detection be turned on. This will avoid one product being placed on top of another if only some of the products on a shelf are selected for alignment.

Distribute Left/Right

Distribute Left/Right

Distribution ensures that the spaces (or overlaps) between objects are equal.

Products

If only products are selected, then Distribute Left/Right will establish the total distance between the left edge of the leftmost product and the right edge of the right most product. It will then establish the combined length of all the products within that distance.

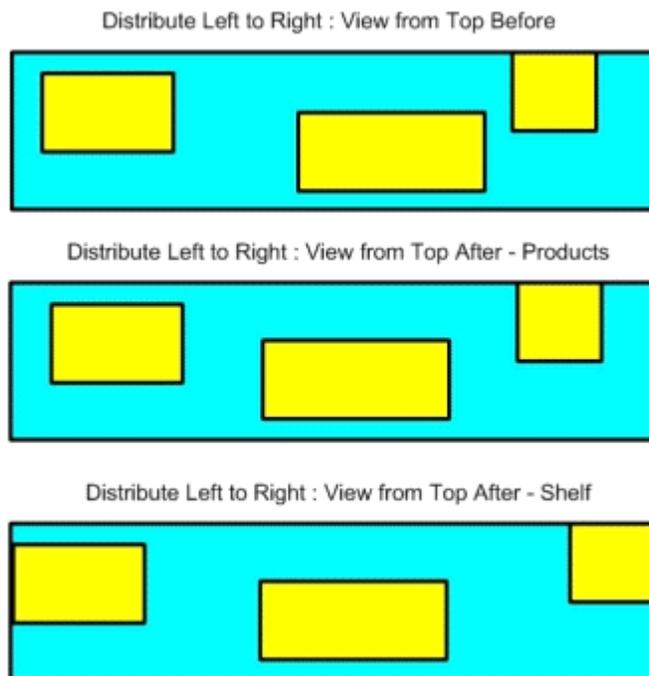
After comparing the total distance and the combined length, Distribute Left/Right will then move all selected products so that the gaps (or overlaps) between the selected products are equal.

If products are selected, the left hand and right hand products in the selection will not move, but all intermediate products may have their positions adjusted.

Parent Fixture/Shelf

If the parent fixture/shelf is also selected, then it will assume that all child products are selected; this will distribute products between the left hand edge and right hand edge of the merchandisable areas.

This means that unlike a Products selection, the left hand and right hand products in the selection will move to the respective left hand and right hand extents of the shelf respectively.



Note: It is recommended that Clash Detection be turned on. This will avoid one product being placed on top of another if only some of the products on a shelf are selected for alignment.

Distribute Front/Back

Distribute Front/Back

Distribution ensures that the spaces (or overlaps) between objects are equal.

Products

If only products are selected, then Distribute Front/Back will establish the total distance between the front edge of the foremost product and the back edge of the rear most product. It will then establish the combined depth of all the products within that distance.

After comparing the total distance and the combined depth, Distribute Front/Back will then move all selected products so that the gaps (or overlaps) between the selected products are equal.

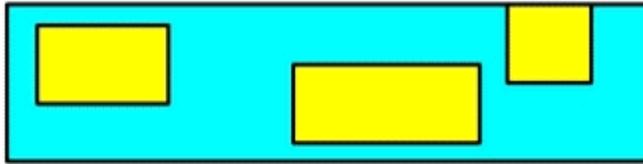
If products are selected, the front and back products in the selection will not move, but all intermediate products may have their positions adjusted.

Parent Fixture/Shelf

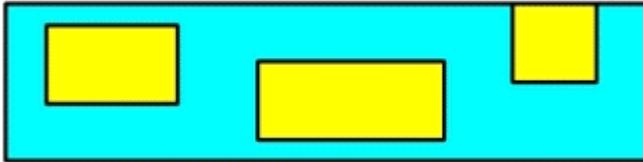
If the parent fixture/shelf is also selected, then it will assume that all child products are selected; this will distribute products between the front edge and rear edge of the merchandisable areas.

This means that unlike a Products selection, the front and rear products in the selection will move to the respective front and rear extents of the shelf respectively.

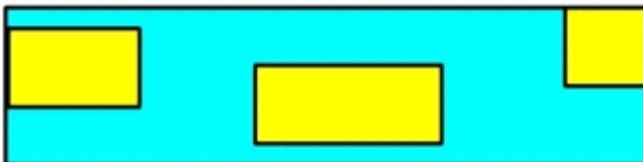
Distribute Left to Right : View from Top Before



Distribute Left to Right : View from Top After - Products



Distribute Left to Right : View from Top After - Shelf



Note: It is recommended that Clash Detection be turned on. This will avoid one product being placed on top of another if only some of the products on a shelf are selected for alignment.

Distribute Top/Bottom

Distribute Top/Bottom

Distribution ensures that the spaces (or overlaps) between objects are equal.

Products

If only products are selected, then Distribute Top/Bottom will establish the total distance between the top edge of the lowermost product and the maximum height available. It will then establish the combined heights of all the products within that distance.

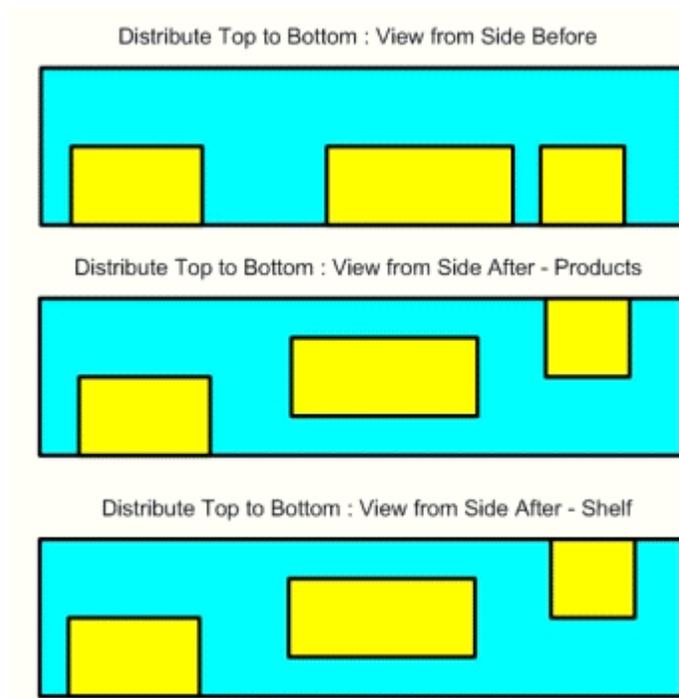
After comparing the total distance and the combined heights, Distribute Top/Bottom will then move all selected products so that the gaps (or overlaps) between the selected products are equal.

If products are selected, the top and bottom products in the selection will not move, but all intermediate products may have their positions adjusted.

Parent Fixture/Shelf

If the parent fixture/shelf is also selected, then it will assume that all child products are selected; this will distribute products between the front edge and rear edge of the merchandisable areas.

This means that unlike a Products selection, the top and bottom products in the selection will move to the respective top and bottom extents of the shelf respectively.



Note: It is recommended that Clash Detection be turned on. This will avoid one product being placed on top of another if only some of the products on a shelf are selected for alignment.

Aligning to Non-Rectangular Objects

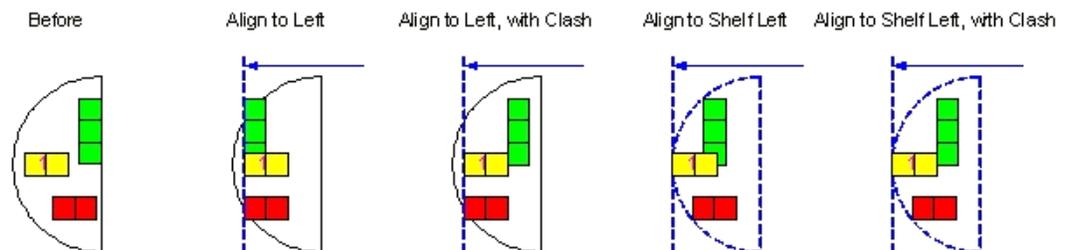
Macro Space Planning allows alignment to non rectangular objects such as semi-circular fixtures or corner shelves in Merchandiser.

The shape of the non-rectangular shelf is defined in Fixture Studio - all products placed on the shelf will be confined to the bounds of the non-rectangular area.

Note: See the Fixture studio

Shelves

Alignment on non-rectangular objects should be carried out using the Shelf alignment options and with clash detection on.



Products

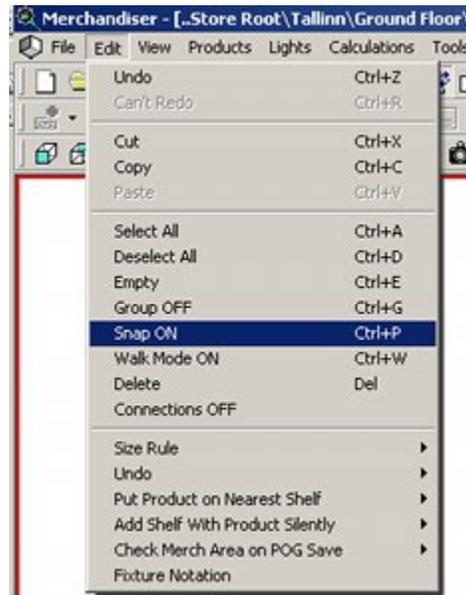
Non-rectangular products will be treated as boxes for alignment purposes.

Aligning to Snap Grid

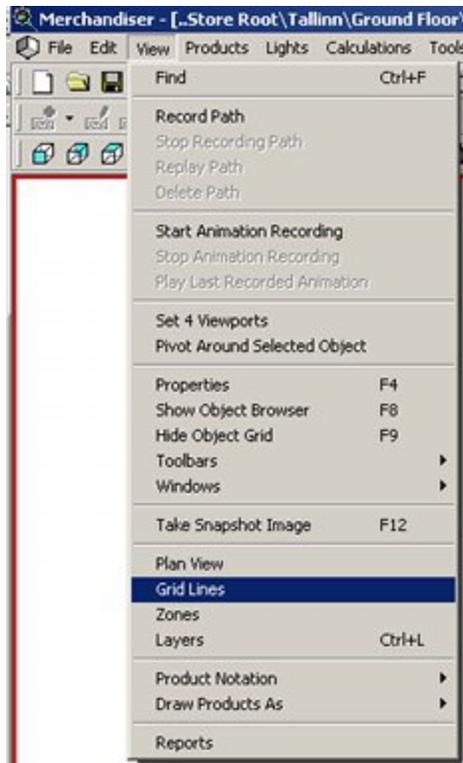
It is possible to **align objects to a regular grid**. This can be toggled On or Off by clicking on the Snap option on the Status bar.



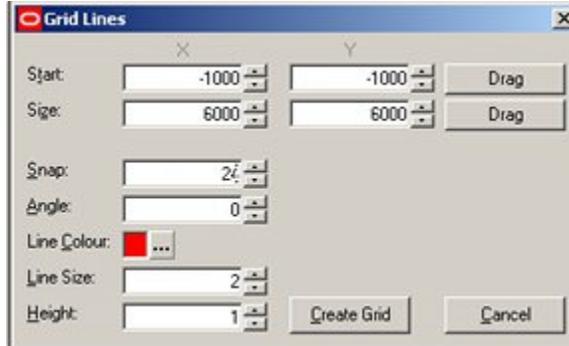
It is also possible to toggle it On or Off using the Edit menu.



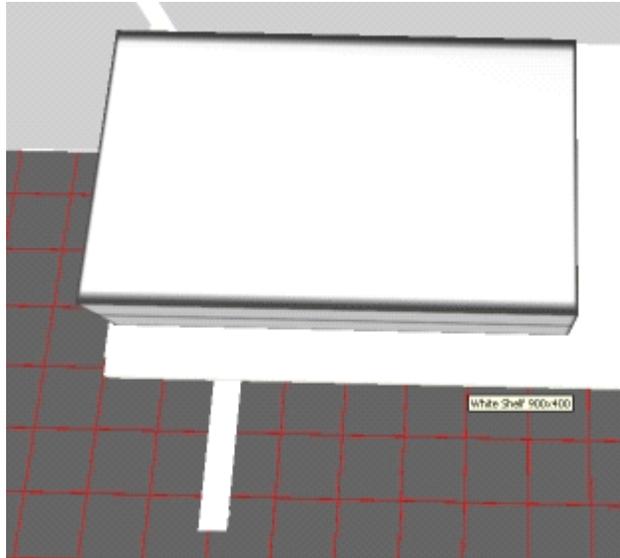
The grid itself can be set to be displayed using the Grid Lines Option in the View pull down menu.



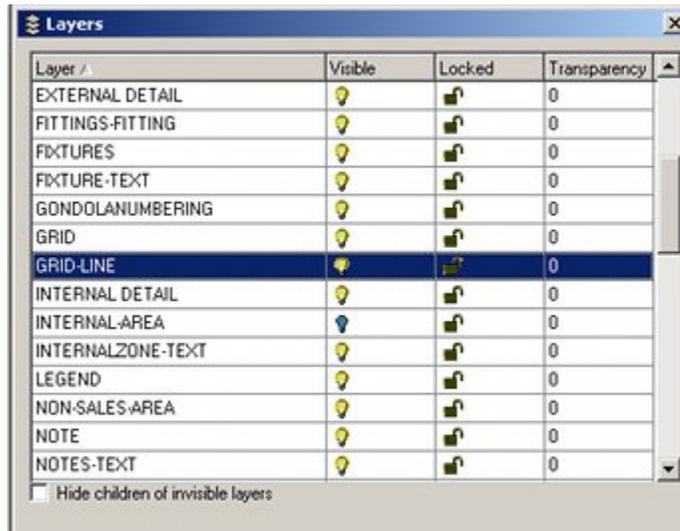
This brings up the Grid Lines dialogue box which can be used to set the parameters of the grid.



The grid will then appear in the Virtual Reality Environment.



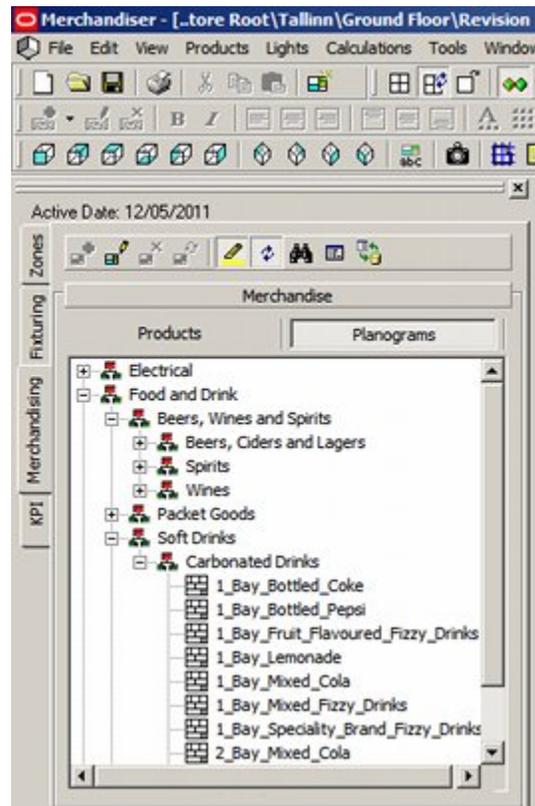
To turn the grid off, go to the layers dialogue box and turn off the Grid-Line layer.



The Planogram Hierarchy

Overview of the Planogram Hierarchy

The **Planogram Hierarchy** is found towards the top of the Object Browser.



It is active when the planogram button is selected in the merchandising toolbar.

The hierarchy can be modified in one of two ways: groups and planograms.

Groups

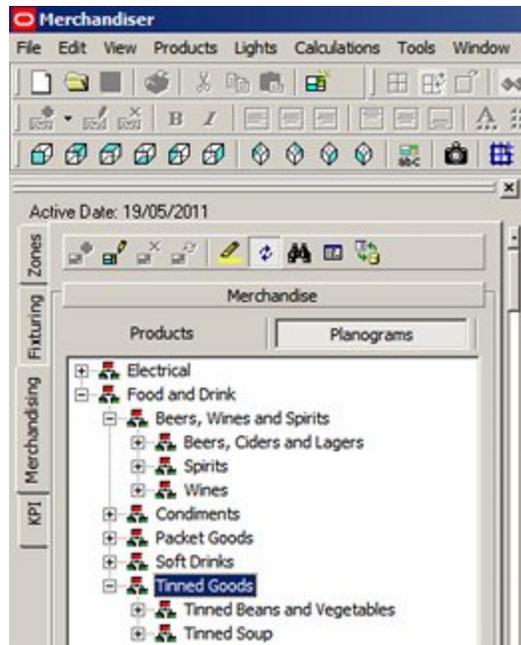
Groups hold collections of planograms. They can be set up in a hierarchical structure - for example Summer Promotion is a child of Promotional Items.

Planograms

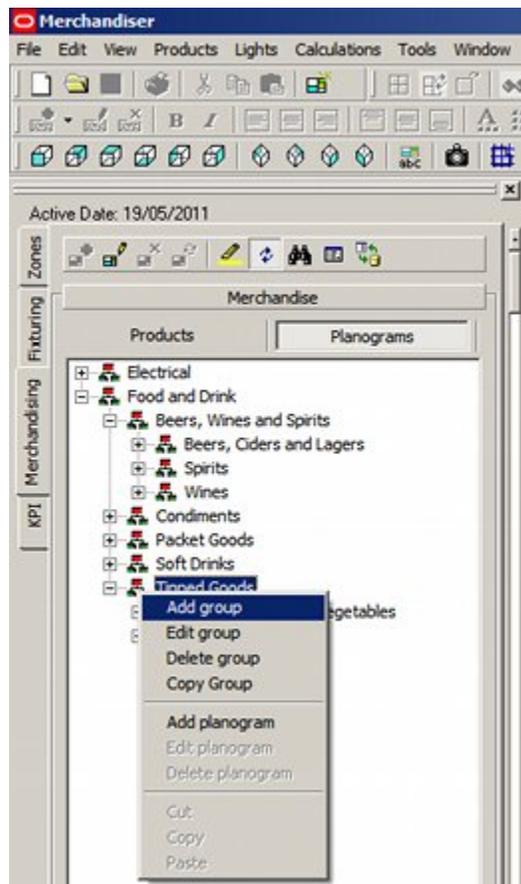
Planograms can be assigned to groups. Each Group holds a collection of planograms of similar purpose.

Adding a Group

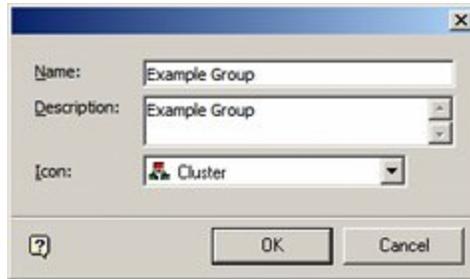
To **add a group**, highlight the node in the hierarchy the group is to be a child of.



In this case the Tinned Goods Group has been selected.
Use <Ctrl> and Right click to bring up the pop-up menu.



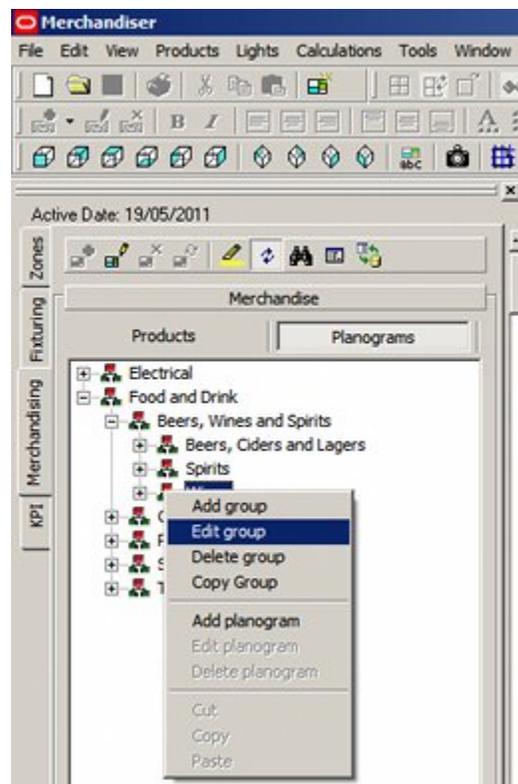
Select Add Group to bring up the Group dialogue box.



The Name and description can be typed in, and the pertinent icon selected from a drop down list. On clicking on OK, the group will be added to the hierarchy.

Editing a Group

To edit the details of the Planogram Group, highlight the required group in the hierarchy and use <Ctrl> plus right click to bring up the pop-up menu.



Select the Edit Group option. This will bring up the Edit Group dialog box. Modify it as required.

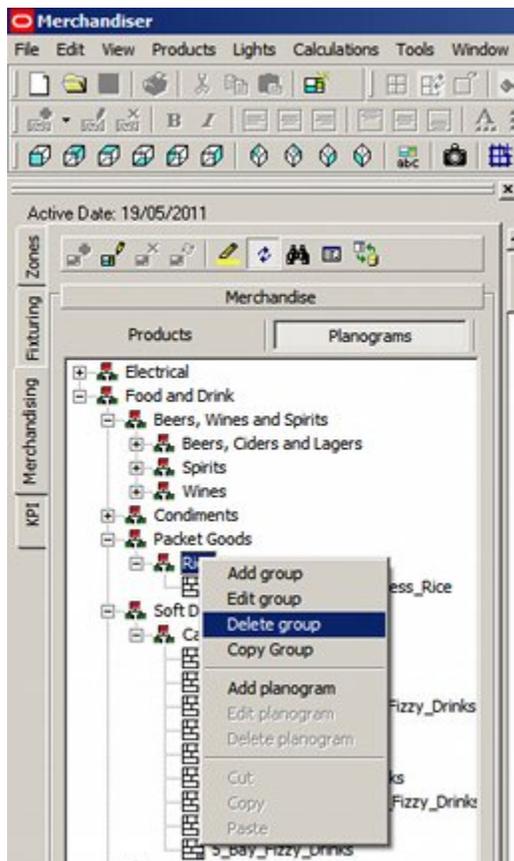


In this instance 'Example Planogram Group' has been changed to Modified Planogram Group'.

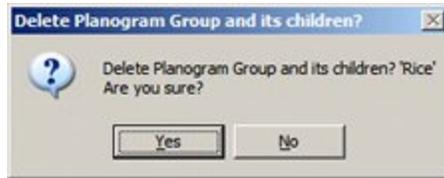
Click on OK and the details will be modified in the hierarchy.

Deleting a Group

To delete a Planogram Group, highlight it in the hierarchy, then bring up the right click menu.

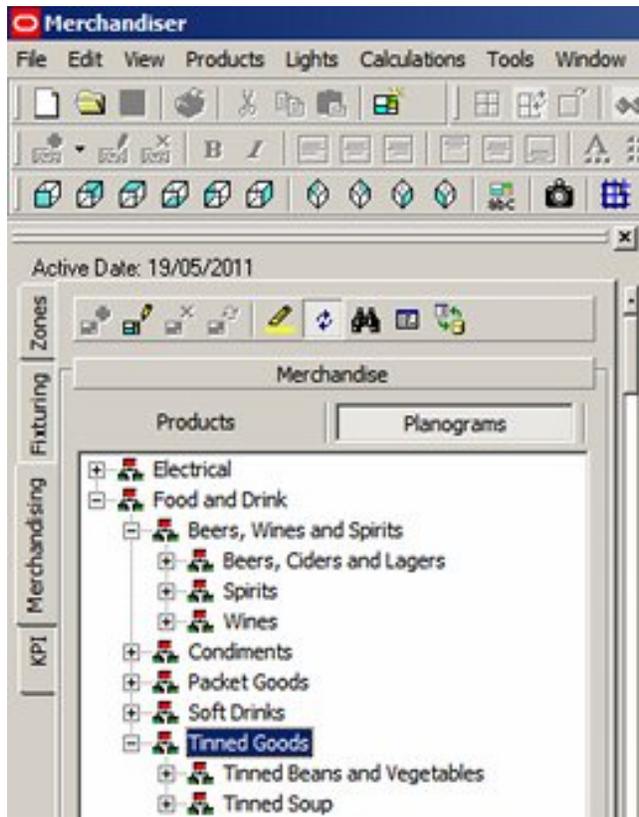


Click on Delete Group and the group will be deleted. If the Planogram group has planograms associated with it, these will be deleted as well. Before this can occur, a confirmatory dialog box will appear.



Adding Planograms

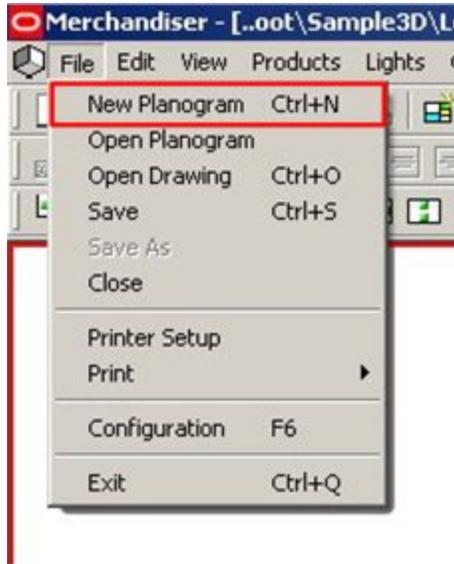
Planograms are added by selecting a parent group and highlighting it.



In this case we wish to add a Planogram to the 3D Samples Group.

Once the group is highlighted, there are two ways to add a planogram; from the menu bar and from the pop-up menu.

- Planograms can be added from the File pull down menu:



Clicking on New Planogram will cause a blank Planogram dialogue box to appear, ready for the details of the planogram to be entered.

- Planograms can also be added by using <Ctrl> plus right click to bring up the pop-up menu.



The add planogram option will then cause a blank Planogram dialogue box to appear, ready for the details of the planogram to be entered.

BoxedSocks

Details Stores Seasons Fixture Styles Design UDAs

Name: Revision:

Description:

Status: Source:

Effective Date: Imported Name:

Type:

Stock Type: Last Imported:

Autofill Rule: Summary Product:

Units: Temp Range:

Can be Split: Created:

Number of Bays: Created By:

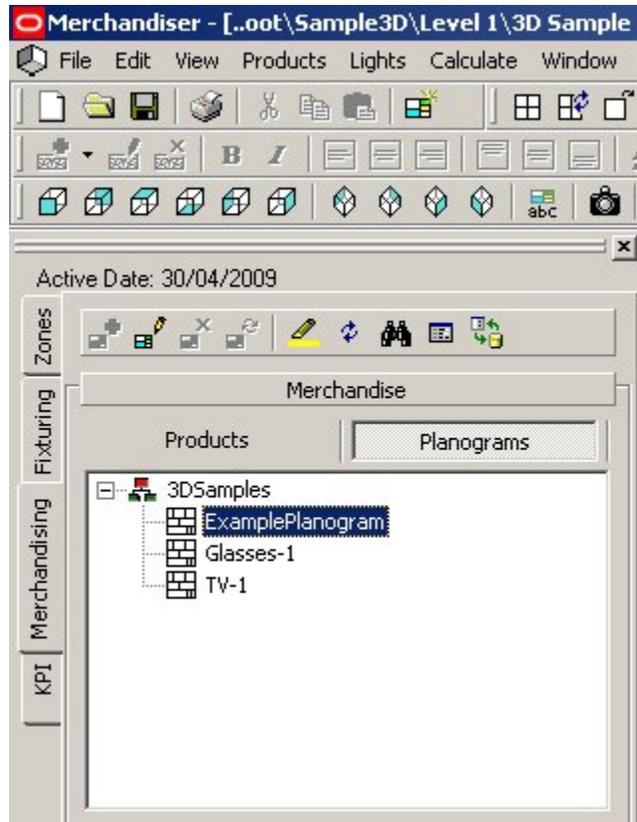
Size: Last Modified:

Last Modified By:

Last Published:

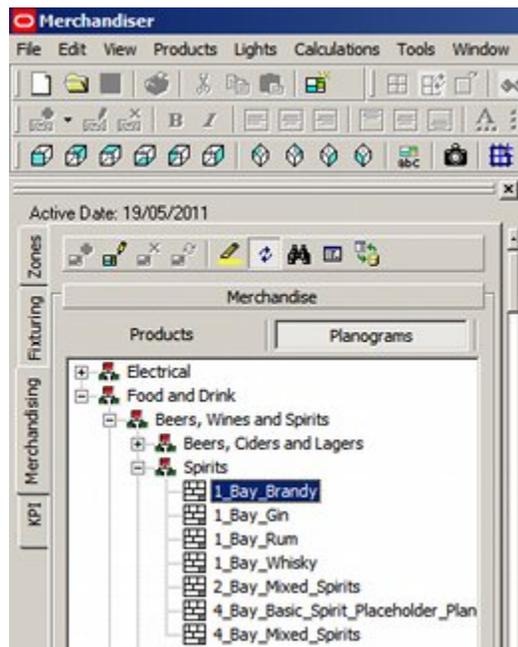
OK Save As Cancel

On saving of the Planogram dialogue, the new planogram will appear in the hierarchy.



Editing Planograms

Planograms are edited by selecting a planogram and highlighting it.

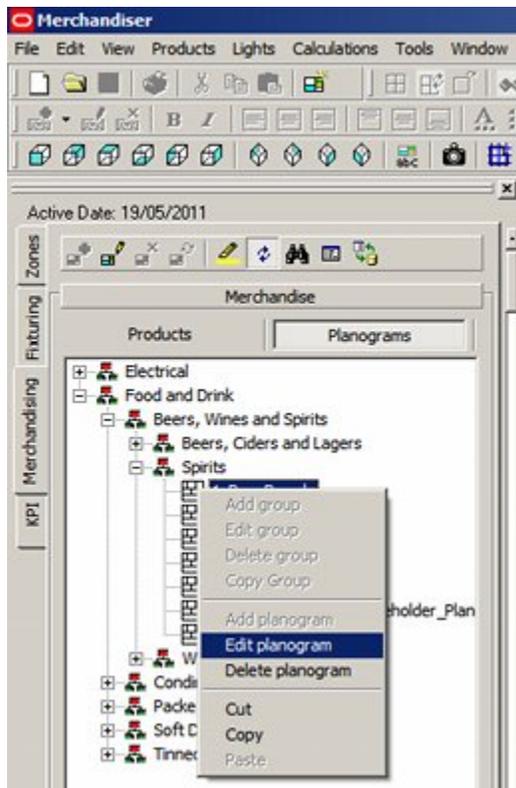


Planograms can be opened for editing in one of two ways: from the menu bar and from the pop-up menu.

- Planograms can be opened for editing from the File pull down menu:



- Planograms can also be edited by using <Ctrl> plus right click to bring up the pop-up menu.



In both cases the Planogram dialogue box will open to allow the properties of the planogram to be edited.

Planogram: 4_Bay_Basic_Spirit_Placeholder_Planogram

Details Properties Stores Seasons Fixture Styles Design Financial UDAs

Name: 4_Bay_Basic_Spirit_Placeholder_Planogram Revision: 1

Description: 4 bay Basic Spirit Placeholder Planogram

Size Description: 144 x 24 x 72

Status: Proposed Client Code: Example

Family Code: EXAMPLE Buddy Family Code: EXAMPLE

Assortment Code: EXAMPLE Units: imperial inch

Temperature Range: Ambient Goods Time Units: standard hour

Weight Range: < No Ranges Selected > Manpower Set Time: 4.00

Publish Date: 13 June 2011 Manpower Dismantle Time: 2.00

Effective Date: 30 June 2011 Category Role: Routine

Expiry Date: 31 December 2999 Inventory Model: EXAMPLE

Stock Type: Normal Bank: 0

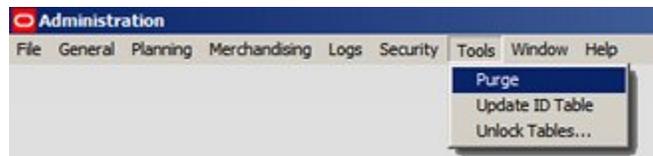
Autofill Rule: < No Rule Selected > Traffic Flow: Left to Right
 Right to Left

Can be Split: Requires Power:

OK Save As Cancel

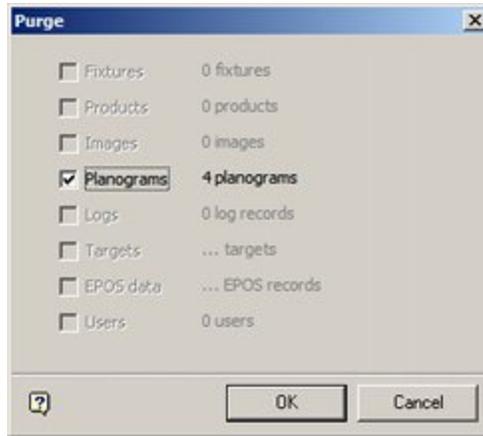
Purge Planograms Option

Purge options are available using the Purge option on the Tools pull down menu in the Administration Module.

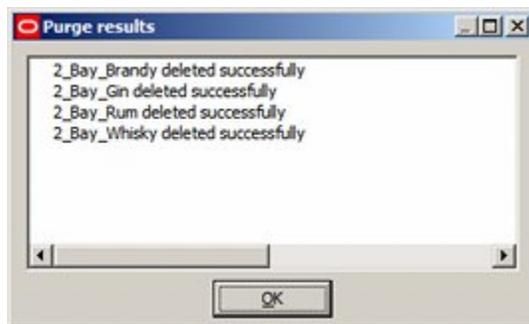


Note: The Administration module is only available to users with Administrator's privileges.

The planograms will not be permanently deleted from the database until the Planograms option is checked on the Purge dialogue and the OK button clicked.



Results will be reported in the Purge Results dialogue box.



Setting Access Permissions for Planogram Design

The ability for users to modify the planogram hierarchy and individual planograms is set in the Administration module. These permissions can be used to:

- Allow users to add, edit or delete Planogram groups in the Planogram Hierarchy
- Allow users to add, edit or delete individual planograms

Overview of Planogram Creation

Overview of Planogram Creation

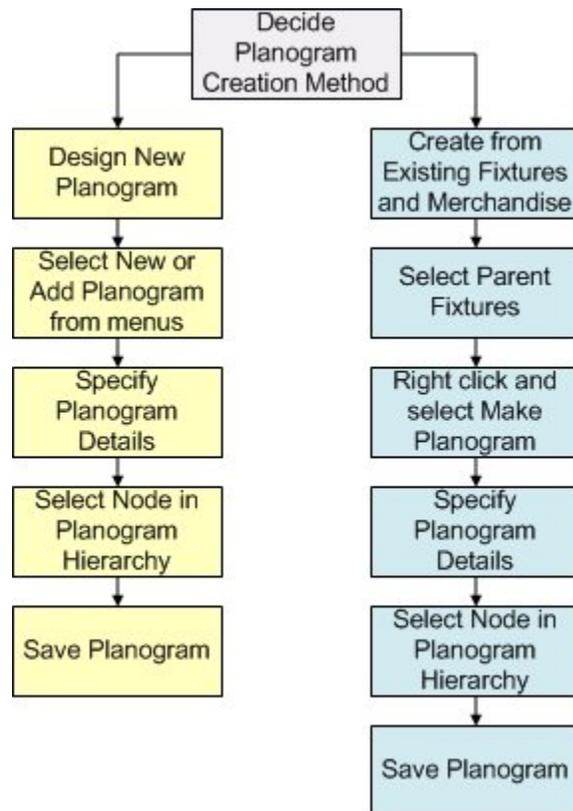
There are **two basic ways** of creating planograms.

- By designing a planogram in the planogram design dialog box.
- By selecting merchandised fixtures in the store and using them to create a planogram.

The first method is used for creating a planogram from scratch, including selecting the fixtures, shelves and products from those available.

The second method is used to turn an existing arrangement of fixtures, shelves and products in a floor plan into a planogram.

Both methods use a similar logic, and which one is used at a specific time will depend on the circumstances.

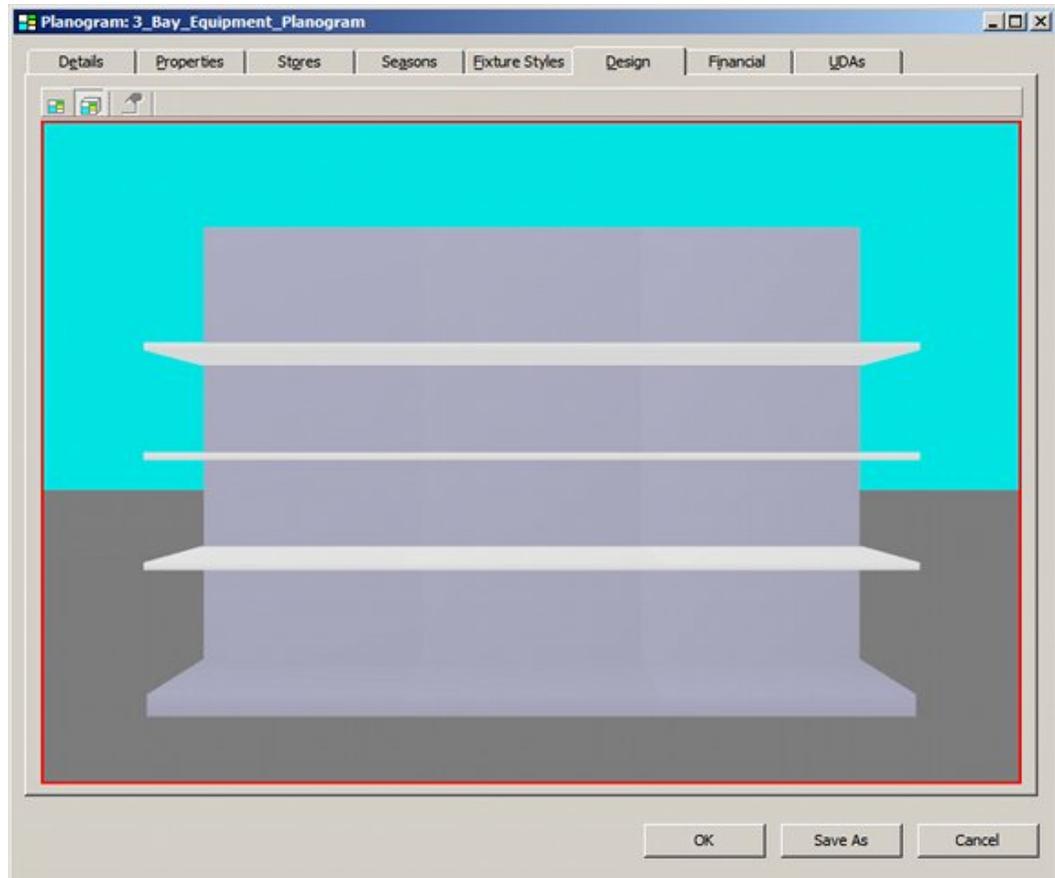


Special Forms of Planograms

There are two forms of planograms that can be used to supplement fully detailed, finished planogram designs.

Equipment Planograms

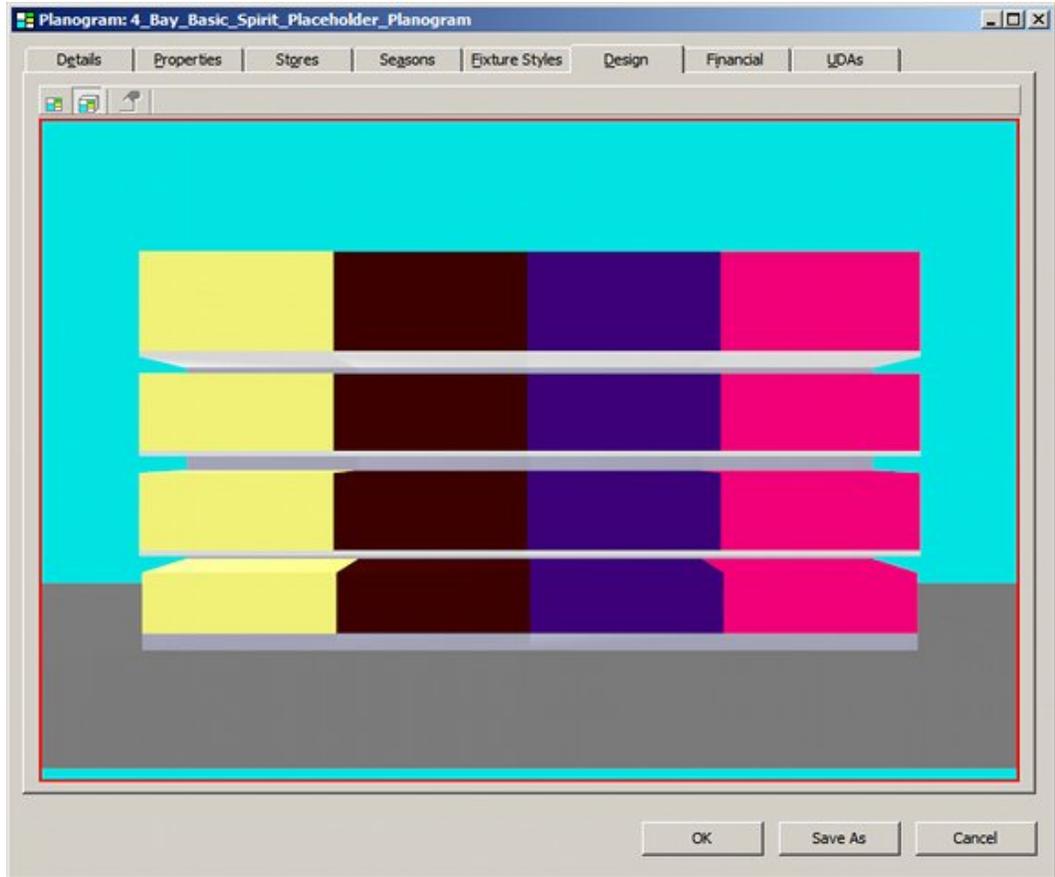
If a store plan is being developed, but planogramming is still at an early stage, it is possible to create equipment planograms. These can be used to lay out the shelves, etc, in the floor plan so that a bill of materials can be generated.



Note: it is also possible to place the shelves, etc, directly in the floor plan without using equipment planograms.

Placeholder Planograms

Planograms can be saved with product placeholders in place of display styles.



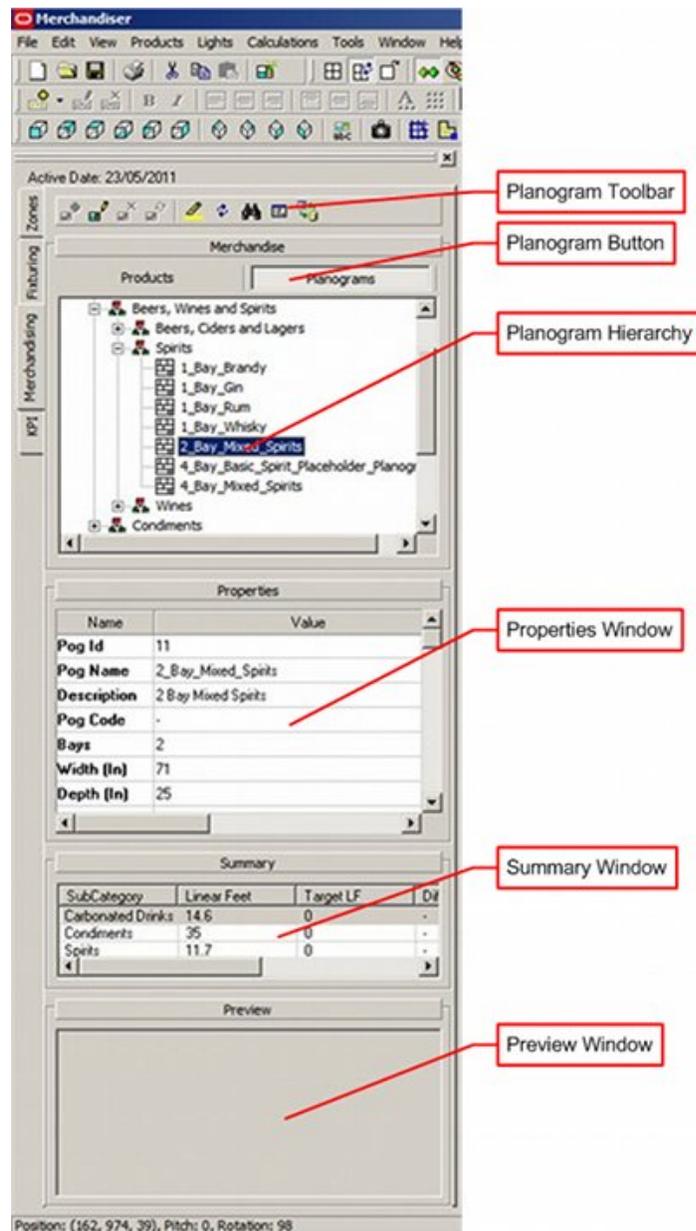
The usual purpose of this sort of planogram is to allow store planning to start before planogram design. The placeholder planogram is saved as Revision 1. When the design is finalized, it is saved as Revision 2.

If Planogram Substitution is carried out in a floor plan containing Revision 1 (placeholder), that planogram will automatically updated to Revision 2 (full detail).

Planogram Design Display Window and Toolbar

Overview of Merchandising on the Object Browser

Clicking on the Merchandising Tab on the Object Browser brings up a series of options for adding, editing and deleting Planograms.



The **Toolbar** gives access to varying options concerning Planograms.

Buttons allow users to swap between product or planogram operations.

The **Hierarchy Window** allows users to see the list of available planograms. (The hierarchy showing will depend on which button is selected).

The **Properties Window** gives details of the currently selected object.

The **Summary Window** gives details of how many of the selected objects have been placed in the drawing.

The **Preview Window** gives a preview of the selected product or planogram (if available).

The Planogram Toolbar

The **Planogram toolbar** is found on the Merchandising Tab of the Object Browser. It is active when the Planogram button is selected.



It contains a series of icons allowing various operations to be carried out on Planograms.

Icon	Description	Comment
	Add to Selected Fixture	(Not enabled in Merchandiser)
	Edit Planogram Definition	
	Remove from Fixture	(Not enabled in Merchandiser)
	Reverse Planogram	(Not enabled in Merchandiser)
	Highlight where used in store	
	Highlight Selected Item in Tree	
	Find Product or Planogram	
	Show Merchandising Options	
	Refresh	

Some of these options are only available in the Planner environment - alternative methods being available in the Merchandiser module.

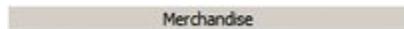
The Merchandising Hierarchy Window

The **Merchandising window** shows a hierarchical tree of all the available products or planograms.



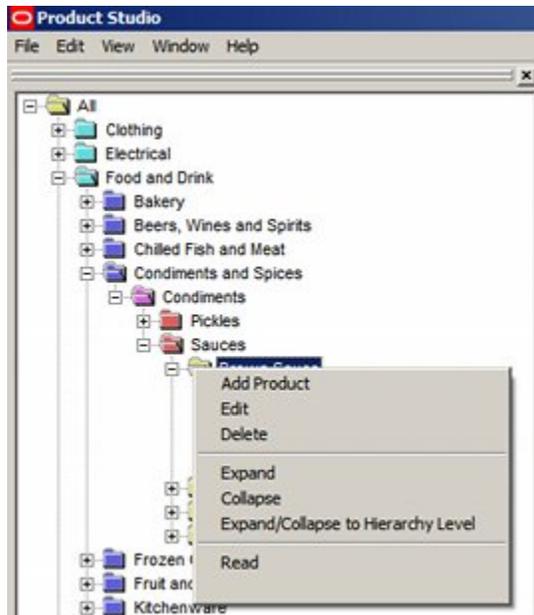
The tree can be expanded or contracted by clicking on the + or – icons.

The Merchandising window can be minimized by clicking on the splitter bar.

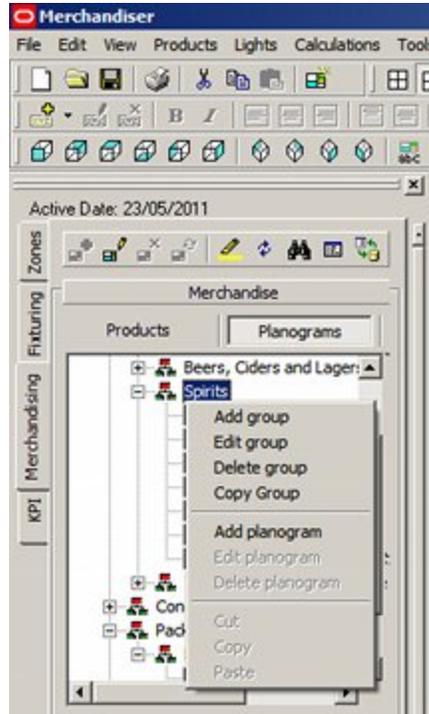


The Products or Planograms buttons immediately below the splitter bar determine whether the hierarchical tree shows products or planograms.

The Products hierarchical tree can be configured in Product Studio using the Add Product, Edit and Delete options on the menu available by right clicking.



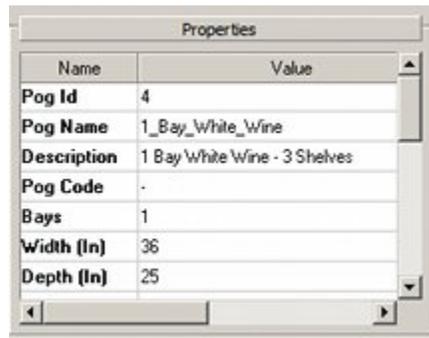
The Planograms hierarchical tree can be configured in Merchandiser using the Add, Edit and Delete options on the menu available by right clicking.



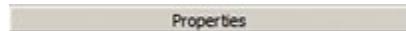
The Group or Planogram options will be available or greyed out depending on whether a group or a planogram has been highlighted in the hierarchy.

The Properties Window

The **Properties Window** will show the properties for the currently selected product or planogram.



The Properties window can be minimized by clicking on the splitter bar.



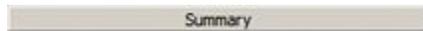
The Summary Window

The **Summary Window** will show a user defined list of products or planograms placed in the drawing.

SubCategory	Linear Feet	Target LF
Carbonated Drinks	14.6	0
Condiments	8	0
Rice	17.5	0
Spirits	11.7	0

Clicking on a column heading will re-order that column. Clicking again will reverse the sort order.

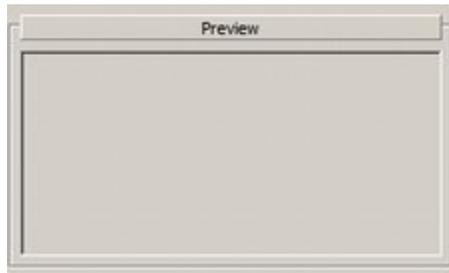
The Summary window can be minimized by clicking on the splitter bar.



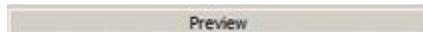
The information that appears in the summary window is customizable and is selected by means of a SQL statement.

The Preview Window

The **Preview Window** will be blank if a planogram is selected.



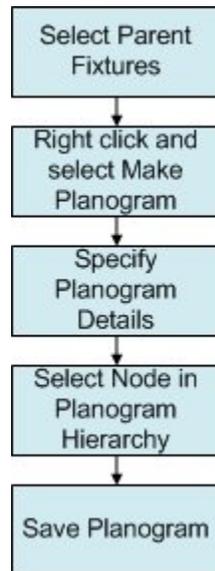
The Preview window can be minimized by clicking on the splitter bar.



Planogram Creation in Store

Overview of Planogram Creation in the Store

Planogram Creation within the Store requires the following stages:



Select Fixtures

This determines which fixtures (and associated products) will become the planogram.

Right click and Select Make Planogram

This starts the planogram definition process.

Specify Planogram Details

This allows the user to specify the Planogram Details, Store Dependency, Season Dependency, Fixture Styles, and User Defined Attributes, (UDA's).

It also allows the user to modify the fixtures and products originally selected for the planogram design.

Select Node in Planogram Hierarchy

This determines where the planogram will be saved in the hierarchy one it has been defined.

Save Planogram

This saves the defined planogram to the specified point in the planogram hierarchy in the Object Browser.

Select Fixtures

One or more fixtures (together with their associated merchandise) can be selected by holding down <Ctrl> and right clicking on the required fixtures. The fixtures will then be enclosed by a selection box.



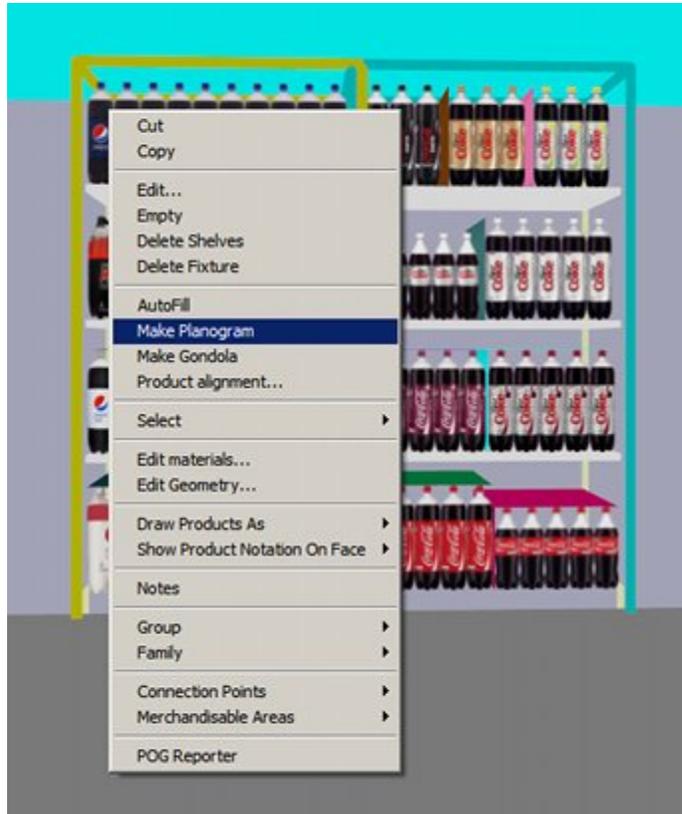
In this example, the first selected fixture is enclosed by a red selection box, and the second in a blue selection box. Other selection box colors may occur depending on whether multiple fixtures have been selected, or whether the fixtures belong to a group or family.

All selected fixtures will be included in the planogram.

Right click and select Make Planogram

Once the fixture(s) have been selected, position the mouse pointer over them and right click to bring up the pop-up menu.

Note: The Make Planogram option will only be available if fixtures are selected. If product or shelves are selected, it will not be available.



Selecting the Make Planogram Option will bring up a new Planogram dialogue box.

The screenshot shows the 'Planogram' dialog box with the following fields and options:

- Details** | Properties | Stores | Seasons | Fixture Styles | Design | Financial | UDAs
- Name: [Text Field] Revision: 1
- Description: [Text Field]
- Size Description: [Text Field]
- Status: Proposed (Dropdown)
- Client Code: [Text Field]
- Family Code: [Text Field]
- Buddy Family Code: [Text Field]
- Assortment Code: [Text Field]
- Units: imperial inch (Dropdown)
- Temperature Range: < No Ranges Selected > (Dropdown)
- Time Units: standard second (Dropdown)
- Weight Range: < No Ranges Selected > (Dropdown)
- Manpower Set Time: 0 (Spin Box)
- Manpower Dismantle Time: 0 (Spin Box)
- Publish Date: [Text Field]
- Category Role: < No Selection > (Dropdown)
- Effective Date: [Text Field]
- Inventory Model: [Text Field]
- Expiry Date: 31 December 2999 (Dropdown)
- Bank: 0 (Spin Box)
- Stock Type: [Text Field]
- Traffic Flow:
 - Left to Right
 - Right to Left
- Autofill Rule: < No Rule Selected > (Dropdown)
- Requires Power:
- Can be Split:

Buttons: OK, Save As, Cancel

This requires completion and saving.

Specify Planogram Details

The **Planogram** dialogue box allows users to specify full details for the planogram.

The **Details Tab** allows the planogram name, effective date, etc, to be specified.

The **Stores Tab** allows users to select which stores the planogram is intended for.

The **Seasons Tab** allows users to select which time periods the planogram is intended for.

The **Fixture Styles Tab** allows users to specify which types of fixtures the planogram can be placed on.

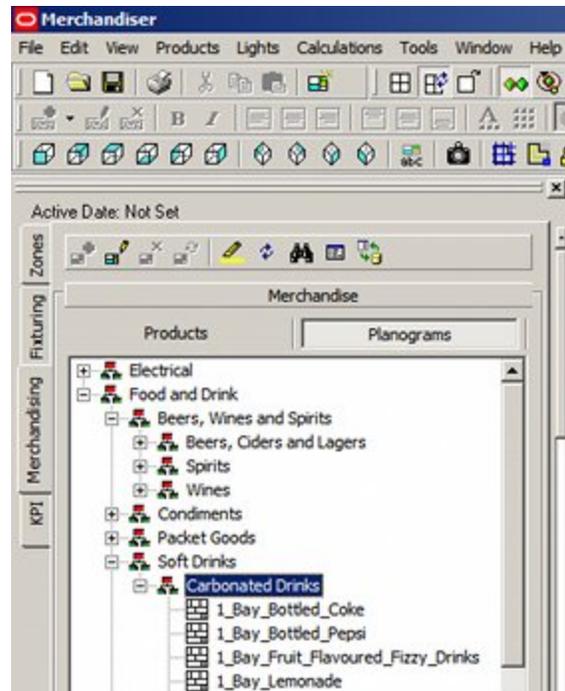
The **Design Tab** allows the planogram design to be modified relative to the fixtures and merchandise selected in the store.

The **Financial Tab** allows financial performance data to be assigned to the planogram.

The **UDA Tab** allows User Designed Attributes to be set for the Planogram.

Select Node in Hierarchy

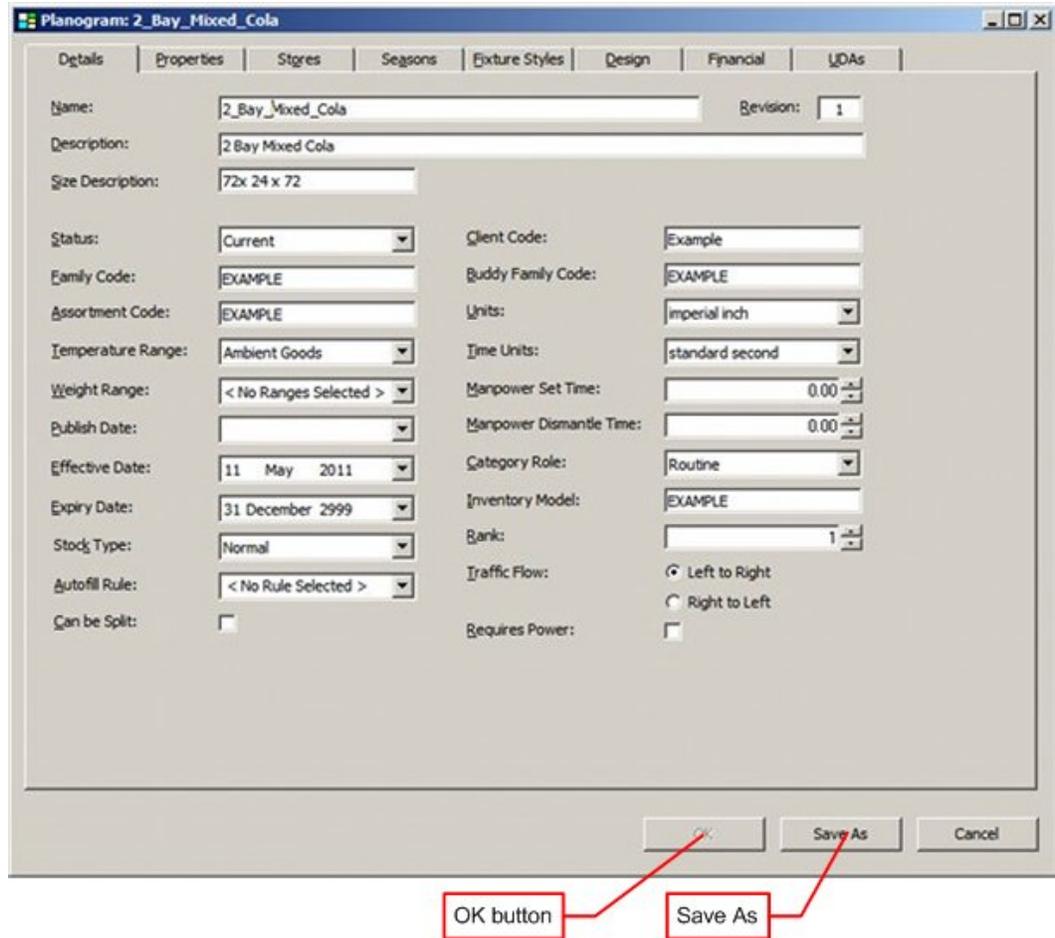
Selecting the node in the hierarchy determines where the planogram will be saved once it has been created.



Here, the Carbonated Drinks Planogram Group has been highlighted, and the planogram will be saved under this node.

Save Planogram

Clicking on the **OK button** will save details of the planogram to the Macro Space Planning database.

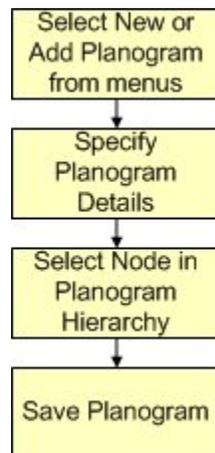


Note: The **Save As** button is used to save a different version of an existing planogram. It is not normally used when creating a planogram from new.

New Planogram Design

Overview of New Planogram Design

Planogram Creation from new requires the following stages:



Select New Planogram from File pull down menu

This starts the planogram definition process.

Specify Planogram Details

This allows the user to specify the Planogram Details, Store Dependency, Season Dependency, Fixture Styles, and User Defined Attributes, (UDAs).

It also allows the user to modify the fixtures and products originally selected for the planogram design.

Select Node in Planogram Hierarchy

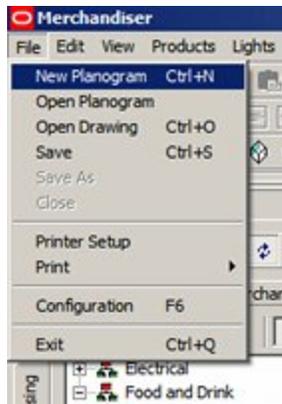
This determines where the planogram will be saved in the hierarchy one it has been defined.

Save Planogram

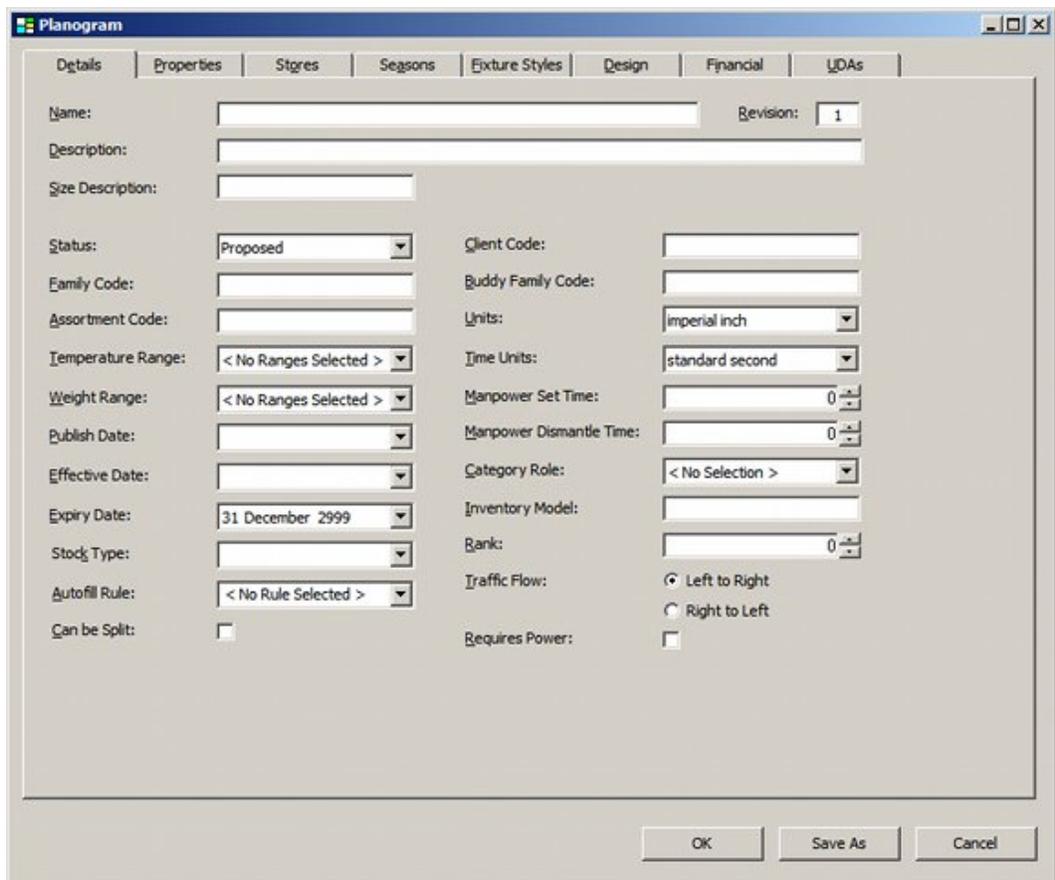
This saves the defined planogram to the specified point in the planogram hierarchy in the Object Browser.

Select New Planogram from File pull down menu

The **New Planogram Option** is selected from the File Pull down menu. (Alternatively, the Add Planogram option can be selected from the right click menu).



This will bring up a blank Planogram definition dialogue to allow the details of the planogram to be specified.



Specify Planogram Details

The **Planogram** dialogue box allows users to specify full details for the planogram.

The screenshot shows a software window titled "Planogram: 2_Bay_Mixed_Cola" with a tabbed interface. The "Details" tab is active, displaying the following fields:

- Name: 2_Bay_Mixed_Cola
- Revision: 1
- Description: 2 Bay Mixed Cola
- Size Description: 72x 24 x 72
- Status: Current
- Client Code: Example
- Family Code: EXAMPLE
- Buddy Family Code: EXAMPLE
- Assortment Code: EXAMPLE
- Units: imperial inch
- Temperature Range: Ambient Goods
- Time Units: standard second
- Weight Range: < No Ranges Selected >
- Manpower Set Time: 0.00
- Manpower Dismantle Time: 0.00
- Publish Date: (empty)
- Category Role: Routine
- Effective Date: 11 May 2011
- Inventory Model: EXAMPLE
- Expiry Date: 31 December 2999
- Bank: 1
- Stock Type: Normal
- Traffic Flow: Left to Right (selected)
- Autofill Rule: < No Rule Selected >
- Requires Power: (unchecked)
- Can be Split: (unchecked)

At the bottom of the dialog are buttons for "OK", "Save As", and "Cancel".

The **Details Tab** allows the planogram name, effective date, etc, to be specified.

The **Stores Tab** allows users to select which stores the planogram is intended for.

The **Seasons Tab** allows users to select which time periods the planogram is intended for.

The **Fixture Styles Tab** allows users to specify which types of fixtures the planogram can be placed on.

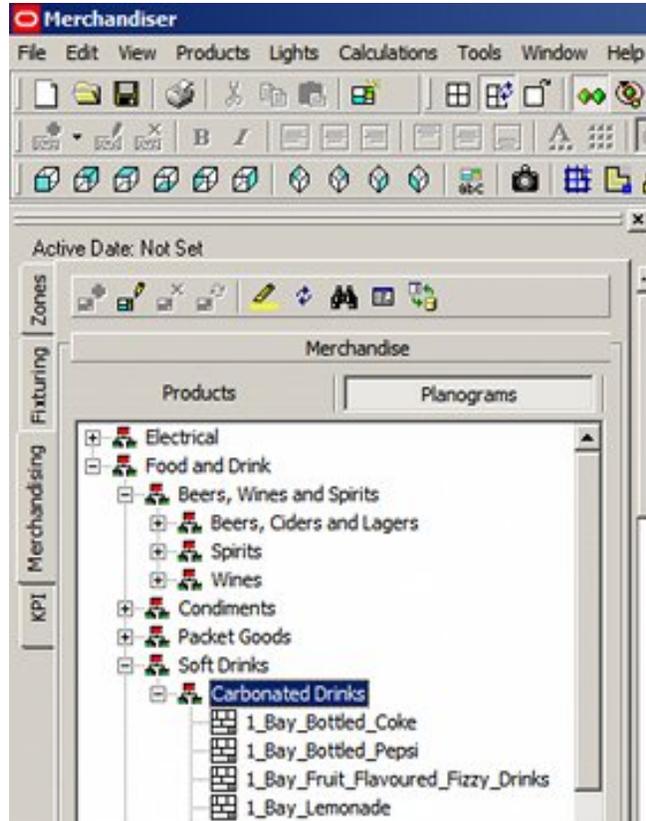
The **Design Tab** allows the planogram design to be created from the available fixtures and merchandise.

The **Financial Tab** allows financial performance data to be assigned to the planogram.

The **UDA Tab** allows User Designed Attributes to be set for the Planogram.

Select Node in Hierarchy

Selecting the node in the hierarchy determines where the planogram will be saved once it has been created.



In this example, only a simple hierarchy has been created, but considerably more complex hierarchies can exist in large retail organizations.

Here, the Clothing Planogram group has been highlighted, and the planogram will be saved under this node.

Save Planogram

Clicking on the **Save** button will save details of the planogram to the central Macro Space Management database.

The image shows a software dialog box titled "Planogram: 2_Bay_Mixed_Cola". The dialog has several tabs: Details, Properties, Stores, Seasons, Fixture Styles, Design, Financial, and UDAs. The "Details" tab is active. The form contains the following fields and controls:

- Name: 2_Bay_Mixed_Cola
- Revision: 1
- Description: 2 Bay Mixed Cola
- Size Description: 72x 24 x 72
- Status: Current (dropdown)
- Client Code: Example
- Family Code: EXAMPLE
- Buddy Family Code: EXAMPLE
- Assortment Code: EXAMPLE
- Units: Imperial inch (dropdown)
- Temperature Range: Ambient Goods (dropdown)
- Time Units: standard second (dropdown)
- Weight Range: < No Ranges Selected > (dropdown)
- Manpower Set Time: 0.00 (spin box)
- Manpower Dismantle Time: 0.00 (spin box)
- Publish Date: (dropdown)
- Category Role: Routine (dropdown)
- Effective Date: 11 May 2011 (dropdown)
- Inventory Model: EXAMPLE
- Expiry Date: 31 December 2999 (dropdown)
- Bank: 1 (spin box)
- Stock Type: Normal (dropdown)
- Traffic Flow: Left to Right, Right to Left
- Autofill Rule: < No Rule Selected > (dropdown)
- Requires Power:
- Can be Split:

At the bottom right of the dialog are three buttons: "OK", "Save As", and "Cancel". Red boxes highlight the "OK" and "Save As" buttons, with red lines pointing to labels "OK button" and "Save As" respectively.

Note: The Save As button is used to save a different version of an existing planogram. It is not normally used when creating a planogram from new.

Planogram Design Options

Overview of Planogram Design Options

The Planogram dialogue box allows users to specify full details for the planogram.

The screenshot shows a dialog box titled "Planogram: 4_Bay_Basic_Spirit_Placeholder_Planogram". It has several tabs: Details, Properties, Stores, Seasons, Fixture Styles, Design, Financial, and UDAs. The "Details" tab is active, showing the following fields:

- Name: 4_Bay_Basic_Spirit_Placeholder_Planogram
- Revision: 1
- Description: 4 bay Basic Spirit Placeholder Planogram
- Size Description: 144 x 24 x 72
- Status: Proposed
- Client Code: Example
- Family Code: EXAMPLE
- Buddy Family Code: EXAMPLE
- Assortment Code: EXAMPLE
- Units: Imperial inch
- Temperature Range: Ambient Goods
- Time Units: standard hour
- Weight Range: < No Ranges Selected >
- Manpower Set Time: 4.00
- Publish Date: 13 June 2011
- Manpower Dismantle Time: 2.00
- Effective Date: 30 June 2011
- Category Role: Routine
- Expiry Date: 31 December 2999
- Inventory Model: EXAMPLE
- Stock Type: Normal
- Bank: 0
- Autofill Rule: < No Rule Selected >
- Traffic Flow: Left to Right, Right to Left
- Can be Split:
- Requires Power:

Buttons at the bottom: OK, Save As, Cancel.

The **Details Tab** allows the planogram name, effective date, etc, to be specified.

The **Stores Tab** allows users to select which stores the planogram is intended for.

The **Seasons Tab** allows users to select which time periods the planogram is intended for.

The **Fixture Styles Tab** allows users to specify which types of fixtures the planogram can be placed on.

The **Design Tab** allows the planogram design to be modified relative to the fixtures and merchandise selected in the store.

The **Financial Tab** contains performance data for the planogram.

The **UDA Tab** allows User Designed Attributes to be set for the Planogram.

The Details Tab

Overview of the Details Tab

The **Details Tab** is used for to set up the description of the planogram, together with other parameters concerning its operation.

Name, Description and Revision

The **Name**, **Description** and **Revision** allow users to enter information pertinent to the planogram.

Name is the filename by which the planogram will be referenced in the database.

Description is a longer and more informative version of the name.

Revision is the number of the initial revision of the planogram. The revision will be auto-incremented each time a new version of the planogram is saved.

Size Description is used to describe the nominal dimensions of the planogram.

Planogram Status and Dates

The planogram status and dates define when the planogram will come into service.

Planogram: 4_Bay_Basic_Spirit_Placeholder_Planogram

Details Properties Stores Seasons Fixture Styles Design Financial UDAs

Name: 4_Bay_Basic_Spirit_Placeholder_Planogram Revision: 1

Description: 4 bay Basic Spirit Placeholder Planogram

Size Description: 144 x 24 x 72

Status: Proposed Client Code: Example

Family Code: EXAMPLE Buddy Family Code: EXAMPLE

Assortment Code: EXAMPLE Units: imperial inch

Temperature Range: Ambient Goods Time Units: standard hour

Weight Range: < No Ranges Selected > Manpower Set Time: 4.00

Publish Date: 13 June 2011 Manpower Dismantle Time: 2.00

Effective Date: 30 June 2011 Category Role: Routine

Expiry Date: 31 December 2999 Inventory Model: EXAMPLE

Stock Type: Normal Bank: 0

Autofill Rule: < No Rule Selected > Traffic Flow: Left to Right
 Right to Left

Can be Split: Requires Power:

OK Save As Cancel

Status

Status is set from the Status drop down list in the Details tab.

Status: Current

Family Code:

Assortment Code:

Proposed

Current

Superseded

Status can be set to one of three options:

- Proposed - the planogram is still in the process of being designed and approved. Planograms at Proposed status can be placed in floor plans - for example to allow floor plans to be developed before planogram designs are complete.

Note: It may be necessary to develop a report or KPI that shows planograms of Proposed status so they can be reviewed before a floor plan is authorized to go into service.

- Current - the planogram is in service and available for placement
- Superseded - the planogram is obsolete and has been taken out of service.

Note: additional statuses may be added using the Status option available from the General menu in the Administration module.

Publish Date

This date is a flag that can be used to indicate the data at which equipment and merchandiser required to implement the planogram can be ordered.

Effective Date

This is the date planograms come into service.

If the MERCH_TREE_EFFECTIVE_DATE system variable is turned on (Administration module) the effective date of the planogram will be compared to the Active Date of the current floor plan (set at the top of the Object Browser). If the Planogram Effective Date is after the Active Date for the floor plan, the planogram will not be available for placement. This prevents planograms that will only be available after a specific date being placed

Expiry Date

The Expiry date is the date at which the planogram will be taken out of service. When a planogram is created, the date will be set to a default of 31st Dec 2999.

Planogram Information

Planogram information

This section contains information on the planogram

The screenshot shows a software dialog box titled "Planogram: 4_Bay_Basic_Spirit_Placeholder_Planogram". It has a tabbed interface with "Details" selected. The fields are organized as follows:

- Name:** 4_Bay_Basic_Spirit_Placeholder_Planogram
- Revision:** 1
- Description:** 4 bay Basic Spirit Placeholder Planogram
- Size Description:** 144 x 24 x 72
- Status:** Proposed (dropdown)
- Client Code:** Example
- Family Code:** EXAMPLE
- Buddy Family Code:** EXAMPLE
- Assortment Code:** EXAMPLE
- Units:** imperial inch (dropdown)
- Temperature Range:** Ambient Goods (dropdown)
- Time Units:** standard hour (dropdown)
- Weight Range:** < No Ranges Selected > (dropdown)
- Manpower Set Time:** 4.00 (spin box)
- Publish Date:** 13 June 2011 (calendar)
- Manpower Dismantle Time:** 2.00 (spin box)
- Effective Date:** 30 June 2011 (calendar)
- Category Role:** Routine (dropdown)
- Expiry Date:** 31 December 2999 (calendar)
- Inventory Model:** EXAMPLE
- Stock Type:** Normal (dropdown)
- Bank:** 0 (spin box)
- Autofill Rule:** < No Rule Selected > (dropdown)
- Traffic Flow:** Left to Right (radio button selected)
- Requires Power:** (checkbox, unchecked)

Buttons at the bottom: OK, Save As, Cancel.

Note: Name, Description, Size Description, Revision, Status, Publish Date, Effective Date, Expiry Date are discussed elsewhere in this section.

Family Code indicates the Family the planogram belongs to. There might be a 1 bay planogram for printer cartridges for small stores and a 2 bay planogram with larger quantities of the same cartridges for a larger store. The Family Code can be used in reports of KPI's to check that only one instance of a printer cartridge planogram has been placed in a store.

Assortment Code gives further information on the purpose of the planogram. Codes are often client specific - for example HSL might indicate that the planogram was designed for stores with a Hispanic demographic, for stores of small size and does not have a large movement of products associated with it.

Temperature Range is the temperature that the products in the planogram will be displayed at. It is set using the drop down list. The selected temperature range must match the temperature range on the fixtures the planogram will be placed on in the floor plan. Temperature ranges are configured using the Ranges option in the Merchandising menu in the Administration module.

Weight Range indicates the total weight of the products in the planogram. This functionality is not yet in use.

Stock Type is not in use in this version of the software.

AutoFill Rule indicates the AutoFill rule that has been selected if the AutoFill functionality has been configured in the Merchandiser module.

Can be Split is a flag indicating whether the planogram must be placed on adjacent fixtures, or whether the selected fixtures can be separated from each other.

Client Code is a code assigned by the client to identify the planogram. The code will vary from retailer to retailer.

Buddy Family Code indicates the Family code of a planogram that should be associated with this planogram. For example, if the family code of a planogram is that of printer cartridges, the Buddy Family code might be that of printer paper. The Buddy Family Code can be used in reports or KPI's to check that the right pairing of planograms has been placed.

Units are the units of measure for the planogram dimensions. The list of available units can be configured using the Units option accessed from the General menu in the Administration Module.

Time Units are the units of measure for the set and dismantle times. The list of available units can be configured using the Units option accessed from the General menu in the Administration Module.

Manpower Set Time is the time it will take to add any shelving and place the products. The units are set in the Time units drop down list.

Manpower Dismantle Time is the time it will take to clear all shelving and products in preparation for placing the next planogram.

Category Role is the reason the retailer believes customers purchase products from that planogram.

Inventory Model indicates the Inventory Model used to provide the data for the planogram design.

Rank is an arbitrary number that can be assigned to indicate order

Traffic Flow indicates whether the planogram is designed to be viewed by people walking left to right or right to left.

Requires Power is a flag specifying whether the planogram requires electrical power or not. An example would be a planogram for televisions where the televisions in display are on.

The Properties Tab

Overview of the Properties Tab

The Properties tab (which is read only) gives information on the planogram.

Field	Value
Source:	MSM
Import Identifier:	
Imported Name:	
Last Imported:	
Parent Product:	Spirits
Created:	28 April 2011
Created By:	pw
Last Modified:	10 May 2011
Last Modified By:	pw
Last Published:	
Size (Length, Depth, Height):	142 25 72
Number of Bays:	4
Total Number of Facings:	176

Source is the source of the design of the planogram. MSM indicates that the planogram was created using Macro Space Management. Alternatively, this could be the name of the third party source of the planogram design. This information is read from the AVTTB_POG_SOURCE table in the database.

Import Identifier is assigned to identify the specific import that brought in the information.

Imported Name identifies the source of the import. This could be the name assigned to the planogram in the third party software, a cluster holding a series of planograms or a flat file holding a number of planograms.

Last Imported is the date of the last import. (Information may be imported a number of time to update - for example - financial data.

Parent Product is the name of the node in the hierarchy that is the common link between all of the products in the planogram. It can either be calculated by Macro Space Management or assigned during import.

Created is the date the planogram was first created or imported

Created By is the identifier of the user if the planogram was manually created. If the planogram was imported, this will be indicated instead.

Last Modified is the date the planogram was last saved or information was last imported.

Last Modified By is the identifier of the user if the planogram was manually updated. If the information was imported, this will be indicated instead.

Last Published is the date the planogram design was last printed in electronic or hard copy form.

Size is the calculated size of the planogram.

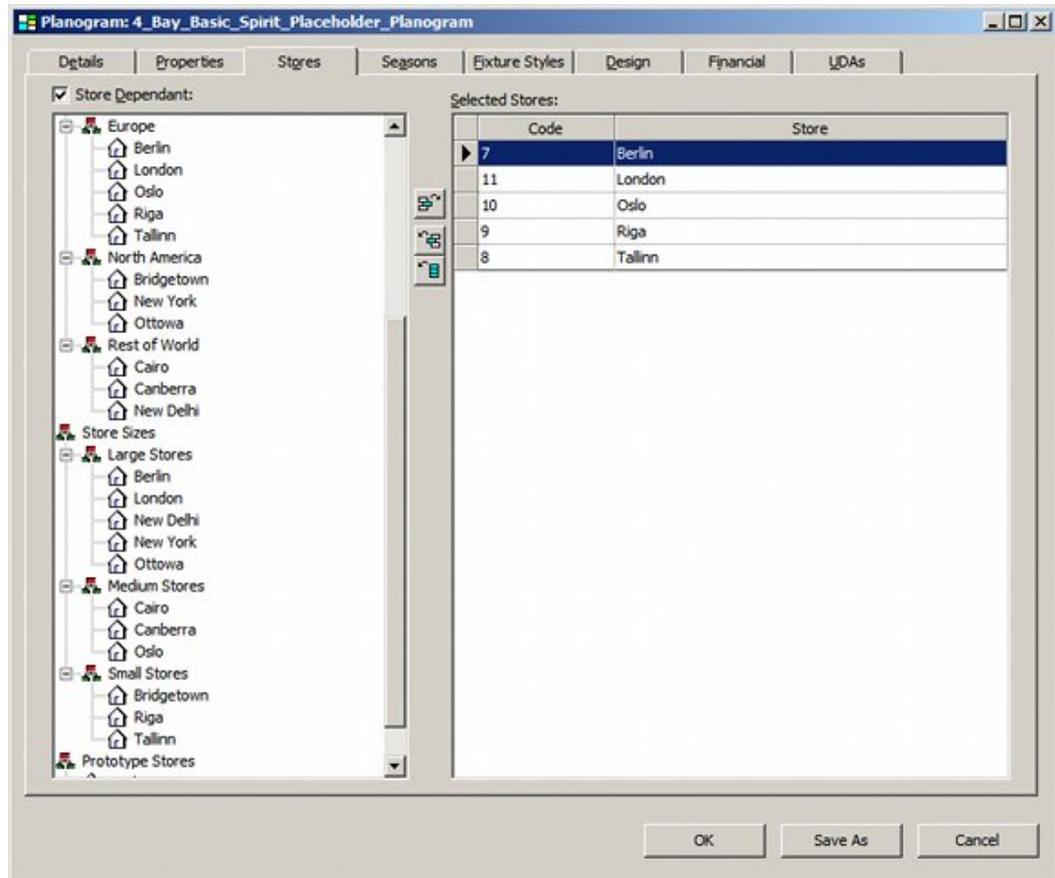
Number of Bays is the number of profiles (bays) in the planogram.

Total Number of Facings is the number of facings in the planogram.

The Stores Tab

Overview of the Stores Tab

The **Stores** Tab is used to select the Stores the planogram is valid for.



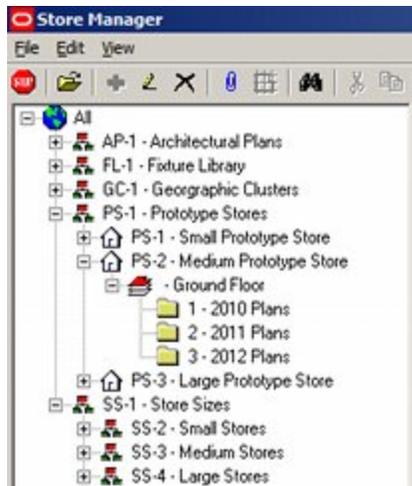
This information is for reporting purposes only and does not put any constraints on planogram placement.

Configuring the List of Stores

The **list of stores** can be configured by means of the Store Manager module. This is invoked by clicking the Store Manager Icon in the toolbar.

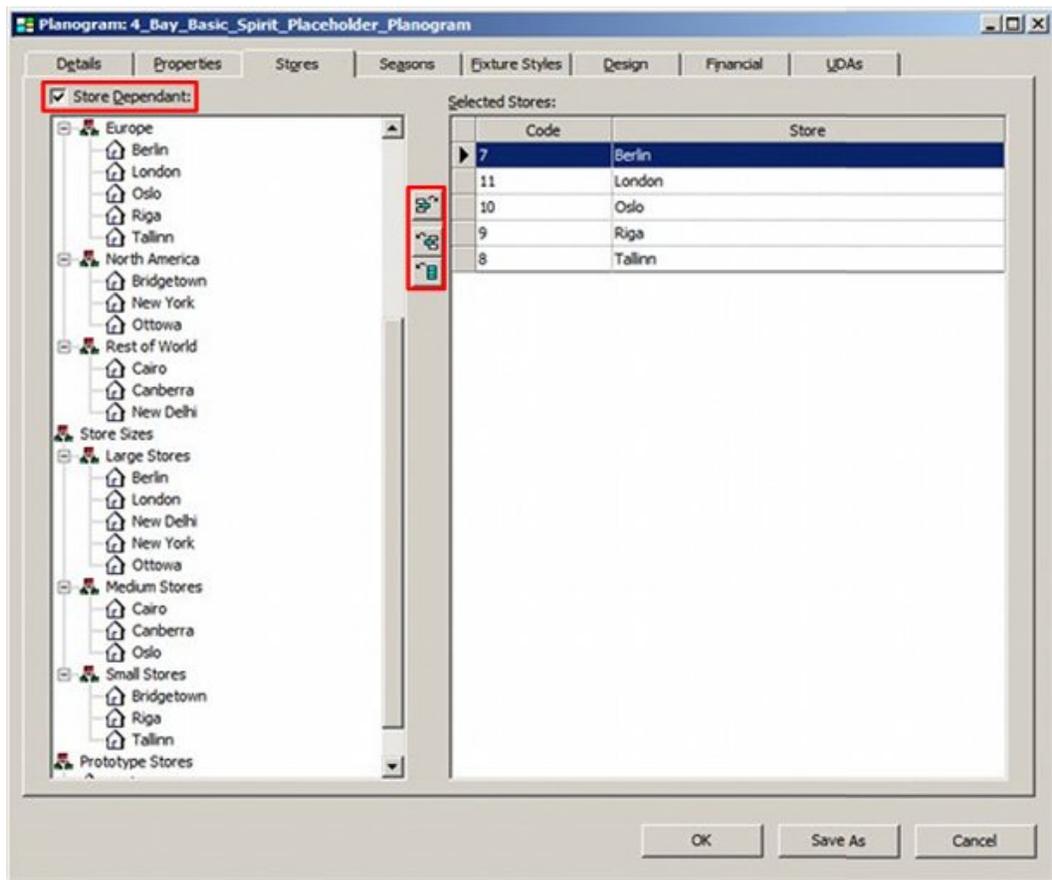


Store Manager allows the hierarchy of clusters and stores to be added to, edited and deleted from.



Adding or Removing Stores

To Add or Remove Stores check the Store Dependent box.



This will enable the Stores toolbar.

Icon	Description
	Add Store

Icon	Description
	Remove Store
	Remove all Stores

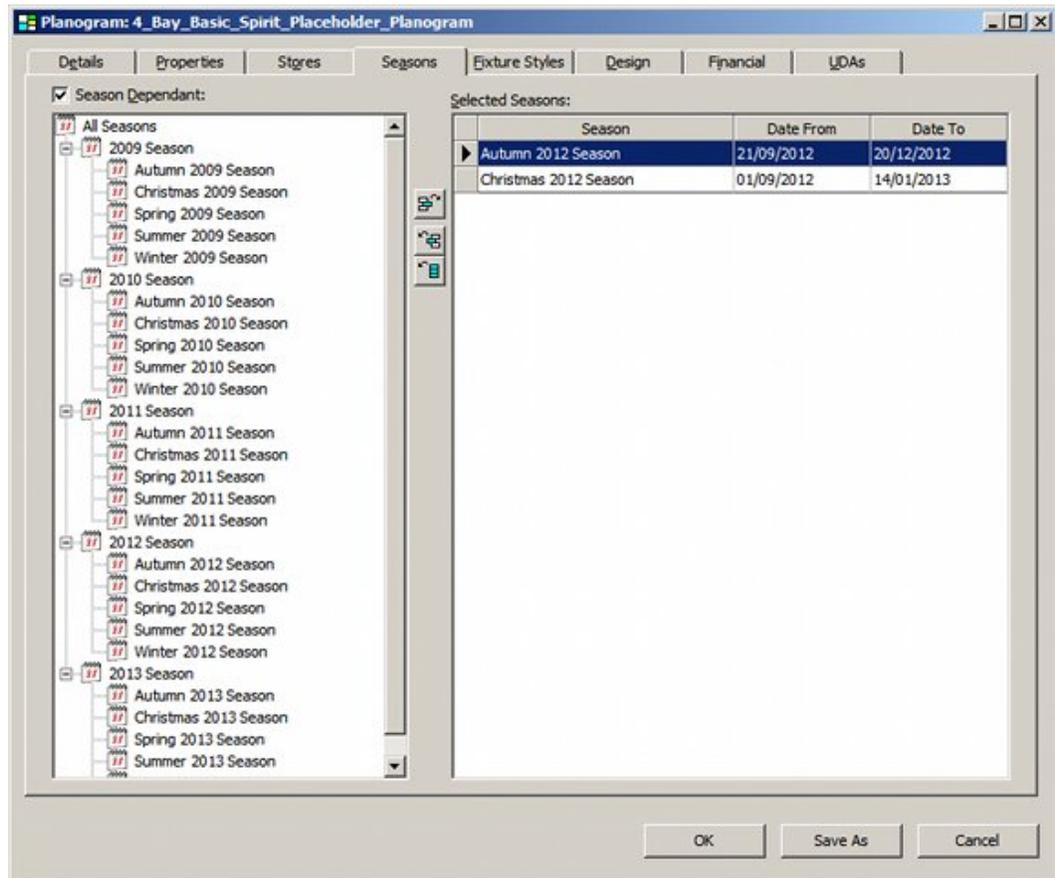
Individual Stores can be added or removed by using the Add Season or Remove Season icons.

Remove all Stores will remove all selected stores from the right of the display.

The Seasons Tab

Overview of the Seasons Tab

The **Seasons Tab** allows users to specify which seasons (if any) the planogram is valid for.



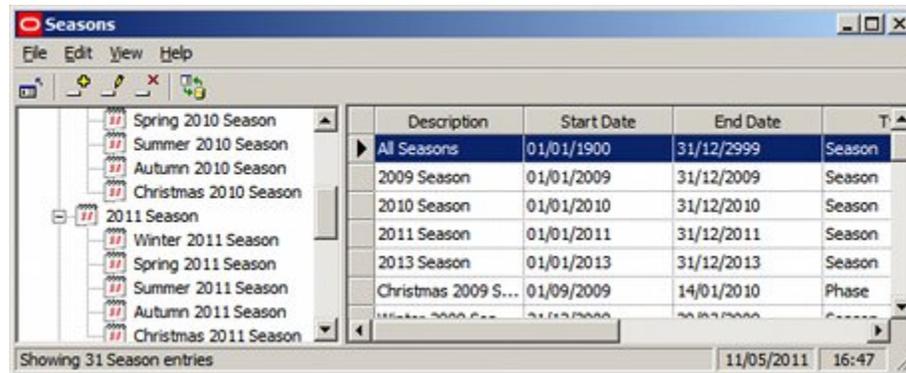
This information is for reporting purposes only and does not put any constraints on planogram placement.

Configuring the List of Seasons

The list of seasons is configured in the Administration Module. Select the **Seasons** option from the Merchandising Menu.



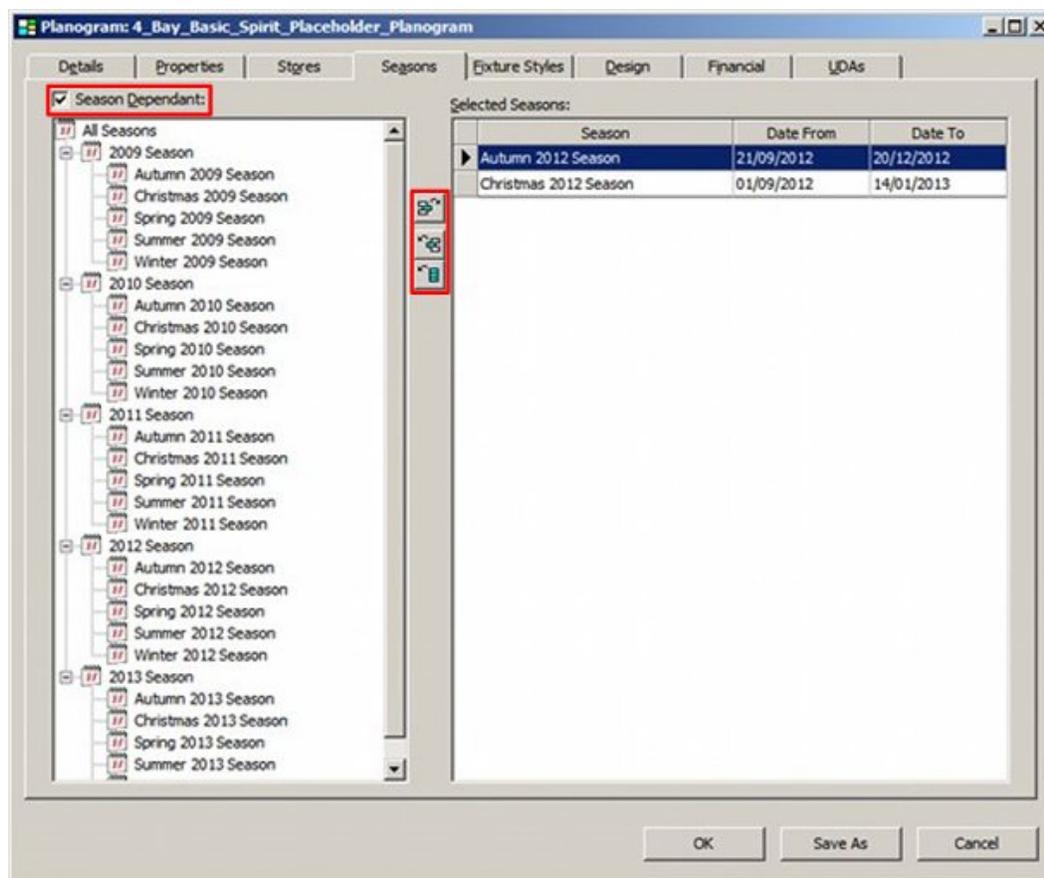
This will bring up the Seasons dialogue box.



This allows seasons to be added, edited or deleted.

Adding or Removing Seasons

To **Add or Remove** seasons check the Season Dependent box.



This will enable the season toolbar

Icon	Description
	Add Season
	Remove Season
	Remove all Seasons

All available seasons can be added to the planogram by selecting all seasons on the left of the display, then clicking on the Add Season icon.

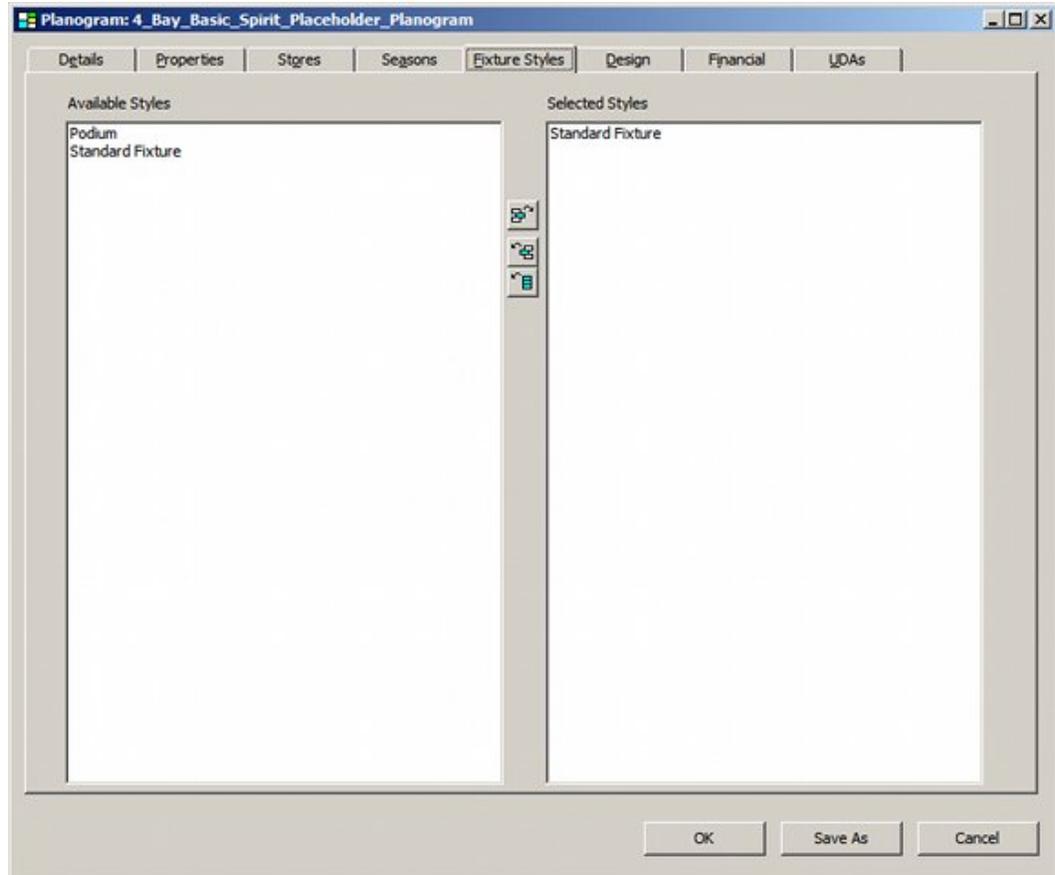
Individual seasons can be added or removed by using the Add Season or Remove Season icons.

Remove all seasons will remove all selected Seasons from the right of the display.

The Fixture Styles Tab

Overview of the Fixture Styles Tab

The **Fixture Styles** tab allows users to specify which fixture styles the planogram can be placed on.



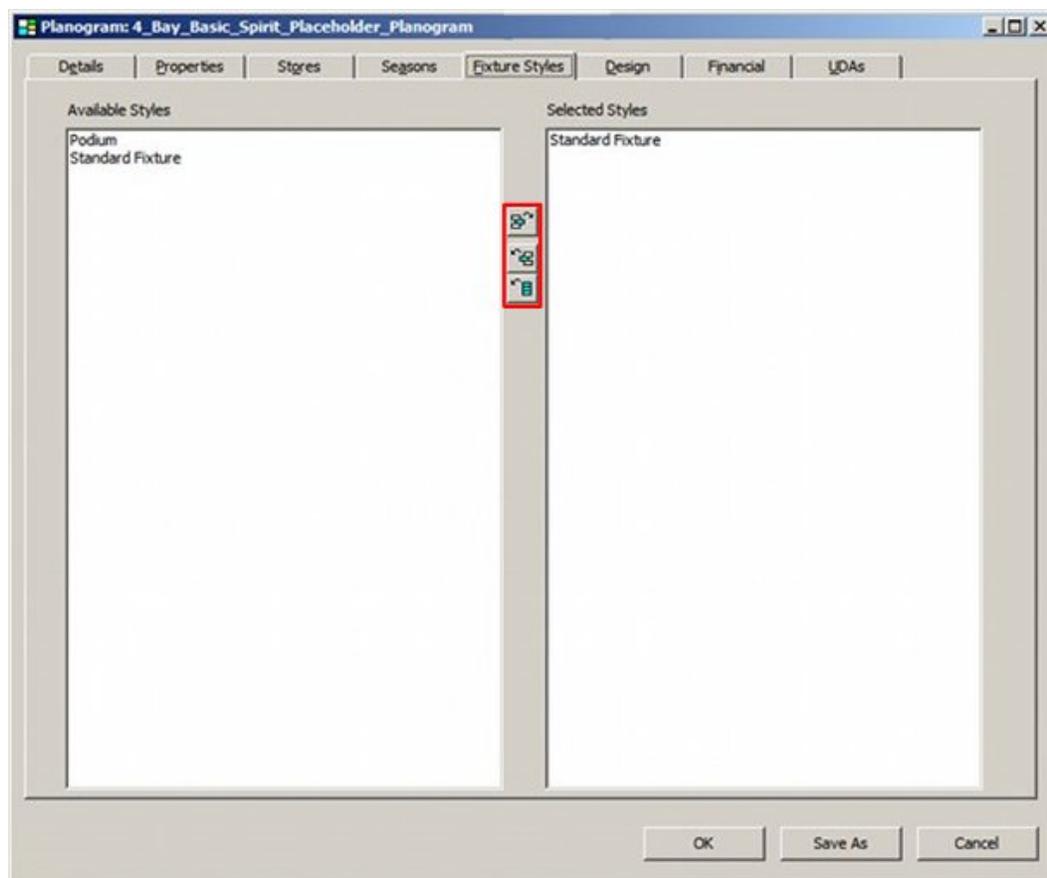
Planograms can only be placed on fixtures that have been assigned those styles. In the example above, the planogram can only be placed on fixtures that have been assigned the Standard Fixture style.

Selecting styles can be done by means of the toolbar.

Icon	Description
	Add Style
	Remove Style
	Remove all Styles

Adding or Removing Styles

Styles can be added or removed by means of the toolbar.



To add or remove a style, simple highlight it and click on the relevant icon.

Icon	Description
	Add Style
	Remove Style
	Remove all Styles

Remove all Styles will remove all selected Styles from the right of the display.

Configuring the List of Styles

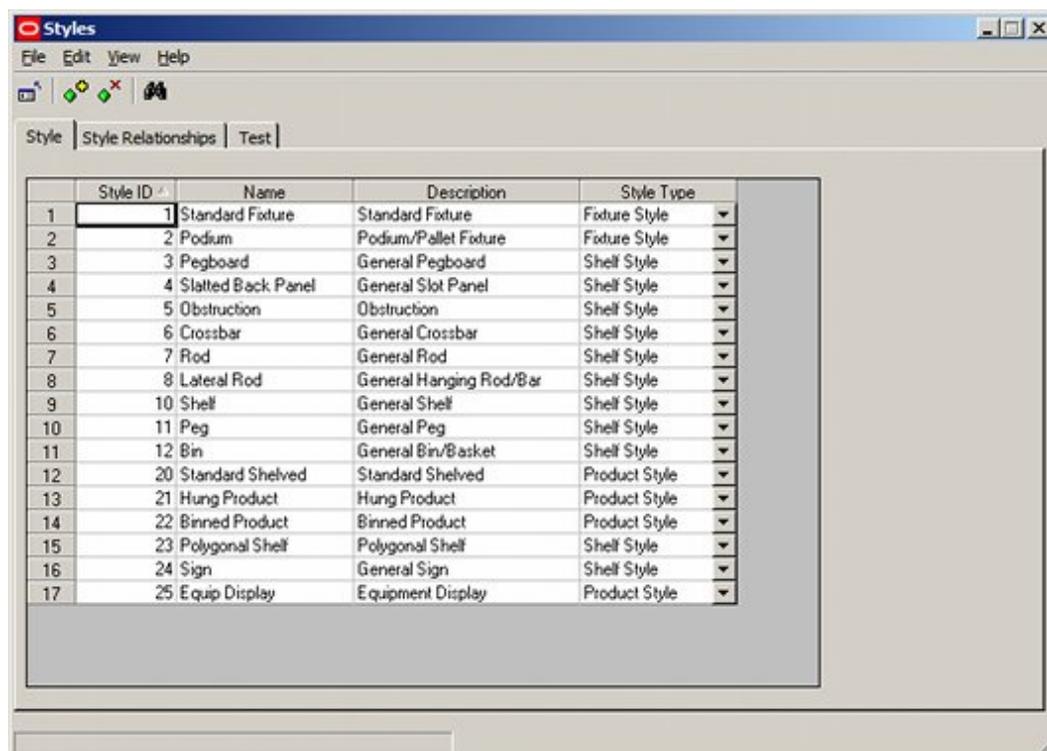
The list of available styles is configured in the Administration Module.

Note: Users will require the appropriate privileges to use the Administration Module

Select Styles from the Administration Module Merchandising Menu.



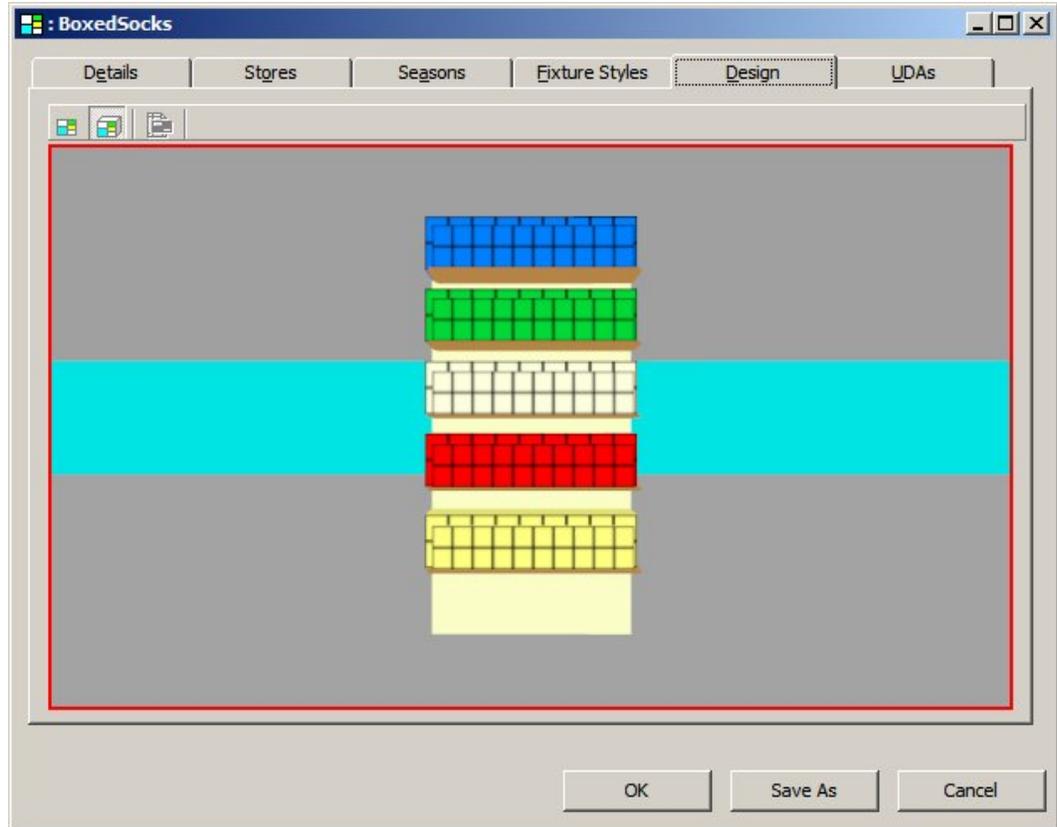
This will bring up the Styles dialogue box. This allows Styles to be defined, Style Relationships to be set and those style relationships to be tested.



The Design Tab

Overview of the Design Tab

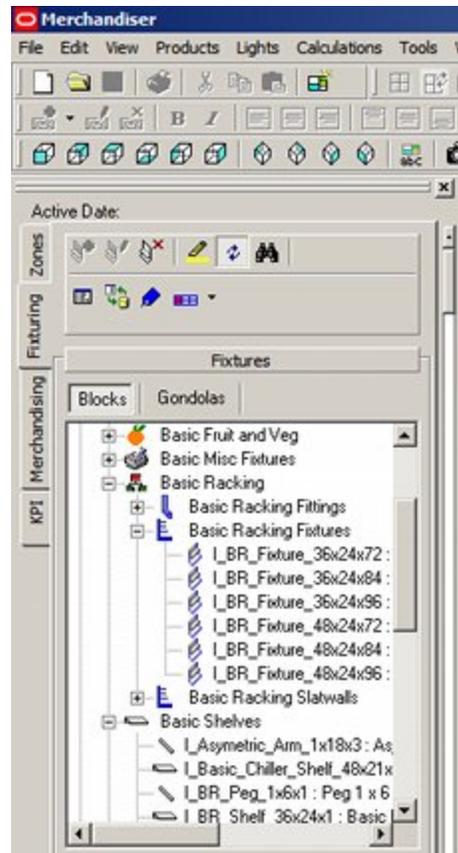
The **Design Tab** is used to design the planogram.



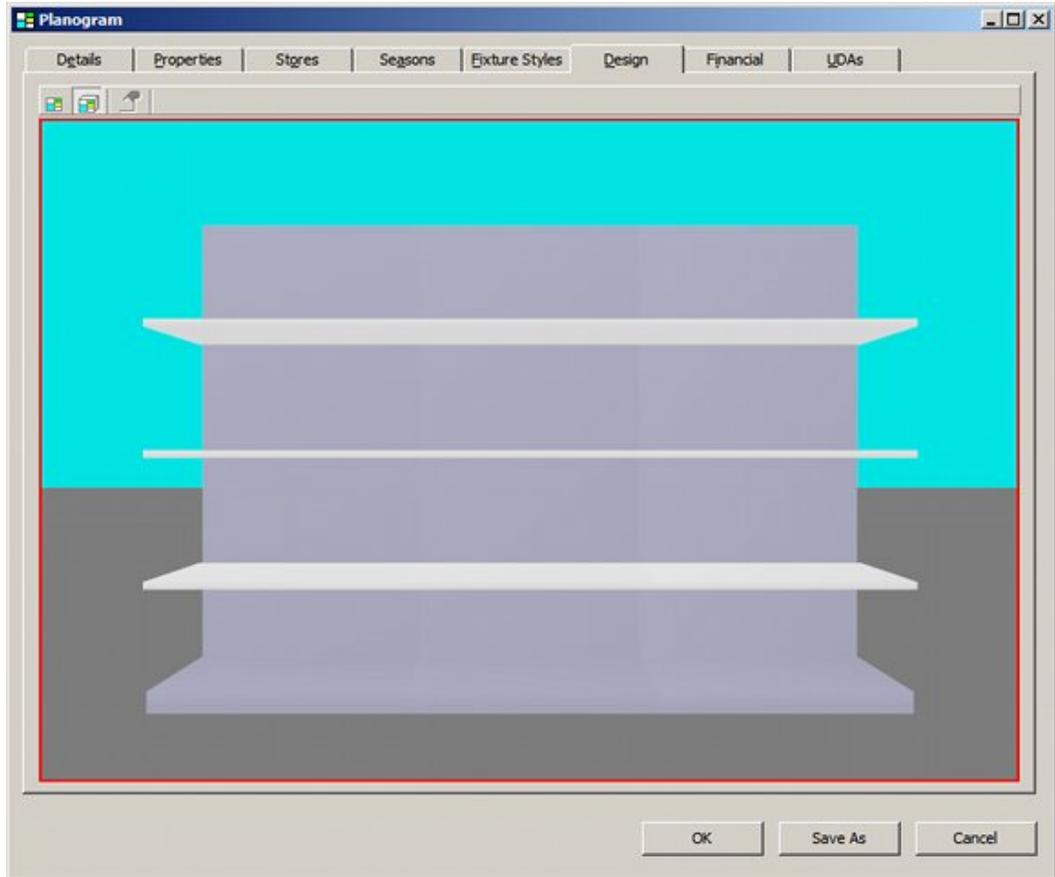
Selecting the Fixtures and Shelf Objects for the Planogram

When working in the Design tab, only fixtures and shelf objects can be added. It is not possible to using gondolas.

The fixtures required for the planogram can be selected from the hierarchy on the Object Browser and 'dragged and dropped' into the planogram design.



As fixtures are 'dragged and dropped' into the design window, they will align facing the user and ordered from left to right.

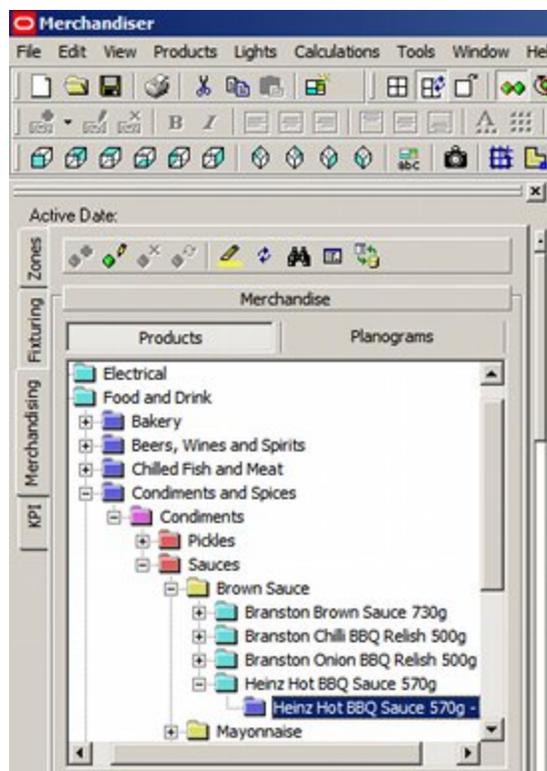


Similarly, shelf objects can be added by selecting the required parent fixtures and adding as necessary.

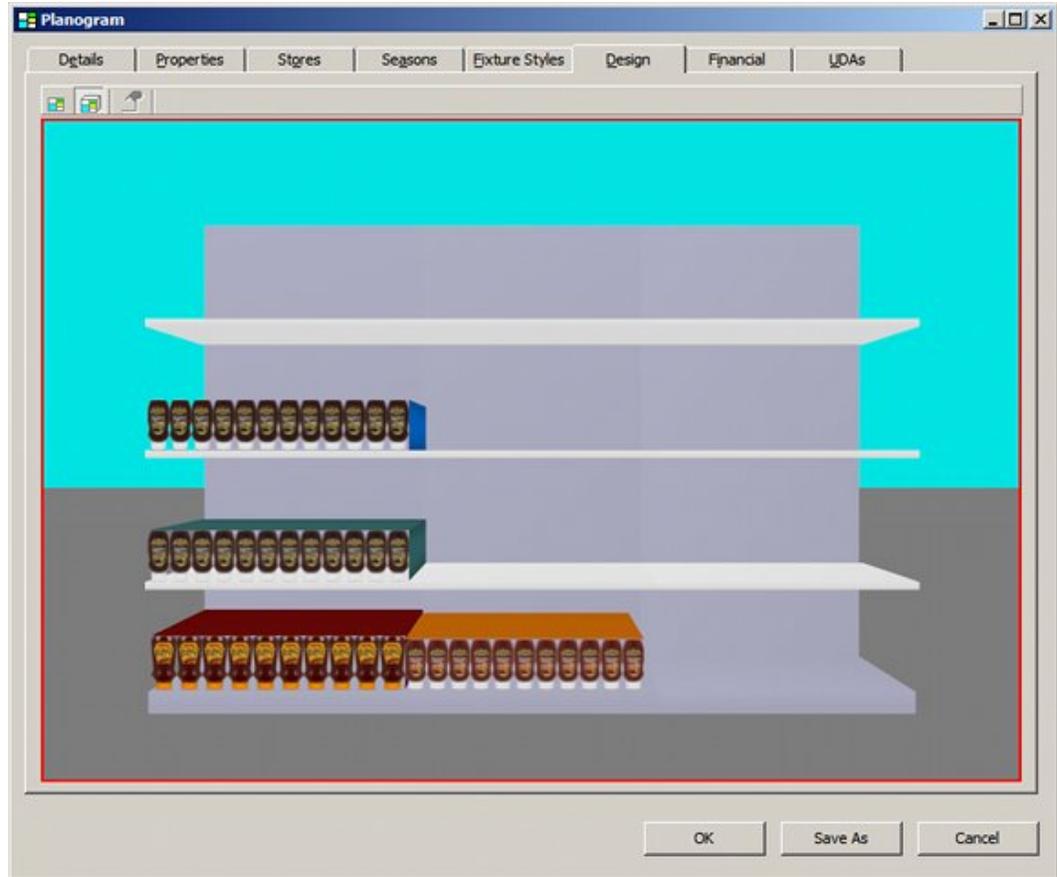
Selection details work in a similar manner to in a floor plan, as do Walk Mode and Edit Mode.

Selecting the Products for the Planogram

Products can then be placed using those available from the hierarchy in the Object Browser.



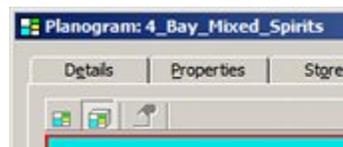
If objects are selected at SKU level or above, they will be placed as placeholders - indicating that type of merchandise is on that fixture or shelf, but giving no indication of position, size or quantity. If objects are selected at display style level, position, size and quantity are specified.



The screen shot above shows products being added to a planogram at display style level.

2D and 3D Views

There are two forms the planogram can be viewed in: 2D and 3D. The option in use is selected from the toolbar in the Design tab of the Planogram Design dialog box.



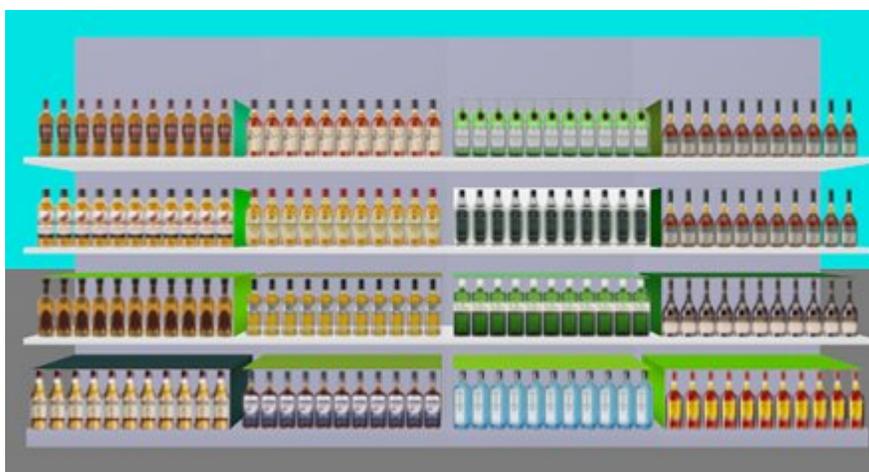
2D

The 2D option shows a flat 'Read Only' image of the planogram. It is a preview of the image that can be set to appear on the front of planograms when they are imploded into 2D form in Merchandiser floor plans.



3D

The 3D option shows a fully editable view of the planogram. It shows the planogram as it would appear when placed in a floor plan in the merchandiser module. It also allows equipment and merchandise to be added, edited and deleted.

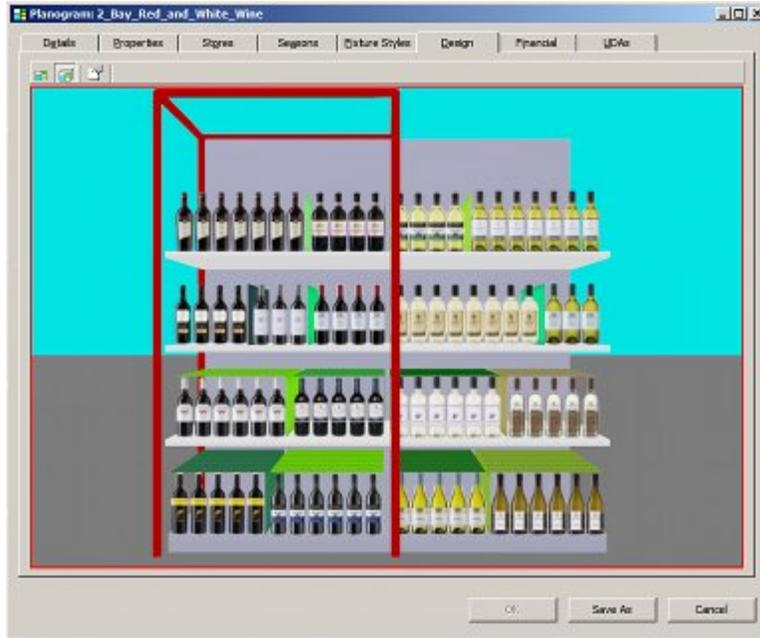


User Defined Attributes

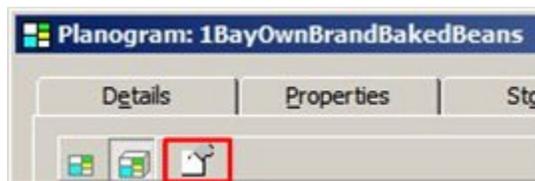
As well as the User Defined Attributes assignable to the planogram in general on the UDA tab, it is also possible to assign UDA information to individual profiles (bays), as to specific shelves and products.

UDA's associated with Planogram Profiles (bays) in the planogram design

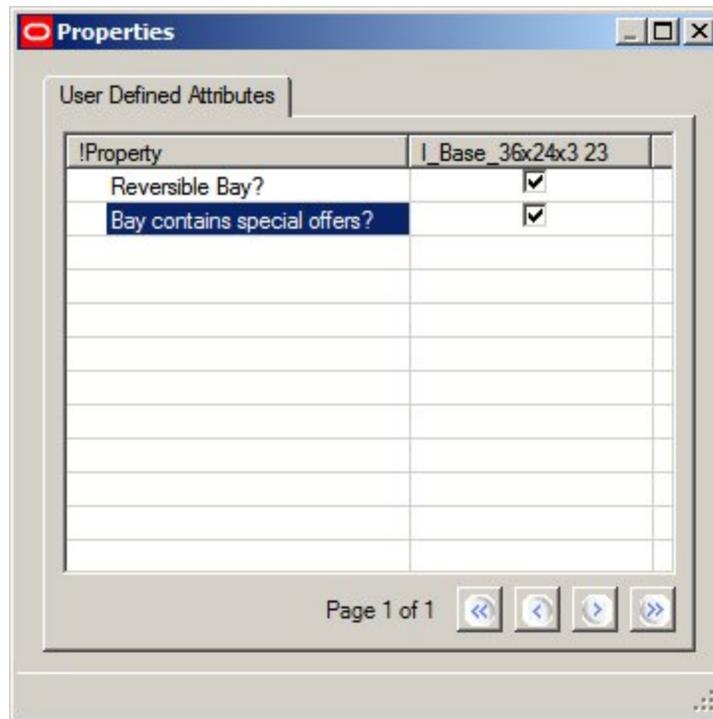
UDA's associated with a specific profile (bay) in a planogram can be seen by highlighting that bay in the Design tab.



Clicking the Object Properties icon on the toolbar will bring up the Profile User Defined Attributes dialog box.



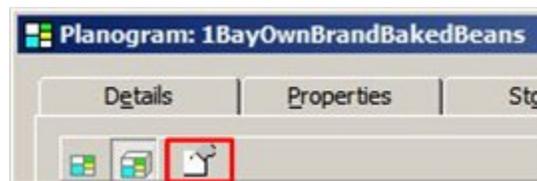
This will bring up the Profile User Defined Attributes dialog box.



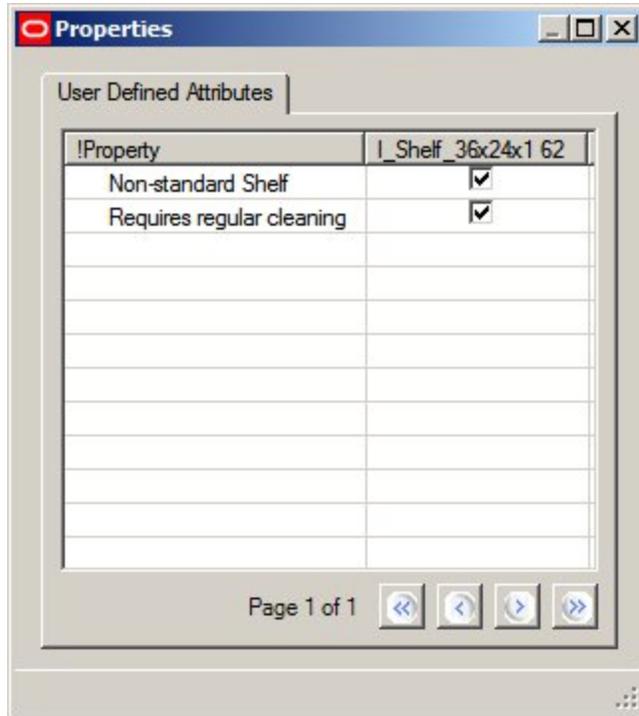
Note: The number after the parent fixture for the profile (23 in the above example) is the PRD_ID from the AVTTB_PROFILE table. It is a unique identifier for the profile/bay the UDA refers to.

UDA's associated with specific items of equipment in the planogram design

UDA's associated with a specific item of equipment in a planogram can be seen by highlighting that item of equipment in the Planogram Design window in the Merchandiser module and clicking the Object Properties icon on the toolbar.



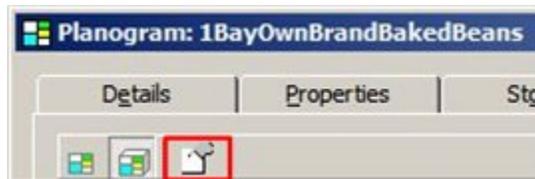
This will bring up the Equipment User Defined Attributes dialog box.



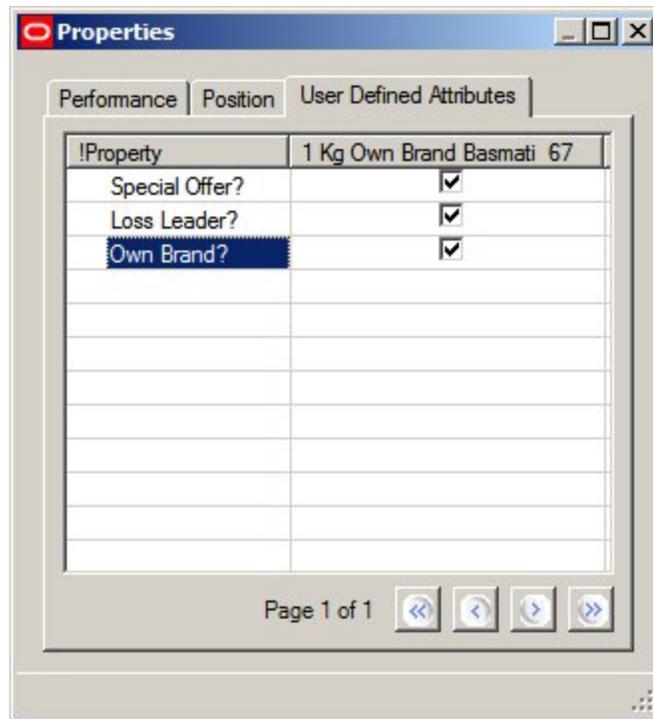
Note: The number after the item of equipment (62 in the above example) is the FXL_ID from the AVTTB_POG_FIXEL table. It is a unique identifier for the item of equipment the UDA refers to.

UDA's associated with specific products in the planogram design

UDA's associated with a specific product in a planogram can be seen by highlighting that item of merchandise in the Planogram Design window in the Merchandiser module and clicking the Object Properties icon on the toolbar.



This will bring up the Product User Defined Attributes dialog box.



Note: The number after the item of merchandise (67 in the above example) is the PPR_ID from the AVTTB_POG_PRODUCT table. It is a unique identifier for the item of merchandise the UDA refers to.

The Financial Tab

Overview of the Financial Tab

The Financial Tab contains information of the performance of the planogram. This information can either be manually entered or imported as part of a planogram import.

Planogram: 4_Bay_Basic_Spirit_Placeholder_Planogram

Details Properties Stores Seasons Fixture Styles Design **Financial** UDAs

Currency: UK Sterling Calculate other fields after editing: Use planogram size for dimensions:

Linear: 36.00 Square: 864.00 Cubic: 62208.00

Linear Units: imperial foot Square Units: square feet Cubic Units: cubic foot

Demand Transference: 5.00 Target Service Level %: 10.00 Target Number of Facings: 125

Target Capacity (% fill): 95.00 Historical Service Level %: 9.00 Return on Inventory Investment %: 5.50

Actual Forecast

Sales £: 0.00 Gross Margin %: 0.00

SalesLinear: 0.00 Gross MarginLinear: 0.00

SalesSquare: 0.00 Gross MarginSquare: 0.00

SalesCubic: 0.00 Gross MarginCubic: 0.00

Profit £: 0.00 Movement: 0

ProfitLinear: 0.00 MovementLinear: 0.00

ProfitSquare: 0.00 MovementSquare: 0.00

ProfitCubic: 0.00 MovementCubic: 0.00

OK Save As Cancel

Financial Tab - Basic Details

Planogram: 4_Bay_Basic_Spirit_Placeholder_Planogram

Details Properties Stores Seasons Fixture Styles Design **Financial** UDAs

Currency: UK Sterling Calculate other fields after editing: Use planogram size for dimensions:

Linear: 36.00 Square: 864.00 Cubic: 62208.00

Linear Units: imperial foot Square Units: square feet Cubic Units: cubic foot

Demand Transference: 5.00 Target Service Level %: 10.00 Target Number of Facings: 125

Target Capacity (% fill): 95.00 Historical Service Level %: 9.00 Return on Inventory Investment %: 5.50

Currency

The currency for the financial data is set from a drop down list. The data in this list is specified in the Units dialog box, accessed from the General Menu in the administration module.

Calculate other fields after editing

If checked, this forces all data associated with specific fields to be recalculated when data is changed elsewhere.

Use Planogram Size for Dimensions

This substitutes the planogram size held in the database for the imported planogram size.

Linear

This field holds the base linear measurement of the planogram.

Square

This field holds the footprint of the planogram: the base linear multiplied by the depth

Cubic

This field holds the volume of the planogram: the base linear multiplied by the depth multiplied by the height.

Linear Units

This field holds the unit of measure for the length.

Square Units

This field holds the unit of measure for the area.

Cubic Units

This field holds the unit of measure for the volume.

Demand Transference

This is the probability that if a specific product is out of stock in a store, a customer will buy an alternative product. This probability could be very high - for example for baked beans. It could be very low for specific products - for example recently released computer software games.

Target Capacity

This is the minimum percentage of the merchandisable capacity of the parent fixtures that should be filled with product.

Target Service Level

This is the level of stock that will result in the specified percentage of merchandise being present in the stores across the retail chain. High Target Service Levels result in stock being increasingly available for customers, but also increase inventory costs.

Historical Service Level

This is the service level resulting from the historical levels of stock.

Target Number of Facings

This is the designed number of product facings in the planogram

Return on Inventory Investment

This is the Gross Margin Return on Investment.

Note: the calculation method may vary from retail organization to retail organization.

Financial Tab - Actual Data

The actual data is based on EPOS data collected by the retailer and imported into Macro Space Planning as updates to the planogram specific data during planogram imports.

Actual	Forecast
Sales £:	0.00
SalesLinear:	0.00
SalesSquare:	0.00
SalesCubic:	0.00
Profit £:	0.00
ProfitLinear:	0.00
ProfitSquare:	0.00
ProfitCubic:	0.00

Note: the currency unit for the financial data is set using the Currency drop down list in the upper part of this dialog box.

Sales

This is the sales for this planogram. The time period is client dependent and may be daily average, weekly total, monthly total, etc.

Sales/Linear

This is the sales figure divided by the Linear figure for the planogram.

Sales/Square

This is the sales figure divided by the Square (footprint) value for the planogram.

Sales/Cubic

This is the sales figure divided by the Cubic (volume) value for the planogram.

Profit

This is the profit for this planogram. The time period is client dependent and may be daily average, weekly total, monthly total, etc.

Profit/Linear

This is the profit figure divided by the Linear figure for the planogram.

Profit/Square

This is the profit figure divided by the Square (footprint) value for the planogram.

Profit/Cubic

This is the profit figure divided by the Cubic (volume) value for the planogram.

Gross Margin

This is the gross margin for this planogram. Gross Margin is calculated by the formula
$$\text{Gross Margin} = (\text{Profit}/\text{Sales}) \times 100\%$$

The time period is client dependent and may be daily average, weekly total, monthly total, etc.

Gross Margin/Linear

This is the gross margin divided by the Linear figure for the planogram.

Gross Margin/Square

This is the gross margin divided by the Square (footprint) value for the planogram.

Gross Margin/Cubic

This is the gross margin divided by the Cubic (volume) value for the planogram.

Movement

Movement is the number of times the planogram will be replenished in a specific time period.

Movement/Linear

This is the movement divided by the Linear figure for the planogram.

Movement/Square

This is the movement divided by the Square (footprint) value for the planogram.

Movement/Cubic

This is the movement divided by the Cubic (volume) value for the planogram.

Financial Tab - Forecast Data

This tab contains forecast data for the performance of the planogram. It can be superseded by actual data as the planogram comes into service.

Note: the currency unit for the financial data is set using the Currency drop down list in the upper part of this dialog box.

Forecast Sales

This is the forecast sales for this planogram. The time period is client dependent and may be daily average, weekly total, monthly total, etc.

Forecast Sales/Linear

This is the forecast sales figure divided by the Linear figure for the planogram.

Forecast Sales/Square

This is the forecast sales figure divided by the Square (footprint) value for the planogram.

Forecast Sales/Cubic

This is the forecast sales figure divided by the Cubic (volume) value for the planogram.

Forecast Profit

This is the forecast profit for this planogram. The time period is client dependent and may be daily average, weekly total, monthly total, etc.

Forecast Profit/Linear

This is the forecast profit figure divided by the Linear figure for the planogram.

Forecast Profit/Square

This is the forecast profit figure divided by the Square (footprint) value for the planogram.

Forecast Profit/Cubic

This is the forecast profit figure divided by the Cubic (volume) value for the planogram.

Forecast Gross Margin

This is the forecast gross margin for this planogram. Gross Margin is calculated by the formula $\text{Gross Margin} = (\text{Profit}/\text{Sales}) \times 100\%$

The time period is client dependent and may be daily average, weekly total, monthly total, etc.

Forecast Gross Margin/Linear

This is the forecast gross margin divided by the Linear figure for the planogram.

Forecast Gross Margin/Square

This is the forecast gross margin divided by the Square (footprint) value for the planogram.

Forecast Gross Margin/Cubic

This is the forecast gross margin divided by the Cubic (volume) value for the planogram.

Forecast Movement

Forecast movement is the number of times the planogram will be replenished in a specific time period.

Forecast Movement/Linear

This is the forecast movement divided by the Linear figure for the planogram.

Forecast Movement/Square

This is the forecast movement divided by the Square (footprint) value for the planogram.

Forecast Movement/Cubic

This is the forecast movement divided by the Cubic (volume) value for the planogram.

Financial Data and Planogram Weighting

The data from the Financial tab is used in the Financial Weighing dialog box accessed from the Merchandising menu in the Administration module.

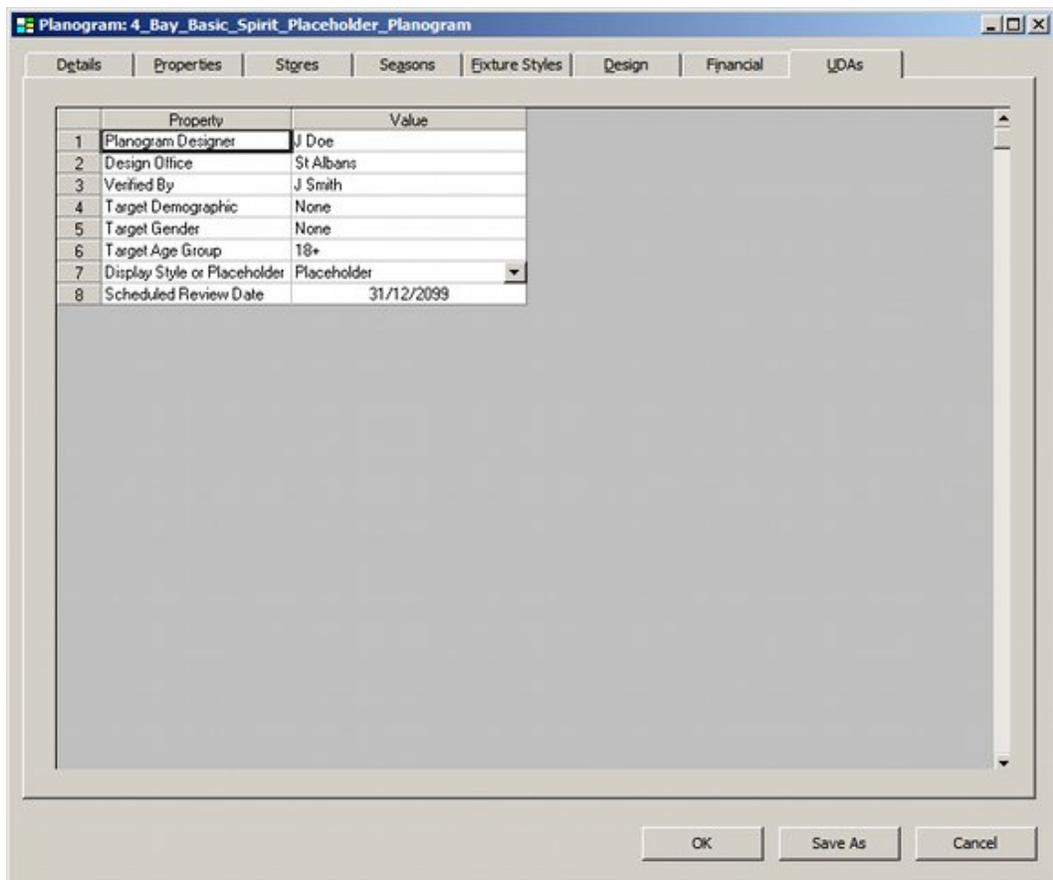


This option allows users to set up a system for calculating the relative performance of planograms from the imported or manually entered financial performance data.

The UDA Tab

Overview of the UDA Tab

The UDA Tab is used to add User Defined Attributes (UDA's) to the Planogram.



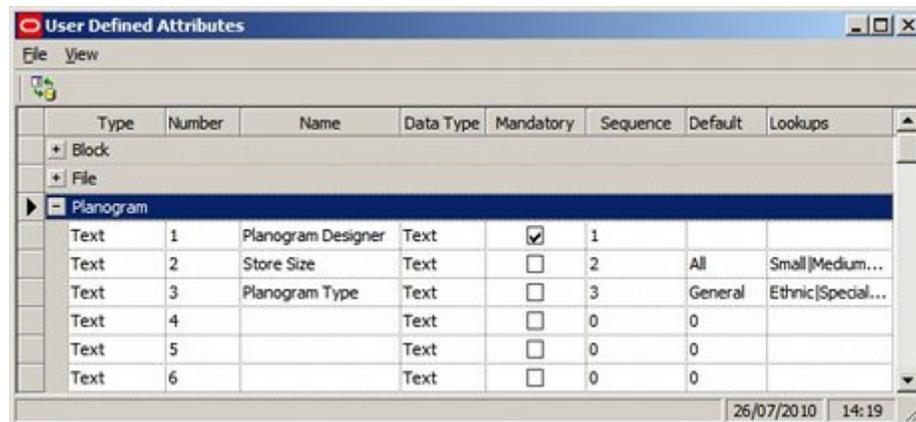
UDA's are implementation specific and can be customized according to customer requirements.

Configuring the Fields for the UDAs

The fields for the UDAs are configured in the Administration Module. Select the User Defined Attributes option from the Merchandising Menu.



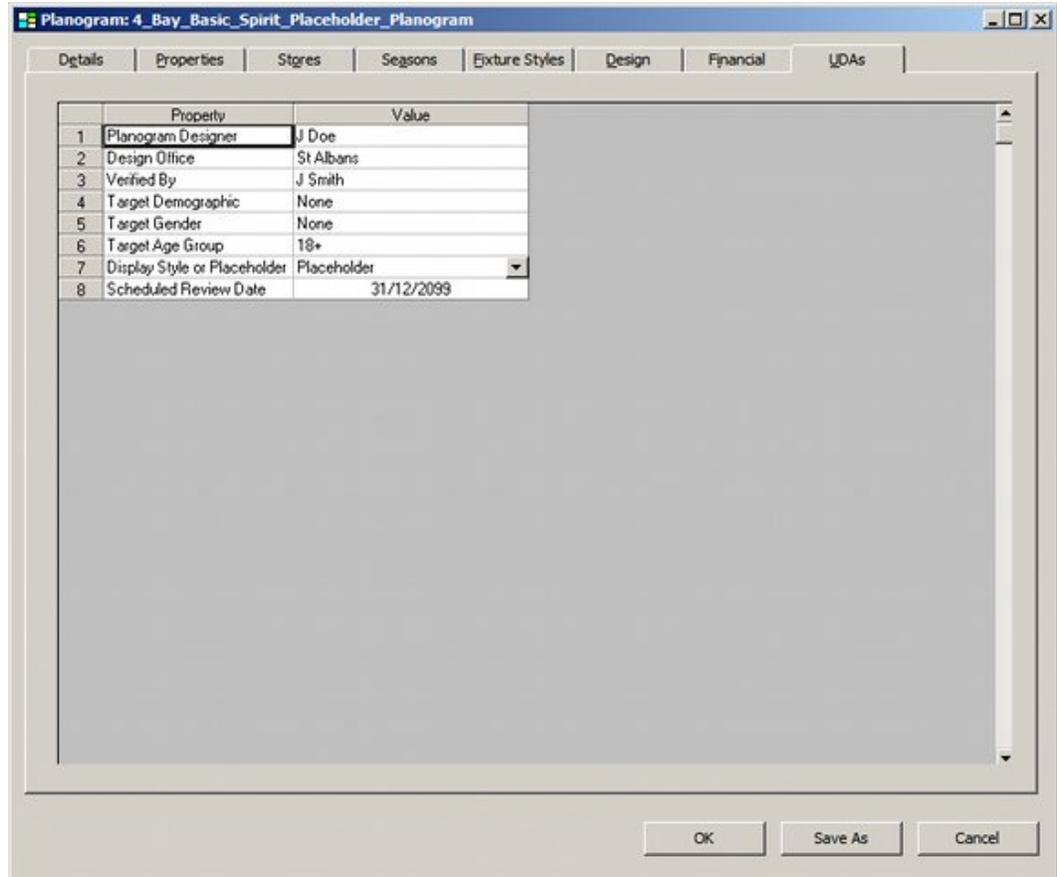
This will bring up the User Defined Attribute dialogue box.



This allows the fields for the UDAs to be added, edited or deleted.

Adding, Editing or Deleting UDA Information

The UDA fields themselves are configured in the Administration Module. The title used for each UDA field is shown in the Property column. This information cannot be edited in the Planogram Design dialog box.



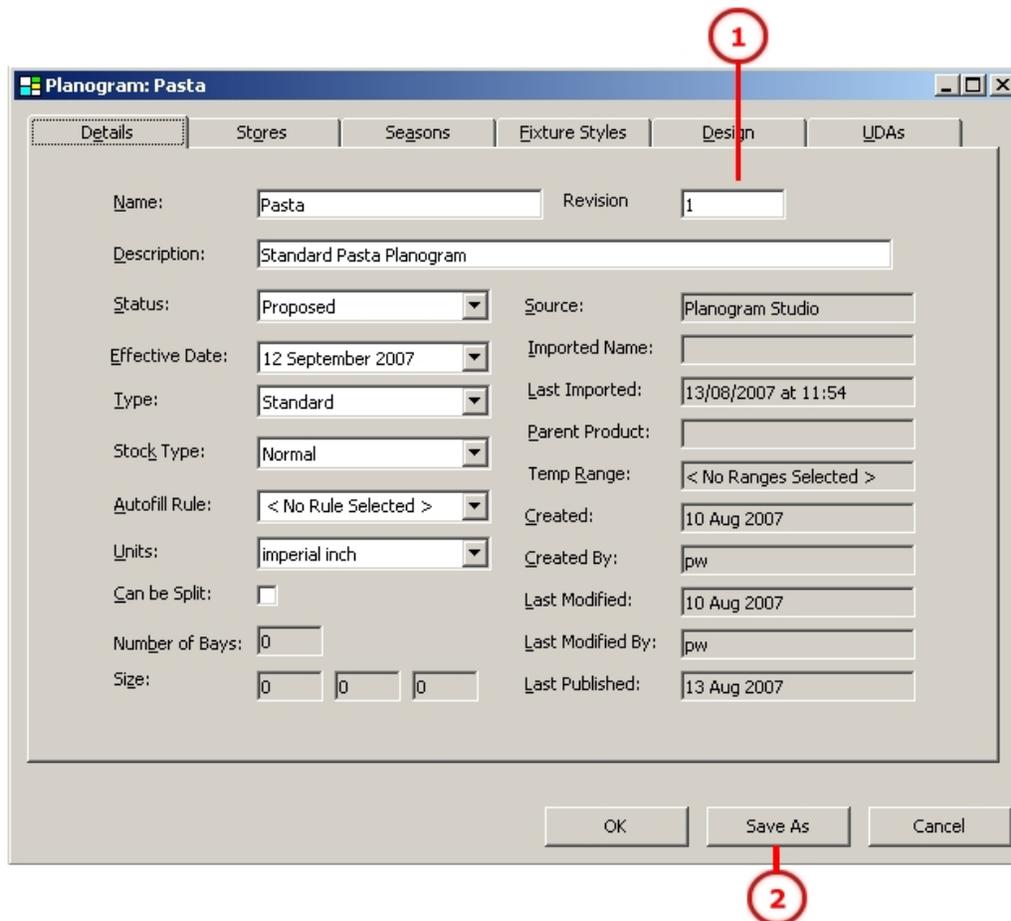
The information in the Value field can be added, edited or deleted by the user. Data can be one of the following types:

Type	Description
Text	A text field, for example a name
Whole Number	An integer, such as 1, 2 or 3
Decimal	A number with values after the decimal point, for example 1.234
Date	A date - for example a review date
Boolean	A Yes/No field. This appears as a checkbox.
Currency	Currency: a financial value.

Saving Planograms

Saving Planograms as New Designs and New Revisions

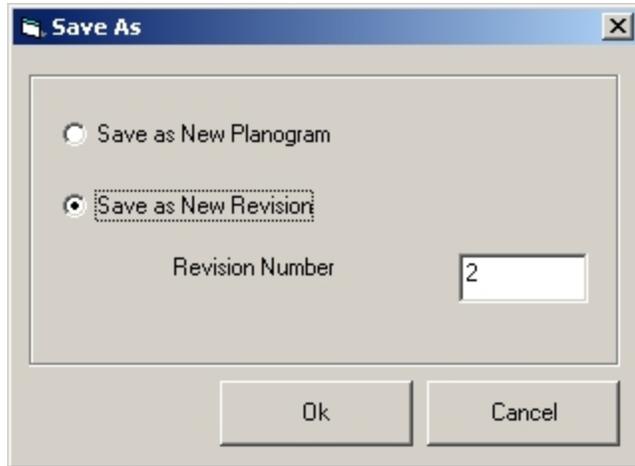
Once a planogram has been designed, that design can be updated at a later date. Changing the Revision Number of a planogram is straightforward.



The screenshot shows a dialog box titled "Planogram: Pasta" with several tabs: Details, Stores, Seasons, Fixture Styles, Design, and UDAs. The "Details" tab is active. The "Revision" field is set to "1", which is circled in red with the number "1" above it. The "Save As" button at the bottom right is also circled in red with the number "2" below it. Other fields include Name (Pasta), Description (Standard Pasta Planogram), Status (Proposed), Effective Date (12 September 2007), Type (Standard), Stock Type (Normal), Autofill Rule (< No Rule Selected >), Units (imperial inch), Can be Split (unchecked), Number of Bays (0), and Size (0 0 0). The Source is Planogram Studio, and the Created date is 10 Aug 2007.

The Planogram Revision (1) can be seen at the top right of the dialogue box.

To change the revision, click on the Save As button (2). This will bring up the Save As dialogue.



Select the Save as New Revision radio button and enter the Revision Number. Click on OK to save the new revision.

Overview of Planogram Versions

Planogram designs can be updated. For example, a more up to date design of packaging could become available and the planogram updated accordingly.

The updated planogram is known as a new version.

When a planogram is revised in such a manner, the older version of the planogram has its status changed to 'superseded',

Overview of Planogram Import

As an alternative to creating planograms within Merchandiser, Macro Space Management users have the option of importing existing planograms from third party software.

This requires a customized import routine - planograms being imported into the central Macro Space Management database where they become available for placement into store plans.

Contact Oracle's Technical Support Team for further information.

The Preview Window

KPIs and Time Dependent Data

Overview of Time Dependent Data

Macro Space Management data can come from two main sources: the program itself and data imported from external software.

This data is stored in the central Macro Space Management database.

The data can then be analyzed in two ways: using Reporting Tools and using KPI's (Key Performance Indicators).

Key Performance Indicators present data visually in the form of color coded objects within the Virtual Reality store. This enables an overview of performance to be seen at a glance.

Reporting Tools present data in the form of ordered lists. This enables data to be analyzed in detail.

Note: Macro Space Management has an internal reporting tool called Report Studio. Alternatively, reporting tools from Oracle can be used - an example is BI Publisher.

The two methods are complementary; enabling the user to see information in two different ways.

As data changes with time, Macro Space Management allows data to be analyzed for specific periods of time. Such information is known as Time Dependent Data.

It is possible to review Time Dependent Data for a specific day, week, month, quarter or year. It is also possible to review the data for seasons or any other specified criteria.

Data Import

Data can be imported from external programs using Macro Space Management's Data Import module.

This data is then stored in tables within Macro Space Management's central database.

Such data might include sales values, product volumes, etc.

Imported data can then be analyzed using Report Studio or KPI's, (Key Performance Indicators).

Setting Effective Dates in Store Manager

The **Effective Date** for a drawing within in Store Manager can be manually set by selecting the required drawing by highlighting it. Right clicking will bring up a menu of options.

Selecting Properties will bring up the Properties dialogue box.

Publish and effective dates can then be set by clicking on the down arrows by the Publish and Effective Date drop down menus. This will cause a Standard Date control to be displayed. This can be used to set the Publish and Effective data for the drawing.

Note: Publish and Effective dates can only be set when a drawing has Authorized status.

Status and Effective Dates

Status

Each store within a retail organization is subdivided into floors. Each floor in turn can have a number of revisions, and each revision can contain a number of drawings.

Only one drawing at a time can be current (active) for a store. The current position of a drawing is indicated by its Status. Although there will be some variation from customer to customer, statuses tend to follow the same general sequence.

- Proposed drawings are tentative layouts for stores.
- Authorized drawings are layouts that have been accepted for future implementation.
- Current drawings are the layouts that are presently in use.
- Historical drawings are drawings of layouts that have been superseded.

A specific store may only have one current drawing (the layout presently in use) and one authorized drawing (the layout due to come into use) at any one time.

Drawings can be viewed with any status, but the amount of information available for KPI's and reports may vary depending on the status of the drawing.

For example drawings with Proposed status may not have sales data associated with them, while drawings with Current status probably will.

Publish and Effective Dates

When a drawing reaches Authorized status it may have Publish and Effective dates assigned to it.

The Publish Date is the date at which an authorized drawing is sent to the affected stores so that they may begin preparations for implementing it.

The Effective Date is the date at which the drawing becomes the active version of the layout within the affected stores.

Note: Publish and Effective dates can only be set when a drawing has Authorized status.

Effect of Effective Date on Status

When an Authorized drawing is given an Effective date, this indicates the date at which it is to come into use.

At the date at which the drawing becomes Effective, its status is changed from Authorized to Current. Simultaneously, the drawing it replaces has its status changed from Current to Historical.

Overview of using KPI's

KPI's can be produced using data from on the store associated with the current drawing, or from a user specified store.

Macro Space Management enables the user to select both the date and time period for the data to be displayed. This enables users to monitor performance with specified time periods.

KPI's can be selected from the Object Browser by clicking on the KPI tab.

Clicking on a particular KPI will then bring up the Key Performance Indicator Dialogue Box.

This lets the user specify the Details, Stores involved and Date Ranges required.
It also lets the user specify which ViewPort(s) to use.
When these have been selected, the pertinent KPI will be displayed.

Selecting Stores and Date Ranges

Selecting Stores

Stores for which KPI's can be displayed can be selected using the Stores Tab in the Key Performance Indicator dialogue box.

If the Current Store check box is selected, then KPI's will be displayed for the store associated with the currently active drawing.

If the Current Store check box is not ticked, then the store may be selected from the list of all available stores. These may be sorted by Store Code or Store Name by clicking on the column header.

Selecting Dates

Date Ranges for which KPI's can be displayed can be selected using the Date Tab in the Key Performance Indicator dialogue box.

Radio buttons enable the user to specify whether the date on which the KPI should be based is the Effective Date (the date on which the drawing became current), the Current Date (today's date), or a user specified date.

Dates can be set using the Date Control Display that will appear as soon as the Date drop down list is activated.

The Date range can also be selected from the drop down list that appears when Data Type is activated.

This will specify the time period relative to the selected date.

All date ranges are after the selected date.

For example, selecting a current date of 11/10/06 and a date range of a Month will select all data for October 2006.

KPI's and ViewPorts

Each KPI can be associated with **one or more** ViewPorts.

This is specified in the Details Tab of the Key Performance Indicator dialogue box when the KPI is first opened.

In the above example, the KPI has been selected to show in ViewPort 1.

KPI's and using Multiple ViewPorts

It is possible to use ViewPorts to display a single KPI reporting on data over different date ranges. It is also possible to use ViewPorts to display performance data from different stores sharing the same layout.

Each instance of the KPI can be set to show in a different ViewPort window, allowing the Macro Space Management user to see compare how performance changes over time or how performance varies from store to store.

In the above example the Weekly Sales KPI has been set to show in four different ViewPorts, each showing date for a different week.

Renaming KPI's

Each instance of similar KPI's open in multiple ViewPorts has to be renamed. This is because each KPI must have a unique name. If duplicate names occur, Macro Space Management will put a warning at the bottom of the Key Performance Indicator dialogue box.

In the example below the SubClass Forecast Sales (Fixture) KPI has been renamed to each instance has a unique name.

Selecting Stores

Stores can be selected from the list on the Stores Tab of the Key Performance Indicator dialogue box.

Date Ranges

Start dates and Date Ranges can be set from the Date Tab of the Key Performance Indicator dialogue box.