# Oracle® Retail Macro Space Management Store Planning

User Guide
Release 13.2.4

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ORACLE

Oracle® Retail Macro Space Management Store Planning User Guide, Release 13.2.4

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# Preface

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## Related Documents

For more information, see the following documents in the Oracle Retail Macro Space Management Release 13.2.4 documentation set:

- *Oracle Retail Macro Space Management Administration Module User Guide*
- *Oracle Retail Macro Space Management Administration Module Online Help*
- *Oracle Retail Macro Space Management Configuration Module 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 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 Installation Guide*
- *Oracle Retail Macro Space Planning License Information*
- *Oracle Retail Macro Space Planning Data Model*

For more information on In-Store Space Collaboration see the following documents in the Oracle Retail In-Store Space Collaboration Release 13.2.4 documentation set:

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

## Customer Support

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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, 13.2) or a later patch release (for example, 13.2.4). If you are installing the base release and additional patch and bundled hot fix releases, read the documentation for all releases that have occurred since the base release before you begin installation. Documentation for patch and bundled hot fix 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."

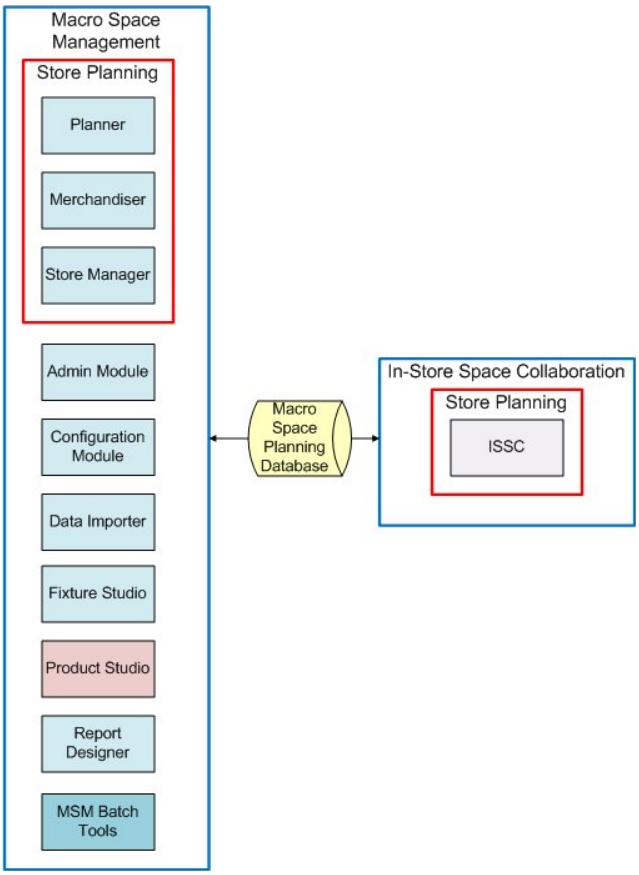
```
This is a code sample
    It is used to display examples of code
```

# 1

# 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 I**n-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.

**2. 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.

3. **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.

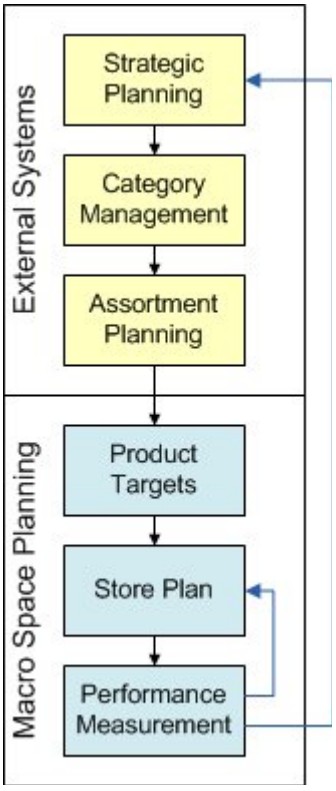
- Configuring Macro Space Management is carried out using the Administration module for global changes and the Configuration module for local, user specific changes.
- Libraries of information maintained include the fixture and gondola libraries (Fixture Studio), product library (Product Studio) and 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.

## Overview of Store Planning Business Process

The store planning business process will vary from retail organization, but can be conceptually described as follows:




#### Strategic Planning

Retail organizations have a strategic planning process that evaluates the choices for the broad types of merchandise the retail chain will sell.

#### Category Management and Assortment Planning

Category Management and Assortment Planning tools are then used to find the precise mix of merchandise required within a specific store.

#### Product Targets

The information on the required quantities of merchandise are imported as Product Targets.

#### Store Plan

Merchandise is then placed within the store/floor plan until the Product Targets have been matched. This can be done in the Planner and Merchandiser modules (or in In-Store Space Collaboration).

#### Performance Measurement

Once the floor plan has been created, its performance is measured using Key Performance Indicators or Reports. This information can then be used to optimize the current floor plan or it can be fed back into the strategic planning process.

## Differences between the 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.

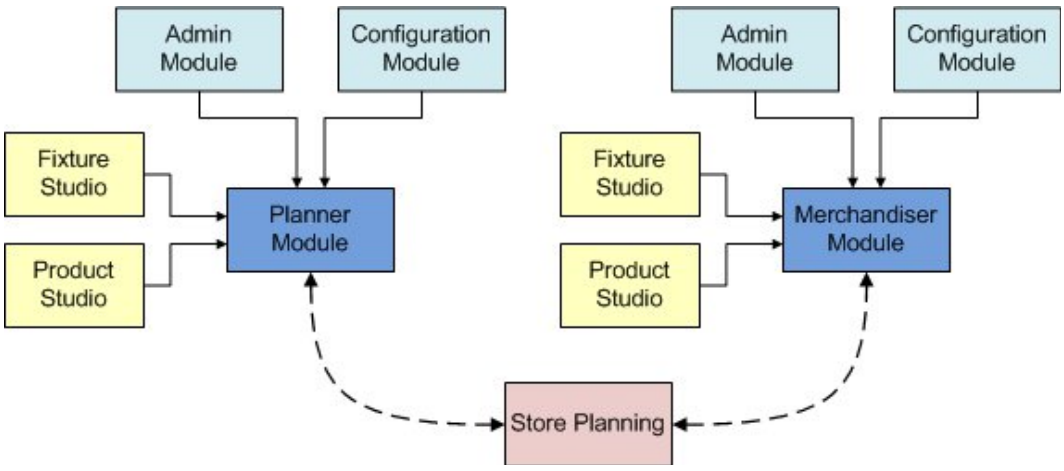
| | Planner | Merchandiser |
|---|---|---|
| Zones | ▪ Can be added, edited and deleted. | ▪ Can be viewed 'read only' |
| Fixtures and Gondolas | ▪ Can be accurately positioned using standard AutoCAD functionality.<br>▪ Shelves generally not shown<br>▪ Position of signage shown, but no text/images available. | ▪ Can be positioned accurately, but not as easily as in Planner.<br>▪ Can work with additional detail for equipment - shelves and pegs for instance.<br>▪ Can see writing/images on signage |
| Products | ▪ Can only be displayed as placeholders - no information on quantity or position given. | ▪ Can be shown as display styles on fixtures or shelves - giving full information on quantity and position.<br>▪ Can be associated with images - giving a photo-realistic appearance. |

| | Planner | Merchandiser |
|---|---|---|
| Planograms | ▪ Can only be seen as placeholders - with no information available on quantity or position of shelves or merchandise. | ▪ Planograms can be seen with full detail including position and quantity of shelves and merchandise. |
| Key Performance Indicators | ▪ Can be used for zones and fixtures. | ▪ Can be used for zones, fixtures, shelves and products. |
| Annotation | ▪ Fully configurable annotation. | ▪ Basic text labeling. |
| Floor Plans | ▪ Can be prepared for printing with fixtures toggled to 2D form, specified annotation and title blocks. | ▪ Snapshots can be taken, but no formal way of outputting floor plans exists. |

## 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.




### Admin 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 |
| Title Blocks | How an 'frame' of information is added to the floor plan before it is published. Information in the title block can include store name, floor plan designer'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 | ▪ How zones are drawn when being added to the floor plan.<br>▪ How zones are highlighted in the floor plan. | X<br>X | |
| Fixturing tab | ▪ How the Add Fixture dialog box functions<br>▪ How Connection Points function<br>▪ Highlighting of Fixtures | X<br>X<br>X | X |
| Merchandising Tab | ▪ Selection Method for Fixtures<br>▪ Highlighting of Products<br>▪ Checking Planogram Placement Validity | X<br>X<br>X | X |
| Merchandiser tab | ▪ 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 | Datum's 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 Equipment | This is used to specify whether one item of equipment can accept another - for example whether a fixture will accept shelves. | | X |
| 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 |

| Option | Description | Planner | Merch |
|---|---|---|---|
| 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 |

# 2

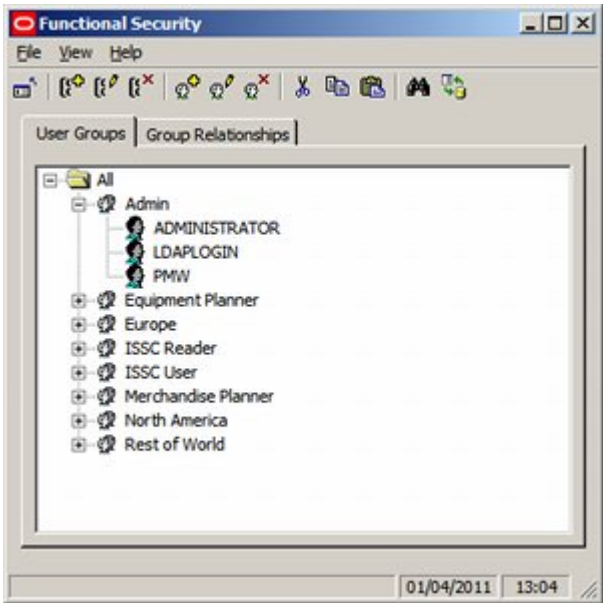
# Logging In

## How Passwords and Privileges are Configured

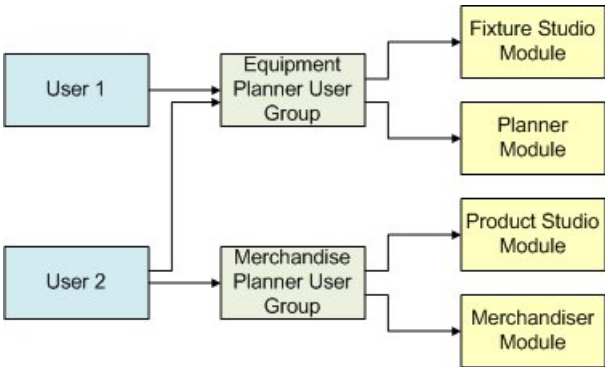
Passwords and Privileges are configured in Macro Space Management's Administration module.

> **Note:** Access to the Admin Module is normally restricted to a limited number of users. This is because the Admin 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. A users 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.

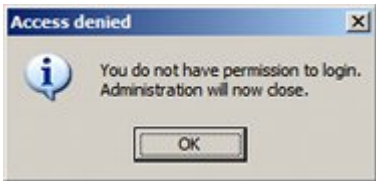
# Logging in to Macro Space Management Modules

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.

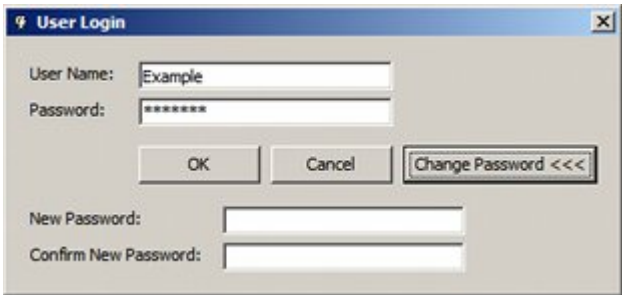
If the user attempts to log into a module for which they do not have permissions for, a warning will appear and the log in attempt will be terminated.




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

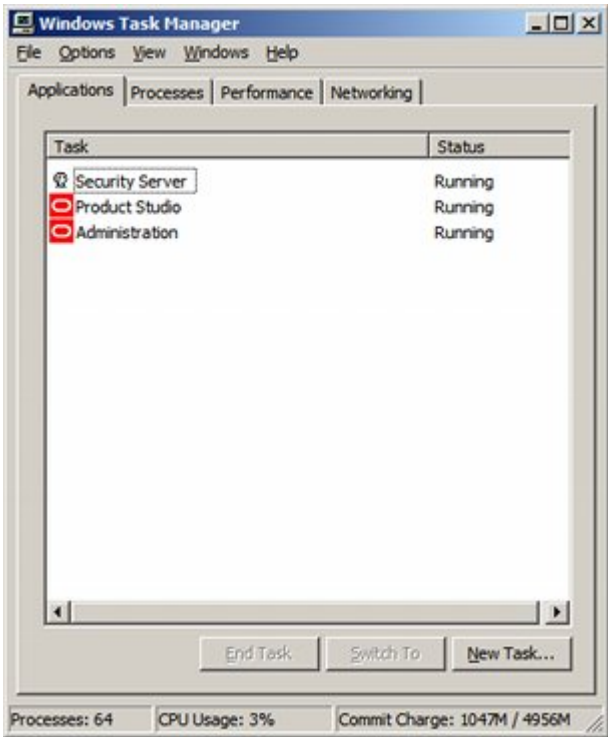
### Password Changes

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.

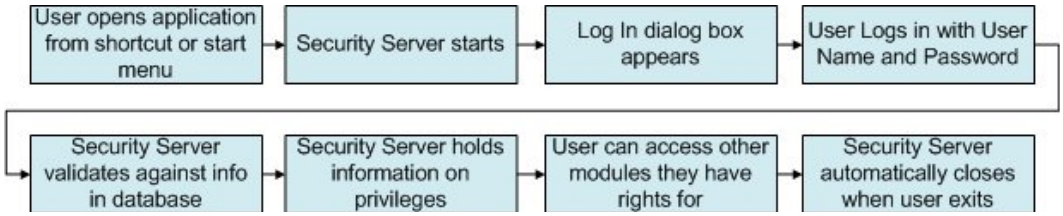


## Security Server

**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.

# 3

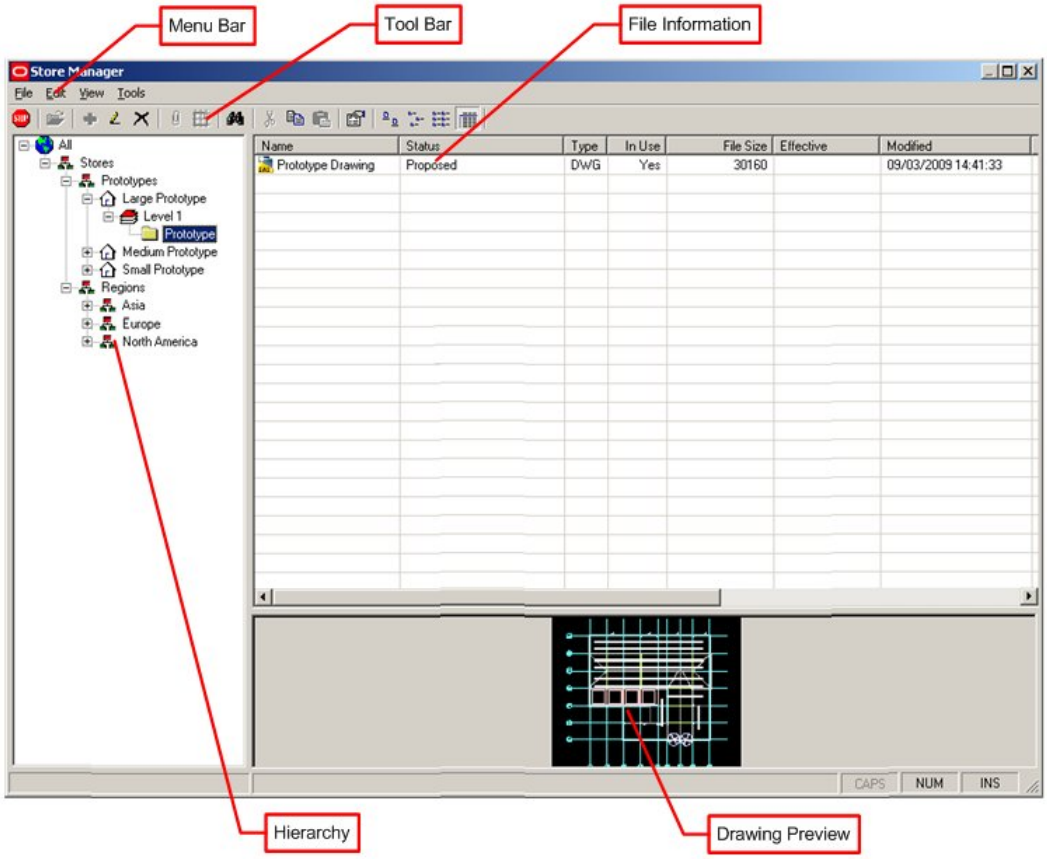
# Store Manager

## Overview of Store Manager 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 organization's 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:

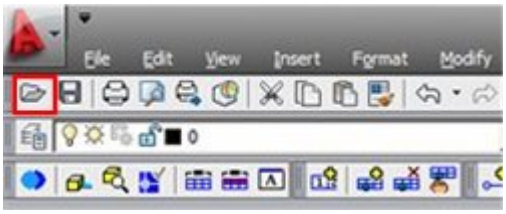
- Assign your retail outlets to logical groupings, allowing comparisons and analysis of sales to be made between individual stores or groups of stores.
- Assign or change floor plans for stores, allowing the effects of differing store layouts or merchandising mixes to be evaluated.
- Carry out routine 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.

## Accessing Store Manager

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 setting up Store Manager

### 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.

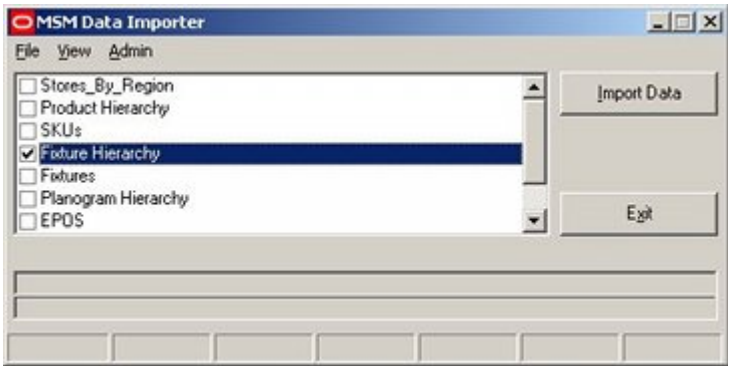
A correctly planned structure can significantly improve the performance of a retail organization – a poorly planned structure could prevent the full power of Macro Space Management being used.

### Data Import

Macro Space Management has a Data Import module.

This enables data to be taken from external databases and imported into the Macro Space Management 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.

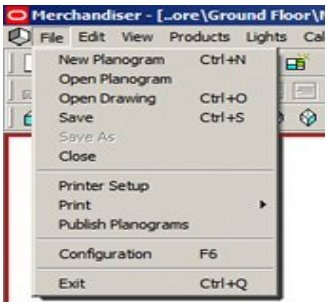
Oracle's consultants can configure the exact nature of the data import so that specified data is selected from the designated databases and imported into the required fields within Macro Space Management's central database.

### The Store Manager menu bar

The **Store Manager Menu bar** contains several options:



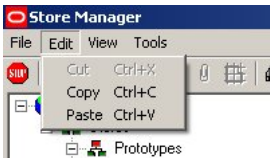
**File** activates a pull down menu with options primarily concerned with operations on files.




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

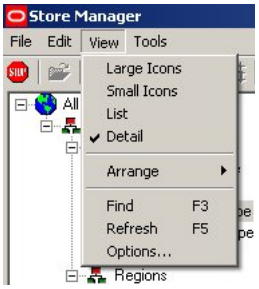
This menu can be used to add, edit and delete files and to associate files and architectural plans.

**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 grayed out (unavailable).

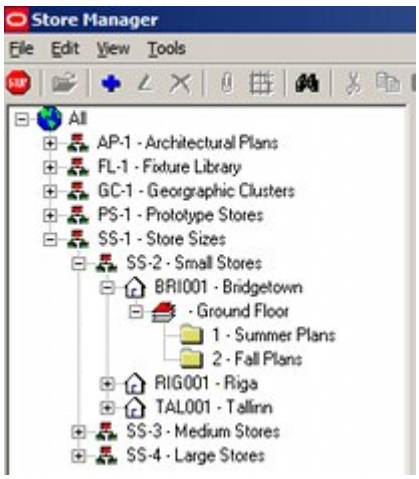
| Icon | Description |
|---|---|
|  | Close Store Manager |
|  | Open a Drawing |
|  | Add an Item |
|  | Edit an Item |
|  | Delete an Item |
|  | Create reports |
|  | Associate File |
|  | Associate Architectural Plan |
|  | Search |
|  | Cut |
|  | Copy |
|  | Paste |
|  | Properties |
|  | Large icons for files |

| Icon | Description |
|---|---|
|  | Small Icons for files |
|  | List of files |
|  | Details of files |

## Basic Concepts

### 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 Stores cluster contains the Prototypical sub-cluster. This sub-cluster contains the Large Prototype store. The Large Prototype store has a 'Level 1' floor, and that floor contains the Prototype revision.

The Store cluster is closest to the trunk, while the New Dover Layout revision is the most dependent data.

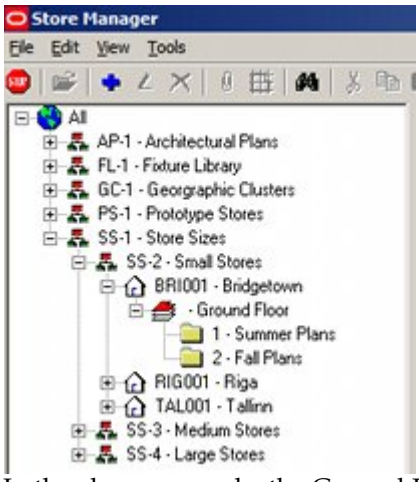
### Parent-child relationships

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.

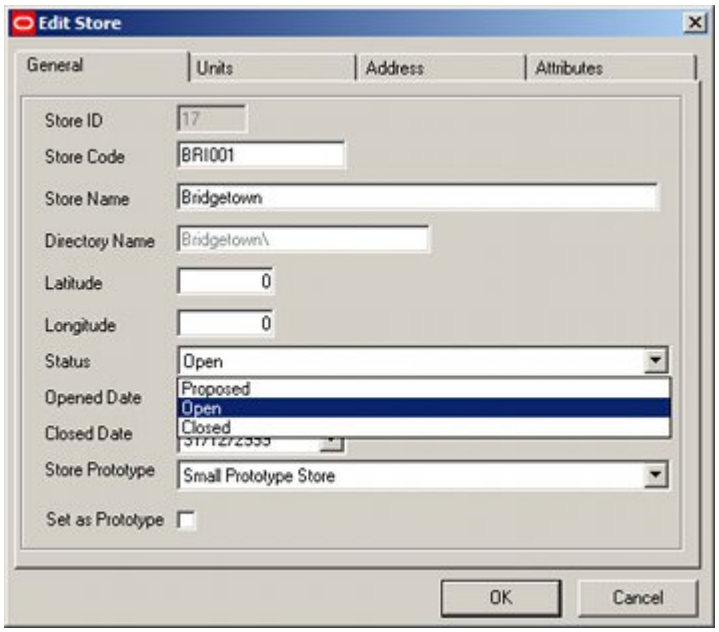



In the above example, the Ground Floor is a child of the Bridgetown store, but is a parent of the Summer Plans Revision.

## 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 dates and effective dates

**Publish** and **Effective** dates are associated with the status of the drawing of a floor plan in some implementations of standard Macro Space Management and the automated Enterprise version of Macro Space Management.

The Publish date is the date at which the drawing is issued to the stores. Drawings are typically published a number of days 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 by making changes to the AVTTB_SYSTEM_VARIABLE table in the database.

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

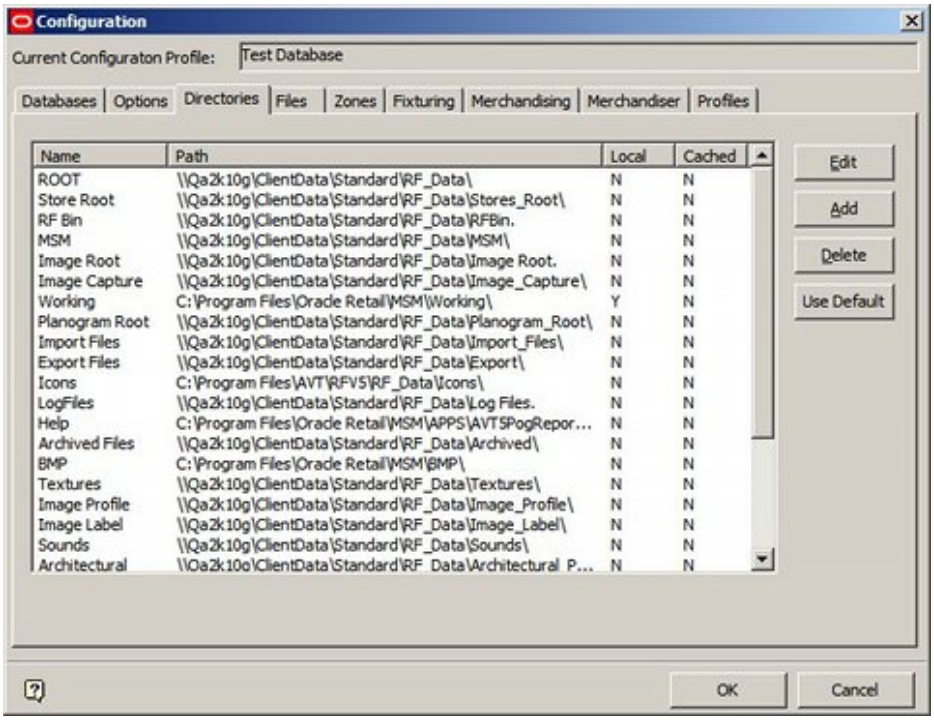
Once enabled, Publish and Effective dates can be used to automatically change the status of revisions and drawings by making use of the UpdateStaus.exe file in the Macro Space Management/Tools sub-directory.

> **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.



This location can generally only be changed by users with rights to the Admin module.

### XREF's

**XREF** is a method Planner uses to link drawings. When you attach a drawing as an XREF, you link that referenced drawing to the current drawing. Any changes to the referenced drawing are then displayed in the current drawing when it is opened.

This is used within Macro Space Management where an architectural drawing can be attached as an XREF to multiple drawings at the same time. This allows a single architectural drawing to be used as a framework on which multiple arrangements of zones, fixtures, aisles and merchandise may be planned.

> **Note:** Using XREF's reduces the quantity of data stored, as each architectural plan is only used once for each floor, not copied under multiple file names.

## Overview of Objects

### 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 labeled England might be further sub-divided into sub-clusters called north, central and south.

If necessary, this process could be continued further, with the north sub-cluster being further divided into, for example, city and suburban sub-sub-clusters.

### 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.

### Prototype store



In some implementations of Macro Space Management a **Prototype Store** is a store that is used as a basis for comparison for other stores within the Store Manager hierarchy.

Prototype Stores can be theoretical, in that they can be designed by marketing staff as an exemplar of what a store should be. They can also be practical examples selected from operational stores.

There can be many Prototype Stores, but each operating store can only have a single Prototype Store assigned to it at one time.

Prototype status can be assigned to a store by editing its properties.

### 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.

Only one Revision can be active at any one time.

### Files

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

# The Store Manager Hierarchy

## A note on parent-child relationships

When deleting clusters, sub-clusters, stores, floors or revisions, it should be noted that all associated child files will be deleted along with the parent file.

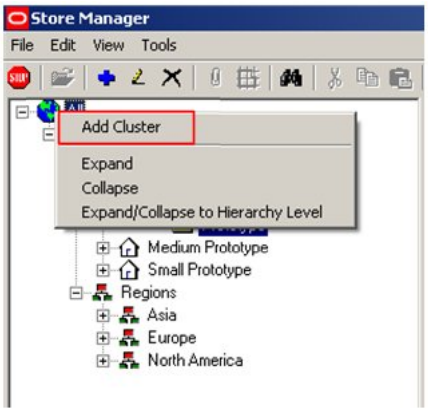
These files are not permanently deleted and can be recovered by use of the purge option in the Admin functions in the Store Manager module, (accessed by <Ctrl + A>).

Changing the status of a revision may also affect the status of an associated child file.

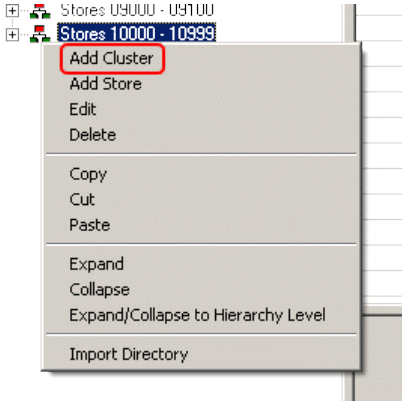
## Adding, Editing and Deleting Clusters

To **Add a Cluster** to the Store Root, go to the hierarchy tree in Store Manager. Click on the Store Root, (Stores), icon to highlight it. If it was not previously live it will change from a white to a colored Icon.

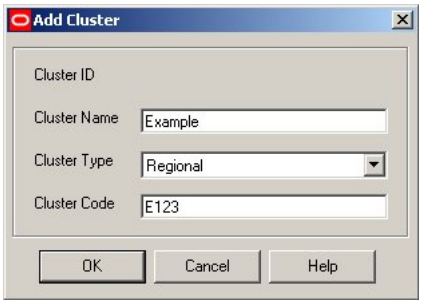
With the mouse pointer over the Store Root icon, right click to bring up the drop down menu of options.




To add a Cluster to an existing Cluster, click on it to highlight it. Right click to bring up the list of options. (Note that this is a slightly different drop down menu from that which appears at the Store Root).

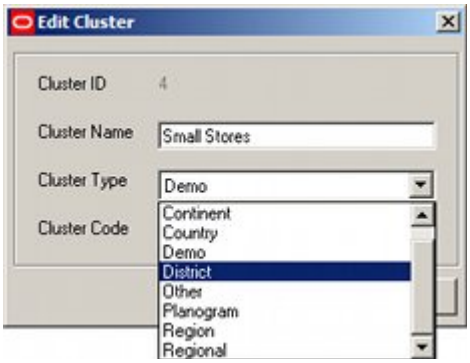



Select the Add Cluster option. A small dialogue box will come up.




(Alternatively, when the Store Root icon is live; click on the add-an-item icon in the toolbar. This will bring up the small dialogue box).

Enter the *Cluster Name* and *Cluster Code*. Select the *Cluster Type* from the drop down list available.



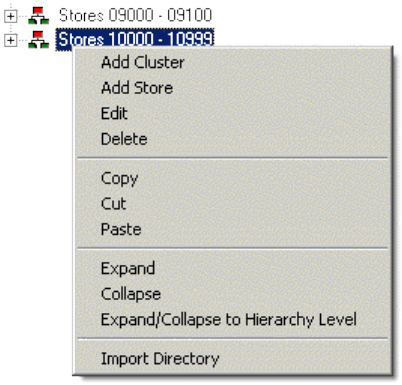

Selecting the correct Cluster Type is important as this information will be used for reporting purposes. If clusters are allocated to the wrong type, errors will occur in reporting.

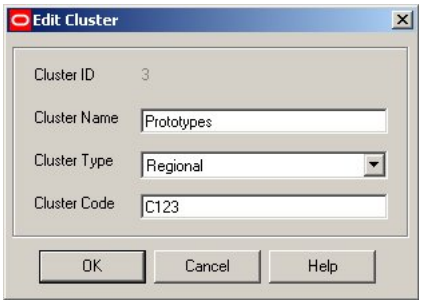
When all the available information has been entered, click OK to insert the cluster.

> **Note:** The list of drop down options is customizable. Please consult Oracle's Technical Support team for information.

### Editing Clusters

Some of the characteristics of the cluster can be edited by left clicking on the cluster to select it, then right clicking and selecting the Edit option.






The Cluster ID is allocated on creation and cannot be changed. It is accordingly grayed out.

The Cluster Name, Code and Type can all be edited.

The cluster can be deleted by left clicking on the cluster to select it, then right clicking and selecting the "delete" option.

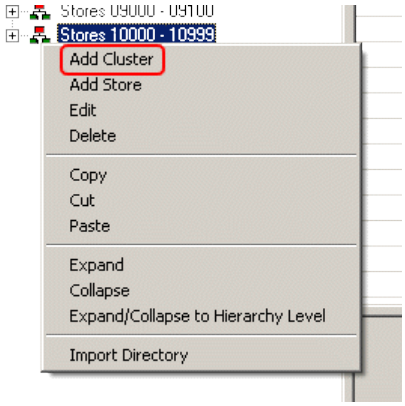
### Deleting Clusters

The cluster and all its associated child files are removed from the hierarchical tree and moved to the RFBin. At this stage the files have not been permanently deleted and can be restored via the Administrator menu, (accessed via <Ctrl + A>).

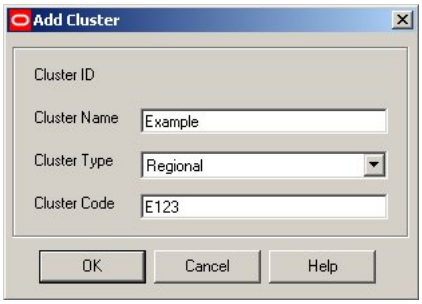
Deleting a cluster results in all copies of the stores associated with it being removed, but copies of the stores associated with other clusters will not be affected.

## Adding, Editing and Deleting Sub-Clusters

To **Add a sub-cluster**, go to the hierarchy tree in Store Manager. Click on the icon of the required Cluster to highlight it. Right click to bring up the available options.

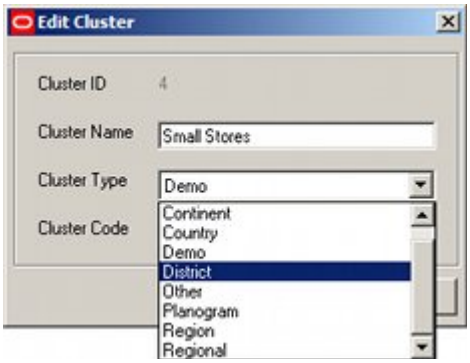



Select the Add Cluster option. A small dialogue box will come up.



(Alternatively, when the Cluster icon is live; click on the add-an-item icon in the toolbar. This will bring up the small dialogue box).

Enter the *Cluster Name* and *Cluster Code*. Select the *Cluster Type* from the drop down list available.




Selecting the correct Cluster Type is important as this information will be used for reporting purposes. If clusters are allocated to the wrong type, errors will occur in reporting.

When all the available information has been entered, click OK to insert the cluster.

> **Note:** The list of Cluster types in the drop down options is customizable. Please consult Oracle's Technical Support team for information.

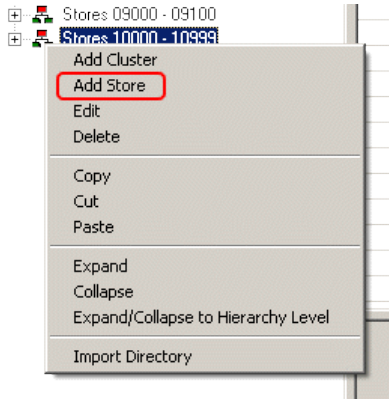
#### Modifying and Deleting Sub Clusters

Modifying and deleting sub-clusters is carried out exactly the same as for Clusters

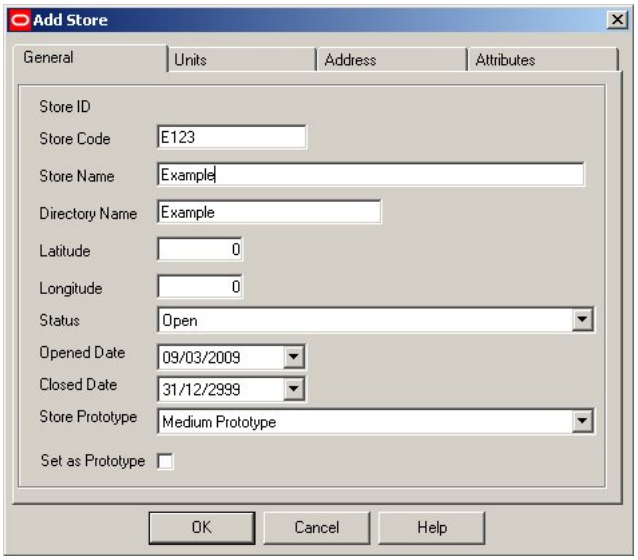
## Adding, Editing and Deleting Stores

To **Add a Store**, go to the hierarchy tree in Store Manager. Click on the icon of the required Cluster to highlight it.

With the mouse pointer over the cluster or sub-cluster icon, right click to bring up the list of options. Select the Add Store option.



The Add Store dialogue box will come up.




(Alternatively, when the cluster or sub-cluster icon is live; click on the Add-an-Item icon in the toolbar. This will bring up the dialogue box).

Starting with the *General* tab, enter the required data including the *Store Code* and *Store Name*.

Select the store *Status*. This can be:

- Prototype.
- Proposed.
- Open.
- Closed.

If the store is not a prototype, select the Prototype Store from the drop down list at the bottom of the dialogue box.

If the store is designated as a Prototype, then selecting a prototype store from the drop down list is not possible.

Click on the Units tab and select the required units.

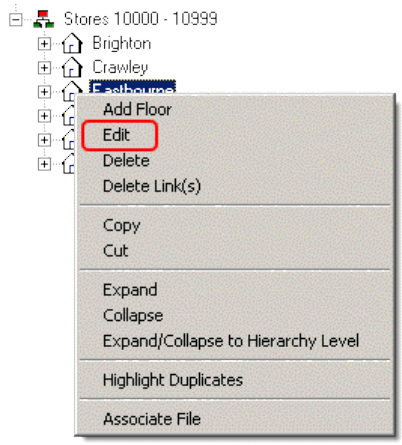
> **Note:** The units set in the Units tab are for information purposes only, and will not have any direct effect in current implementations of Macro Space Management.

Click on the Address tab and enter the required information.

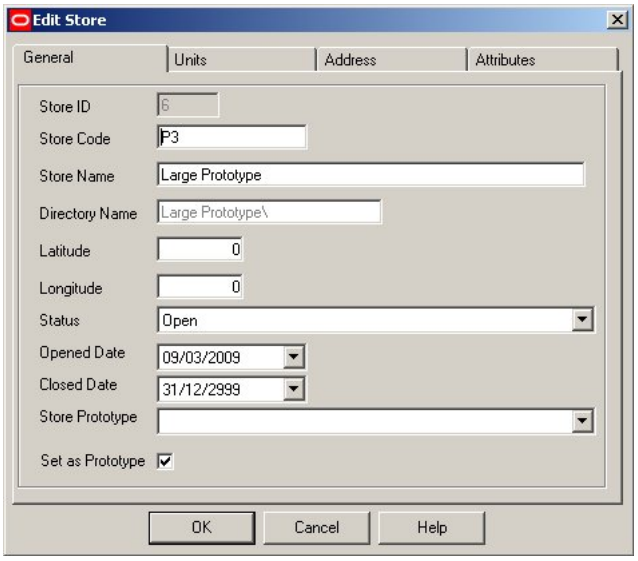
When all the required data has been entered, click on the OK button to complete insertion of the store.

### Editing Stores

Most of the characteristics of the store can be edited by left clicking on the store to select it, then right clicking and selecting the Edit option.




This will bring up a dialogue box.




The store ID is allocated on creation and cannot be changed. It is accordingly greyed out.

All other information can be edited.

> **Note:** The units set in the Units tab are for information purposes only, and will not have any direct effect in current implementations of Macro Space Management.

### Deleting Stores

To delete a store from all the clusters it is associated with, left click on the store to select it, then right click and select the Delete option.

The store and all its associated child files are removed from the hierarchical tree and moved to the RFBin.

At this stage the files have not been permanently deleted and can be restored via the Administrator menu, (accessed via <control> A).

To remove a store from a specific cluster, left click on the store to select it. With the left mouse key held down, drag the store icon to another cluster that the store is associated with. Release the mouse key to "drop" the store. The store will be removed from the original cluster.

## Stores and Clusters

### Moving stores Between Clusters

To move a store from one cluster to another, left click on the store to select it. With the left mouse key held down, drag the store icon to the required cluster. Release the mouse key to drop the store.

Stores can also be moved by left clicking on them to select them, then using the Cut and Paste options accessible with the right mouse key.

Multiple stores can be selected by using the mouse key in conjunction with the <Shift> or <Control> keys

### Putting stores into Multiple Clusters

A cluster, (or sub-cluster), is used to group together stores sharing a common characteristic such as size or geographical location.

Stores can logically belong to more than one category when they meet more than one criteria. Accordingly, stores can be assigned to more than one cluster.

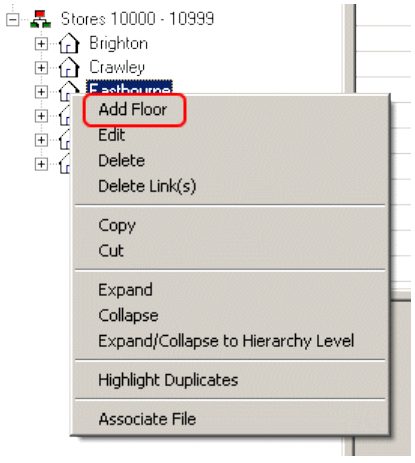
To be put into multiple clusters, stores must first be added to an existing cluster. The required stores can then be selected by left clicking with the mouse. They can be added to the second cluster, (or sub-cluster), by use of the Copy and Paste options accessible with the right mouse key.

This process can be continued until the required store(s) have been put into all the appropriate clusters or sub-clusters.

## Adding, Editing and Deleting Floors

To **Add a Floor**, go to the hierarchy tree in Store Manager. Click on the icon of the required store to highlight it.

With the mouse pointer over the store icon, right click to bring up the list of options.




Select the Add Floor option. A small dialogue box will come up.

Alternatively, when the store icon is live; click on the Add-an-Item icon in the toolbar. This will bring up the same small dialogue box.




Select the *Floor Type*. Example possibilities include:

- Basement.
- Level 1.
- Level 5.

> **Note:** The list of floor types can be configured by Oracle. Contact Oracle Technical Support for more information.

If additional information is required, edit the *Description* of the floor. (The default is the Floor type).

If necessary edit the *Directory*. (This is the name that will be given to the associated directory).

Select the Status of the floor. Available options are:

- Proposed.
- Existing.
- Closed.

Only one floor at each level can have Existing status at a time. If a floor at the level being added already has Existing status, a message stating "A floor already exists of this type" will appear.

To give the new floor Existing status, the status of the floor with current Existing status will have to be changed.

Next, set the Allocated Area % Tolerance to any figure up to 100%. This figure is used to check the allocated area of the floor meets a specified level of efficiency. For example, setting the percentage to 95 % will result in a warning if the planning of fixtures and fittings results in less than 95% of the floor area being allocated.

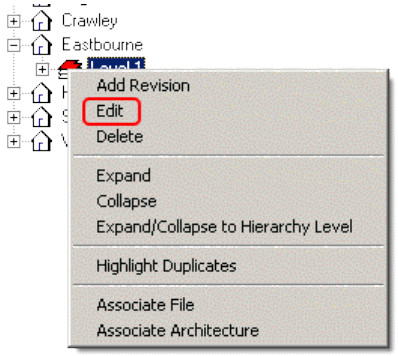
The Elevation option allows the merging of floors for planning purposes.

The Edit Levels option allows fixtures to be located at higher than floor level. An example would be display cabinets placed high on the wall.

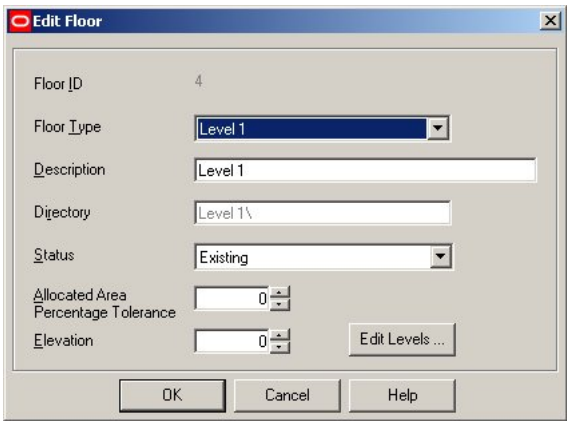
Click on OK to add the Floor.

### Modifying Floors

Most of the characteristics of the floor can be edited by left clicking on the store to select it, then right clicking and selecting the Edit option.




This will bring up a dialogue box.




The store ID is allocated on creation and cannot be changed. It is accordingly grayed out.

All other information can be edited.

> **Note:** Changing the status of the floor is discussed in the section on business flows.

### Deleting Floors

To delete a floor from the store it is associated with, left click on the floor to select it, then right click and select the Delete option.

The floor and all its associated child files are removed from the hierarchical tree and moved to the RFBin.

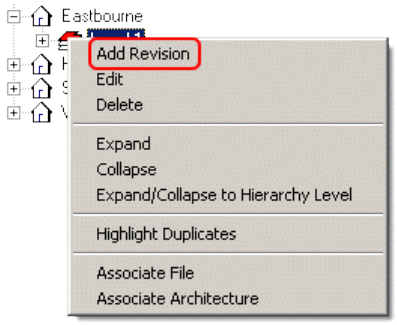
At this stage the files have not been permanently deleted and can be restored via the Administrator menu, (accessed via <control> A).

## Adding, Editing and Deleting Revisions

**Revisions** are alternative layouts for floors. Changing from one Revision to another allows the layout of a floor to be changed, (for example), from the Spring to the Summer arrangement.

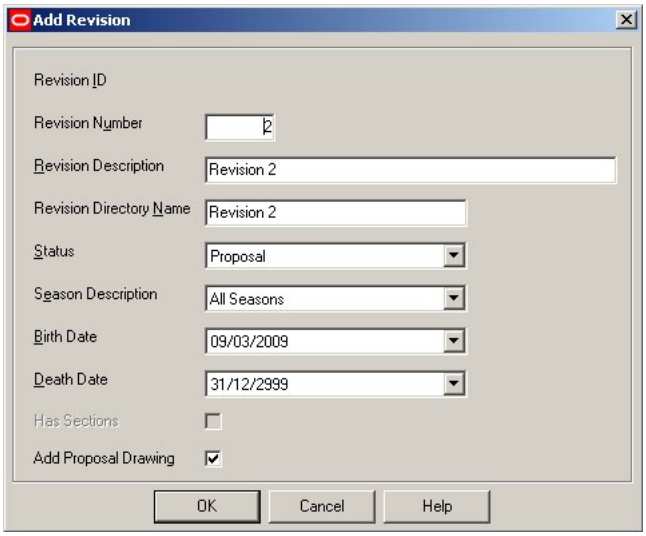
To Add a Revision, go to the hierarchy tree in Store Manager. Click on the icon of the required floor to highlight it.

With the mouse pointer over the store floor, right click to bring up the list of options.




Select the Add Revision option. A small dialogue box will come up.

Alternatively, when the floor icon is live; lick on the Add-an-Item icon in the toolbar. This will bring up the same small dialogue box.




Decide on and enter the *Revision Number*. If you inadvertently select an existing revision number, the revision number will default to the next available number.

Input the *Revision Description* and *Revision Directory Name*.

Select the status of the revision. Typical available options are:

- Proposal.
- Authorized.
- Current.

At this stage it will only be possible to set the revision status to "Proposal".

Set the season to one of the available options.

- Spring.
- Summer.

- Autumn.
- Winter.
- All.

The Birth date will automatically set to the days' date.

The Death date will automatically set to 31st December 2999.

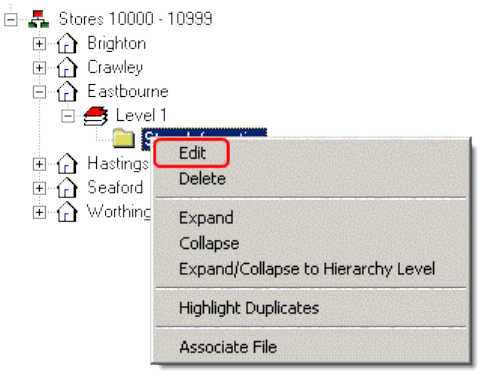
Neither the Birth nor Death date need changing at this stage.

There is a check box at the bottom of the dialogue box. Selecting this will automatically add a proposal drawing.

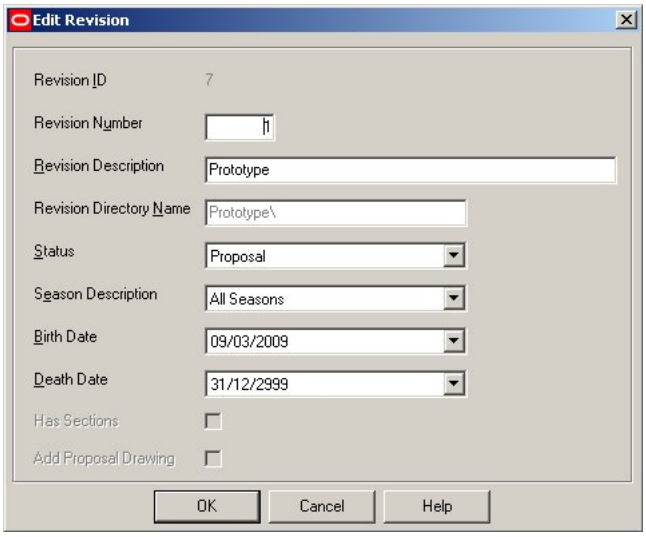
Click on OK to add the Revision.

### Editing Revisions

Most of the characteristics of a Revision can be edited by left clicking on the Revision to select it, then right clicking and selecting the Edit option.




This will bring up a dialogue box.




The revision ID is allocated on creation and cannot be changed. It is accordingly grayed out.

All other information can be edited.

> **Note:** Changing the status of the revision is discussed in the section on business flows.

### Deleting Revisions

To delete a revision, left click on the revision to select it, then right click and select the Delete option.

The revision and all its associated child files are removed from the hierarchical tree and moved to the RFBin.

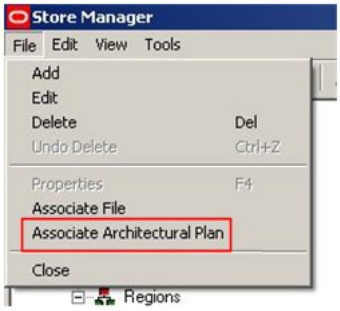
At this stage the files have not been permanently deleted and can be restored via the Administrator menu, (accessed via <control> A).

## Associating Architectural Plans

**Architectural Plans** can only be associated with Floors.

An example of a file of this type would be an Planner drawing; (file extension .DWG).

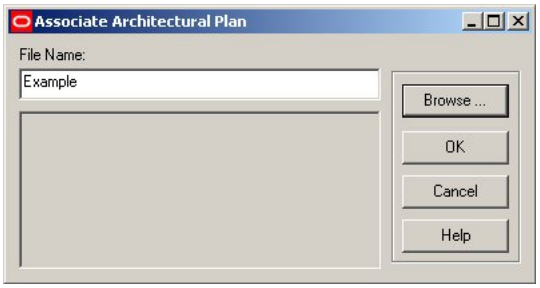
To associate an Architectural Plan with a Floor, go to the hierarchy tree in Store Manager. Click on the icon of the required floor to highlight it. With the mouse pointer over the floor, right click to bring up the list of options.




Alternatively, the Associate Architectural Plan icon on the toolbar can be used.



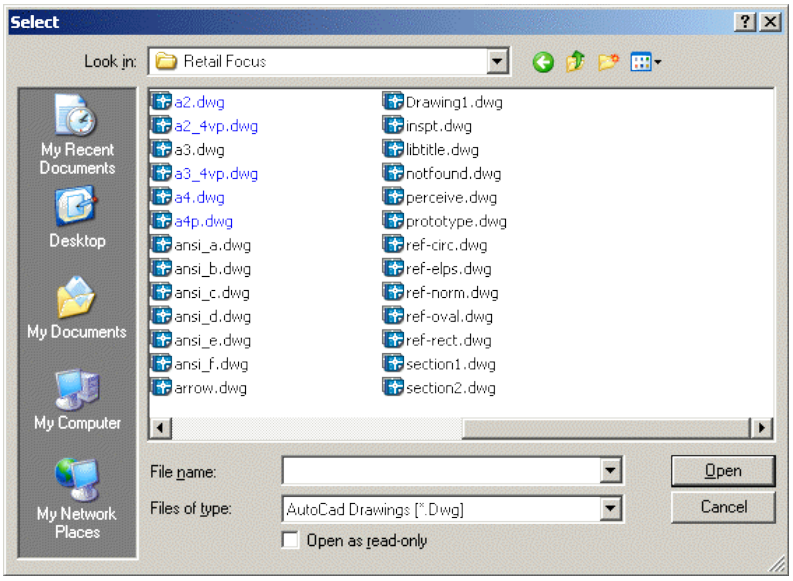
On selection of the Associate Architecture option the Architectural File Association dialogue box will come up.




Two options exist; to copy or link a file. Select which option is appropriate by clicking on the required radio button.

> **Note:** Macro Space Management will automatically update files that are linked if they are changed or modified by an external program. Copied files updated by Macro Space Management may not have their original versions changed.

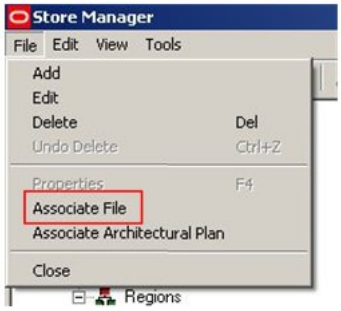
Click on the Browse button and select the required file.




Select the file and click Open to confirm. This will return you to the Architectural Plan dialogue box. Click OK on this dialogue box to confirm the Architectural Plan is to be associated.

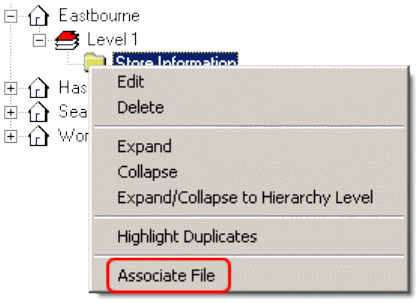
## Associating Files

For a revision to be fully active, it needs files to be associated with it. This can be done via the file menu.

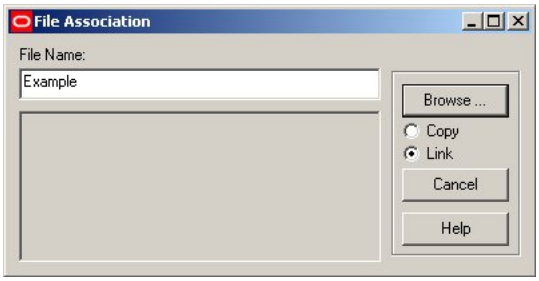



Another way of associating a file with a revision is to go to the hierarchy tree in Store Manager. Click on the icon of the required revision to highlight it. With the mouse pointer over the revision, right click to bring up the list of options.

(Alternatively, the associate file icon on the toolbar can be used).




Select the Associate File option. A small dialogue box will come up.



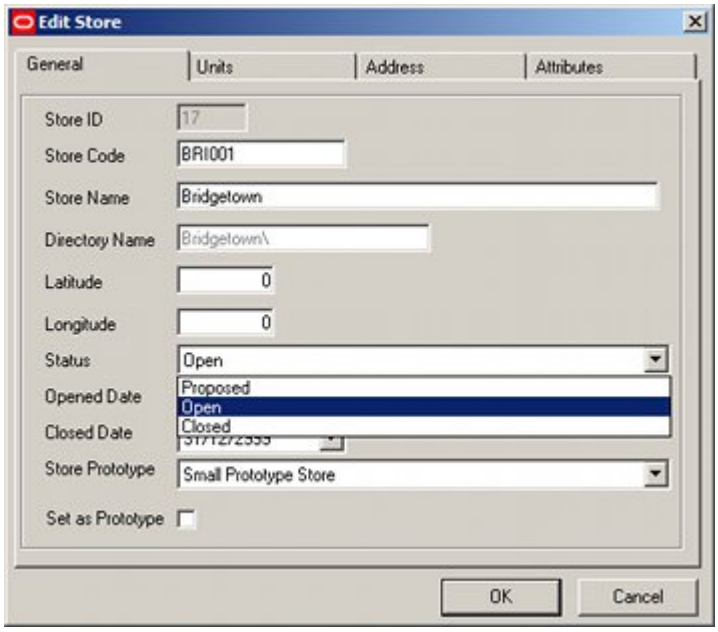

Two options exist; to copy or link a file. Select which option is appropriate by clicking on the required radio button.

Click on the Browse button and select the required file. Click OK to confirm.

> **Note:** Macro Space Management will automatically update files that are linked if they are changed or modified by an external program. Copied files updated by Macro Space Management may not have their original versions changed.

## Overview of status

The status of an object will be continually changing as it moves through the business cycle. For example, stores start as Proposed. After approval they become Open. When the store reaches the end of its life it will become Closed.




Understanding the changing status of objects is fundamental to the operation of Macro Space Management.

All objects except clusters and sub-clusters have a status.

Stores and floors have independent status: their status can be changed without affecting the status of any objects below them in the hierarchical tree.

Changing the status of a revision may affect the status of its associated child files. Changing the status of a revision may also affect the status of any other revisions for that floor.

Some status changes are reversible. For example, a store can be changed from open to closed status for a major refurbishment. On completion of the refurbishment, the stores' status can then be changed back to open.

Some status changes are irreversible. For example, once a floors' status has been changed from current to historical it cannot be changed back.

Whether a status is reversible or irreversible is determined when Macro Space Management is first implemented.

## Status of Clusters

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

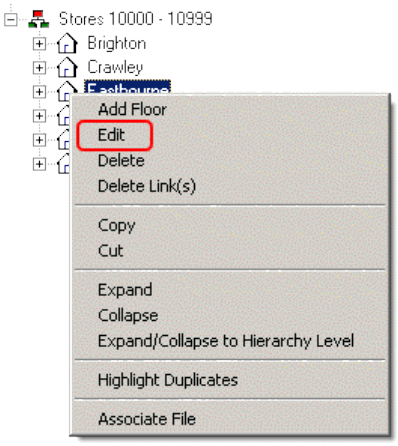
## Changing the status of Stores

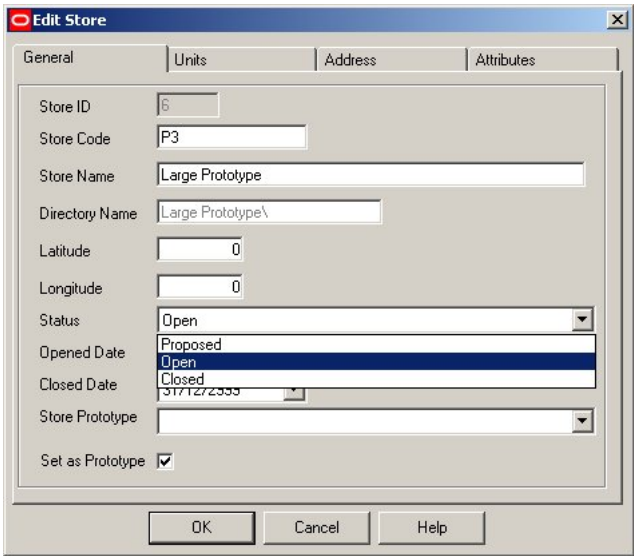
Stores can have the following status:

- Proposed.
- Open.
- Closed.

They can also be set to Prototype status.

Status of a Store is changed through the Edit Store dialogue box. This is accessed by right clicking on the Store icon in the hierarchical tree and selecting the Edit option.






The status of the Store can be changed by means of the drop down list.

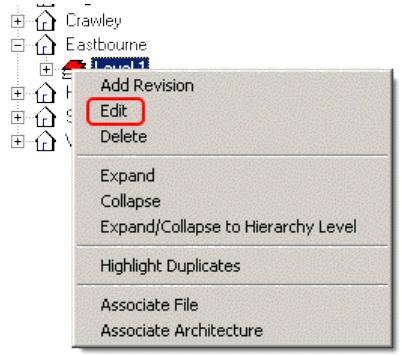
A stores' status can be changed without affecting status of the floors, revisions or files below it in the hierarchy.

## Changing the status of Floors

Floors can have the following status:

- Proposed.
- Existing.
- Closed.

Status of a Floor is changed through the Edit Floor dialogue box. This is accessed by right clicking on the Floor icon in the hierarchical tree and selecting the Edit option.





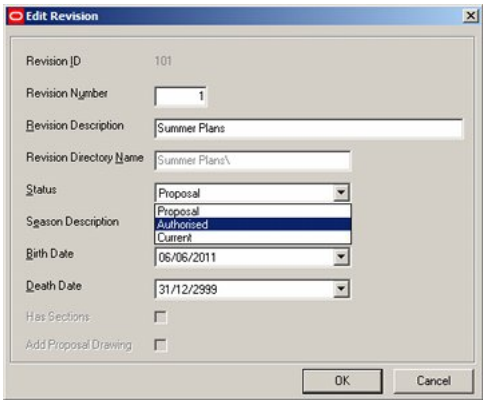

A floors' status can be changed between Proposed to Existing without affecting status of the revisions or files below it in the hierarchy.

Changing the status to Closed turns any Current file to Historical status.

## Changing the Status of Revisions

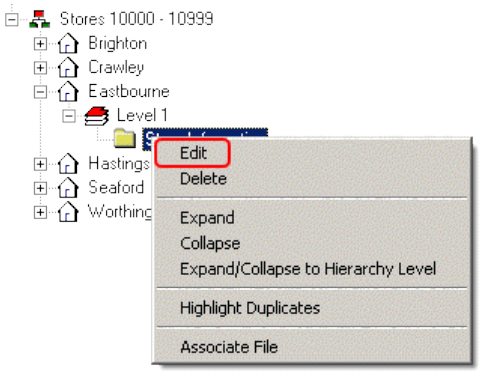
Revisions within Macro Space Management can have the following generic statuses:

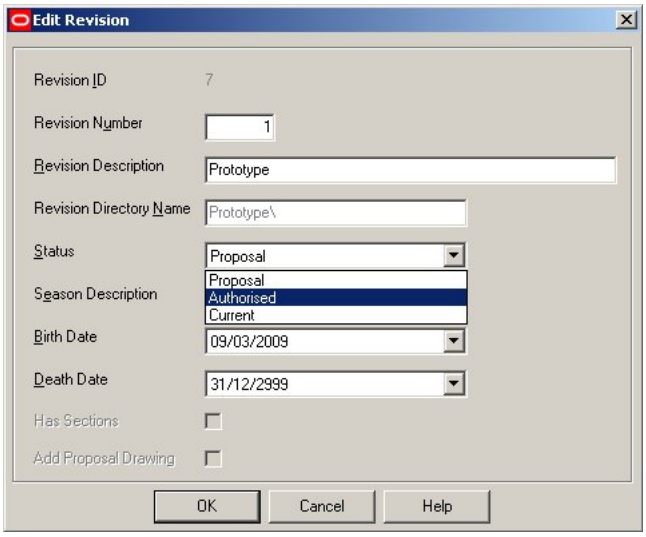
- Proposal
- Authorized
- Current
- Historical




**Note:** Revisions cannot be directly changed to Historical status - they are automatically changed by Macro Space Management when another Revision becomes Current.

Status of a Revision is changed through the Edit Revision dialogue box. This is accessed by right clicking on the Revision icon in the hierarchical tree and selecting the Edit option.




Only one Revision can have the status of Authorized for a specific Store.

Only one Revision can have the status of Current for a specific Store.

Changing the status of a Revision can affect the status of its associated child files.

| Changing from | Changing to | Result |
|---|---|---|
| Proposal | Authorized | Children not affected by status change.<br>If another revision has currently has authorized status, this revision will automatically have its status changed back to proposal.<br>The change back to proposal will require confirmation by a prompt. |

| Changing from | Changing to | Result |
|---|---|---|
| Authorized | Current | A revision can only be changed to current if it has only one related drawing, or if only one drawing has been given authorized status.<br>If another revision within the same floor has a status of current, that revision will have its status changed to historical.<br>The change to historical will require confirmation by a prompt.<br>"Current" children of the revision which is having its status changed to historical will also have their status changed to historical. Other children of that revision could also have their status changed. |
| Current | Historical | This change is automatic, all pertinent children being changed automatically.<br>This change is irreversible. |

The status of a Revision can be seen from the color of its associated folder.




- Proposed revisions have a buff, (yellow), colored folder.
- Authorized revisions have a green folder.
- Active revisions have a pink folder.
- Historical revisions have a purple folder.

## Changing the status of Files

Files can exist at the store, floor or revision level in Macro Space Management.

Within Macro Space Management, files at Revision level can have a generic status of:

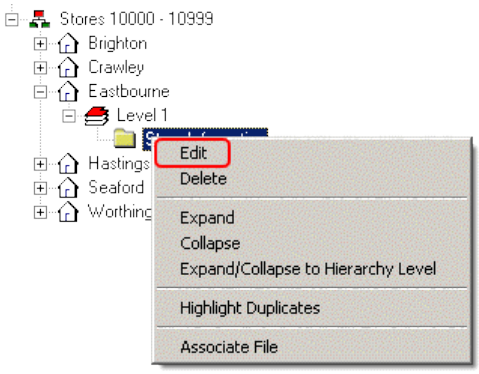
- Proposed
- Authorized
- Current
- Historical

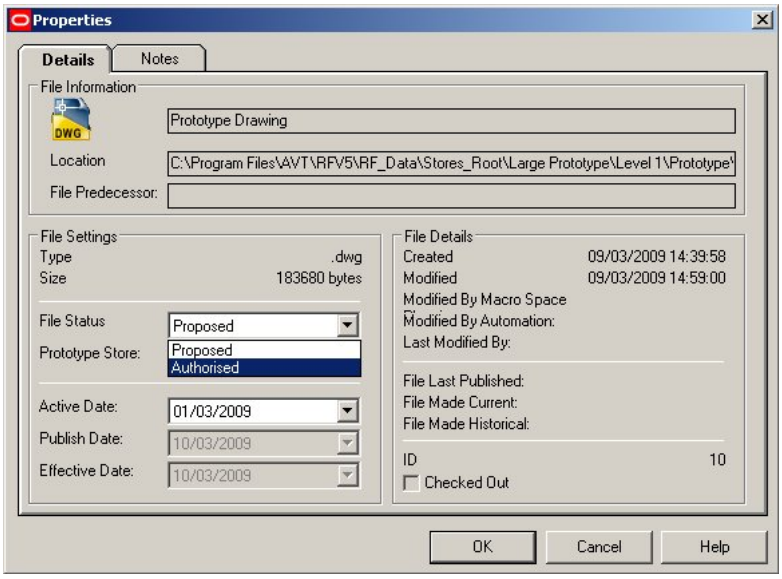
> **Note:** Files cannot be directly changed to Historical status - they are automatically changed by Macro Space Management when another Revision becomes Current.

If Macro Space Management is being used in parallel with In-Store Space Collaboration, then other generic statuses are possible:

- Survey
- Submitted

Status of a Revision is changed through the Edit Revision dialogue box. This is accessed by right clicking on the Revision icon in the hierarchical tree and selecting the Edit option.




The status of a file can only be reversed if the status has been marked as reversible in the database.

If the file is the child of a revision currently changing its status to current, the file will automatically have its status changed.

If the file is the child of a revision automatically having its status changed from current to historical, the file will automatically have its status changed.

Only one drawing within a revision can have a status of authorized. If you are attempting to change a second file to authorized status, the initial file with authorized status will be automatically changed back to proposed first.

The automated change to of a revision to historical will require confirmation by a prompt.

### Macro Space Management Files and In-Store Space Collaboration

Two types of drawings are often present in Macro Space Management and derived from the use of In-Store Space Collaboration:

- Survey drawings
- Submitted drawings

Survey Drawings are created in Macro Space Management to represent store layouts that are currently in place, but where there the information is to be updated. They consist of a building outline and dummy fixtures, fitting and gondolas.

A surveyor then walks the store and updates the drawing using In-Store Space Collaboration so that it reflects the actual arrangement in place.

Fixtures, Fittings, Gondolas, Products and Merchandise can be updated on a Survey Drawing using In-Store Space Collaboration.

Survey drawings start at Survey status. If they are saved using the In-Store Space Collaboration Save option, their status remains at Survey status.

Submitted drawings are drawing that have been fully updated using In-Store Space Collaboration and are being saved back to the central Macro Space Management database with a modified status.

When they are saved using the Save Submit option within In-Store Space Collaboration, their status is automatically changed to Submitted.

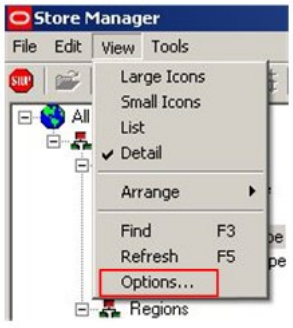
> **Note:** Other statuses can be selected using the IN_STORE_SUBMITSTATUS system variable.

Their status cannot be further changed by In-Store Space Collaboration.

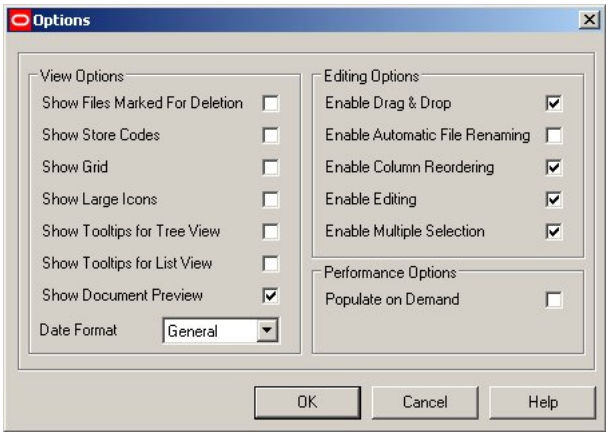
## Advanced Administration

### Customizing Administration Options

Some of the operations of the Admin 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** leaves the Object Names present in the hierarchical tree, but puts a cross by them.




**Show Store Codes** displays the store codes.

**Show Grid** puts the files displayed in the List view into a grid.

**Show Large Icons** changes the icon size.

**Show Tooltips for Tree View** displays the revision code when the mouse pointer is held over the revision.

**Show Tooltips for List View** displays the full path when the mouse pointer is held over a file.

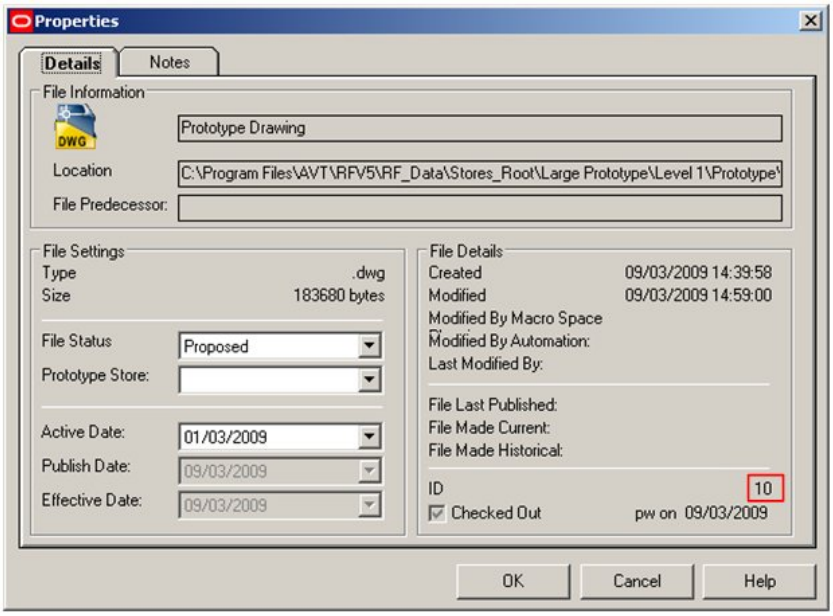
**Show Document Preview** put a preview of the document at the bottom of the Store Manager Window

**Date Format** brings up a drop down list that enables the form the date is displayed in to be customized.

## File Identification Numbers

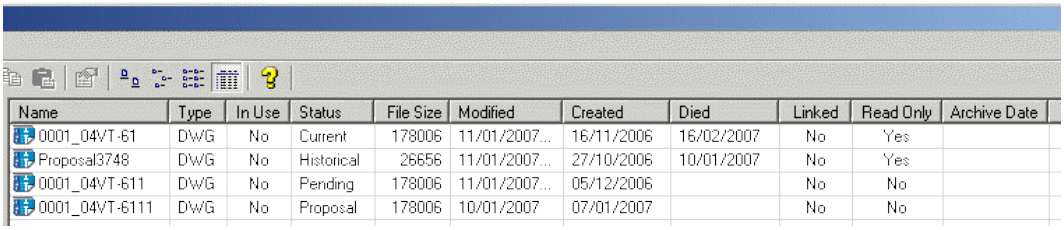
Each drawing within Macro Space Management has a **File Identification Number**. this is often useful in identifying information within the database.

This can be found by opening the Properties dialogue box associated with that drawing. The File ID can be seen on the lower right.

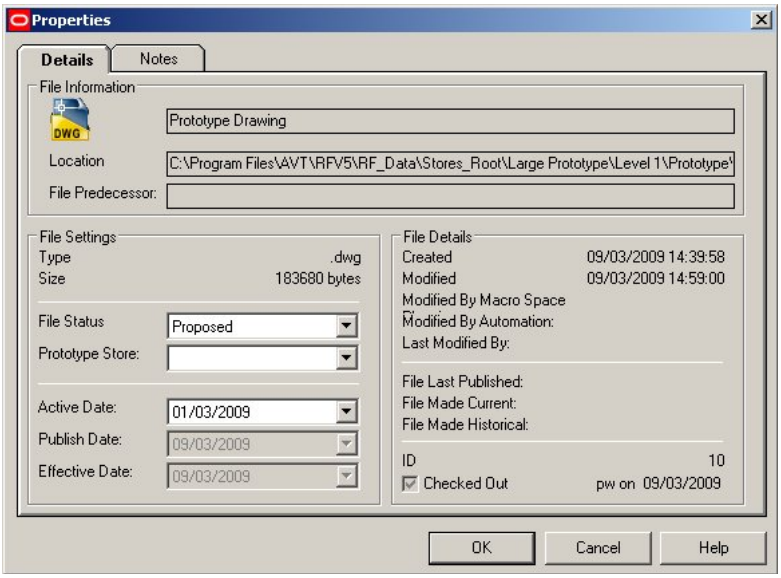



## Significance of Dates

There are a series of dates associated with individual files. These can be seen both in the Store Manager file display and in the properties tab for each file.



| Name | Type | In Use | Status | File Size | Modified | Created | Died | Linked | Read Only | Archive Date |
|---|---|---|---|---|---|---|---|---|---|---|
| 0001_04VT-61 | DWG | No | Current | 178006 | 11/01/2007... | 16/11/2006 | 16/02/2007 | No | Yes | |
| Proposal3748 | DWG | No | Historical | 26656 | 11/01/2007... | 27/10/2006 | 10/01/2007 | No | Yes | |
| 0001_04VT-611 | DWG | No | Pending | 178006 | 11/01/2007... | 05/12/2006 | | No | No | |
| 0001_04VT-6111 | DWG | No | Proposal | 178006 | 10/01/2007 | 07/01/2007 | | No | No | |




**Created** is the date at which the file was created.

**Accessed** is the date at which the file was last viewed (without making any changes to the file).

**Modified** is the last date at which changes to the file were saved.

**Last Modified** by is the user name of the last individual to modify the file.

**Last Published** is the last date at which the file was published.

**Archived** indicates if the file has been moved to the Archive database.

**Publish** is the date the file is set to be published on. (If the file has been published this date will be greyed out).

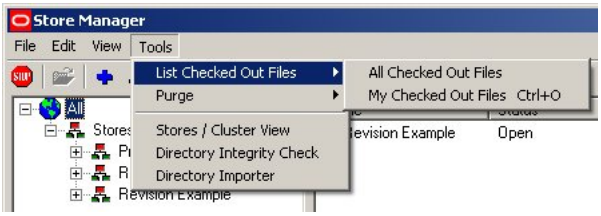
**Effective** is the date at which the file will become current at. (If the file is Current or Historical this date will be greyed out).

**Died** is the date at which the file has lost or will lose current status.

(This date will be in the future if the file has *Current* status, and in the past if it has *Historical* Status).

## List checked out files

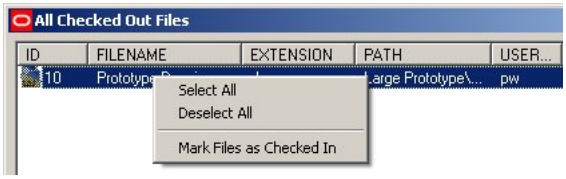
**When a file is being amended or updated**, it is not available for other operations within Macro Space Management. Such a file is designated as Checked Out. The List Checked Out Files functions allows the administrator to identify such files.




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.




## The Directory Structure

The directory structure for Store Manager is relatively simple.

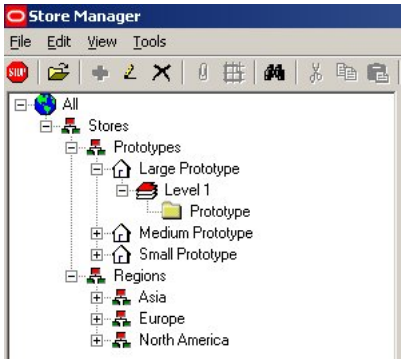
All files emanate from the Store Root.

This Store Root is accessible from the Oracle configuration object. It can be more simply accessed by the View > Options button on the toolbar.

Each level within the hierarchy can store files against itself, (with the exception of File type objects).

The general format of the directory structure is thus Store Root/Cluster/Sub-cluster/Store/Floor/Revision/File.

Note that clusters and sub-clusters will not have a Windows folder associated with them.




This can be seen in the above example where the Store Root contains a Cluster called Stores. This contains a Sub-cluster called Prototypes.

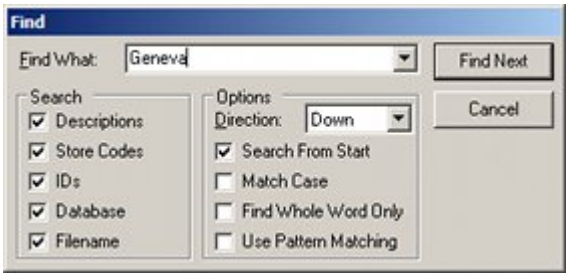
The Prototype cluster contains a Store called Large Prototype, which contains a Level 1 Floor. This Floor has a Revision called Prototype.

**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.

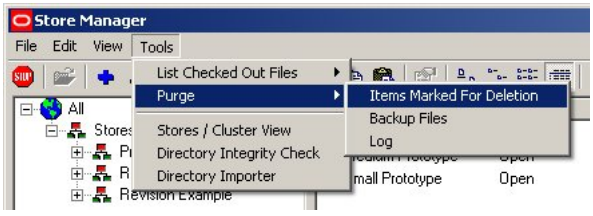



The search function in Store Manager performs an *in-string* search and does not support wild-cards. It will thus only return exact matches.

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

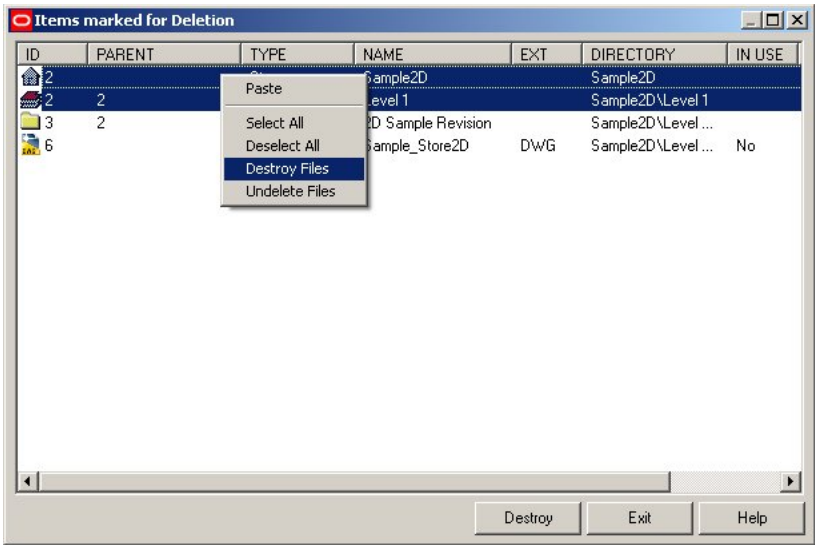
## Purging Files

Using the **Purge File** option allows the PERMANENT removal of varying types of files from Store Manager. Purged files cannot be recovered, so care should be taken to ensure that the files to be purged are no longer required.



### Purging Items Marked for Deletion

This option allows various operations to be carried out on files deleted from the Store Manager file structure. The available functions can be accessed by right clicking the mouse.




**Select All** selects all the files chosen for deletion.

**De-select All** un-checks all files marked for deletion.

**Individual files** can be selected by left clicking on them with the mouse, while groups of files can be selected by left clicking with the mouse in conjunction with the <Shift> or <Control> keys.

**Destroy Files** removes all files that have been selected for deletion.

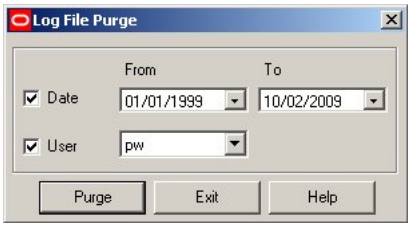
**Undelete Files** restores deleted files to their original place within the Store Manager file structure.

### Purging .BAK files

When Planner modifies a file it saves the modified file with the file extension .DWG. The old file is saved with the file extension .BAK. Because Planner files are large, these .BAK files can occupy a considerable amount of server or hard disc space. Purging the files frees up this space.

### 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.



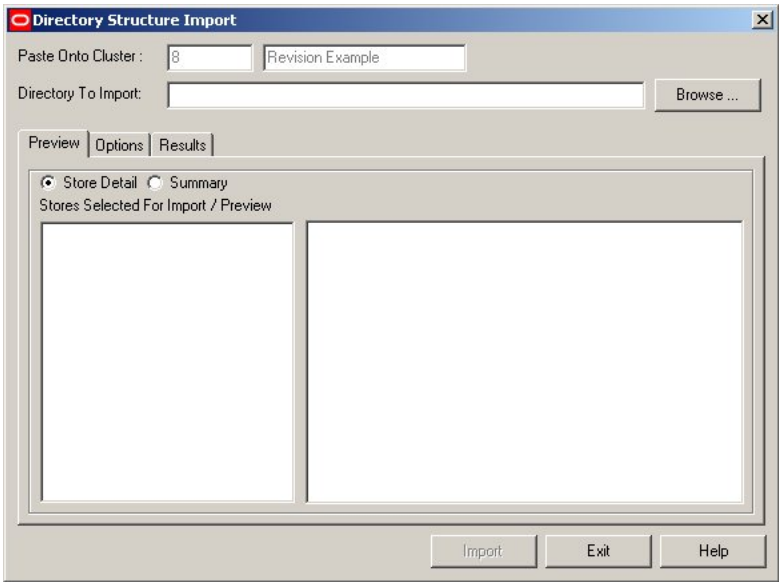
## Importing directories

The **Import Directory** option allows files to be imported into the Store Manager file structure and corresponding entries to be made in the Store Manager file structure.

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.

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.




Conformation of the cluster which the data is to be imported into will be found at the top of this box.

Clicking on the browse button will bring up a further dialogue box, allowing selection of the required group of files. When the files have been selected, a list will appear in the preview pane of the Directory Structure Import box. This list can be seen either in summary or detailed form.

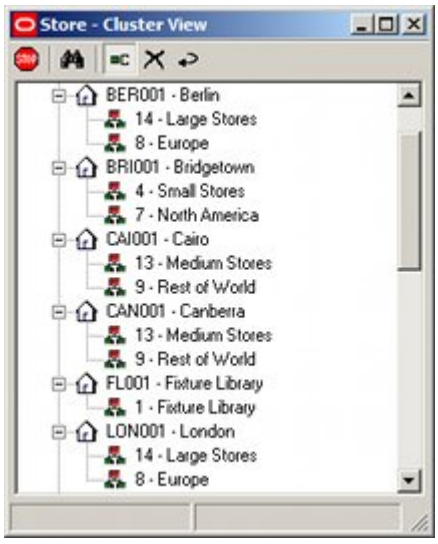



The Options tab in the Directory Structure Import box allows unwanted file extensions from the files to be imported to be specified. This allows the import of BAK, (back-up version of Planner drawing), LOG, (log files), and MDB, (Access database) to be prevented.

After the files have been imported the results can be seen in the Results tab of the Directory Structure Import. Any problems will be flagged for attention.

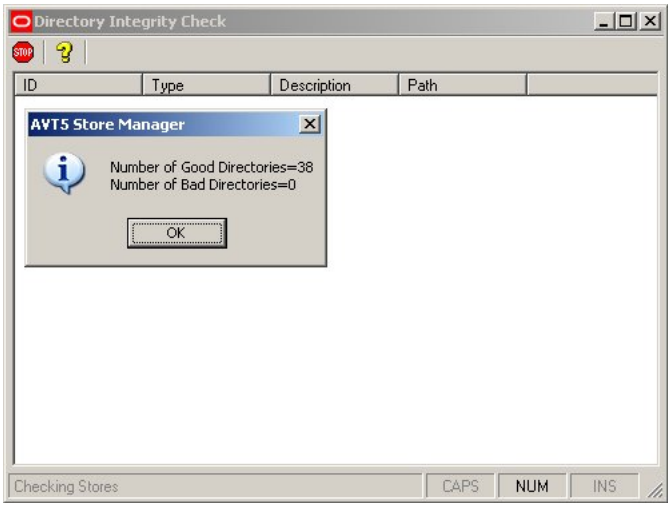
## Store/Cluster view

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.




## 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.

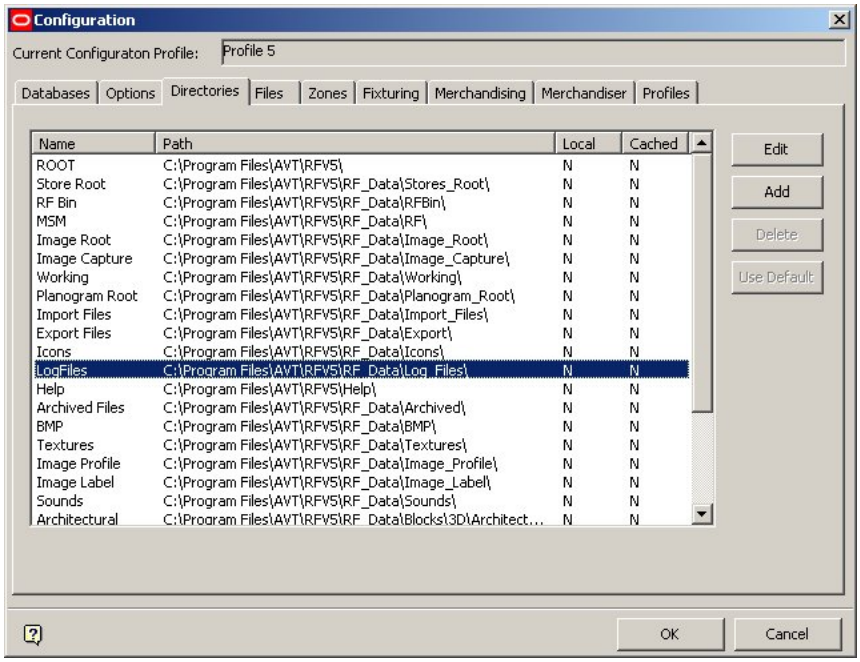
The **Description** is the name given to the object.

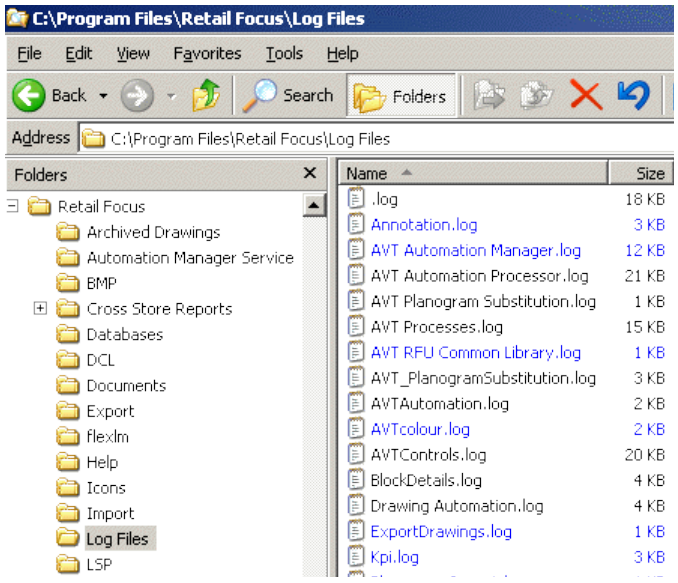
The **Path** is the path in the directory structure to the designated object.

## 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 Configuration Module.




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

# Update Status

## Ways of Running UpdateStatus.exe

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.

### 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.

### Through Windows Scheduler

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

### Through other Batch Scheduling Tools

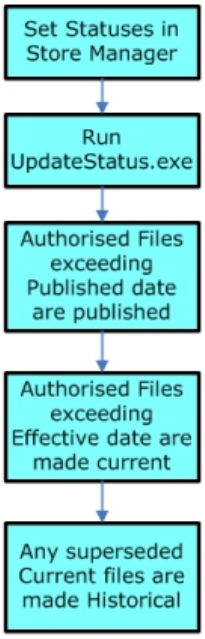
UpdateStatus.exe can also be run though more advanced batch scheduling tools.

## How UpdateStatus.exe Operates

**To use UpdateStatus.exe** the statuses of the required files and revisions are changed in Store Manager.

When files are set to Authorized they require a published and an effective date.

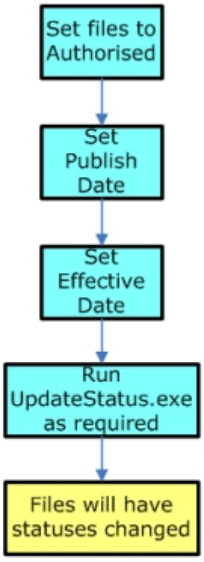
When UpdateStatus.exe is run it changes the status of files and revisions accordingly.




- Any file with a Publish date set to a date before the date UpdateStatus.exe is run will be published.
- Any file with an Effective date set to a date before the date UpdateStatus.exe is run will be made current.

## Using UpdateStatus.exe

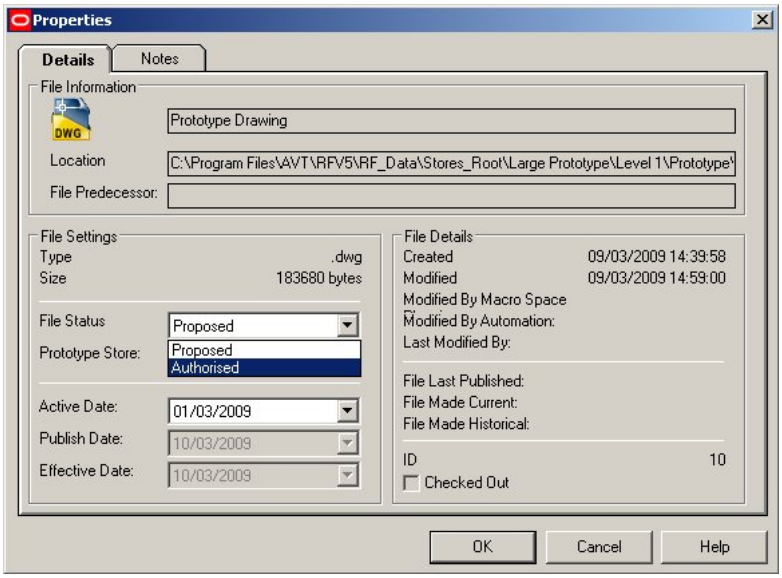
To use UpdateStatus.exe the following actions are required.



### Set Files to Authorized

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

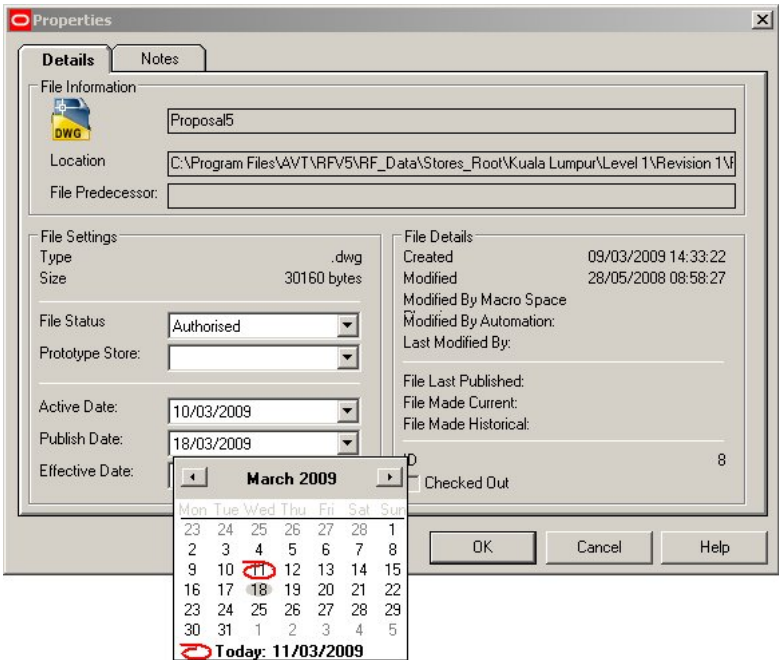
Set the File Status to Authorized from the drop down list.




### Set Publish Date

The Publish Date is the date at which the drawing will be sent to the requisite store to allow the store to begin preparations for implementing it. The Publish Date is generally set a week or two ahead of the Effective Date.

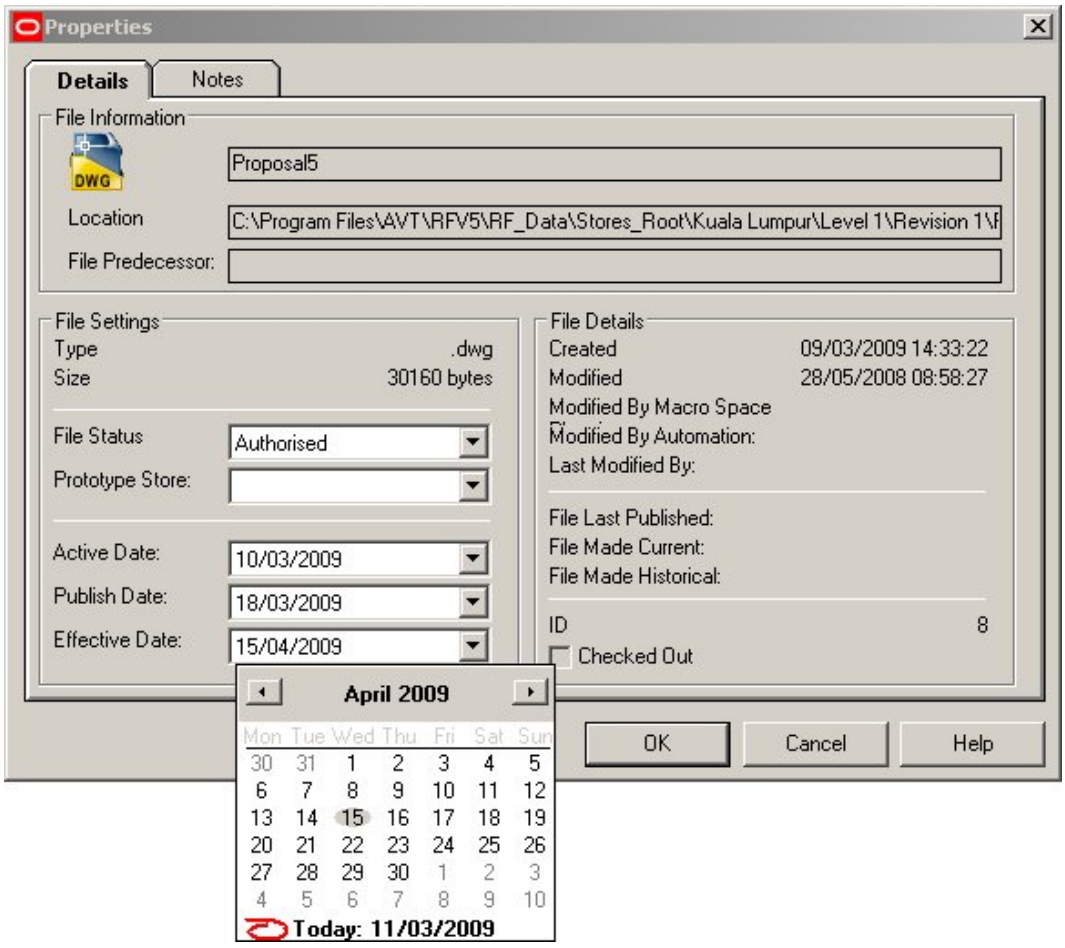
The Publish Date can be set using the drop down calendar.



### Set Effective Date

The Effective Date is the date at which the drawing becomes Current - i.e. is put into effect in the store.

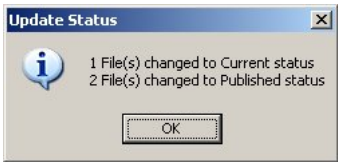
The Effective Date can be set using the drop down calendar.




### Run UpdateStatus.exe

This can be run either via Automaton Manager or by going to the appropriate directory and double clicking on UpdateStatus.exe to run it directly.

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




### Changed File Statuses

UpdateStatus.exe will publish all files with a Publish Date before the date Update Status.exe is run.

It will make all files Current with en Effective Date before the date Update Status.exe is run.

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

## 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 files within the Revision have their status changed.

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

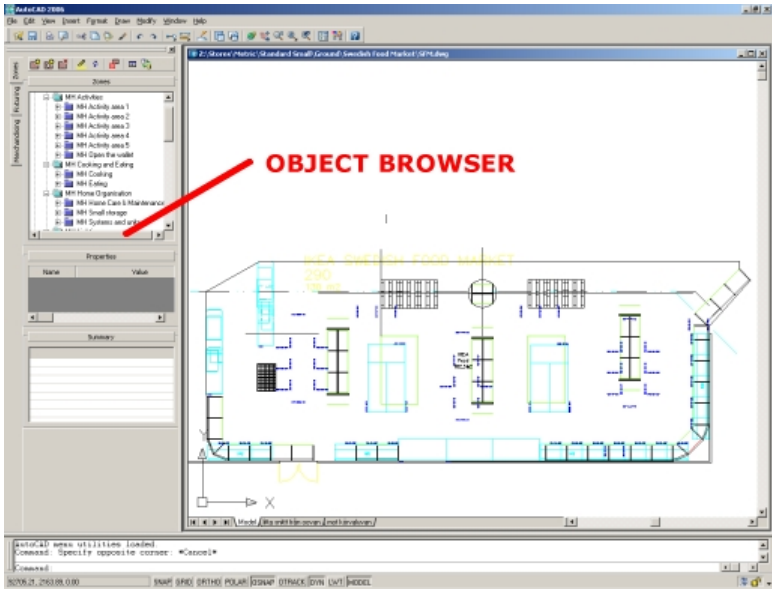
# 4

# The Object Browser

## About the Object Browser

The **Object Browser** is a separate and closable window. It 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).

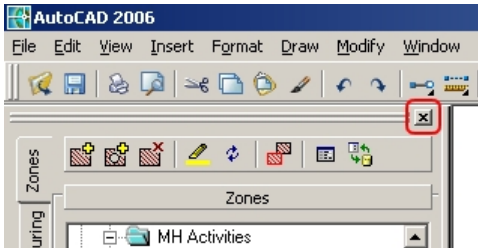
It is found in both the Planner and Merchandiser environments and is used to control the various activities within those environments.



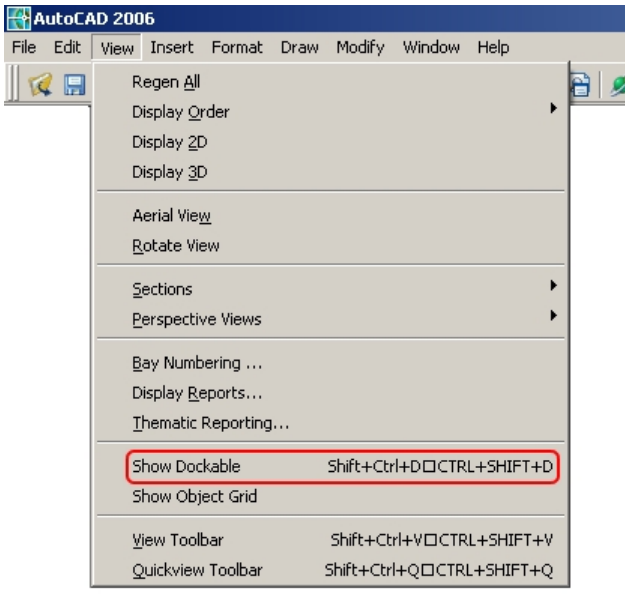

| | Planner Environment | Merchandiser Environment |
|---|---|---|
| **Zones** | Yes | Yes |
| **Fixturing** | Yes | Yes |
| **Merchandising** | Yes | Yes |
| **KPI's** | No | Yes |

## Turning off and accessing the Object Browser

The **Object Browser** can be turned off by clicking on the 'x' in the upper right corner.

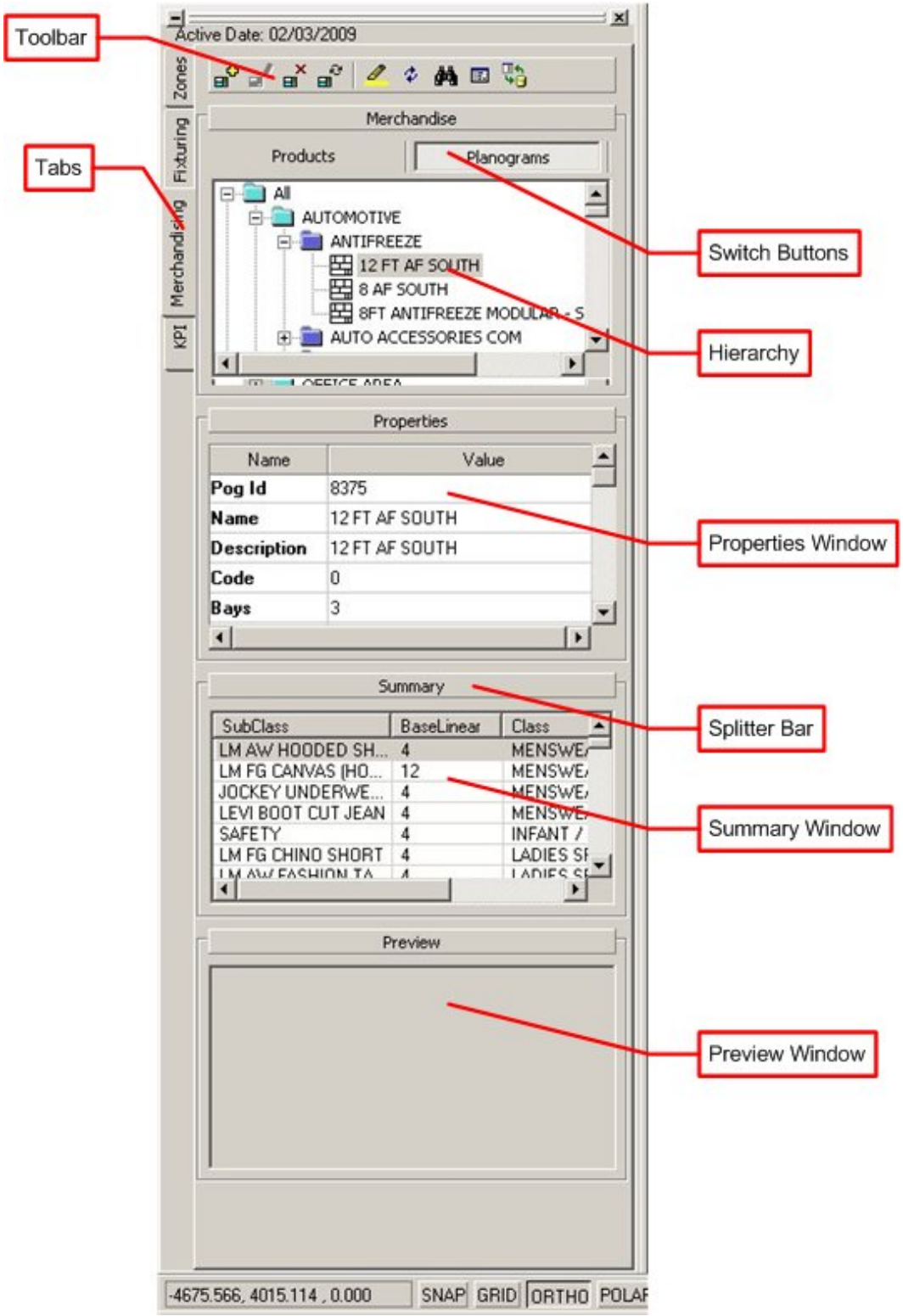


The Object Browser can be opened by selecting the Show Object Browser option on the View drop down menu.



## Overview of the Object Browser

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 **Switch Buttons**.

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**.

## A Note on the Refresh Option

All the toolbars in the various Object Browser tabs contain a Refresh option.



If clicked, it will update the hierarchies in that particular tab with the latest information from the central Macro Space Management database.

One the hierarchies have been refreshed, the latest information from the database can be incorporated in the drawing.

For example, once the refresh button has been used in the Fixturing tab, the hierarchies will contain the most recent fixture and gondola information for insertion into the drawing.

This allows a user to update these definitions in Fixture Studio then make them immediately available within Merchandiser.

> **Note:** In this instance, if the drawing is already open then fixtures already placed in the drawing will not use any changes loaded in the refresh operation until the drawing is closed and re-opened.

However, all new fixtures and gondolas added to the open drawing will use the new data.

# Changing the Object Browsers Position

## Opening and Closing the Object Browser

The Object Browser is open by default the first time a user logs in to Macro Space Management. There are two ways to close the Object Browser.

- Press the button at the top right of the Object Browser
- Right click the double bar on the Object Browser and click the Close option

There are two ways to open the Object Browser.

- Use the View – Show Object Browser menu option
- Use <Ctrl> +<Shift> +<D> keyboard shortcut

## Moving the Object Browser

### Overview

The Object browser behaves slightly differently in the Planner and Merchandiser environments.

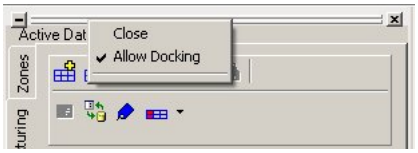
In the Planner environment it can be docked on any side of the screen. It can also be floated. In the merchandiser environment it can be docked on any side of the screen, but not floated.

### Planner

By default the Object Browser is docked on the left-hand side of the screen the first time a user logs in to The Planner Module. The Object Browser can be moved to dock on any of the four sides of the screen. To move the Object Browser, click and hold the double bar on the Object Browser and drag to it to a new position.

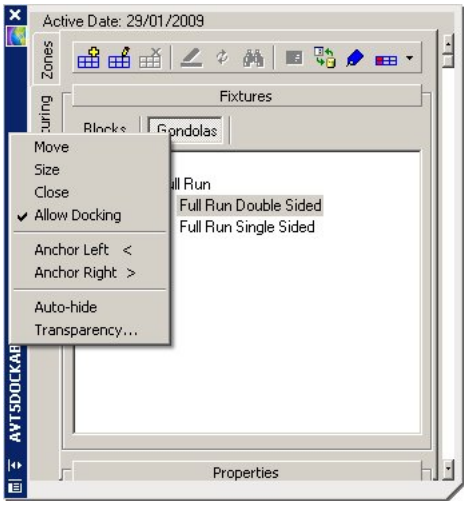
The Object Browser can also be un-docked or float on the screen. This can be done in two ways.

- Right click the double bar on the Object Browser and deselect the Allow Docking option
- Click and hold the double bar on the Object Browser and drag it to the middle of the screen



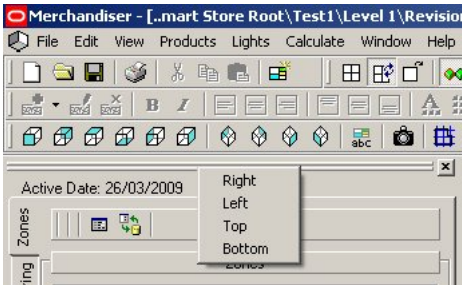

When the Object browser is floating it can be minimized to save space while still leaving it visible on the screen.

The Object Browser can be re-docked by right clicking the title bar on the left and selecting Allow Docking. Then drag the Object Browser to the side of the screen where you want to dock it.




#### Merchandiser

By default, the Object Browser is docked on the left-hand side of the screen the first time a user logs in to the Planner module. The Object Browser can be moved to dock on any of the four sides of the screen. To do this, right click on the double bar at the top and select the required location.



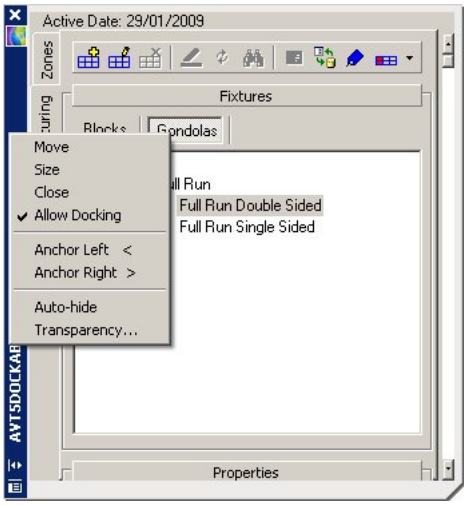

### Adjusting the Object Browser

The width of the Object Browser can be adjusted by moving the mouse cursor to the right-hand edge and dragging the mouse to the desired width. Also, the windows displayed on the Object Browser can be minimized by clicking on the title buttons at the top of each window.

### Anchoring the Object Browser

#### (Planner Module Only)

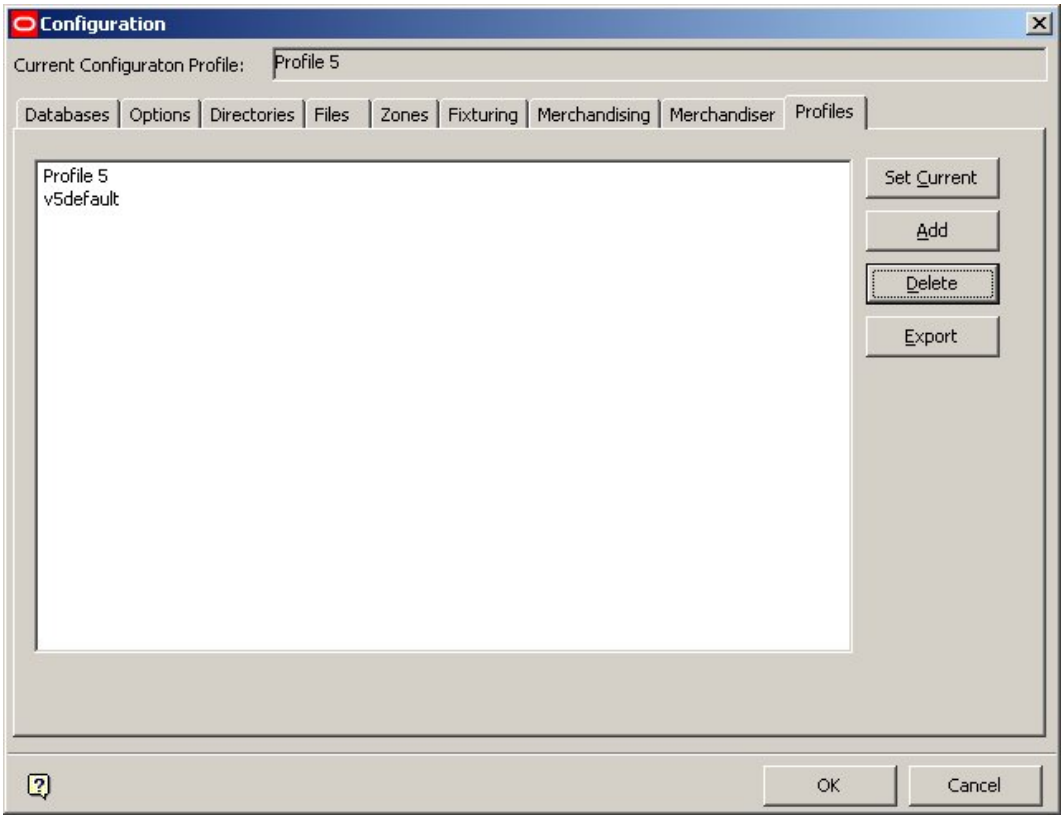
The Object Browser can also be anchored on the left or right side of the AutoCAD window. By anchoring the Object Browser it remains on screen, but in a minimized state, which allows you to bring it back up when needed. This also helps to increase the amount of visible drawing area. This can be done from the right click menu.




## Saving Settings for the Object Browser

**Settings for the Object Browser** are saved by Macro Space Management so if closed, it will re-open in the same state as it was closed by an individual user.

Individual settings are saved to the profile currently selected in the Profiles Tab of the Configuration Module.




Providing this profile remains selected, the Object Browser will open at the same width and height and in the same Tab as when it was closed.

The hierarchy displayed will be that showing when the Object Browser was closed and the information windows will be the same size and open/closed required.

> **Note:** If the user has not used that machine or profile before, then default settings will be used.

Similarly, if the user logs onto another machine, then the settings used will be the same as when the user last used that machine.

# Zones Tab

## Overview of 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:

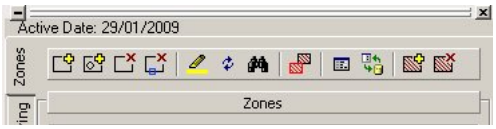
- The Toolbar – provides controls to add, modify, and delete zones from a store plan.
- The Zones Window – shows a hierarchy of available zones.
- The Properties Window – when a Zone is selected from the hierarchy, its properties are visible in this window.
- The Summary Window – shows details of the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

## Zones Tab Toolbar

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 absent.

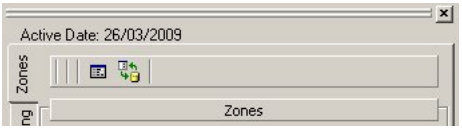
**Planner**




| Icon | Description |
|---|---|
|  | Add Zone |
|  | Add Hole |
|  | Delete all Zones of that type |
|  | Delete selected Zone or Hole |

| Icon | Description |
|---|---|
|  | Highlight Zone in Store Plan |
|  | Highlight Selected zone in Tree |
|  | Detect Clashes |
|  | Options |
|  | Refresh |
|  | Hatch |
|  | Remove Hatch |

**Merchandiser**

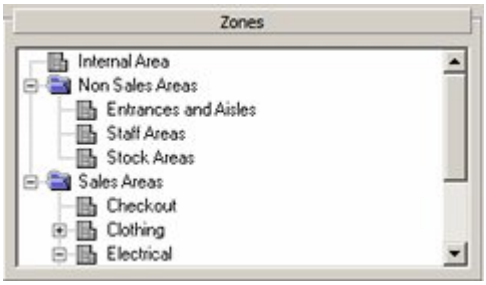



| Icon | Description |
|---|---|
|  | Options |
|  | Refresh |

## The Hierarchy, Properties and Summary Windows

### The Hierarchy Window

The hierarchy window displays the zone hierarchy. This hierarchy is defined in the Admin 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 collapsed by using the minus control next to each item.

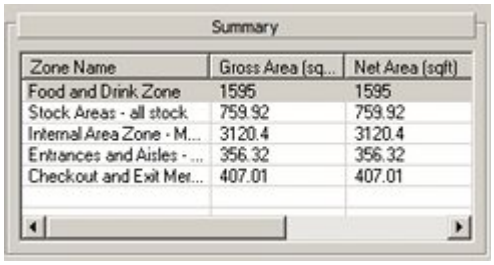
### The Properties Window

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.




# Fixturing Tab

## Overview of Fixturing Tab

The **Fixturing tab** allows users to add fixtures, fittings, gondolas and other equipment to the store plan.

Fixtures and fittings can also be placed one at a time if required. Fixtures, fittings, and other equipment that are placed one at a time are known as blocks.

- Gondolas are a collection of fixtures and fittings that have been designed to be placed in a specific layout. Gondolas can place the correct number of fixtures and fittings for a given size by using a simple control.

The Fixturing tab is divided in to 5 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 a sample picture of the block selected in the block hierarchy

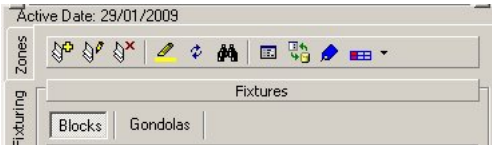
**Note:** In Merchandiser, fixtures can only be added by dragging and dropping from the hierarchy. The Add icon is not active.

## Fixturing Tab Toolbar

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.

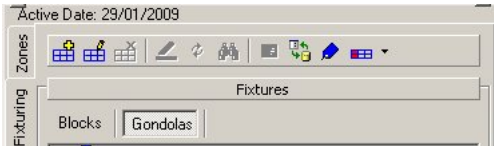
**Fixturing Toolbar**




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

**Note:** The graphics for fixtures are created in the Planner environment.

When editing fixtures; care must be taken that the information held in the central Macro Space Management database continues to reflect the actual details of the graphic. If information in the central database does not match the graphic, then there could be problems with alignment in the VR environment, adjacency calculations, etc.

In case of doubt contact Oracle's Technical Support team.

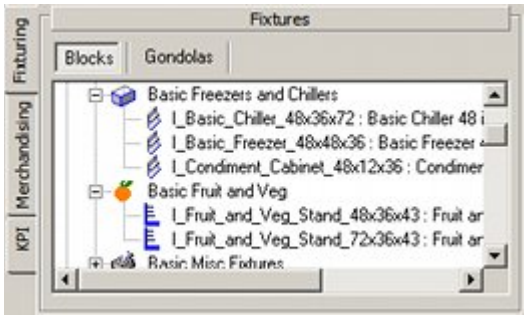
## The Hierarchy, Properties, Summary and Preview Windows

#### 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.

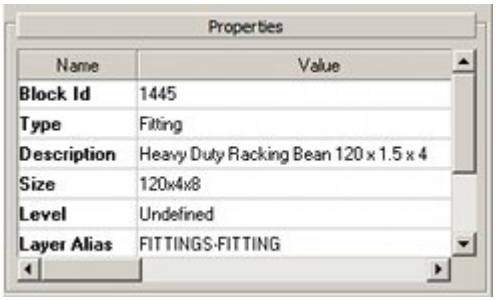
The hierarchy can be expanded using the plus control next to each item on the hierarchy. It can also collapsed by using the minus control next to each item.

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



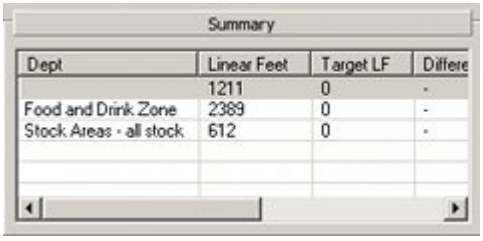

### The Properties Window

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



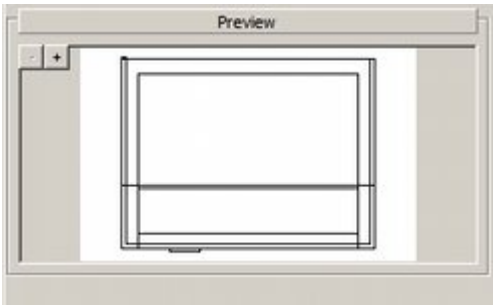

### The Summary Window

The Summary window displays information on the blocks placed in the open store plan. The content of this window is customizable by an Oracle Retail consultant.




### The Preview Window

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

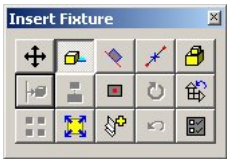



The preview is not updated when the Gondola hierarchy is displayed.

## Placing Fixtures and Gondolas

### Placing Fixtures

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

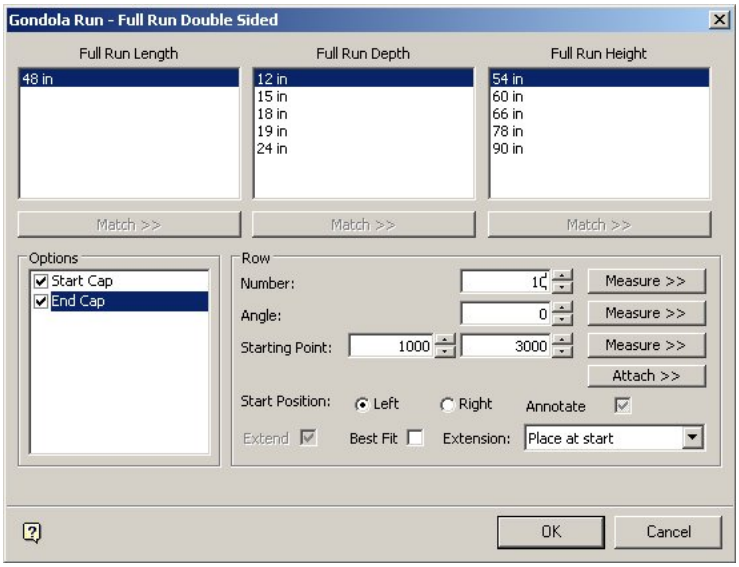
To add a block to the store plan, highlight the required block in the hierarchy then drag and drop the fixture to the store plan drawing.

(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.

# Merchandising Tab

## Overview of 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

## Merchandising Tab Toolbar

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 |

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

| Icon | Action |
|---|---|
|  | Refresh |

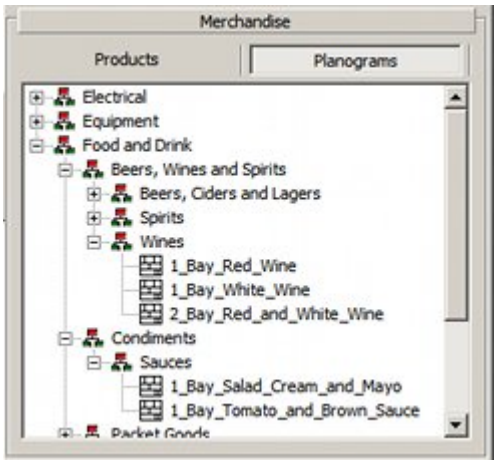
## The Hierarchy, Properties, Summary and Preview Windows

### 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.

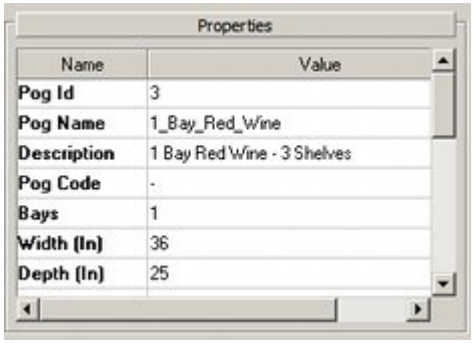
The hierarchy can be expanded using the plus control next to each item on the hierarchy. It can also collapsed by using the minus control next to each item.




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

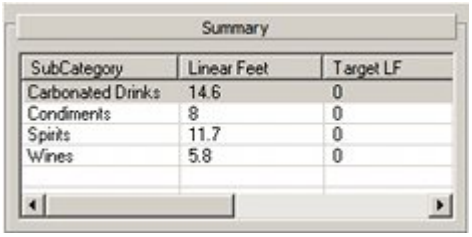
### The Properties Window

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.



#### 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.




#### The Preview Window

The Preview Window will be blank for both Products and Planograms.

# KPI Tab

## Overview of 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 in to 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.

## KPI Tab Toolbar

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 |

| Icon | Description |
|---|---|
|  | 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**



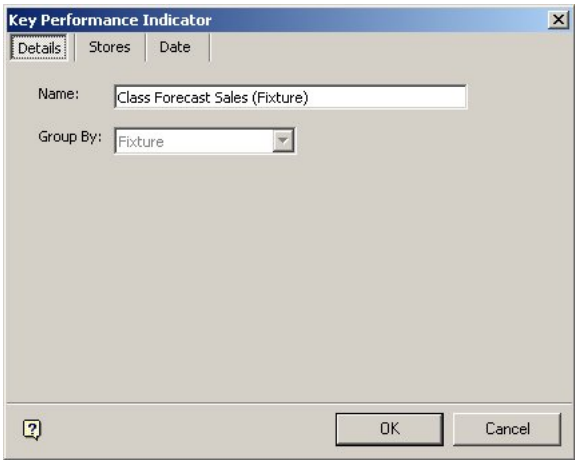
| Icon | Description |
|---|---|
|  | View Data |
|  | Edit KPI in list of those displaying |
|  | Delete KPI from list of those displaying |
|  | Refresh All |

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.

Pressing the **Add KPI** button opens the Key Performance Indicator dialog for the highlighted KPI.

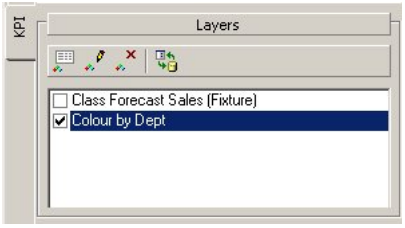


The Details tab shows the name of the selected KPI in the **Name** field. The user can edit this if they wish. This will only change the name that is shown in the Layers section of the KPI tab on the Object Browser and not the name of the KPI definition saved in the database.

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

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.

## Turning Off KPI's




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.

When no KPI's are ticked the store plan view returns to the normal view mode.

## Deleting KPI's

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 only stops the results from being displayed. 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.

# 5

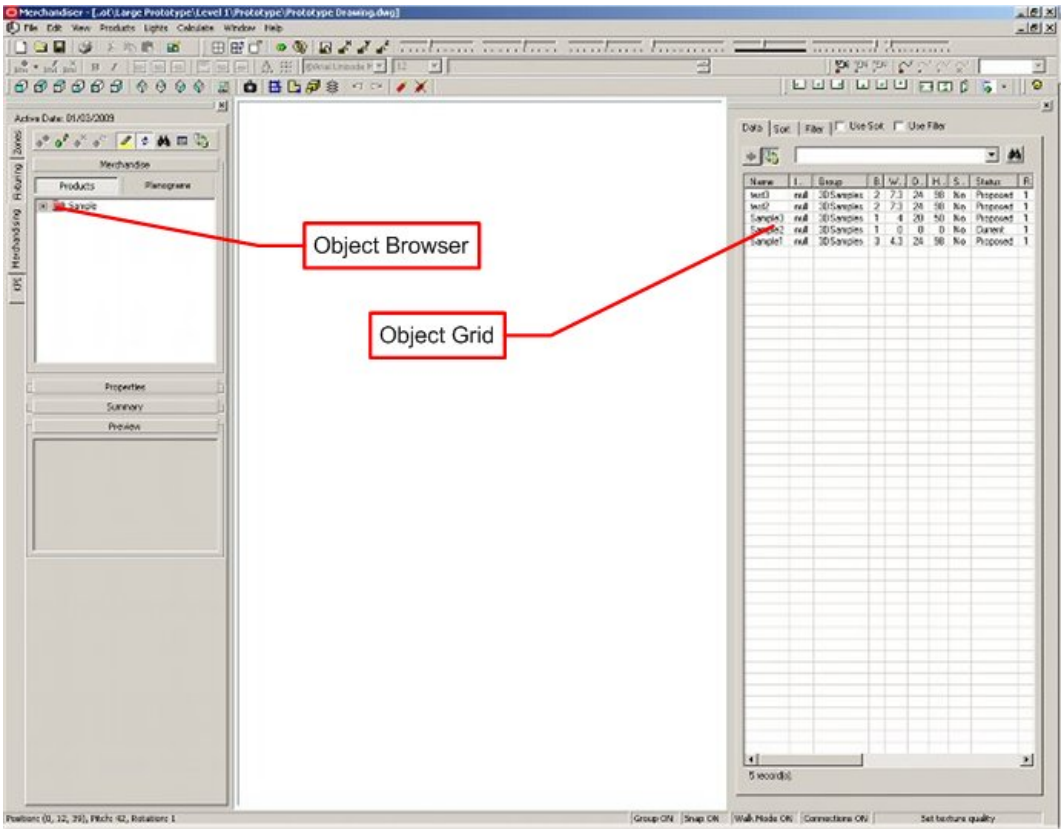
# Object Grid

## Overview of the Object Grid

The **Object Grid** provides an alternative to selecting lower level objects in the Object Browser, including the following:

- Zones
- Fixtures
- Products
- Planograms

It is an Object Browser window that is used in conjunction with the hierarchies visible in the Object Browser and is available in both the Planner and Merchandiser environments.




Information selected from a hierarchy in the Object Browser will appear in the form of a list in the Object Grid.

The higher the level selected in a hierarchy in the Object Browser, the more items that will appear in the list on the Object Grid. For example selecting 'Food' in the Merchandising tab would result in all food product (or planograms) appearing in the Object Grid. Selecting 'Fruit' would restrict the information displayed to just fruit items.

**Note:** The number of items displayed is set to a default maximum of 250 items. This is to prevent the Object Grid having to filter and sort thousands of items each time these operations are carried out.

This default value can be changed - consult Oracle Technical Support for further information.

The user can then soft and filter the data to find the objects they want.

Once the required object has been found it can be added to the drawing by dragging the item from the grid. In the Planner environment it can also be added by clicking the add button. (The Add button is disabled in Planogram Studio).

When an object is added from the grid; that row in the grid will include values and colors.

The object grid contains three tabs:

- Data which will display the actual object data
- Sort which will allow the user to sort the data by multiple columns
- Filter which will allow the user to filter the data by multiple columns

The type of information that is displayed in the grid (as well as the sort and filter panels) is determined by the active panel in the object browser (i.e. zones, fixturing, products or planograms).

The data will be automatically filtered by clicking on a node in the object browser tree; for instance, clicking on a product sub-category will then show all SKUs that are related that sub-category. This automatic filtering will affect the filters on the filter tab, which the user can then modify.

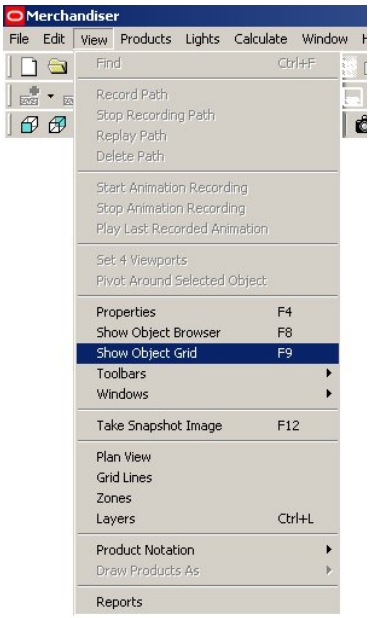
This automatic filtering may only work for the following levels (dependant on the custom SQL):

- Product Department (BA)
- Product Category (RA)
- Product Sub-Category (PA)
- Planogram Group Parent
- Fixture Group Parent
- Zone Group Parent

It will also be possible to trigger a change in the list of displayed products, if a different zone is selected. In this way, the application can restrict which products are placed in which zone.

## Showing and Hiding the Object Grid

The **Object Grid Display** can be turned On or Off using the Object Grid option on the View pull down menu in both the Planner and Merchandiser environments.

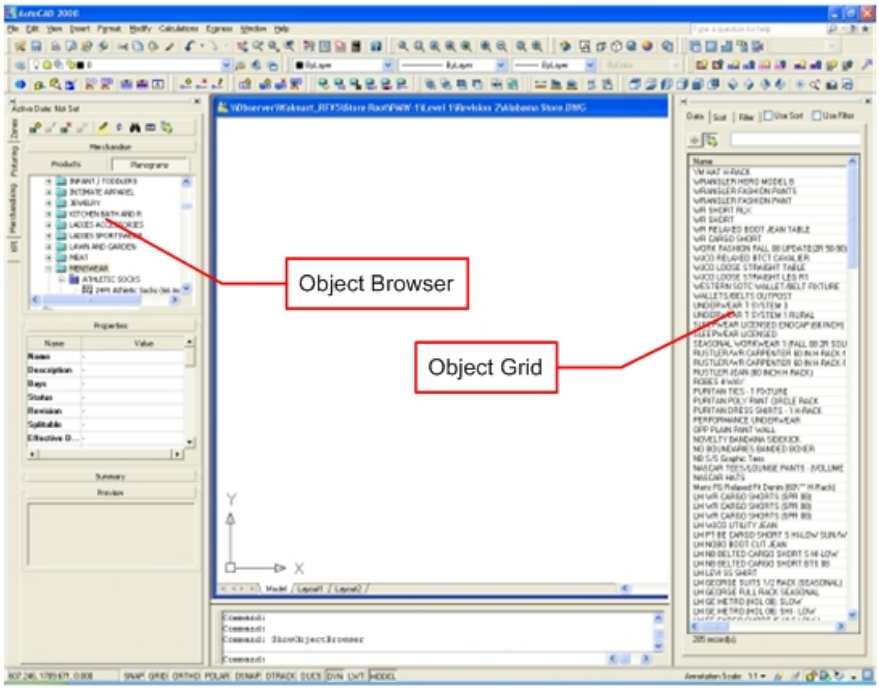



Display can also be toggled On or Off by use of the F9 key.

## Object Grid Functionality

The **Object Grid** provides an alternative to selecting Fixtures and Planograms in the Object Browser.

It is a Object Browser window that is used in conjunction with the hierarchies visible in the Object Browser.



Information selected from a hierarchy in the Object Browser will appear in the form of a list in the Object Grid. The higher the level selected in a hierarchy in the Object Browser, the more items that will appear in the list on the Object Grid.

For example selecting the 'Food' group in the Merchandising tab would result in all food planograms appearing in the Object Grid. Selecting the 'Fruit' group would restrict the information displayed to just fruit items appearing in the Object Grid.

> **Note:** The number of items displayed is set to a default maximum of 250 items.

The user can then sort and filter the data to find the objects they want.

Once the required object has been found it can be added to the drawing by 'dragging and dropping' the item (when using the Merchandiser module) from the grid or by clicking the add button (when using Planner module).

When an object is added from the grid that row in the grid will including values and colors.

The object grid contains three tabs:

- Data Tab which will display the actual object data
- Sort Tab which will allow the user to sort the data by multiple columns
- Filter Tab which will allow the user to filter the data by multiple columns

The type of information that is displayed in the grid (as well as the sort and filter panels) is determined by the active panel in the object browser (i.e. zones, fixturing, products or planograms).

The data will be automatically filtered by clicking on a node in the object browser tree; for instance, clicking on a product sub-category will then show all SKUs that are related that sub-category. This automatic filtering will affect the filters on the filter tab, which the user can then modify.

It is also be possible to trigger a change in the list of displayed products, if a different zone is selected. In this way, the application can restrict which products are placed in which zone.

# Changing the Object Grid's Position

## Opening and Closing the Object Grid

There are two ways to open the Object Grid.

- Use the View – Show Object Grid menu option.
- Use <Ctrl> +<Shift> +<D> keyboard shortcut.

There are two ways to close the Object Grid.

- Press the button at the top right of the Object Grid.
- Right click the double bar on the Object Grid and click the Close option.

## Moving the Object Grid

### Overview

The Object browser behaves slightly differently in the Planner and Merchandiser environments.

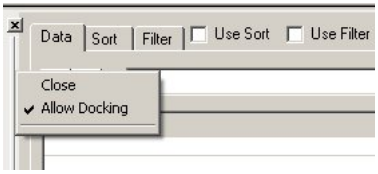
In the Planner environment, it can be docked on any side of the screen. It can also be floated. In the Merchandiser environment it can be docked on any side of the screen, but not floated.

### Planner

By default, the Object Grid is docked on the bottom of the screen the first time a user logs in to Macro Space Management. The Object Grid can be moved to dock on any of the four sides of the screen. To move the Object Grid click and hold the double bar on the Object Grid and drag to it to a new position.

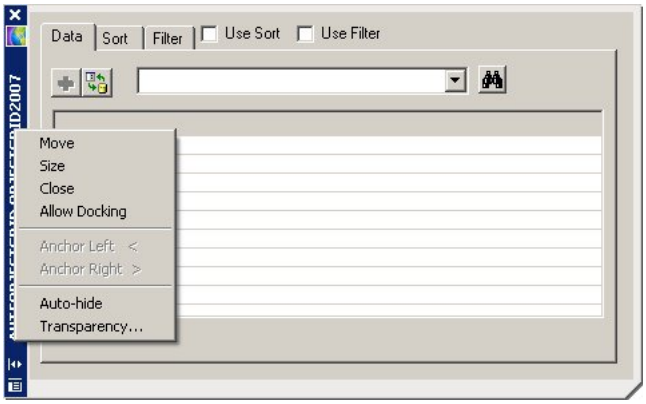
The Object Grid can also be un-docked or float on the screen. This can be done in two ways.

- Right click the double bar on the Object Grid and un-tick the Allow Docking option.
- Click and hold the double bar on the Object Grid and drag it to the middle of the screen.



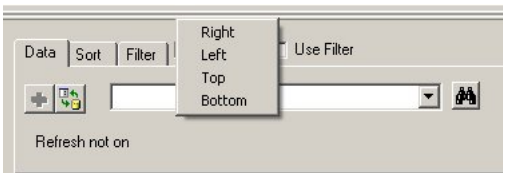

When the Object Grid is floating, it can be minimized to save space while still leaving it visible on the screen.

The Object Grid can be re-docked by right clicking the title bar on the left and selecting Allow Docking. Then drag the Object Grid to the side of the screen where you want to dock it.




### Merchandiser

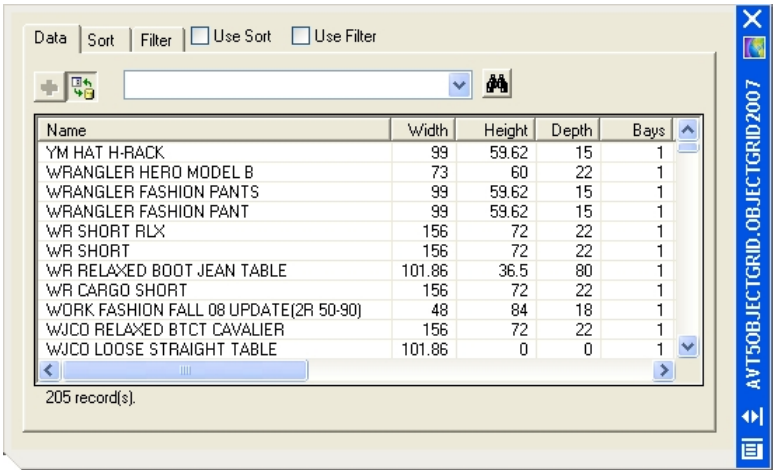
By default, the Object Browser is docked on the left-hand side of the screen the first time a user logs in to the Planner module. The Object Browser can be moved to dock on any of the four sides of the screen. To do this, right click on the double bar and select the required location.



## Anchoring the Object Grid

**(Planner Module only)**

The Object Grid can also be anchored on the left or right side of the AutoCAD window. By anchoring the Object Grid it remains on screen, but in a minimized state, which allows you to bring it back up when needed. This also helps to increase the amount of visible drawing area.




To anchor the Object Grid, press the minus button on the top left. To restore the Object Grid to normal press the Auto-hide button on the title bar of the Object Grid.

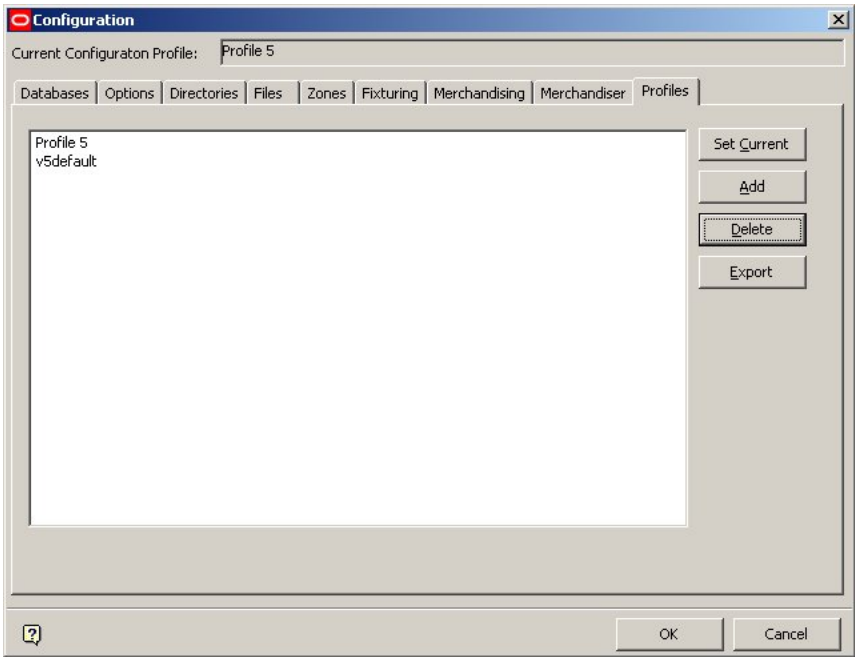
## Adjusting the Object Grid

The width of the Object Grid can be adjusted by moving the mouse cursor to the right-hand edge and dragging the mouse to the desired width. The windows displayed on the Object Grid can be minimized by click on the title buttons at the top of each window.

## Saving Settings for the Object Grid

**Settings for the Object Grid** are saved by Macro Space Management so if closed, it will re-open in the same state as it was closed by an individual user.

Individual settings are saved to the profile currently selected in the Profiles Tab of the Configuration Module.




Providing this profile remains selected, the Object Grid will open at the same width and height and in the same Tab as when it was closed.

When the Object Grid reopens it will open at the Data tab, no matter which tab was selected when the Object Grid was closed. (For example, if closed in the Sort Tab, it will reopen in the Data Tab).

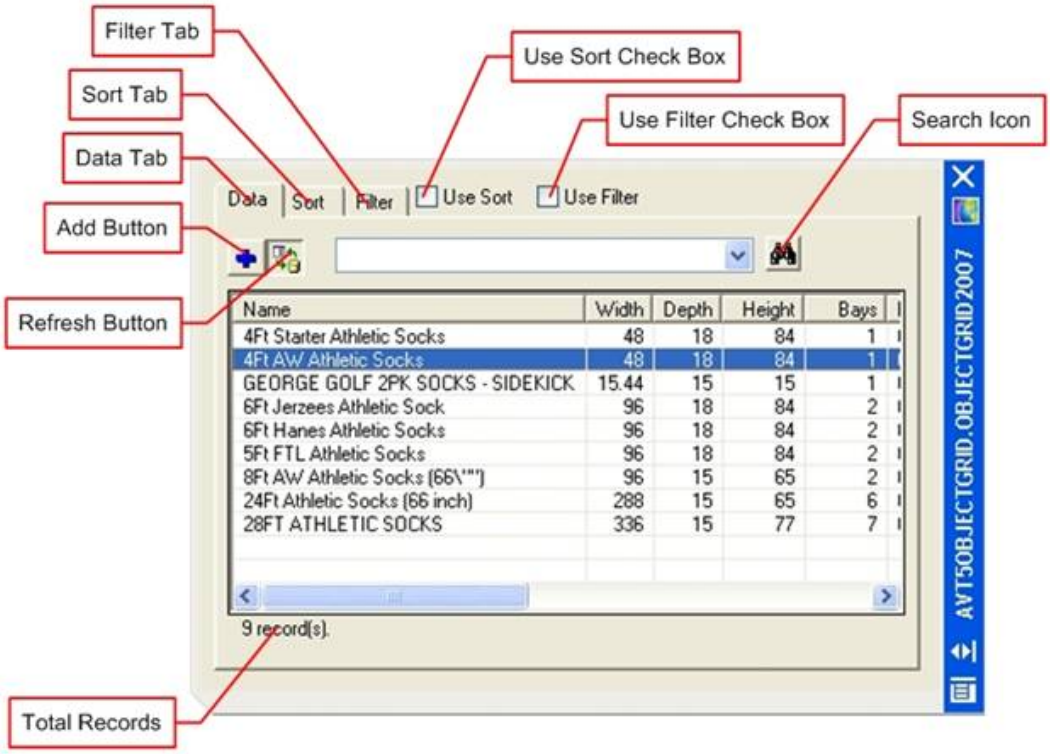
The columns that are respectively visible and hidden within the Object Grid Data panel when the module is closed should reopen in the same state when Object Grid is reopened. The width of the re-opened columns should be the same as when the Object Grid was closed.

> **Note:** If the user has not used that machine or profile before, then default settings will be used.

Similarly, if the user logs onto another machine, then the settings used will be the same as when the user last used that machine.

# Using the Object Grid

The **Object Grid** has a series of controls at the top. These enable the user to determine how it functions.



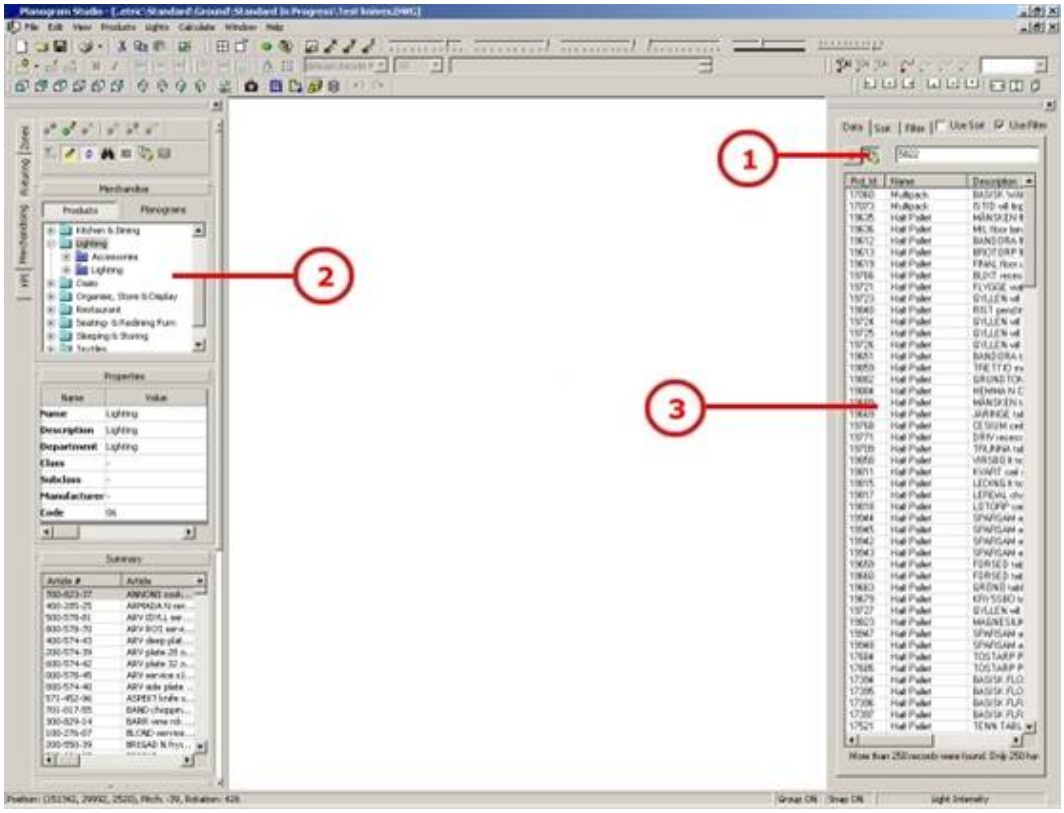

- The Total Records displayed are located at the bottom of the screen.
- The Refresh Button can be toggled on and off. It determines whether data in the Object Grid will be updated if a different point is selected in the current hierarchy in the object Browser.
- The Add Button allows the user to add the currently selected object to the drawing.
- The Data Tab allows the user to see the list of currently selected data.
- The Sort Tab allows the user to set the selected sort sequences into ascending or descending.
- The Filter Tab allows the user to filter the currently selected data.
- The Use Sort checkbox enables the user to toggle sorting On and Off.
- The Use Filter checkbox allows the user to toggle filtering On and Off.
- The Search Icon allows the user to search for specific text strings.

> **Note:** If there are more records than the maximum specified in the software, a warning message will appear at the bottom of the Object Grid as follows.

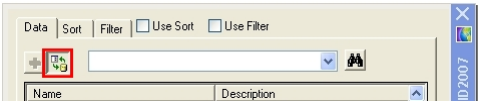
## Selecting Data to Load into the Object Grid

**Data is selected** from the currently selected hierarchy in the Object Browser.

For example, if the products hierarchy is selected in the merchandising tab, then the selected list of products will be loaded into the object grid.




To select a list of products, ensure the Refresh Button on the Object Grid (1) is selected.




Select an appropriate node from the hierarchy in the Object Browser (2) .

The appropriate list of information will appear in the Object Grid (3).

If there are more that the permitted number of entries, a warning will appear at the base of the Object Grid.

## Selecting Objects

> **Note:** Before populating the Object grid, ensure the Refresh button is selected (depressed).

### Fixtures

To populate the Object Grid with Fixtures, go to the Fixtures Tab on the on the Object Browser and highlight a Fixture Group. The Object Grid will populate with all fixtures that have been associated with that group.

### Gondolas

Gondolas cannot be selected using the Object Grid.

### Products

As most merchandising will be done using planograms, the Object Grid will populate with planograms even if a product is selected (down to sub-class level).

This works by identifying all planograms that contain that product.

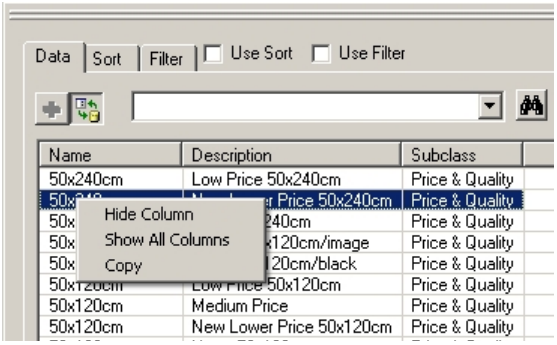
That list of planograms will then be displayed in the Object Grid.

### Planograms

To populate the Object Grid with planograms, select a planogram group in the Object Browser. All planograms associated with that group will then be displayed in the Object Grid.

## Hiding and Changing Order of Columns

**Columns can be hidden** by positioning the mouse cursor over the column you wish to hide, then right clicking to bring up a pop-up menu.

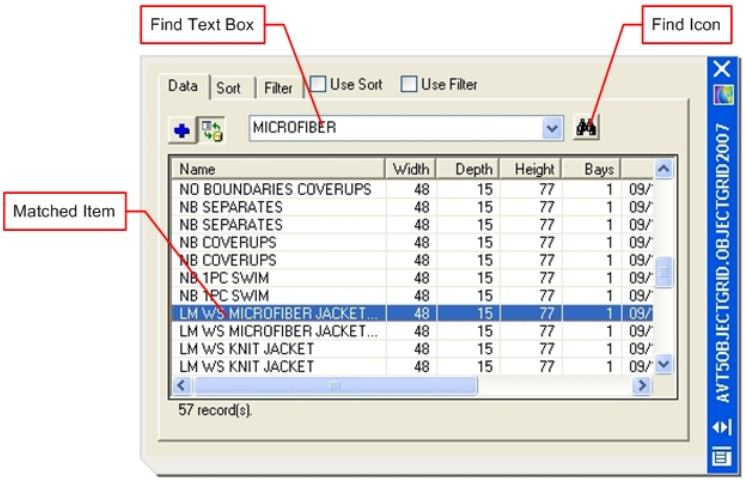



The same pop-up men can be used to show all columns and to copy data from the cell last clicked on by the mouse.

The column order can be changed by positioning the mouse cursor over the requited column heading, holding down the left mouse key and dragging it to its new position. Releasing the mouse key will leave it in its new position.

## Searching for Data

To **search for data**, select the Data Tab.




Type a text string into the Find Text Box. The Search String can include wild cards.

The drop down list in the Find Edit Box will display the last 10 search criteria, allowing the user to revert back to previous searches. The user will also be able to use <Ctrl + X>, <Ctrl + C> and <Ctrl + V> to cut, copy and paste date between the Windows clipboard and the Find Edit Box.

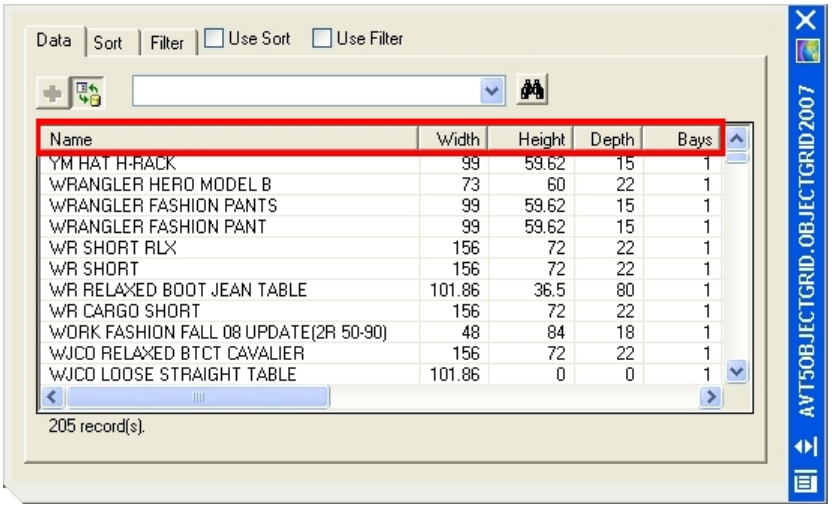
Click on the Find Icon - the first matched item will appear highlighted in the list of objects. Successive clicks on the Search Icon will bring up further matches.

When the list of matches has been exhausted (or if there are no matches) then a warning dialog will appear.




## Sorting Data using Column Headers

**Data can be sorted** into ascending or descending order by clicking on the column headers.




The first click will sort in ascending order. A second click will reverse the sort sequence.

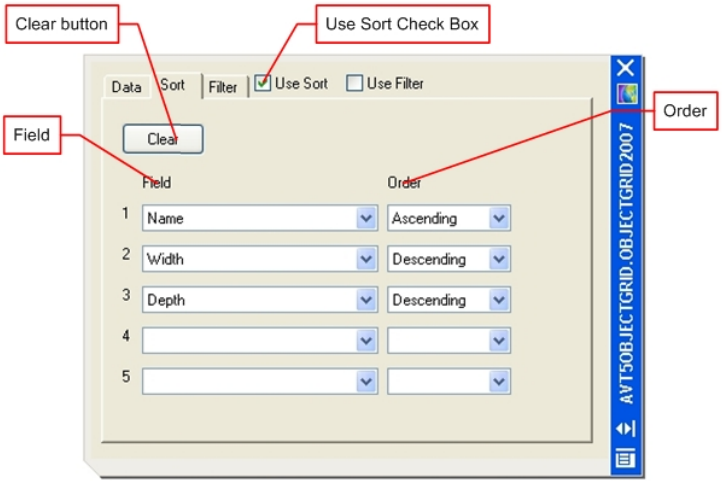
If data is sorted in this way, the Use Sort check box will be automatically cleared.

The column alignment depends on the data type.

| Data Type | Alignment |
|---|---|
| Boolean | Center |
| Date | Center |
| Numeric | Right |
| Text | Left |

## Sorting Data

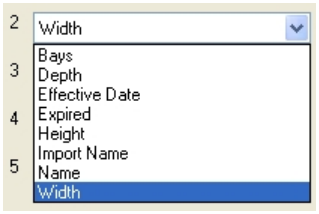
**Data can be sorted** in the Sort Tab.




For Sorting to be enabled, the Use Sort checkbox must be enabled. (If the user sorts the data in the data tab by clicking on a column header, this will automatically clear the Use Sort checkbox.)

Select the required Field from the drop down list.

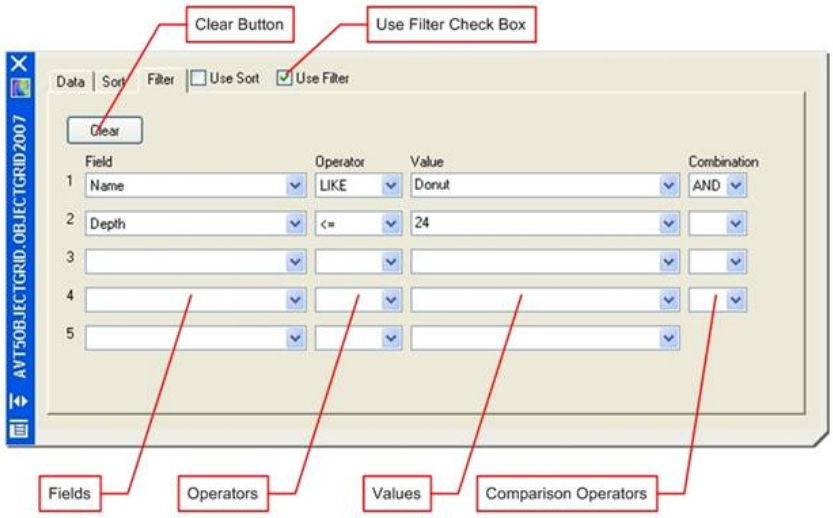
The sequence fields can be Ordered in is set by the drop down list.




Settings can be removed by clicking on the Clear button.

## Filtering Data

**Data can be filtered** by clicking on the Filter Tab.



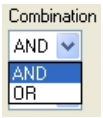
For Filtering to be enabled the Use Filter checkbox must be selected.

The Field to be filtered can be selected from a drop down list. The available fields will include those from any columns that have been hidden.

The Operator to be used for filtering is also selected from a drop down list. Operators include =, <>, <, <=, >, >=, IN, NOT IN, LIKE, NOT LIKE.

A value can be typed into the Value text box. The effect this has will depend on the filter operator selected.

The Combination drop down list can be set to AND or OR.

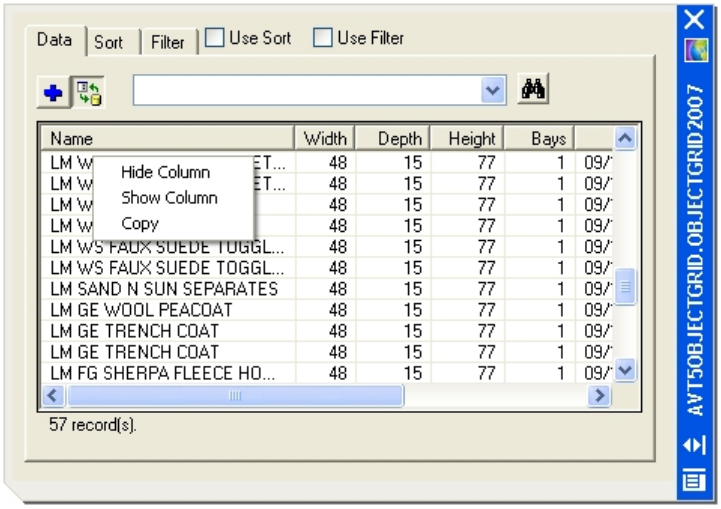



AND means all the conditions specified have to be satisfied for a filtered object to be selected. OR means that if either of the conditions specified met are specified, a filtered object will be selected.

## Working with Columns

There are two actions that can be carried out with columns in the Object Grid; showing/hiding column and changing the column order.

Columns can be hidden by positioning the mouse cursor over the column you wish to hide, then right clicking to bring up a pop-up menu.




The same pop-up men can be used to show all columns and to copy data from the cell last clicked on by the mouse.

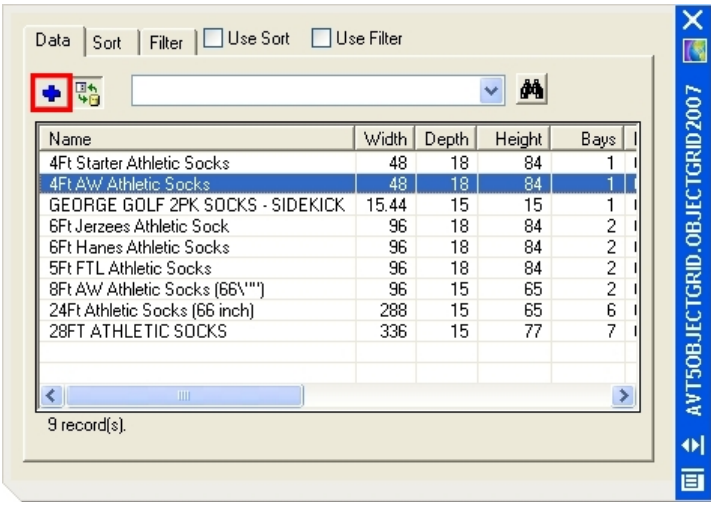
The column order can be changed by positioning the mouse cursor over the requited column heading, holding down the left mouse key and dragging it to its new position. Releasing the mouse key will leave it in its new position.

## Adding an Object to the Drawing

### Planner Environment

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.

## Technicalities

### Colored Rows

The data is selected from the database by custom SQL.

If the custom SQL includes a column named RGB, then the row will be colored using the value in the column.

This will allow certain rows to be highlighted, which could be used indicate high performing products or planograms, or simply indicate which products have already been placed.

Contact **Oracle Technical Support** for more information.

### Cut, Edit and Paste

To **cut data,** highlight it and use <Ctrl + X>.

To **copy data**, highlight it and use <Ctrl + C>.

To **paste** previously selected data, position the cursor where you want the text to appear and use <Ctrl + V>.

### Examples of Combinations

The effect of multiple filters depends on whether AND or OR is selected.

Class = Tinned Goods AND Description = Beans will find all tinned goods with a description of 'beans'.

Class = Tinned Goods OR Description = Beans will find all tinned goods. It will also find any item with a description of 'beans'. (This could include dried beans in plastic packaging).

Use of AND will normally give a more specific result than OR.

### Operators

**Operators** are used to select or filter data.

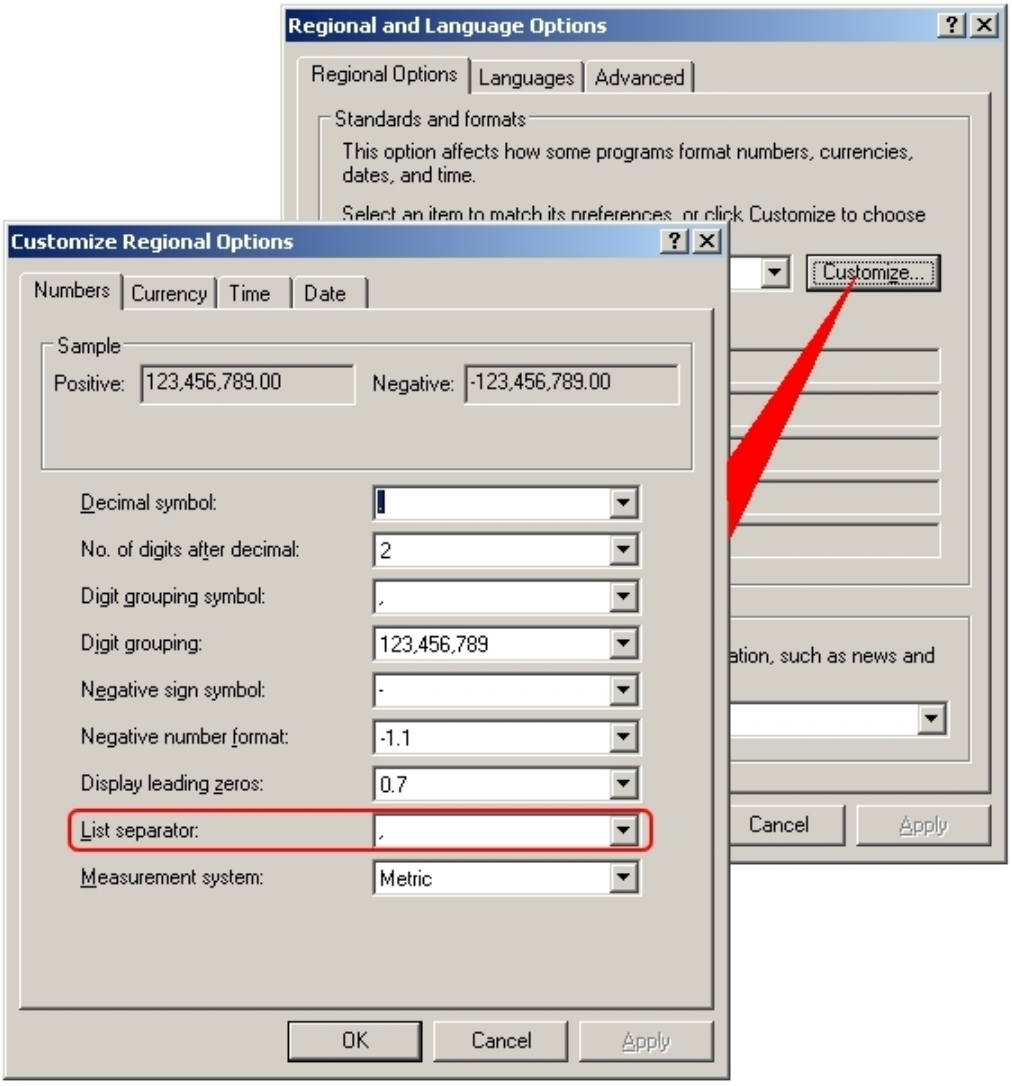
Which operators can be used depend on the type of data to be filtered.

| Comparison | Means | Boolean | Numeric | Text | Date |
|---|---|---|---|---|---|
| = | Equal to | x | x | x | x |
| <> | Not equal to | x | x | x | x |
| < | Less than | | x | x | x |
| <= | Less than or equal to | | x | x | x |
| > | Greater than | | x | x | x |
| >= | Greater than or equal to | | x | x | x |
| IN | | | x | x | x |
| NOT IN | | | x | x | x |
| LIKE | | | | x | |
| NOT LIKE | | | | x | |

In the case where the LIKE operator is used, it will assume wild cards (*Value*) unless the user defines them explicitly.

In the case where the IN operator is used, the user will separate the values using a space or the Operating System locale setting for the list separator.

The Operating System locale setting can be found by going to the Windows control panel and selecting the Regional and Language Option.




Clicking on the Customise button in the Regional and Language Options dialogue box brings up the Customise Regional Options dialogue box.

This shows the current setting for the List Separator.

### Wild cards

A **wild card** character can be used to substitute for any other character or characters in a search string.

The asterisk (*) substitutes as a wild card for any number of characters.

The question mark (?) substitutes as a wild card for any single character.

The hash mark (#) substitutes for any single number.

**Examples:**

Beans 50g will find an exact match.

Beans* will find Beans 50g, Beans 100g, Beans - Special, Beans - barbecue, etc.

Be??? will find Beans and Beers.

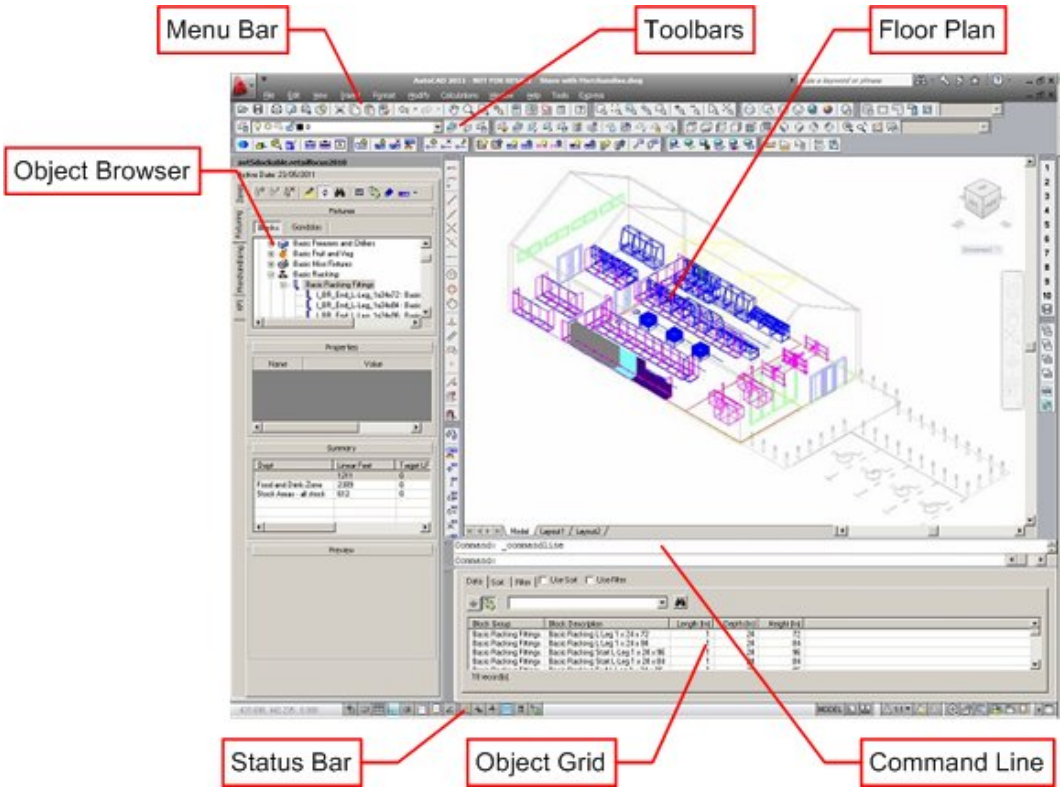
Beans ##? will find Beans 50g, Beans 75g, etc.

# 6

# Planner Module

## 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.

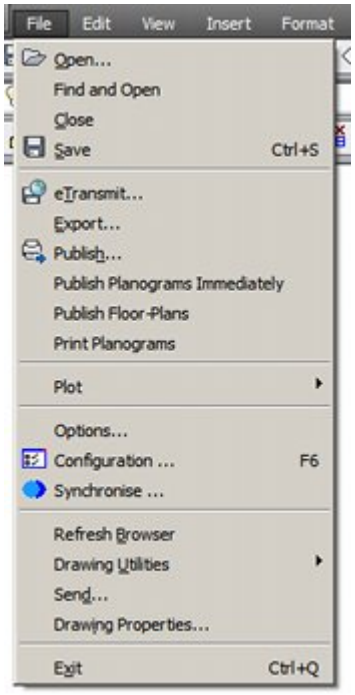
**Floor Plan** - the currently active representation of a floor within a specific store.

## 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.



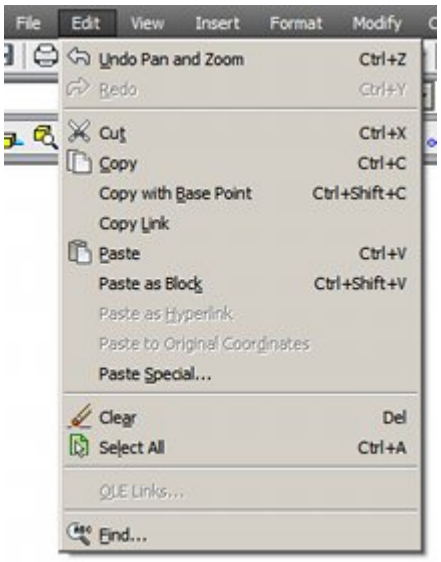

| Functionality | Source | Comment |
|---|---|---|
| Open | Macro Space Management | Opens Store Manager |
| Close | Macro Space Management | Closes the current drawing |
| Save | Macro Space Management | Saves the current drawing |
| eTransmit | AutoCAD | See AutoCAD Help File for further information. |
| 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.



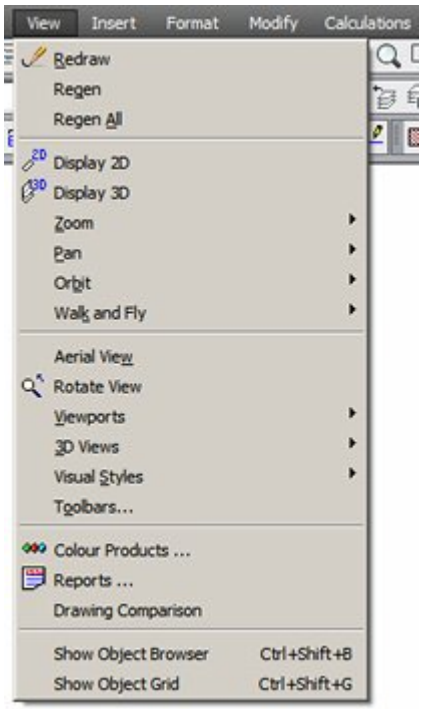

| Functionality | Source | Comment |
|---|---|---|
| Undo | Macro Space Management | Allows the last command(s) to be undone. (The exact text will vary depending on what the last executed command was). |
| Redo | Macro Space Management | Allows the last command(s) to be undone. (The exact text will vary depending on what the last executed command was). |
| Cut | AutoCAD | See AutoCAD Help File for further information. |

| Functionality | Source | Comment |
|---|---|---|
| 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.



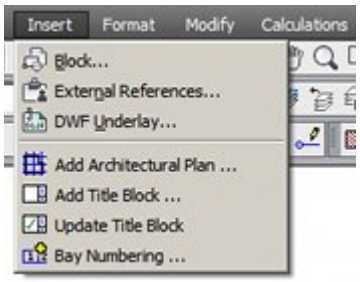

| Functionality | Source | Comment |
|---|---|---|
| Redraw | AutoCAD | See AutoCAD Help File for further information. |
| Regen | AutoCAD | See AutoCAD Help File for further information. |
| Regen All | AutoCAD | See AutoCAD Help File for further information. |
| Display 2D | Macro Space Management | 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. |
| Color Products | Macro Space Management | Allows products be to colored according to their general type. |

| Functionality | Source | Comment |
|---|---|---|
| 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 other 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. |
| 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.

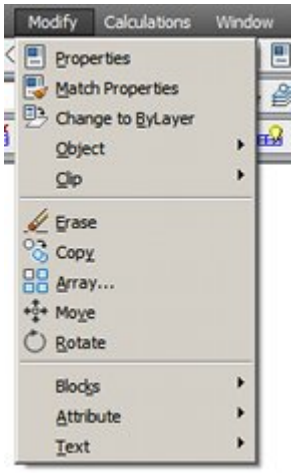



| Functionality | Source | Comment |
|---|---|---|
| Layer Aliases | Macro Space Management & AutoCAD | Calls a mixture of Macro Space Management and AutoCAD functionality. |
| Layer | AutoCAD | See AutoCAD Help File for further information. |
| Layer States Manager | AutoCAD | See AutoCAD Help File 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.

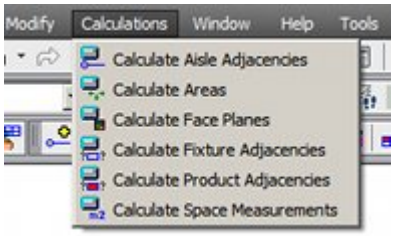
> **Note:** This section of the help file refers to the Modify menu associated with the 2008 version of AutoCAD. Users using earlier versions of AutoCAD may find a slightly different menu.




| 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. |

### The Calculations Menu

The **Calculations Menu** enables users to initiate varying calculations that write data into the central Macro Space Planning database.

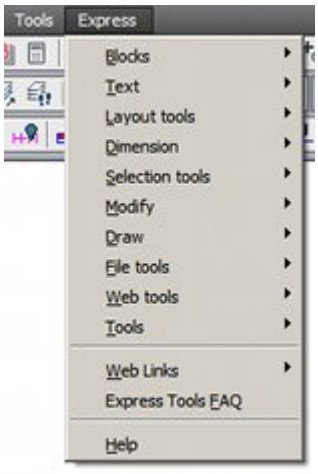



None of the functionality accessed from this menu is AutoCAD functionality.

### The Express Menu

The **Express Menu** provides quick access to commonly used AutoCAD functionality.

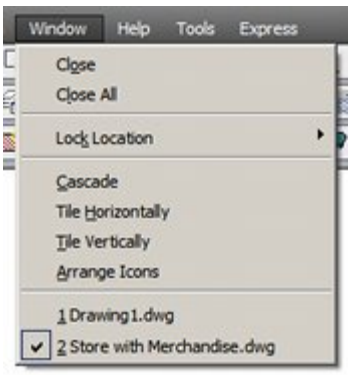
> **Note:** This section of the help file refers to the Express menu associated with the 2008 version of AutoCAD. Users using earlier versions of AutoCAD may find a slightly different menu.




### 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.

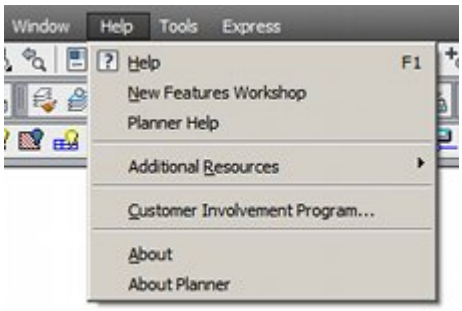



All functionality in this menu is AutoCAD functionality.

### 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.

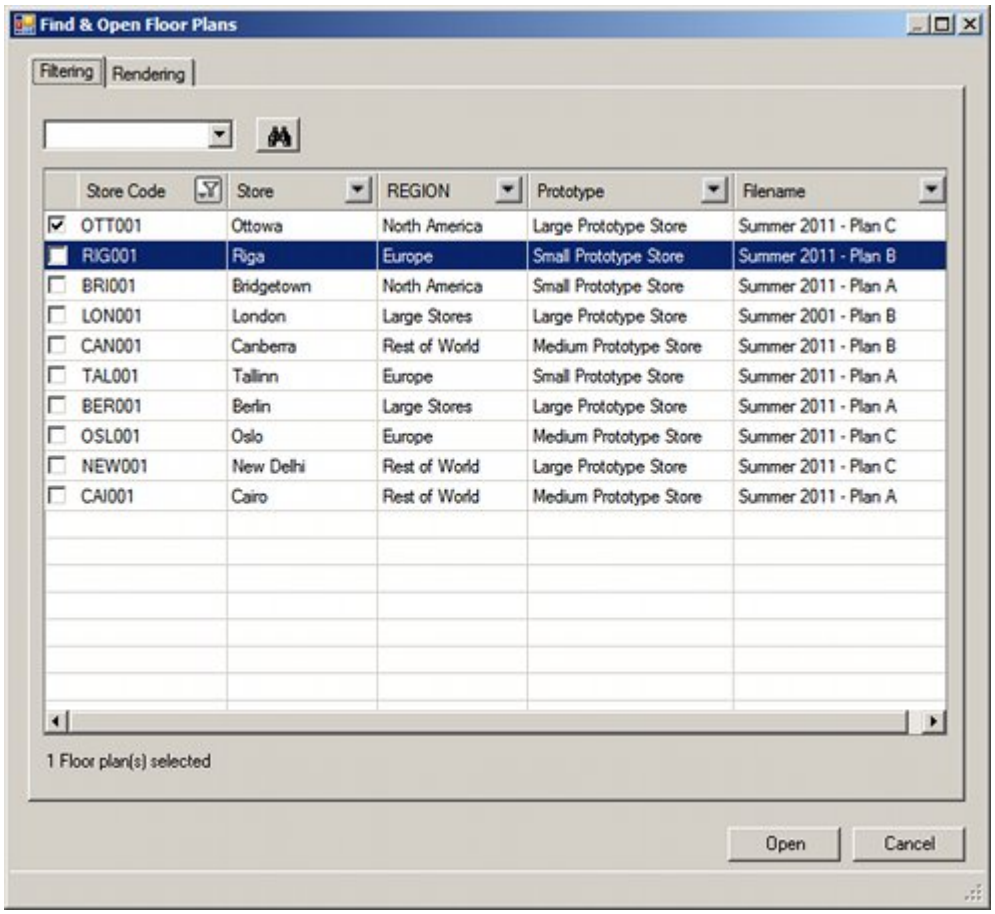



| Functionality | Source | Comment |
|---|---|---|
| AutoCAD Help | AutoCAD | See AutoCAD Help File for further information. |
| New Features Workshop | AutoCAD | Not yet available |
| Planner Help | Macro Space Management | Calls Macro Space Management's Help File for this module. |
| Additional Resources | 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 |

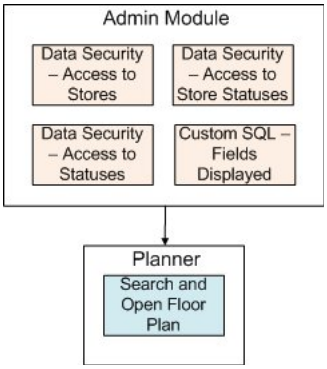
# Find and Open

## Overview of Find and Open

Find and Open provides and 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.




The basic method of operation is as follows:




1. Admin Module

Within the Admin Module:

   a. The Stores users have permissions to open floor plans from are assigned in the Data Security dialog box - Stores Tab.

**b.** The Store statuses users have permissions to open floor plans from are assigned in the Data Security dialog box - Statuses Tab

**c.** The file statuses users have permissions to open floor plans from are assigned in the Data Security dialog box - Statuses Tab.

**d.** 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 Find and Open Floor Plans dialog box when it is accessed in the Planner module.

> **Note:** In order to access the Admin Module, users must have permission to do so.

**2.** 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:

a. The Find and Open Plans dialog box is selected from the file menu.

b. The appropriate floor plans are selected in the Filtering tab of the Print Floor Plans dialog box.

c. Settings determining the visual appearance of the printed drawing are specified in the Rendering tab.

d. 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.

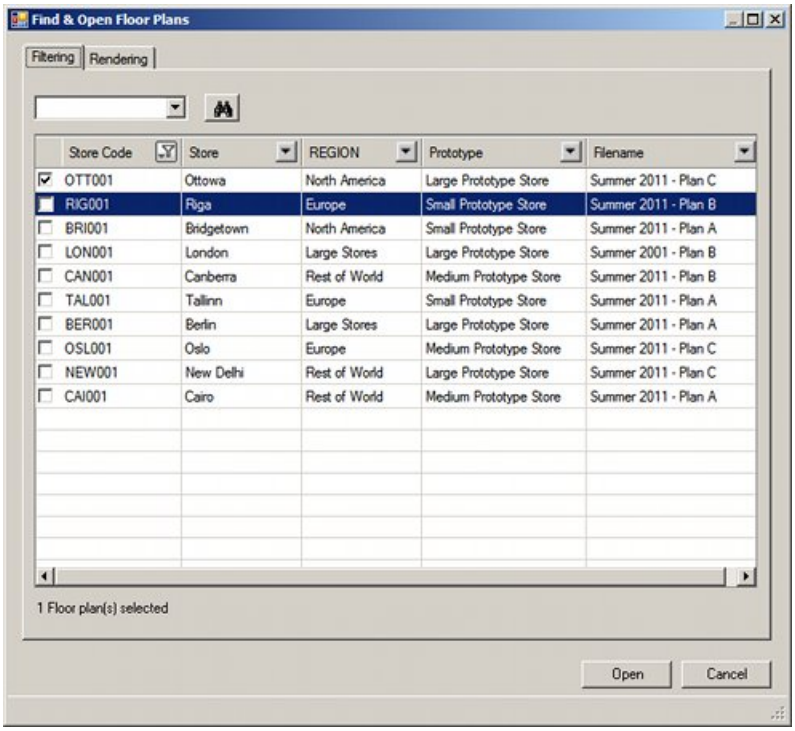
e. After the selected floor plans have been opened, the Find and Open Plans dialog box will remain open until the Cancel button has been clicked.

## Accessing the Find and Open Functionality

The **Find and Open** 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.



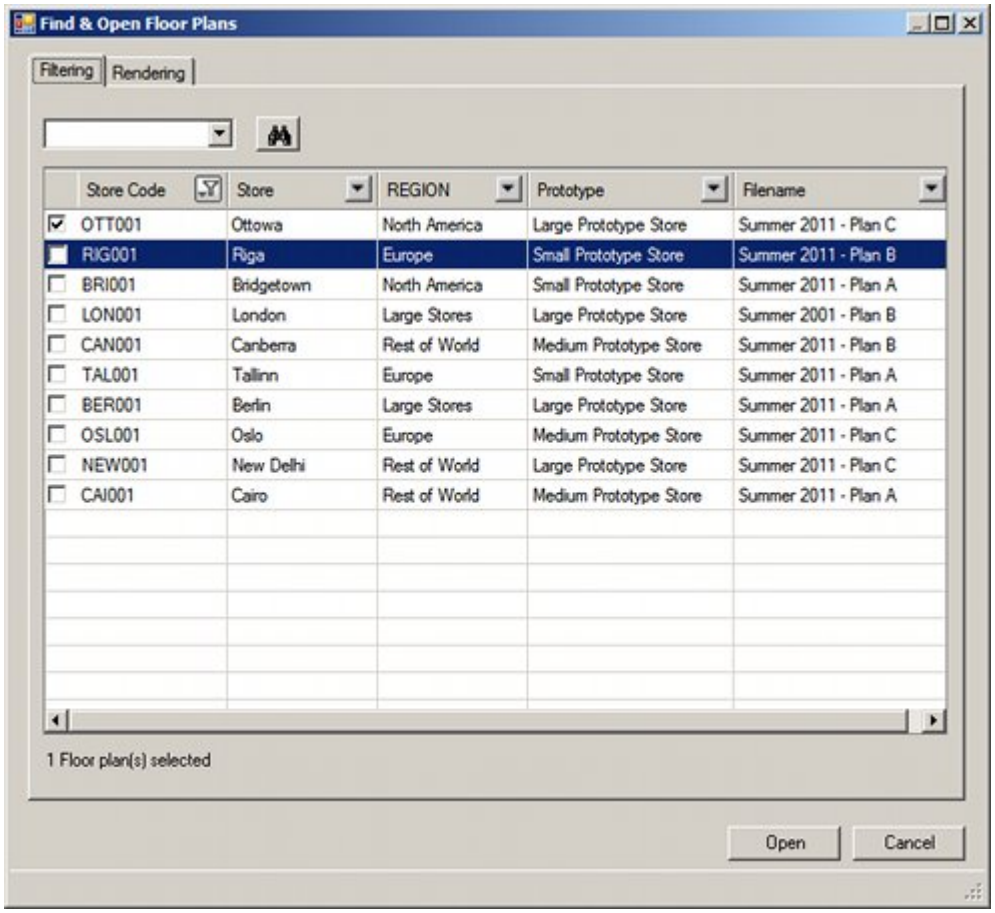

Selecting Find and Open will bring up the Find and Open Floor Plans dialog box. This will open at the filtering tab and will display all floor plans that the user has been assigned access rights to in the Data Security option in the Admin Module.



**Note:** The fields that are displayed in the dialog box are configurable in the Custom SQL option available from the General Menu in the Admin module.

## 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

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.



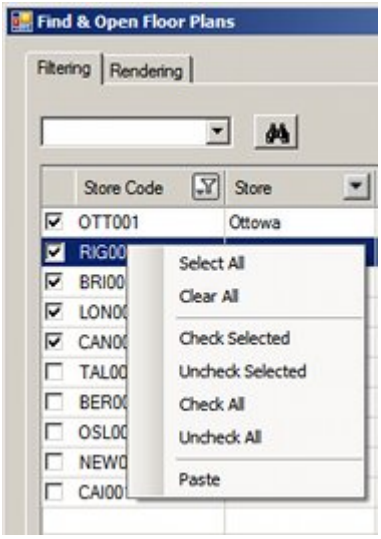

Find operates with explicit or implied wild cards. The explicit wild cards are:

| 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 Dehli, etc.

#### Right Click Menu

The right click menu provides a quick way of modifying the selected items.



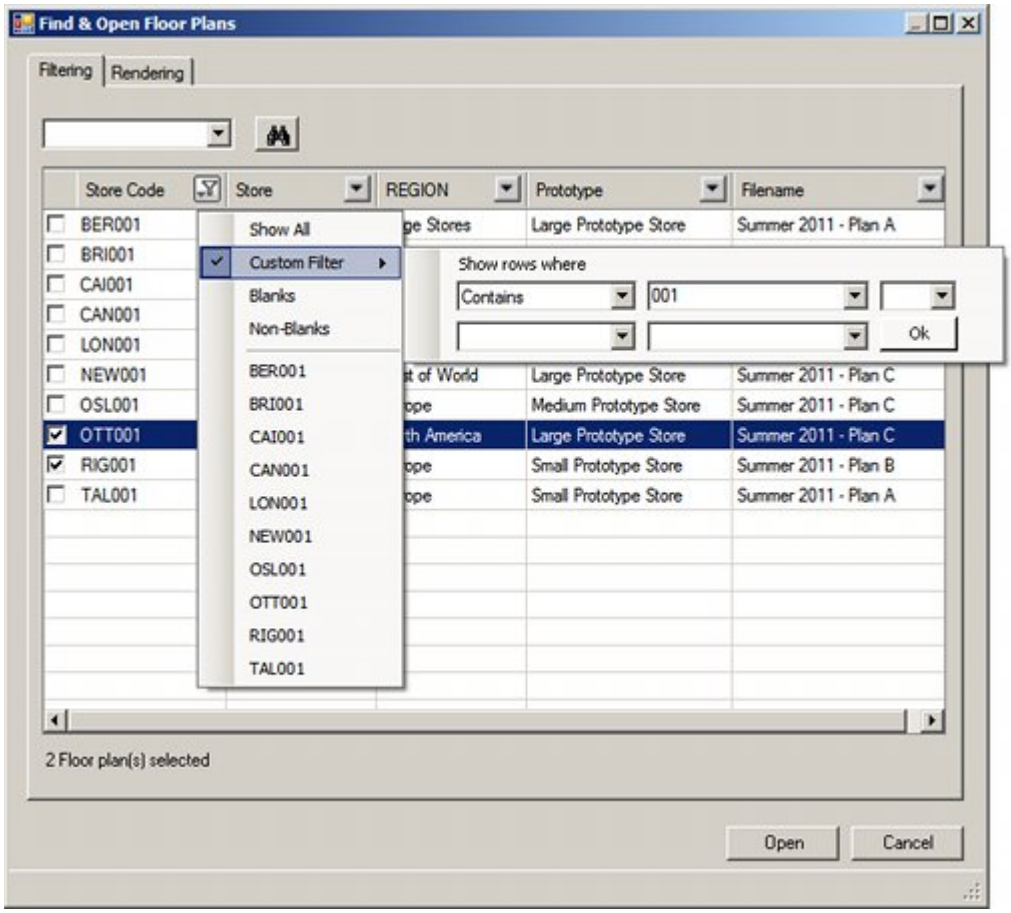

a. **Select All** will select (but not check) all rows of data
b. **Clear All** will deselect (but not uncheck) all rows of data
c. **Check Selected** will check all rows of selected data
d. **Uncheck Selected** will uncheck all rows of selected data
e. **Check All** will check all rows of data
f. **Uncheck All** will uncheck all rows of data
g. **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:

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.

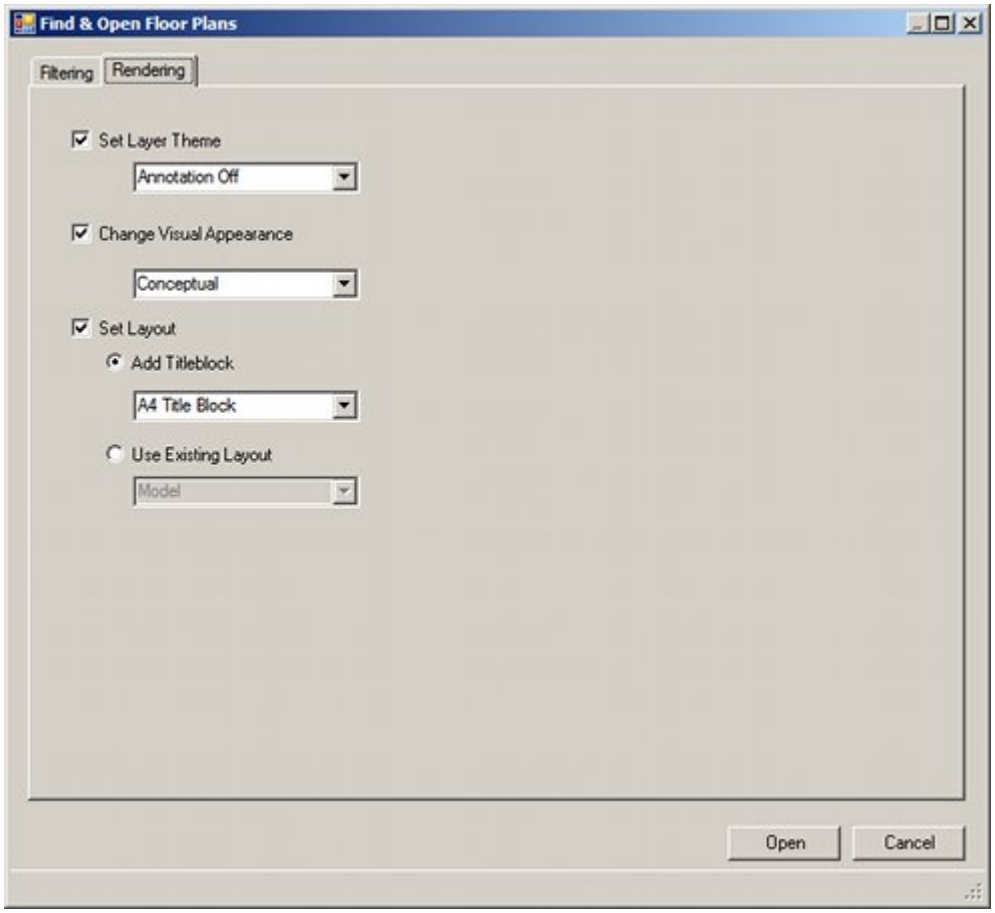
3. **Blanks** - column will be filtered to only show rows with null values.
4. **Non-Blanks** - column will be filtered to only show rows containing a value
5. **Results** - column will be filtered to only show the selected result.

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.

## The Rendering Tab

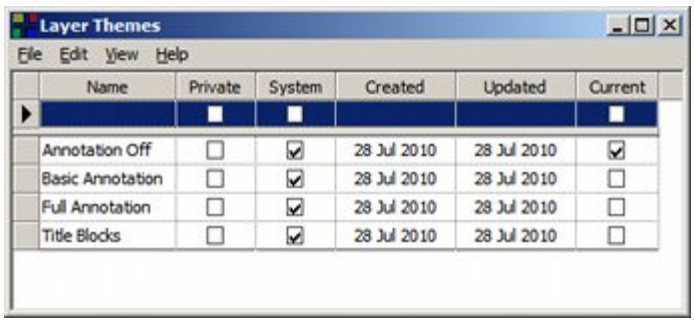
The **Rendering Tab** is used to ensure the visual appearance of the floor plan is as desired.




### 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.

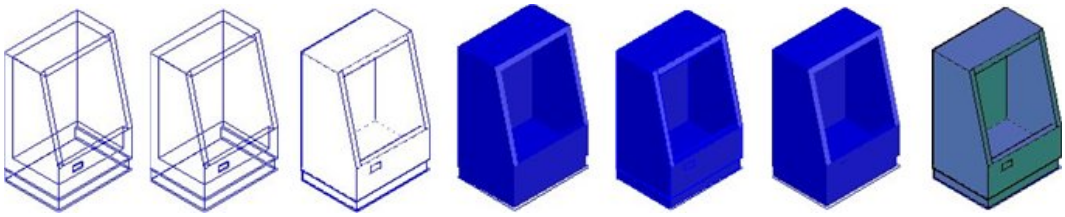
These layer themes are configured in the Layer Themes dialog box accessed from the Layer Aliased dialog box on the Format menu.




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



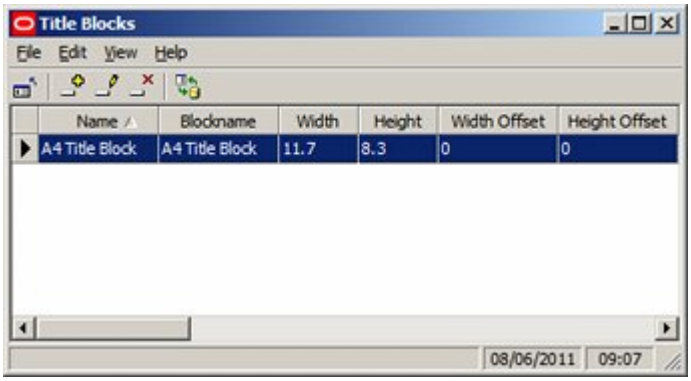
The images above show the different visual appearances available. They can be set by means of the Visual Styles toolbar or Visual Styles Manager.

**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 Admin 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.

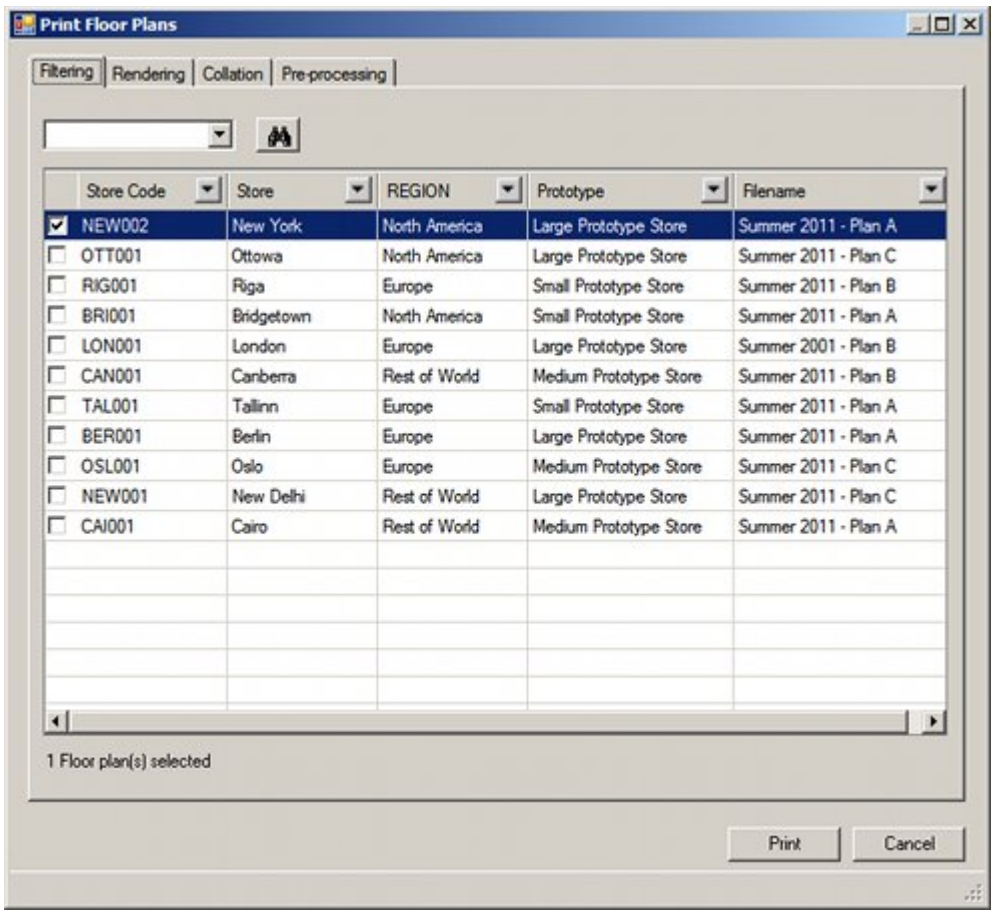



# Floor Plan Printing

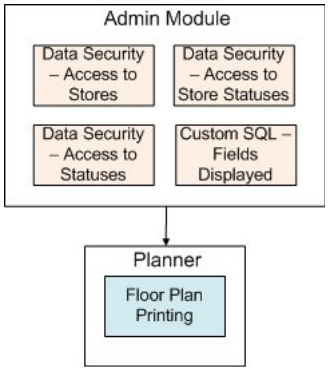
## Overview of Floor Plan Printing

**Floor Plan Printing** allows the user to list all floor pans 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.




The basic method of operation is as follows:




1. Admin Module

Within the Admin Module:

   a. 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.
   b. 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.
   c. 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.

d. 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 Admin Module, users must have permission to do so.

**2. 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.

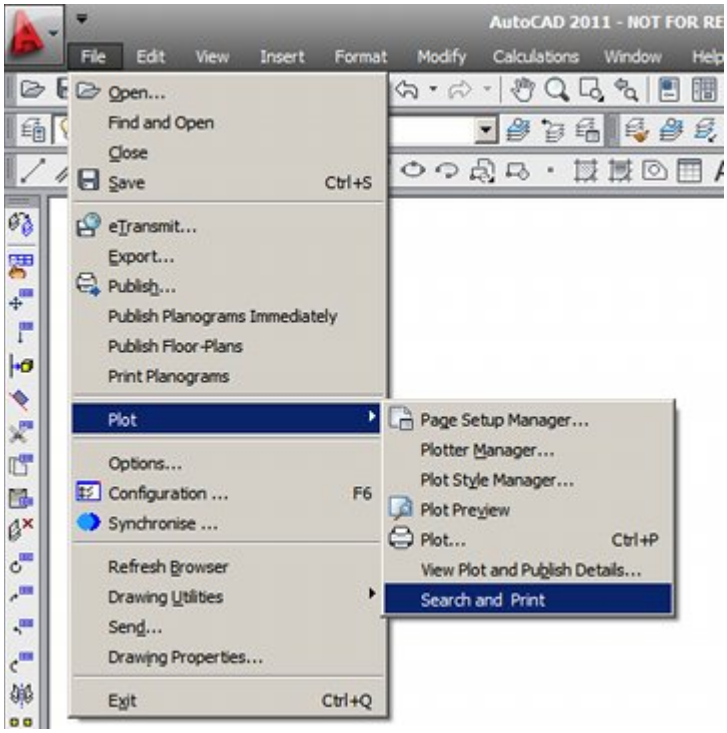
#### Using Floor Plan Printing

The functionality is used as follows:

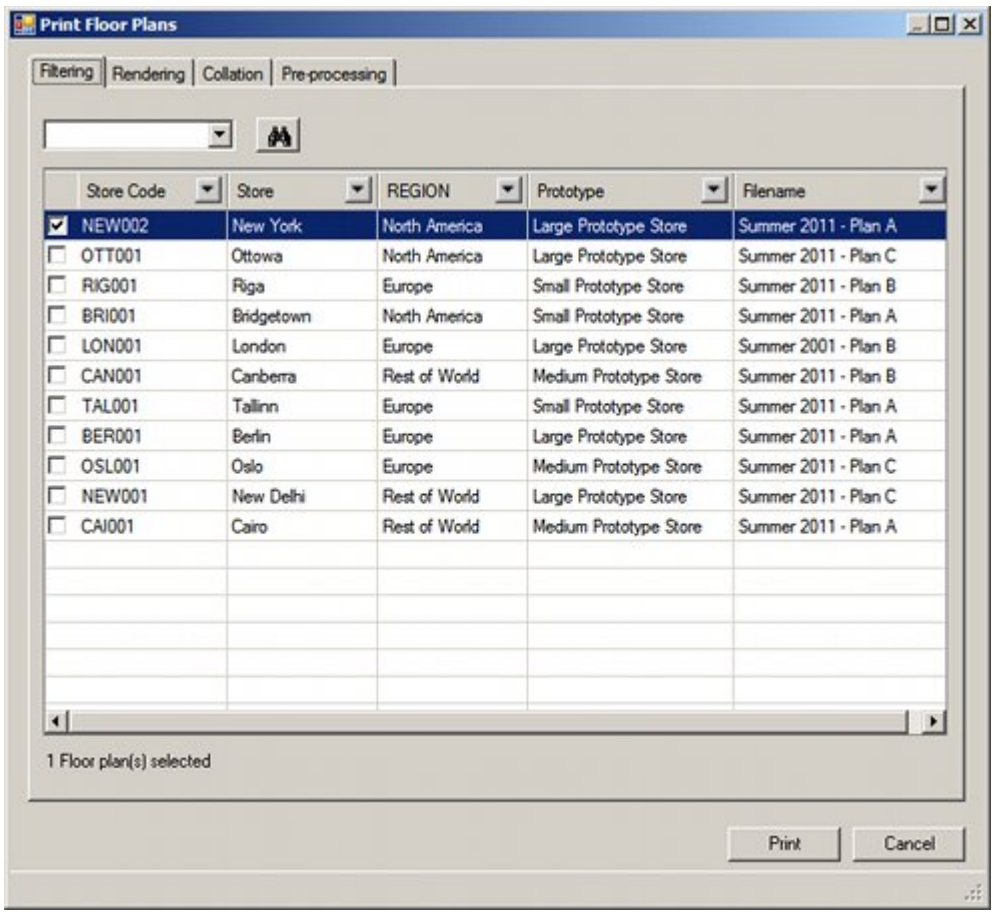
a. The Print Floor Plans dialog box is selected from the file menu.
b. The appropriate floor plans are selected in the Filtering tab of the Print Floor Plans dialog box.
c. Settings determining the visual appearance of the printed drawing are specified in the Rendering tab.
d. Settings determining how data associated with the floor plan is updated are specified in the Pre-Processing tab.
e. The sequence the selected floor plans are to be printed in is specified in the Collation Tab.
f. On clicking the Print button, the first floor plan will be opened (if not already open) in the sequence specified in the Collation Tab.
g. Changes will be made to the floor plan as specified in the Rendering and Pre-processing tabs.
h. The floor plan will be printed on the default printer associated with the user's computer.
i. The changes made for printing purposes will be undone and the floor plan checked back in.

## Accessing the Print Floor Plan Functionality

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.



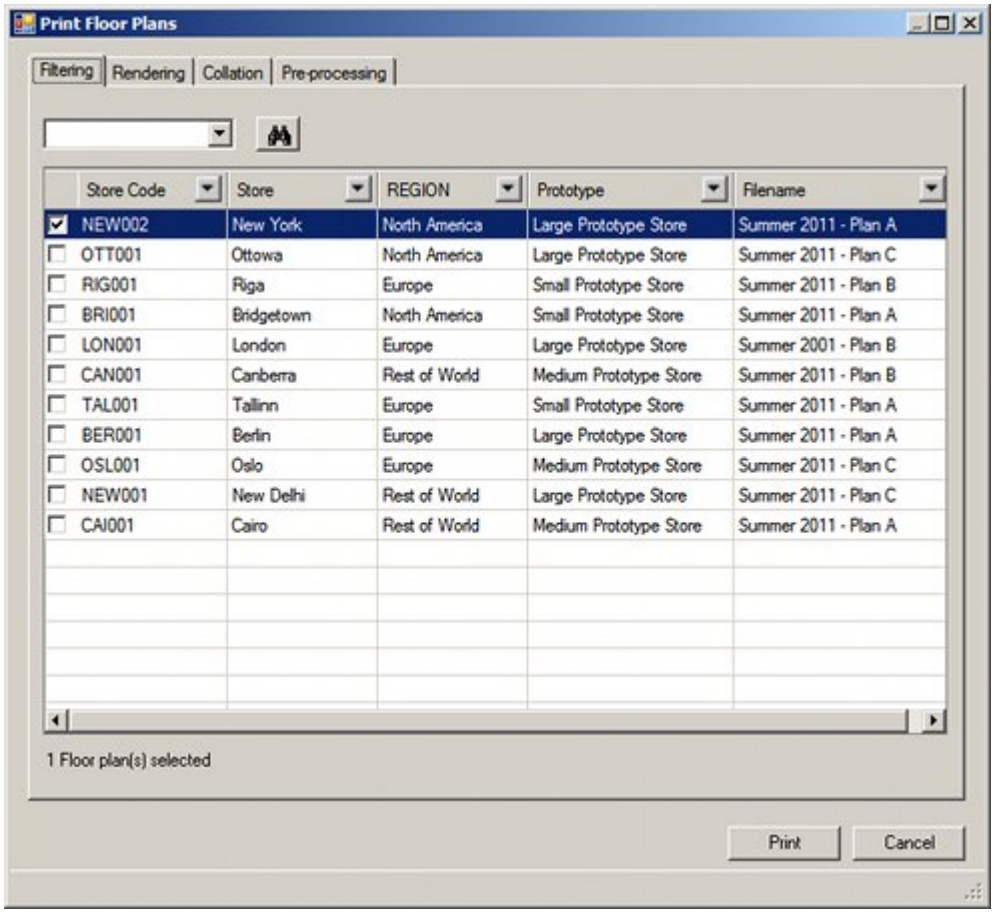

Selecting Search and Print will bring up the Print Floor Plans dialog box. This will open at the filtering tab and will display all floor plans that the user has been assigned access rights to in the Data Security option in the Admin Module. All currently open floor plans will be checked.




**Note:** The columns that are displayed in the dialog box are configurable in the Custom SQL option available from the General Menu in the Admin module.

## 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.



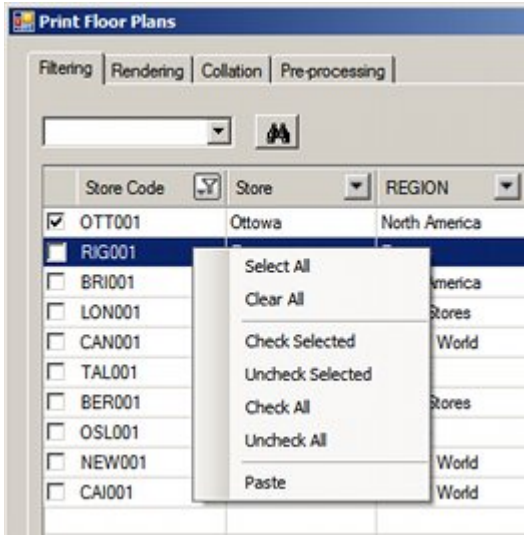

Find operates with explicit or implied wild cards. The explicit wild cards are:

| 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 Dehli, etc.

#### Right Click Menu

The right click menu provides a quick way of modifying the selected items.



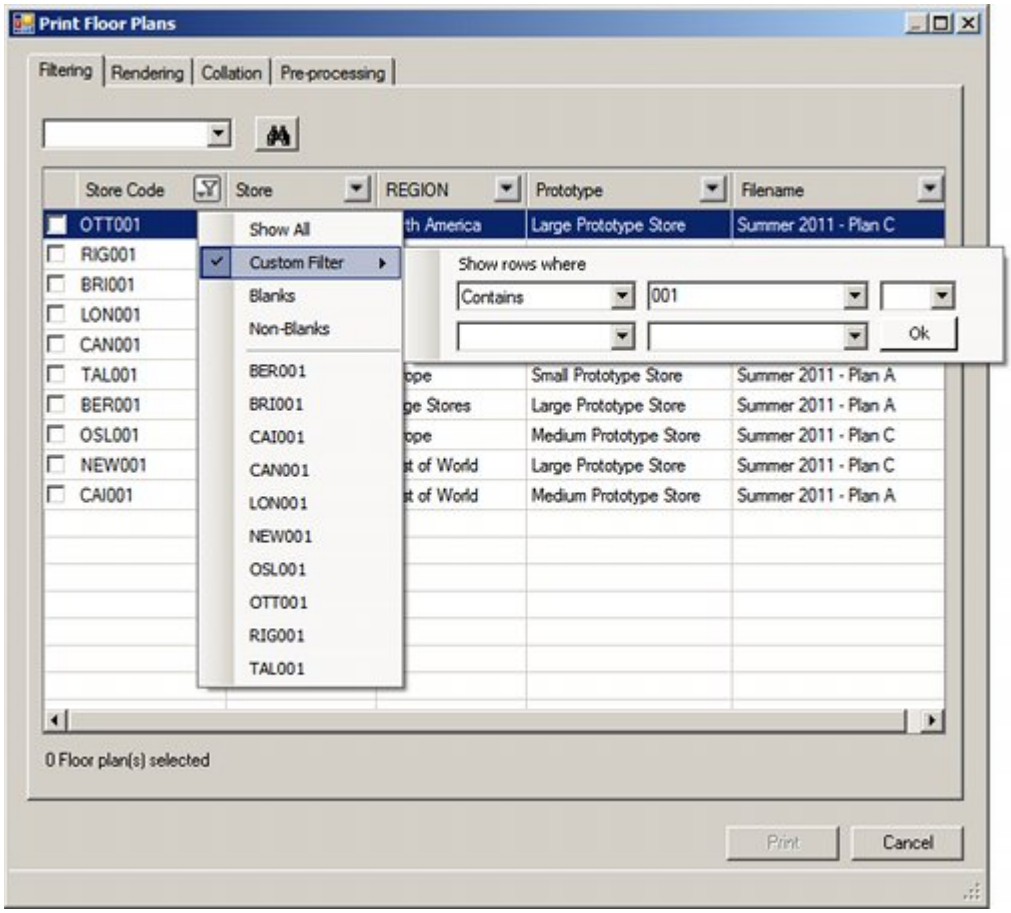

a. **Select All** will select (but not check) all rows of data
b. **Clear All** will deselect (but not uncheck) all rows of data
c. **Check Selected** will check all rows of selected data
d. **Uncheck Selected** will uncheck all rows of selected data
e. **Check All** will check all rows of data
f. **Uncheck All** will uncheck all rows of data
g. **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:

1. **Show All** - this option shows all results.
2. **Custom Filter** - this option allows users to set filters using Boolean logic. The options are:
    a. **Equal to**: will return rows that are an exact match for the entered text.
    b. **Not Equal to**: will return rows that do not match the text string
    c. **Contains**: will return rows where part of the data matches the text string. (Uses implied wild cards).
    d. **Does not contain**: will return rows where no part of the data matches the text string. (Uses implied wild cards).
    e. **Begins with**: will return rows where the text string is an exact match for the start of the data.
    f. **Ends with**: will return rows where the text string is an exact match for the end of the data.
    g. **Does not begin with**: will return rows where the text string is not an exact match for the start of the data.
    h. **Does not end with**: will return rows where the text string is not an exact match for the end of the data.

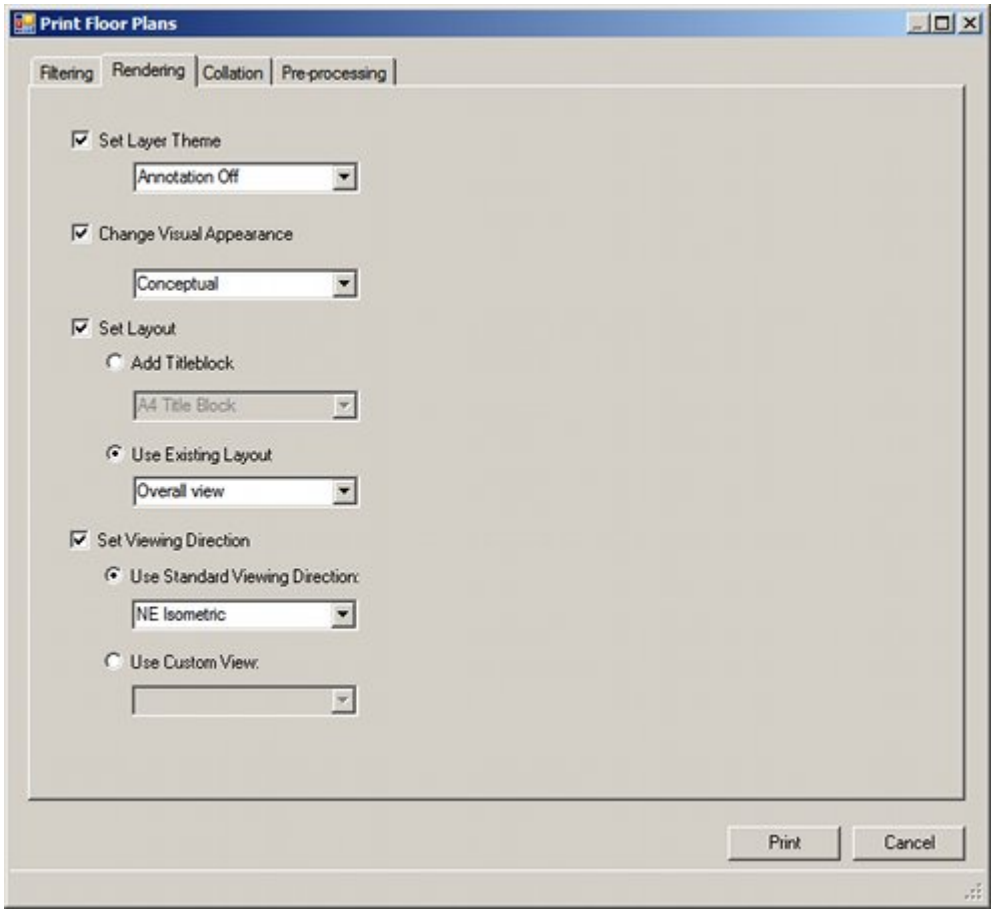
3. **Blanks** - column will be filtered to only show rows with null values.
4. **Non-Blanks** - column will be filtered to only show rows containing a value
5. **Results** - column will be filtered to only show the selected result.

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.

## The Rendering Tab

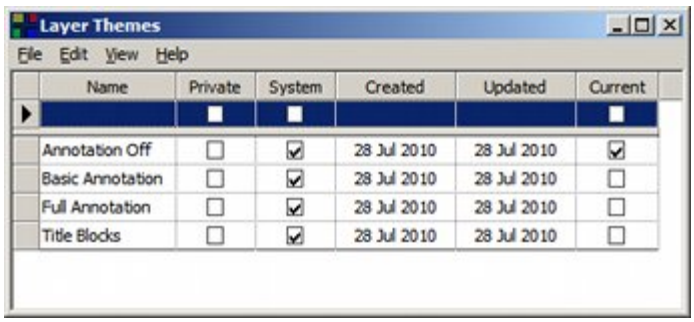
The **Rendering Tab** is used to ensure the visual appearance of the floor plan is as desired.




### 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.

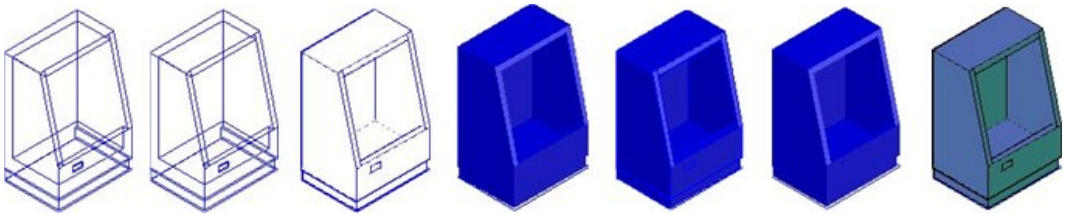
These layer themes are configured in the Layer Themes dialog box accessed from the Layer Aliased dialog box on the Format menu.




### 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



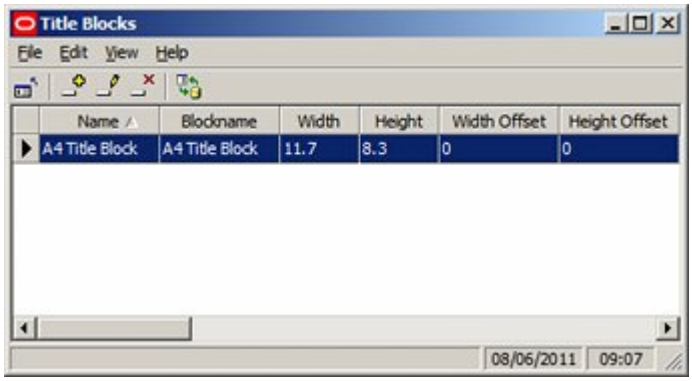
The images above show the different visual appearances available. They can be set by means of the Visual Styles toolbar or Visual Styles Manager.

### 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 Admin 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.




**Set Viewing Direction**

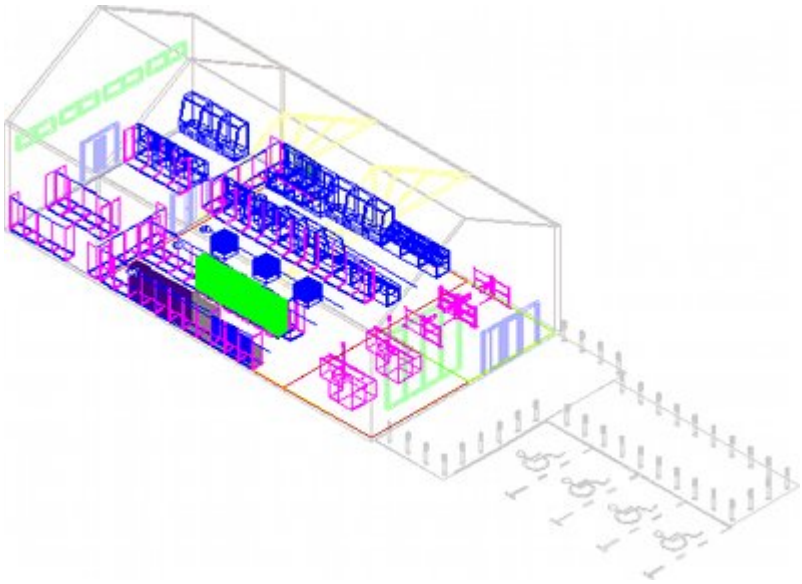
The viewing direction can be set if a Layout tab has been selected in the set Layout section. Users can then select the View direction from the drop down list. The options are:

- 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 wildcards to allow for inconsistencies in the actual name. It will not be case sensitive.

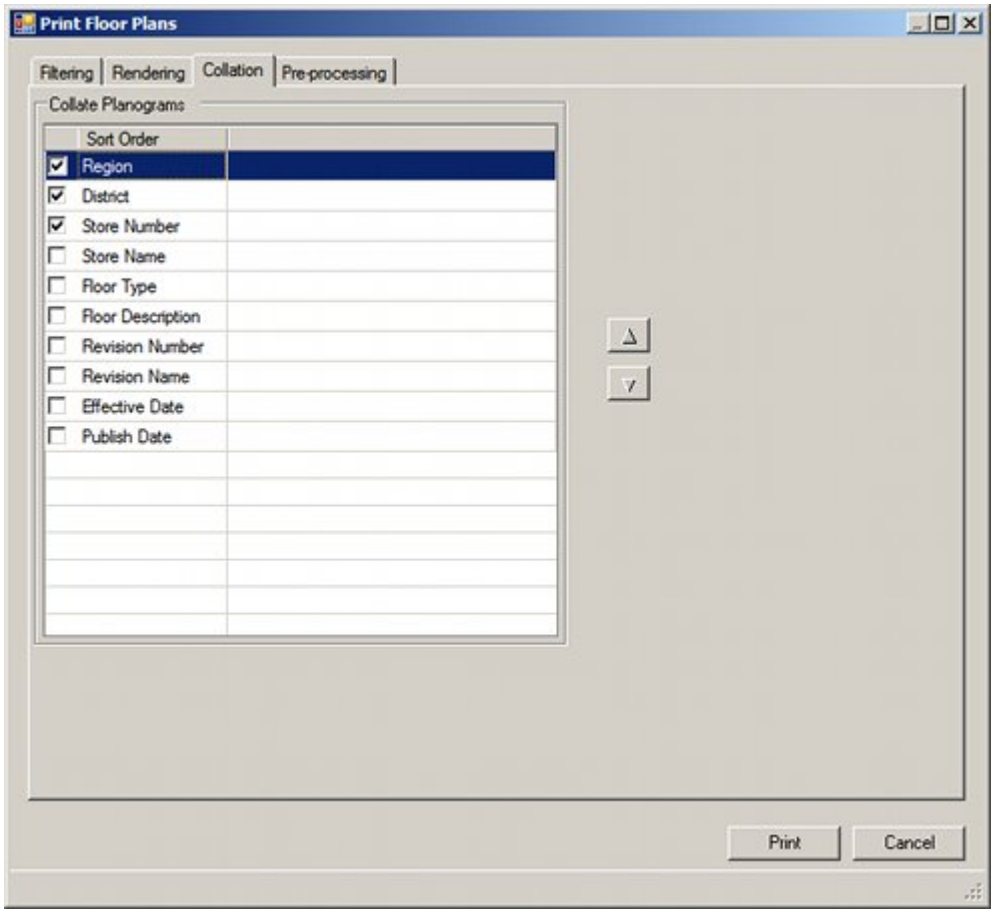
The example below shows a floor plan in SW Isometric view.



## The Collation Tab

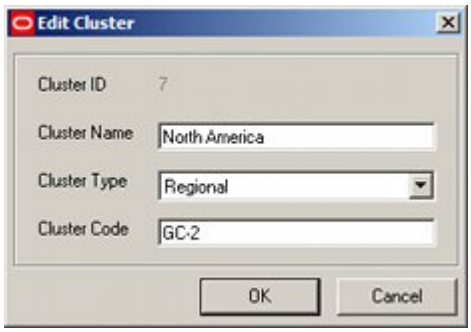
The **Collation Tab** allows users to specify the sequence the floor plans will be printed in. This makes it easier to sort and distribute them after printing.

At least one collation option must be selected, or the tab will show as having an error.

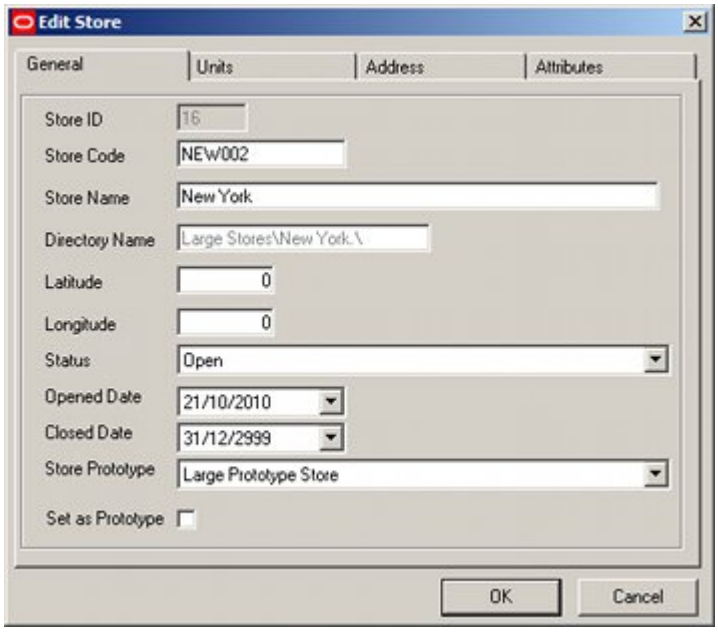


The available options can be ordered by highlighting them, then using the up or down arrows. The options are made active by using the check boxes.

1. **Region** is a specific type of cluster set in the Cluster type drop down list in the Cluster dialog box in Store Manager.
2. **District** is a specific type of cluster set in the Cluster type drop down list in the Cluster dialog box in Store Manager.



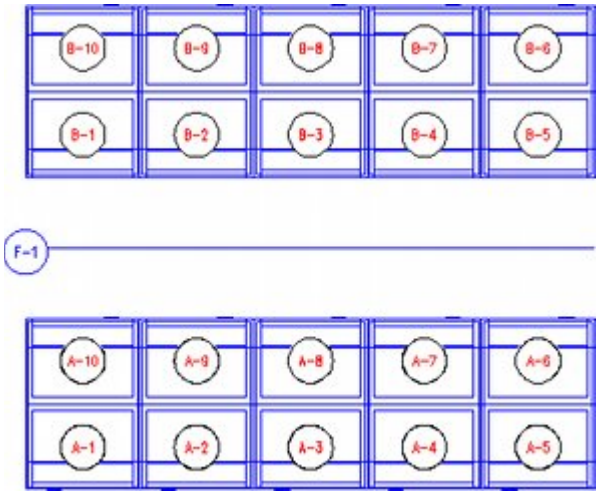

3. **Store Number** is the Store Code in the Store dialog box in Store Manager.
4. **Store Name** is the Store Name in the Store dialog box in Store Manager.



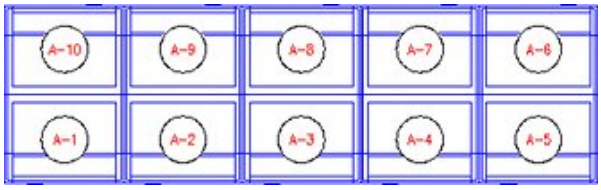

5. **Department** is the department the planogram is associated with. This option requires a link between the Zone Definitions and the Product hierarchy. This is done by associating a PRD_ID (Product ID from the AVTTB_PRODUCT_DEF table) with a Zone Definition in the AVTTB_ZONE_DEFINITION table.

| COLUMN_NAME | DATA_TYPE | NULLABLE |
|---|---|---|
| ZND_ID | NUMBER(10,0) | No |
| ZND_PID | NUMBER(10,0) | Yes |
| ZND_NAME | NVARCHAR2(64 CHAR) | No |
| ZND_DESC | NVARCHAR2(100 CHAR) | Yes |
| ZNT_ID | NUMBER(10,0) | No |
| HAS_ID | NUMBER(10,0) | No |
| ICO_ID | NUMBER(10,0) | No |
| ZND_COLOUR | NUMBER(10,0) | No |
| PRD_ID | NUMBER(19,0) | Yes |
| ZND_CREATED | DATE | No |
| ZND_UPDATED | DATE | No |
| ZND_CREATED_BY | NVARCHAR2(40 CHAR) | No |
| ZND_UPDATED_BY | NVARCHAR2(40 CHAR) | No |
| ZND_CODE | VARCHAR2(10 BYTE) | Yes |

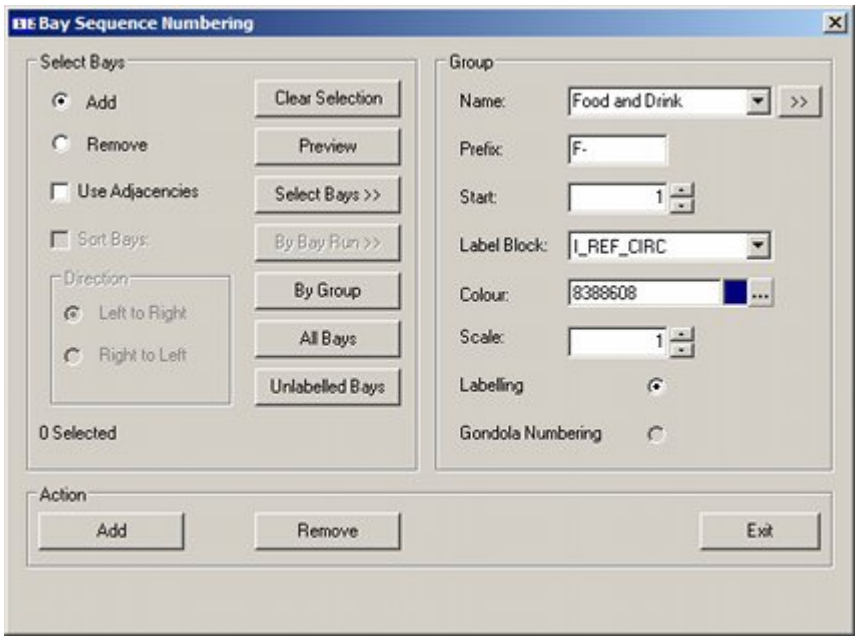
6. **Aisle** is the aisle the planogram is associated with. For this option to operate, aisles must first be drawn in the floor plan in the Planner module. In the example below, Aisle F-1 has been drawn between two runs of fixtures.



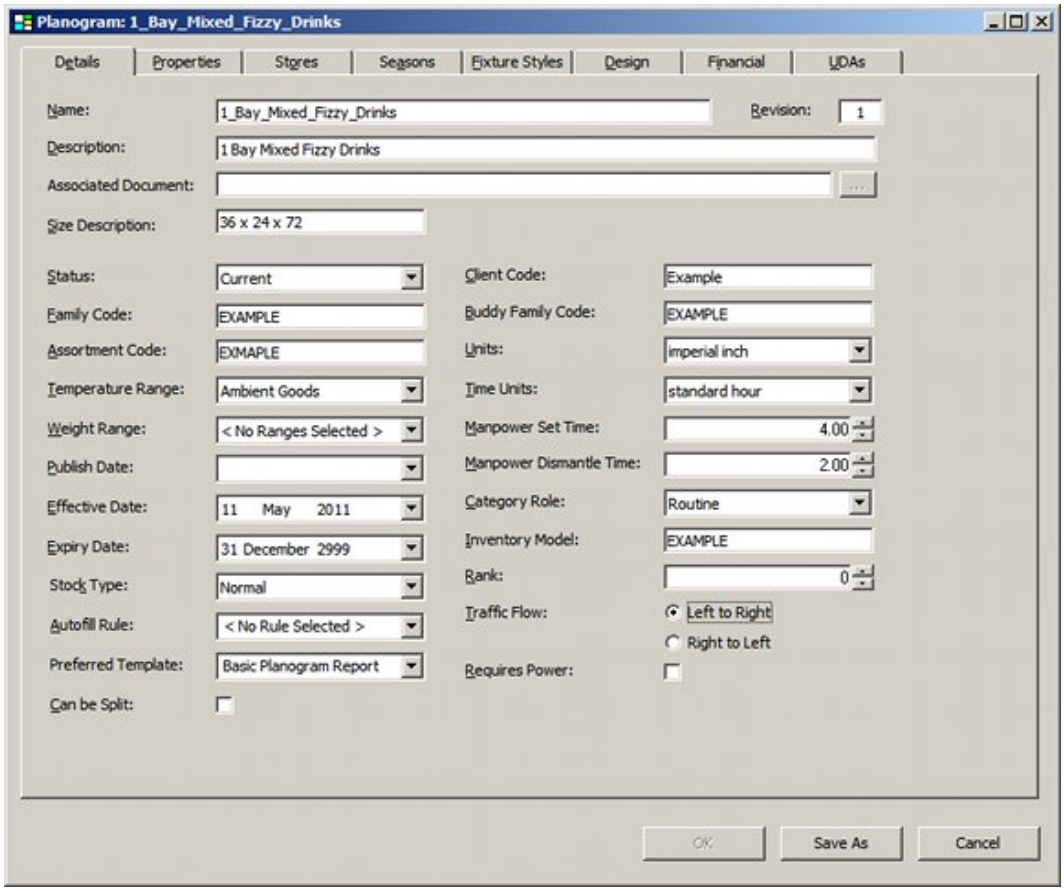

7. **Bay Number** is the bay number associated with the fixtures the planogram is placed on. For this option to operate, the fixtures in the floor plan must previously have been bay numbered.




8. 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.

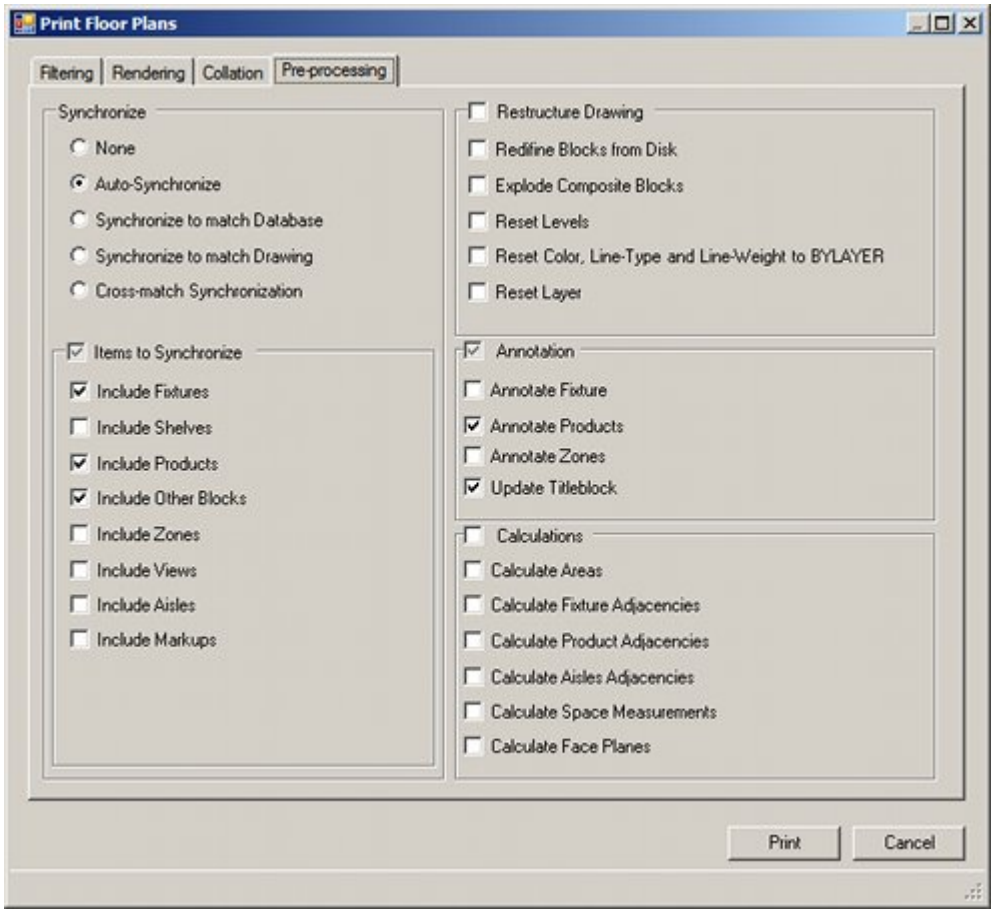



9. **Planogram Name** is the name of the planogram. This is set in the Name field of the Planogram Design dialog box in Merchandiser.
10. **Planogram Code** is the code for the planogram. This is set in the Client Code field of the Planogram Design dialog box in Merchandiser.



## The 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:

1. **None** - no synchronization operations will be carried out.
2. **Auto-Synchronize** - the application will automatically detect which form of synchronization is required:
   a. 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".

b. 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".

c. 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.

3. **Synchronize to Match Database** - information in the database will be written into the floor plan.
4. **Synchronize to Match Drawing** - information from the floor plan will be written to the database.
5. **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.

1. **Include Fixtures** - fixtures and fittings will be synchronized.
2. **Include Shelves** - shelf objects will be synchronized.
3. **Include Products** - products and planograms will be synchronized
4. **Include Other Blocks** -
5. **Include Zones** - Zones will be synchronized.
6. **Include Views** - view positions in Planner or Merchandiser will be synchronized. (This will not affect In-Store Space Collaboration).
7. **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.

1. **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.
2. **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.

3. **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.
4. **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. It they differ from the defaults for that layer, they will be set back to those defaults.
5. **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 Admin Module.

1. **Annotate Fixtures** - all fixtures that have had 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.
2. **Annotate Products** - all products, planograms and planogram profiles will have their annotation updated.
3. **Annotate Zones** - all zones will have their annotation updated.
4. **Update Title Block** - all text boxes in the title block that reference information in the database will have that information updated.

#### Calculations

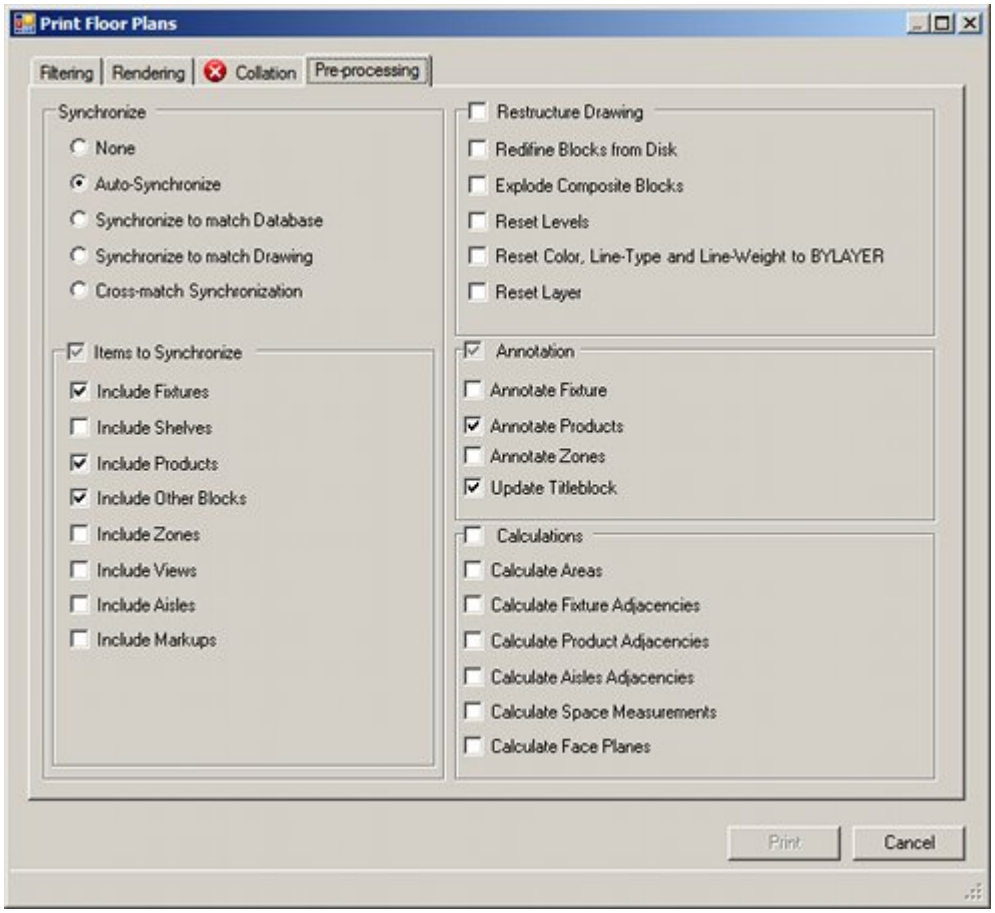
This option is used to update the calculations associated with the floor plan. This has a number of benefits including ensuring that reports based on this floor plan are accurate and up to date. It also ensures that annotation draws correctly.

1. **Calculate Areas** - this updates the area calculations; and hence the floor area assigned to each fixture.
2. **Calculate Fixture Adjacencies** - this updates the fixture adjacencies; and hence the relationship of one fixture to another.
3. **Calculate Product Adjacencies** - this updates the product adjacencies; and hence the relationship of one product to another.
4. **Calculate Aisle Adjacencies** - this updates the aisle adjacencies; and hence which products share an aisle.
5. **Calculate Space Measures** - this updates space measures: the volume occupied by each product in a planogram.

6. **Calculate Face Planes** - this updates face planes: the frontal area occupied by each product in a planogram.

## Errors and Results

If any settings in the **Print Floor Plans 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.



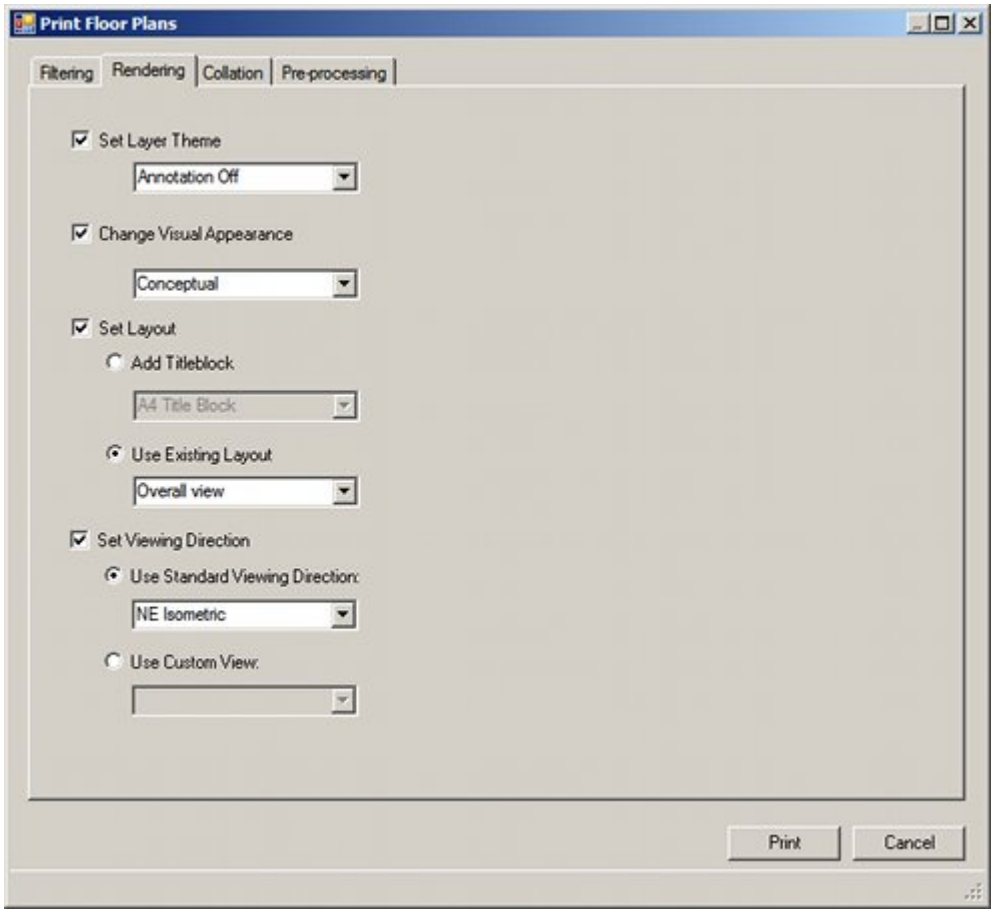

Users must correct the problems before the Print button will activate.

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).

## Changes to Floor Plan During and After Printing

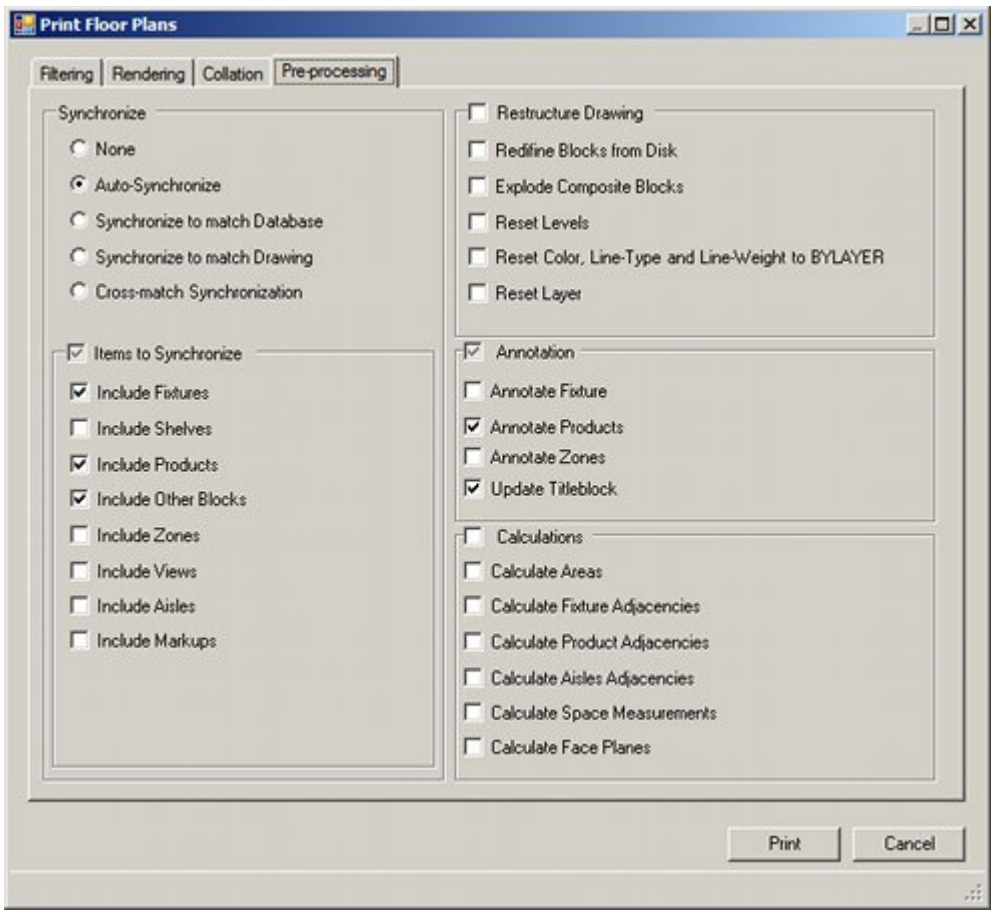
Options in the **Print Floor Plans dialog box** allow the use to specify the changes required to the floor plan before it is printed.

The **Rendering Tab** allows the user to specify the visual appearance of the floor plan.




This may result in changes to the layers within the floor plan, the visual appearance of the blocks within the floor plan, the tab and title block used for printing and the direction the floor plan is viewed from.

The **Pre-processing tab** allows users to specify a number of options affecting the data in the floor plan (DWG file) and in the database. this includes synchronization options, changes to blocks (Restructure Drawing option) and annotation and the calculations used for reporting purposes.




This may result in the floor plan being synchronized relative to the database, changes made to the block and annotation within the floor plan ad changes made to the data used for reporting purposes within the database.

#### Making and Undoing Changes

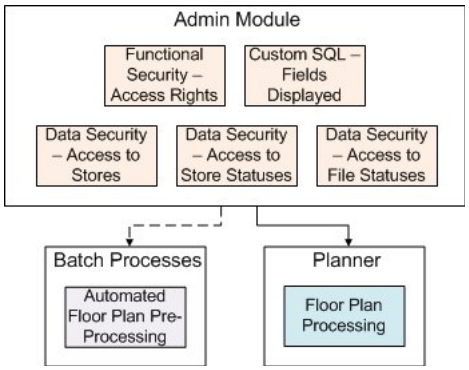
The specified changes will be made to the selected floor plans before it they are printed. This allows users to review a hard copy version of the floor plan in a specified condition.

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.

# 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. The options available are:




The basic method of operation is as follows:

1. **Admin Module**
   a. Permissions to use the floor plan pre-processing functionality are assigned in the Functional security dialog box in the Admin module.
   b. 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 Admin Module.
   c. 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 Admin Module.
   d. 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 Admin 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.

   e. The fields that users can see in the Floor Plan Processing dialog box are specified in the Custom SQL dialog box in the Admin Module.
2. **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 Admin Module. The Batch Process will then execute using command line switches to define parameters.

3. **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 Admin 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 are 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 are given below:

1. **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.

2. **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:

   a. Synchronize (batch the database) to bring the substituted planograms into the Planner floor plans (DWG files).
   b. Annotation to update the annotation associated with the changed planograms.
   c. Calculations (Product Adjacency, Aisle Adjacency, Face Plane and Space Measurement) to ensure than any subsequent reports are accurate.

3. **Floor Plans are to be published and reports are to be generated**

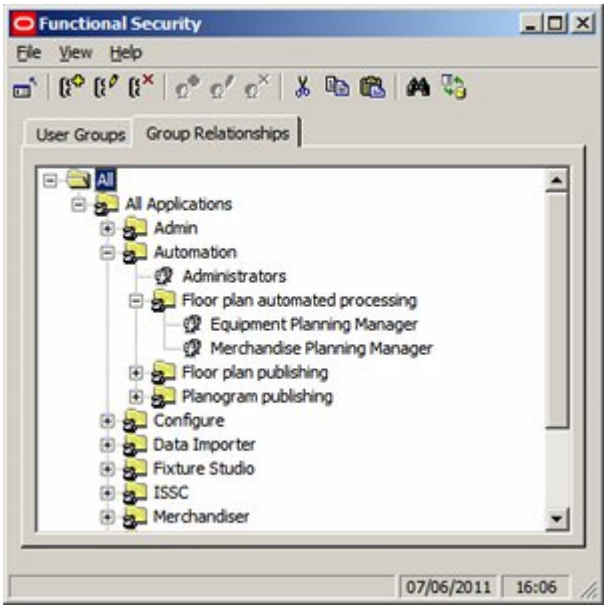
If floor plans are to be published and reports are to be generated, business work flows may make it sensible to run Floor Plan Automated Processing as a predecessor to

generating the reports and floor plans. In this case Floor Plan Publishing would be configured without any options selected on the pre-processing tab.

## 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 Admin module. This is done using the Functional Security dialog box accessed from the Security menu.

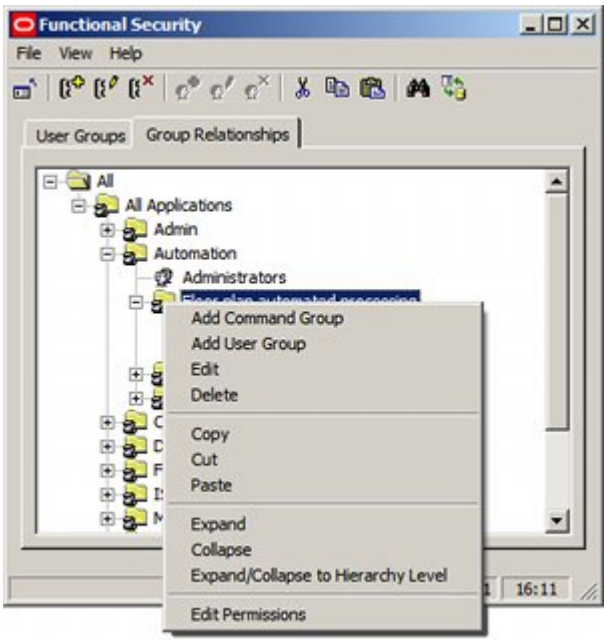
> **Note:** For users to access the Admin Module, they must first have the appropriate permissions.



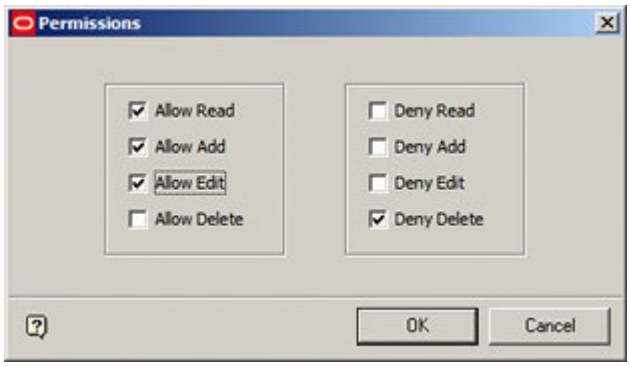

Users assigned to the Automation Command Group (such as the Administrator User Group) can run all Automation Functionality. User Groups assigned to the child Command Groups (Floor plan automated publishing, Floor plan publishing, Planogram publishing) have the ability to use that functionality. In the 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.



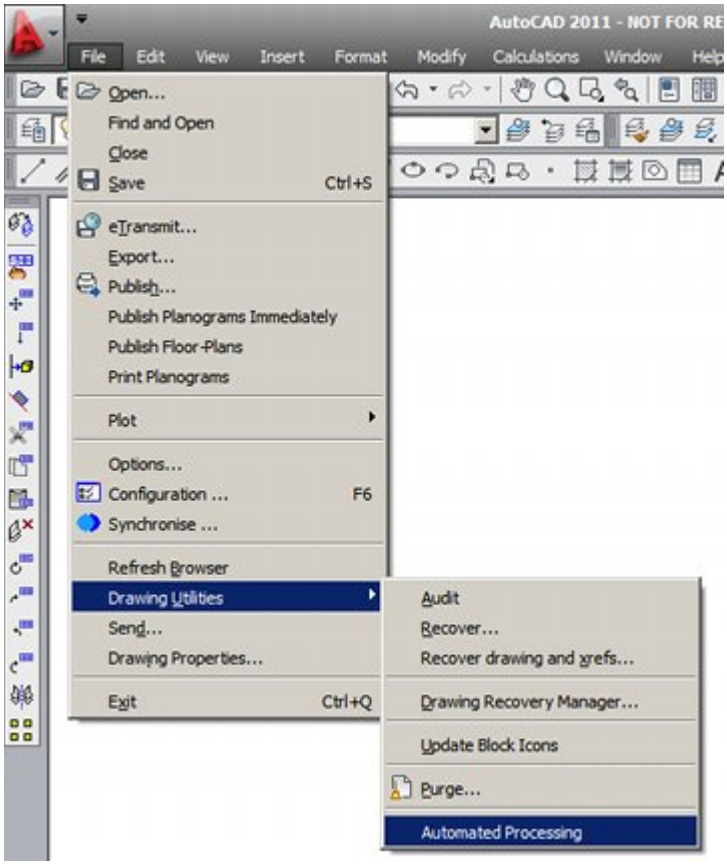

This will bring up the Permissions dialog box.



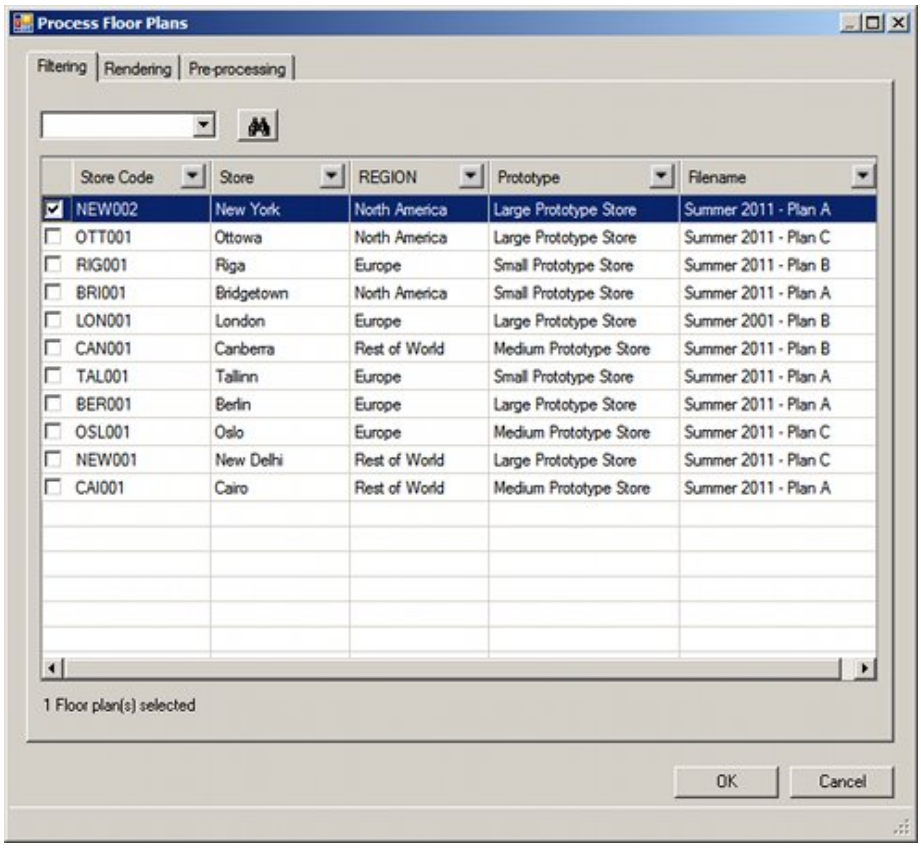

1. If the User Group belongs to a Command Group higher in the Command Group hierarchy, by default it will inherit the permissions from that higher Command Group. This permission can be varied at the lower level by changing the selections made using the check boxes.
2. If the User Group only exists at this level in the hierarchy, the Permissions dialog box will initially have all check boxes blank. The Administrator must then assign Allow of Deny permissions.

## Accessing the Process Floor Plan Functionality

The Process Floor Plan functionality is accessed from the File Menu > Drawing Utilities > Automated Processing option.



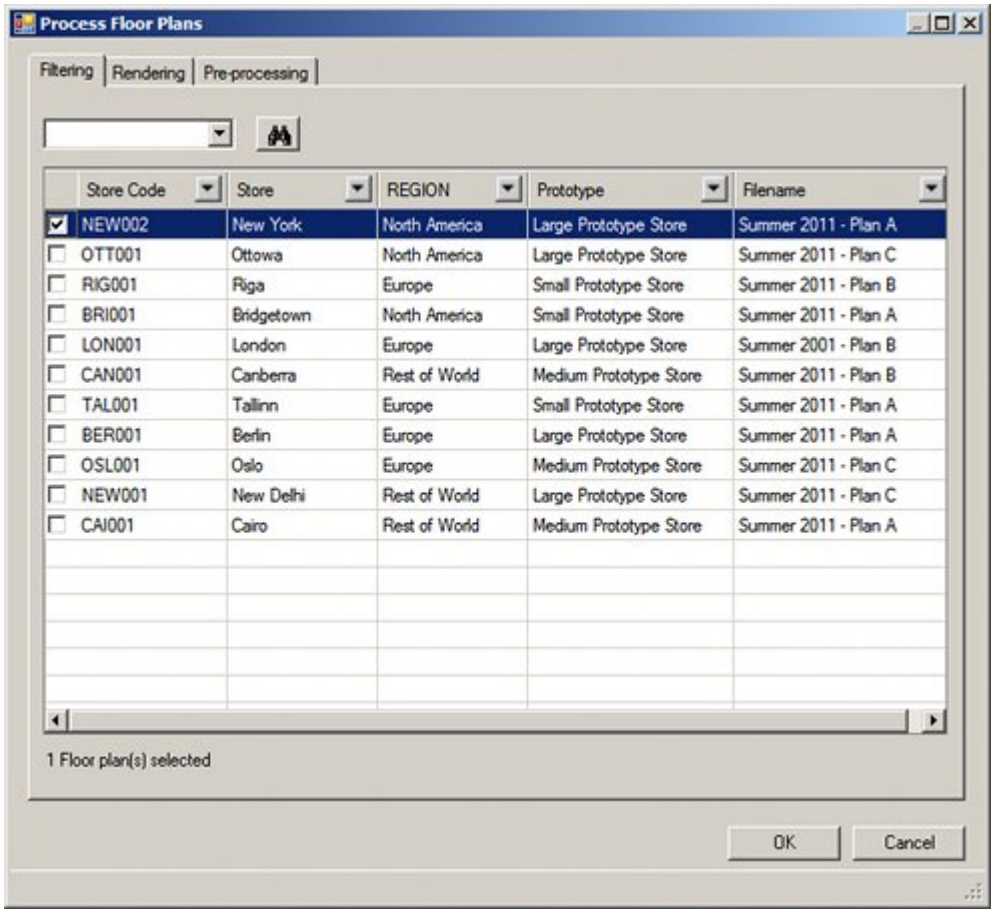

Selecting Automated Processing will bring up the Process Floor Plans dialog box. This will open at the filtering tab and will display all floor plans that are at or have exceeded their Publish Date.




**Note:** The columns that are displayed in the dialog box are configurable in the Custom SQL option available from the General Menu in the Admin module.

## 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:

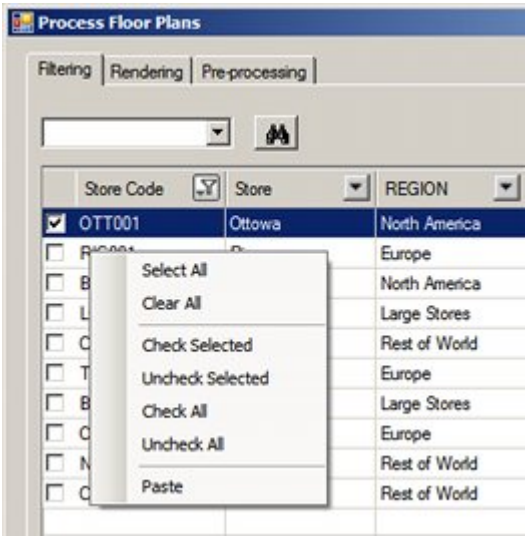
| Wild Card | Description |
|---|---|
| * | Any characters |
| ? | Any character in this position |

| 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 Dehli, etc.

#### Right Click Menu

The right click menu provides a quick way of modifying the selected items.



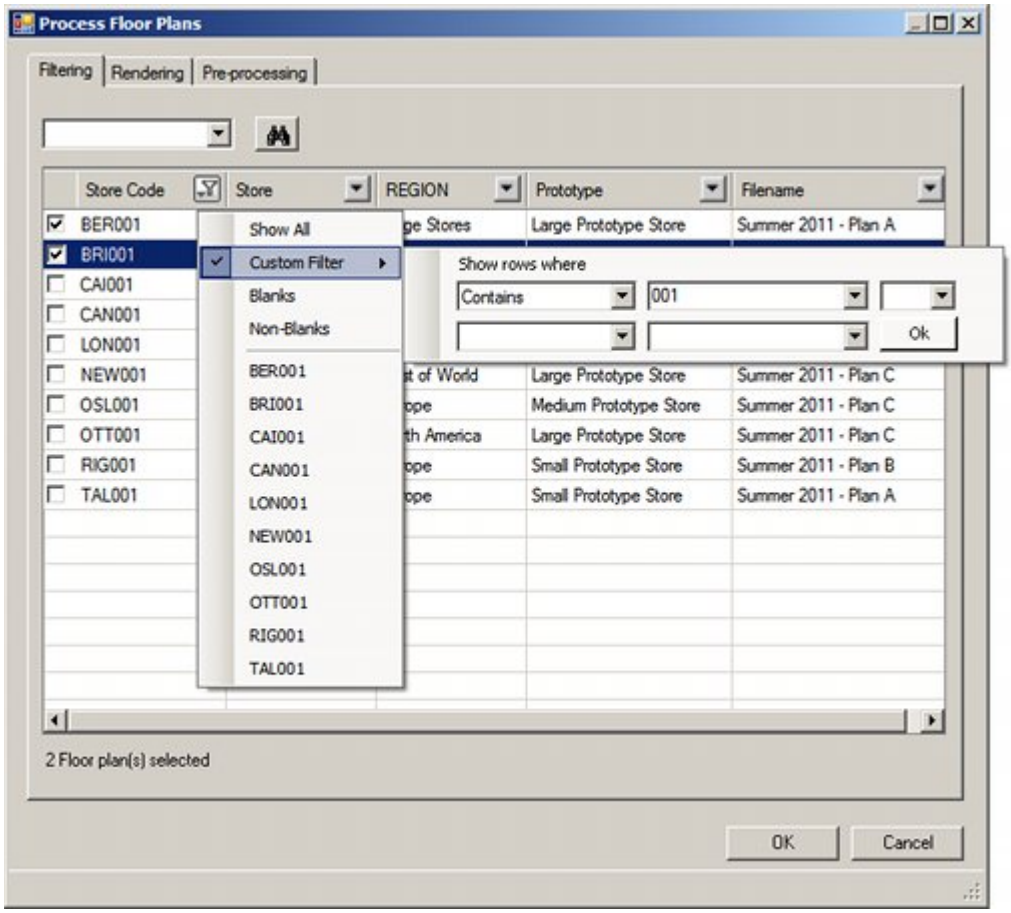

a. **Select All** will select (but not check) all rows of data
b. **Clear All** will deselect (but not uncheck) all rows of data
c. **Check Selected** will check all rows of selected data
d. **Uncheck Selected** will uncheck all rows of selected data
e. **Check All** will check all rows of data
f. **Uncheck All** will uncheck all rows of data
g. **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 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:

1. **Show All** - this option shows all results.
2. **Custom Filter** - this option allows users to set filters using Boolean logic. The options are:
   a. **Equal to**: will return rows that are an exact match for the entered text.
   b. **Not Equal to**: will return rows that do not match the text string
   c. **Contains**: will return rows where part of the data matches the text string. (Uses implied wild cards).
   d. **Does not contain**: will return rows where no part of the data matches the text string. (Uses implied wild cards).
   e. **Begins with**: will return rows where the text string is an exact match for the start of the data.
   f. **Ends with**: will return rows where the text string is an exact match for the end of the data.
   g. **Does not begin with**: will return rows where the text string is not an exact match for the start of the data.
   h. **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**.

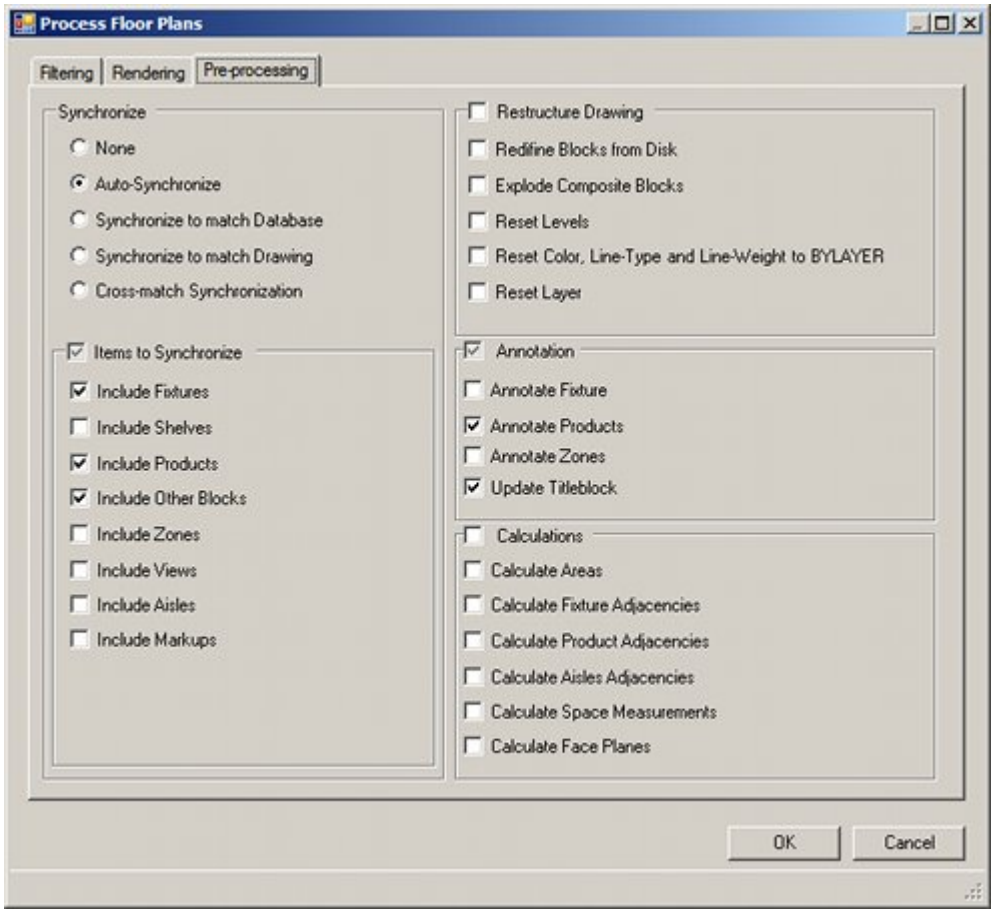
1. **And** means that both conditions must be met. **A and B** means the data returned must contain both A and B.
2. **Or** means either condition can be met. **A or B** means the data returned can contain either A or B. It does not need to contain both.

## Results of 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).

## 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:

1. **None** - no synchronization operations will be carried out.
2. **Auto-Synchronize** - the application will automatically detect which form of synchronization is required:
   a. 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".
   b. 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".
   c. 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.
3. **Synchronize to Match Database** - information in the database will be written into the floor plan.
4. **Synchronize to Match Drawing** - information from the floor plan will be written to the database.
5. **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.

1. **Include Fixtures** - fixtures and fittings will be synchronized.
2. **Include Shelves** - shelf objects will be synchronized.
3. **Include Products** - products and planograms will be synchronized
4. **Include Other Blocks** - this synchronizes all blocks assigned as type 'other' in Fixture Studio.
5. **Include Zones** - Zones will be synchronized.

6. **Include Views** - view positions in Planner or Merchandiser will be synchronized. (This will not affect In-Store Space Collaboration).
7. **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.

1. **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.
2. **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.

3. **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.
4. **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.
5. **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 Admin Module.

1. **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.
2. **Annotate Products** - all products, planograms and planogram profiles will have their annotation updated.
3. **Annotate Zones** - all zones will have their annotation updated.
4. **Update Title Block** - all text boxes in the title block that reference information in the database will have that information updated.

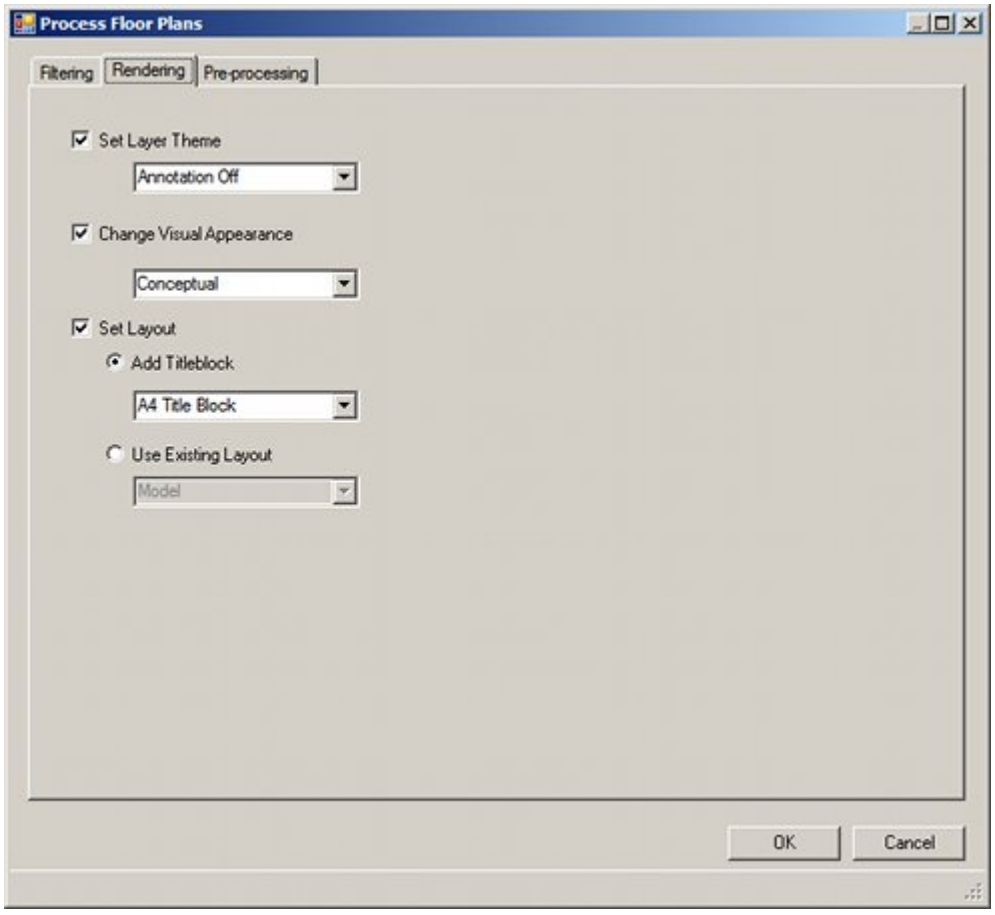
#### Calculations

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.

1. **Calculate Areas** - this updates the area calculations; and hence the floor area assigned to each fixture.
2. **Calculate Fixture Adjacencies** - this updates the fixture adjacencies; and hence the relationship of one fixture to another.
3. **Calculate Product Adjacencies** - this updates the product adjacencies; and hence the relationship of one product to another.
4. **Calculate Aisle Adjacencies** - this updates the aisle adjacencies; and hence which products share an aisle.
5. **Calculate Space Measures** - this updates space measures: the volume occupied by each product in a planogram.
6. **Calculate Face Planes** - this updates face planes: the frontal area occupied by each product in a planogram.

## The Rendering Tab

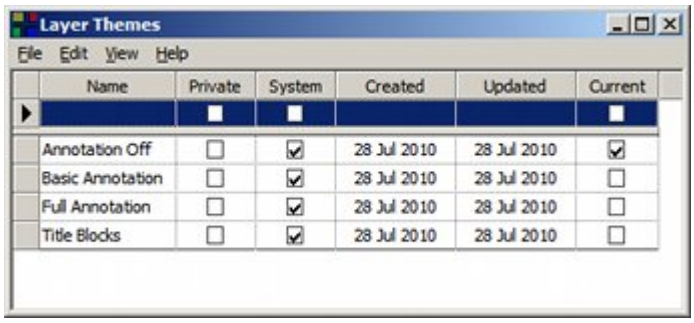
The **Rendering Tab** is used to ensure the visual appearance of the floor plan is as desired.



### 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.

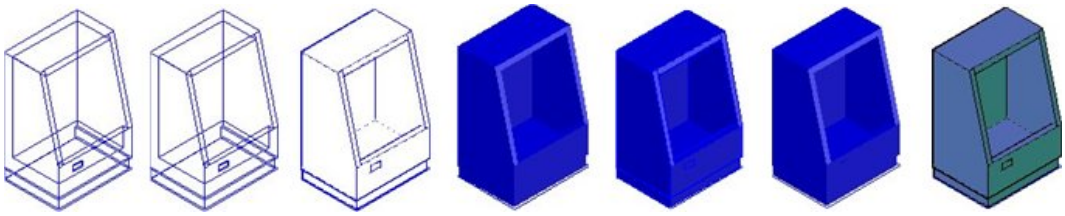
These layer themes are configured in the Layer Themes dialog box accessed from the Layer Aliased dialog box on the Format menu.




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



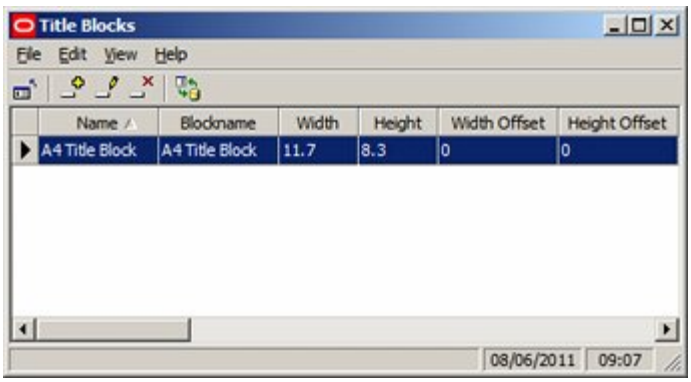
The images above show the different visual appearances available. They can be set by means of the Visual Styles toolbar or Visual Styles Manager.

### 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 Admin 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.

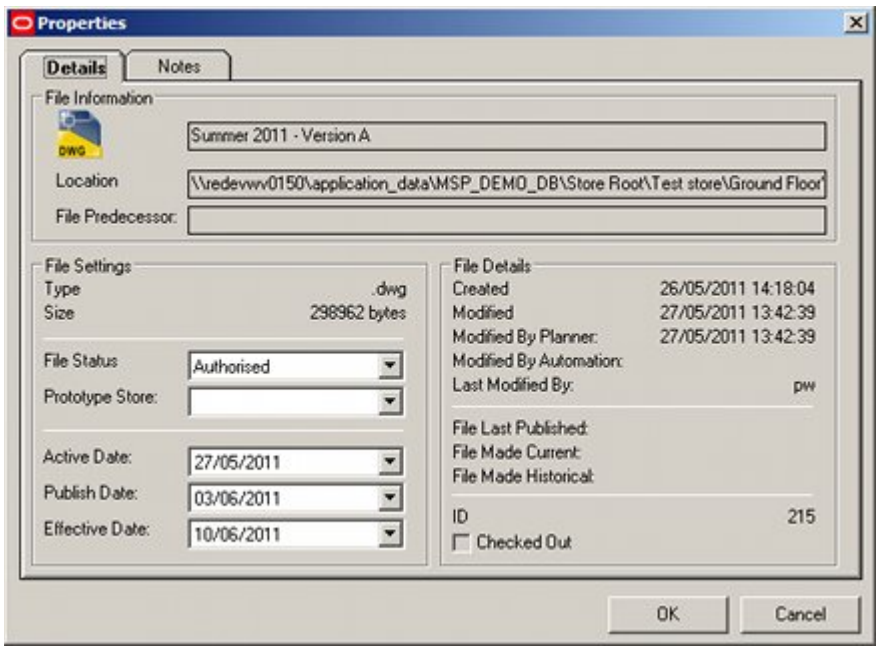



# Floor Plan Publishing

## 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.

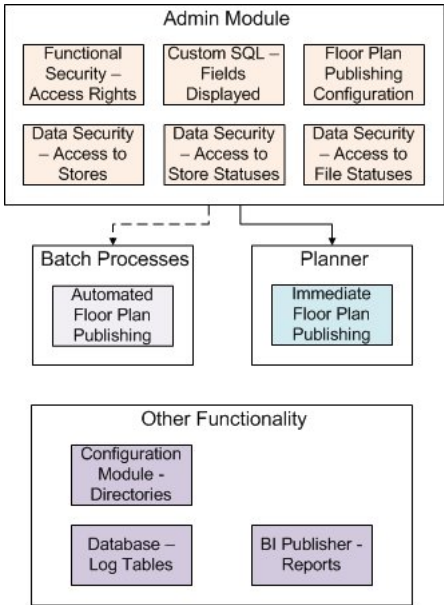



> **Note:** Publishing floor plans should not be confused with reporting on that floor plan. Reporting is used for the collation of information required for ordering the equipment and merchandise required to implement the floor plan. Reports will be used in conjunction with the purchasing system and 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.

The basic method of operation is as follows:




1. **Admin Module**

The Admin 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:

   a. 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.

   b. 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.

   c. 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.

   d. **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.

2. **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 Admin Module.

3. **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 Admin module.

4. **Other Functionality**

There are three other items of functionality that affect floor plan publishing.

a. **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.

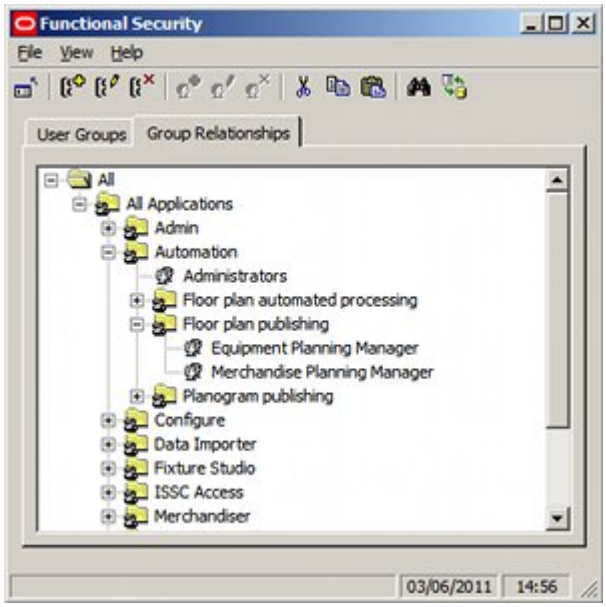
b. **Tables in the Macro Space Planning database** hold the results of floor plan pre-processing and floor plan publishing operations.

c. **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 Admin module. This is done using the Functional Security dialog box accessed from the Security menu.

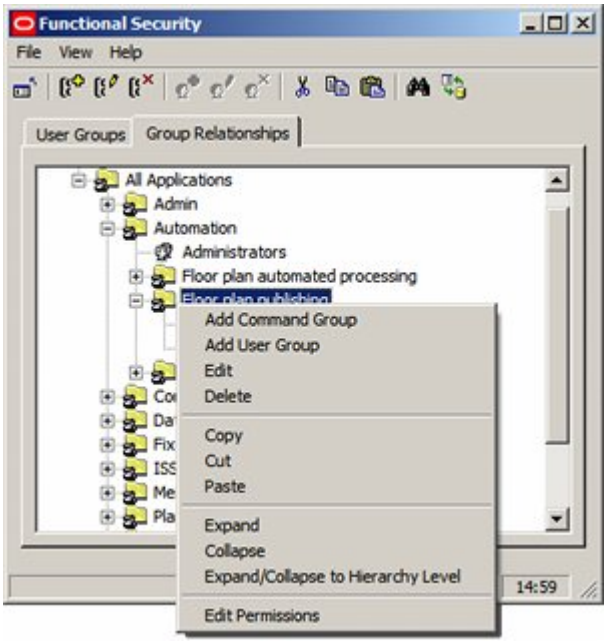
> **Note:** This dialog box will only be accessible to users with access rights to the Admin Module.



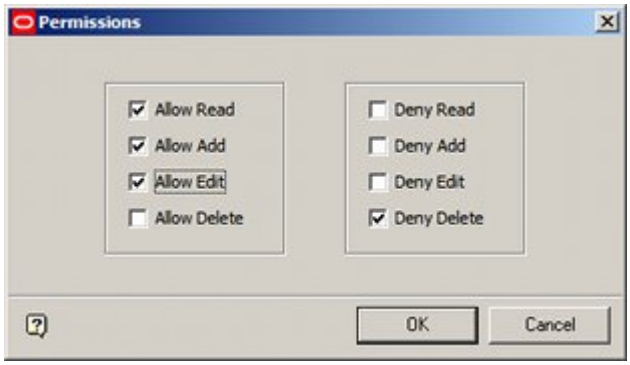

Users assigned to the Automation Command Group (such as the Administrator User Group) can run all Automation Functionality. User Groups assigned to the child Command Groups (Floor plan automated publishing, Floor plan publishing, Planogram publishing) have the ability to use that functionality. In the 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 Automated Publishing (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.

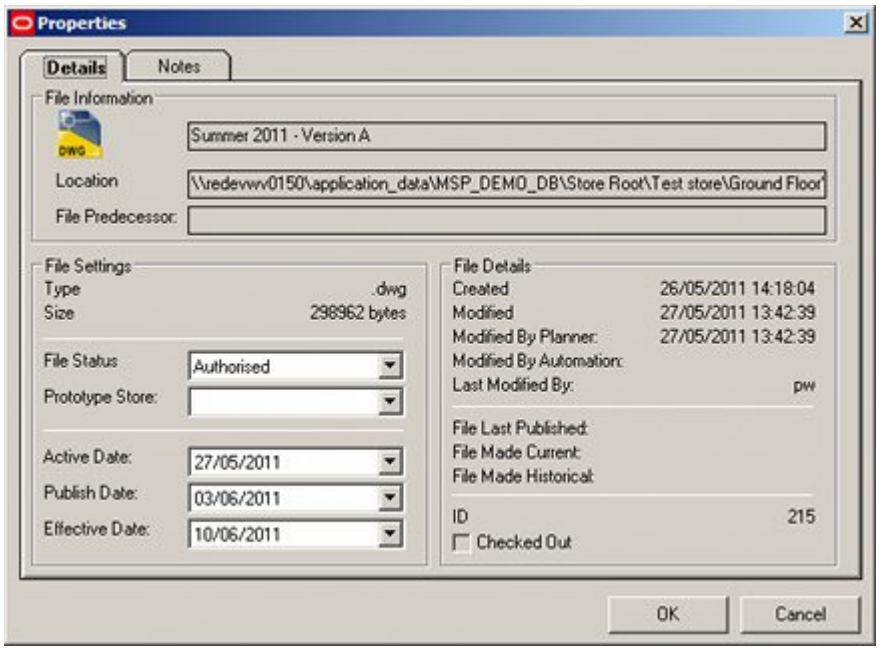



1. If the User Group belongs to a Command Group higher in the Command Group hierarchy, by default it will inherit the permissions from that higher Command Group. This permission can be varied at the lower level by changing the selections made using the check boxes.
2. If the User Group only exists at 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 Floor Plans will be Published

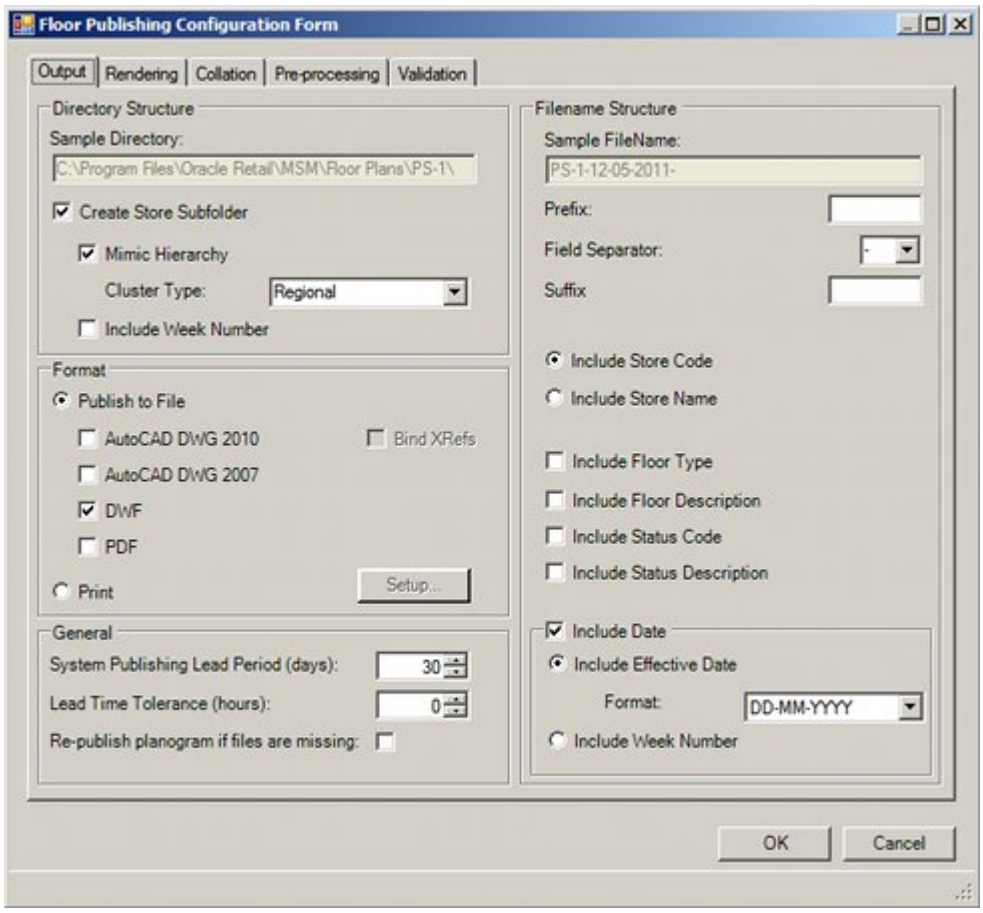
The purpose of publishing a floor plan is to disseminate information on the type, quantity and layout of equipment and merchandise to those tasked with implementing the change. Publishing a floor plan can be done in hard copy or electronic format. The date at which this is executed depends on the Publish 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 Admin Module.

> **Note:** This dialog box will only be accessible to users with access rights to the Admin Module.




Batch processes can be set to start at any time of the day. For example, the batch process might initiate at 8 pm (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:

1. **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.

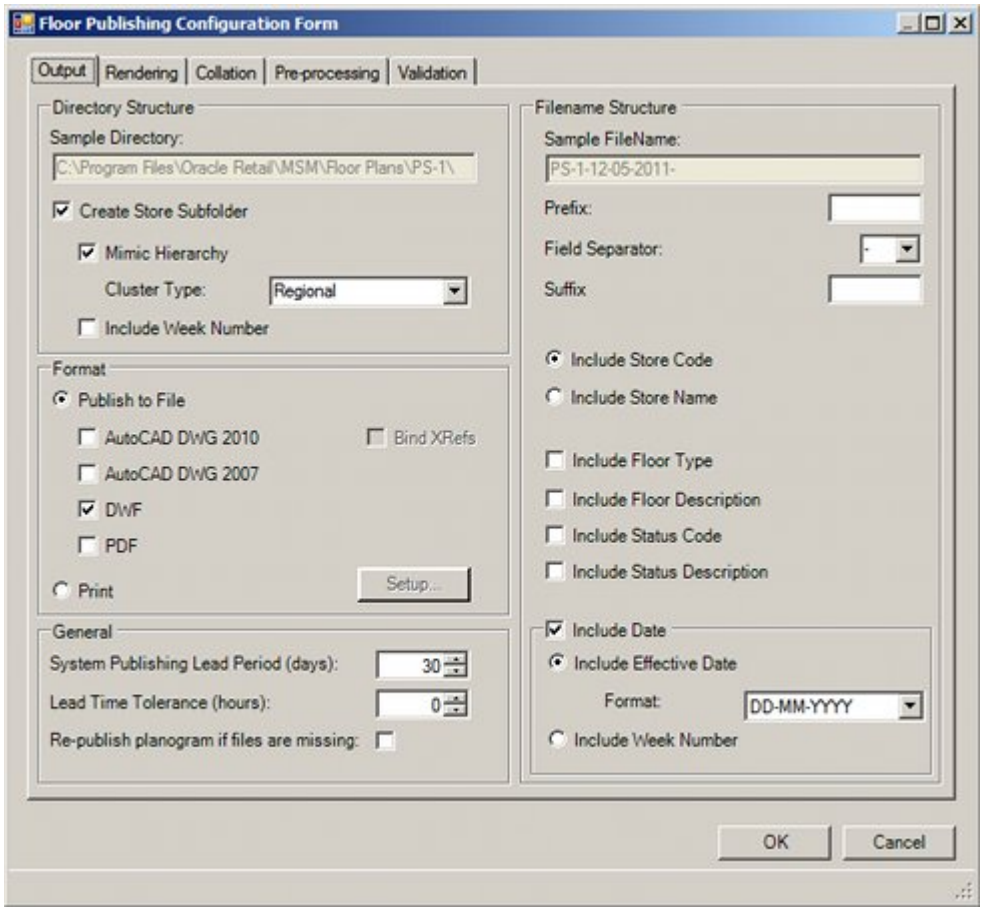
2. **Floor Plan has been Updated since it was Published**

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

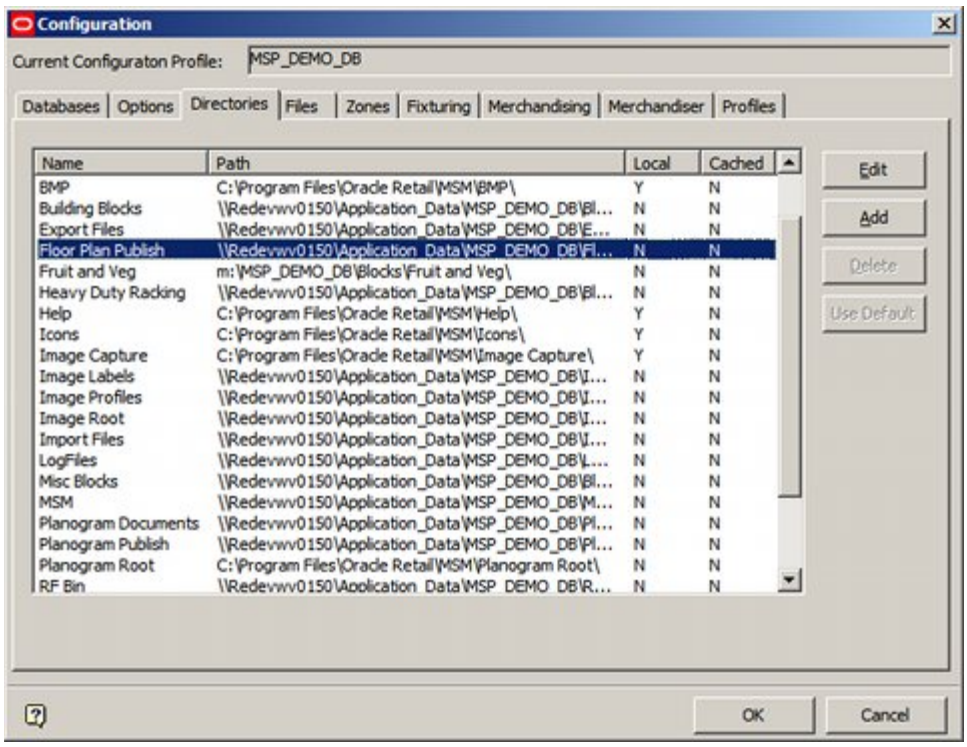
The locations Floor Plans will published to and the file names used are specified in the Output tab of the Floor Plan Publishing Configuration dialog box in the Admin module.

> **Note:** This dialog box will only be accessible to users with access rights to the Admin Module.



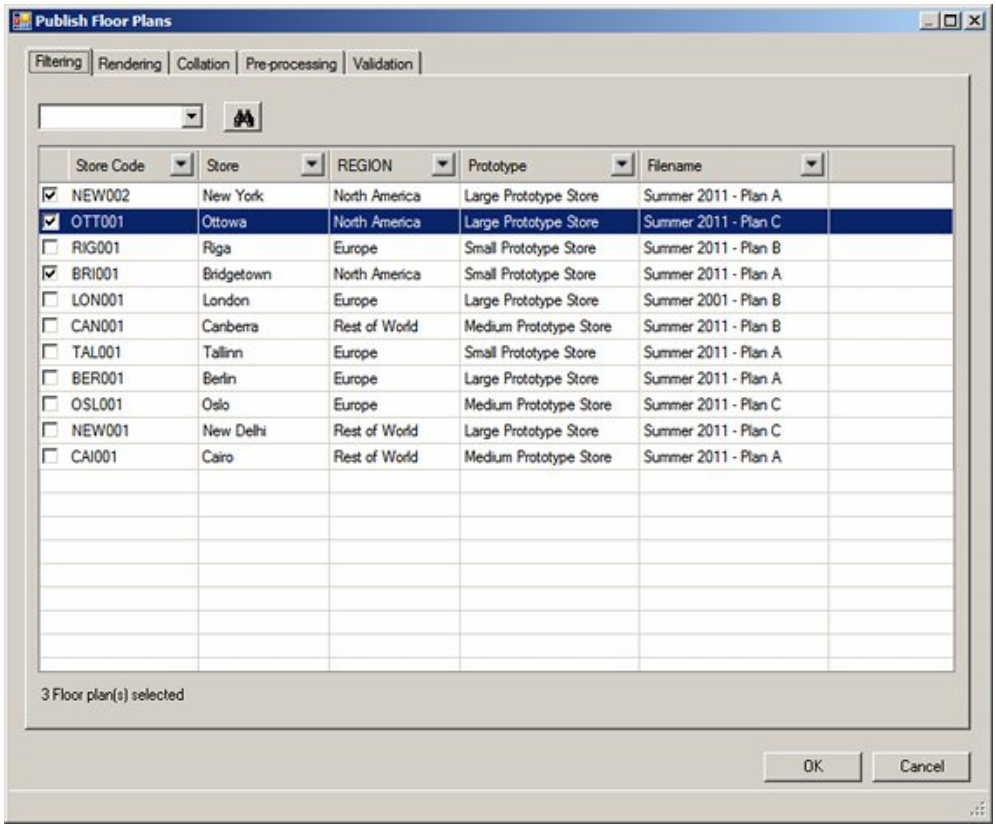

This dialog box allows Administrators to specify the directory structure, file format and file name that will be used when floor plans are published.

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.




## 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.



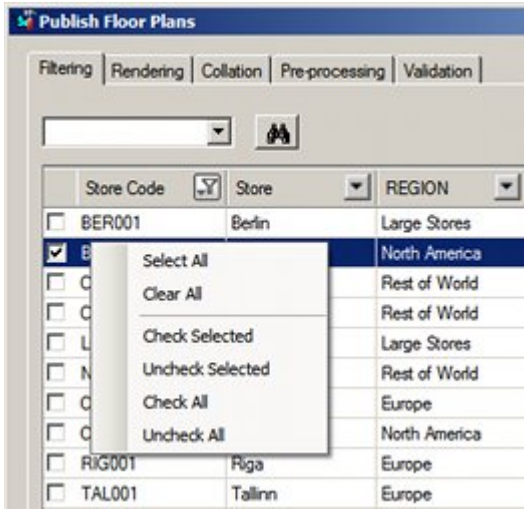

Find operates with explicit or implied wild cards. The explicit wild cards are:

| 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.




a. **Select All** will select (but not check) all rows of data
b. **Clear All** will deselect (but not uncheck) all rows of data
c. **Check Selected** will check all rows of selected data
d. **Uncheck Selected** will uncheck all rows of selected data
e. **Check All** will check all rows of data
f. **Uncheck All** will uncheck all rows of data

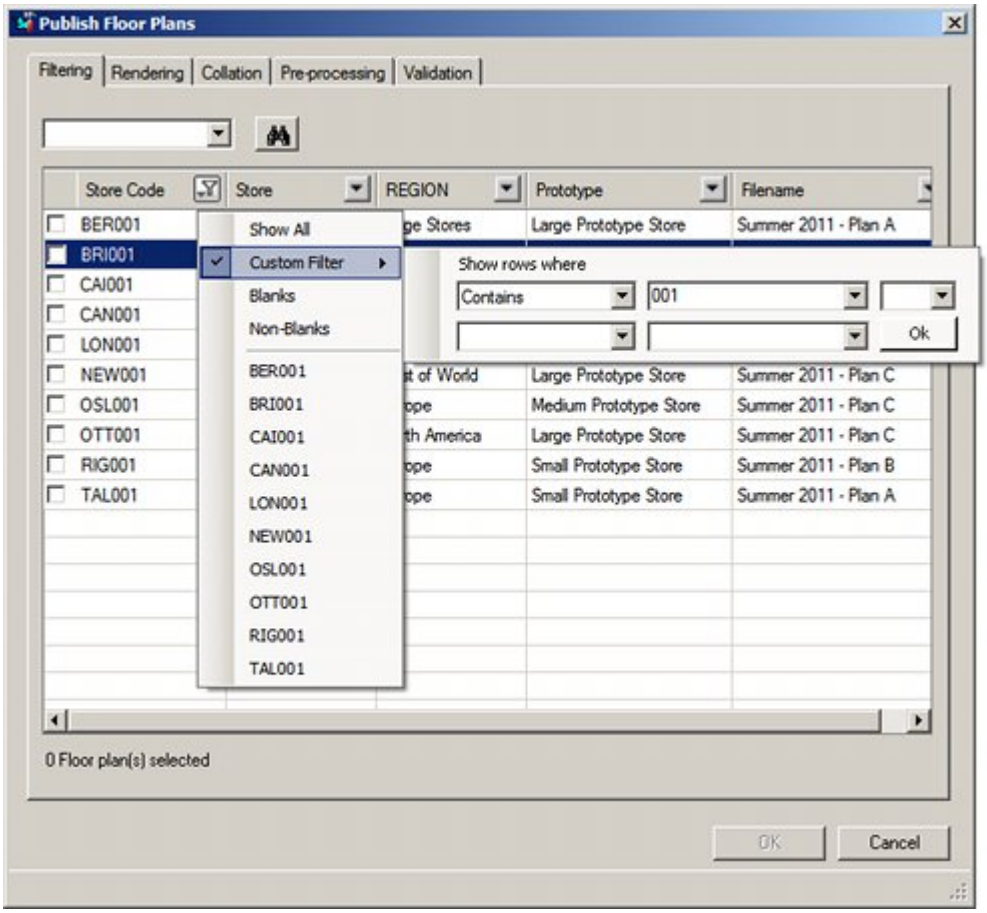
g. **Paste** allows users to paste a carriage returned list of floor plan identifiers from the Windows clipboard. All rows in the dialog box that match the pasted information will be checked.

**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:

1. **Show All** - this option shows all results.
2. **Custom Filter** - this option allows users to set filters using Boolean logic. The options are:
   a. **Equal to**: will return rows that are an exact match for the entered text.
   b. **Not Equal to**: will return rows that do not match the text string
   c. **Contains**: will return rows where part of the data matches the text string. (Uses implied wild cards).
   d. **Does not contain**: will return rows where no part of the data matches the text string. (Uses implied wild cards).
   e. **Begins with**: will return rows where the text string is an exact match for the start of the data.

f. **Ends with**: will return rows where the text string is an exact match for the end of the data.

g. **Does not begin with**: will return rows where the text string is not an exact match for the start of the data.

h. **Does not end with**: will return rows where the text string is not an exact match for the end of the data.

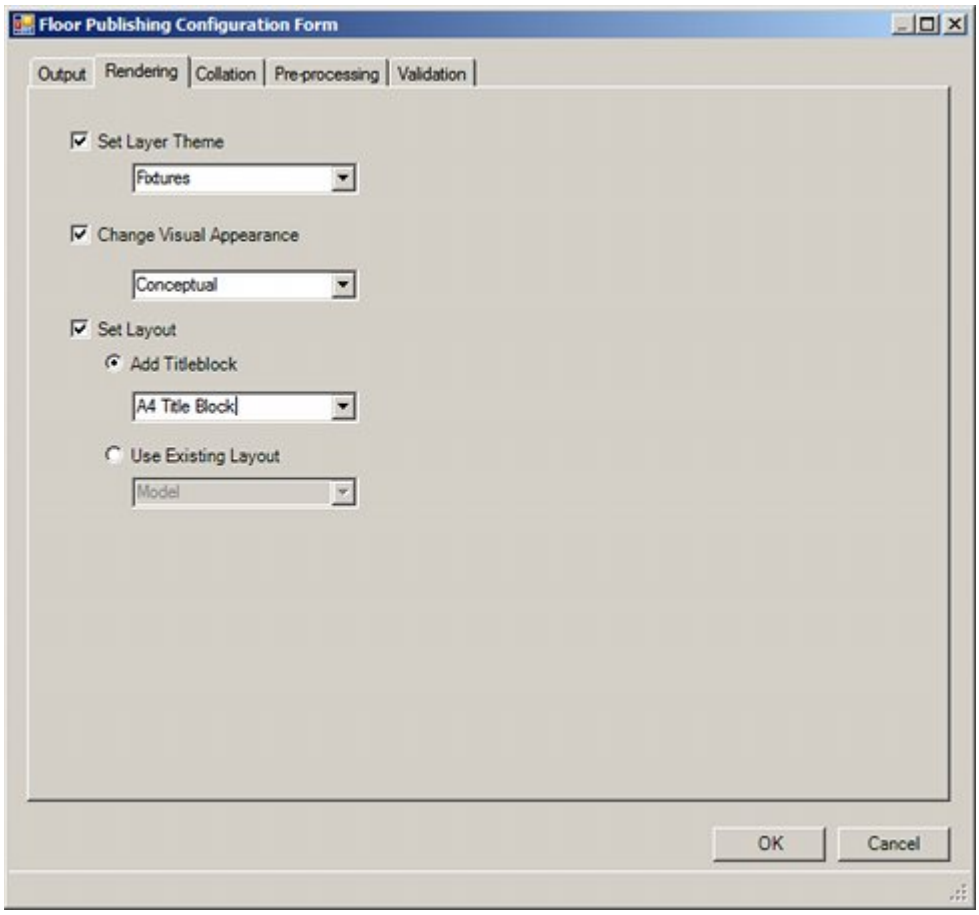
3. **Blanks** - column will be filtered to only show rows with null values.
4. **Non-Blanks** - column will be filtered to only show rows containing a value
5. **Results** - column will be filtered to only show the selected result.

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.

## The Rendering Tab

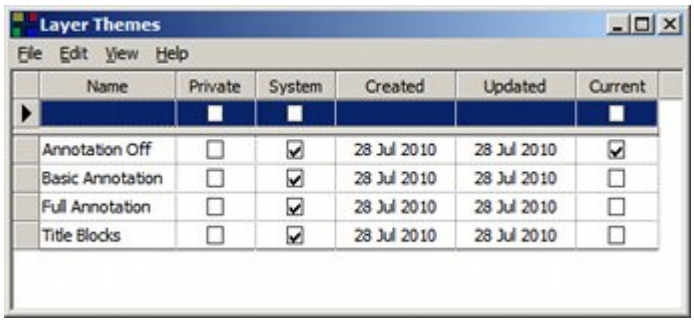
The **Rendering Tab** is used to ensure the visual appearance of the floor plan is as desired.



### 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.

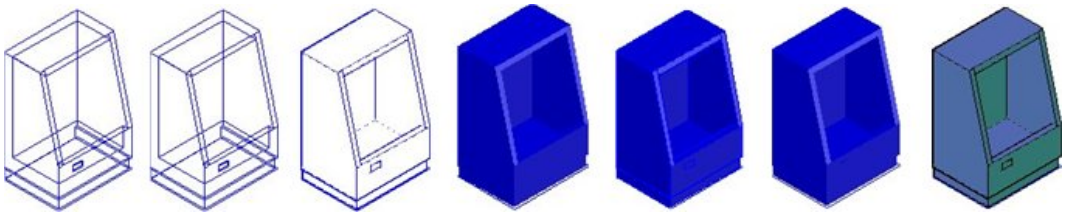
These layer themes are configured in the Layer Themes dialog box accessed from the Layer Aliased dialog box on the Format menu in the Planner module.




Change Visual Appearance

If the 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



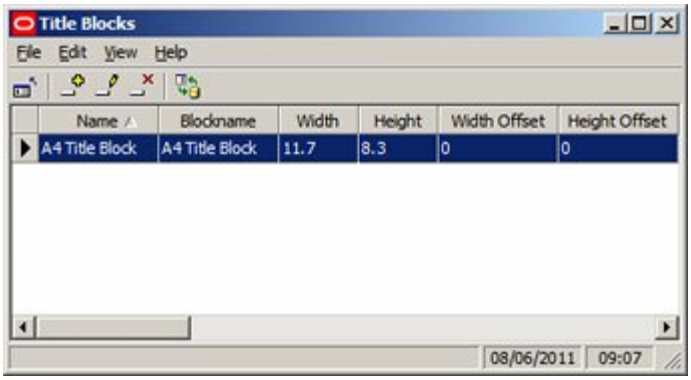
The images above show the different visual appearances available. Within the Planner module, they option can be set in either the Visual Styles toolbar or Visual Styles Manager.

### Set Layout

If the checkbox is ticked the users can select one of two options: Add Titleblock or Use Existing Layout.

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 Admin 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 |

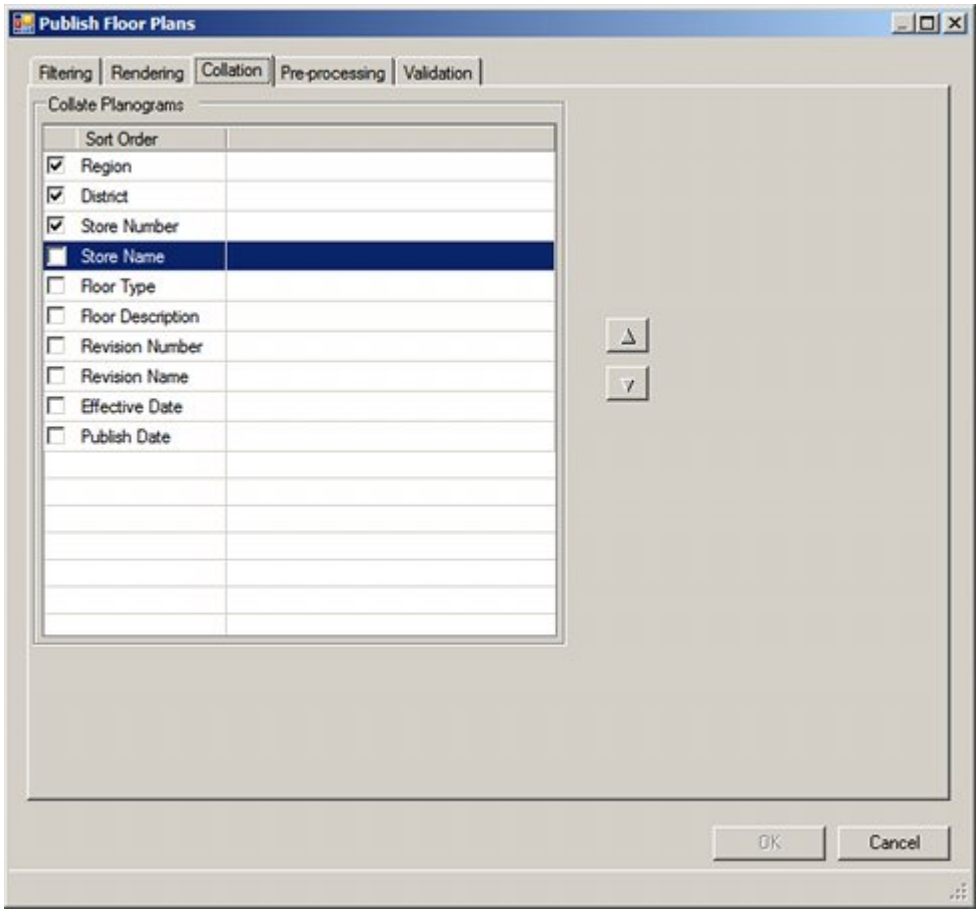
The names of the paper space tabs can be seen at the foot of the floor plan in the Planner module. In the example below they are named Overall store, food and drink, Electrical and Clothing.



## The Collation Tab

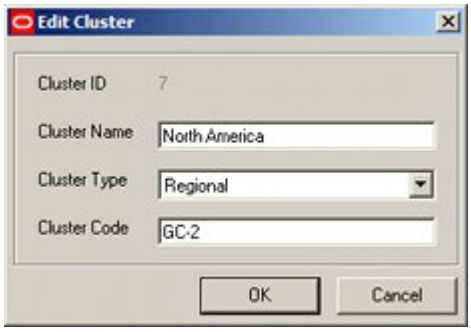
The **Collation Tab** allows users to specify the sequence floor plans will be published or printed in. Its main use is in printing hard copy versions of the floor plans where the sequence they are printed in makes it easier to sort and distribute them after printing.

At least one collation option must be selected, or the tab will show as having an error.



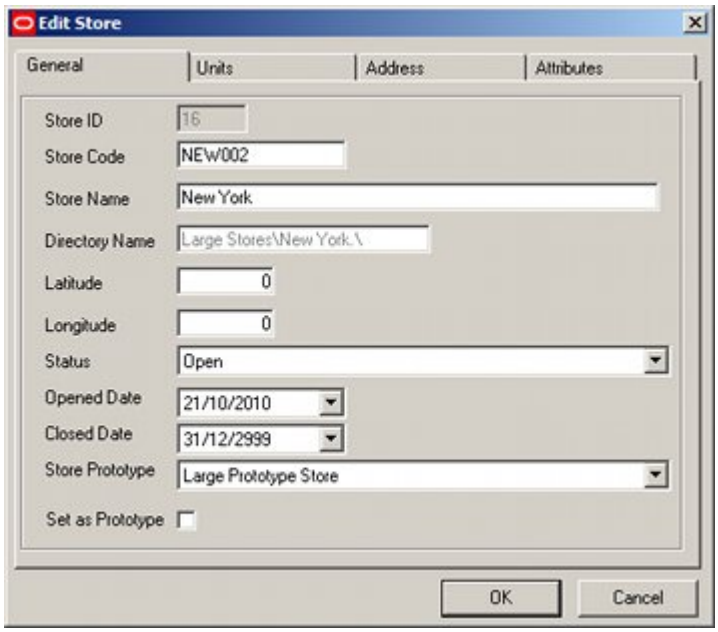

The available options can be ordered by highlighting them, then using the up or down arrows. The options are made active by using the check boxes.

1. **Region** is a specific type of cluster set in the Cluster type drop down list in the Cluster dialog box in Store Manager.
2. **District** is a specific type of cluster set in the Cluster type drop down list in the Cluster dialog box in Store Manager.

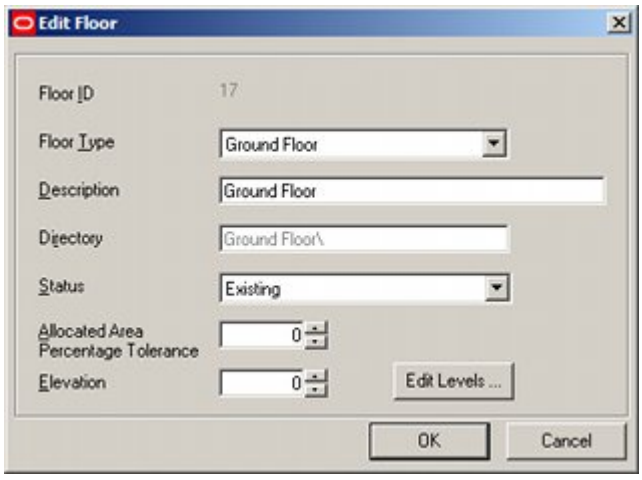



3. **Store Number** is the Store Code in the Store dialog box in Store Manager.

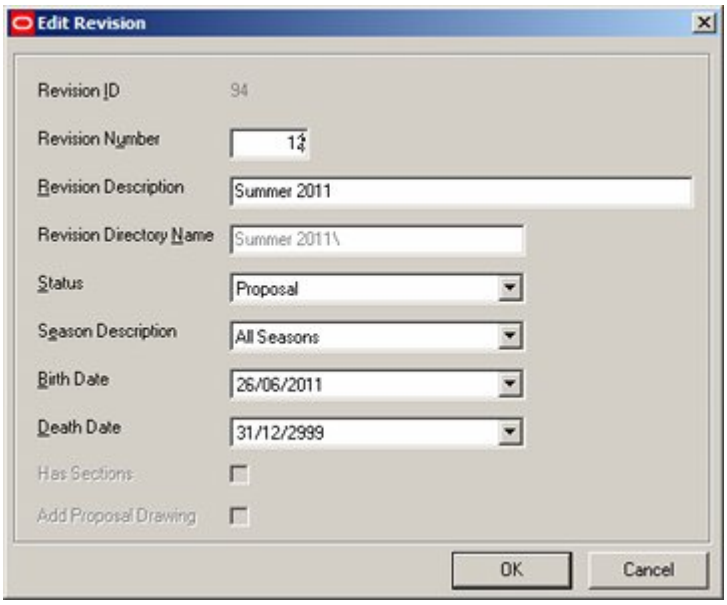
4. **Store Name** is the Store Name in the Store dialog box in Store Manager.



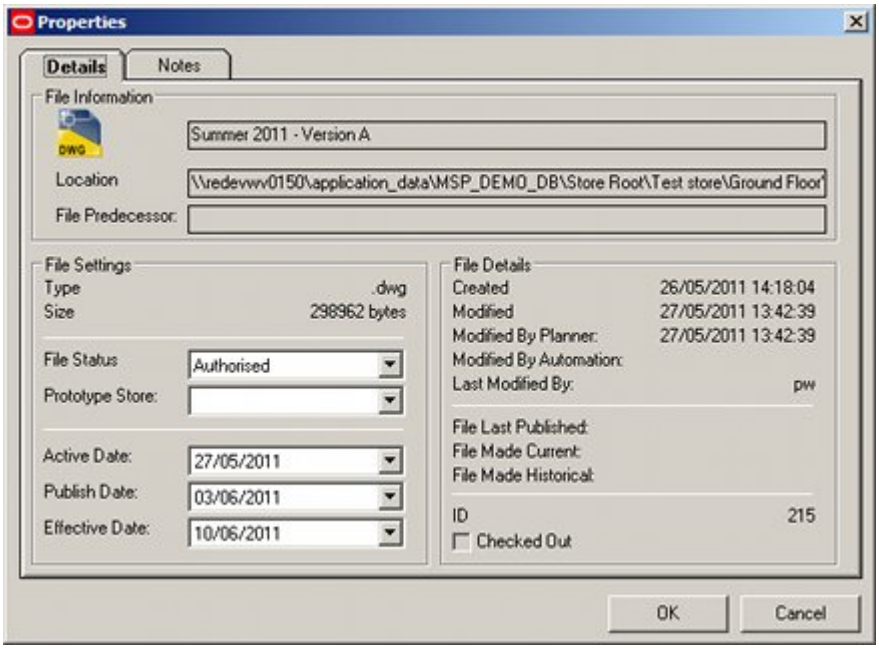

5. **Floor Type** is the type selected from the drop down list in the Floor dialog box in Store Manager.
6. **Floor Description** is the Description in the Floor dialog box in Store Manager.




7. **Revision Number** is the Revision Number in the Revision dialog box in Store Manager.
8. **Revision Name** is the Revision Description in the Revision dialog box in Store Manager.

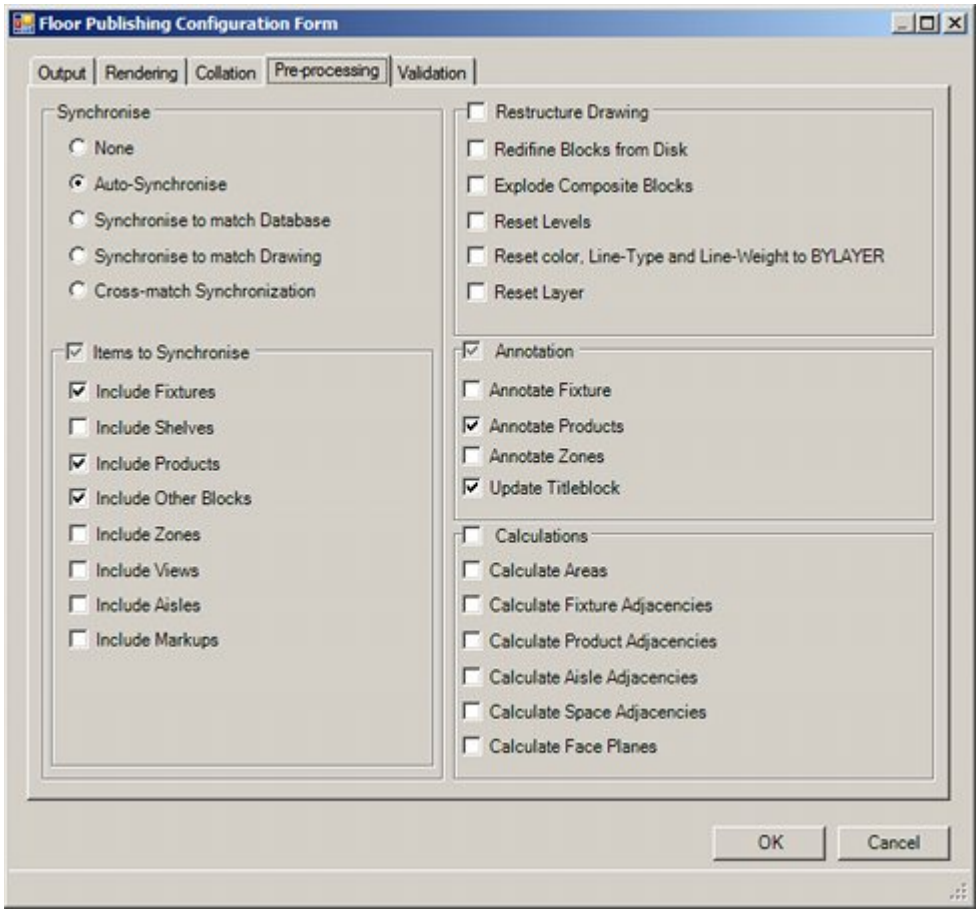



9. **Publish Date** is the Publish Date set in the File Properties dialog box in Store Manager.
10. **Effective Date** is the Effective Date set in the File Properties dialog box in Store Manager.



## 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:

1. **None** - no synchronization operations will be carried out.
2. **Auto-Synchronize** - the application will automatically detect which form of synchronization is required:
   a. 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".

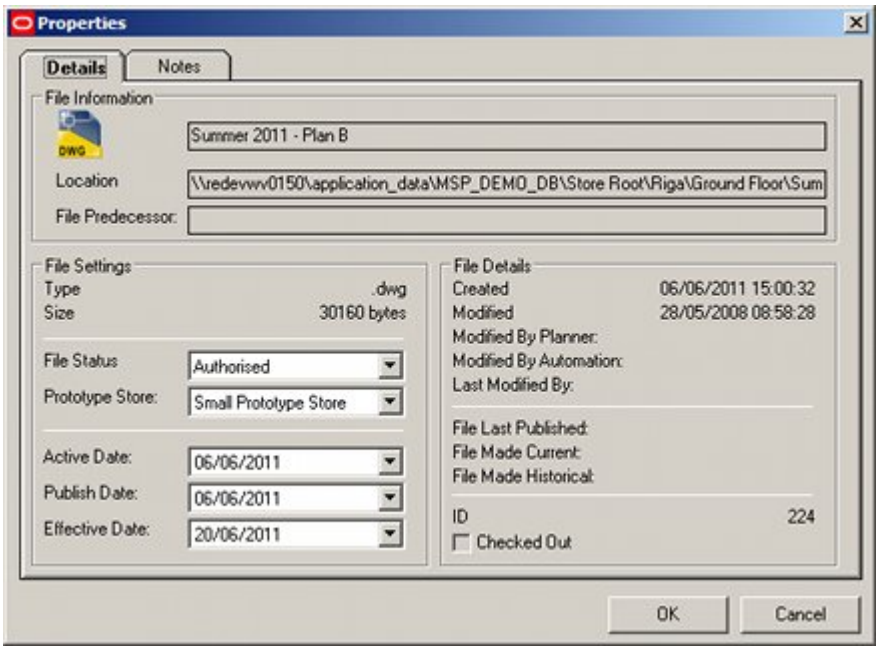
b. If the date of the information in the floor plan (or the date it was modified in raw AutoCAD) exceeds the date the information was written to the database, the information will be synchronized "match the drawing".

c. 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.

3. **Synchronize to Match Database** - information in the database will be written into the floor plan.
4. **Synchronize to Match Drawing** - information from the floor plan will be written to the database.
5. **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.

1. **Include Fixtures** - fixtures and fittings will be synchronized.
2. **Include Shelves** - shelf objects will be synchronized.
3. **Include Products** - products and planograms will be synchronized
4. **Include Other Blocks** - this synchronizes all blocks assigned as type 'other' in Fixture Studio.
5. **Include Zones** - Zones will be synchronized.

6. **Include Views** - view positions in Planner or Merchandiser will be synchronized. (This will not affect In-Store Space Collaboration).
7. **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.

1. **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.
2. **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.

3. **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.
4. **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.
5. **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 Admin Module.

1. **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.
2. **Annotate Products** - all products, planograms and planogram profiles will have their annotation updated.
3. **Annotate Zones** - all zones will have their annotation updated.
4. **Update Title Block** - all text boxes in the title block that reference information in the database will have that information updated.

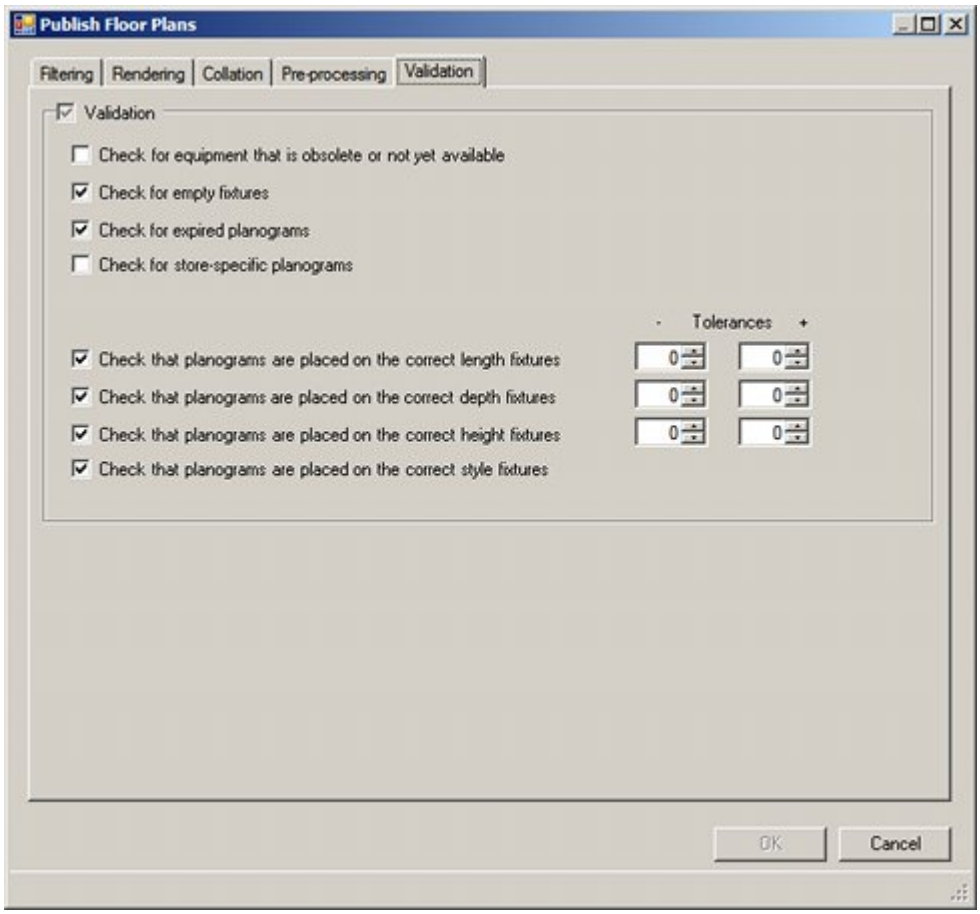
**Calculations**

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.

1. **Calculate Areas** - this updates the area calculations; and hence the floor area assigned to each fixture.
2. **Calculate Fixture Adjacencies** - this updates the fixture adjacencies; and hence the relationship of one fixture to another.
3. **Calculate Product Adjacencies** - this updates the product adjacencies; and hence the relationship of one product to another.
4. **Calculate Aisle Adjacencies** - this updates the aisle adjacencies; and hence which products share an aisle.
5. **Calculate Space Measures** - this updates space measures: the volume occupied by each product in a planogram.
6. **Calculate Face Planes** - this updates face planes: the frontal area occupied by each product in a planogram.

## The Validation Tab

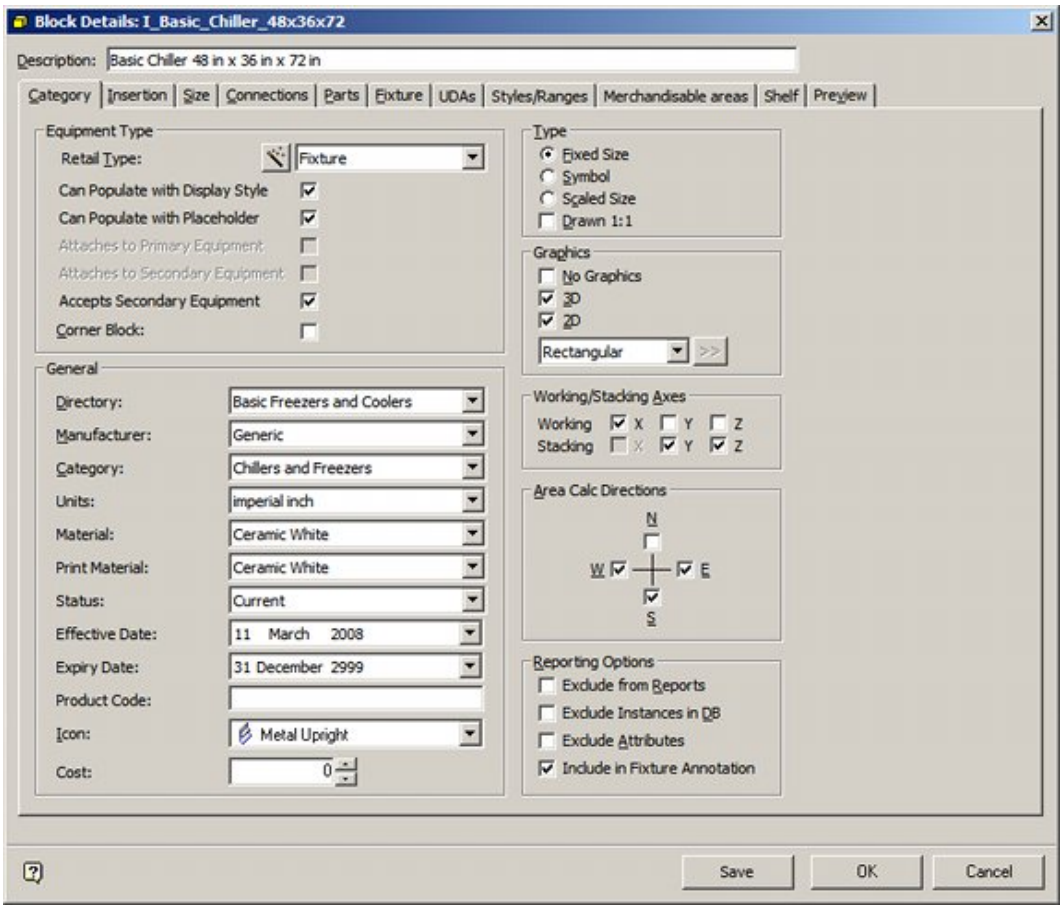
The **Validation Tab** enables users to set a series of validation checks that must be satisfied before the floor plan is published. If any of the checks fail, the floor plan will be not be published and details written to the AVTTB_PROCESS_FILE_LOG table. Information in this table can be read by means of a BI Publisher report or similar.



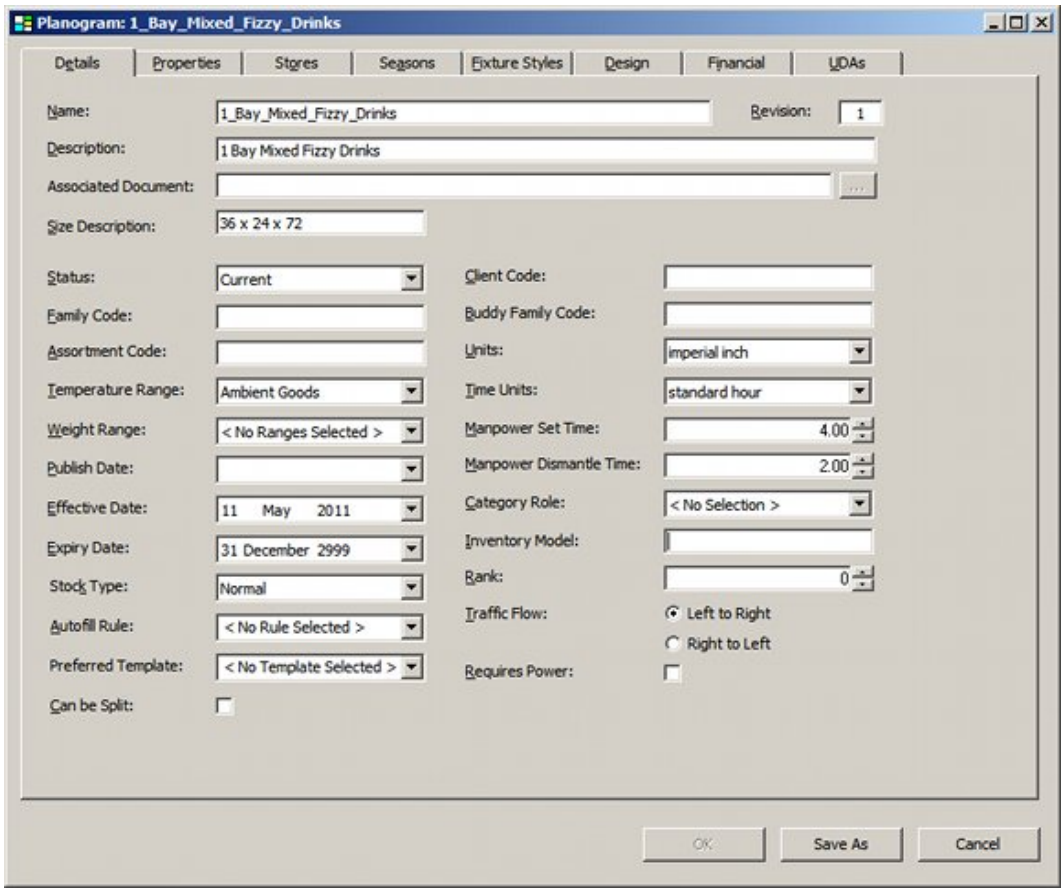
The tolerance values will use the system units, i.e. inches for imperial systems, and millimeters for metric systems. The values on the left are the lower tolerance; the values on the right are the upper tolerance.

1. **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.




The Effective Date of the Planogram is set in the Details tab of the Planogram design dialog box in the Merchandiser module.

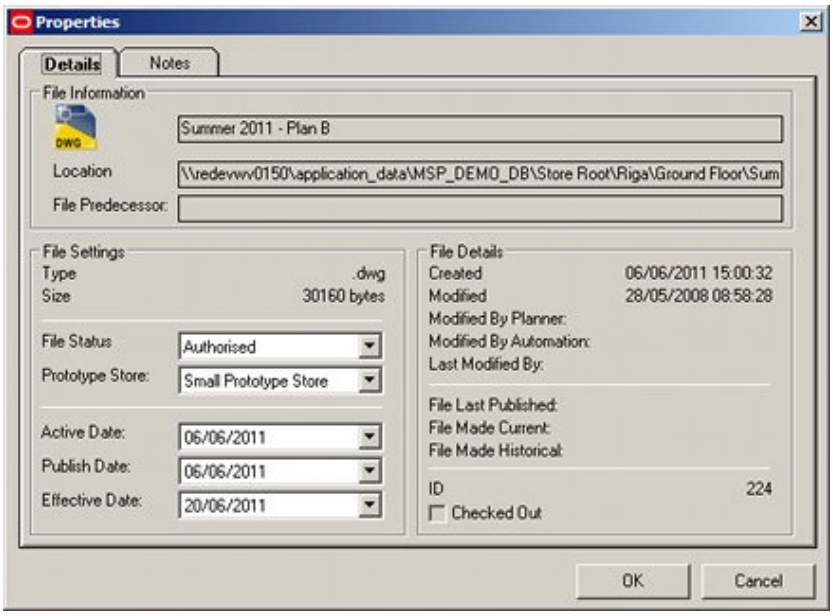



This validation check will error if the Planogram Effective Date is before the Equipment Effective Date or after the Equipment Expiry Date.

The relevant part of the check will be ignored if the equipment effective or expiry date is undefined.

2. **Check for empty fixtures** - if selected, this validation option will search for fixtures which do not contain any products.
3. **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:
   a. The Effective Date of the Planogram is less than or equal to the Floor Plan Effective Date
   b. 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).

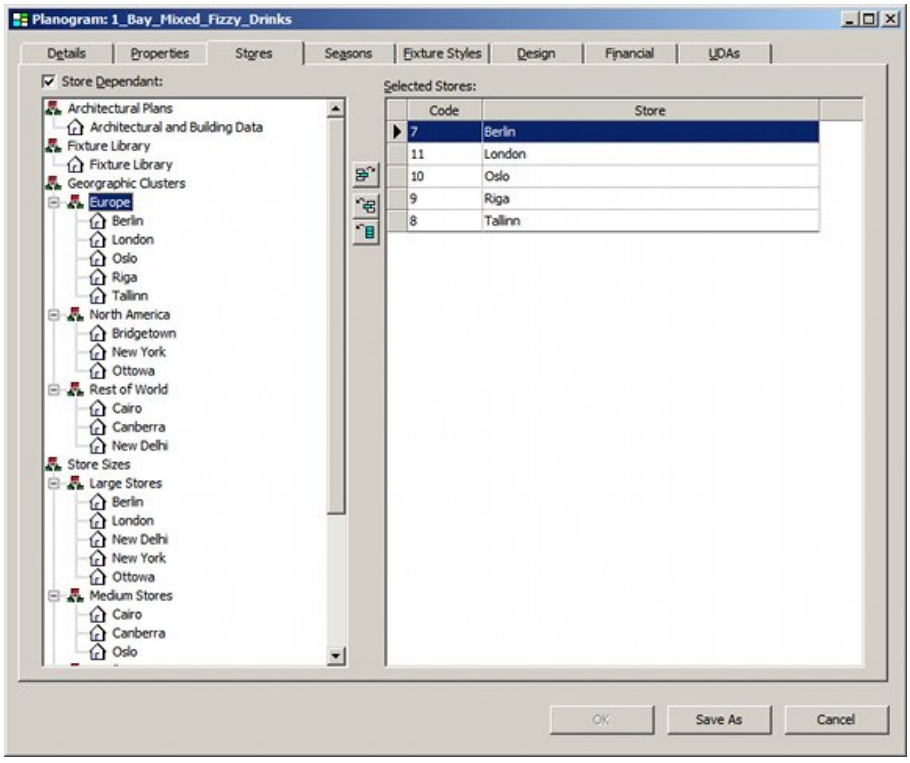



**Note:** Active Dates can also be set in the File Properties dialog box in Store Manager.

The relevant part of the check will be ignored if the planogram effective or expiry date is undefined.

4. **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.

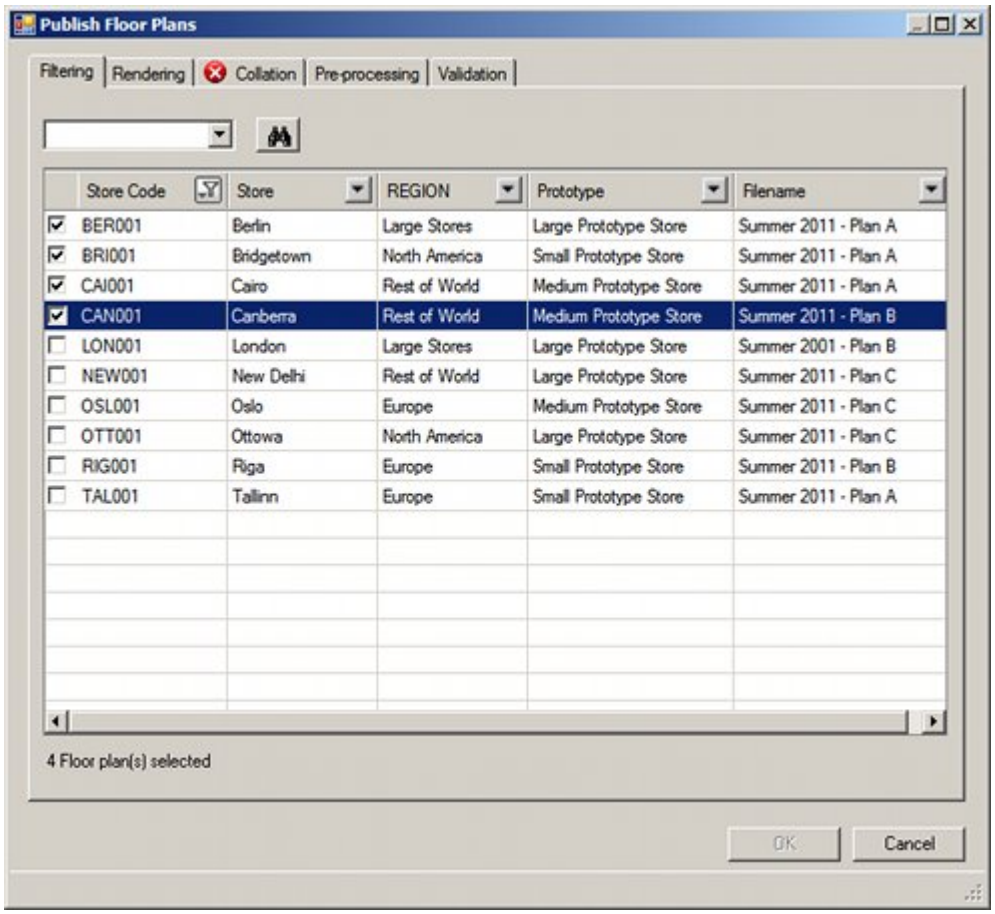
Whether planogram are store specific or not is specified in the Stores tab of the Planogram Design dialog box in the Merchandiser module.



5. **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.
6. **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.
7. **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.
8. **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.

## Errors and Results

If any settings in the Publish Floor Plans 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.

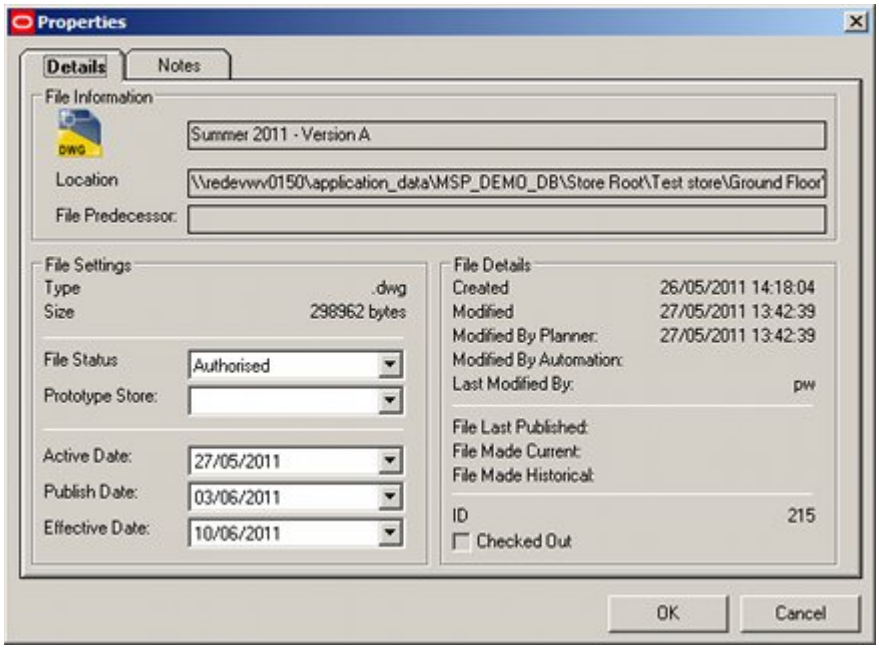



Users must correct the problems before the Print button will activate.

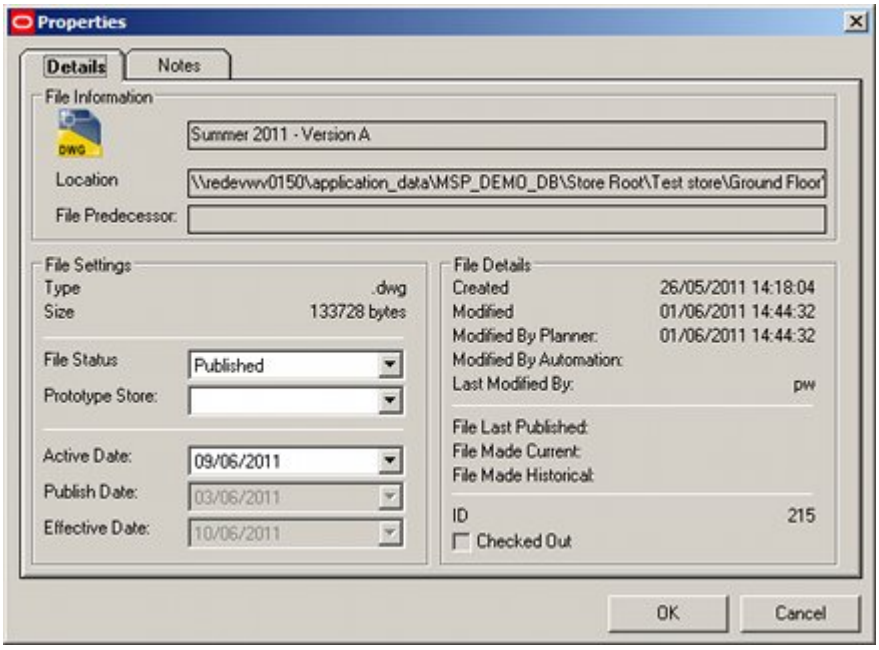
The results from Floor Plan Publishing are stored in two tables within the database. These results can be viewed via reports generated from BI Publisher (or similar software).

## 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.

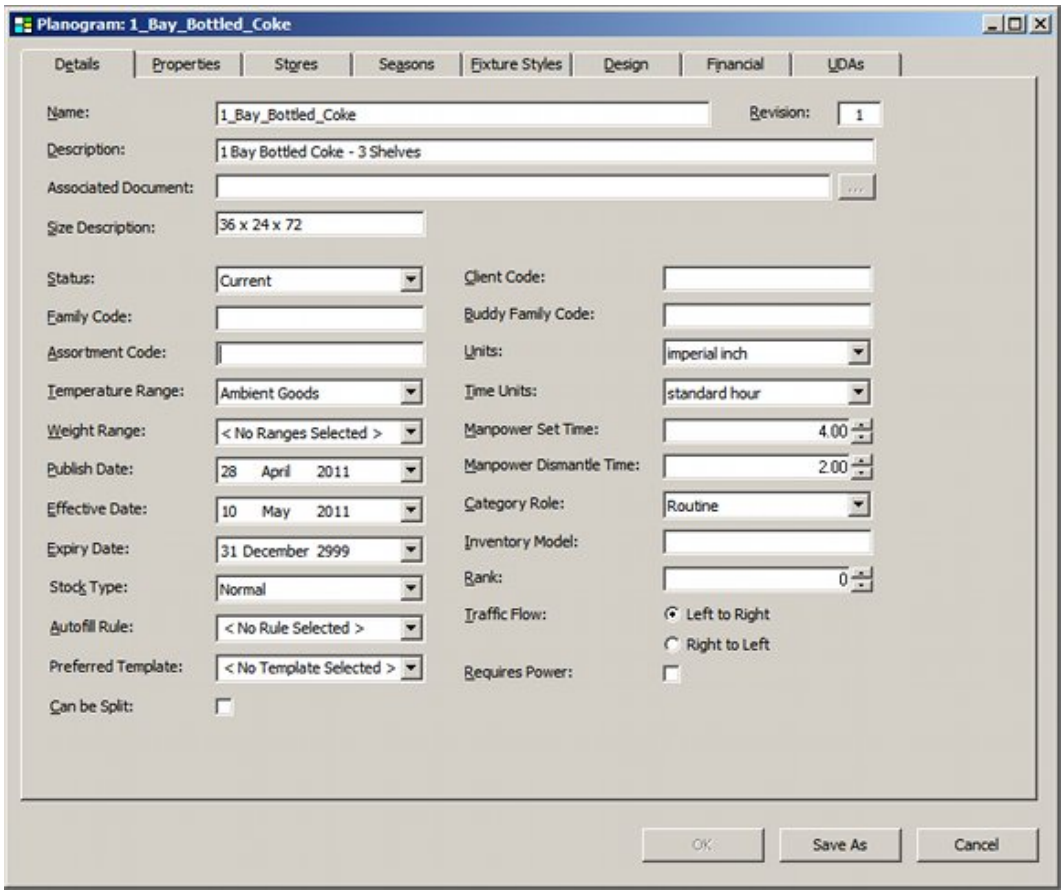
# Planogram Publishing

## 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 Admin module.

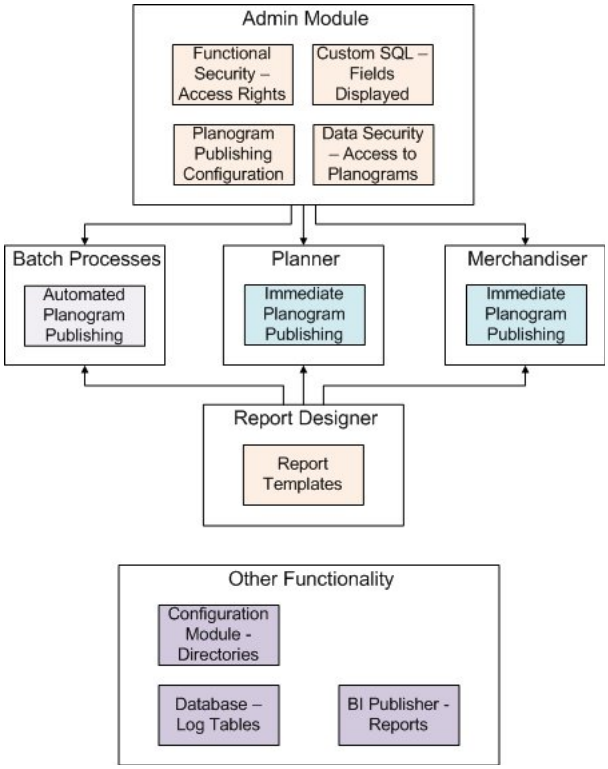
The purpose of publishing a planogram is to disseminate information on the type, quantity and location of shelves and merchandise to those tasked with implementing the change. Publishing a planogram design can be done in hard copy or electronic format. The date at which this is executed depends on the Publish Date set in the Details tab of the Planogram Design dialog box in the Merchandiser module.




The 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. **Admin Module**

The Admin 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 floor plans:

   a. 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.

   b. 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).

   c. 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.

   d. **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.

2. **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 Admin 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 Admin 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 Admin 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.

a. **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.

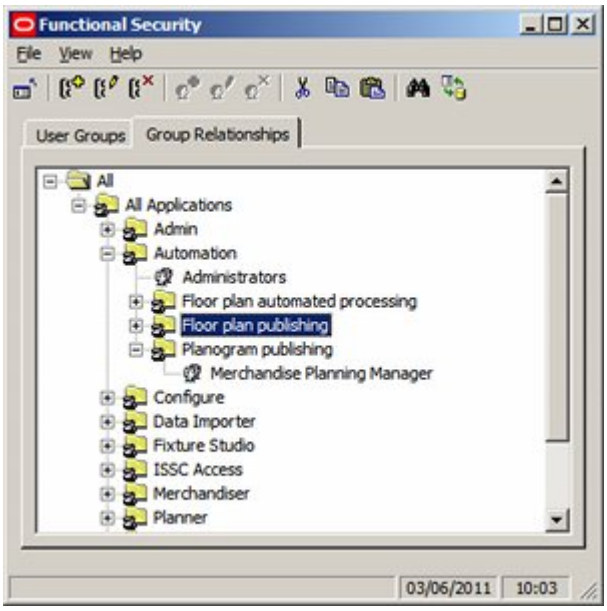
b. **Tables in the Macro Space Planning database** hold the results of planogram publishing operations.

c. **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

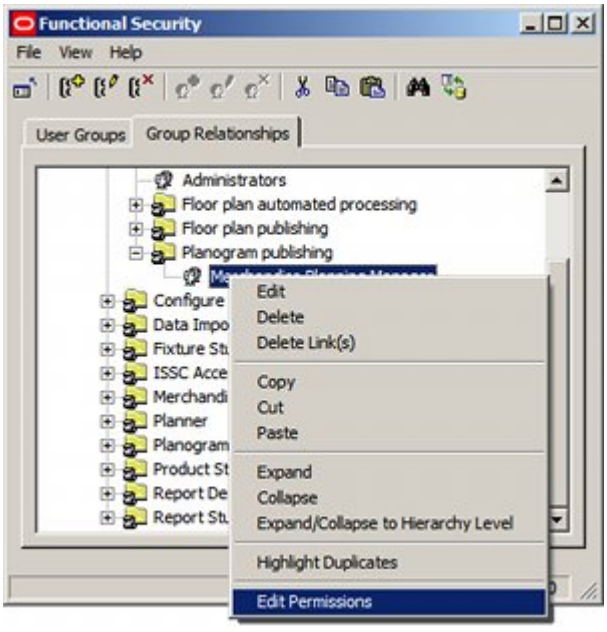
Before a user can run Immediate Planogram Publishing, they must first have been assigned the appropriate permissions in the Admin module. This is done using the Functional Security dialog box accessed from the Security menu.

> **Note:** This dialog box will only be accessible to users with access rights to the Admin Module.

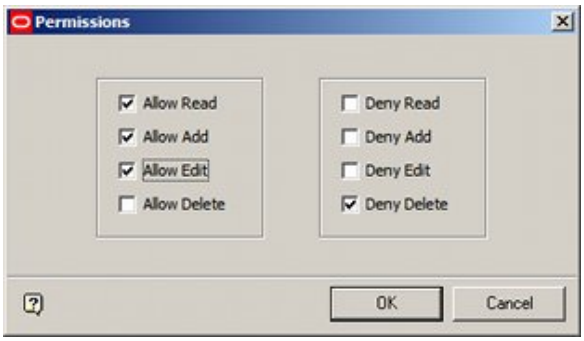



Users assigned to the Automation Command Group (such as the Administrator User Group) can run all Automation Functionality. User Groups assigned to the child Command Groups (Floor plan automated publishing, Floor plan publishing, Planogram publishing) have the ability to use that functionality. In the 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.

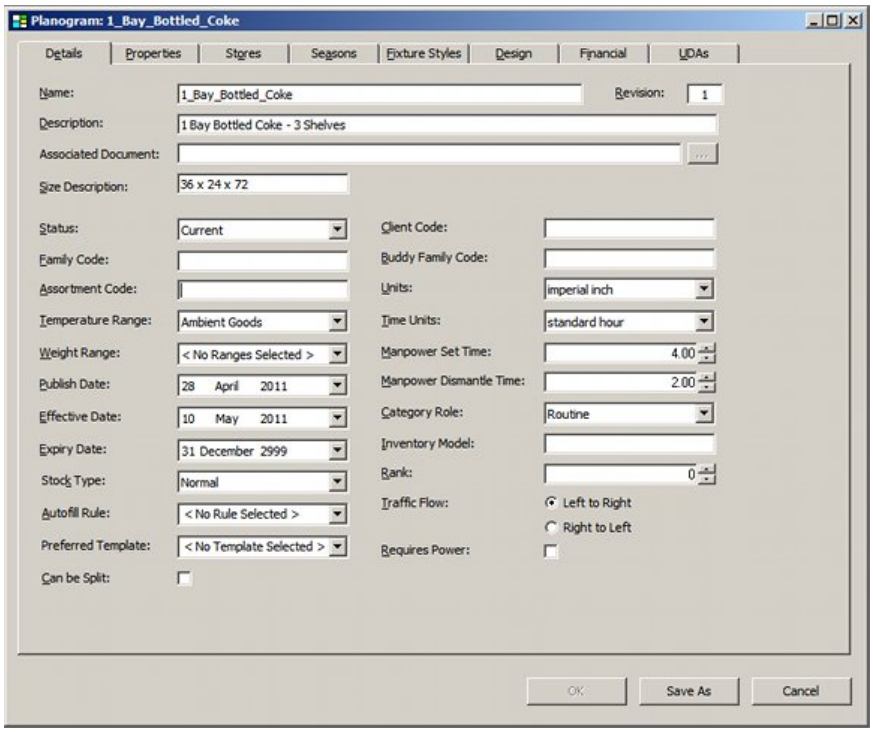



1. If the User Group belongs to a Command Group higher in the Command Group hierarchy, by default it will inherit the permissions from that higher Command Group. This permission can be varied at the lower level by changing the selections made using the check boxes.
2. If the User Group only exists at this level in the hierarchy, the Permissions dialog box will initially have all check boxes blank. The Administrator must then assign Allow of Deny permissions.

## Dates Planograms will be Published

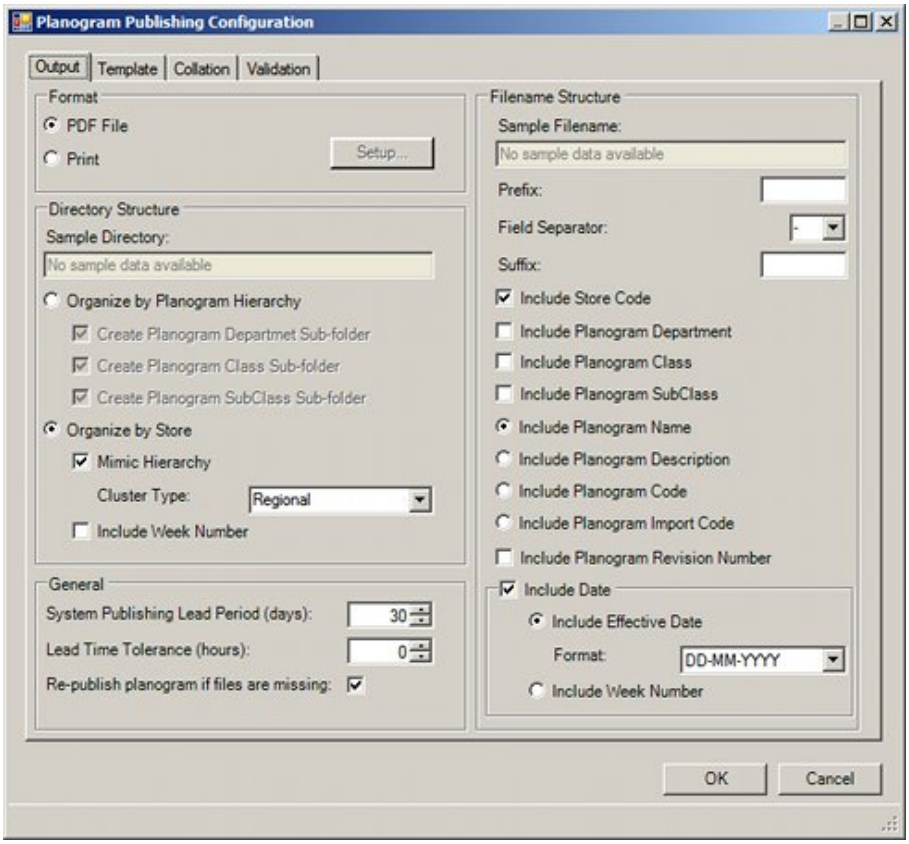
The purpose of publishing a planogram is to disseminate information on the type, quantity and location of shelves and merchandise to those tasked with implementing the change. Publishing a planogram design can be done in hard copy or electronic format. The date at which this is executed depends on the 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.



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 Admin Module.

> **Note:** This dialog box will only be accessible to users with access rights to the Admin Module.




Batch processes can be set to start at any time of the day. For example, the batch process might initiate at 8 pm (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

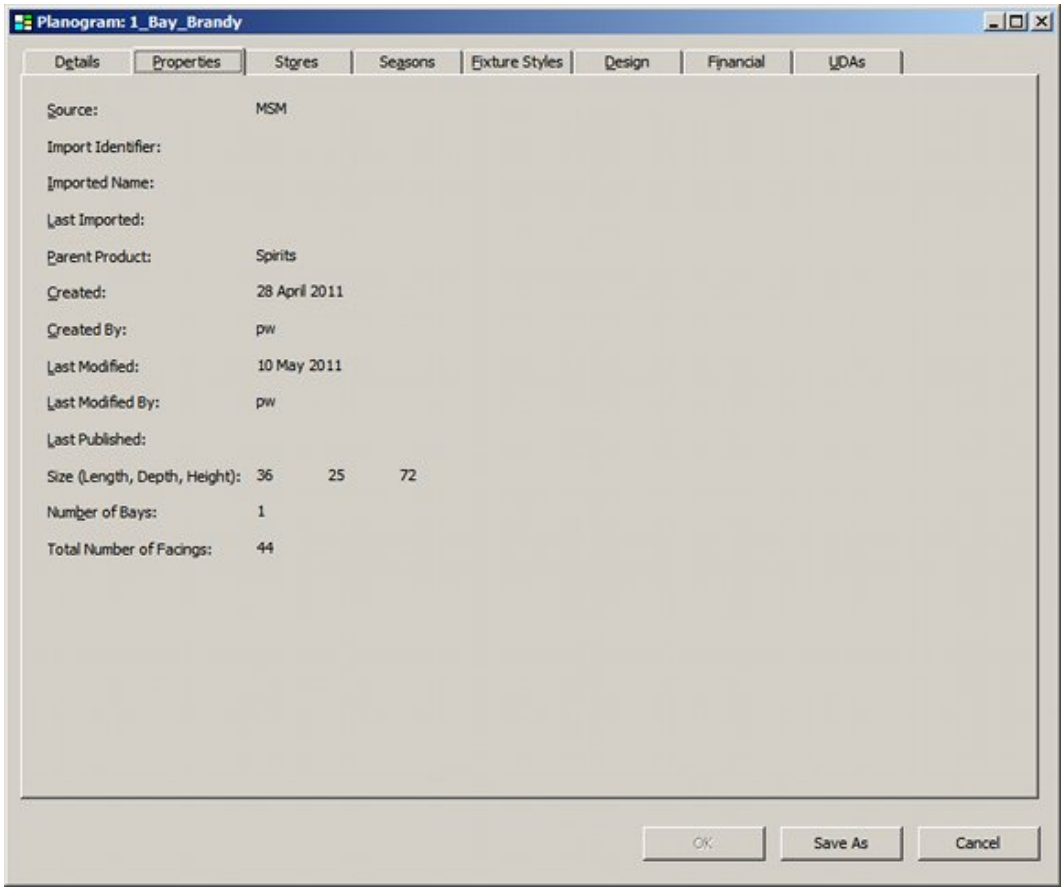
There are two criteria for publishing planograms:

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.

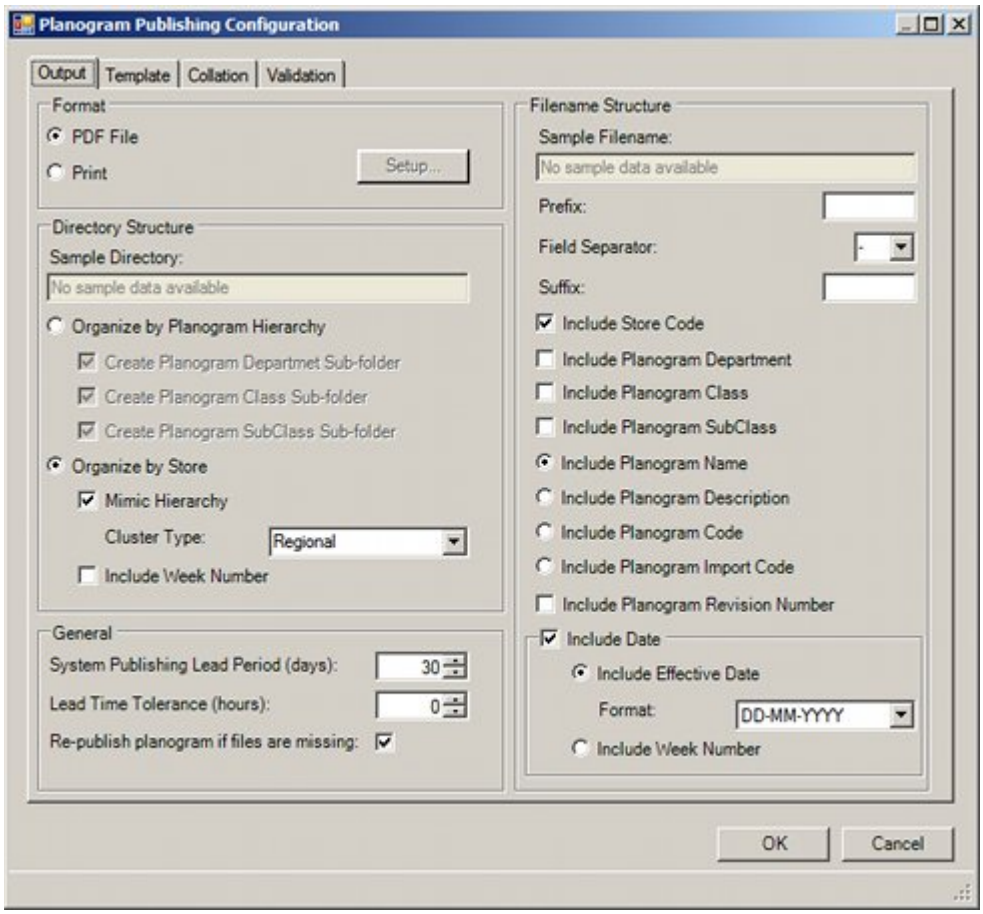



**Note:** Planograms may also be republished if the **Republish planogram if files are missing** option has been checked in the Planogram Publishing Configuration dialog box.

## Locations Planogram Designs will be Published To

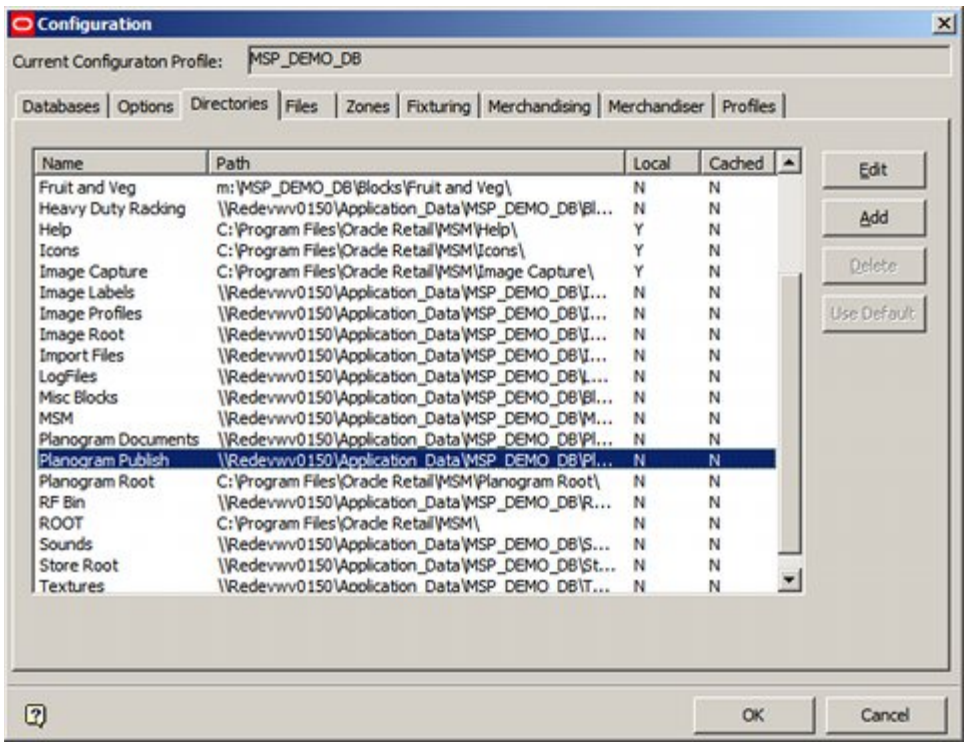
The locations Planogram designs will published to and the file names used are specified in the Output tab of the Planogram Publishing Configuration dialog box in the Admin module.

> **Note:** This dialog box will only be accessible to users with access rights to the Admin Module.



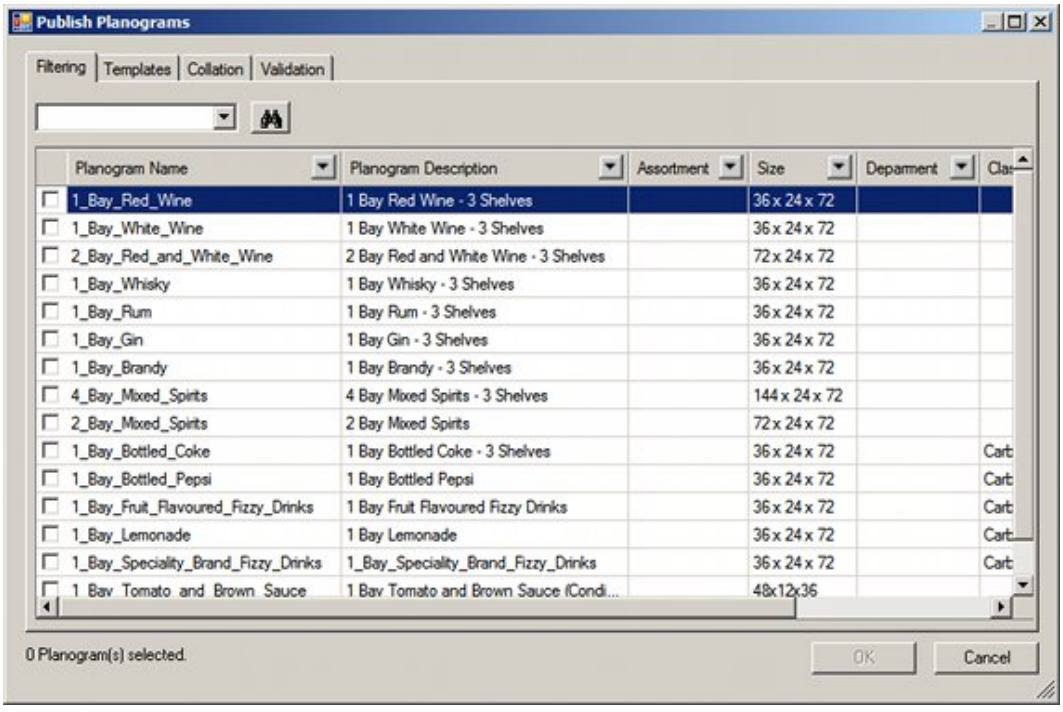

This dialog box allows Administrators to specify the directory structure, file format and file name that will be used when planogram designs are published.

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.




## 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.



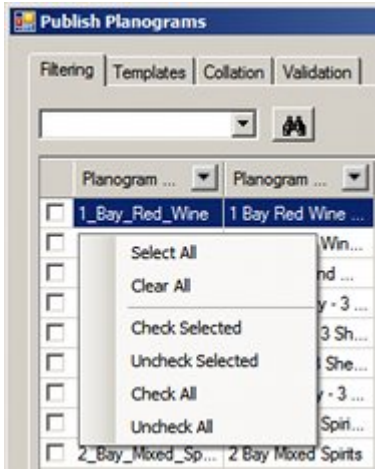

Find operates with explicit or implied wild cards. The explicit wild cards are:

| 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.



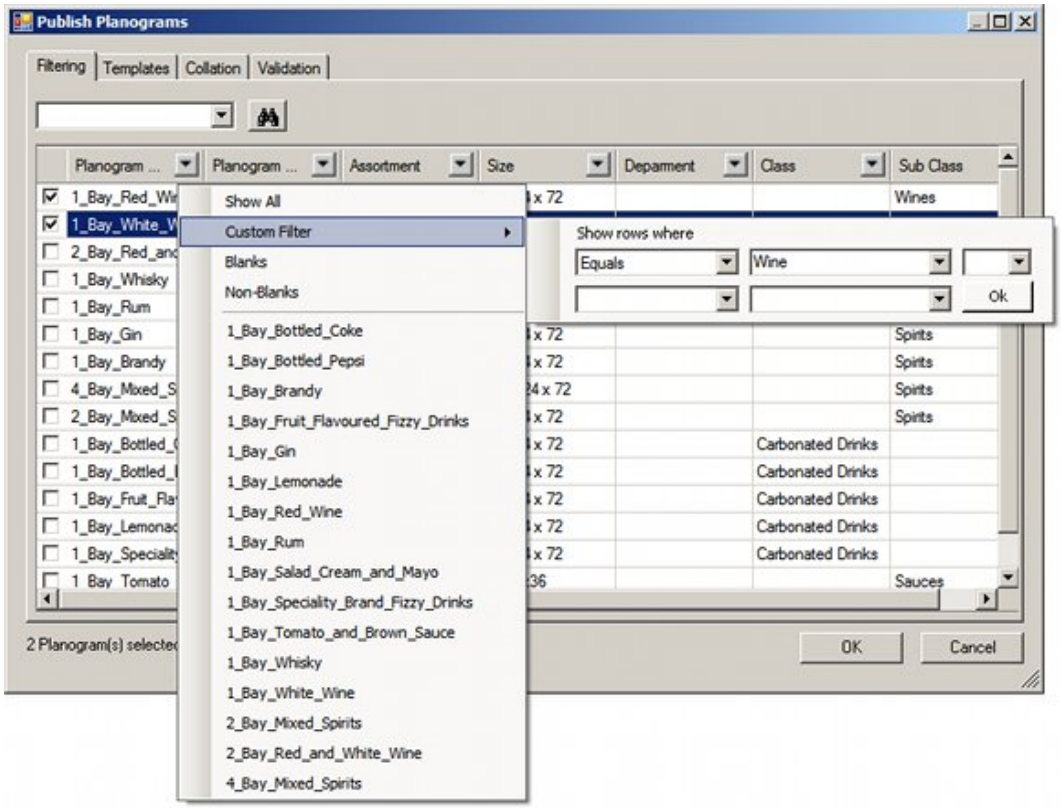

a. **Select All** will select (but not check) all rows of data
b. **Clear All** will deselect (but not uncheck) all rows of data
c. **Check Selected** will check all rows of selected data
d. **Uncheck Selected** will uncheck all rows of selected data
e. **Check All** will check all rows of data
f. **Uncheck All** will uncheck all rows of data
g. **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:

1. **Show All** - this option shows all results.
2. **Custom Filter** - this option allows users to set filters using Boolean logic. The options are:
    a. **Equal to**: will return rows that are an exact match for the entered text.
    b. **Not Equal to**: will return rows that do not match the text string
    c. **Contains**: will return rows where part of the data matches the text string. (Uses implied wild cards).
    d. **Does not contain**: will return rows where no part of the data matches the text string. (Uses implied wild cards).
    e. **Begins with**: will return rows where the text string is an exact match for the start of the data.
    f. **Ends with**: will return rows where the text string is an exact match for the end of the data.
    g. **Does not begin with**: will return rows where the text string is not an exact match for the start of the data.
    h. **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.

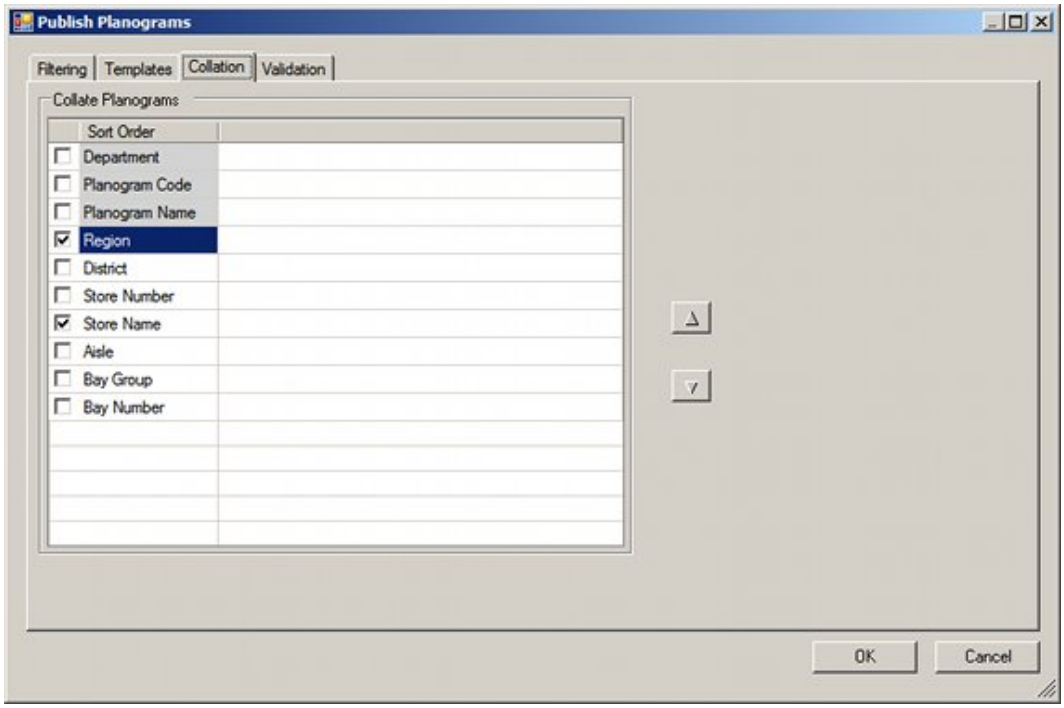
Boolean logic also includes the use of **And** or **Or**.

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.

## The Collation Tab

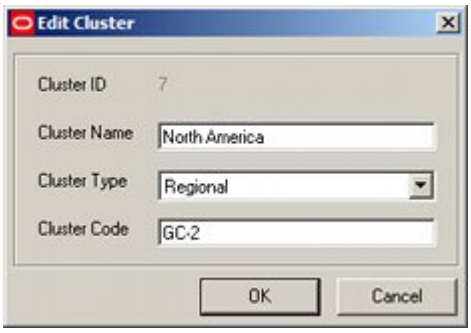
The **Collation Tab** allows users to specify the sequence the planogram designs will be published or printed in. Its main use is in printing hard copy versions of the designs where the sequence they are printed in makes it easier to sort and distribute them after printing.

At least one collation option must be selected, or the tab will show as having an error.

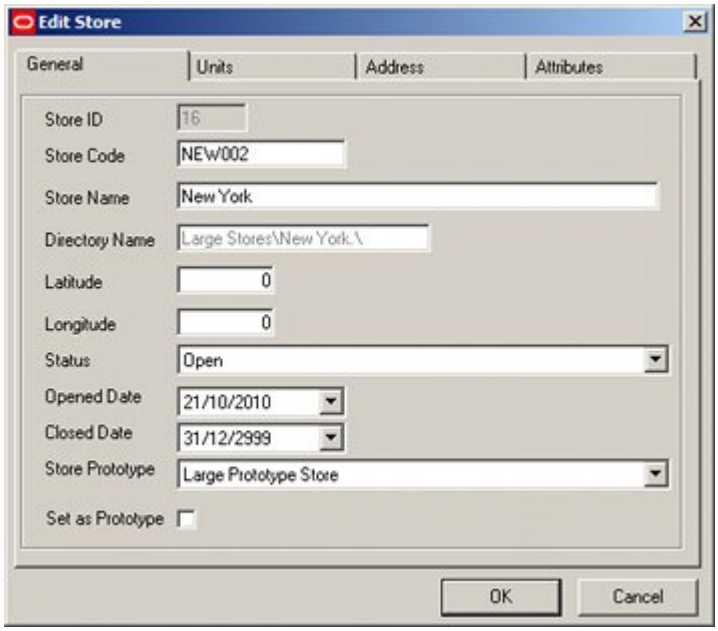



The available options can be ordered by highlighting them, then using the up or down arrows. The options are made active by using the check boxes.

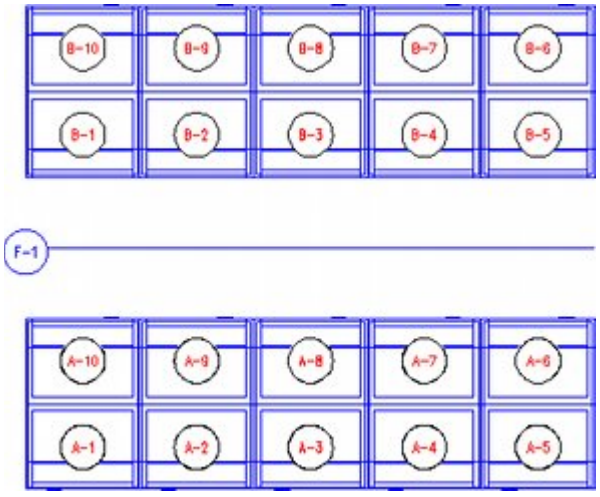
1. **Region** is a specific type of cluster set in the Cluster type drop down list in the Cluster dialog box in Store Manager.
2. **District** is a specific type of cluster set in the Cluster type drop down list in the Cluster dialog box in Store Manager.



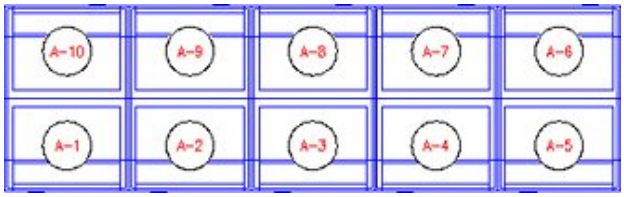

3. **Store Number** is the Store Code in the Store dialog box in Store Manager.
4. **Store Name** is the Store Name in the Store dialog box in Store Manager.



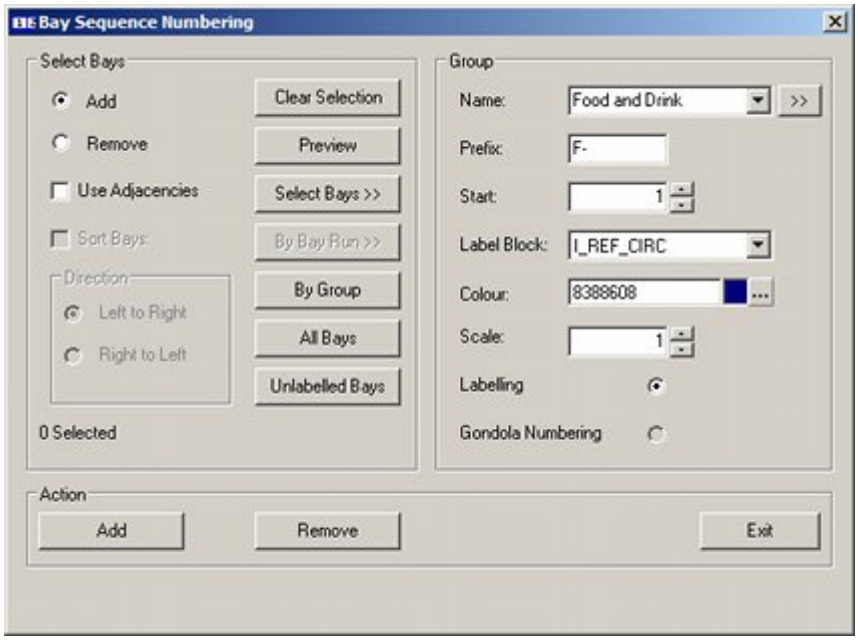

5. **Department** is the department (zone) in the floor plan the planogram is associated with.
6. **Aisle** is the aisle the planogram is associated with. For this option to operate, aisles must first be drawn in the floor plan in the Planner module. In the example below, Aisle F-1 has been drawn between two runs of fixtures.



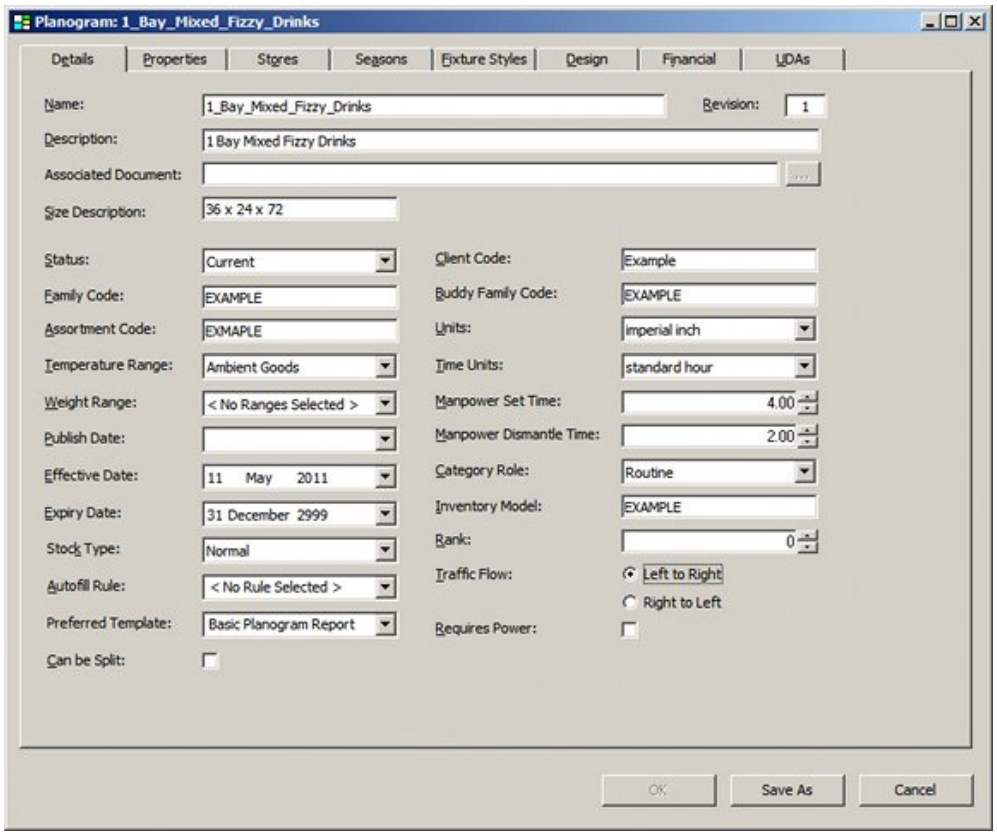
7. **Bay Number** is the bay number associated with the fixtures the planogram is placed on. For this option to operate, the fixtures in the floor plan must previously have been bay numbered.




8. **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.

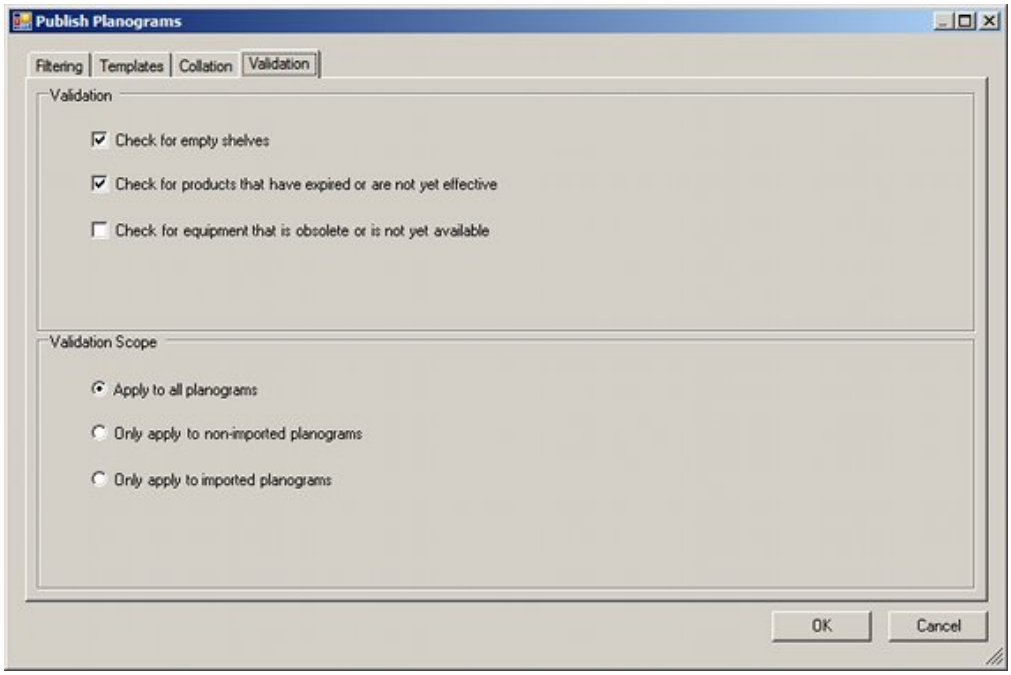



9. **Planogram Name** is the name of the planogram. This is set in the Name field of the Planogram Design dialog box in Merchandiser.
10. **Planogram Code** is the code for the planogram. This is set in the Client Code field of the Planogram Design dialog box in Merchandiser.




## The Validation Tab

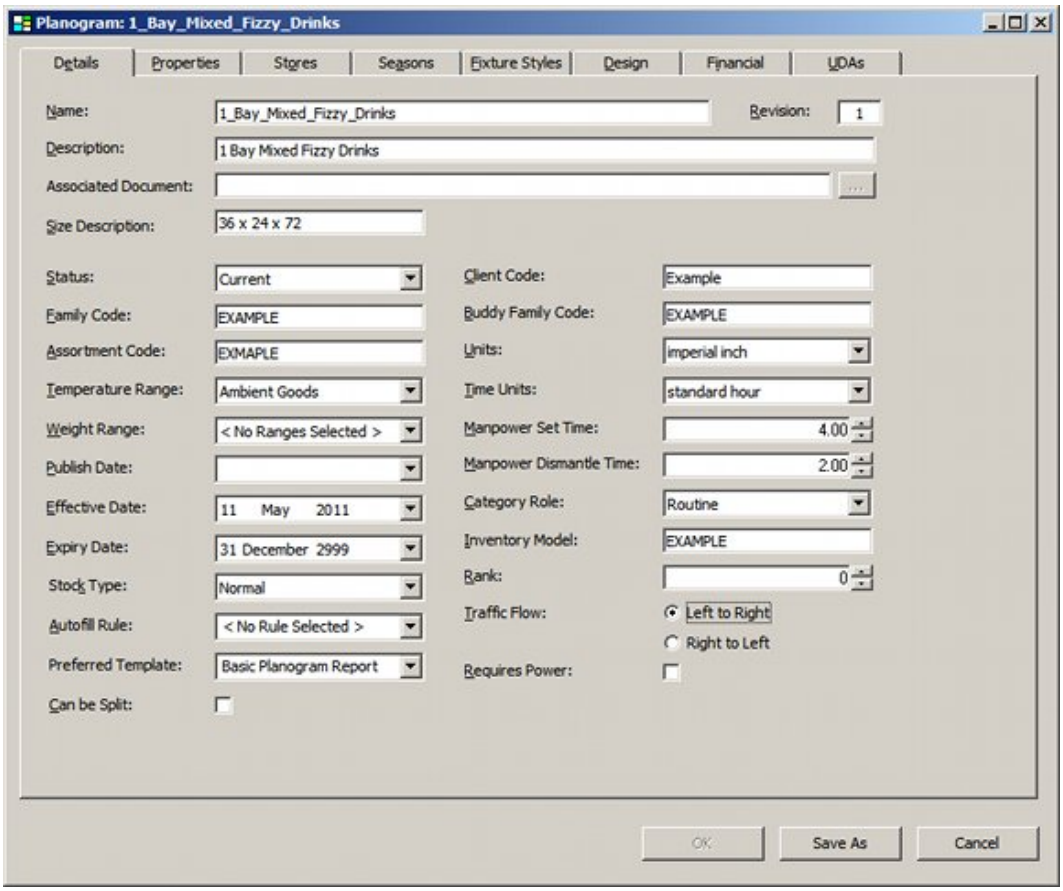
The **Validation tab** enables users to set a series of validation checks that must be satisfied before the planogram design is published. If any of the checks fail, the details will be written to the AVTTB_PUBLISH_POG_LOG table. Information in this table can be read by means of a BI Publisher report or similar.



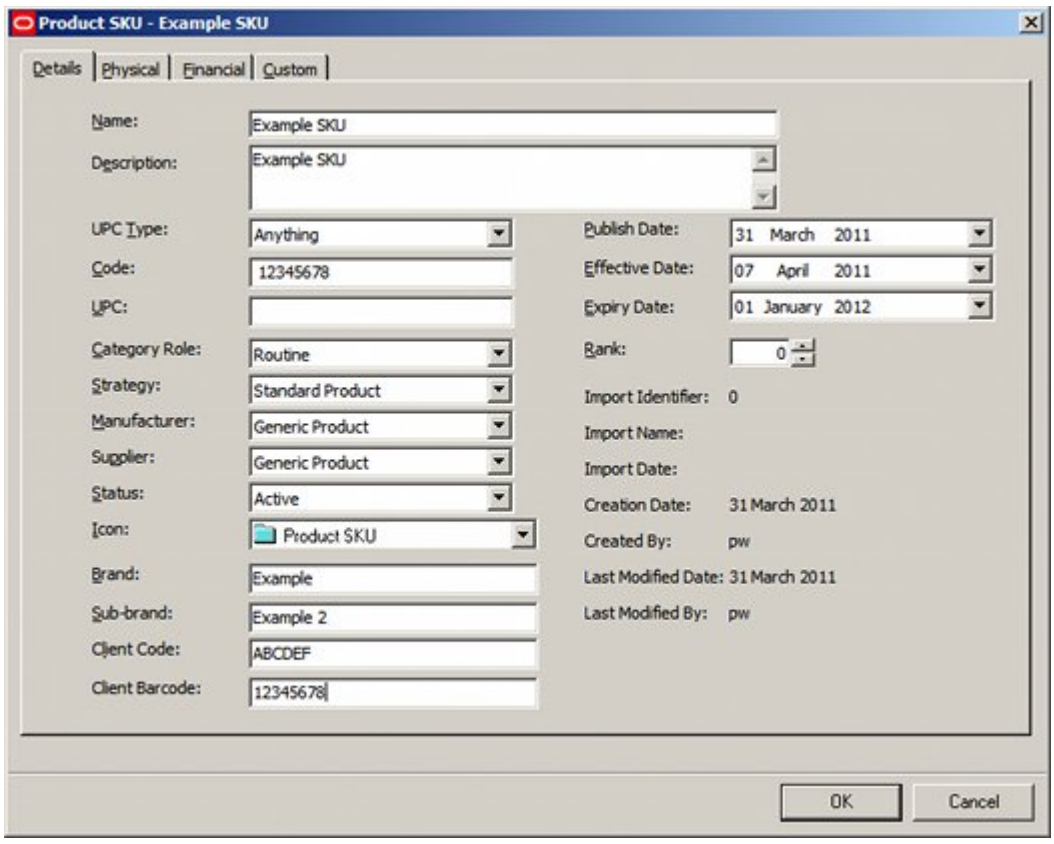
1. **Check for empty shelves** - this option will check the parent fixture and associated shelf objects. It will raise an error report if:
   a. The fixture and associated shelf objects can be populated with product display styles, but no product display style has been placed.
   b. The fixture and associated 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:
   a. The Product Effective Date is after the Planogram Effective Date - i.e. the product is not yet available to place in the planogram.
   b. 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.



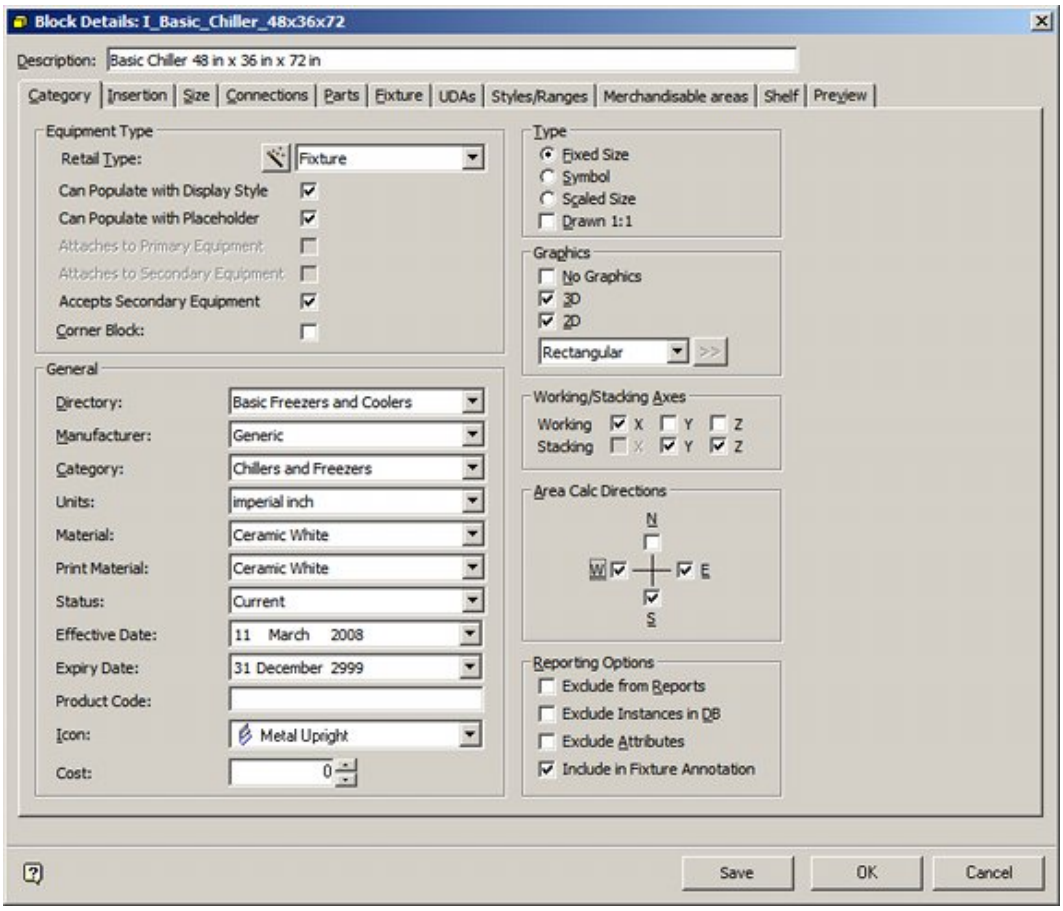

The Product Effective and Expiry dates are set in the Details tab of the SKU dialog box in Product Studio.




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:
   a. The Equipment Effective Date is after the Planogram Effective Date - i.e. the equipment is not yet available for the planogram.
   b. 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.

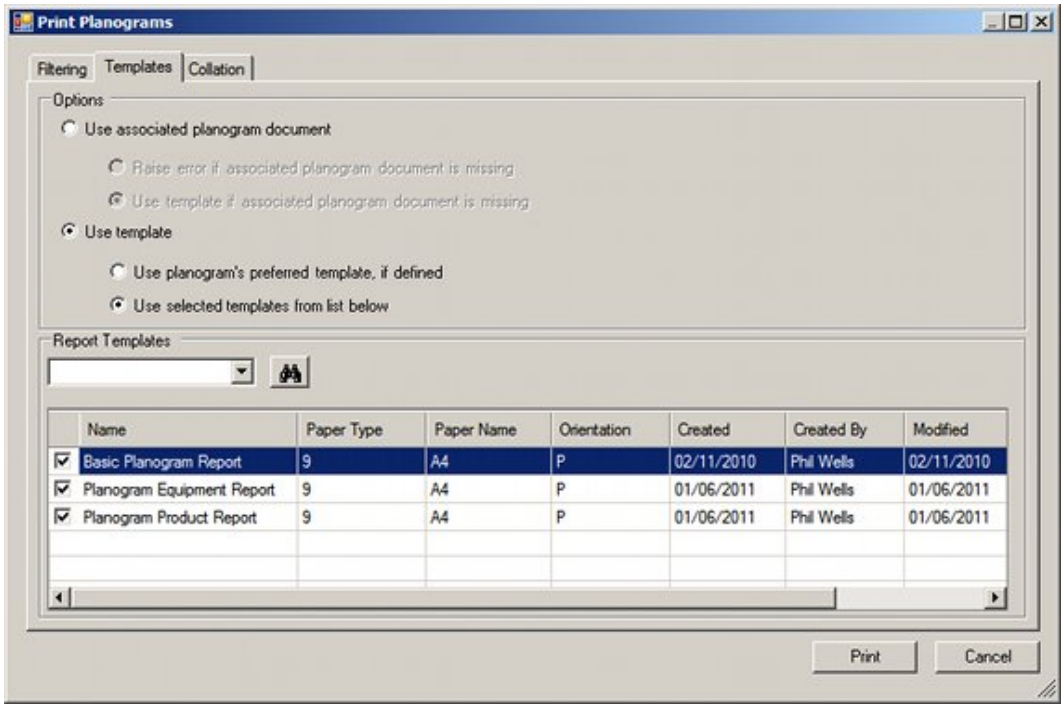



4. **Validation Scope** - this controls when to apply the validation checks. There are three options - selectable by the radio button.
   a. Apply to all planograms.
   b. Apply to non-imported (manually created) planograms.
   c. Apply to imported planograms.

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.

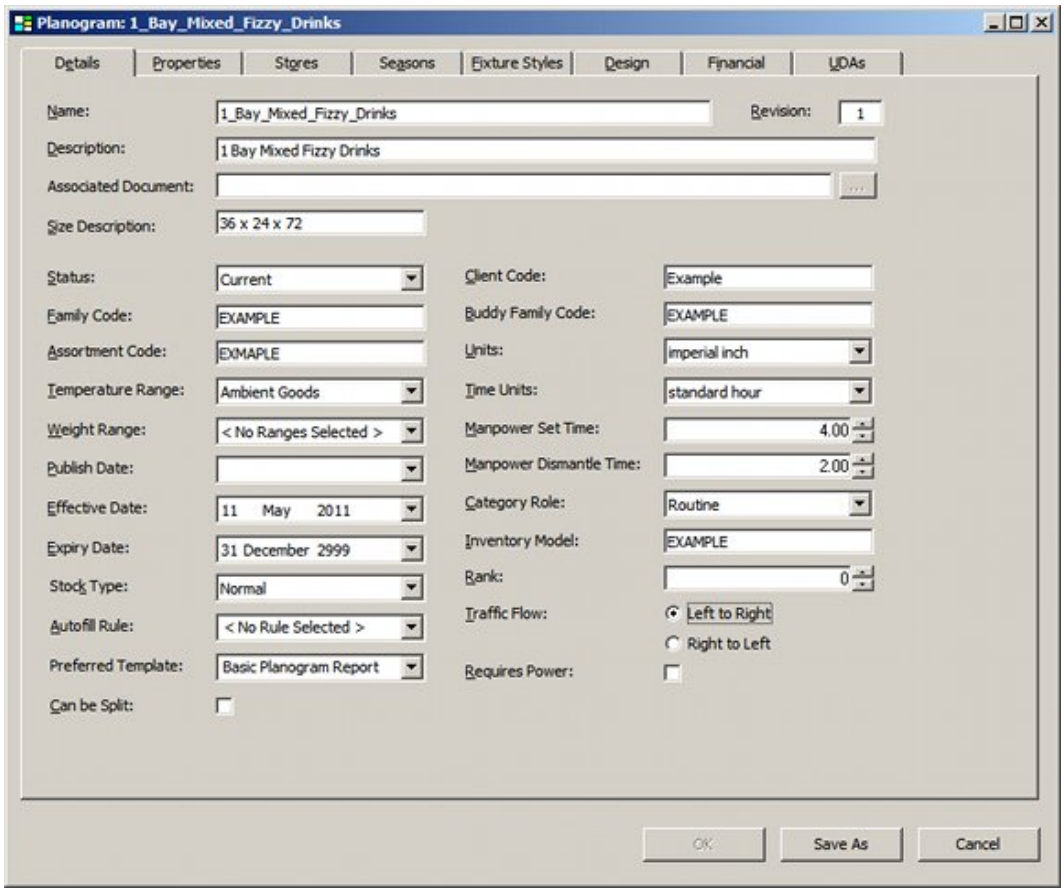
## The Templates Tab

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.

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:

   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.

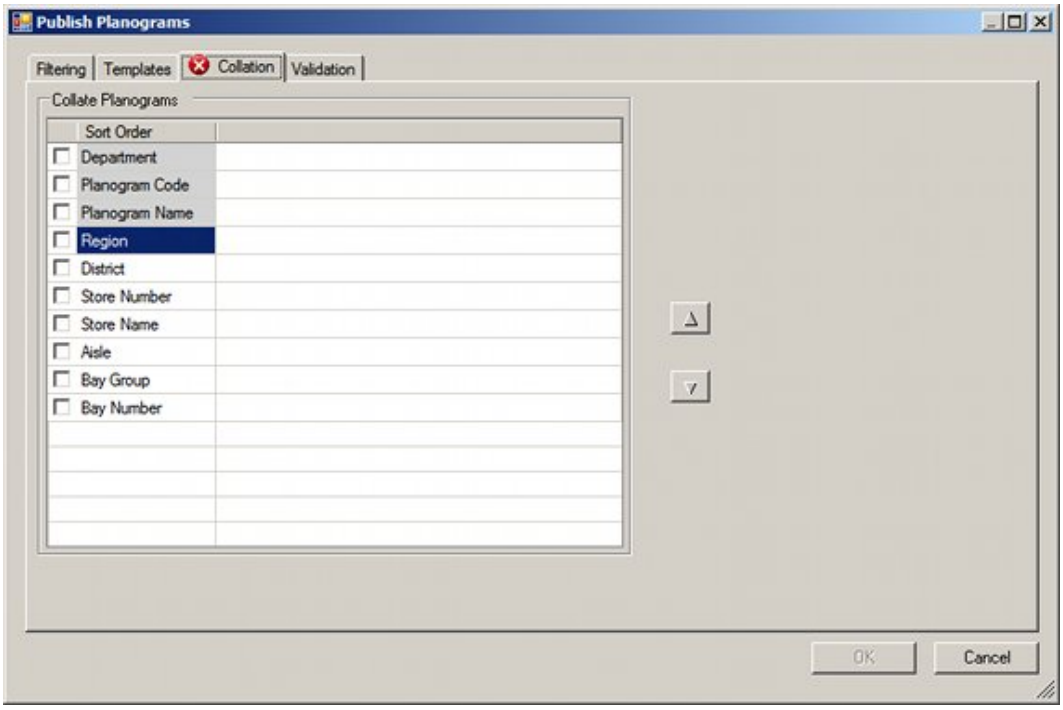
   b. **Use Selected Template from List Below** - this option can be set by checking items in the list of available templates. One or more templates may be selected. If multiple templates are selected, the name of the template will be added to the file name in brackets - for example 1_Bay_Mixed_Fizzy_Drinks (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 strings can be selected using the drop down list in the text box.

## 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.

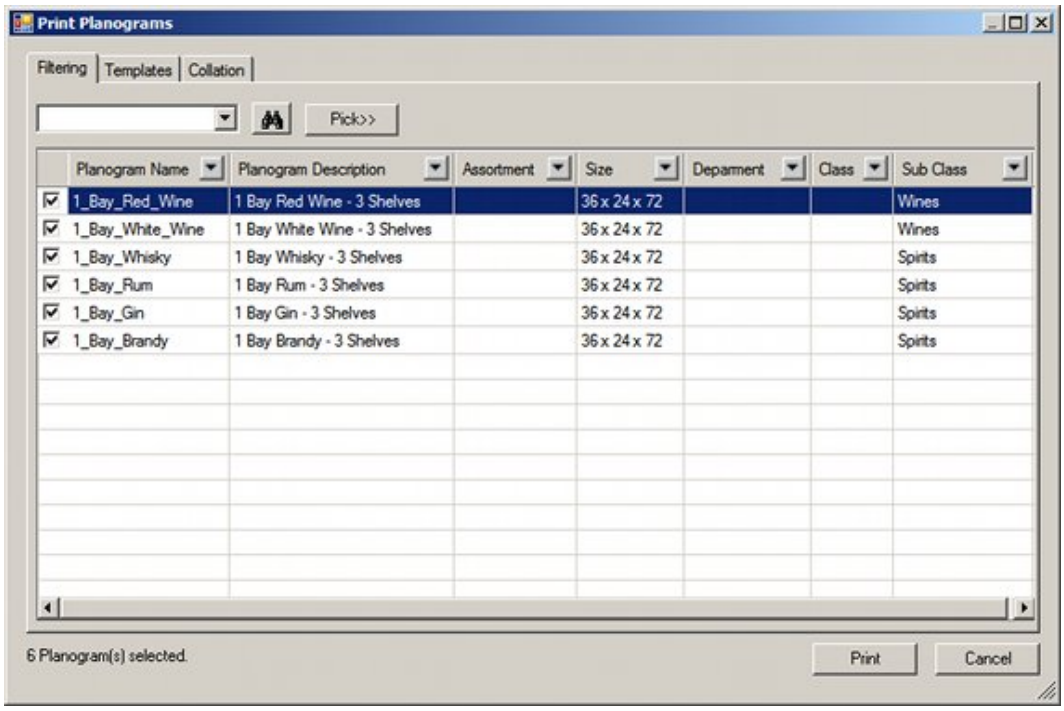
The results from Planogram Publishing are stored in two tables within the database. These results can be viewed via reports generated from BI Publisher (or similar software).

# Planogram Printing

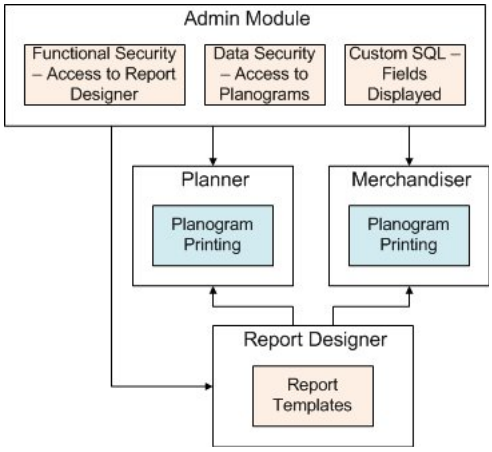
## Overview of Planogram Printing

**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 Admin module.




The basic method of operation is as follows:




**1. Admin Module**

Within the Admin Module:

- **a.** The planogram users have permissions to print are assigned in the Data Security dialog box - Planograms Tab.
- **b.** The fields that display in the Filtering Tab of the Print Planograms dialog box are configured in the Custom SQL dialog box.
- **c.** 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 Admin 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 Admin module.

#### Using Planogram Printing

The functionality is used as follows:

a. A floor plan containing planograms is opened in the Planner or Merchandiser module.

b. The Print Planogram option is selected from the File menu in the Planner or Merchandiser module.

c. The appropriate planograms are selected in the Filtering tab of the Print Planograms dialog box.

d. The report to use is specified in the Templates tab.

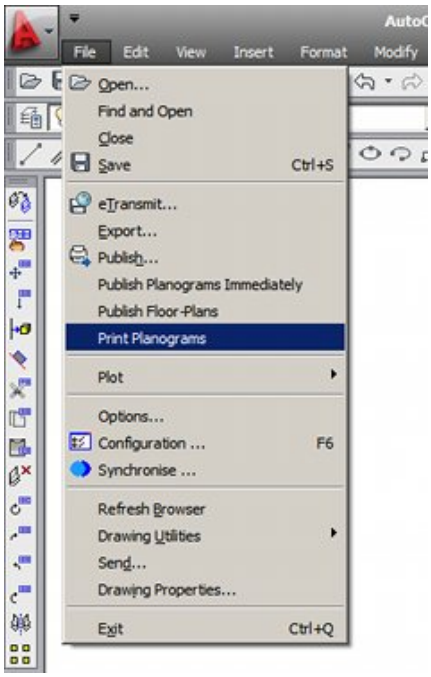
e. The sequence the selected floor plans are to be printed in is specified in the Collation Tab.

f. 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

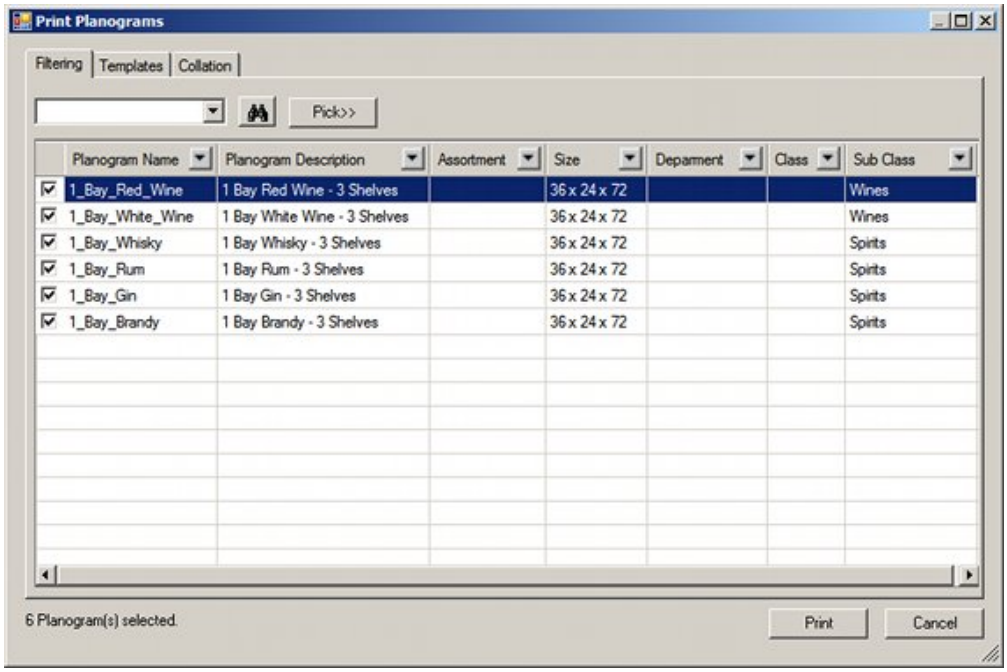
> **Note:** Before accessing the Print Planogram functionality, users should open a floor plan containing planograms.

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.

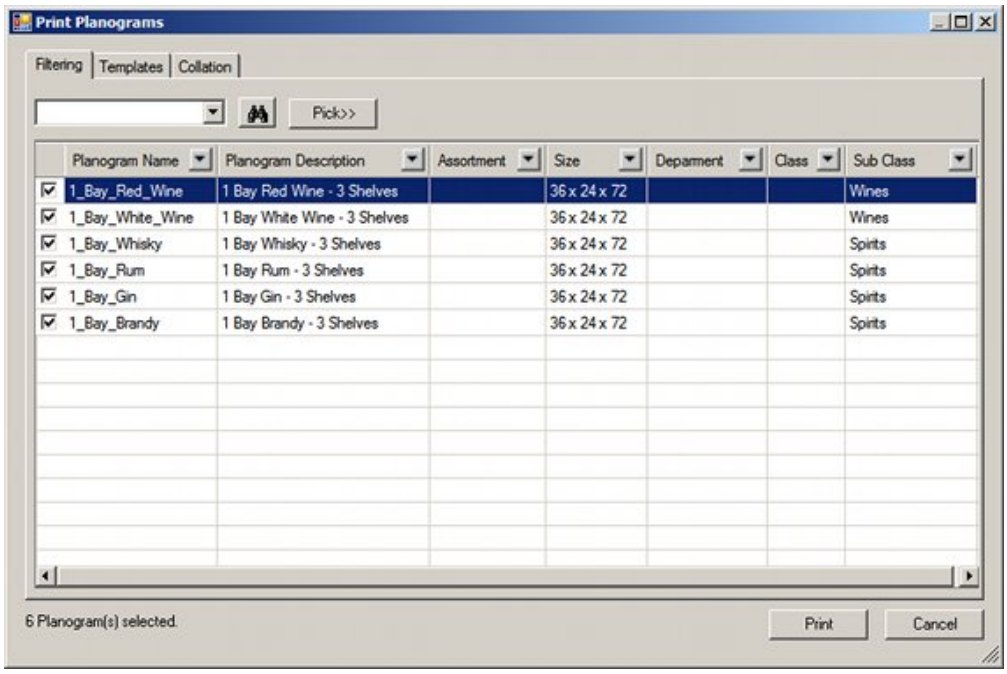


**Note:** The columns that are displayed in the dialog box are configurable in the Custom SQL option available from the General Menu in the Admin module.

## 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 |

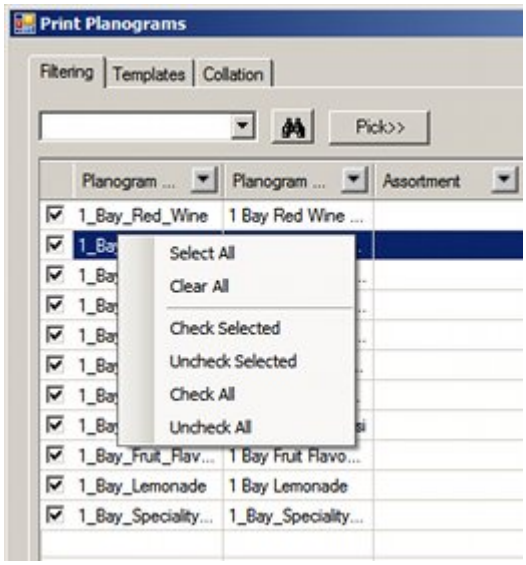
If explicit wild cards are not used, implicit wild cards will be assumed. For example the text entry 'Wine' will be treated as '*wine*' and will find I Bay Red Wine, 1 Bay White Wine, etc.

**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.



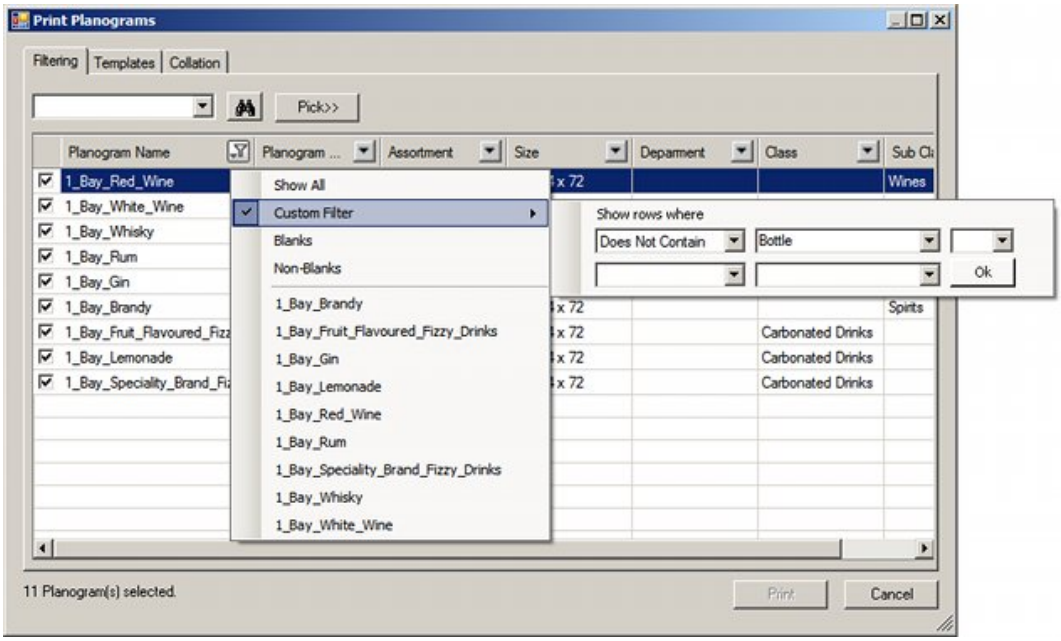

g. **Select All** will select (but not check) all rows of data
h. **Clear All** will deselect (but not uncheck) all rows of data
i. **Check Selected** will check all rows of selected data
j. **Uncheck Selected** will uncheck all rows of selected data
k. **Check All** will check all rows of data
l. **Uncheck All** will uncheck all rows of data
m. **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:

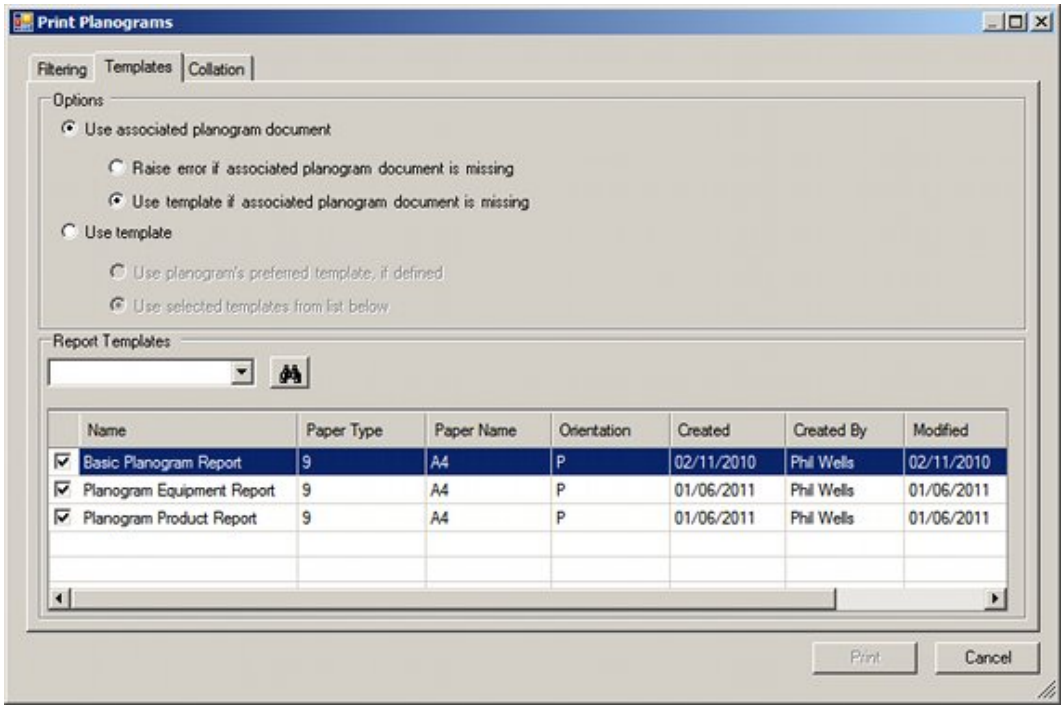
1. **Show All** - this option shows all results.
2. **Custom Filter** - this option allows users to set filters using Boolean logic. The options are:
   a. **Equal to**: will return rows that are an exact match for the entered text.
   b. **Not Equal to**: will return rows that do not match the text string
   c. **Contains**: will return rows where part of the data matches the text string. (Uses implied wild cards).
   d. **Does not contain**: will return rows where no part of the data matches the text string. (Uses implied wild cards).
   e. **Begins with**: will return rows where the text string is an exact match for the start of the data.
   f. **Ends with**: will return rows where the text string is an exact match for the end of the data.
   g. **Does not begin with**: will return rows where the text string is not an exact match for the start of the data.
   h. **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.

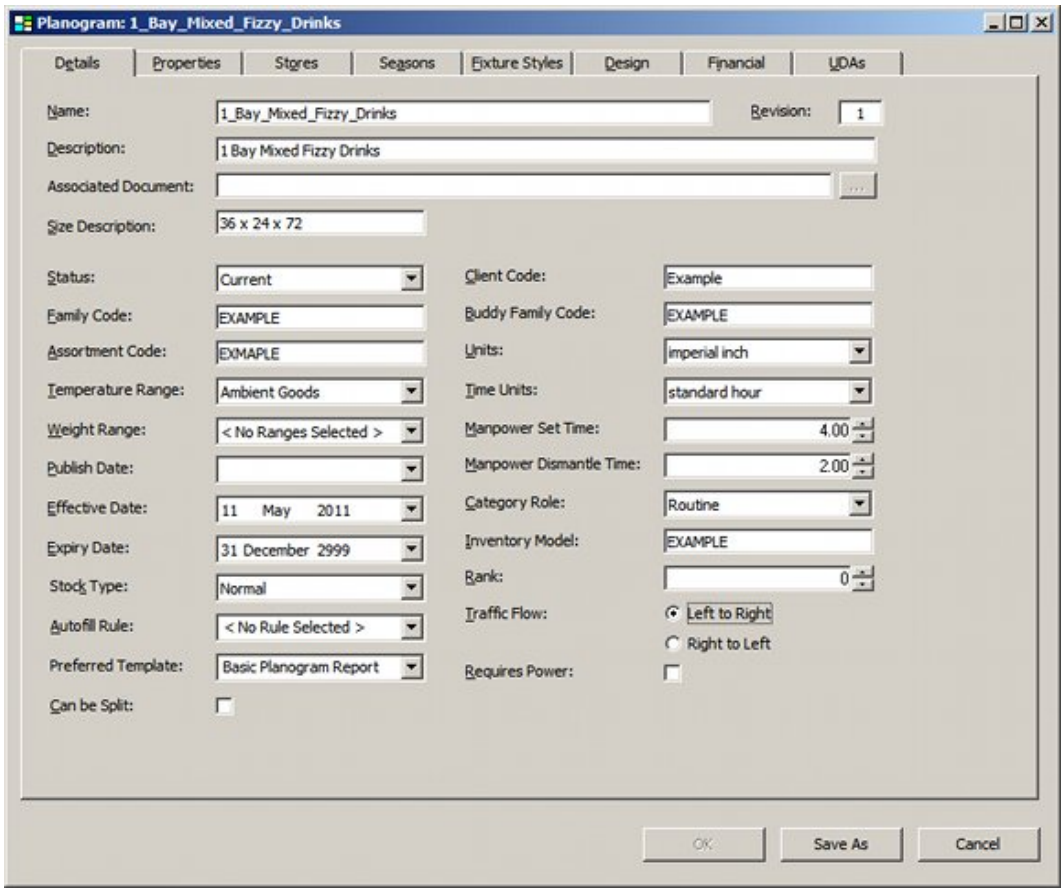
## The Templates Tab

The **Templates Tab** allows users to specify the template format to be used when printing planogram designs.




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:

   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

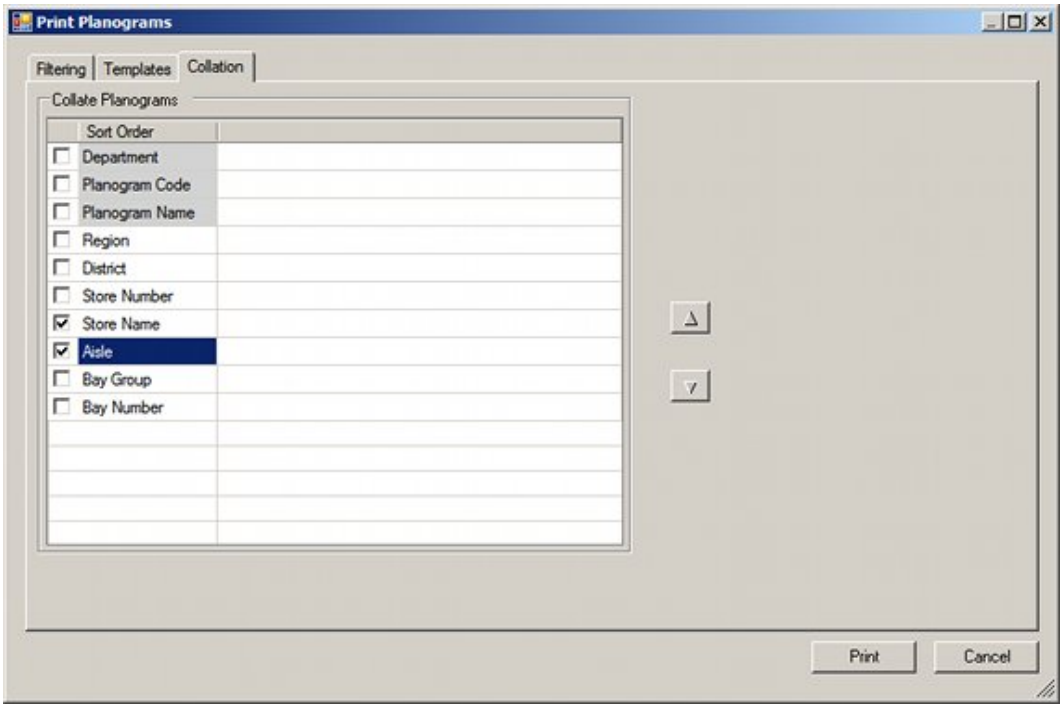
If necessary, the list of templates can be searched by entering a text string into the drop down list, then clicking the **Find** button. (Actual or implied wild cards can be used). Each click of the Find button will cause the search engine to move forward through the matching results until no results are left.

> **Note:** The last 10 text searches can be selected using the drop down list in the text box.

## The Collation Tab

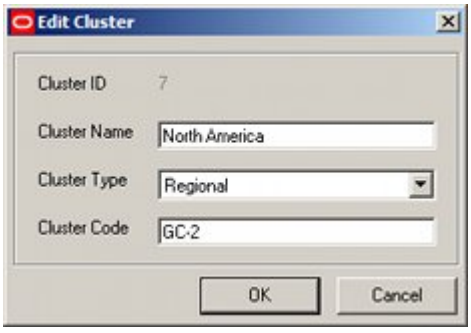
The Collation Tab allows users to specify the sequence the planogram designs will be published or printed in. Its main use is in printing hard copy versions of the designs where the sequence they are printed in makes it easier to sort and distribute them after printing.

At least one collation option must be selected, or the tab will show as having an error.

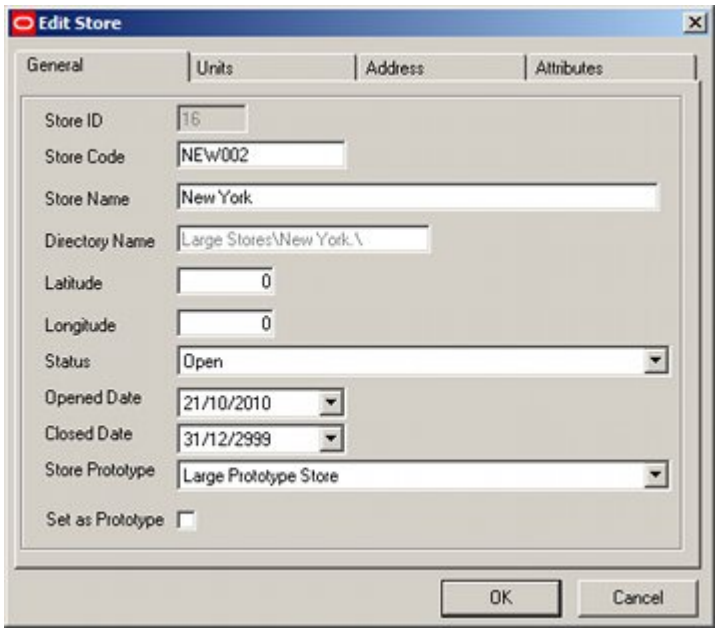



The available options can be ordered by highlighting them, then using the up or down arrows. The options are made active by using the check boxes.

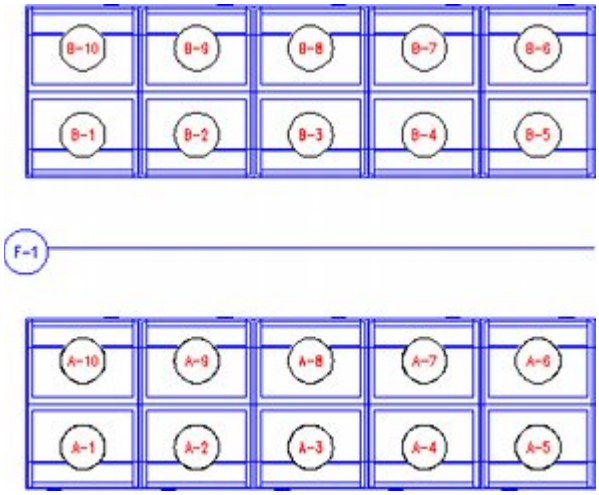
1. **Region** is a specific type of cluster set in the Cluster type drop down list in the Cluster dialog box in Store Manager.
2. **District** is a specific type of cluster set in the Cluster type drop down list in the Cluster dialog box in Store Manager.



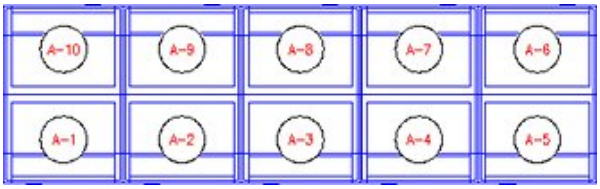

3. **Store Number** is the Store Code in the Store dialog box in Store Manager.
4. **Store Name** is the Store Name in the Store dialog box in Store Manager.



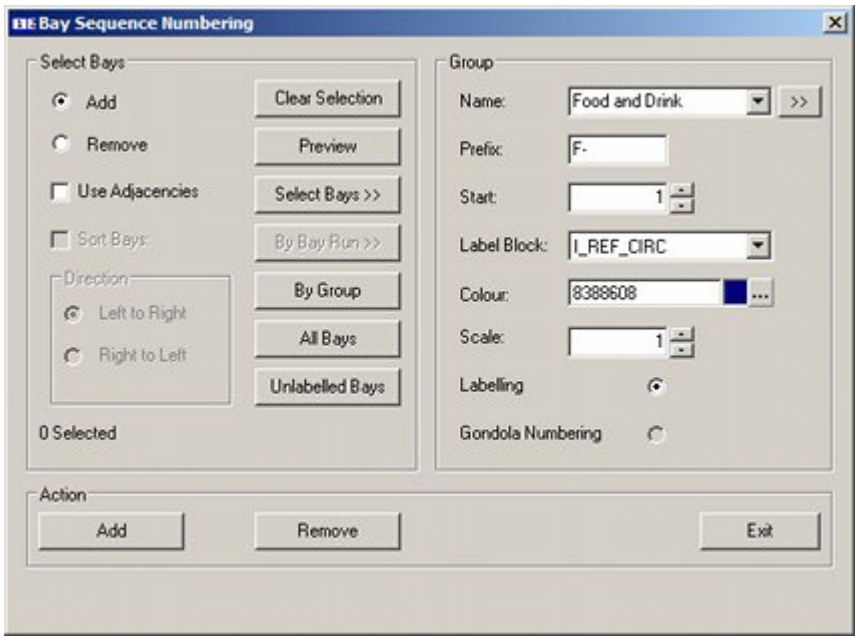

5. **Department** is the department (zone) in the floor plan the planogram is associated with.
6. **Aisle** is the aisle the planogram is associated with. For this option to operate, aisles must first be drawn in the floor plan in the Planner module. In the example below, Aisle F-1 has been drawn between two runs of fixtures.



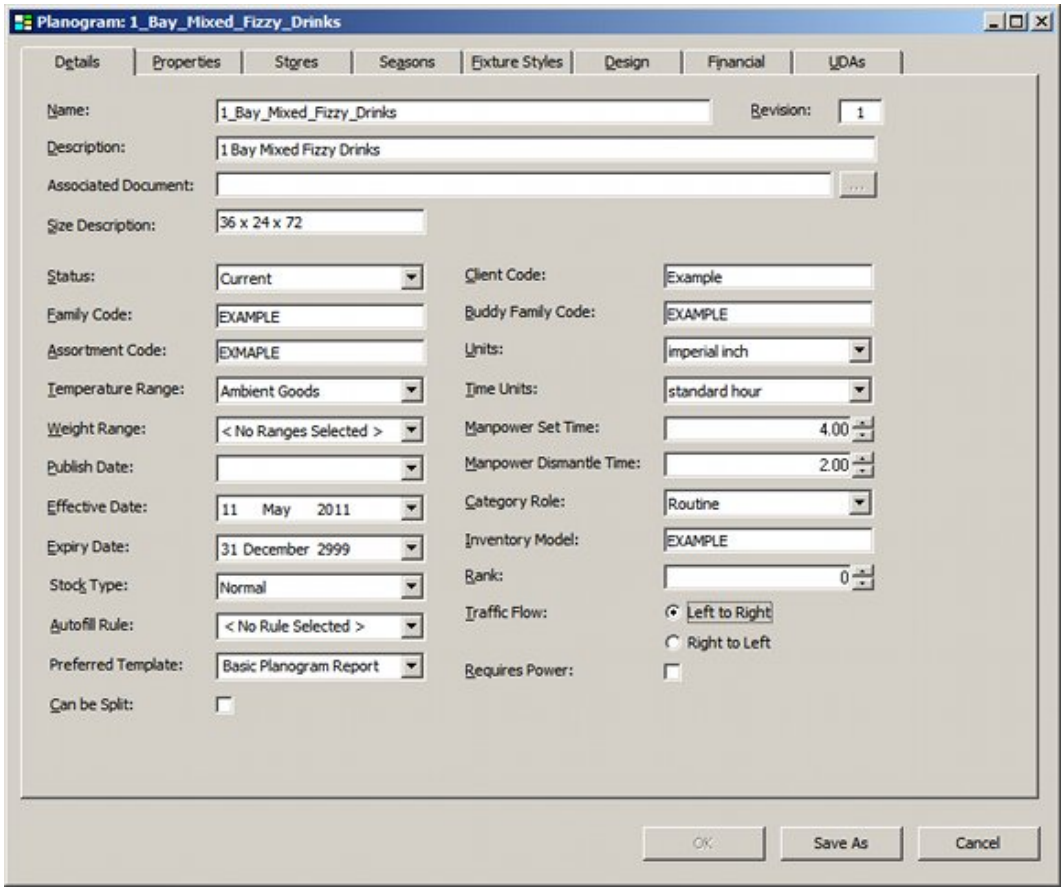

7. **Bay Number** is the bay number associated with the fixtures the planogram is placed on. For this option to operate, the fixtures in the floor plan must previously have been bay numbered.




8. 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.

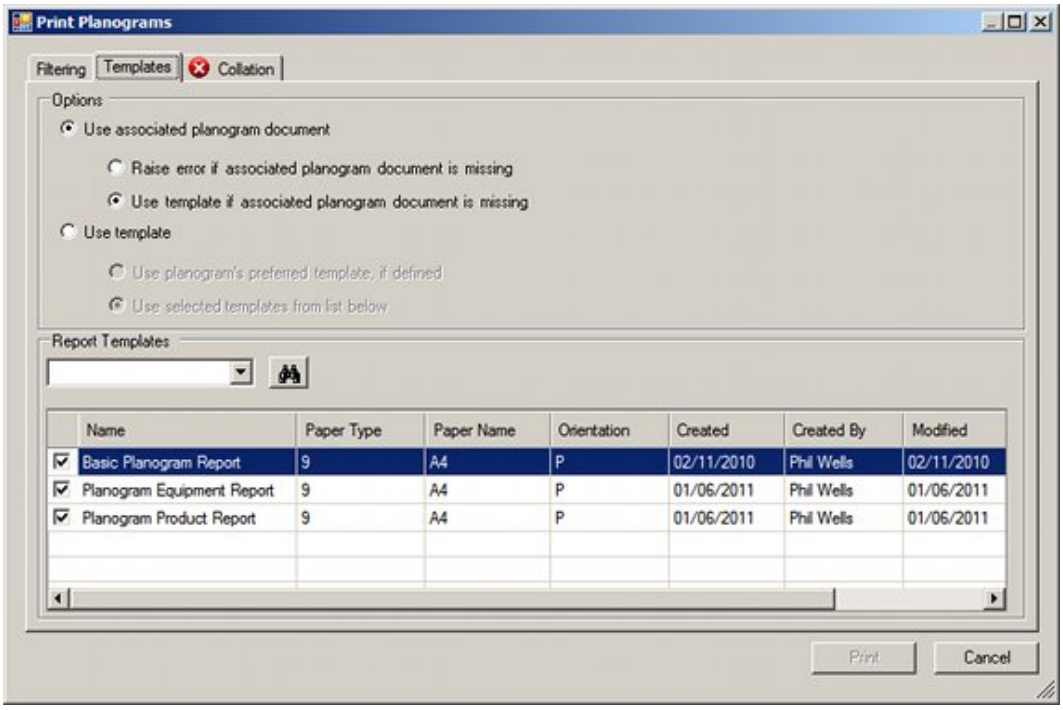



9. **Planogram Name** is the name of the planogram. This is set in the Name field of the Planogram Design dialog box in Merchandiser.
10. **Planogram Code** is the code for the planogram. This is set in the Client Code field of the Planogram Design dialog box in Merchandiser.



## 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).

# Synchronization

## Overview of Synchronization

### Storing Data in Planner

Data is stored in two ways within the Planner environment.
Data stored in an AutoCAD drawing is retained in the .DWG file that contains all the pertinent information. Macro Space Management also stores information in its central database.

Macro Space Management is integrated with AutoCAD. However, some AutoCAD tools can modify AutoCAD drawings in ways that are not registered by Macro Space Management's central database. For example, if AutoCAD tools are used to move or delete fixtures or gondolas from the drawings, this does not alter the information held in the Macro Space Management database.

Potential differences between the AutoCAD drawing and the information held in Macro Space Management must be resolved. This is done using the Synchronization option. After data has been synchronized, the information held in the AutoCAD drawing is identical to that held in the Macro Space Management central database.

#### Storing Data in Merchandiser

Merchandiser only operates on data held within Macro Space Management's central database.

If a drawing is worked on the Merchandiser environment, any changes will not be reflected in the drawing when it is next opened in the Planner environment.

Accordingly, when a drawing is opened in the Planner environment after being worked on in the Merchandiser environment, it must be 'synchronized to database' in order to bring the drawing up to date with the changes made in Merchandiser.

#### Adjacency Calculations

Adjacency calculations are used to establish the relationships of fixtures and merchandise to each other.

Before running adjacency calculations, it is good practice to run Synchronization. This ensures that the information in the drawing matches that in the database and hence any adjacency calculations will be correct.

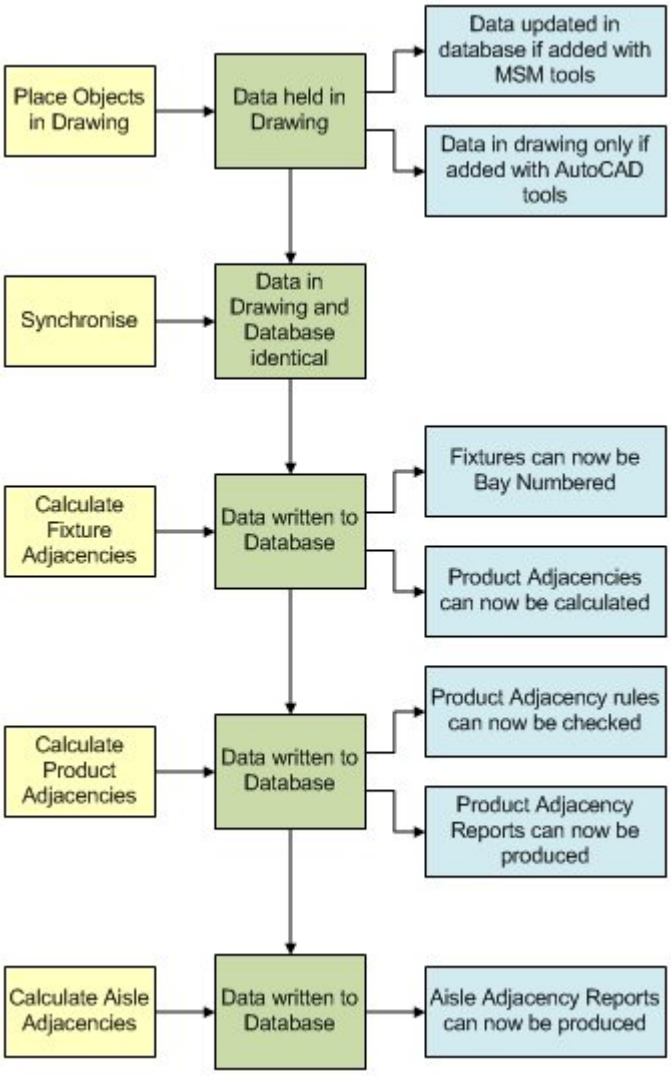
#### Saving and Synchronization

Each time a Macro Space Management command is used, the information is written directly to the database at the same time as a change is made in the drawing. (These commands are also held in temporary memory so that 'undo' commands can be used).

Each time an AutoCAD command is used, changes are made to the drawing, but are not written to the central Macro Space Management database. This can lead to differences between drawing and database.

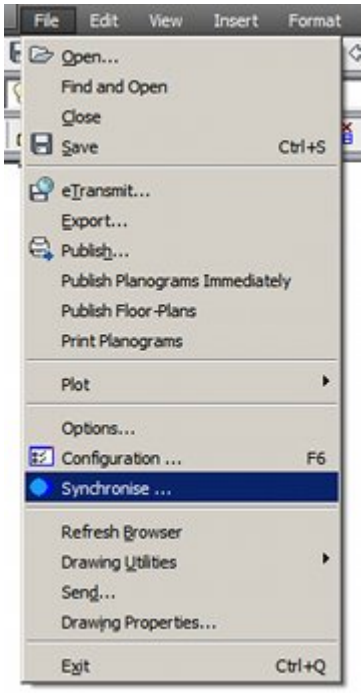
When working in Planner, it is therefore good practice to synchronize the drawing immediately before saving and exiting.

## Relationship between Synchronization and Adjacency

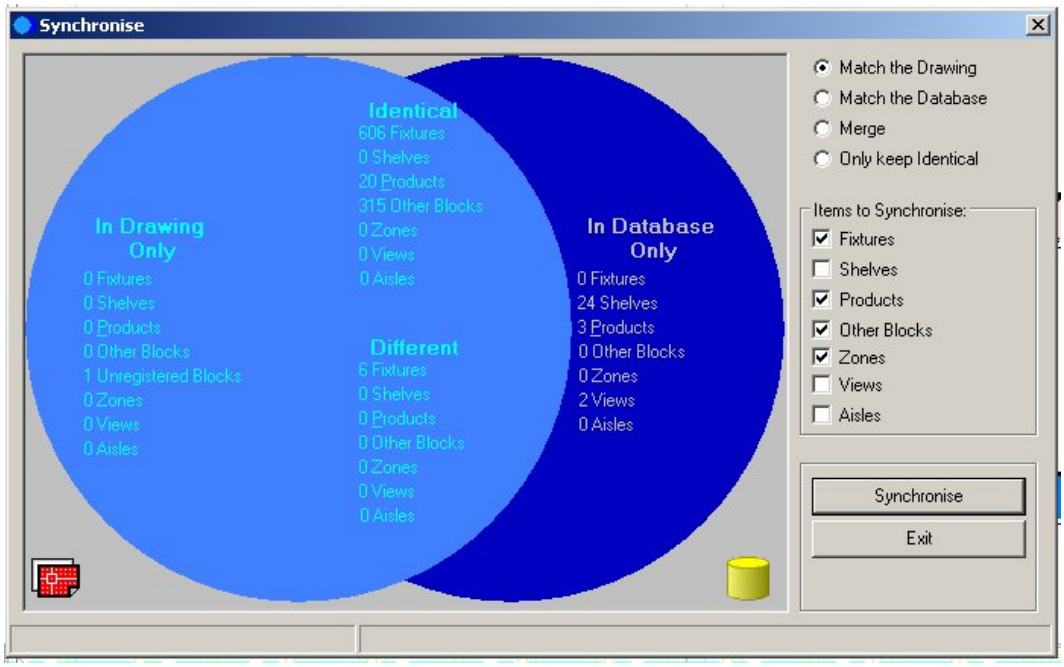


## Accessing the Synchronization Module

**Accessing the Synchronization Module** can be carried out from the File pull down menu in Planner.




This will bring up the Synchronization dialogue box.



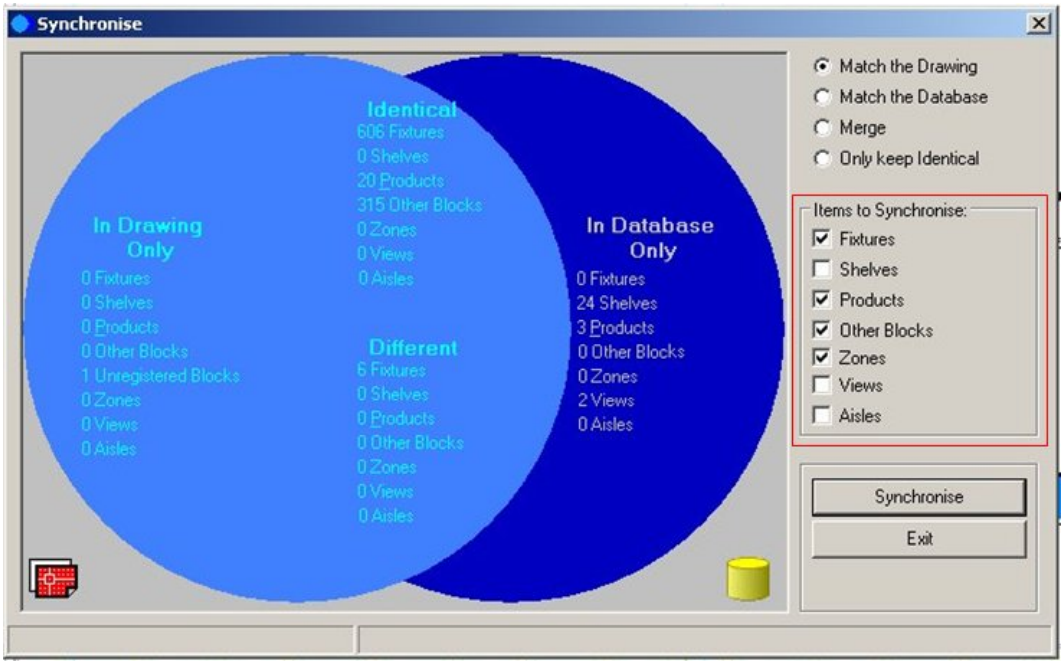

This dialogue box allows the type of synchronization to be selected by means of the Action frame in the upper right corner of the dialogue box.

The types of items to synchronize can be selected by means of the Items to Synchronize frame in the center right of the dialogue box.

The current status of the synchronization can be seen in the main frame of the dialogue box. This details the information held in the drawing only and in the database only. It also displays totals of identical and different items

## Selecting Items to be Synchronized

The items that can be synchronized are detailed in a small check box frame in the Items to Synchronize dialogue box.




One or more options can be selected by ticking the appropriate check box.

**Fixtures** ensures all fixtures, fittings and gondolas are synchronized.

**Shelves** ensures all shelves are synchronized. This may be necessary when planograms have been used to populate features with product and the planogram contains information on what is on the varying shelves within the fixture. It may also be necessary if shelves have been added to fixtures in the Merchandiser environment.

**Products** ensures all product placed as products or using planograms are synchronized.

**Other Blocks** enables additional drawing features such as blocks representing lights or power-points to be synchronized.

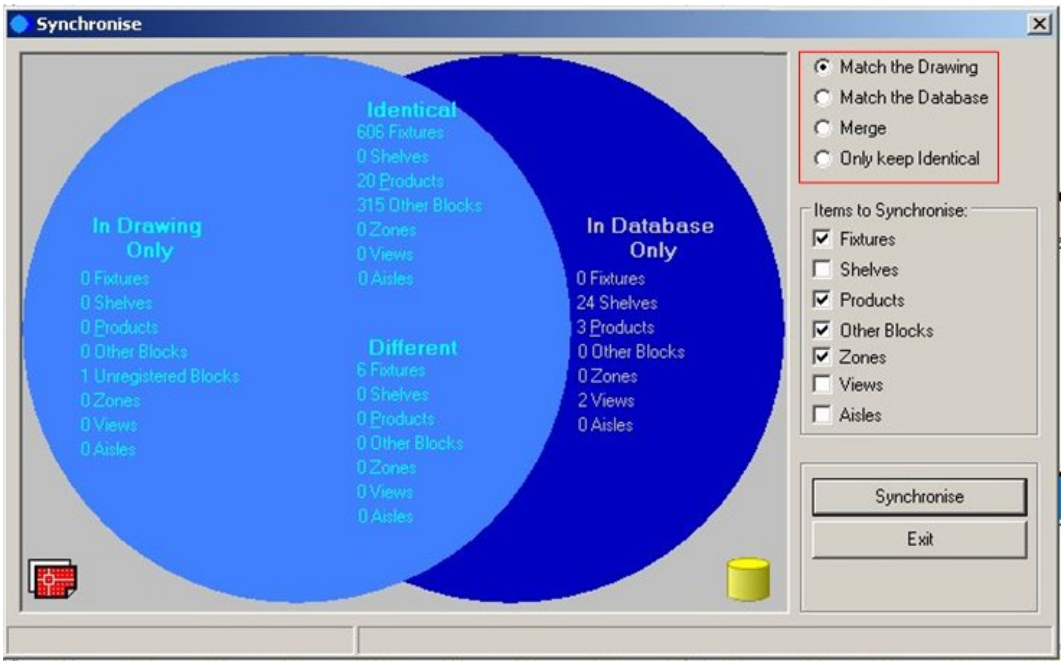
**Zones** enables Zone locations to be synchronized.

**Views** enables views (temporary tables in the database) to be synchronized.

**Aisles** enables the physical position of Aisles to be synchronized.

## Setting Synchronization Options

The varying **options for** synchronization are selected using radio buttons.




Only one action may be selected.

> **Note:** All changes made to drawings using Macro Space Management tools are stored in the central database at the same time as the action is carried out. All changes made to the drawing using AutoCAD tools are only stored in the drawing. Synchronization means drawing and database contain identical information.

**Match the Drawing** updates the central database with all AutoCAD changes to the drawing made since the last synchronization.

No changes will be made to the drawing, and all new information in the drawing will be stored in the database.

**Match the Database** restores the drawing to the last version held in the central database.

All AutoCAD changes made to the drawing since the last time the drawing was synchronized with the database will be removed.

**Merge** updates the database based on data held in both the drawing and the database.

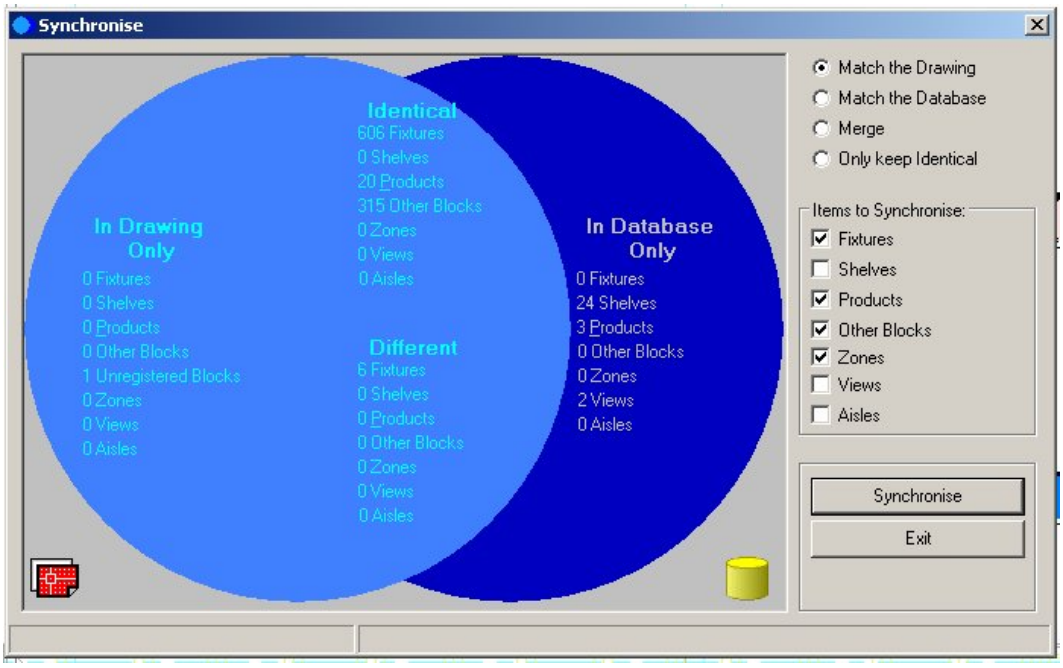
If objects exist in both the drawing and database, but there are slight differences between them (for example in position) which data will be used depends on whether merge priority is given to the drawing or to the database.

**Only Keep Identical** updates the drawing with only those objects common to both the drawing and the database.

All objects in the drawing that are not identical with objects held in the central database will be removed from the drawing. Similarly, all objects in the central database that are not identical with objects on the drawing will be removed from the database.

## Identifying Items in Specified Categories

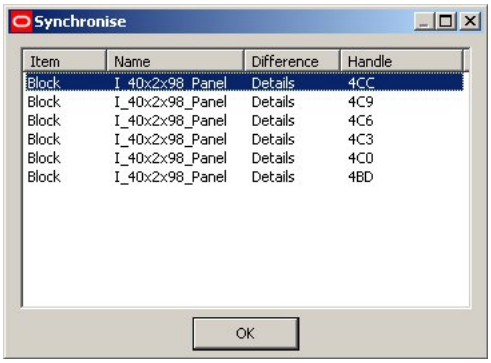
The Synchronization Module dialogue box contains tabulated lists of objects in specified categories. For example there are 606 Fixtures that are Identical in both Drawing and Database and there are 24 shelves in the Database only.




If the mouse pointer is poised over a category of information with items in it, a black question mark will appear.



This indicates left clicking on the category will bring up a dialogue box.




The dialogue box contains a list of all objects.

**Item** specifies the type of object. These are normally blocks, but can also be Views or other types of Macro Space Management options.

**Name** is the user input file name of the block.

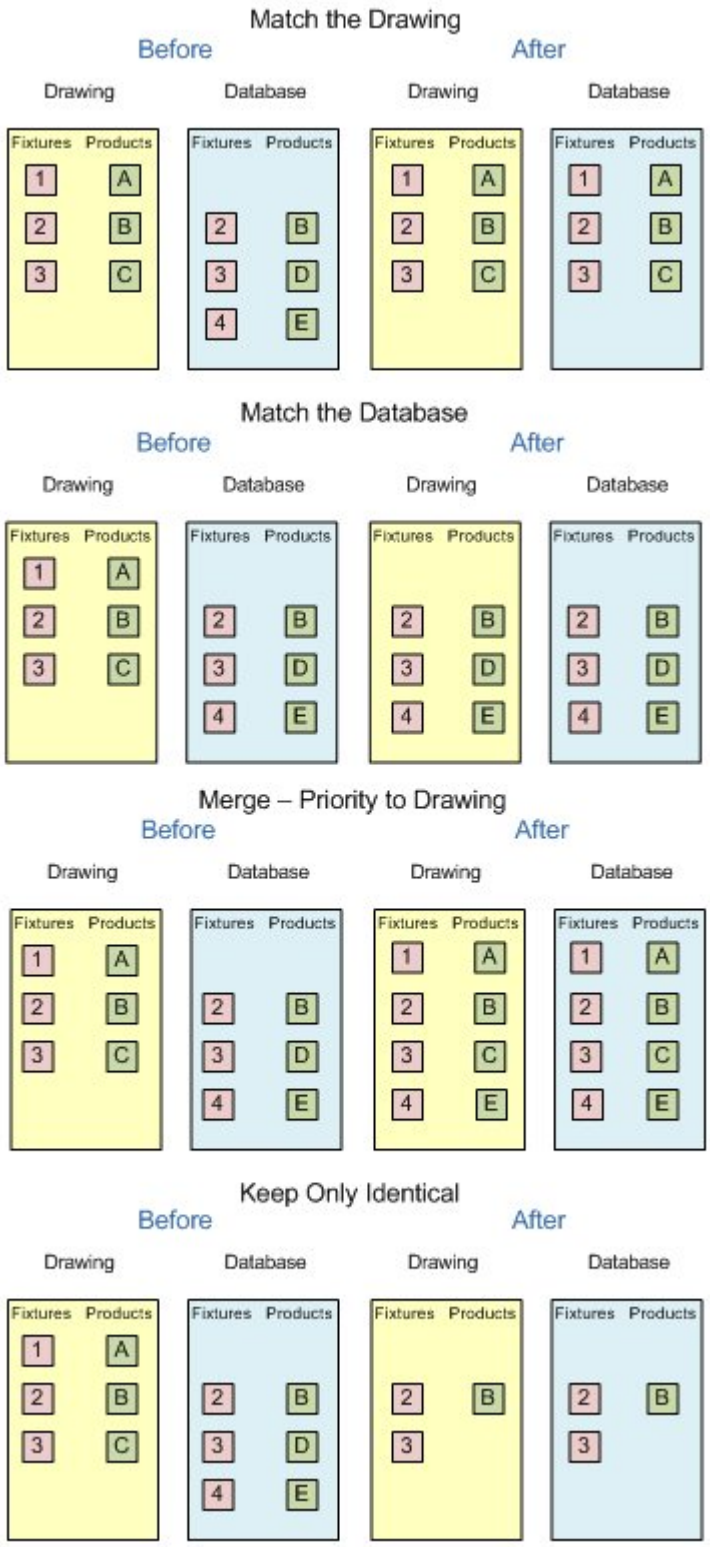
**Difference** specifies whether the objects are in the drawing only, database only or are identical.

**Handle** is the AutoCAD handle. This handle is the unique alphanumeric tag for an object in that specific drawing.

Clicking on OK returns the user to the main Synchronization dialogue box.

## Effect of Synchronization Options

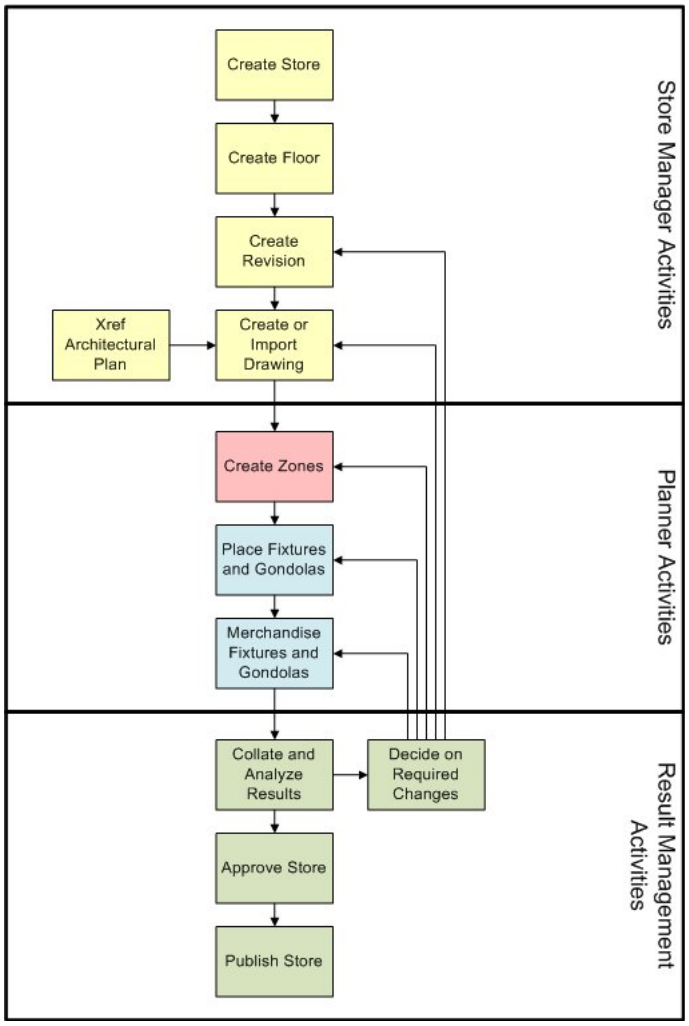
The effect of using the various synchronization options is demonstrated in the diagram below.



- In the Merge example, note that merging is with priority to the drawing. Product block C is selected in preference to product block D
- In Keep Only Identical, only Fixtures 2 and 3, together with Product B are identical, so only these blocks are retained

# Zones in Planner

## Business Flows for Zones




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 an AutoCAD architectural drawing. 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 an AutoCAD Polyline enclosing a specific section of floor. Further Polylines 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.

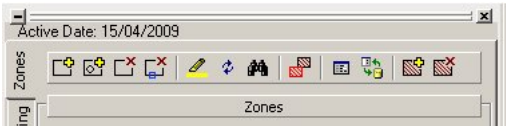
Zones can also be designated as being excluded from certain types of reports. This allows fixtures and Planograms that have been placed in a storage area to be excluded from any calculations or reports on the performance of that part of the store.

Many of the characteristics of Macro Space Management Zones can be configured within the Administration Module.

## Zones on the Object Browser

### The Zones Toolbar

The **Zones Toolbar** is found on the Object Browser.




It 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 |

| Icon | Description |
|---|---|
|  | Configuration Options |
|  | Refresh |
|  | Add Hatching |
|  | Remove Hatching |

### The Zones Hierarchy Window

The **Zones Hierarchy Window** is found immediately below the toolbar.

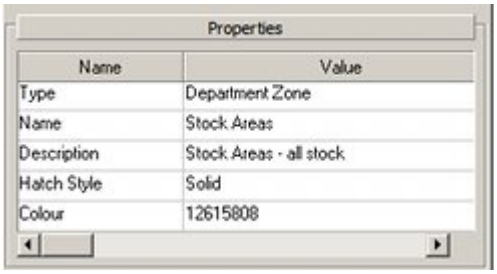



It contains a Hierarchical Tree giving a list of all the available Zone types.

> **Note:** Zone types and descriptions can be added, edited or deleted using the Administration Module.

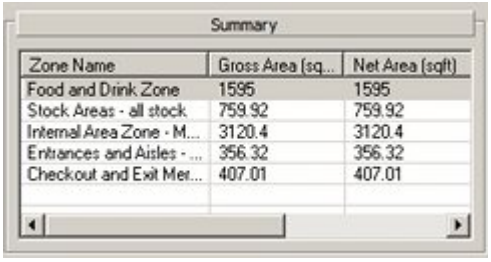
### The Properties Window

The **Properties Window** gives details of the Zone Definition that has been selected in the hierarchy.



### The Summary Window

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.

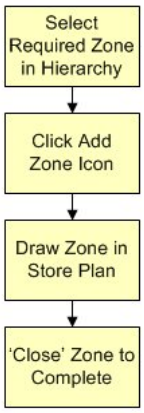
(Information displayed can be customized by Oracle – contact Technical Support if necessary).

Zone Names and Zone Descriptions can be sorted by clicking on the column headings. If a zone has been selected in the drawing, it will be highlighted in the summary of zone properties.

## Adding, Editing and Deleting Zones and Holes

### Overview of Adding Zones

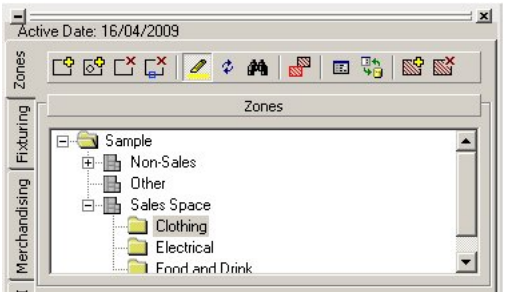
**Adding zones** is a simple process, initiated from the Object Browser.



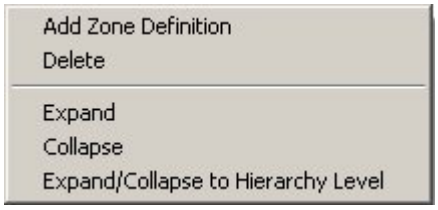

After the Zones tab has been selected on the Object Browser, the required Zone Description is selected from the Zones Hierarchy Window. The Add Zone option is then selected. Finally, the required Zone shape is then drawn and the process completed by using the 'close' command.

### Selecting the Zone Description

The **Zone Description is selected** from the Zones Hierarchical Tree window.



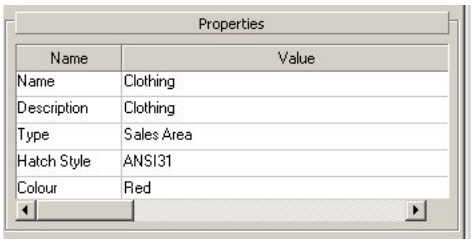

The tree can be expanded or contacted by clicking on the + or – signs. Alternatively right clicking with the mouse will bring up a small menu of options.




This can be used to expand or collapse the hierarchical tree.

The required Zone can then be selected by left clicking on it to highlight it.

Details of the Zone will appear in the Properties window.

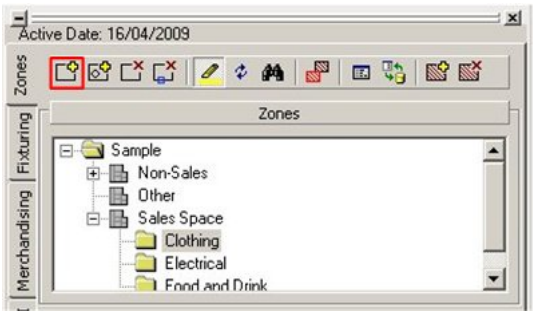



This will enable the Zone Description to be confirmed as correct.

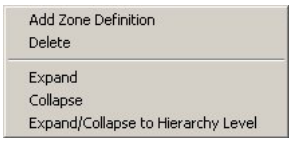
### Initiating Drawing the Zone

When the Zone Description has been selected, the process of drawing the Zone is initiated by selecting the Add Zone Boundary Option. This can be done on one of two ways.

Firstly, the Add Zone Boundary icon can be clicked in the tool bar to initiate drawing the Zone.



Alternatively, right clicking in the Zone Descriptions window will bring up a small menu.




Selecting Add Zone Definition will initiate drawing the zone.

## Drawing the Zone

After the Add Zone Boundary option has been selected, the user will find the cursor active and ready to start specifying the Zone Boundaries.




> **Note:** The way the Zone is drawn will depend on whether OSNAP (Object Snap) has been selected or not. If selected, Lines can only be drawn to specified points. If OSNAP is off, then lines may be drawn to any location on the drawing.
> **OSNAP AutoCAD Command**
>
> **Note:** Entering 'Close' in the command line completes the Zone drawing process by turning the currently drawn line into a Polyline enclosing the Zone.

### Drawing a Simple Rectangle

To draw a simple rectangle position the cursor at the required start point and left click to fix it. Draw the cursor to the diagonally opposite corner of the required rectangle and left click to fix it. Press <Escape>. A rectangle of the required dimension will immediately be drawn.

### Drawing Zones with OSNAP On

When OSNAP is on a series of symbols will appear as the cursor moves about. These show the available points that can be selected. Click on successive points to draw the outline of the Zone.

> **Note:** With OSNAP on, the Polylines can only be drawn to a limited number of specified points. To draw to a wider selection of points, turn OSNAP off.

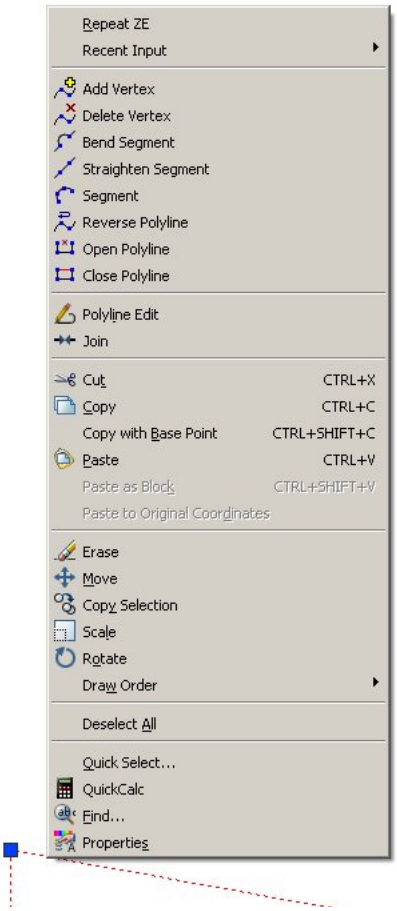
### Drawing Zones with OSNAP Off

With OSNAP off, Polylines can be drawn to any point of the drawing. Draw the required points, left clicking to fix each in turn.

Entering 'Close' in the command line completes the Zone drawing process by turning the currently drawn line into a Polyline enclosing the Zone.

## Overview of Editing Zones with AutoCAD Tools

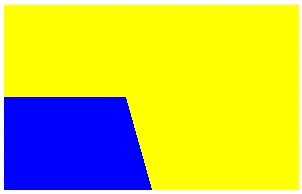
**Zone shapes and dimensions** can be changed using AutoCAD tools. A range of these is available by clicking on the zone boundary to highlight it, then right clicking. This will bring up a menu with a number of edit options.



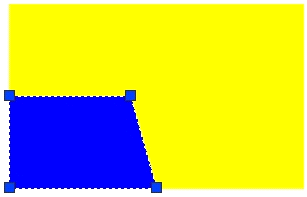

Zones can have vertexes added and deleted, segments bent and straightened and segments added. See the AutoCAD help File for further information.

### Editing Zones with AutoCAD

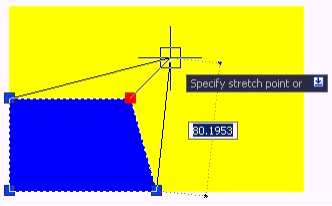
**Editing a Zone in AutoCAD** can be done simply by using the AutoCAD grip points.



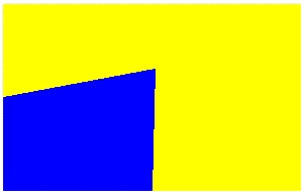
Click on the required Zone to get the grip points to show.



Click on the required grip point and move it to the desired new location.




Left click to set the new location for the grip point and <Escape> to complete the AutoCAD editing process.



The Zone should now be fixed in its new shape.

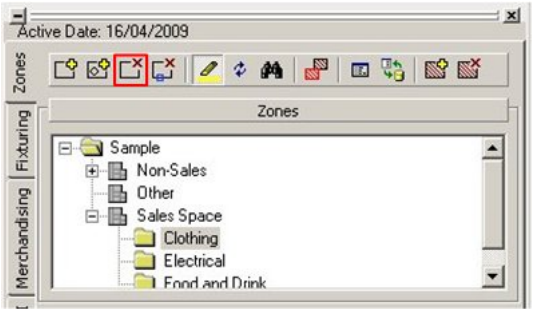
## Deleting Zones and Holes using Macro Space Management

There are two options to **delete a zone**:

1. Delete all zones of that description
2. Delete a specific zone or hole

### Delete all Zones of that Description

To Delete all examples of a specific Zone Description, first select the required zone in the hierarchical tree. Click on the Delete Zone icon in the toolbar to delete the Zone.

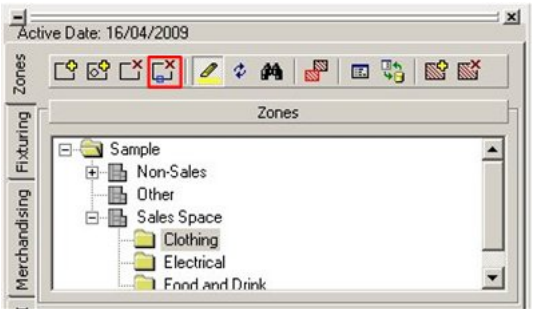



**Note:** If there are multiple Zones of this type in the drawing, all Zones of this type will be deleted.

**Note:** If you need to identify the Zone type to be deleted, use the highlight Zone in Tree option. Highlight Zone in Tree

#### Delete a Specific Zone or Hole

To delete a specific zone or hole, click on the Delete Boundary/Hole option on the toolbar.




Clicking on a zone or Hole in the drawing will then delete that zone or hole.

### Deleting Zones using AutoCAD

> **Note:** It is possible to delete Zones using the AutoCAD Erase tool. However, it is recommended users delete Zones using the Macro Space Management Delete Zone option as this is a simpler and more effective way of achieving deletion.

To erase a Zone using AutoCAD tools select the zone so that the markers show.

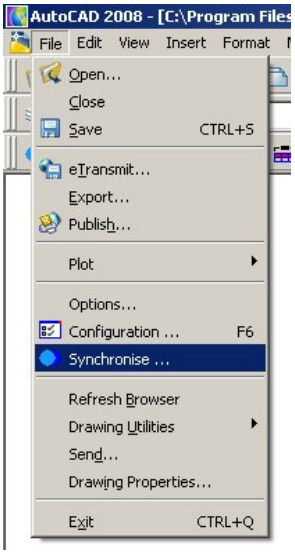


Right click to bring up the menu and click on the Erase icon.



This will remove the Zone from the drawing.

The Zone will not be removed from the Macro Space Management database until the Synchronize tool has been used. This can be found on the File pull down menu.

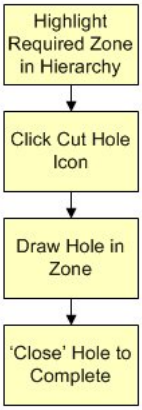



**Note:** If Synchronization is not run after deleting Zones with AutoCAD tools, unpredictable effects can occur in the drawing.

## Cutting or Editing Holes

### Overview of Cutting Holes

**Cutting holes in Zones** is a simple process, initiated from the Object Browser.




After the Zones tab has been selected on the Object Browser, the required Zone is highlighted in the Zones Hierarchy.

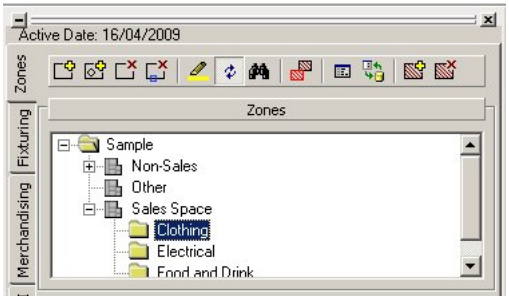
After clicking the Cut Holes icon, the shape of the hole can be drawn.

Entering 'Close' in the command line completes the hole drawing process by turning the currently drawn line into a Polyline enclosing the hole.

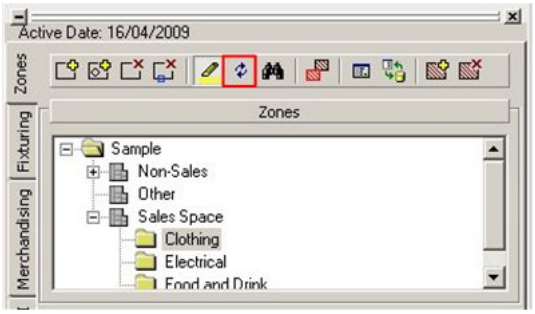
### Selecting the Zone in which to Cut a Hole

> **Note:** Holes can only be cut in the Zone currently highlighted in the Zone Hierarchy

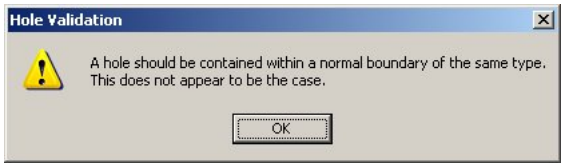
If the name of the zone is known, the appropriate Zone Description can be selected from the Zones Hierarchical Tree window.




Alternatively, the Highlight zone in Tree command can be used to select the appropriate Zone Description in the Zones Hierarchy.




> **Note:** If the Zone Definition is not correctly selected before a hole is cut, the error message depicted will result.




### Initiating Drawing the Hole

When the Zone Description has been selected, the process of drawing the Hole is initiated by selecting the Add Hole Option. This can be done by clicking on the tool bar to initiate drawing the Hole.



## Defining the Hole

After the Cut Hole option has been selected, the user will find the cursor active and ready to start specifying the Hole Boundaries.




> **Note:** The way the hole is drawn will depend on whether OSNAP (Object Snap) has been selected or not. If selected, Lines can only be drawn to specified points. If OSNAP is off, then lines may be drawn to any location on the drawing.
> **OSNAP AutoCAD Command**

> **Note:** Entering 'Close' in the command line completes the hole drawing process by turning the currently drawn line into a Polyline enclosing the hole.

### Drawing a Simple Rectangle

To draw a simple rectangle position the cursor at the required start point and left click to fix it. Draw the cursor to the diagonally opposite corner of the required rectangle and left click to fix it. Press <Escape>. A rectangle of the required dimension will immediately be drawn.

### Drawing Holes with OSNAP On

When OSNAP is on a series of symbols will appear as the cursor moves about. These show the available points that can be selected. Click on successive points to draw the outline of the hole.

> **Note:** With OSNAP on, the Polylines can only be drawn to a limited number of specified points. To draw to a wider selection of points, turn OSNAP off.

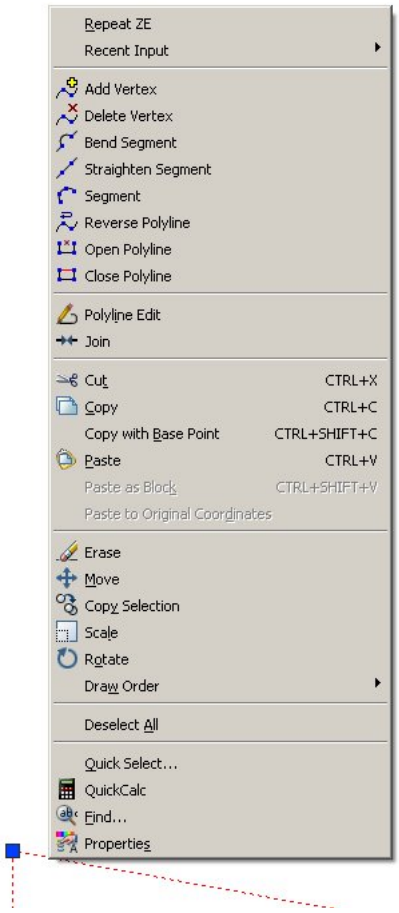
### Drawing Holes with OSNAP Off

With OSNAP off, Polylines can be drawn to any point of the drawing. Draw the required points, left clicking to fix each in turn.

Entering 'Close' in the command line completes the hole drawing process by turning the currently drawn line into a Polyline enclosing the hole.

## Overview of Editing Holes

Hole shapes and dimensions can be changed using AutoCAD tools. A range of these is available by selecting the required hole, then right clicking. This will bring up a menu with a number of edit options.



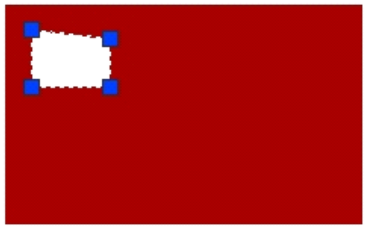

Holes can have vertexes added and deleted, segments bent and straightened and segments added. See the AutoCAD help File for further information.

### Editing Holes

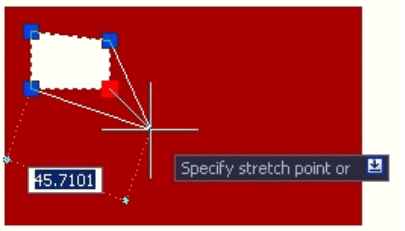
One way of **Editing Holes** is by using the AutoCAD grip points.



Click on the required Hole to get the grip points to show.



Click on the required grip point and move it to the desired new location.




Left click to set the new location for the grip point and <Escape> to complete the AutoCAD editing process.

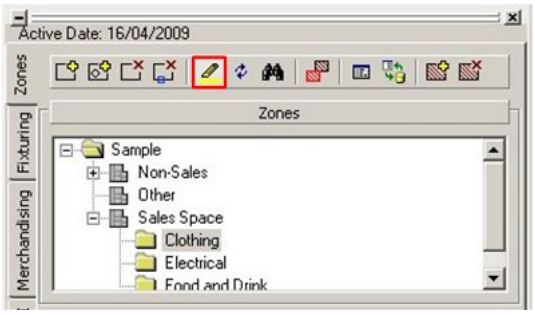


The Hole should now be fixed in its new shape.

## Other Zone Options

### Highlight Zone in Drawing

The **Highlight Zone in Drawing** icon allows the location of a zone to be identified in the drawing.



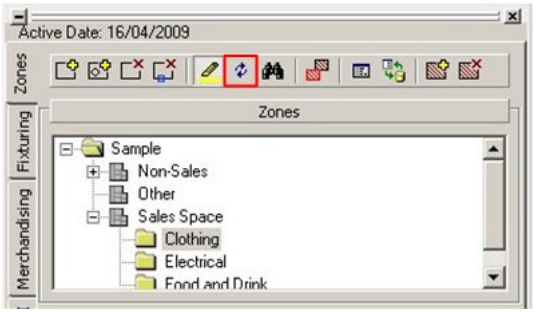

This operation can be toggled on and off by clicking on the icon. When toggled on the icon will appear slightly depressed.

When active, left clicking on any Zone in the hierarchical tree will then cause that zone to display in the drawing.

> **Note:** Only Zones currently in the drawing can be displayed. Selecting a zone which has not been placed will have no effect. The precise way the zone highlights will be determined by the setting in the Zones tab of the Configuration module.

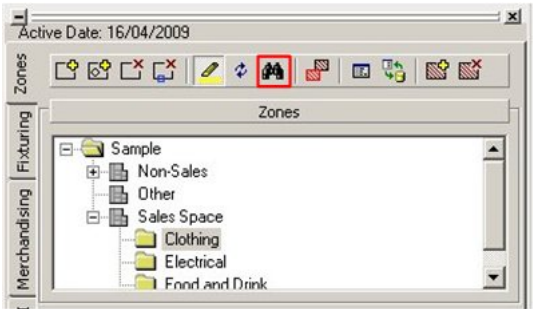
### Highlight Zone in Tree

The **Highlight Zone in Tree** option allows users to click on a zone boundary in the drawing, and have that zone highlighted in the Zone Hierarchy in the Object Browser.

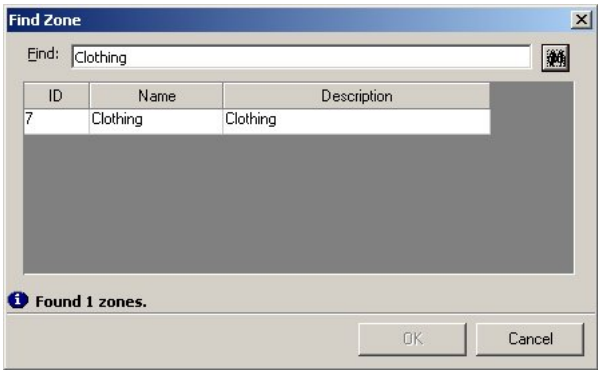



### Find In Tree

**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.

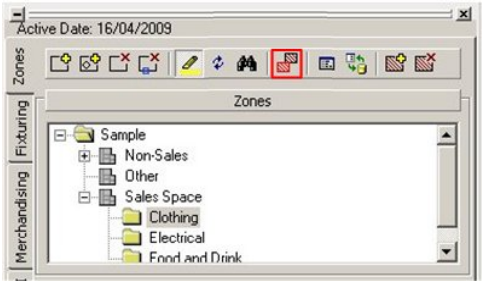



To use the dialogue box:

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

The **Detect Clashes** option can be invoked from the Zones toolbar.




If this option is selected, then any Zones of the same type with overlapping boundaries will be highlighted.

Zones of the same type that share a common boundary will not be highlighted.

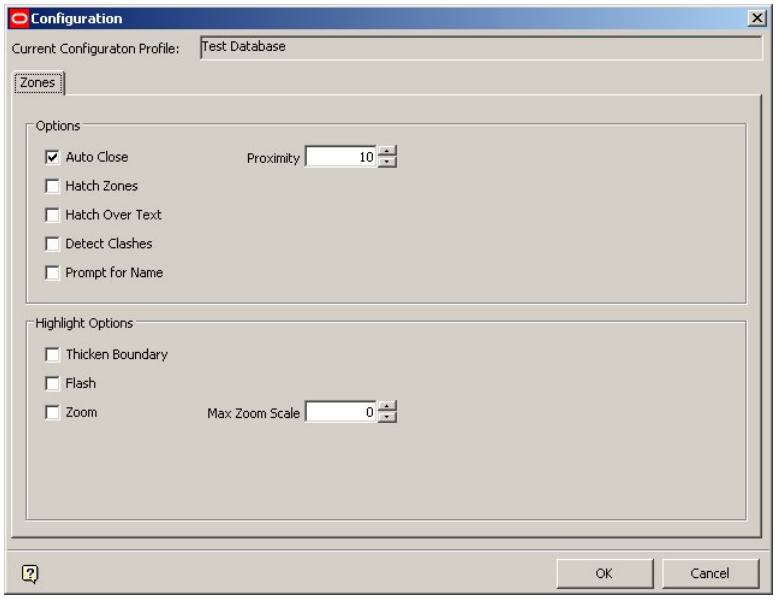
> **Note:** Zones of different type are drawn on different AutoCAD layers. Zones on different layers that overlap will not be shown as clashing.

### Configuration Options

The **Zones Tab** in the Configuration Module can be called by clicking on the Configuration icon on the Zones toolbar.




This brings up the Zones Tab.



This dialog box contains a series of check boxes controlling the way Zones display.

#### Options Frame

- **Auto Close** means that if a point in the zone (or hole) being drawn is within the specified **Proximity** of the first point drawn, the zone will automatically close (complete drawing).
- **Hatch Zones** determines whether the Zones drawn are color coded or not when the zone is first drawn. (Hatching can be added later using the hatch commands).
- **Hatch over Text** determines whether the hatch pattern leave a gap for the zone text or not.
- **Detect Clashes** is used to determine whether Zones on the same layer, (i.e. the same type), overlap each other.
- **Prompt for Name** allows users to locally rename the zone when first drawn.

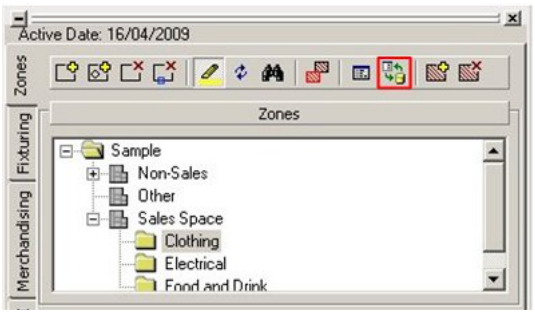
#### Highlight Options Frame

This determines how the zone highlights in the drawing if the 'highlight in drawing' option is selected in the Object Browser.

- **Thicken Boundary** results in the thickness of the Polyline used to draw the Zone being increased.
- **Flash** will cause the Zone boundaries to flash.
- **Zoom** means when the Zone is selected, it will zoom, (expand) either to the limits of the drawing, or by the scaling factor set in the Max Zoom Scale parameter.

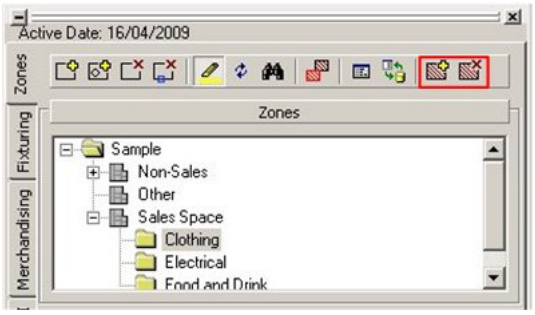
### Refresh

The **Refresh Option** causes the hierarchical tree in the Zones window to be updated with any Zone Definitions that have 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 the Administration module.

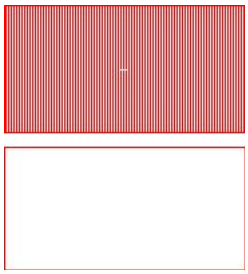


### Adding and Removing Hatching

**Hatching** can be added to or removed from zones using the appropriate option.




In the example below, the top zone is hatched, the bottom one is not.



## Zone Administration

### Options in 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.

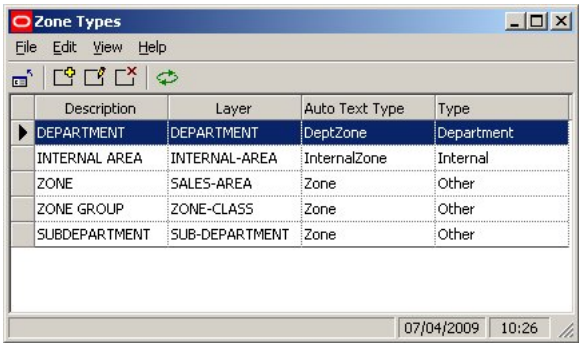
If you do not have these privileges, you will not be able to access the Administration Module.

- **Zone Types c**an 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.

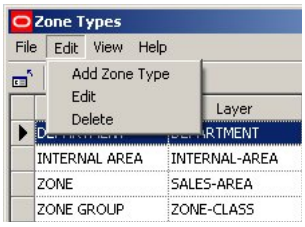
### The Zone Types Option

The **Zone Types** Option in the Administration Module allows Zone Types to be Added, Edited, and Deleted.

Zone Types are broad definitions of zones that allow zones to be grouped into general subclasses.




Options can be selected from the Edit menu.




Alternatively, they can be selected from the toolbar.

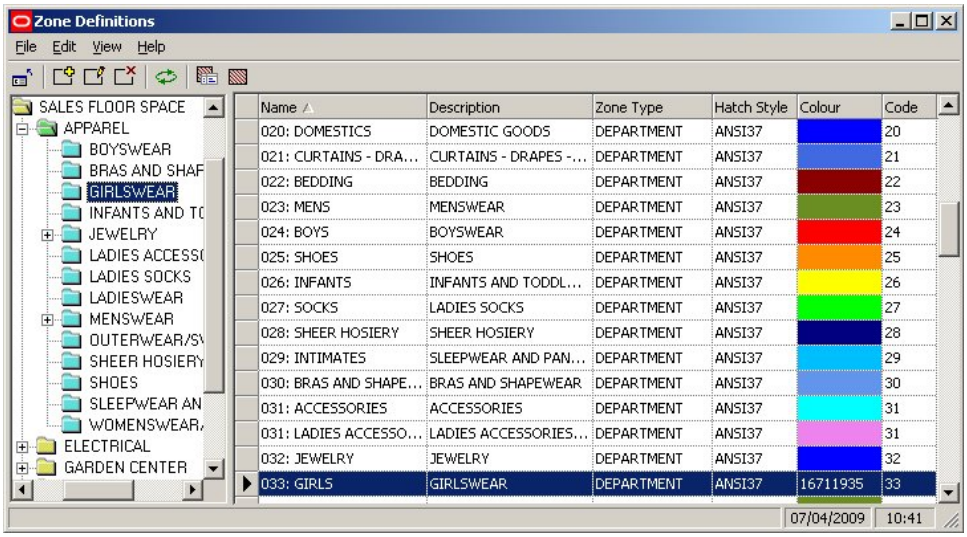
| Icon | Description |
|---|---|
|  | Exit |
|  | Add Zone Type |
|  | Edit Zone Type |
|  | Delete Zone Type |
|  | Refresh View |

### The Zone Definition Option

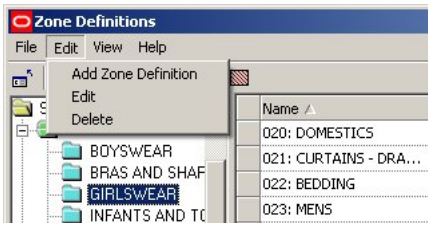
The **Zone Definitions** Option in the Administration Module allows Zone Definitions to be Added, Edited, and Deleted.

Zone definitions are specific definitions of zones (that are grouped together as Zone types).

In the example below, there are DIY, Electrical, fashion, Grocery, and Home departments.




Options can be selected from the Edit menu.

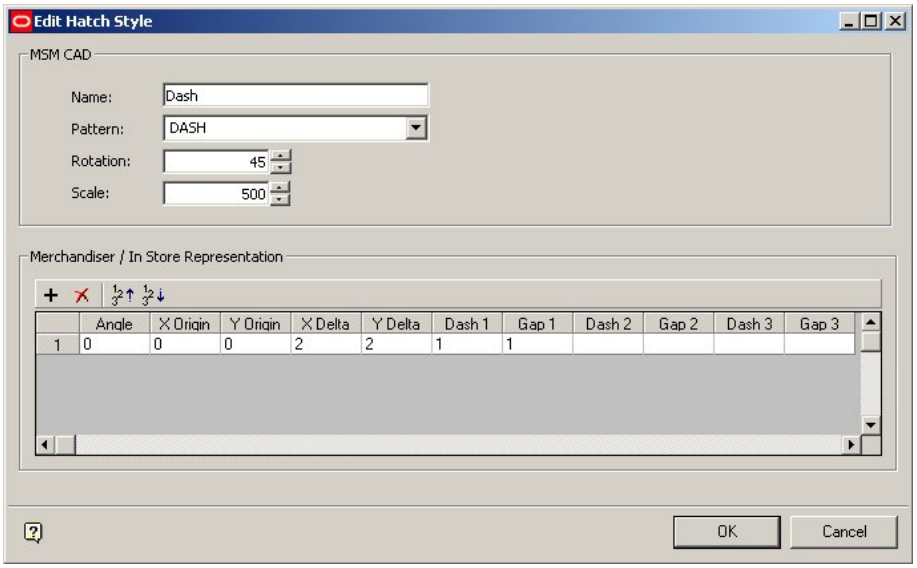



Alternatively, they can be selected from the toolbar.

| Icon | Description |
|---|---|
|  | Exit |
|  | Add Zone Definition |
|  | Edit Zone Definition |
|  | Delete Zone Definition |
|  | Refresh View |
|  | View Zone Types |
|  | View Hatch Types |

### The Zone Hatch Styles Option

The **Hatch Styles Option** in the Administration Module allows Zone Hatch Styles to be Added, Edited, and Deleted.

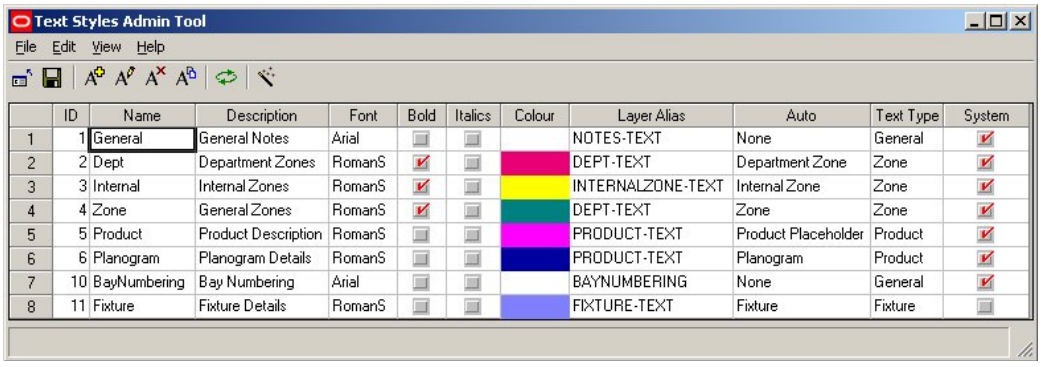



### Changing Zone Annotation

The **Text Styles** Option in the Administration Module allows Zone Annotation to be configured to the user's requirements.

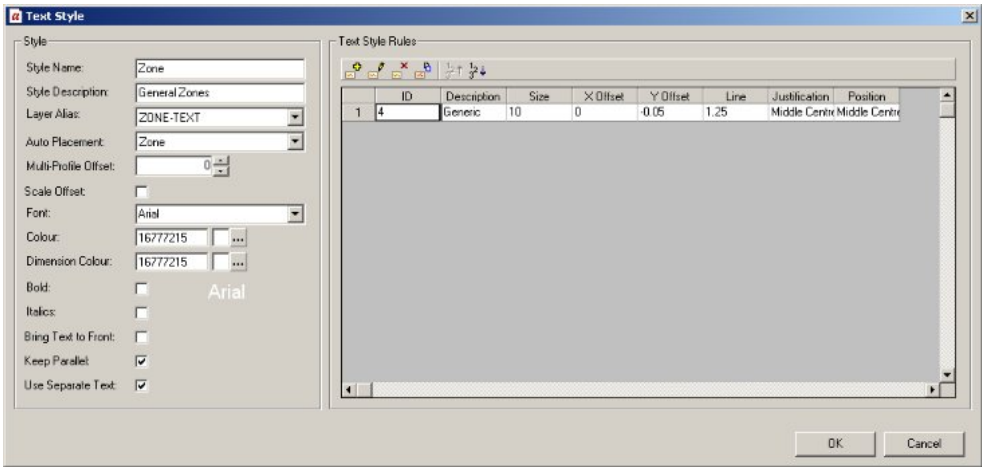
(Other forms of annotation can also be configured using this option).

> **Note:** Zone Annotation only applies to the AutoCAD environment – it is not visible in the Merchandiser environment.




| | ID | Name | Description | Font | Bold | Italics | Colour | Layer Alias | Auto | Text Type | System |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 1 | General | General Notes | Arial | | | | NOTES-TEXT | None | General | |
| 2 | 2 | Dept | Department Zones | RomanS | | | | DEPT-TEXT | Department Zone | Zone | |
| 3 | 3 | Internal | Internal Zones | RomanS | | | | INTERNALZONE-TEXT | Internal Zone | Zone | |
| 4 | 4 | Zone | General Zones | RomanS | | | | DEPT-TEXT | Zone | Zone | |
| 5 | 5 | Product | Product Description | RomanS | | | | PRODUCT-TEXT | Product Placeholder | Product | |
| 6 | 6 | Planogram | Planogram Details | RomanS | | | | PRODUCT-TEXT | Planogram | Product | |
| 7 | 10 | BayNumbering | Bay Numbering | Arial | | | | BAYNUMBERING | None | General | |
| 8 | 11 | Fixture | Fixture Details | RomanS | | | | FIXTURE-TEXT | Fixture | Fixture | |

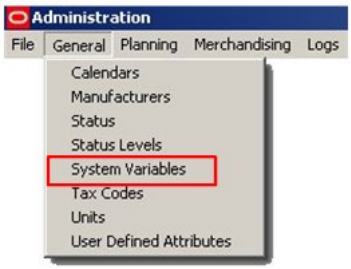
Selecting the Zone option will allow annotation to be configured.

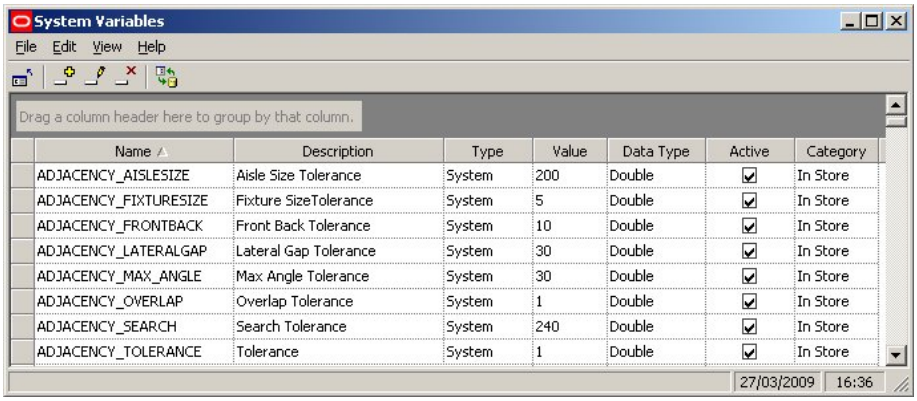



## About System Variables

Some of the variables affecting how Macro Space Management operates can be customized.

Within Macro Space Management these can be changed via the Administration Module.



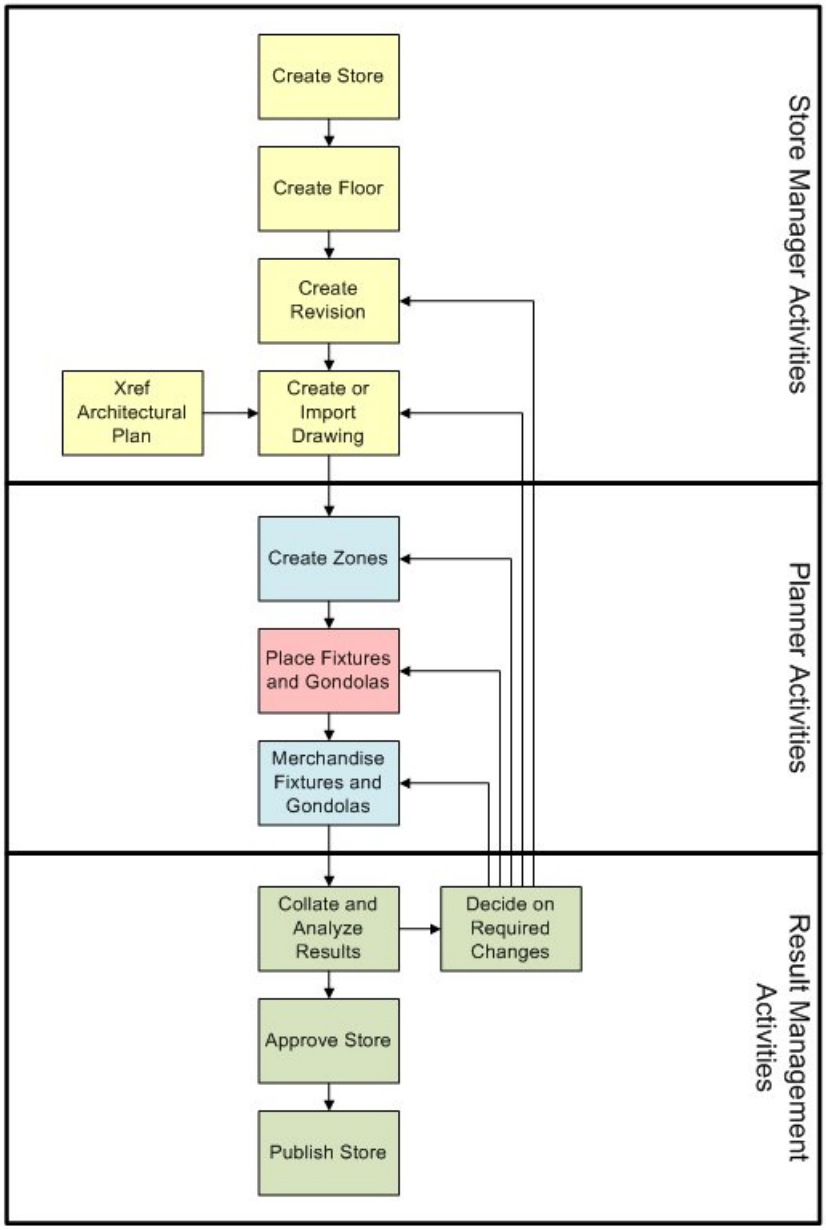

> **Note:** Changing System Variables can have a significant effect on how Macro Space Management operates. It is STRONGLY recommended that any changes are made only after consulting the Oracle technical support team.

There are currently no System Variables within this table affecting the operation of Zones.

# 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.

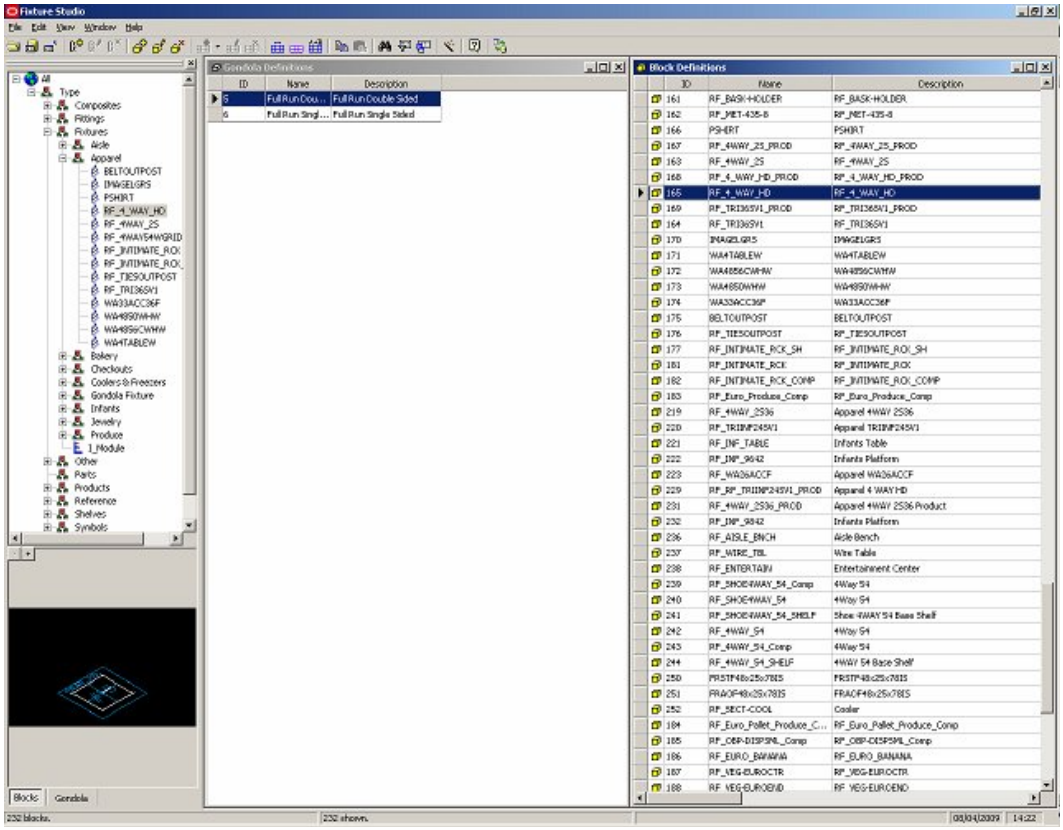
### About Fixture Studio

**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).

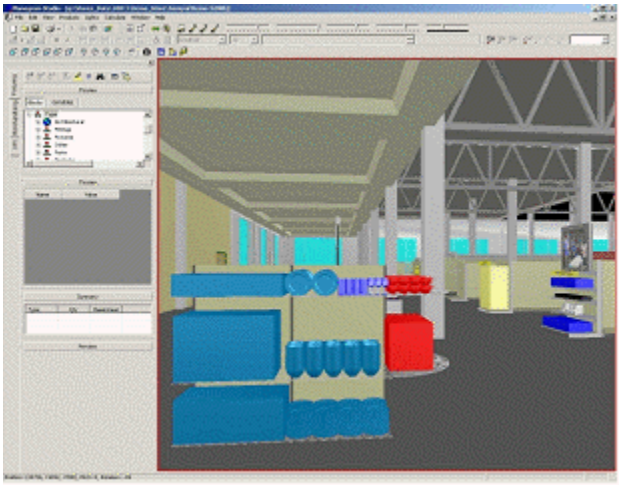



Fixture studio allows the properties of fixtures and gondolas to be specified. It also allows the hierarchical tree in which they are organized to be modified.




## 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.

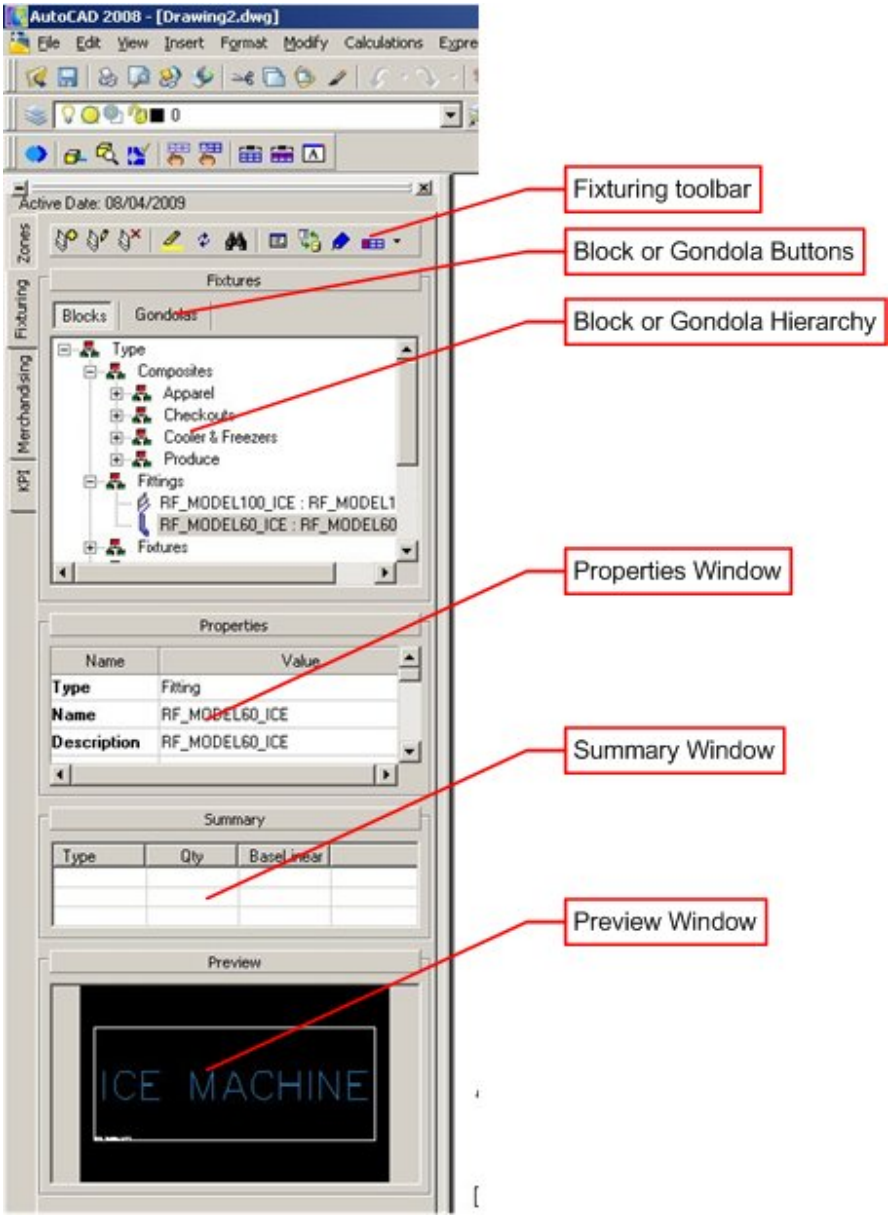
**Note:** Shelves can only be placed in the Merchandiser environment, although they can be seen in the Planner environment after Synchronization.

**Note:** Products can only be placed at display style level in Merchandiser. Such products are not visible in Planner.

## Object Browser - Overview

### 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.

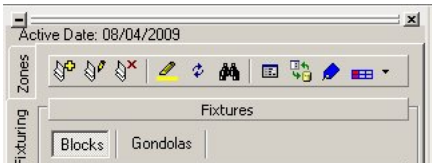
The **Properties Window** shows the properties assigned to the selected fixture.

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

#### The Fixturing Toolbar

The **Fixturing Toolbar** is found on the Object Browser. It is selected by clicking on Blocks in the Fixturing window.

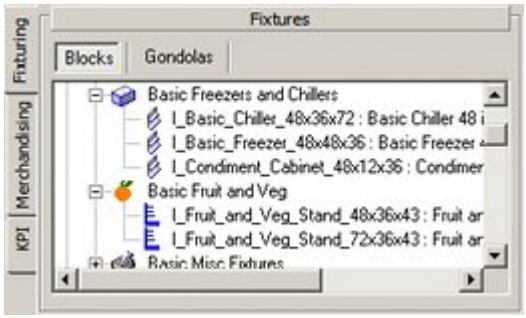



It contains a series of icons allowing various operations to be carried out on Fixtures. Some may be grayed out if they are not available for that operation.

| 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 |

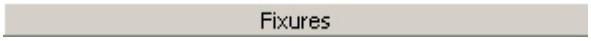
### The Fixtures Hierarchy Window

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.

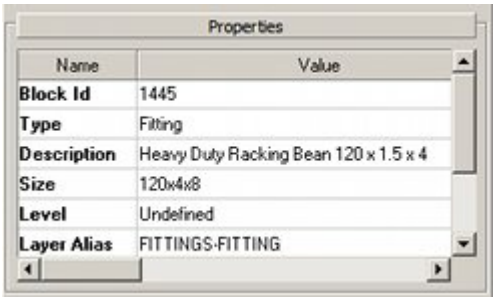



The Blocks or Gondolas buttons immediately above the window determines whether the hierarchical tree shows fixtures or gondolas.

The hierarchical tree can be configured in Fixture Studio using the Add Group, Edit Group and Delete Group icons on the toolbar.

### The Properties Window

The **Properties Window** will show the properties for the currently selected fixture.

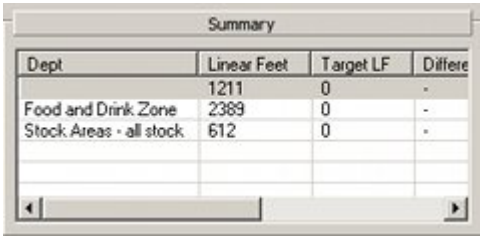



The Properties window can be minimized by clicking on the splitter bar.




### The Summary Window

The **Summary Window** will show a user defined list of fixtures placed in the drawing.



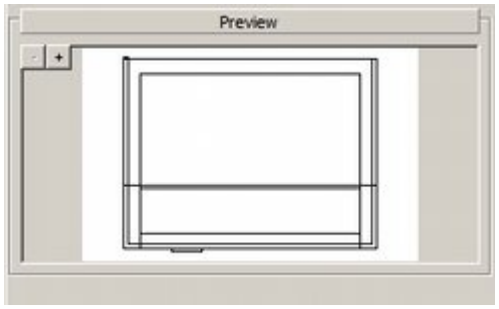

Clicking on a column heading will re-order that column. Clicking again will reverse the sort order.

The Summary window can be minimized by clicking on the splitter bar.



#### The Preview Window

The **Preview Window** shows a low resolution image of the fixture selected in the hierarchical tree.




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.




The image 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.

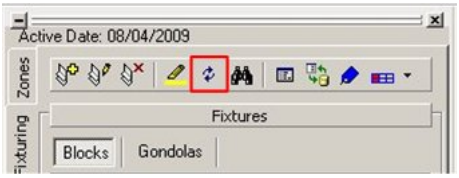
The image can be moved up and down using the central wheel on the mouse.

The image can be resized by holding down the <Ctrl> key, then left clicking the mouse and dragging the object.

### Fixturing on the Object Browser

#### Highlighting Selected Item in Tree

**Highlight Selected Item in Tree** is invoked by clicking the icon in the Fixturing toolbar.




This button can be toggled On and Off by clicking on it. When toggled on, the button will appear depressed.

When the Highlight Selected Item in Tree option is selected, clicking on any fixture in the drawing will result in that fixture type being highlighted in the hierarchical tree.

#### Highlighting Selected Item in View

**Highlight Selected Item in View** is invoked by clicking the icon in the Fixturing toolbar of the Object Browser.



This button can be toggled On and Off by clicking on it. When toggled on, the button will appear depressed.

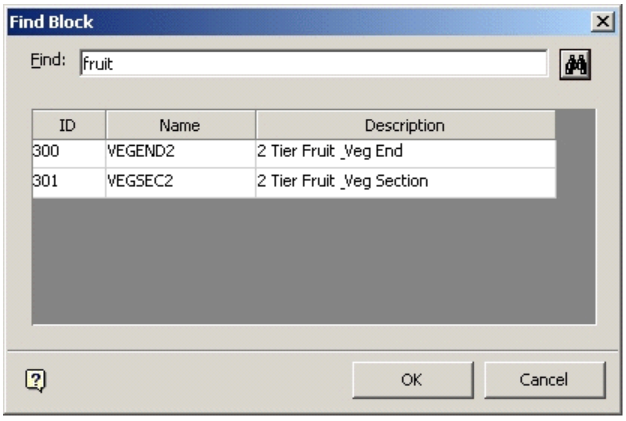
When the Highlight Selected Item in View option is selected, clicking on any fixture in the hierarchical tree of fixtures will result in that type of fixture in the visible portion of the drawing being highlighted.

### Using the Find Function

The **Find** function is invoked by clicking on the Find icon in the fixturing toolbar.




This will bring up the Find Block dialogue box.




This is used by typing the required search string into the Find box and clicking the Find icon to the right of it.

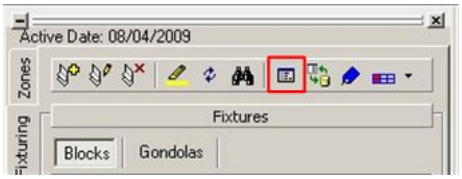


This will bring up a list of any blocks matching the search string.

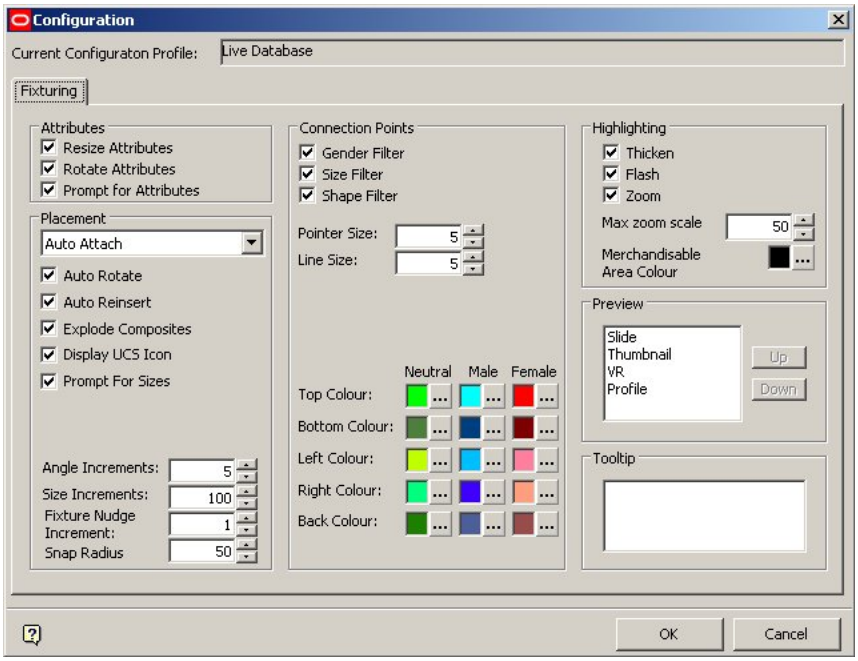
Left clicking on any result will return the user to the Fixtures Window, where the selected block will be highlighted in the hierarchy tree.

### Fixturing Options

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.



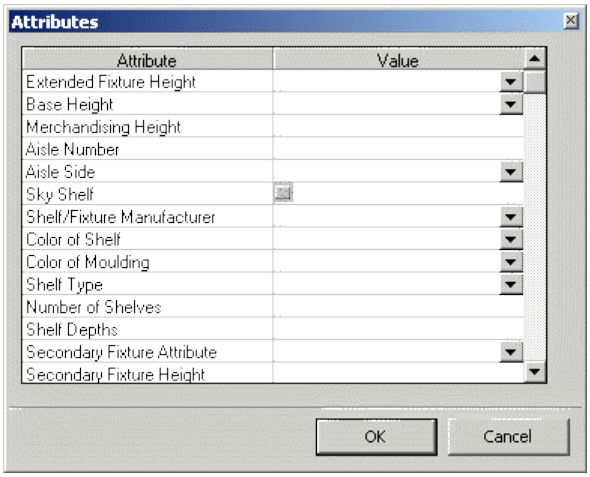

(See section on the Configuration Module for more information).

### 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.




This allows the user to add or edit information for that fixture.

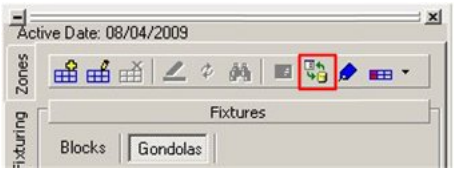
These notes serve as prompts for the user.

If multiple fixtures are selected, only fields with common data will display information.

(These Attributes are configurable in Fixture Studio - see the Fixture Studio help file for more information).

### Refreshing

The **Refresh** Icon refreshes both Fixtures and Gondola information in the respective hierarchical trees.




Clicking on the Refresh button in the Gondolas tab will load the latest gondola information from the database into the Gondola hierarchy.

At the same time, it will load the latest fixture information from the database into the Fixture Hierarchy.

(This refreshing will operate irrespective of whether the Object Browser is used either in the Planner or Merchandiser environments).

Dragging and dropping a gondola from the appropriate hierarchy after the refresh button has been pressed will add that gondola to the drawing using the latest definition from Fixture Studio.

Similarly, using the Add button will also add a gondola to the drawing using the latest definition from Fixture Studio.

If a drawing is already open then gondolas already placed in the drawing will not use any changes loaded during the refresh operation until the drawing is closed and reopened. However, new gondolas added to the open drawing will use the new data.

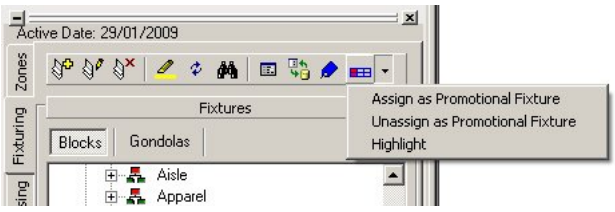
### Promotional Fixtures

**Promotional Fixtures** can be assigned by selecting a fixture or fixtures and clicking on the Fixture Attribute icon in the toolbar.




Promotional Fixtures are normally used for reporting purposes.

They are assigned by selecting a fixture then selecting the appropriate option from the pull down menu.




Fixtures designated as Promotional can be identified by using the highlight option. Alternatively, they can be identified by running a report on the drawing or by using a KPI.

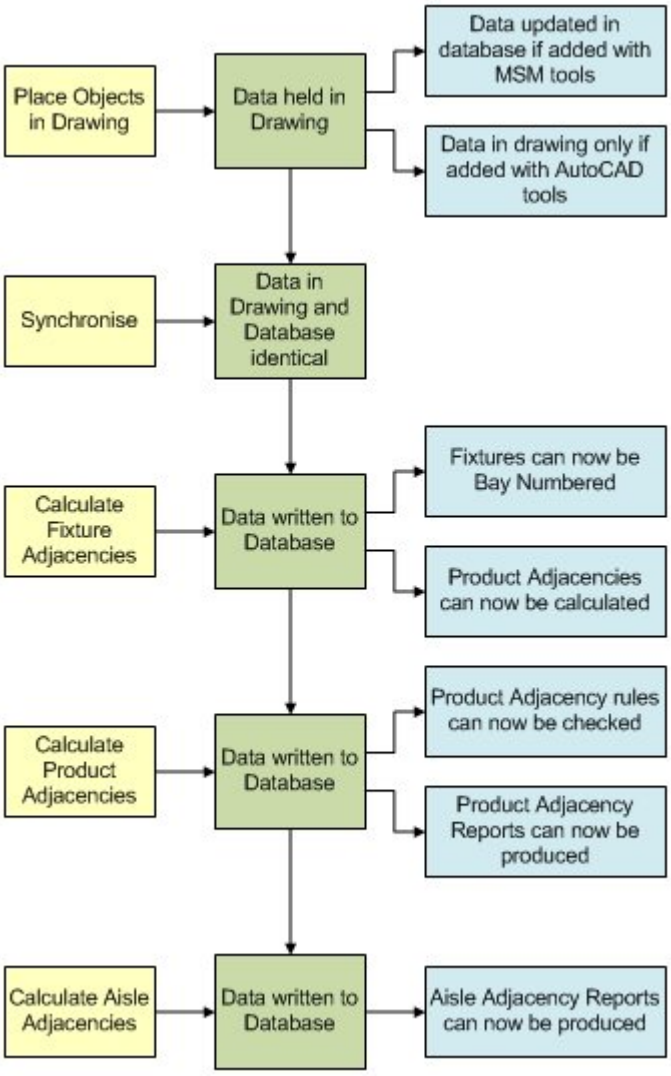
# Synchronization and Adjacencies

## 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.

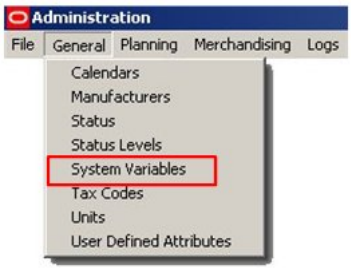
These relationships are used for both bay numbering and as the basis for subsequent Product Adjacency calculations.

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

## Configuring System Variables

Some of the **System Variables** affecting how Macro Space Management operates can be changed by the user.

Within Macro Space Management these can be changed via the Admin Module.




**Note:** Changing these System Variables can have a significant effect on how Macro Space Management operates. It is STRONGLY recommended that any changes are made only after consulting the Oracle technical support team. There is currently one System Variable affecting the operation of Fixturing.

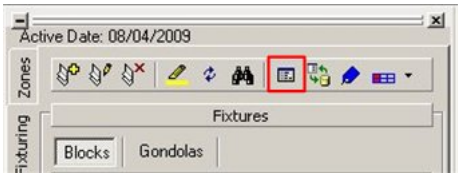
The **ADDITIONAL_FIXTURE_HEIGHT** System Variable determines the allowance made for the height of products above the top shelf.

For example, if a fixture is 2,000 mm high, and the ADDITIONAL_FIXTURE_HEIGHT System Variable is set to 300 mm, then the total possible maximum height of fixture and products is 2,300 mm.

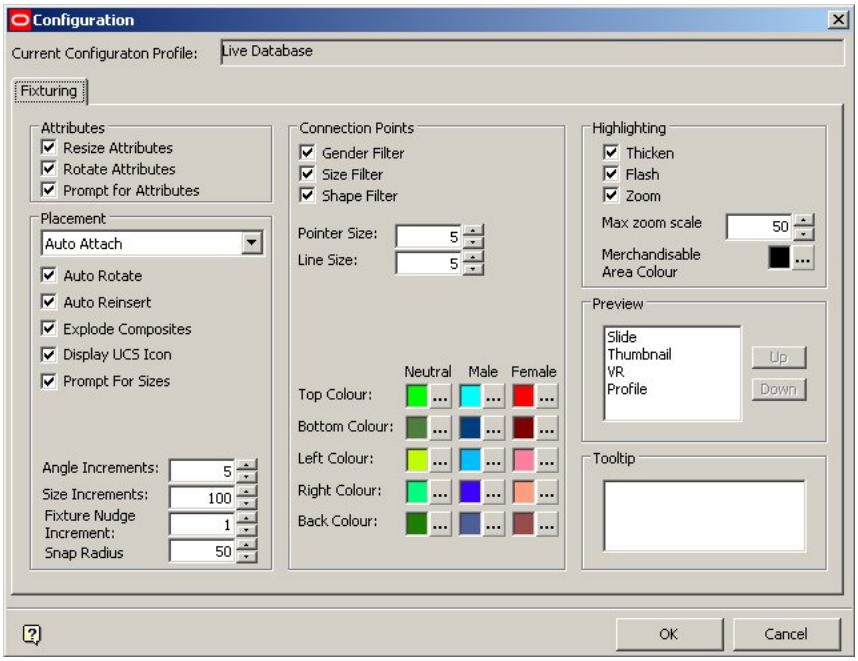
## Configuration

## Accessing the configuration options

The **Configuration 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.



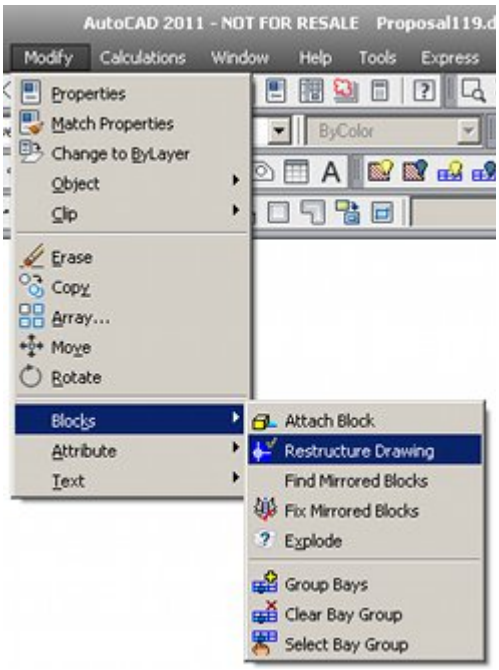

## Restructuring the Drawing

### Overview of Restructuring the Drawing

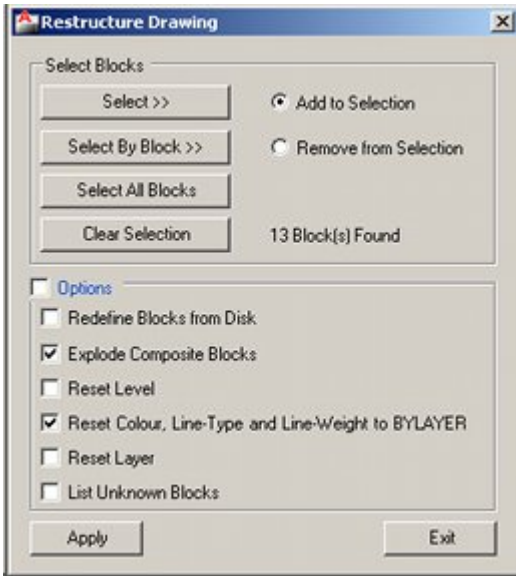
**Restructuring the drawing** can be initiated from the Retail Toolbar.



Alternatively, the functionality can be invoked from the Modify menu.




This will bring up the Restructure Drawing dialogue box.

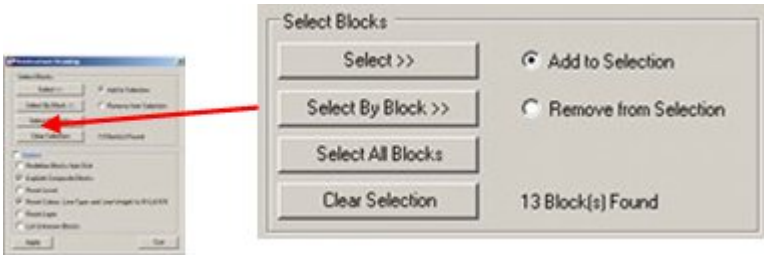



The purpose of this dialog box is to restore blocks in the currently active floor plan to match the properties of the blocks as defined in Fixture Studio. The options are:

| Option | Effect |
|---|---|
| Redefine Blocks from Disc | Update the floor plan with the latest version of the block (.dwg file) that is referenced by Fixture Studio. |
| Explode Composite Blocks | Explodes any composite blocks into their individual parts. |
| Reset Level | Change the level the block is placed to the level currently defined in Fixture Studio. |
| Reset Color, Line Type and Line Weight to BYLAYER | Resets the block properties to BYLAYER - i.e. it resets the block instance color, line type and line weight to the defaults for that layer. |
| Reset Layer | Changes the layer the block is currently placed on to the one currently defined in Fixture studio. |
| List Unknown blocks | Lists any blocks in the drawing that are not registered in the central database. |

### 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 dialogue 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

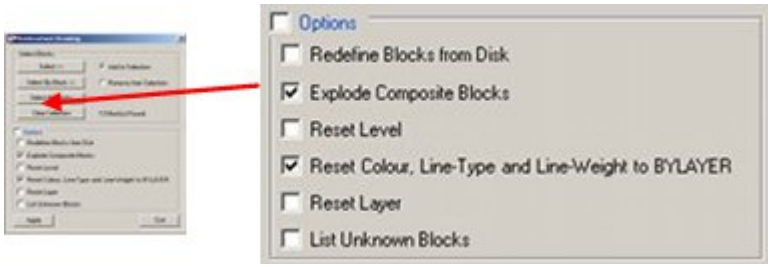
Clicking this button will select all blocks in the currently active floor plan.

#### Clear Selection

Clicking this button will deselect all currently selected blocks.

### Restructuring Options

Once the blocks have been selected, varying **restructuring options** can be chosen.




#### 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

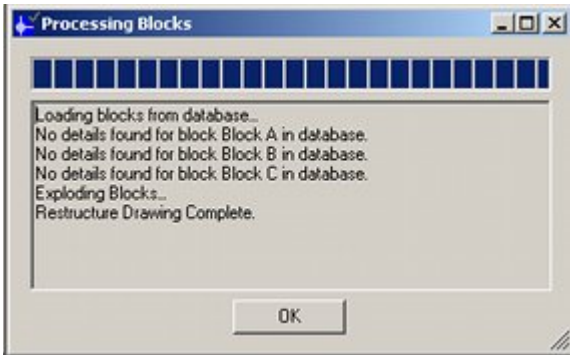
If the colors, line types and line weights of any selected block in the currently active floor plan are different from the default properties of the layer on which they have been placed, the properties of the selected blocks will be set back to those defaults. An example of this could be if a KPI was 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

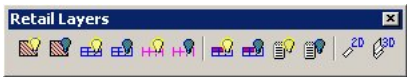
It is possible for blocks to exist in the drawing, but not be registered in Fixture Studio. These sorts of blocks are shown in the Processing Blocks dialogue box that appears when the drawing is being restructured.



# The Retail Layers Toolbar

## The Retail Layers Toolbar

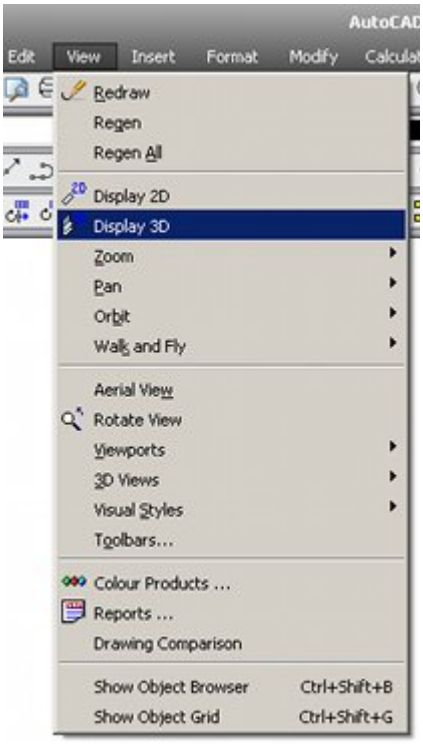
The **Retail Layers Toolbar** enables users to quickly control which layers pertinent to Retailing are visible.




| Buttons | Description |
|---|---|
|  | Turns on all zones, zone text and aisles / boundary layers |
|  | Turns off all zones, zone text and aisles / boundary layers |
|  | 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.



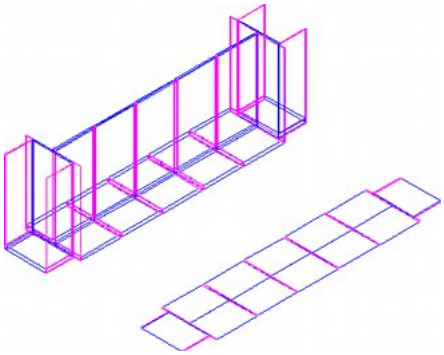
This functionality is specific to Macro space Planning. It requires fixtures that have been configured in a specific way prior to having been registered in Fixture Studio. (The method is described in more detail in the Fixture Studio help file).

> **Note:** The blocks have part configured to be an layer called 2D and part on a layer called 3D. Functionality in Planner then turns of one or the other layer, leaving the block to be shown in plan or 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

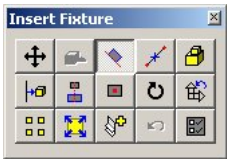
The difference can be seen in the example below where the fixtures can be seen in both 3D form (top) and 2D form (bottom).



## The Insert Fixture Dialog Box

### Overview of Insert/Edit Feature Dialogue Box

The **Insert/Edit Fixture** dialogue box appears when the Add Fixture icon is clicked on the Fixtures toolbar.




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 |

| Icon | Description |
|---|---|
|  | Place Fixture In-Line with Another |
|  | Change Justification |
|  | Rotate the Fixture |
|  | 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 |

Click on each button to activate the required option.

When fixture placement options are satisfactory; complete insertion by clicking on the cross in the upper right corner of the Insert/Edit Fixture dialogue box, or press <Escape>.

> **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.

### Move Fixture option

| | |
|---|---|
|  | Move Fixture |

This option is active when the Insert/Edit Fixture dialogue box appears. It enables the fixture to be inserted into the drawing at a point determined by the mouse cursor.

Moving 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

| | |
|---|---|
|  | Attach Fixture to Another. |

This button will allow one (or more) fixtures to be attached to another when both have compatible connection points.

(If the connection points are not compatible, the fixtures cannot be attached).

To use this option, place a fixture and then clock on the Attach Fixture to another icon. The fixture can them be moved around and will snap to any compatible connection points.

### Move and Align Fixture option

| | |
|---|---|
|  | Move and Align Fixture |

This allows the fixture to be moved to another position and, if necessary, aligned with an existing fixture.

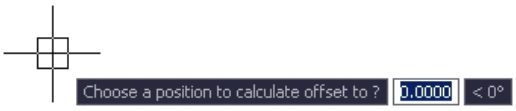
### Move Fixture to Between Others option

| | |
|---|---|
|  | Move Fixture to Between Others |

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.




Left click to select the start point. The dialogue will then change to ask for the endpoint of the line on which the fixture will be placed at the midpoint.




Left clicking will result in the Fixture being placed at the midpoint of the selected line.

### Place Fixture on Top of Another option

| | |
|---|---|
|  | Place Fixture on Top of Another. |

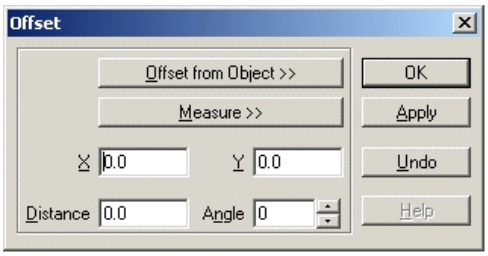
This button will allow one fixture to be placed on top of another when both have compatible connection points.

At present this feature is not enabled in Macro Space Management.

### Offset the Fixture option

| | |
|---|---|
|  | Offset the Fixture |

Clicking on this icon will bring up the Offset dialogue box.




To select the object to be offset from, click the Offset from Object button. Click on an object to select it. The fixture will be temporarily placed at this point. There are then two ways of determining the offset.

Firstly, when the fixture is first positioned in the drawing, a dialogue box will appear giving the offset from the selected fixture:




This can be used to select the required offset. Left clicking will return the user to the Offset dialogue box, which will now have the X, Y, Distance and Angle co-ordinates showing.

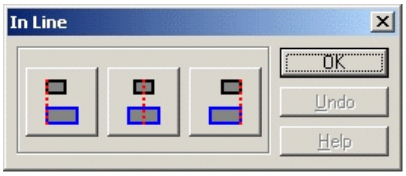
Alternatively, when the fixture has been selected, press <Escape> to return directly to the Offset dialogue box. The X and X coordinates of the offset can then be input. (Alternatively, they can be entered as a distance and an Angle).

Clicking on Apply or OK will place the fixture at the desired offset.

### In-Line the Fixture option

| | |
|---|---|
|  | In Line the Fixture |

Clicking in this icon brings up the In-Line dialogue box.



Clicking on the appropriate button selects how the fixture being inserted will be placed relative to the selected fixture.

On clicking the button for the first time, the user will be invited to select a fixture.

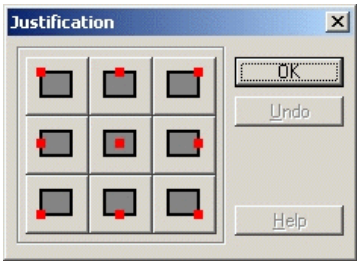



On selecting the fixture, the user will be returned to the dialogue box. Clicking on *OK* completes the process.

### Change Justification option

| | |
|---|---|
|  | Change Justification |

Clicking on the Change Justification icon brings up the Justification dialogue box.

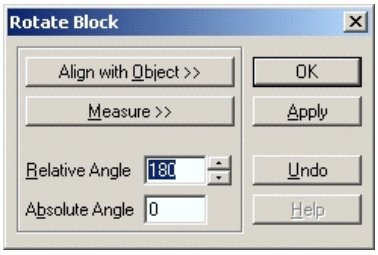



Clicking on the appropriate button changes the justification of the annotation for that particular type of fixture.

### Rotate the Fixture option

| | |
|---|---|
|  | Rotate the Fixture |

Clicking on this icon brings up the Rotate Block dialogue box.



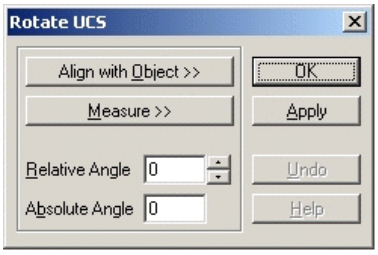

Clicking on the Align with Object button allows the user to select a previously placed fixture. The new fixture will then be placed at the same angle as the selected fixture.

Alternatively, the angle required for the fixture being placed can be entered directly into either the Relative Angle or Absolute Angle boxes.

### Rotate the UCS option

| | |
|---|---|
|  | Rotate the UCS |

Clicking on the Rotate the UCS icon enables the orientation of the Universal Co-ordinate System to be changed.




**A note on the WCS (World Co-ordinate System) and UCS (Universal Co-ordinate System).**

MSM AutoCAD has two coordinate systems: a fixed system called the World Co-ordinate System (WCS) and a movable system called the User Co-ordinate System (UCS).

The UCS is useful for entering coordinates, defining drawing planes, and setting views. Changing the UCS does not change your viewpoint. It changes only the orientation and tilt of the coordinate system.

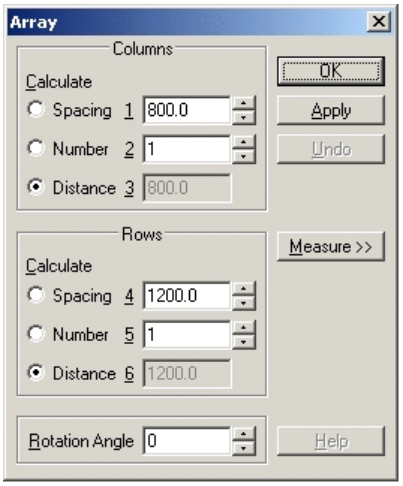
If you are working in a drawing, you can continually relocate the UCS to simplify your work. For example, if you have created a 3D object, you can edit each of its six sides easily by aligning the UCS with each side as you edit it.

If you change the UCS relative to the WCS, you can always make the two align again by using the World option of the UCS command.

### Create an Array of Fixtures option

| | |
|---|---|
|  | Create an Array of Fixtures |

Clicking on the Create an Array icon will bring up the Array dialogue box.



The usual method is to select the numbers of row and columns for the array by means of the number radio buttons.

Alternatively, clicking on the Measure button enables the user to define a rectangle. Left clicking returns the user to the dialogue box where the number of rows and columns will be defined.

Clicking on OK or Apply completes the process.

### Change the Size of the Fixture option

| | |
|---|---|
|  | Change the Size of the Fixture |

This button will allow the fixture to changed in size during insertion.

This option will only work for fixtures that are stretchable - it will not work for non-stretchable ones.

### Insert the Same Fixture as Last Added

| | |
|---|---|
|  | Insert a Copy of the Current Block |

This option allows the user to insert another instance of the last block to be inserted by simply clicking on the icon.

### Undo the Last Change option

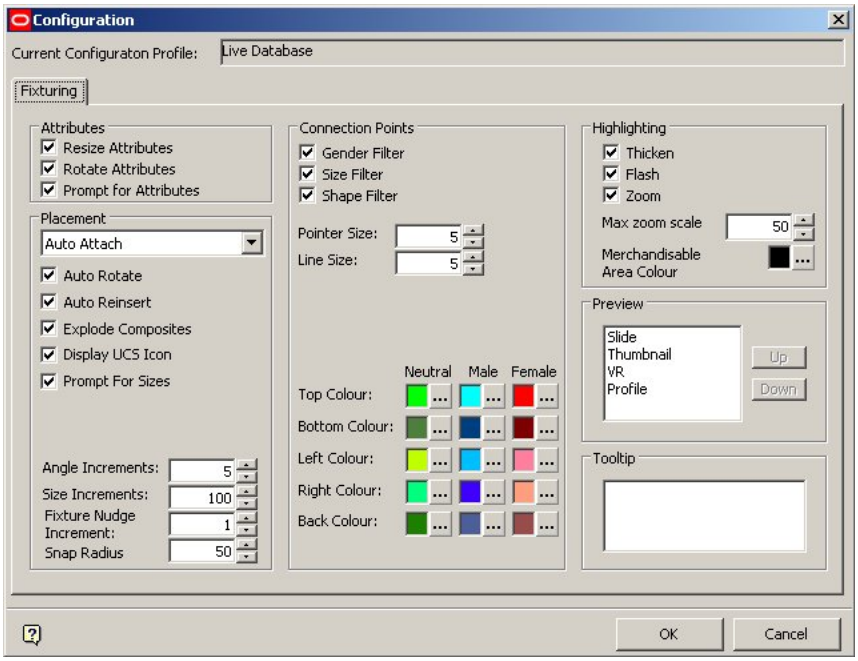
| | |
|---|---|
|  | Undo the Last Change |

The Undo the Last Change option undoes the effect of the last action.

### Modify the Options for this Fixture

| | |
|---|---|
|  | Modify the Options for this Fixture |

Selecting this option brings up the Fixturing Tab from the configuration Module.

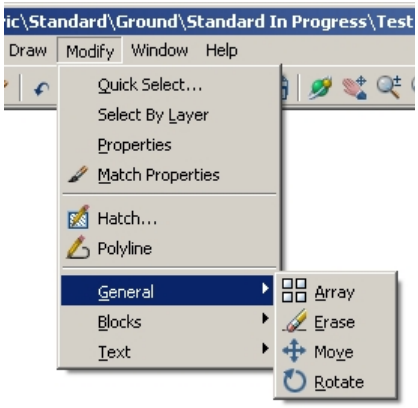



This allows users to configure some options as to how fixtures behave. (See the Configuration Module help file for more information).

## Editing and Deleting Fixtures

### Overview of Editing Fixtures using AutoCAD Tools

Fixtures can be edited using AutoCAD tools. These can be accessed from the Modify > General drop down menu options.




This allows objects to be Erased, Moved or Rotated.

> **Note:** Fixtures can also be moved by the Fixture Manipulation tools provided by Macro Space Management.

### Overview of Editing Fixtures using Fixture Studio

Fixture Studio allows the properties of a fixture of fitting to be edited.

It is accessed from the Object Browser by clicking on the **Edit Fixture** icon on the Fixturing tool bar.



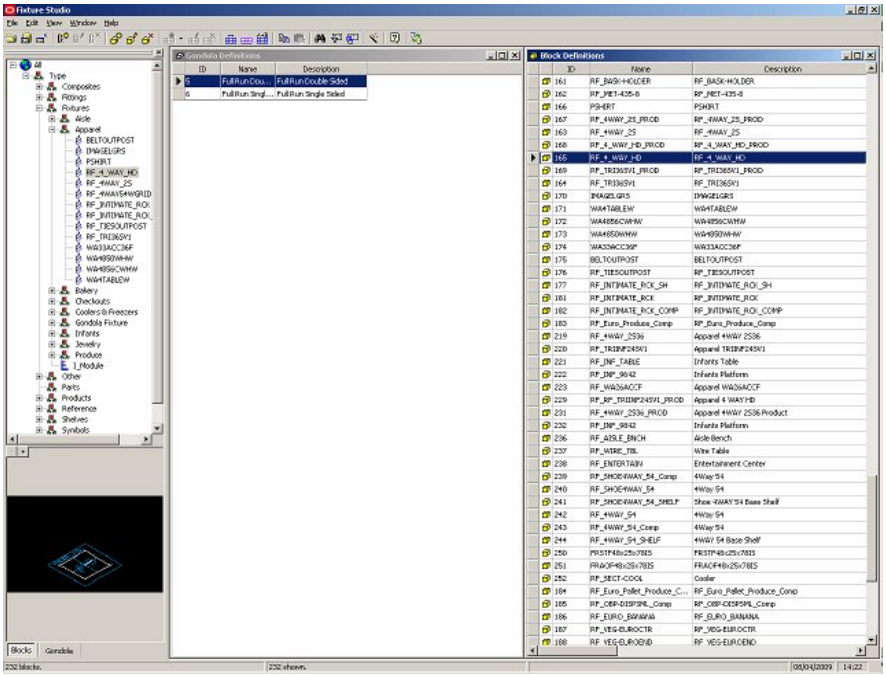

While in Fixture Studio a wide range of properties for the selected fixture or fitting can be customized. These include:

- Insertion points
- Size
- Connection points
- Parts
- Shelving
- Merchandisable areas

Changes made to a fixture or fitting while in Fixture Studio will affect all blocks of that type.

## The Fixture Studio window

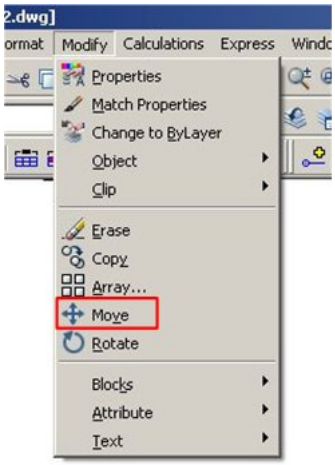
The Fixture Studio window contains two main parts.



On the left is a hierarchical tree of all the available gondolas, while on the right is a window allowing the block details of the currently selected gondola to be customized.

## Moving Fixtures

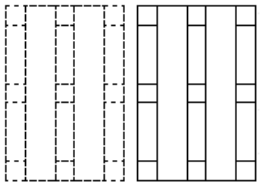
**Moving Fixtures** can be done by selecting the Move option from the Modify pull down Menu.




This will bring up a small prompt asking the user to select the Fixtures to be moved.




Any objects selected will change from solid to dotted lines.



Right clicking completes the selection process.

The use will then be asked to specify a base point.




Following specification of a base point, the user will be prompted to specify a second point.



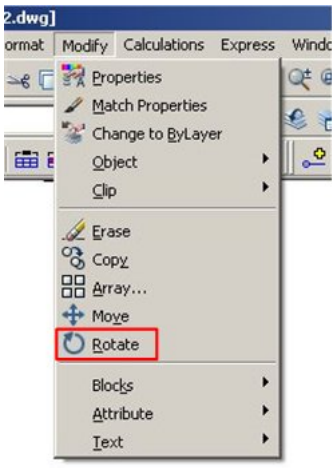

In both cases the points can be specified either by left clicking, or by typing in the X and Y coordinates.

The two points specified define a vector. This indicates how far and in what direction the selected fixtures are to be moved.

> **Note:** Using MSM AutoCAD tools changes the drawing, without the changes being recorded in the central Macro Space Management database. Run Synchronize then Adjacencies to ensure the central database contains the effects of all AutoCAD changes.

### Rotating Fixtures

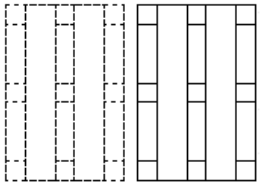
To **Rotate a Fixture** select the Rotate option from the Modify pull down menu.




This will bring up a small prompt asking the user to select the Fixtures to be rotated.




Any objects selected will change from solid to dotted lines.

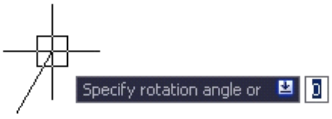


Right clicking completes the selection process.

The use will then be asked to specify a base point. The point can be specified either by left clicking, or by typing in the X and Y coordinates.




Following this the user will be invited to specify a rotation angle.



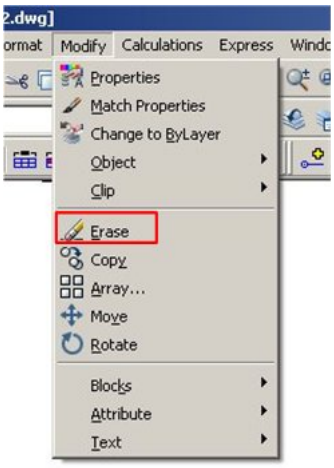

The rotation angle can be specified by typing it in. Alternatively, the mouse cursor can be used to draw a line at the required angle.

Left clicking will cause the specified objects to be rotated.

> **Note:** Using AutoCAD tools changes the drawing, without the changes being recorded in the central Macro Space Management database. Run Synchronize then Adjacencies to ensure the central database contains the effects of all AutoCAD changes.

### Erasing Fixtures

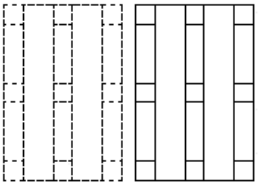
To **Erase a Fixture** select the Erase option from the Modify pull down menu.




This will bring up a small prompt asking the user to select the Fixtures to be erased.




Any objects selected will change from solid to dotted lines.

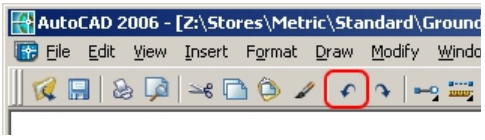


Right clicking completes the selection process – which will cause the selected objects to be removed from the drawing.

> **Note:** Using AutoCAD tools changes the drawing, without the changes being recorded in the central Macro Space Management database. Run Synchronize then Adjacencies to ensure the central database contains the effects of all MSM AutoCAD changes.

### Undoing changes

Moved, Rotated or Erased fixtures can generally be restored to their original position by making use of the **Undo** command on the AutoCAD Toolbar.




> **Note:** Using MSM AutoCAD tools changes the drawing, without the changes being recorded in the central Macro Space Management database. Run Synchronize then Adjacencies to ensure the central database contains the effects of all AutoCAD changes.

### Deleting Fixtures

It is recommended that **Fixtures are deleted** using Macro Space Management tools. This can be achieved by means of the Delete Fixture option on the Fixturing toolbar.

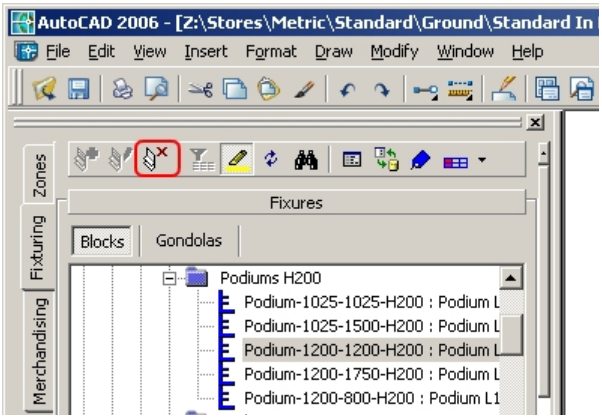
| | |
|---|---|
|  | Delete Fixture |

To delete fixture(s), click on the fixtures required. Alternatively, use the AutoCAD selection tools.



The outline of the fixture(s) will turn to dotted and the insertion point will show.

At the same time the Delete icon will change from grayed out to active, while the Add Fixture and Edit Fixture icons will grey out.




Clicking on the Delete icon will remove all selected fixtures (and gondolas).

## 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 fixtures 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 then 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 an 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

Paste 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 a 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

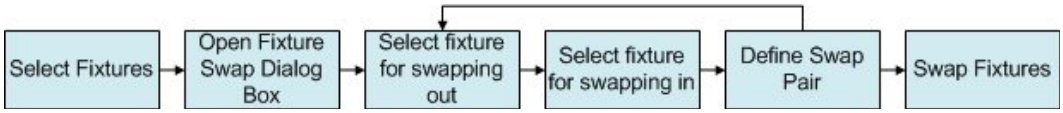
Array takes a selected set of equipment, merchandise and annotation and generates additional rows and columns of that set of objects.

### 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:



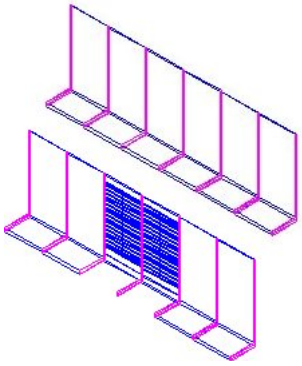

1. The Fixtures it is desired to swap in the floor plan are selected.
2. The Fixture swap dialog box is selected and will populate with the selected fixtures.
3. A fixture is selected to be swapped out.

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.

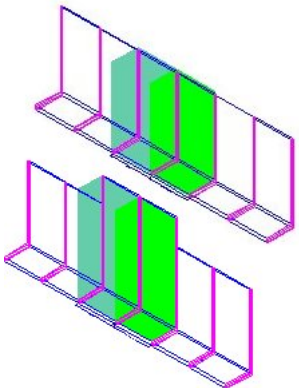
> **Note:** It is possible to reverse the first two steps - i.e. open the dialog box first, then select the required fixtures.

#### 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:

1. From the command line by typing AVT_FIXTURESWAP and pressing **Return**.
2. 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 |
| 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 |

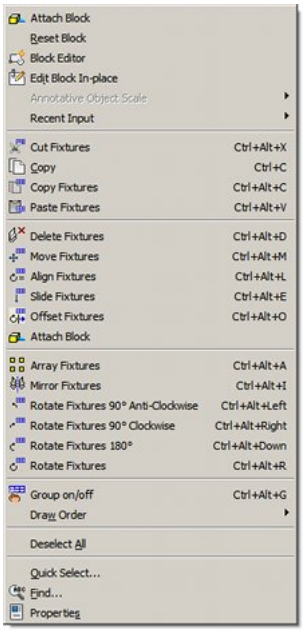
**3.** From the Fixturing toolbar.



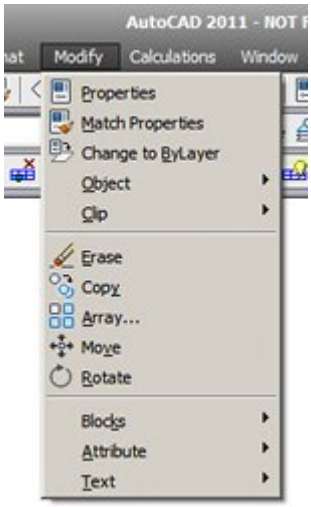
| Option | Icon |
|---|---|
| Group On/Off | |
| Move Fixtures | |
| Slide Fixtures | |
| Offset Fixtures | |
| Match Rotation | |
| Cut Fixtures | |
| Copy Fixtures | |
| Paste Fixtures | |
| Delete Fixtures | |
| Rotate Fixtures | |
| Rotate Fixtures 90 Degrees Clockwise | |
| Rotate Fixtures 90 Degrees Anticlockwise | |
| Rotate Fixtures 180 Degrees | |
| Mirror Fixtures | |

| Option | Icon |
|---|---|
| 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.



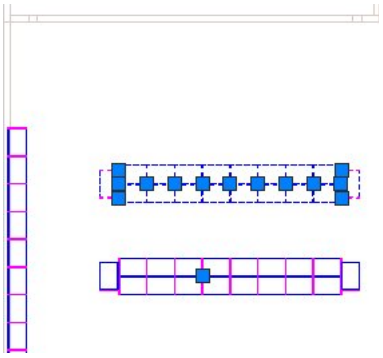
#### Grouping On

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

#### Selection Sequence

There are generally two ways a command can be executed:

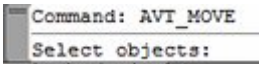
1. Select the objects first then issue the command.
2. Issue the command then select the objects.

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.



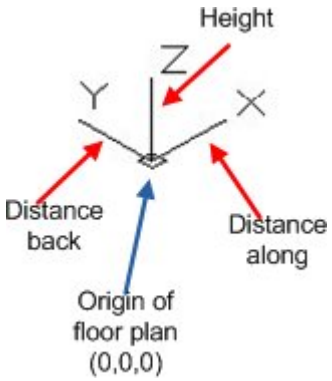
A prompt then appears in the command line. This identifies the command that has been invoked and prompts the user to select the objects the command is to be applied to.




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.

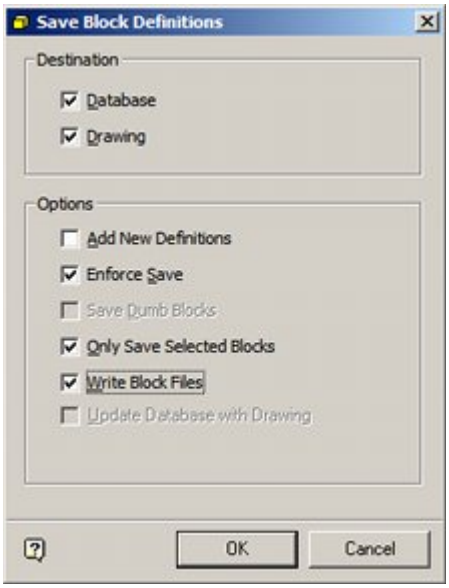
So, if an object is 20 feet to the left of the origin, 10 feet back from it and 3 ft above it, it would have Cartesian coordinates (expressed in feet) of (20,10,3).

**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).

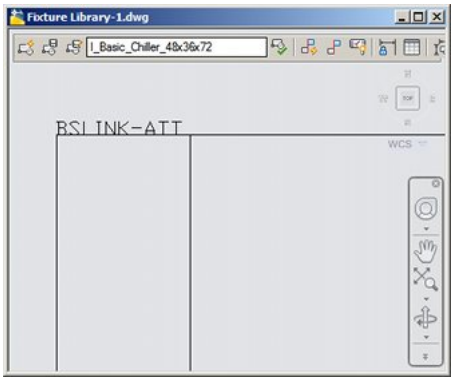
### Fixture Manipulation and XData

Fixture Manipulation relies on the block 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 a special attribute called BSLINK_ATT. This attribute can be seen by selecting a fixture in Planner and using the Block Edit (BEDIT) command. Zooming in close to the insertion point of the block should reveal this attribute.

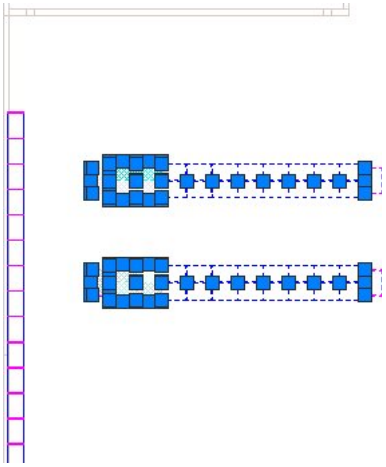



**Note:** This attribute is hidden when the block/fixture is displayed in the floor plan. It can only be revealed by means of the BEDIT command.

If the attribute is absent, fixture manipulation commands will not work.

## 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.



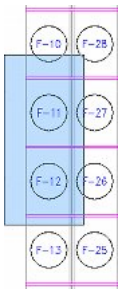
### Individual Selection

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.

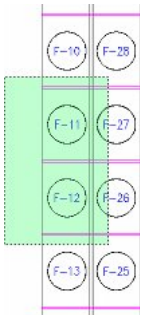



In the above example, fixtures F-11 and F-12 will be selected because they are completely enclosed, but fixtures like F-27 that are not completely enclosed will not be selected.

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, F11, F-12, F-13, F-25, F-26, F27, 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

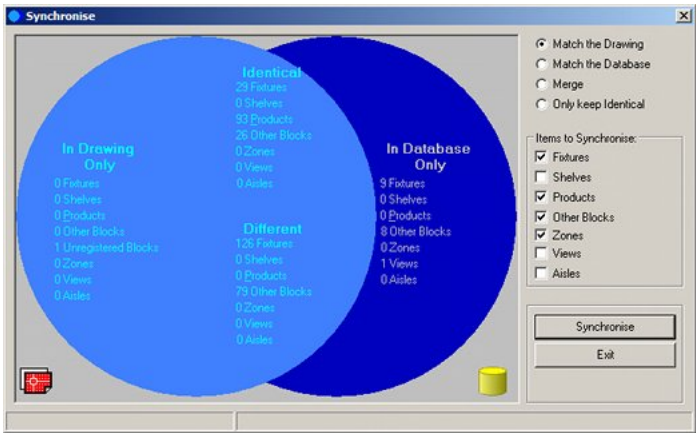
Any existing selection set can be de-selected by hitting the escape key.

### Synchronization

**Synchronization** is used to ensure that the information in the database matches that held in the Planner floor plan. It is invoked from the Synchronization option on the Retail toolbar.



This will bring up the Synchronization dialog box.




**Note:** For full information see the section on Synchronization in the Planner help file.

There are two main options controlled the radio button in the upper right of the dialog box. These are:

1. Match the Drawing
2. Match the Database

Synchronization is run by selecting one or other option and then clicking the **Synchronize** button.

The circumstances when the options are required are described below.

#### Changes made with AutoCAD tools




In the above case, changes have been made using AutoCAD tools (for example the AutoCAD Erase command). Because the Macro Space Planning database is not affected by AutoCAD commands, changes exist between the floor plan and the database. A Synchronize (Match the Drawing) operation is required so that the floor plan and database contain the same information.

#### Changes made with Planner tools




#### Changes made elsewhere in Macro Space Planning

In the above case, changes have been made using Planner tools (for example the Delete command on the fixturing toolbar). This command makes changes simultaneously in both the floor plan and database so no synchronization is required.

**Note:** Changes made with the Fixture Manipulation tools in Planner automatically update the database as well the floor plan.



It is also possible for tools outside of the Planner module to make changes to the database. These could be:

1. Changes made to the floor plan in the Merchandiser module.
2. Changes made to the floor plan in In-Store Space Collaboration.
3. Changes made to the floor plan using Batch tools such as Drawing Automation.

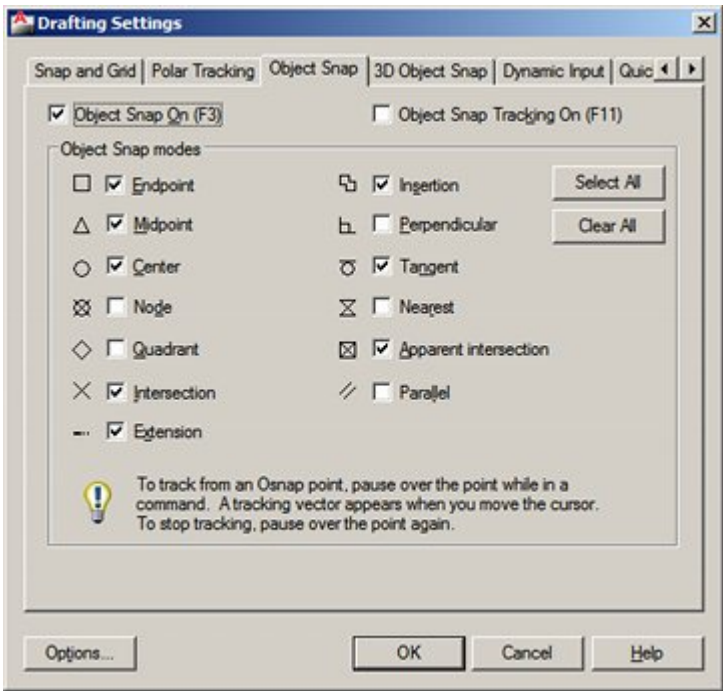
The changes made to the database may not be reflected in the floor plan. Differences will therefore exist between the database and that floor plan. A Synchronize (Match the Database) operation is required so that the floor plan and database contain the same information.

### 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.



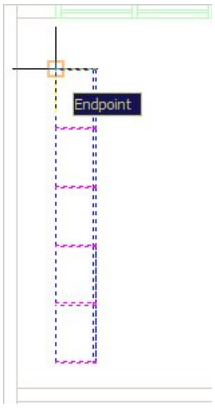

Right clicking the Object Snap icon and selecting **Settings** enables the settings to be defined. Check boxes can be ticked to specify points that the cursor can snap to when carrying out fixture manipulation options.




When carrying out a Fixture Manipulation command (for example Move), the user will be prompted to pick a base point in the selected objects.



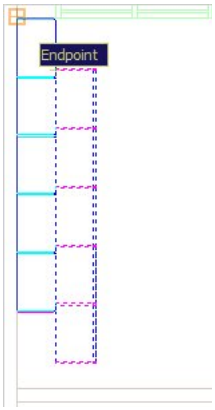

If Object Snap is on, the cursor will snap to any points that have been specified in the Settings dialog box. In the example below an Endpoint has been selected by clicking it.



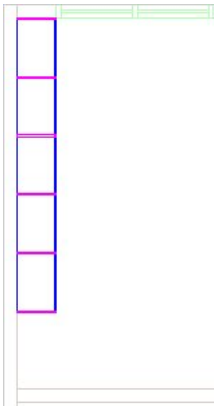

Once the first Object Snap point has been selected, the user will be invited to select a point to move to.

```
Specify base point or [Displacement] <Displacement>: Specify second point or <use first point as dis
placement>:
```

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.



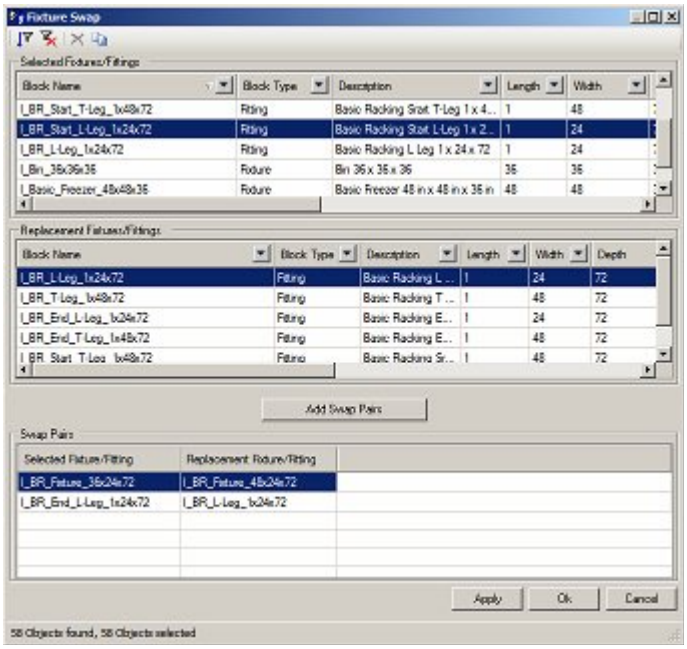

On clicking the second Object Snap point the selected objects will be moved to that point. In the example below, the fixtures have been moved precisely into the corner of the wall.



**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 Custom SQL in the database. For example, if different columns are required, this can be achieved by modifying the Custom SQL.

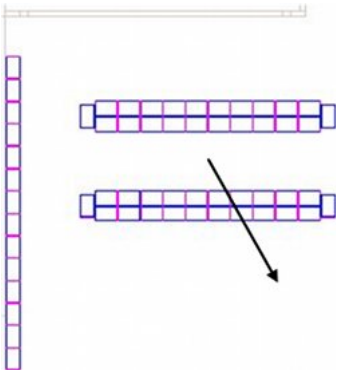



This task can only be accomplished by Administrators with access rights to the Admin Module.

## Move Commands

### Move Fixtures

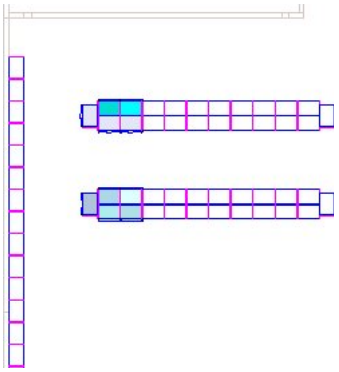
**Move Fixtures** allows the user to move the selected set of equipment, merchandise and annotation from one point to another in the floor plan.



The command is invoked from the **Move** option on the Fixturing toolbar.

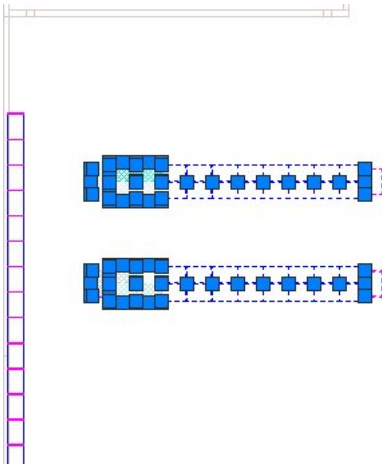


In the example below, the double sided gondolas are to be moved relative to the single sided gondolas along the wall.

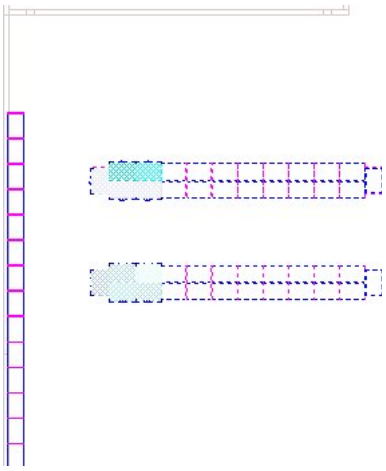


The initial stage is to select the gondolas to be moved. The outlines of the fixtures will turn dotted and the insertion points will show as blue boxes. (If using individual fixture selection, the selection set must be completed by clicking the right mouse button. If using Windows or crossing selection boxes, continue selecting until all required objects are in the selection set).

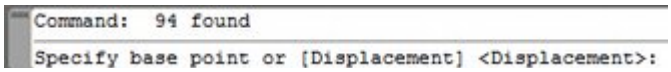
**Note:** Selection behavior will also be affected by whether **Grouping** is On or Off.



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.



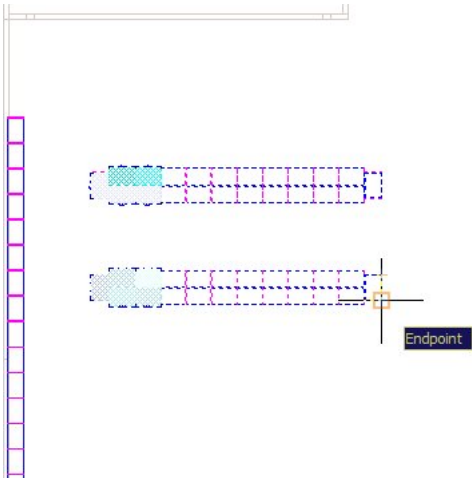
At the same time, the user will be prompted (via the command line) to select a base point for the move.



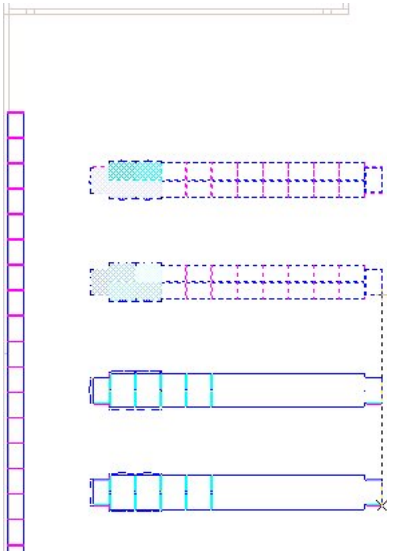

If Object Snap is turned on in the Status Bar, the user can 'snap' the cursor to a convenient point on one of the selected fixtures.



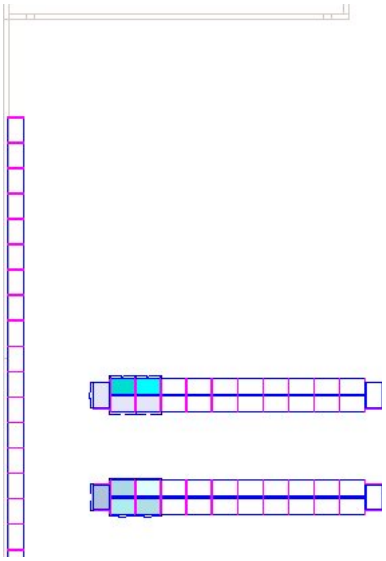

The cursor will then snap to a selected point on the fixture.




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.

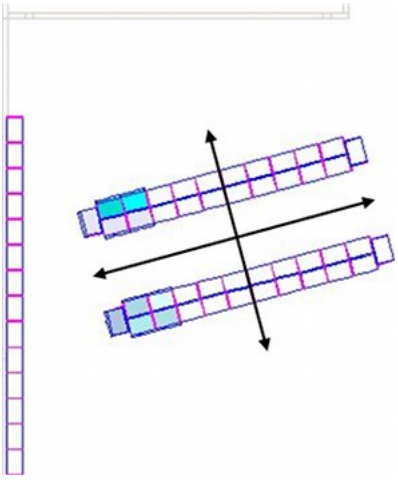


On left clicking at the selected point in the drawing, the fixtures will be moved to that point.



## 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.

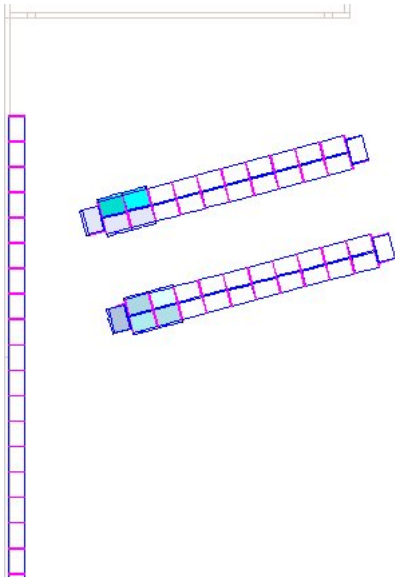


The command is invoked from the **Slide** option on the Fixturing toolbar.



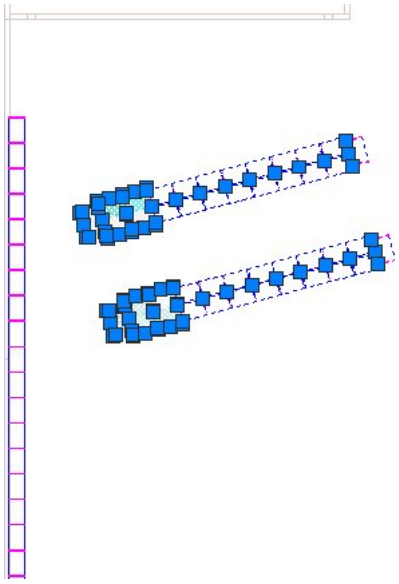
The Slide option is a more restricted form of the Move command. Fixtures can only be moved at 0, 90, 180 or 270 degrees relative to the selected fixtures. If it is desired to move the fixtures a precise distance in the specified direction, this distance can be entered into the AutoCAD command line.

In the example below, the double sided gondolas are to be 'slid' relative to the single sided gondolas along the wall.

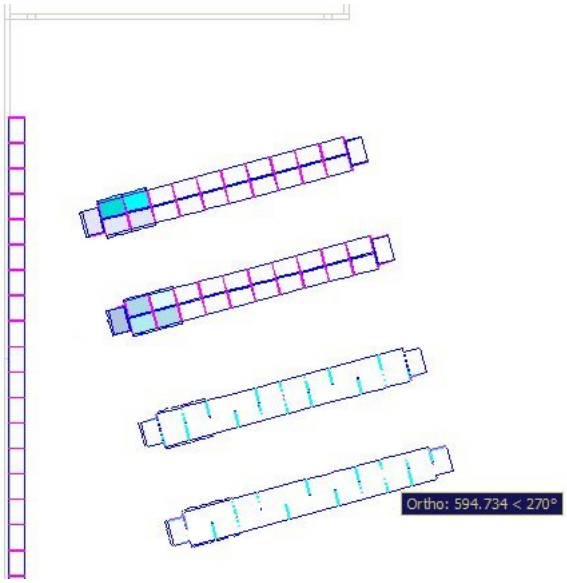


The initial stage is to select the gondolas to be moved. The outlines of the fixtures will turn dotted and the insertion points will show as blue boxes. (If using individual fixture selection, the selection set must be completed by clicking the right mouse button. If using Windows or crossing selection boxes, continue selecting until all required objects are in the selection set).

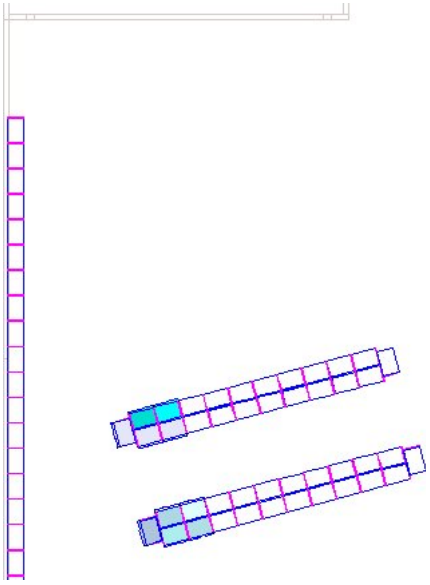
**Note:** Selection behavior will also be affected by whether **Grouping** is On or Off.



The use 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.

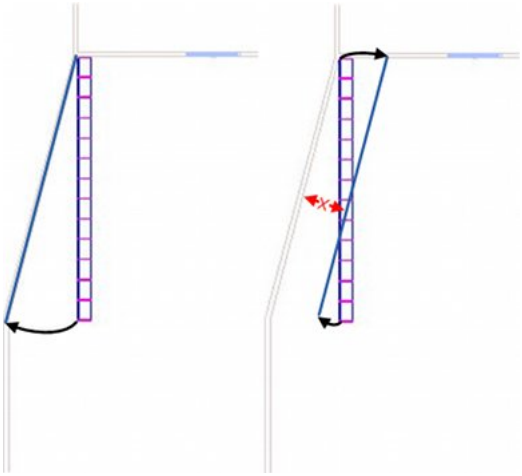



On left clicking at the required point, the fixtures will be repositioned.



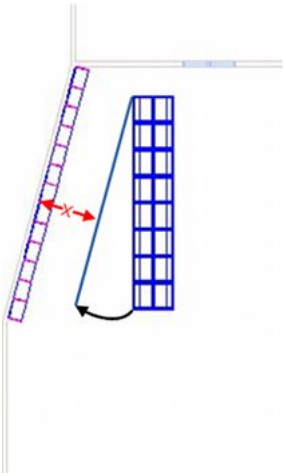
### Offset Fixtures

**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.

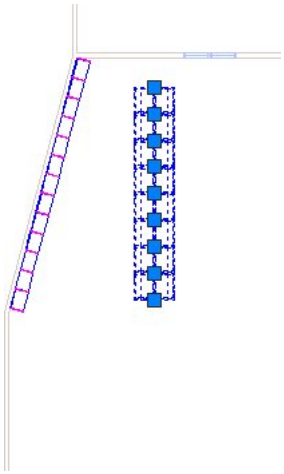


The command is invoked from the **Offset** option on the Fixturing toolbar.



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: AVT_OFFSET
Specify offset distance: <120.0000>96
```

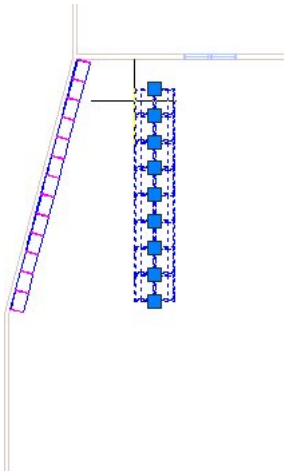
Alternatively, click two successive points in the floor plan. After clicking the first point, the user will be invited to click a second:

```
Command: AVT_OFFSET
Specify offset distance: <120.0000> Specify second point:
```

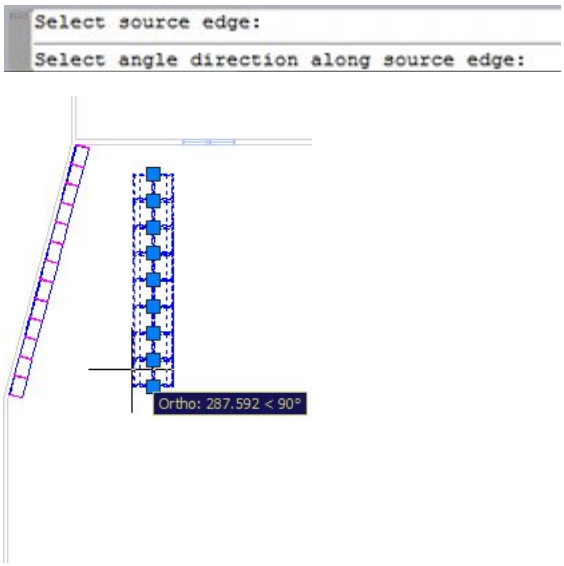
This method can be used to measure an existing distance between two objects in the floor plan (for example a gap between two other gondolas) and use it for the offset.

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.

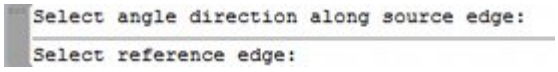
```
Specify offset distance: <120.0000>96
Select source edge:
```



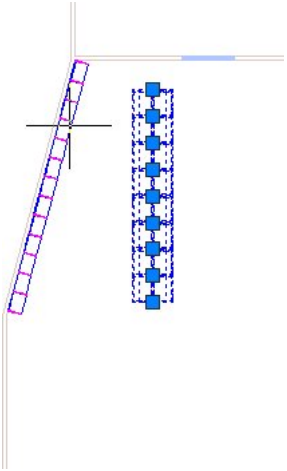
The user will then be invited to select an angle along the source edge. This is done by clicking another point on the face of the gondola.



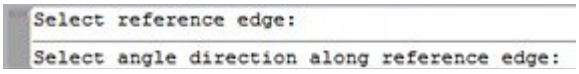

The user will then be invited to select an edge of the object to be aligned with.



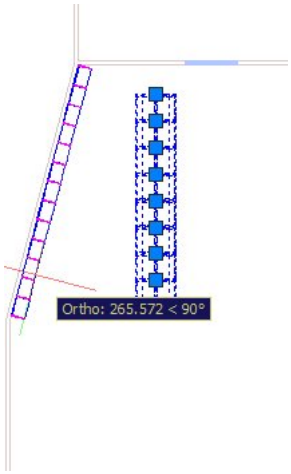

In the example below, the user has selected the front edge of the single gondola along the wall.



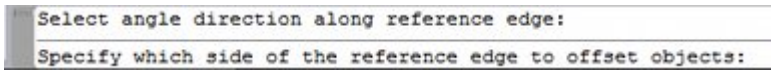
The user will then be invited to select an angle along the reference edge.



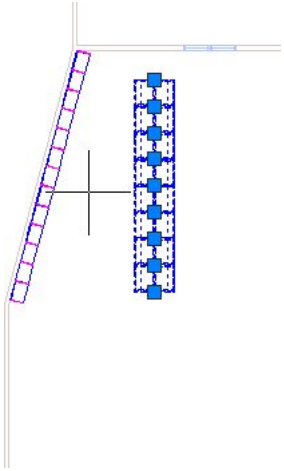

This is done by clicking on another point on the front edge of the single gondola along the wall.



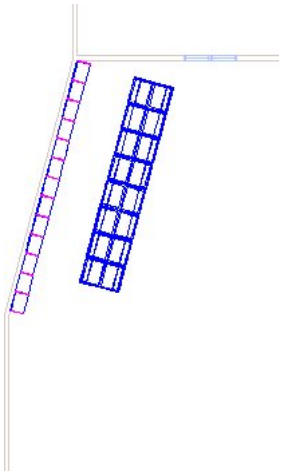

The user will be invited to select the side of the reference line the double gondola is to be offset to.




This is done by clicking on the side of the single gondola we wish the double gondola to be offset to.

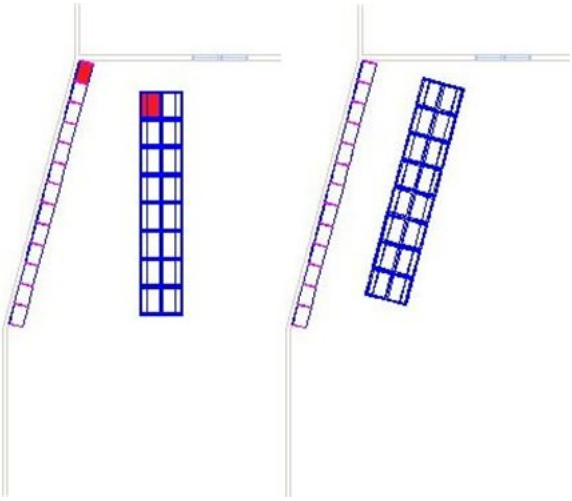


As soon as this point is clicked, the selected equipment, merchandise and annotation will rotate until they are aligned with the selected edge.

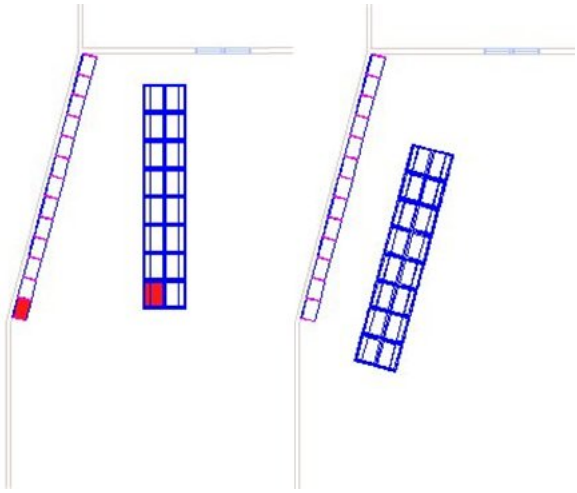


If **Grouping** is **On,** how the offset fixtures line up to their datum fixtures depends on the fixture clicked on to select the fixtures to offset and the fixture selected to specify the fixtures to offset to. When the fixtures to be offset move, the insertion points of the two selected fixtures will 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.

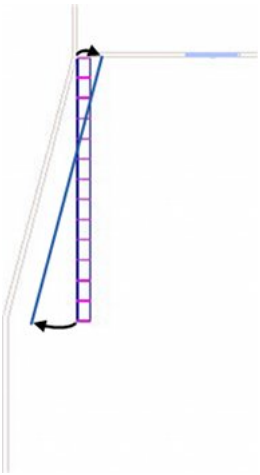


### Match Rotation

**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.

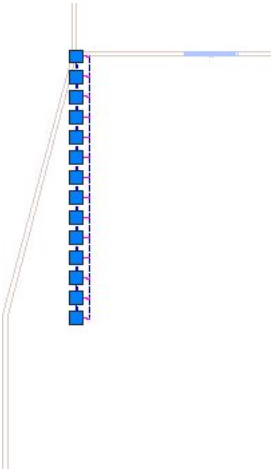


The command is invoked from the **Match Rotation** option on the Fixturing toolbar.



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

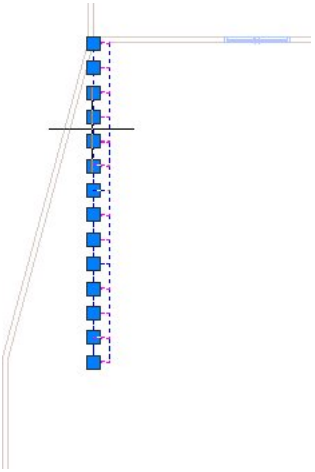


The use can then click the **Match Rotation** icon on the Fixturing toolbar. The user will then be invited to select a source edge. This is the edge of the gondola that will be rotated relative to another object.

```
Command: AVT_MATCH_ROTATION
Select source edge:
```

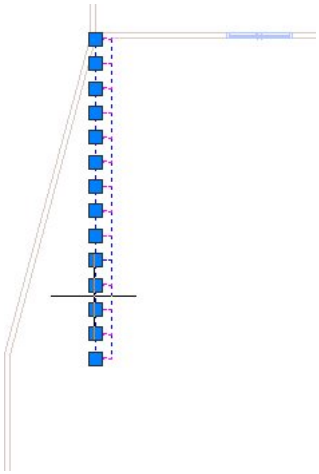
This is done by clicking a point on the required edge of the gondola.

**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.

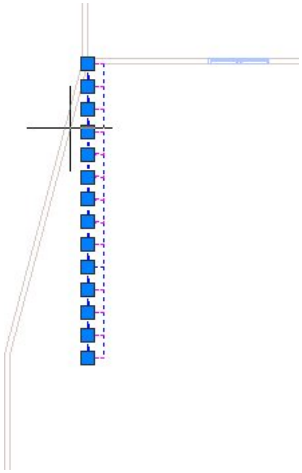
```
Select source edge:
Select angle direction along source edge:
```



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:
```

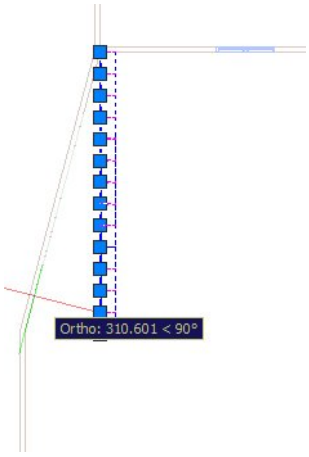
In the example below, the user has clicked on the face of the wall the gondola run is to be aligned to.



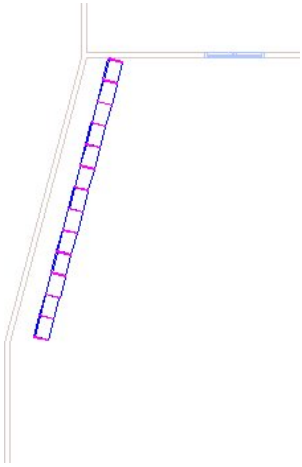
The user will then be prompted to select the direction for the edge.

```
Select reference edge:
Select angle direction along reference edge:
```

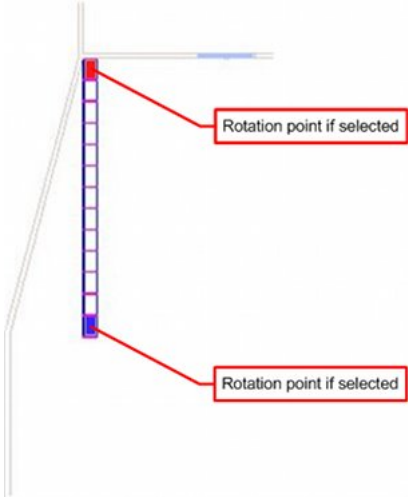
This is done by clicking on another point on the face of the wall.




As soon as the second point is clicked, the selected equipment, merchandise and annotation will rotate until they are aligned with the selected edge.

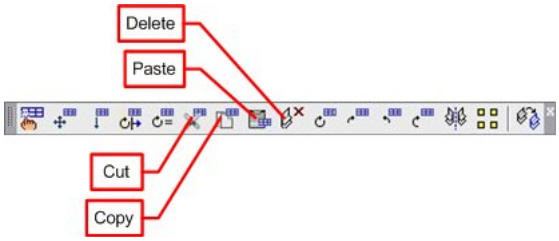


If **Grouping** is **On** and the required fixtures are selected by clicking on an individual fixture, the insertion point of that fixture will serve as the point around which the fixtures will rotate. In the example below, if the top fixture (colored red in this example) is selected, the gondola will rotate about its insertion point. If the bottom fixture (colored blue in this example) is selected, the gondola will rotate about that insertion point.



## 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.

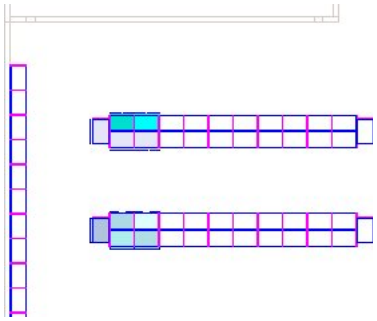



**Cut or Copy Commands**

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.

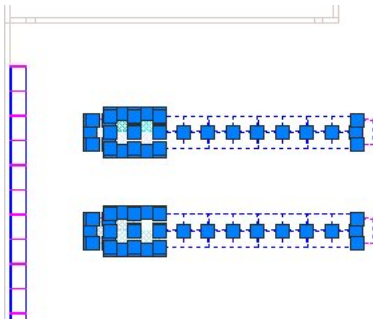
The **Copy** Command takes a copy of the selected equipment, merchandise, annotation and bay numbers from the floor plan and places the information into the clipboard. Any previous information in the clipboard is overwritten.

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.



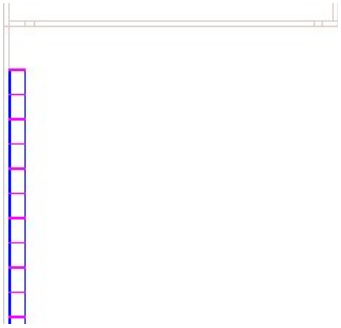
The initial stage is to select the required fixtures. The outlines of the fixtures will turn dotted and the insertion points will show as blue boxes. (If using individual fixture selection, the selection set must be completed by clicking the right mouse button. If using Windows or crossing selection 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.



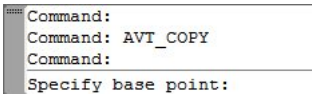
If the **Cut** command is clicked on the fixturing toolbar, the selected equipment, merchandise, annotation and bay numbers will be removed from the floor plan and placed into the clipboard. Any previous information in the clipboard is overwritten.





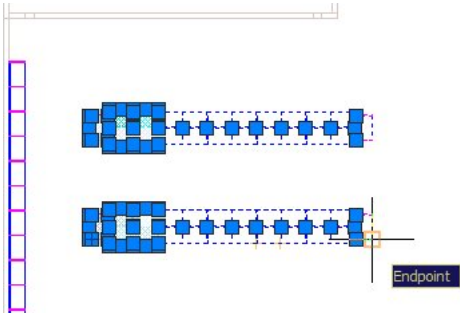
If the **Copy** command is clicked on the fixturing toolbar, the command Line will prompted the use to specify a base point.



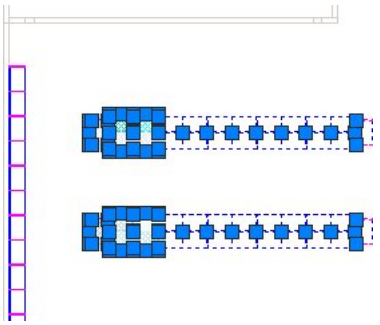



If Object Snap is turned on in the Status Bar, the user can 'snap' the cursor to a convenient point on one of the selected fixtures.




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.

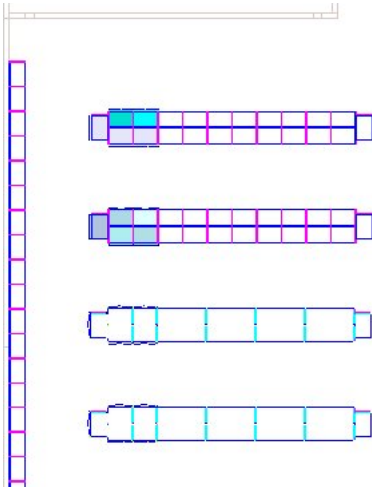


**Paste**

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.



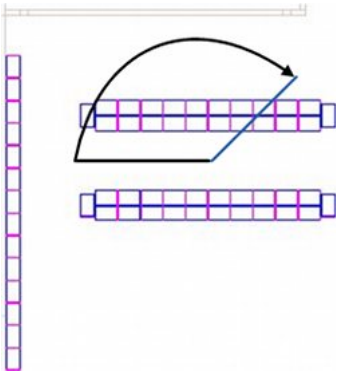
In order to delete fixtures and their associated child objects:

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.

## Rotate Commands

### Rotate Fixtures

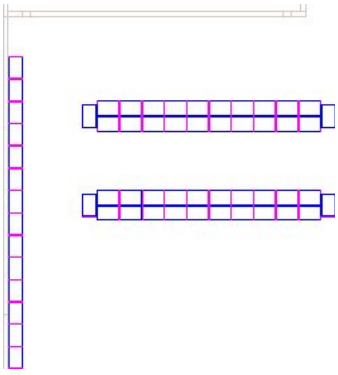
**Rotate Fixtures** takes a selected set of equipment, merchandise and annotation and rotates them about the center of the selected objects.



The command is invoked from the **Rotate** option on the Fixturing toolbar.



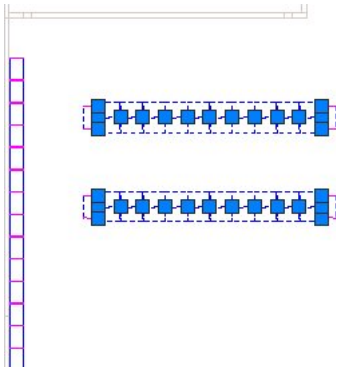
In the example below, the double sided gondolas are to be rotated to through 80 degrees relative to the single sided gondola along the wall.



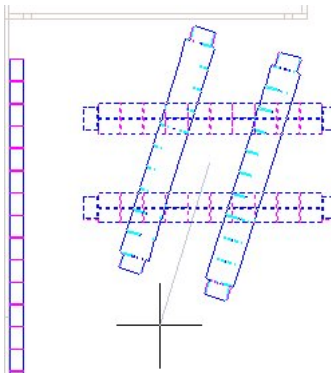
The initial stage is to select the gondolas to be rotated. The outlines of the fixtures will turn dotted and the insertion points will show as blue boxes. (If using individual fixture selection, the selection set must be completed by clicking the right mouse button. If

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.



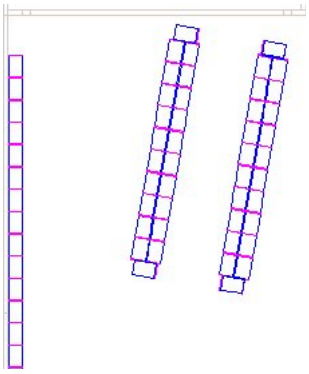
Once the fixtures have been selected and the **Rotate** button has been clicked on the Fixture Manipulation toolbar, they can be rotated around the center of the selected objects by means of the mouse cursor. The new position of the fixtures will be shown as a 'ghost' outline. If this method of rotating 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.

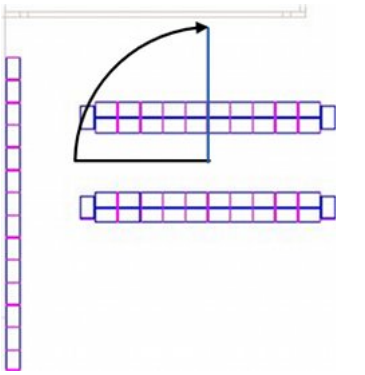
```
Current positive angle in UCS:  ANGDIR=counterclockwise  ANGBASE=0
74 found
Specify base point:
Specify rotation angle or [Copy/Reference] <310>: 80
```

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

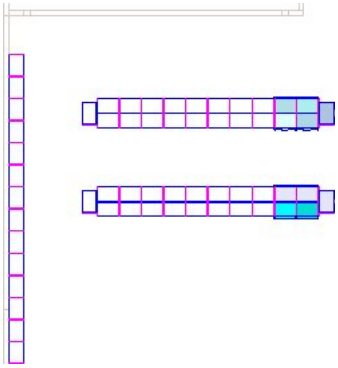
**Rotate Fixtures 90 Degrees Clockwise** takes a selected set of equipment, merchandise and annotation and rotates them 90 degrees clockwise about the center of the selected objects.



The command is invoked from the Rotate 90 degrees Clockwise option on the Fixturing toolbar.

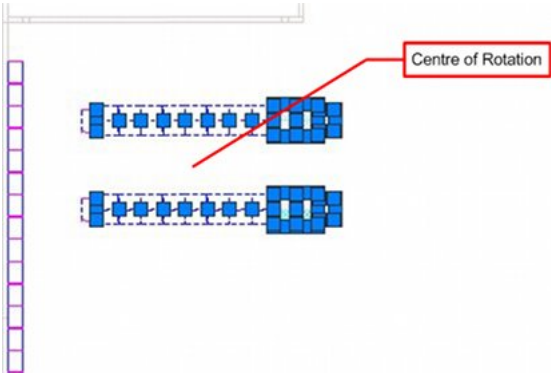


In the example below, the double sided gondolas are to be rotated 90 degrees clockwise.

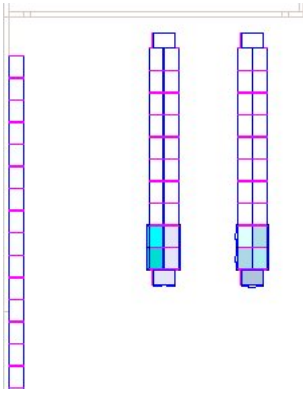


The initial stage is to select the gondolas to be rotated. The outlines of the fixtures will turn dotted and the insertion points will show as blue boxes. (If using individual fixture selection, the selection set must be completed by clicking the right mouse button. If using Windows or Crossing selection boxes, continue selecting until all required objects are in the selection set). The fixtures will be rotated about the center of the selected objects.

**Note:** Selection behavior will also be affected by whether **Grouping** is On or Off.

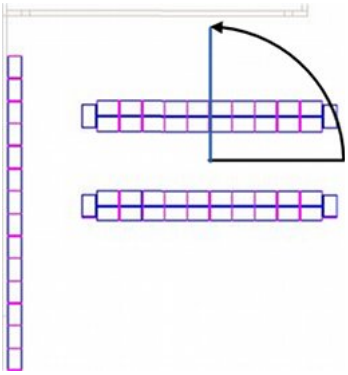



Once the fixtures have been selected, the **Rotate 90 Degrees Clockwise** button is clicked on the Fixture Manipulation toolbar. The fixtures will then be drawn in their final position in the floor plan.



### Rotate Fixtures 90 Degrees Anticlockwise

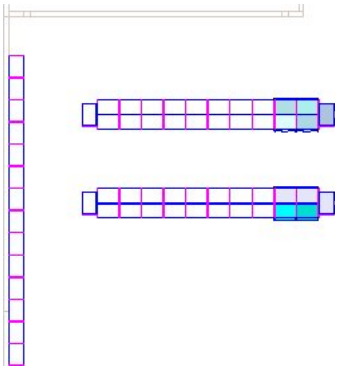
**Rotate Fixtures 90 Degrees Anticlockwise** takes a selected set of equipment, merchandise and annotation and rotates them 90 degrees anticlockwise about the center of the selected objects.



The command is invoked from the Rotate 90 degrees anticlockwise option on the Fixturing toolbar.

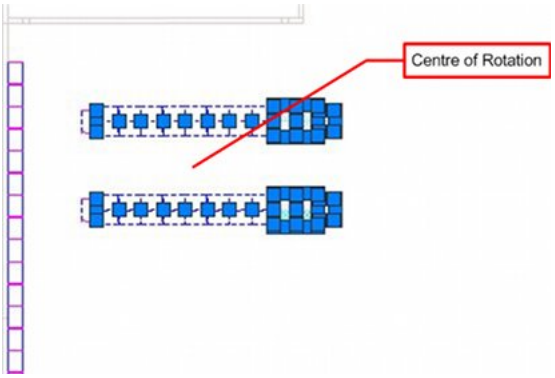


In the example below, the double sided gondolas are to be rotated 90 degrees clockwise.

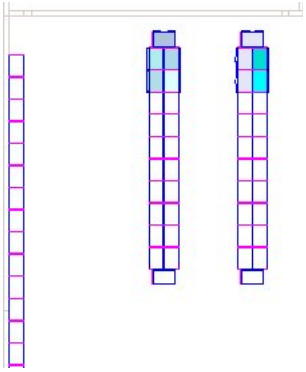


The initial stage is to select the gondolas to be rotated. The outlines of the fixtures will turn dotted and the insertion points will show as blue boxes. (If using individual fixture selection, the selection set must be completed by clicking the right mouse button. If using Windows or crossing selection 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.

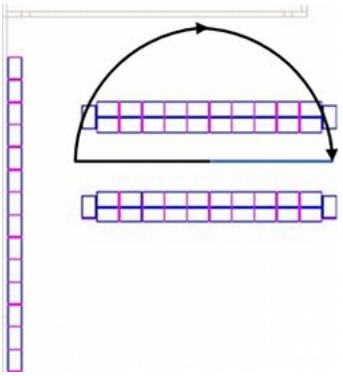



Once the fixtures have been selected, the **Rotate 90 Degrees Anticlockwise** button is clicked on the Fixture Manipulation toolbar. The fixtures will then be drawn in their final position in the floor plan.



### Rotate Fixtures 180 Degrees

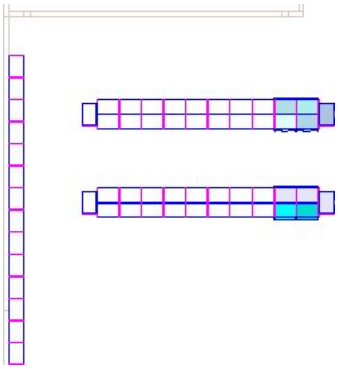
**Rotate Fixtures 180 Degrees** takes a selected set of equipment, merchandise and annotation and rotates them 180 degrees about the center of the selected objects.



The command is invoked from the Rotate 180 degrees option on the Fixturing toolbar.

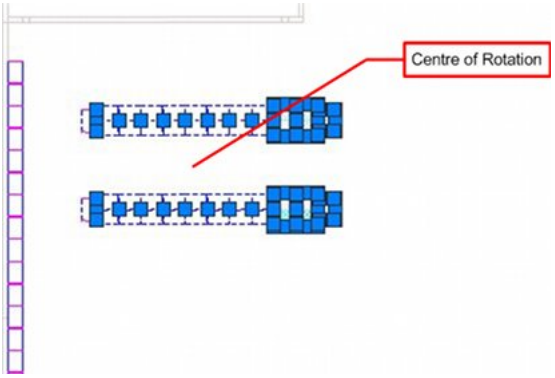


In the example below, the double sided gondolas are to be rotated 180 degrees.

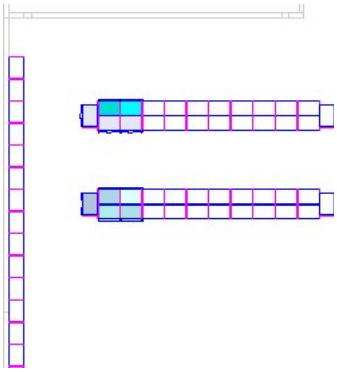


The initial stage is to select the gondolas to be rotated. The outlines of the fixtures will turn dotted and the insertion points will show as blue boxes. (If using individual fixture selection, the selection set must be completed by clicking the right mouse button. If using Windows or crossing selection 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.

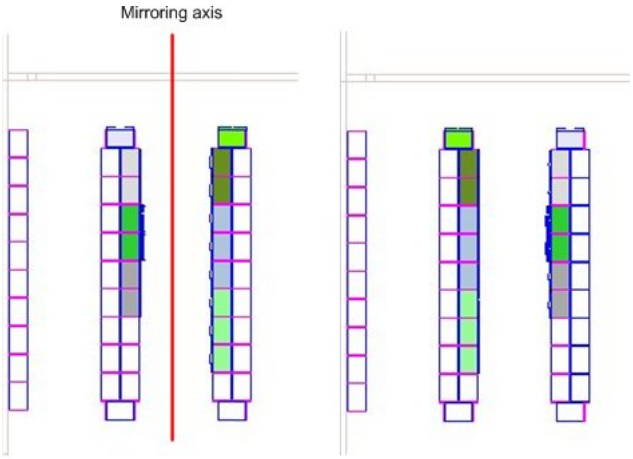


## Other Commands

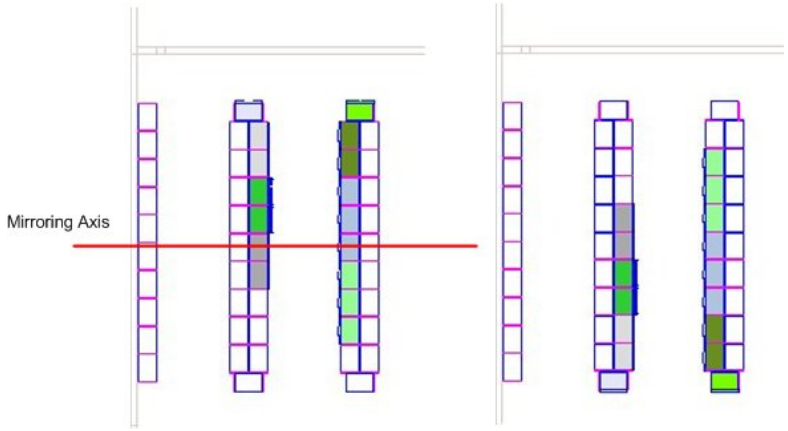
### Mirror Fixtures

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.



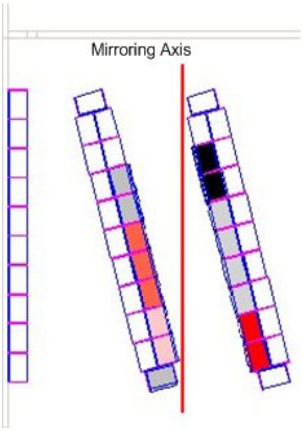

In the example below, the merchandiser has decided to swap the equipment and merchandise about the center of the aisle. The left hand side of the diagram below shows the aisle before mirroring and the axis about which the aisle will be mirrored. The right hand side of the diagram shows the aisle after mirroring.




The command is invoked from the **Mirror** option on the Fixturing toolbar.

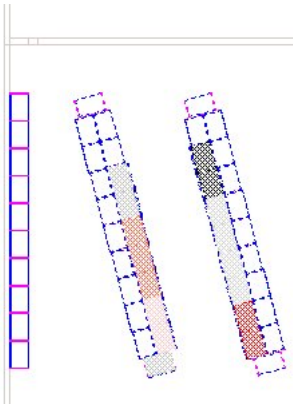


In the example below, the equipment and merchandise in the two double gondolas is to be mirrored about the specified axis.



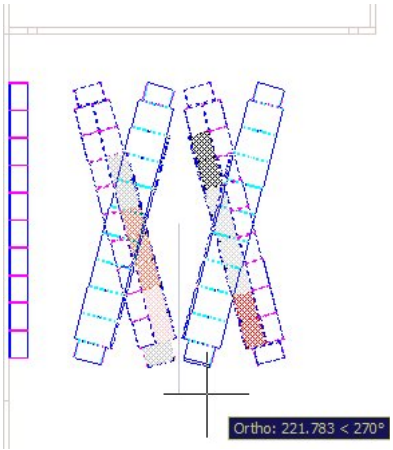

The initial stage is to select the objects to be mirrored. The outlines of the fixtures will turn dotted and the insertion points will show as blue boxes. (If using individual fixture selection, the selection set must be completed by clicking the right mouse button. If using Windows or Crossing selection 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.

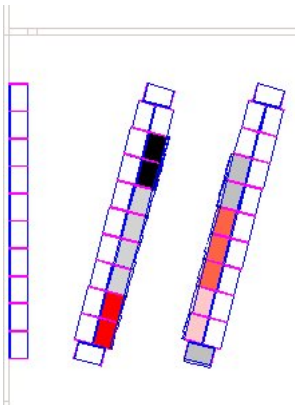


**Note:** Care must be taken to select only the fixtures and merchandise it is intended to mirror.

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.



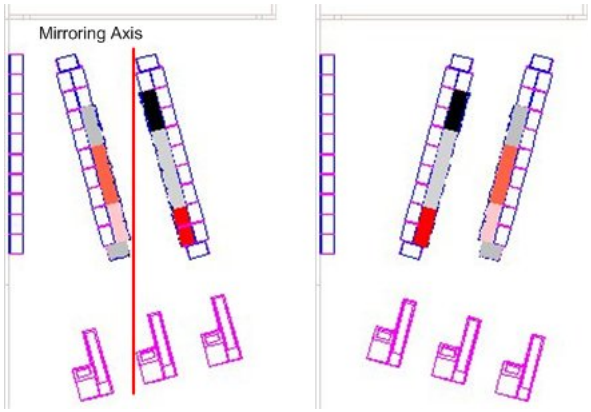
**Note:** If it is desired to mirror at any other angle than 0, 90, 180 and 270 degrees, it is possible to manually turn off the AutoCAD Ortho command during the mirroring operation. The blocks can then be mirrored about any specified angle.

### 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.

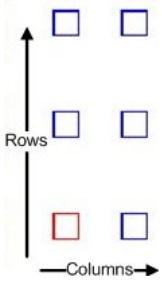
### Non-Symmetrical Objects

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

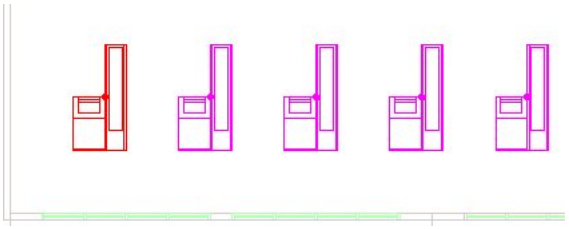
Array takes a selected set of equipment, merchandise and annotation and generates additional rows and columns of that set of objects. In the diagram below, the original red fixture has been used as the basis for an array of three rows and two columns of similar fixtures.



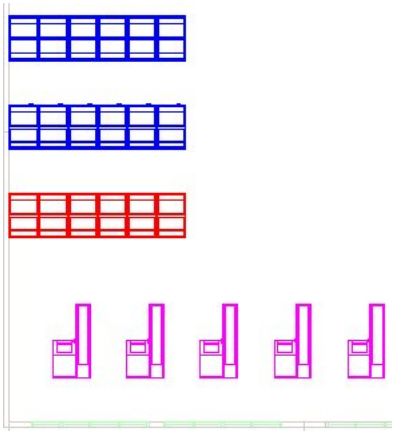

The command is invoked from the array option on the Fixturing toolbar.



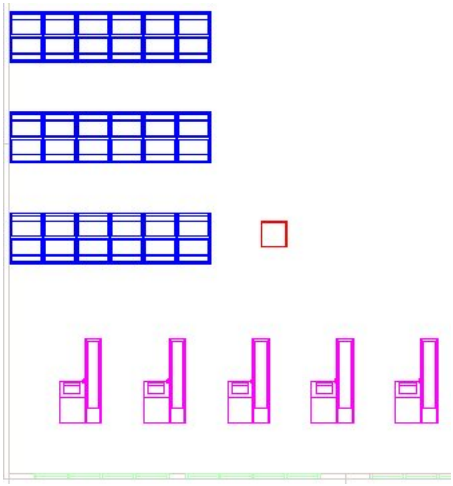
Arraying can be used to speed up laying out the arrangement of equipment in a store. In the example below, the original checkout (shown in red for clarity), has been extended into a row of checkouts by means of the array command.



Similarly, in the example below, the original gondola (shown in red for clarity), has been copied twice by means of the array command.



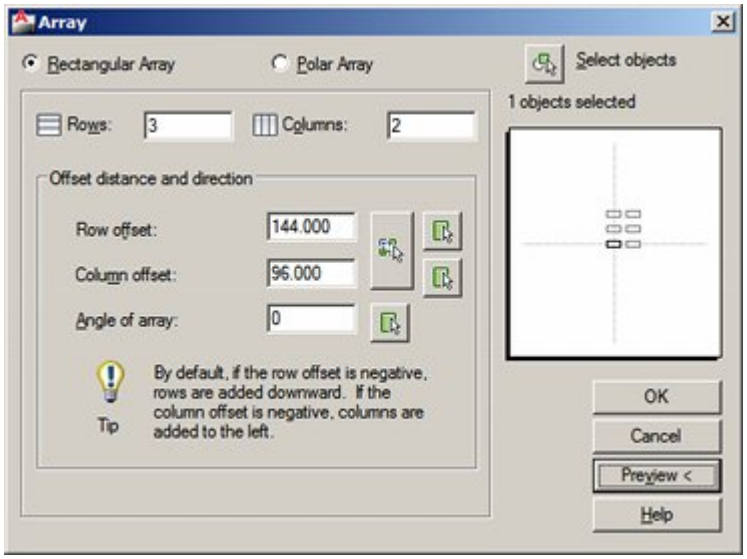
To use the array command, consider the following example:



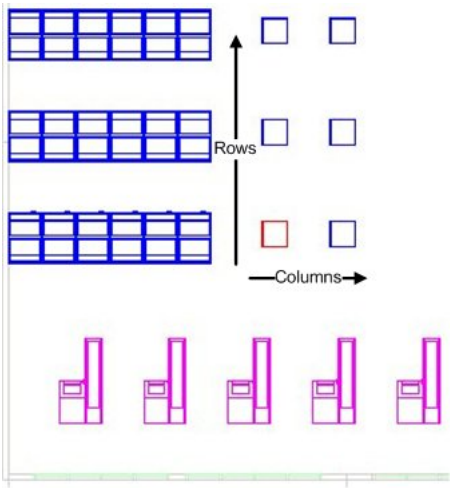
Having laid out some initial checkouts and gondolas, it has been decided to put down an array of bins for special offers. The initial bin (shown in red for clarity) has already been placed. The array command can then be used to space additional bins. The steps are as follows:

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.



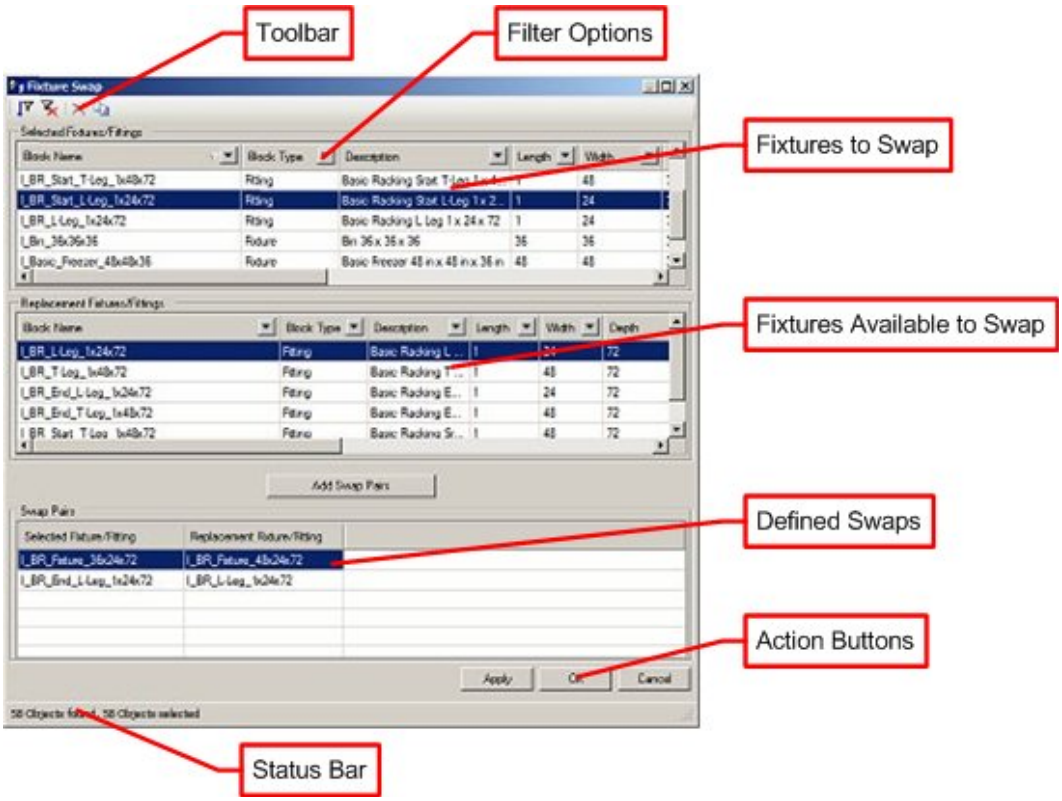

4. The number of columns is set to 3 (to match the number of gondolas) and the row offset is set to 144 (to match the centers of the gondola runs).
5. The number of rows is set to 2. As we want to leave 5 ft (60 inches) between the bins, the column offset is set to 96 (36 inches for the bin, plus 60 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

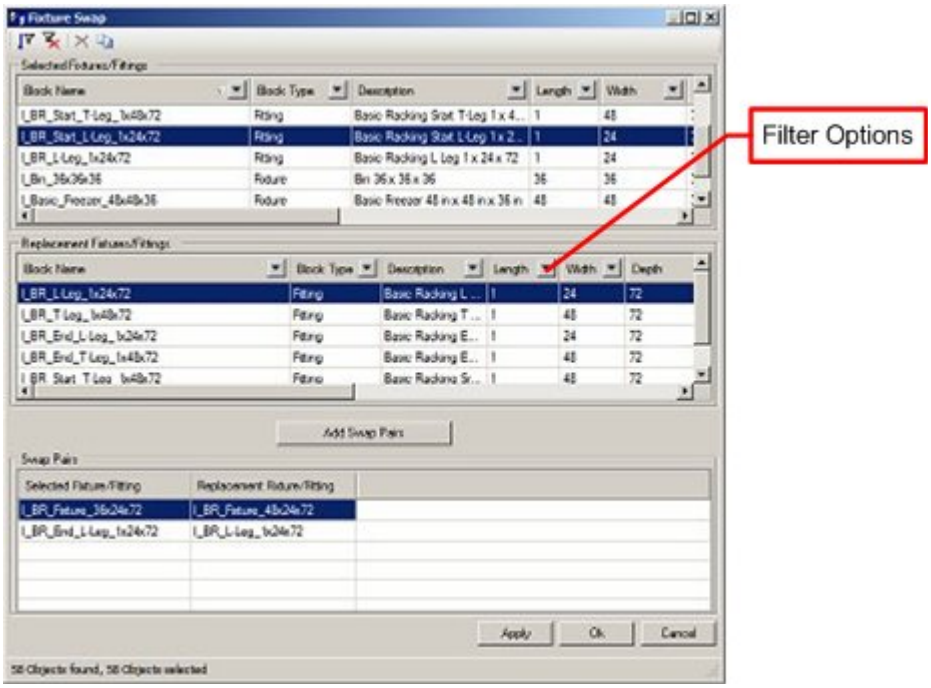
The action buttons allow the user to execute the currently defined swaps, execute the currently defined swaps and exit, and cancel the currently defined swaps and exit.

### Status Bar

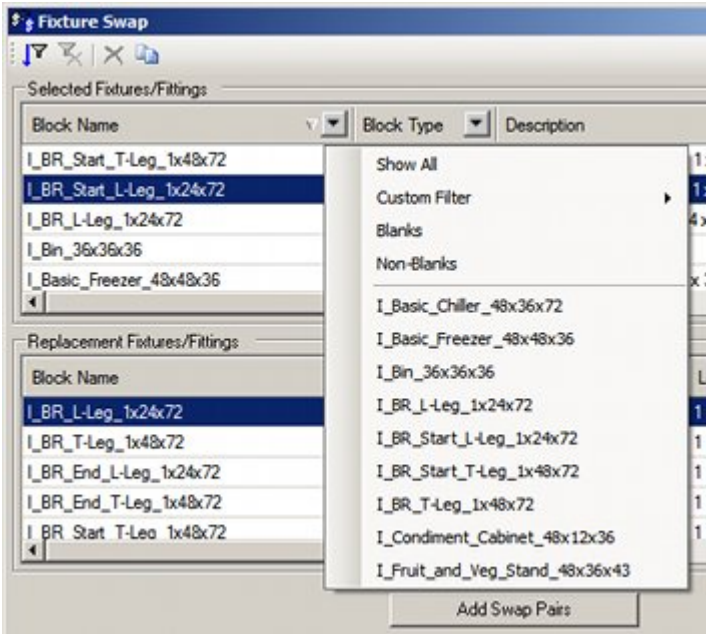
The status bar gives information in the number of objects found in the drawing, and the number selected.

## 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.

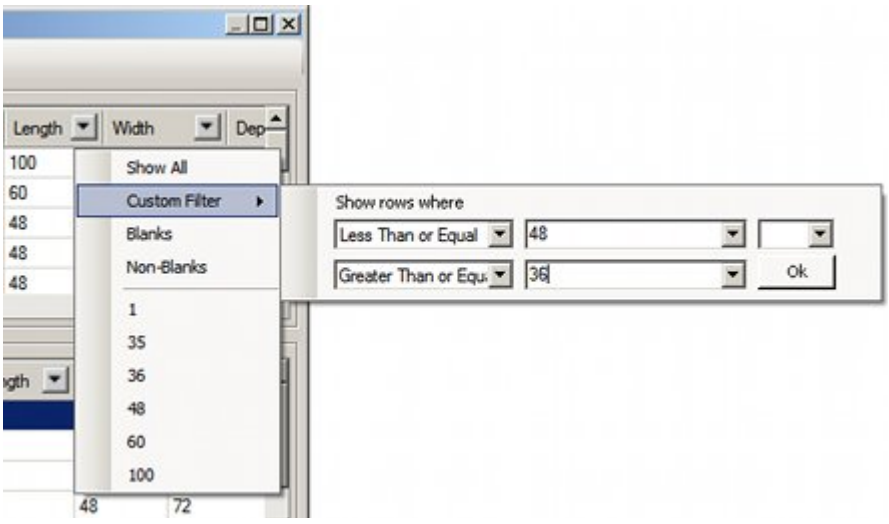



- Selecting **Show All** will remove the filters and show all rows of data.
- Selecting **Custom Filter** will bring up a custom filter allowing Boolean operations on the data (see below).
- Selecting **Blanks** will reduce the data to those rows that have blank values in that column.
- Selecting **Non-Blanks** 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. |

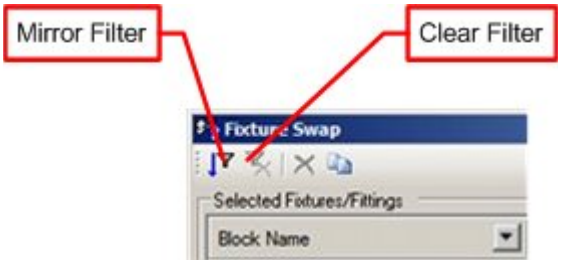
If a text value is selected, a different set of Boolean logic applies

| 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**

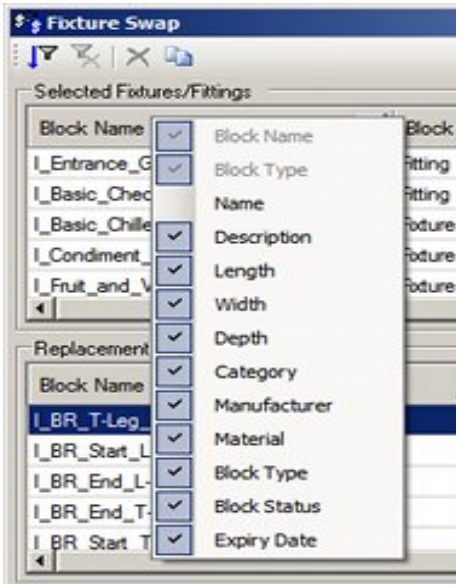
Clicking the **Clear Filters** icon will clear all the filters set in the Fixture Swap dialog box.

## Other Data Manipulation Options

There are two other ways data can be ordered in the dialog box.

### Selecting Columns to Display

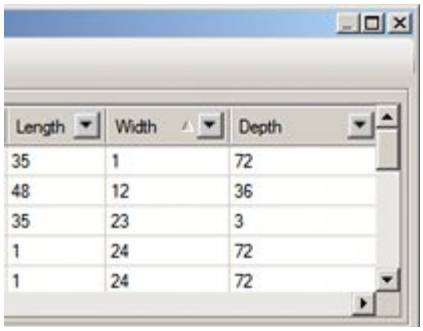
Right clicking on the column header area in either the Selected Fixtures Fitting or the replacement Fixtures/fittings frames allows the users to select which columns of data are displayed.




**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.



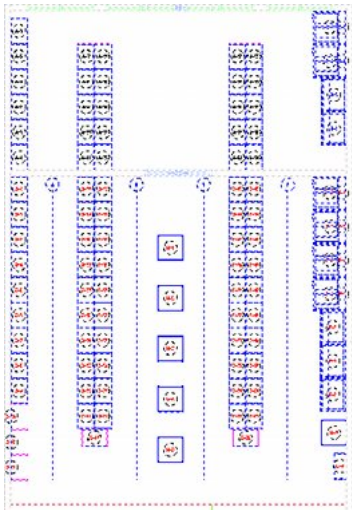

In the above example, the Width column has been sorted in ascending order.

> **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**

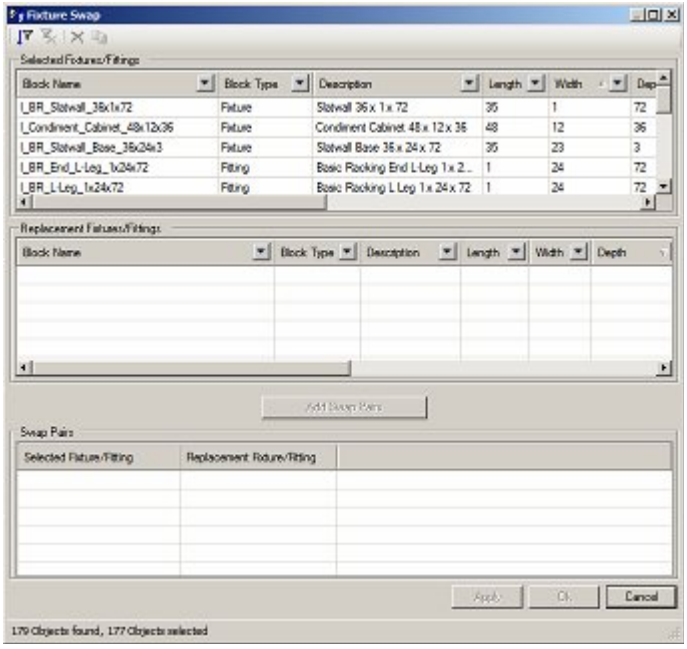
This can be done from the Command Line (AVT_FIXTURESWAP) or from the Fixturing toolbar.



> **Note:** Selecting the Fixtures and Invoking Fixture Swap can be done in either order.

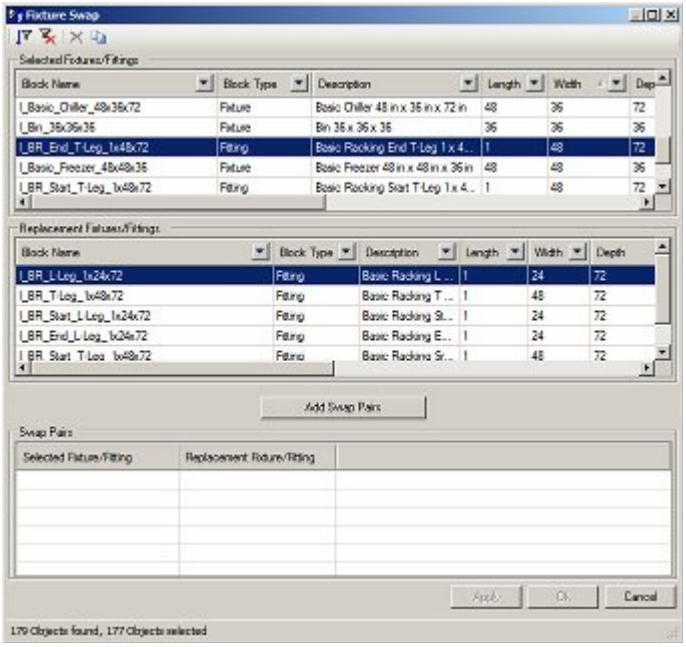
3. **The Fixture Swap dialog box will open**

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.



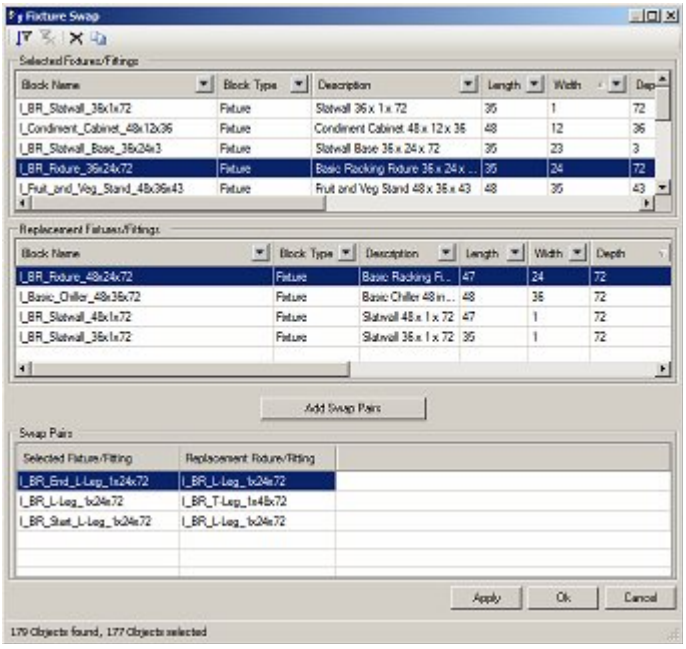

It is possible to select multiple fixtures for replacement by holding down the Control Key and left clicking on additional rows.

**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

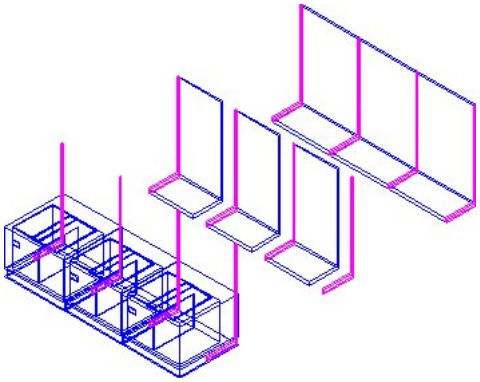
Click the **Apply** button to cause all the defined swaps to execute and leave the dialog box open to define further swaps. Click the **OK** button to make all the defined swaps and exit the dialog box.-

## 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

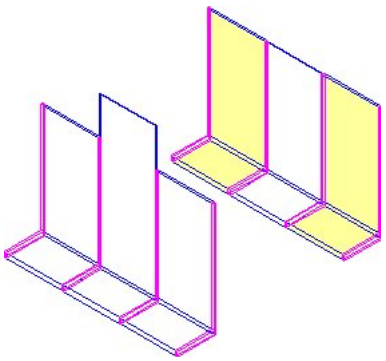
Fixture Swap does not place any restrictions on the size of the equipment that can be swapped. In the example below, the back gondola run is the original gondola. The middle gondola run represents what would happen if 4 foot long fixtures were replaced by 3 ft long ones. The front gondola run shows what 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.



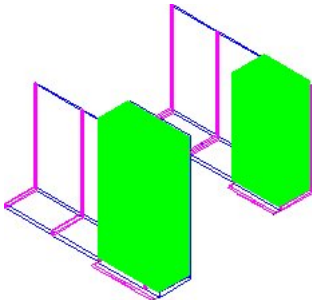
If the fixtures are selected for a fixture swap operation, only the fixture that does not have a planogram placed will be swapped, despite all fixtures being included in the selection. The effect of this can be seen in the front gondola run. The user will be given a warning in the AutoCAD command line - 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
```

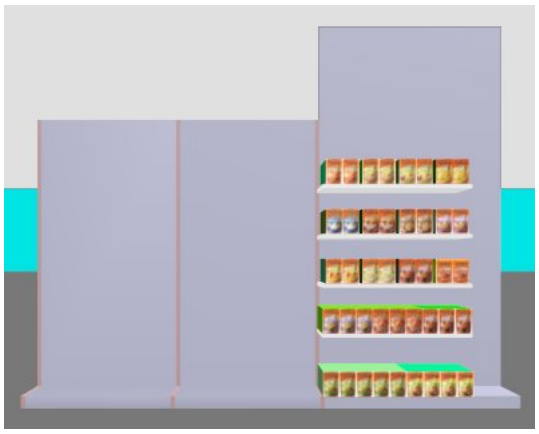
**Note:** One solution for this limitation is to create a KPI (Key Performance Indicator) to color code all fixtures containing planograms. It is then possible to determine which planograms are not merchandised (and which can be subjected for Fixture Swap) and which are merchandised and cannot be swapped.

#### 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

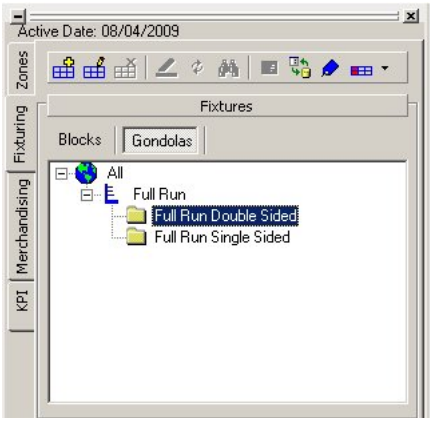
### Overview of Placing Gondolas

Gondola placement is in two stages; gondola selection and gondola insertion.

**Gondola Selection**

Gondolas are selected from the hierarchical tree in the Fixturing Tab.

(The Gondolas button has to be selected to show the gondola hierarchical tree).

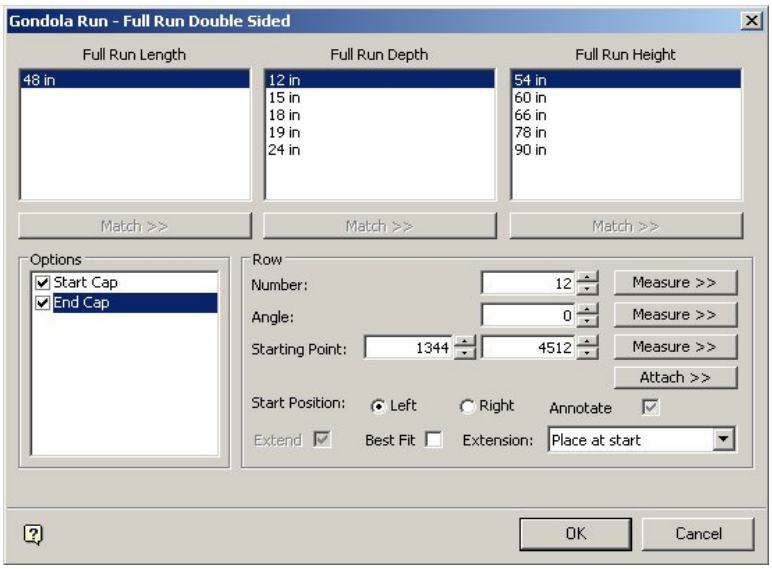



**Gondola Insertion**

Once the Gondola has been selected in the hierarchical tree it can be placed in the drawing in one of two ways: the required gondola can be dragged and dropped in the AutoCAD drawing, or the Add Gondola icon can be clicked on the toolbar.

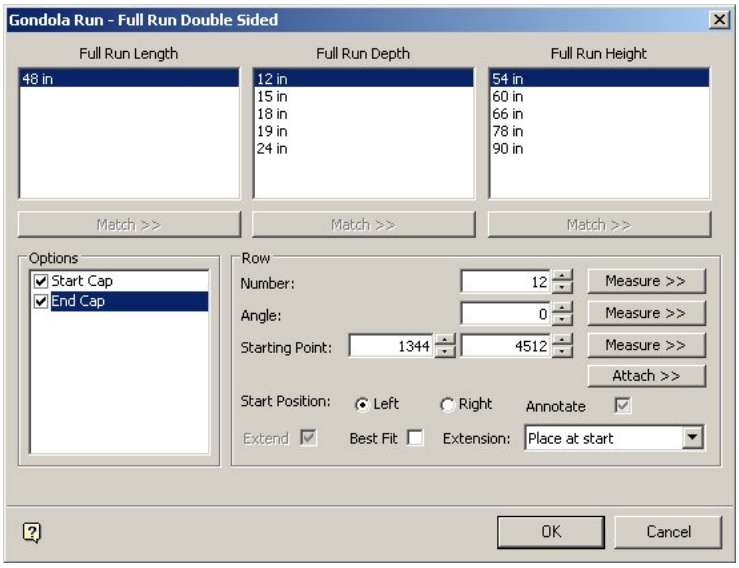
|  | Add Gondola |
|---|---|

After selecting an insertion point, the Gondola Run dialogue box will come up. This will allow the gondola run being placed to be customized.



### The Gondola Insertion dialogue box

The **Gondola Run dialogue box** will appear after the start point for the gondola run has been selected.

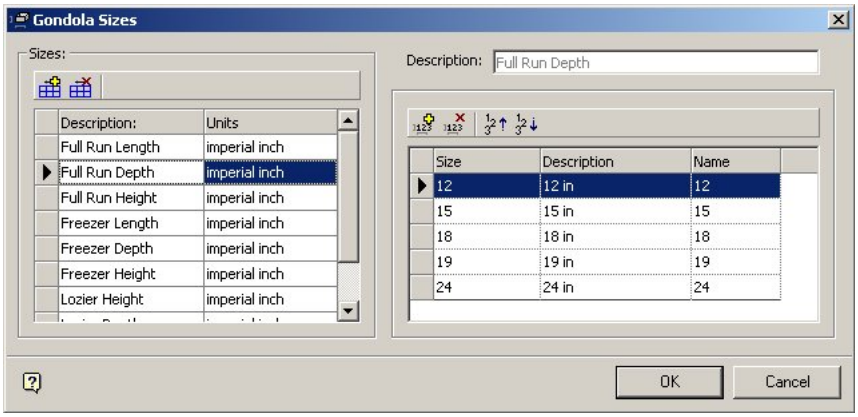



The exact form of the dialogue box that appears will depend on how the Gondola was specified.

> **Note:** Gondolas are specified in Fixture studio.

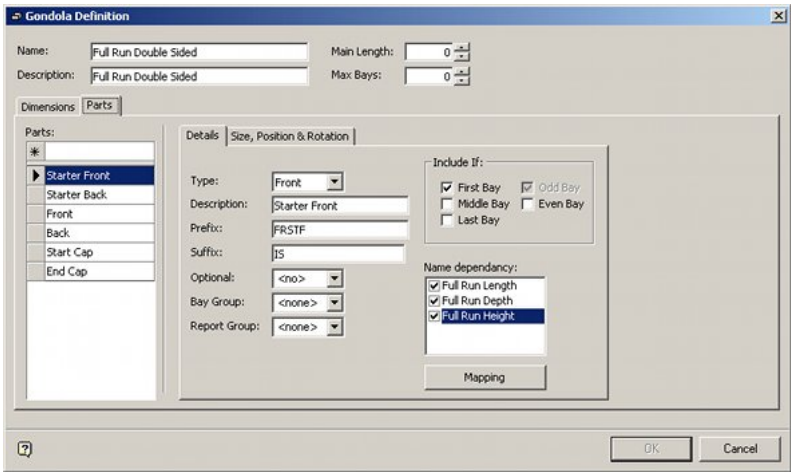
#### Dimensions

The available dimensions are specified in the Gondola Sizes dialogue box.



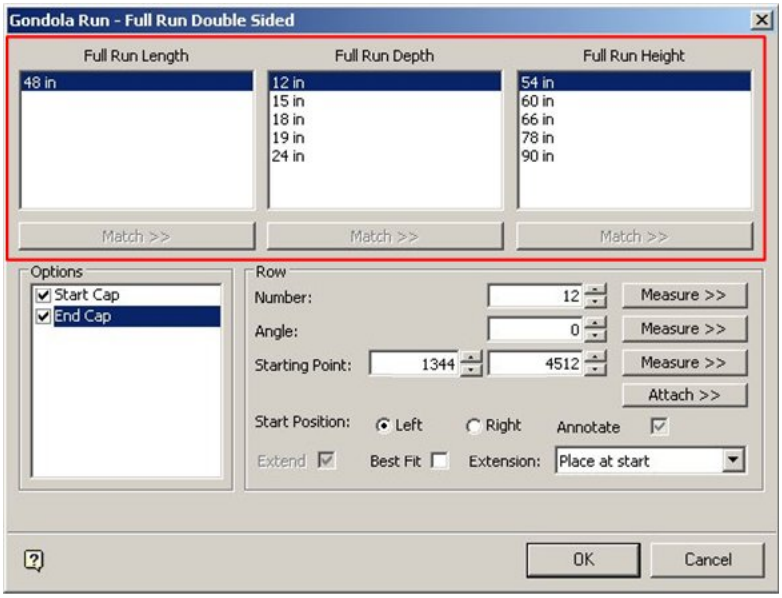
### Gondola Parts and Positions

Gondola parts and positions are specified in the Gondola definition dialogue box.




## Gondola Dimensions

The **Dimensions** displays a list of sizes that can be selected for that particular gondola.

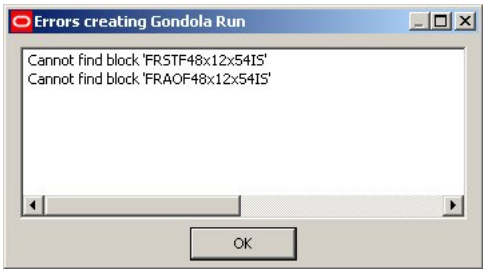



The number of dimensions displayed is determined by those specified in the Gondola Definition dialogue box in Fixture Studio. The actual dimensions available are defined in the Gondola Size dialogue box in Fixture Studio.

Dimensions can either be selected from the available list, or selected using the Match button.

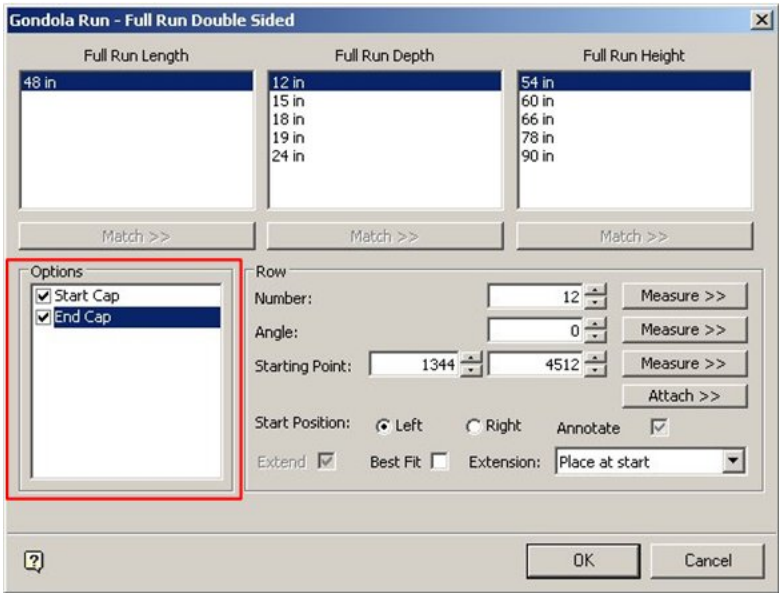
Clicking on the Match button will temporarily hide the dialogue box and take the user to the drawing. The user will be prompted to measure a distance on the drawing. The Gondola Run dialogue box will then be re-displayed with the dimension closest to that measured highlighted.

**Note:** Adding a gondola requires the blocks corresponding to the chosen combination of sizes to be present in the database. If a block is not present, the gondola cannot be drawn and an error message will result.



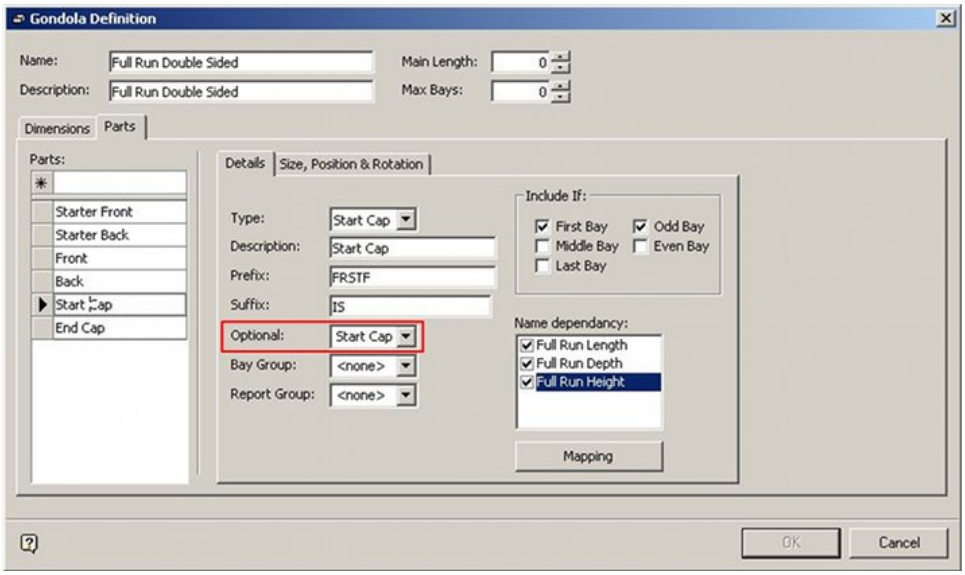

### The Options Frame

The **Options Frame** displays a list of parts that are optional for that particular gondola.



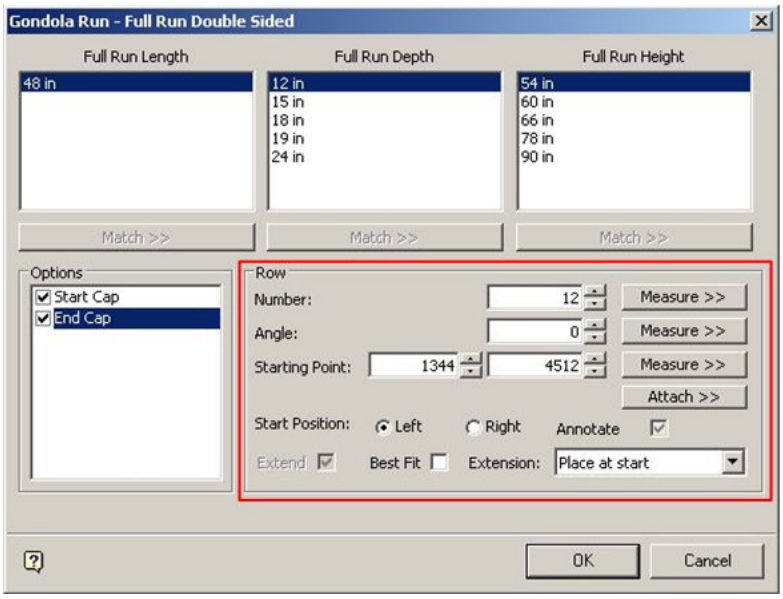

Ticking the appropriate check box will ensure the optional parts are included in the gondola when it is placed in the drawing.

**Note:** Optional parts are specified in the Gondola Definition dialogue box in Fixture Studio.




### The Row Frame

The **Row Frame** allows the number of bays, placement angle, start position, etc, to be specified.




Number can be any integer greater than 0. This number can be changed using the spin control.

> **Note:** The maximum number of bays permissible may be restricted by settings in Fixture Studio.

If the user clicks on the Measure button, they will be prompted to pick a second point in the Planner drawing. This point will be relative to the previously selected insertion point of the gondola.

The distance between the two points will determine the length of the gondola run, as well as its direction. Based on the length of the gondola run, Macro Space Management will calculate the number of full bays that will fit into the measured distance.

> **Note:** The distance occupied by the number of full bays will often be less than the distance measured. To add another bay, tick the Extend option.

End caps will be additional to the number of bays calculated using measure.

The software will also return a calculated angle based on the displacement between the two points. (Angle is measured in degrees from East anticlockwise).

Alternatively, an angle can be input.

Start Position determines whether the specified number of bays is added to the left or right of the insertion point.

> **Note:** The direction bays will be added in is also dependent on the insertion angle. A gondola with an insertion angle of 180 degrees will be facing in a different direction to a gondola an insertion angle of 0 degrees.

The Extend option is primarily of use when placing island gondolas, (i.e. away from walls). The number of bays calculated is normally less in length than the measured distance.

The Best Fit option is only enabled if the length dimension on the gondola definition contains more than one size. It is primarily of use when placing a run of gondolas against a wall.

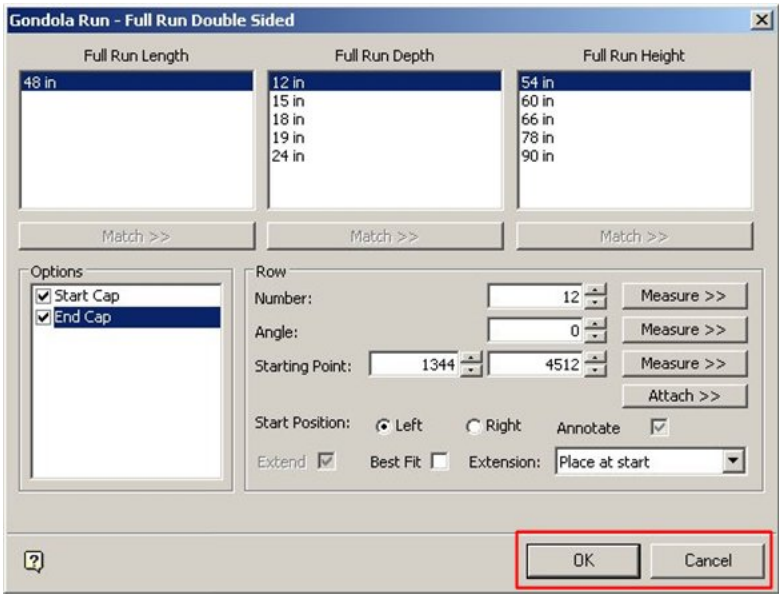
It will use the selected length of the gondola for all but one fixture. The program will then select an extension piece of the best practical length to fill the remaining space.

The Extend option will only be available if the Best Fit option has been enabled.

A drop down list enables the user to decide whether to place the extension piece at the start of the gondola run, in the middle, or at the end.

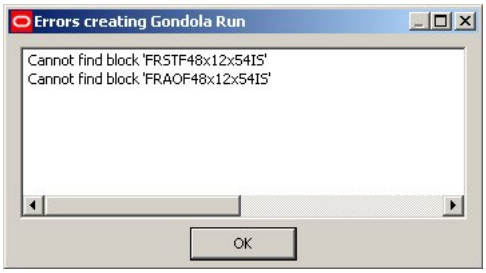
### Completing Insertion

**Insertion is completed** by clicking on the OK button at the bottom of the Gondola Run dialogue box.




Alternatively, the insertion can be aborted by means of the Cancel button.

**Note:** Adding a gondola requires the blocks corresponding to the chosen combination of sizes to be present in the database. If a block is not present, the gondola cannot be drawn and an error message will result.




## Gondola Operations on the Object Browser

### The Gondolas Toolbar

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 grayed 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 |

| Icon | Description |
|---|---|
|  | Attributes |
|  | Promotional Fixtures On or Off |

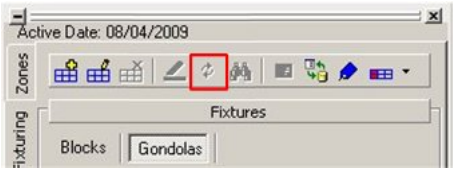
### Highlighting Selected Item in View

**Highlight Selected Item in View** is only available in the fixtures toolbar and is greyed out in the Gondolas toolbar.



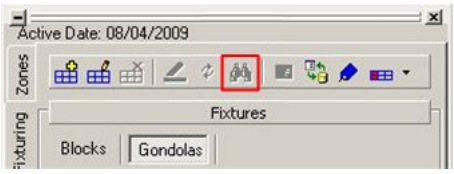

### Highlighting Selected Item in Tree

**Highlight Selected Item in Tree** is only available in the Fixtures toolbar and is greyed out in the Gondolas toolbar.



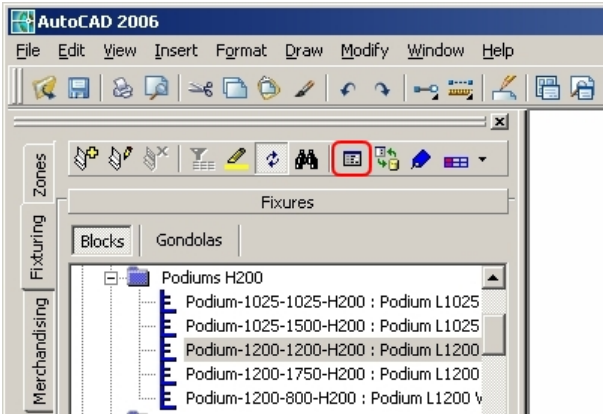

### Using the Search Function

**Find** is only available in the fixtures toolbar and is greyed out in the Gondolas toolbar.

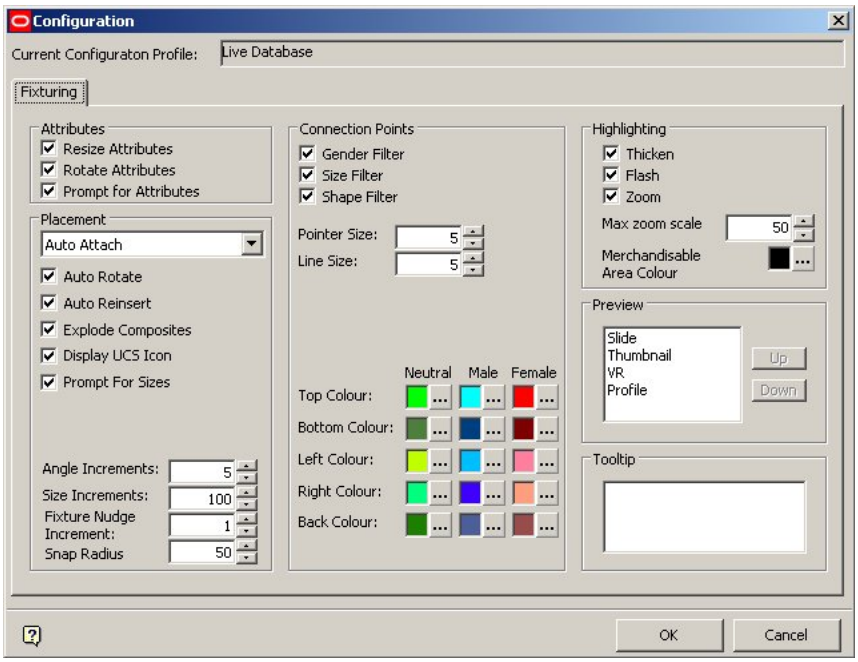


### Gondola Options

Fixture options are invoked by clicking on the Options icon in the fixturing toolbar.



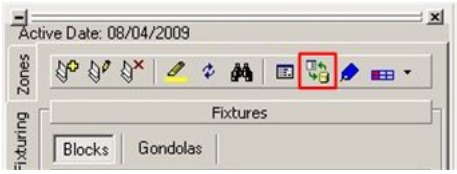

This will take the user to the Fixturing tab on the Configuration Module, enabling changes to be made to placement options, connection points, etc.




(See section on the Configuration Module for more information).

### Refreshing

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.

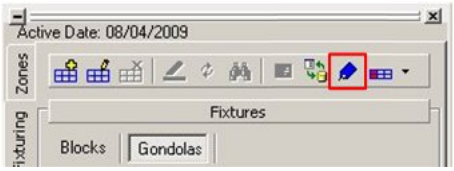
(This refreshing will operate irrespective of whether the Object Browser is used either in the Planner or Merchandiser environment).

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.

### Gondola Attributes

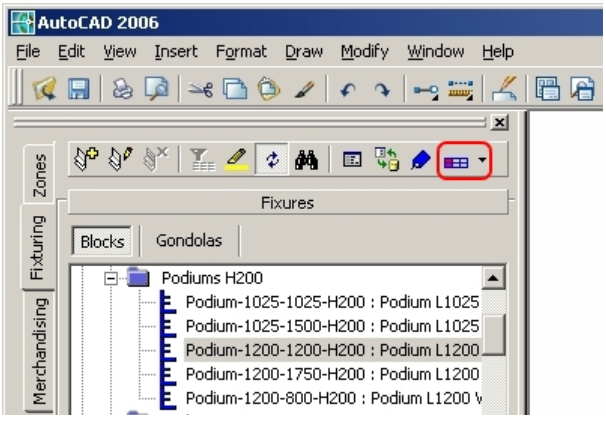
**Attributes** only apply to fixtures.




To get information in individual fixtures within a gondola, select the required fixtures within the gondola and click on the attributes icon.

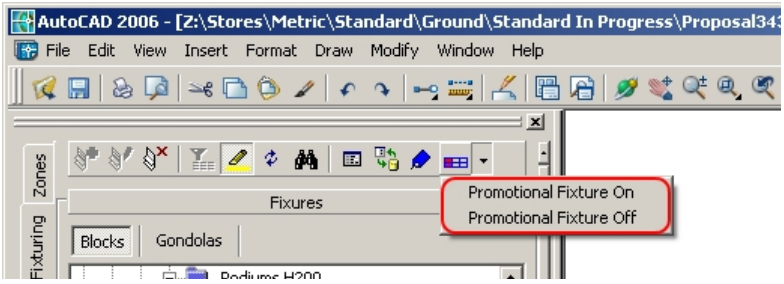
### Promotional Fixtures

Promotional Fixtures can be assigned by selecting a fixture or fixtures and clicking on the Fixture Attribute icon in the toolbar.




Promotional Fixtures are normally used for reporting purposes.

They are assigned by selecting a fixture then selecting the appropriate option from the pull down menu.

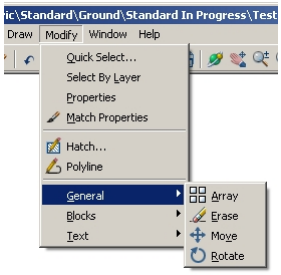



Fixtures designated as Promotional can be identified by running a report on the drawing or by using a KPI.

## Editing and Deleting Gondolas

### Overview of Editing Gondolas using MSM AutoCAD tools

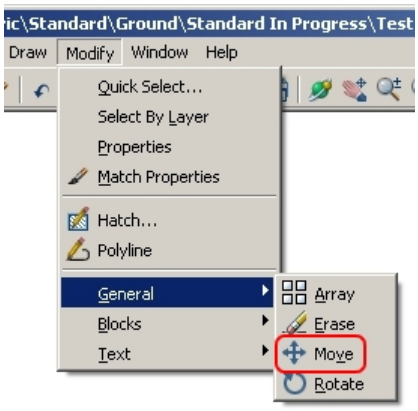
**Gondolas can be edited using AutoCAD tools**. These can be accessed from the Modify > General drop down menu options.



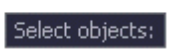

This allows objects to be Erased, Moved or Rotated.

### Moving Gondolas

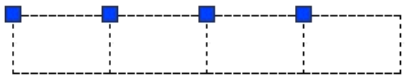
Gondolas can be moved by selecting the Move option from the Modify pull down Menu.




This will bring up a small prompt asking the user to select the gondolas to be moved.




Any objects selected will change from solid to dotted lines.



Right clicking completes the selection process.

The use will then be asked to specify a base point.




Following specification of a base point, the user will be prompted to specify a second point.



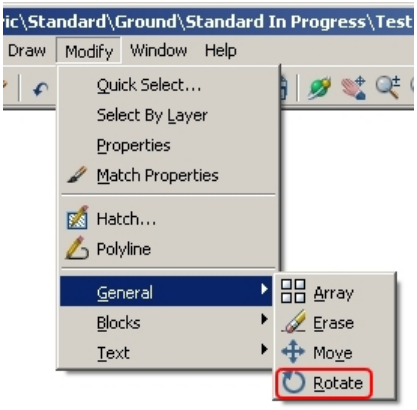

In both cases the points can be specified either by left clicking, or by typing in the X and Y coordinates.

The two points specified define a vector. This indicates how far and in what direction the selected fixtures are to be moved.

> **Note:** Using MSM AutoCAD tools changes the drawing, without the changes being recorded in the central Macro Space Management database. Run Synchronize then Adjacencies to ensure the central database contains the effects of all MSM AutoCAD changes.

### Rotating Gondolas

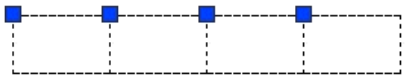
To **rotate** a Gondola select the Rotate option from the Modify pull down menu.




This will bring up a small prompt asking the user to select the Fixtures to be rotated.




Any objects selected will change from solid to dotted lines.

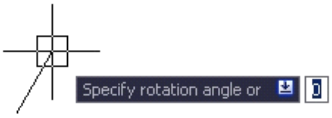


Right clicking completes the selection process.

The use will then be asked to specify a base point. The point can be specified either by left clicking, or by typing in the X and Y coordinates.




Following this the user will be invited to specify a rotation angle.



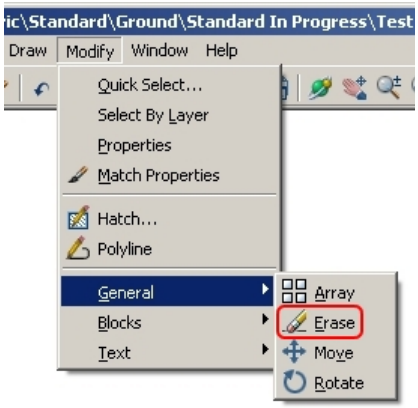

The rotation angle can be specified by typing it in. Alternatively, the mouse cursor can be used to draw a line at the required angle.

Left clicking will cause the specified objects to be rotated.

> **Note:** Using AutoCAD tools changes the drawing, without the changes being recorded in the central Macro Space Management database. Run Synchronize then Adjacencies to ensure the central database contains the effects of all AutoCAD changes.

### Erasing Gondolas

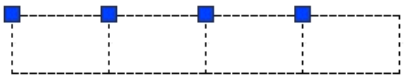
To **erase a gondola** select the Erase option from the Modify pull down menu.




This will bring up a small prompt asking the user to select the gondolas to be erased.




Any objects selected will change from solid to dotted lines.

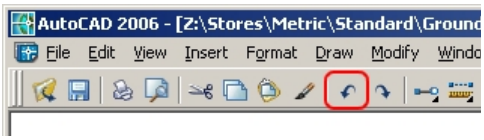


Right clicking completes the selection process – which will cause the selected objects to be removed from the drawing.

> **Note:** Using AutoCAD tools changes the drawing, without the changes being recorded in the central Macro Space Management database. Run Synchronize then Adjacencies to ensure the central database contains the effects of all AutoCAD changes.

### Undoing Changes

Moved, Rotated or Erased gondolas can generally be restored to their original position by making use of the Undo command on the MSM AutoCAD Toolbar

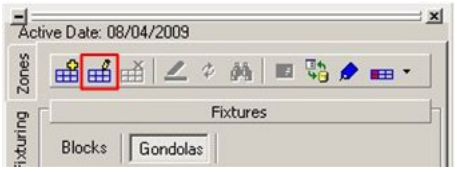



> **Note:** Using AutoCAD tools changes the drawing, without the changes being recorded in the central Macro Space Management database. Run Synchronize then Adjacencies to ensure the central database contains the effects of all AutoCAD changes.

### Overview of Editing Gondolas using Fixture Studio

Fixture Studio allows the properties of a gondola to be edited.

It is accessed from the Planner by clicking on the Edit Gondola icon on the Fixturing tool bar.



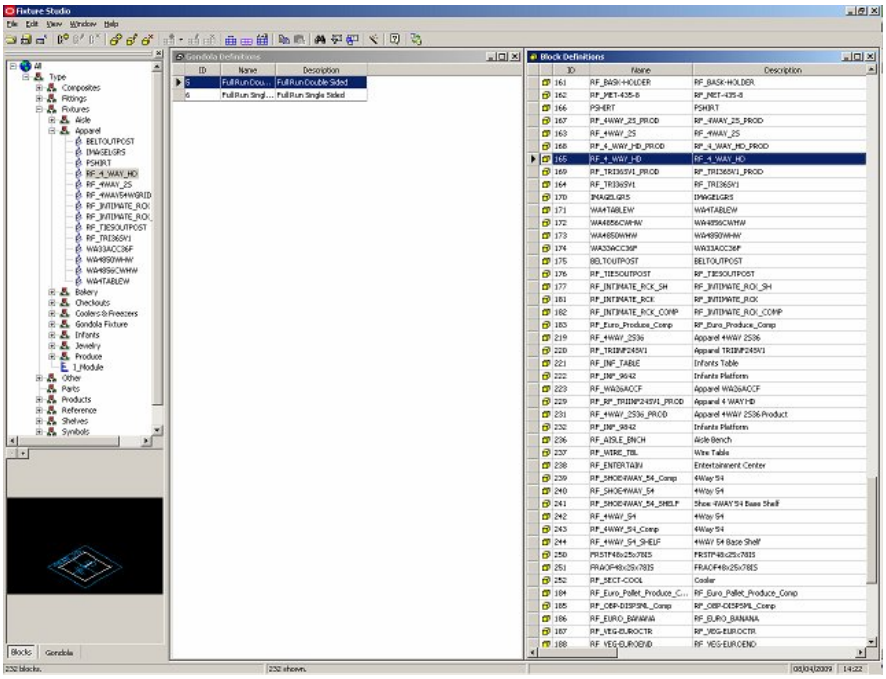

While in Fixture Studio a wide range of properties for the selected gondola can be customized. These include:

- Sizes
- Fixture Positions
- Whether parts are optional or not

Changes made to a Gondola while in Fixture Studio will affect further placements of that type.

### The Fixture Studio Window

The **Fixture Studio window** contains several parts.

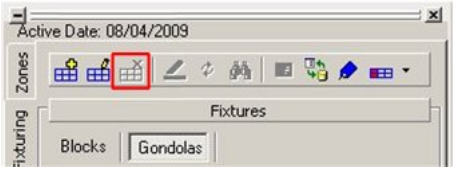


On the left is a hierarchical tree of all the available fixtures, while on the right is are windows allowing the block details of the currently selected fixture, fitting or gondola to be customized.

(See the Fixture Studio help file for more information).

### Deleting Gondolas

**Gondolas can only be deleted** using AutoCAD tools as the Delete Gondola option is grayed out and unavailable in the Gondolas toolbar.

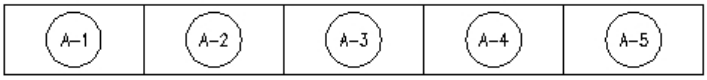



**Note:** After using AutoCAD tools, the drawing must be synchronized so that the changes are written to the central Macro Space Management database.

# Bay Numbering

## Overview of Bay Numbering and Bay Groups

**Bay numbering** allows each fixture within the drawing to be assigned a unique identification code for reporting and identification purposes.




Bay numbering can either be fixture or gondola based.

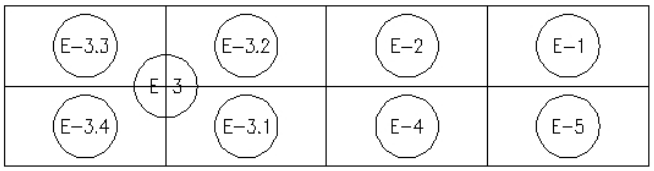
Fixture based bay numbering numbers each fixture in an incremental sequence starting from a designated number.

Gondola based bay numbering numbers fixtures within a gondola with a four part sequential code unique to the drawing.

Before Bay Numbering can be carried out, the Synchronization module must be run to ensure the information from the drawing has been fully transferred to Macro Space Management's central database.

Following this, the Adjacency option must be run so the central database has up to date information on which fixture is next to which fixture.

**Bay Groups** are where two or more fixtures have been linked together for bay numbering purposes.

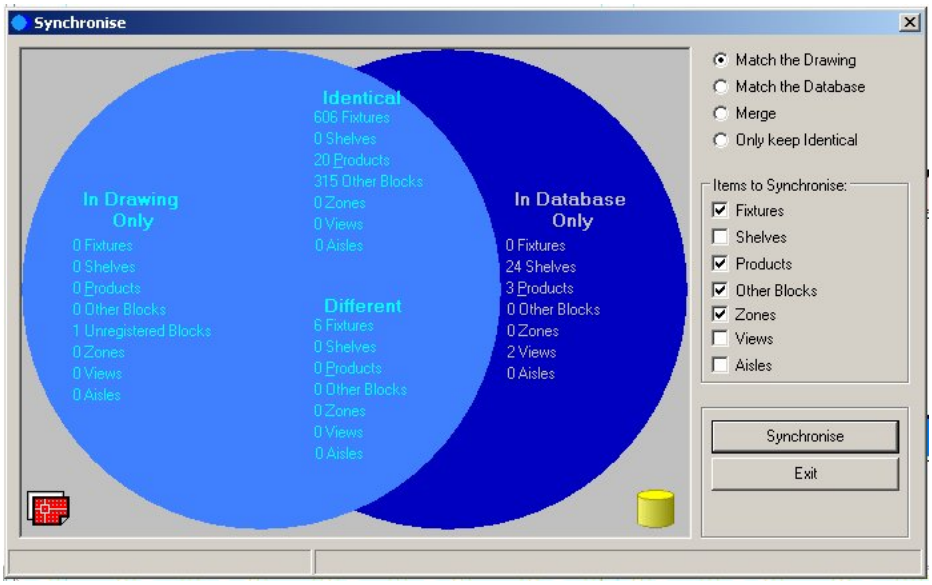



Bay Groups can contain any number of fixtures, but care should be exercised in using this feature. The Bay Number will appear in the geometric center of the selected fixtures, causing it to appear in an unpredictable place if the fixtures selected occupy too wide an area.

## Preparations – Before Bay Numbering

### Synchronization

To synchronize the drawing, select the Synchronize option from the File menu or from the toolbar. This will bring up the Synchronize dialog box.

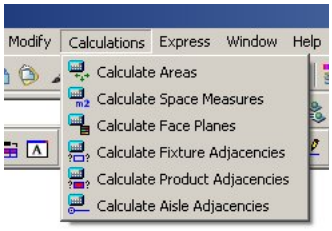



In the Synchronize dialog box, select the Match the Drawing option (under the Action section), Fixtures, Other Blocks, and Zones check boxes (under the Items to Synchronize section), and then click the Synchronize button.

### Fixture Adjacency

Fixture Adjacency is used by the Planner application to calculate the fixtures that are adjacent to each other. If they are within a specified distance (usually just a few mm), they are treated as part of a gondola; otherwise they are treated as individual fixtures. If fixture adjacency is not run, then fixtures may have bay numbers in an odd sequence.

To run Fixture Adjacency, select the Calculate Fixture Adjacencies option from the Calculations menu or toolbar.

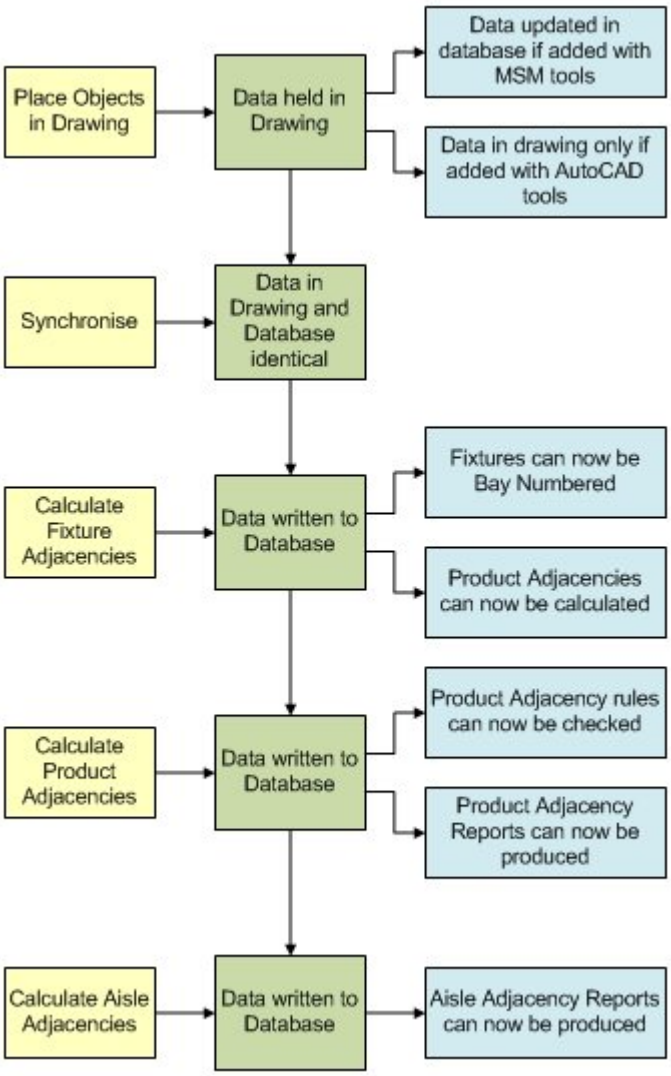



## About Bay Numbering

**Before Bay Numbering** can be carried out the Synchronization module must be run to ensure the information from the drawing has been fully transferred to Macro Space Management's Central database.

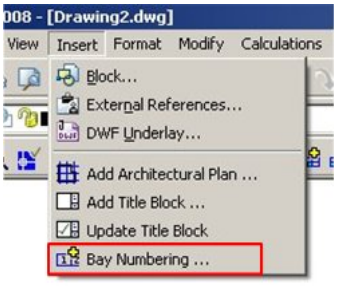
Following this, the Adjacency option must be run so the central database has up to date information on which fixture is next to which fixture.

Bay numbering then allows each fixture within the drawing to be assigned a unique identification code for reporting and identification purposes.

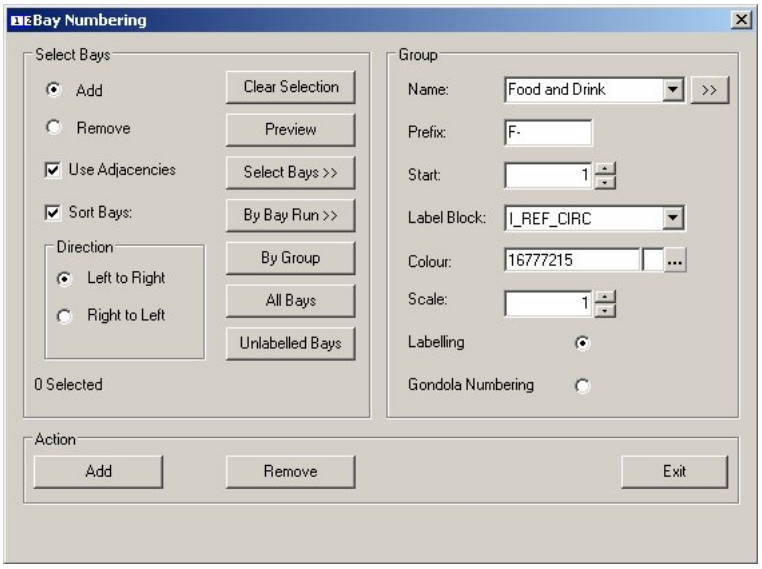



### Accessing the Bay Numbering Options

**Bay numbering is accessed** from the view pull down menu.



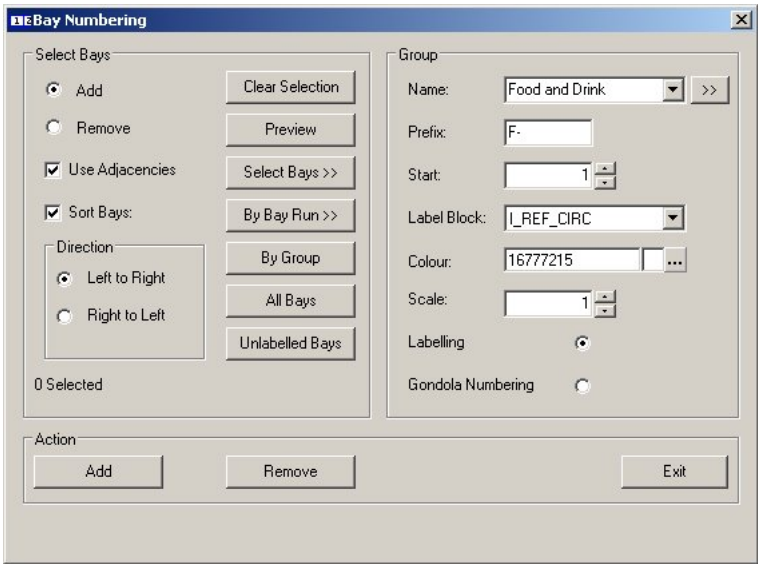

This brings up the Bay Sequence Numbering dialogue box.




### Example of Adding Basic Bay Numbering

**To add basic bay numbering:**

1. Select the **Bay Numbering** option from the Insert menu or from the toolbar. The Bay Sequence Numbering dialog box appears.




The Bay Sequence Numbering dialog box has the following sections:

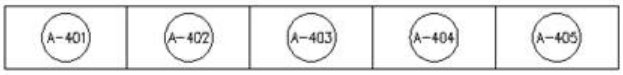
- **Select Bays** section allows users to select the bays that will be numbered (or have the numbers removed). Within the Select Bays frame, the Direction area specifies the direction bay numbering will operate in.
- **Group** section controls the Notation that will be added.
- **Action** section determines what form of labeling will be applied.

2. In the **Select Bays** frame, ensure that the following options are selected:
   - **Add** radio button
   - **Use Adjacencies** check box
   - **Sort Bays** check box

- In the **Direction** area, **Left to Right** radio button

3. Click the **All Bays** button. This will select all fixtures in the drawing.
4. In the **Group** frame, set the following options:
   - Give the selected fixtures a collective name by typing it in the **Name** text box.
   - Add a prefix in the **Prefix** text box. This will be added to all the bay numbers.
   - Select the **Start** number in the Start drop down list. The bay numbering will start from this value.
   - Select the shape of the block from the **Label Block** drop down list.
   - Select the color of the text from the **Color** dialog box.
5. In the **Action** frame, click the **Add** button.

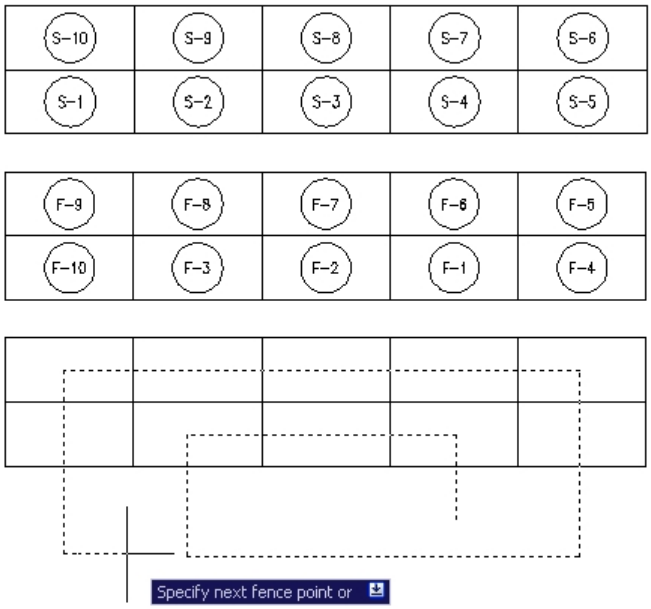
The Bay Numbers will then be added.




## Advanced Bay Numbering

### About Advanced Bay Numbering

There are several ways of carrying out more advanced bay numbering. This example uses a Fence selection method to select both the fixtures to be bay numbered and the sequence they are to be numbered in.




The Bay Numbers on the top (S1 – S10) were numbered in the usual manner and run in sequence up and down the selected bays of the gondola.

The Bay Numbers in the center (F1 – F10) were numbered using a fence and can be precisely controlled as to the sequence they number in.

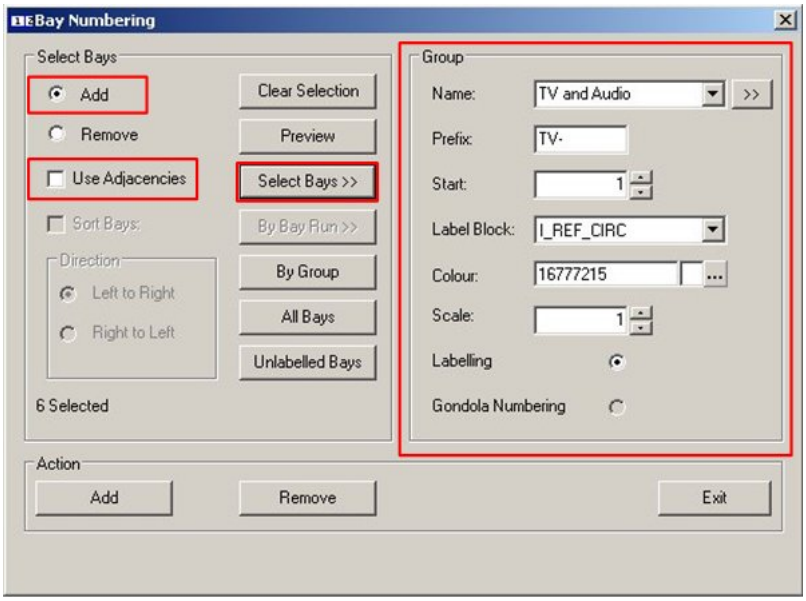
The Gondola on the bottom shows the path of the fence used to select the sequence the fixtures were numbered in.

### Bay Numbering with a Fence

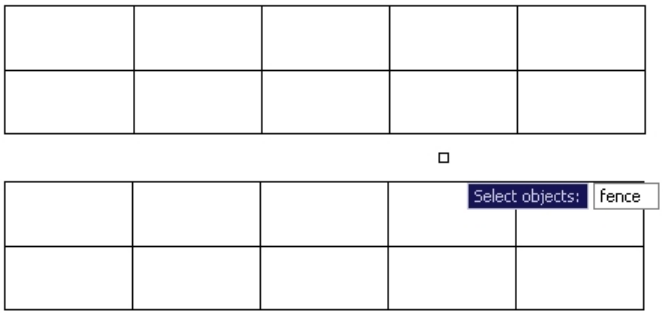
To bay number using a fence:

1. From the **View menu**, launch the Bay Sequence Numbering dialog box.
2. In the **Select Bays frame**, select the Add Radio button, and ensure the Use Adjacencies and Sort Bays check boxes are cleared.

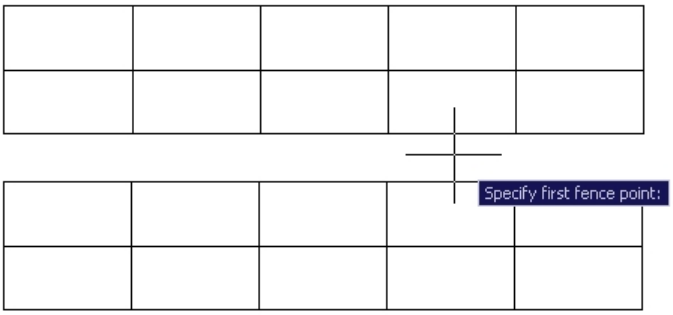
> **Note:** If the Use Adjacencies check box is not cleared, the fence method will not work.



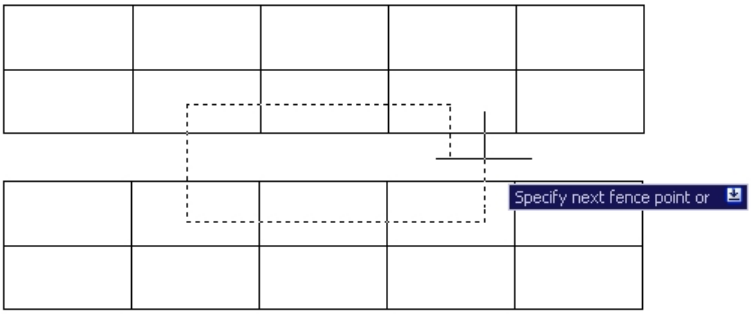

3. In the **Group** frame, set the following options
   - In the **Name** field, type in the required name for the group of fixtures to be selected.
   - In the **Prefix** field, type in the Prefix that will precede the bay numbers.
   - In the **Start** drop down list, set the Start Number for the numbering.
   - In the **Label Block** drop down list, select the shape of the Label Block that will be used for bay numbering
   - In the **C**olor dialog box, select the color for the bay numbering text.
4. In the **Select Bays** frame, click the Select Bays button. The cursor will appear in the drawing.
5. Type in **Fence** and then press ENTER.




6. A Prompt appears next to the cursor to specify the first fence point. Left click to set it.

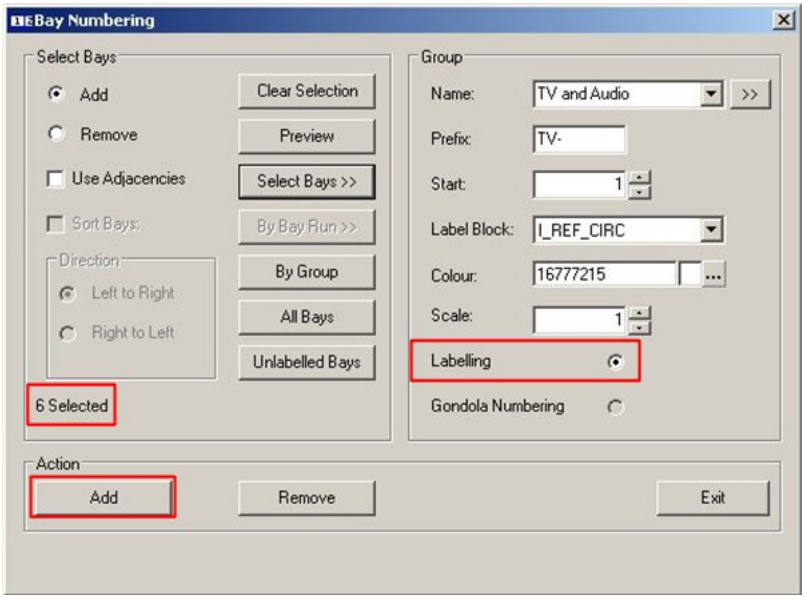



7. Continue to draw the fence by clicking to set successive points.

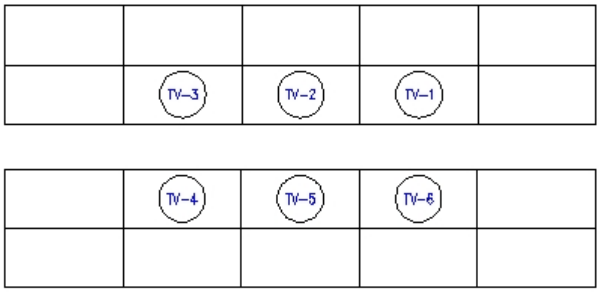



**Note:** It is important for the fence line to start and finish outside the fixtures to be selected. If the fence line starts inside a fixture, the numbering of that and the next fixture might become confused.

8. When all the points in the fence have been drawn, press ENTER until the Bay Sequence Numbering dialog box reappears.



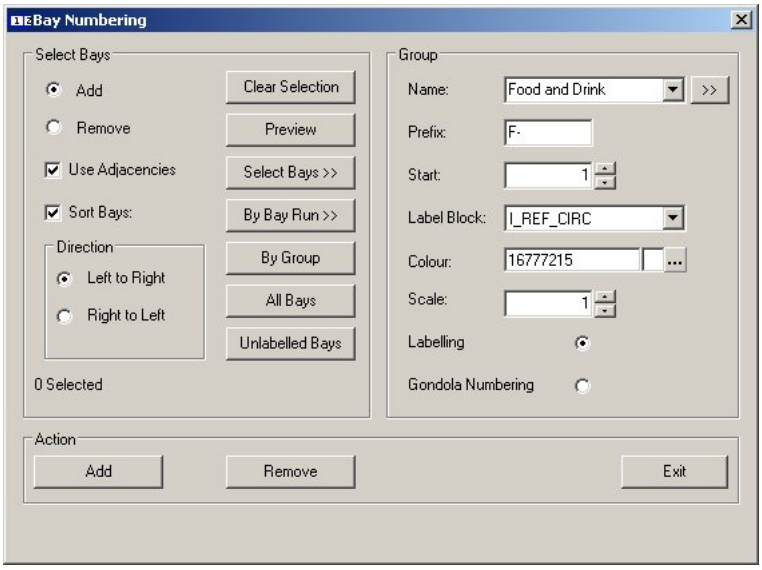

9. In the Group frame, select the Labeling radio button, and click the Add button in the Action frame. The selected bays will then be numbered.




The above figure shows the bays numbered in the sequence specified by the fence.

### Removing Bay Numbering

**Removing bay numbering** is the reverse of adding it. To remove bay numbering:

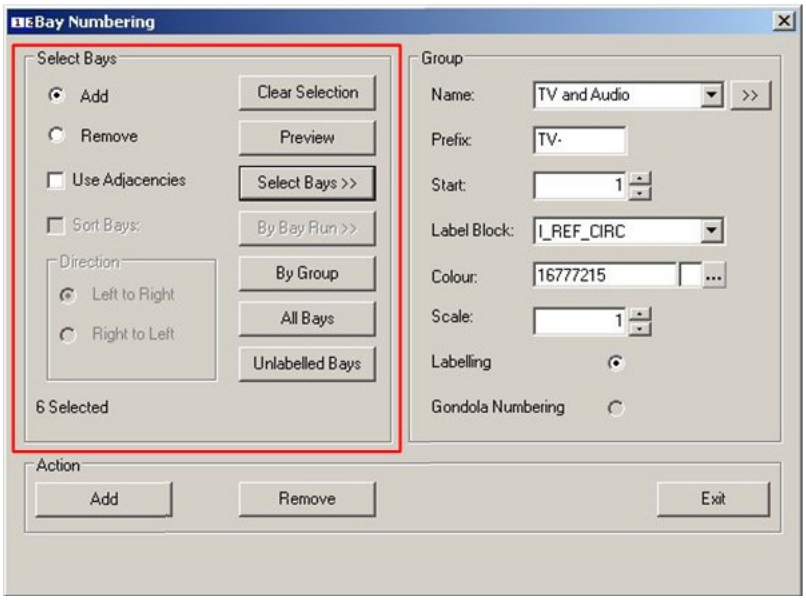



1. From the **Insert menu**, select the **Bay Numbering** option. This will bring up the **Bay Sequence Numbering** dialog box.
2. To remove the bay numbering, click the **Select Bays** button to have bay numbering removed from specific bays, or select the **All Bays** button to remove bay numbering from all bays.
3. Click the **Remove** button, and Bay Numbering will be removed.

## The Bay Numbering Dialog Box

### The Select Bays Frame

The **Select Bays frame** gives a series of options as to how to select fixtures for bay numbering.



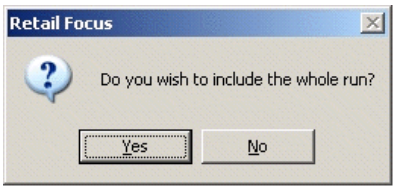
The **Add** or **Remove** radio buttons determine whether fixtures are added or removed from the list of those selected for Bay Numbering. The number selected is shown immediately below.

**Clear Selection** removes all fixtures from the list of those selected.

**Preview** shows the fixtures selected for bay numbering – these will briefly blink on the drawing.

**Select Bays >>** enables the user to select fixtures from the drawing by use of the mouse. Multiple selections can be made by using AutoCAD selection techniques. The selected bays will flash three times.

**By Bay Run** enables the user to select gondolas for Bay numbering. The user is returned to the drawing to select a gondola by left clicking on it with the mouse. A small dialogue box will appear.




If the Whole Run option is selected, every fixture in the gondola will be selected.

If the whole run is not included, then only part of the gondola will be included; the user being asked to specify a stop position. This option should only be used by Macro Space Management users who understand the numbering sequence within gondolas.

This option may also be used to select fixtures that have been placed individually. The selected bays will flash three times.

**By Group** enables fixtures to be selected that have already been designated as belonging to a Group. The selected bays will flash three times.

**All Bays** selects all fixtures on the drawing.

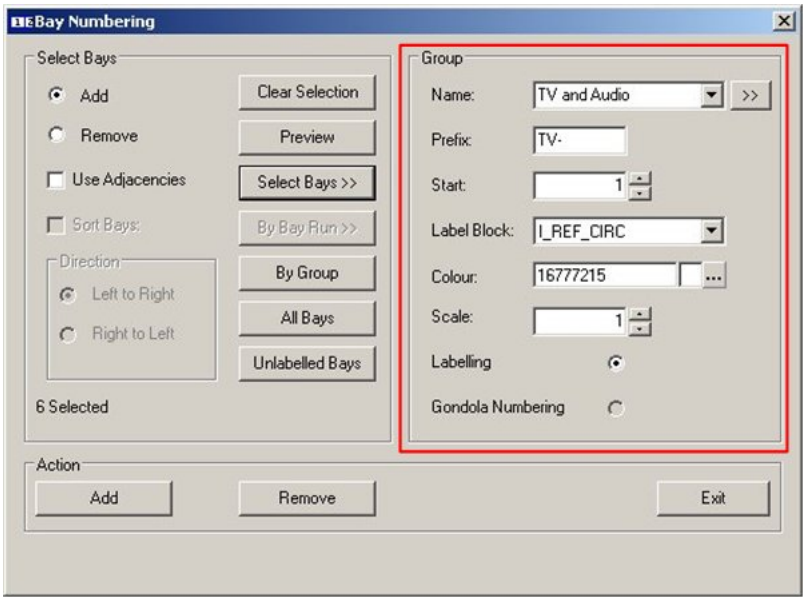
**Unlabeled Bays** selects all fixtures that have not been allocated a bay number.

**Sort Bays** when checked causes fixtures to be numbered according to the adjacency rules. It will be grayed out unless the **Sort Adjacencies** option is checked. If Sort Bays is checked, the Direction radio buttons become available, allowing the user to select the numbering direction.

If Sort Bays is unchecked, then fixtures can be numbered using the sequence defined by a user specified AutoCAD fence.

### The Group Frame

The **Group frame** enables users to specify a number of options concerning Bay Numbering.




**Name** enables a specified selection of fixtures to be given a collective name. This must be entered prior to labeling the selected fixtures.

For example a group of fixtures designated for electrical sales might simply be named Electrical. Whenever this group is selected in the future, all fixtures that were designated as part of it will be selected.

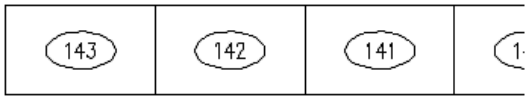
**Prefix** is added to any bay number as it is applied. For example choosing a prefix of E- will result in all selected fixtures being labeled E-1, E-2, E-3, etc. Prefixes are useful for giving visual indication that a fixture belongs to a specific group.

**Start** specifies the number at which bay numbering is to commence. This is important where grouping has been used, as it enables overlapping ranges of bay numbers to be avoided.

**Label Block** brings up a list of label blocks. These will enclose the actual bay numbers.



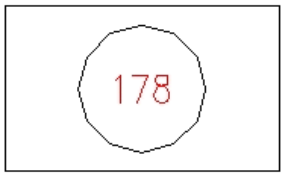

For example, choosing ref-elps will enclose all bay numbers in an elliptical shape.




Color enables bay numbers to be assigned a color. Clicking on the button with the ellipsis will bring up a color pallet.




The selected color will then be applied to all selected bays.

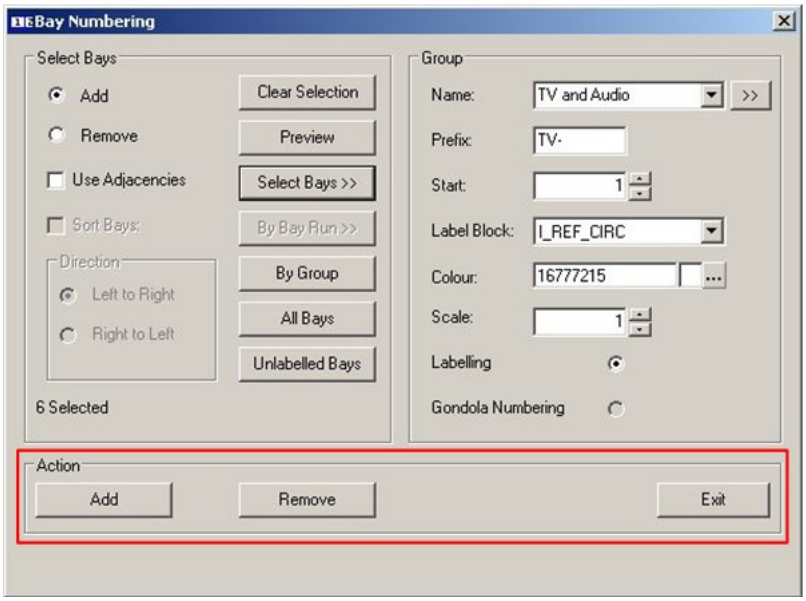



This is useful for color coding bays assigned to different groups.

The **Labeling** and **Gondola Numbering** buttons allow users to select whether Bay or Gondola numbering is used. (Gondola numbering uses a slightly different logic from Bay Numbering).

### The Action Frame

The **Action Frame** completes the bay numbering process.




**Add** adds numbering to any selected fixtures.

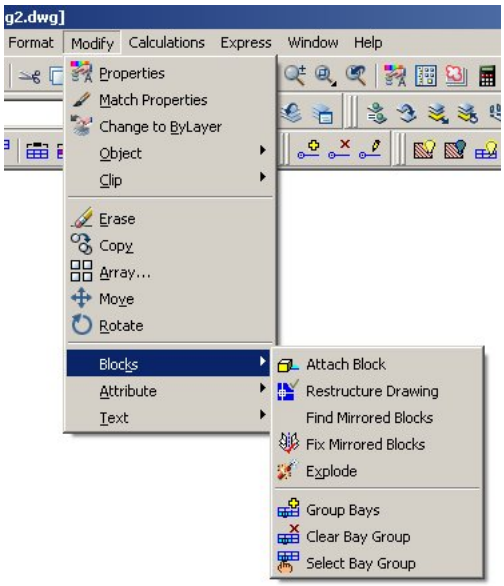
**Remove** removes any existing numbers from any selected fixtures.

**Exit** enables the user to leave the bay numbering routine, having completed all required actions.

## Defining Bay Groups

### Accessing the Bay Groups option

The **Bay Group** options can be accessed from the Modify option on the menu bar




They can also be accessed from the **Bay Numbering** toolbar.




**Group Bays** allows the user to select fixtures to group together a number of fixtures into a single bay.

**Clear Bay Group** converts grouped fixtures back into fixtures that will receive individual bay numbers.

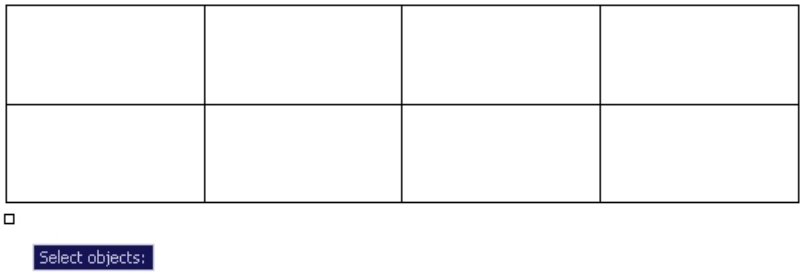
**Select Bay Group** causes other members of a bay group to be highlighted when an individual fixture within the bay group is selected.

## Making Fixtures into Bay Groups

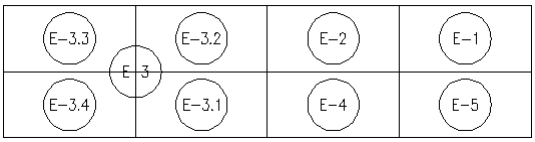
To make **Bay Groups** from fixtures:

1. From the **Modify** menu under the **Blocks** submenu, click the **Group Bays** option. Alternatively use the Group Bays option from the Bay Numbering toolbar.

A prompt appears next to the cursor to select the required fixtures.




2. Select the objects by means of selection windows, left clicking on the required fixtures, or by a fence. Complete the selection by a right click. The selected Bay Group will be numbered as such when the fixtures are bay numbered.

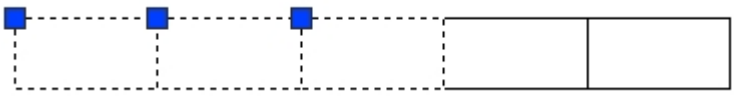



In the above example, there are a number of normally numbered bays, and four Grouped Bays. (Note how the Grouped bays have a master bay number and sub-bay numbers).

### Removing Bay Groups

**To remove fixtures in a bay group**:

1. Select the Remove Bay Group option from the Modify menu or Bay Numbering toolbar.
2. A prompt appears next to the cursor to select the blocks to remove from the group.
3. Select a block from the bay group. All the blocks of the bay group are selected.



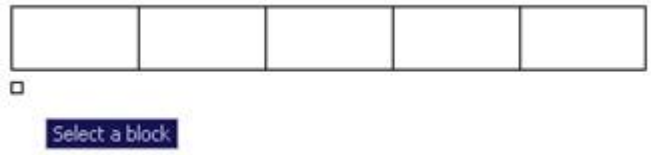
4. On right clicking to complete the selection, the blocks will be removed from the group.

### Showing Bay Groups

**To show all the fixtures in a bay group:**

1. Select the **Show Bay Group** option from the **Bay Numbering** toolbar or the **Modify** menu.

A prompt appears next to the cursor to select a block.



**Select a Block Prompt**

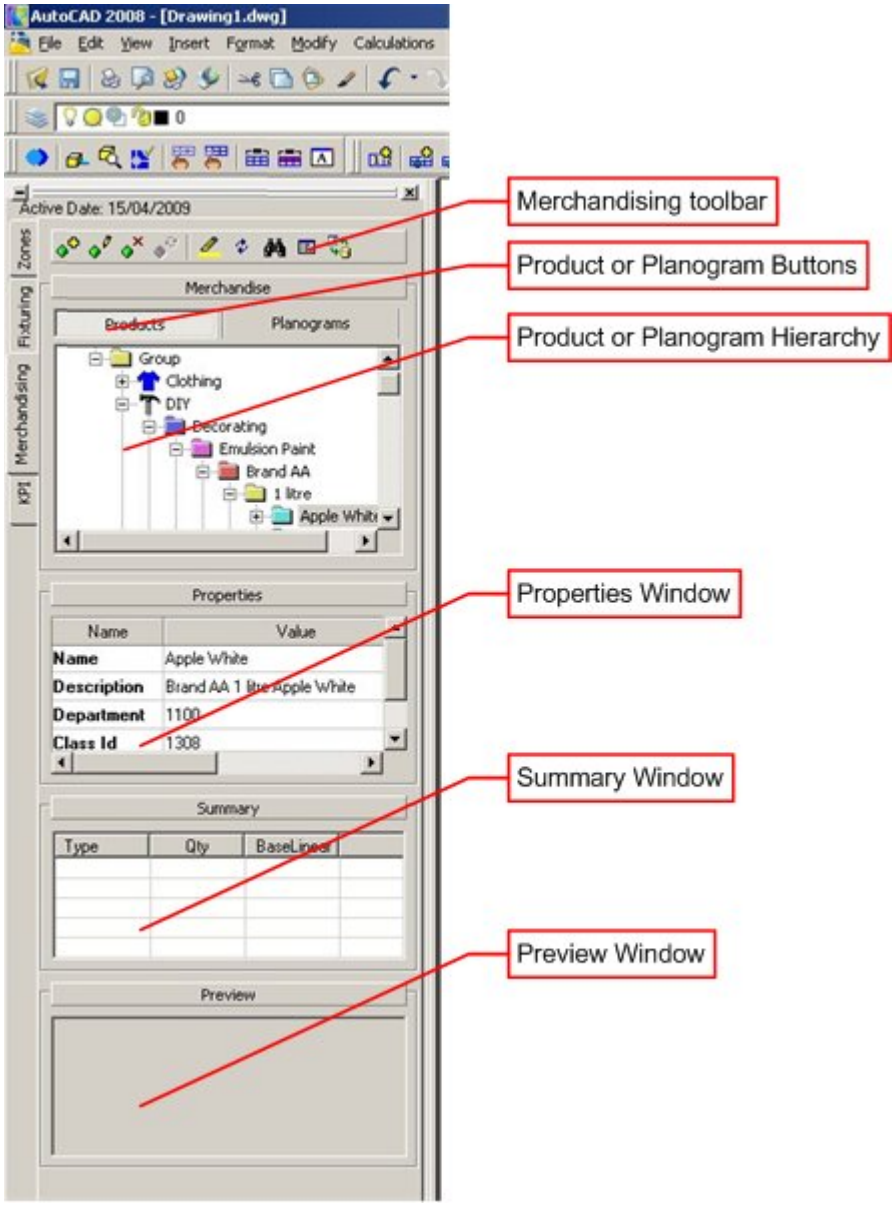
2. Select any block in the bay group and the other blocks will also be selected.



# Merchandise in Planner

## 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 Products and Planograms.



### The Product Toolbar

The **Product toolbar** is found on the Merchandising Tab of the Object Browser. It is active when the Product 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 Planogram Toolbar

The **Planogram toolbar** is found on the Merchandising Tab of the Object Browser. It is active when the Planogram button is selected.

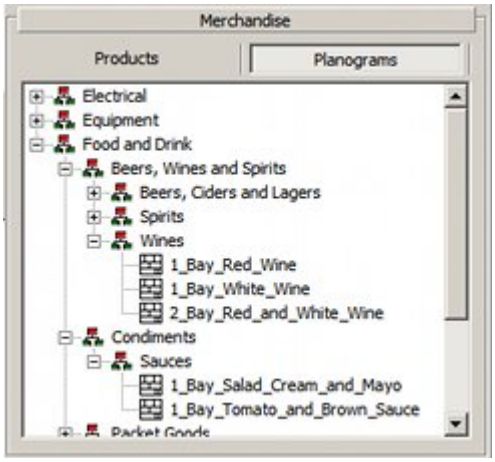



It contains a series of icons allowing various operations to be carried out on Planograms.

| Icon | Description |
|---|---|
|  | 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 Merchandising Hierarchy Window

The **Merchandising window** shows a hierarchical tree of all the available products or planograms.



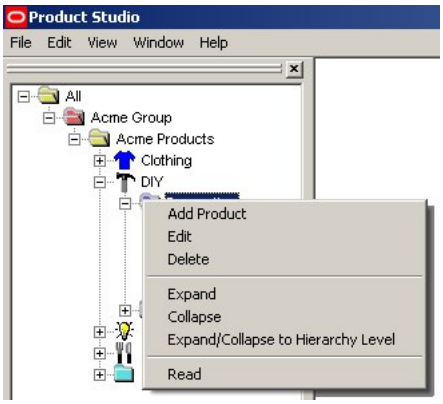

The tree can be expanded or contracted by clicking on the + or – icons.

The Merchandising window can be minimized by clicking on the splitter bar.

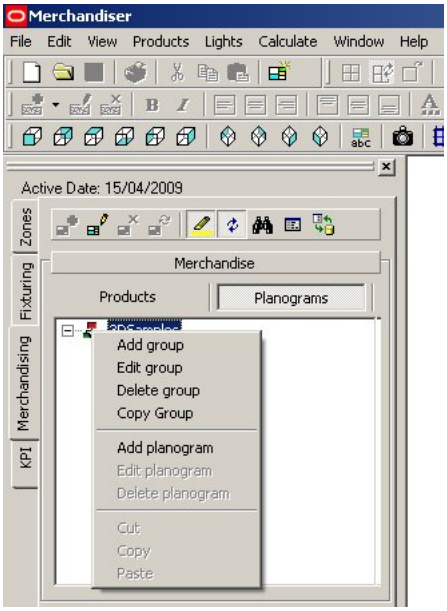


The Products or Planograms buttons immediately above the window determine whether the hierarchical tree shows products or planograms.

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.

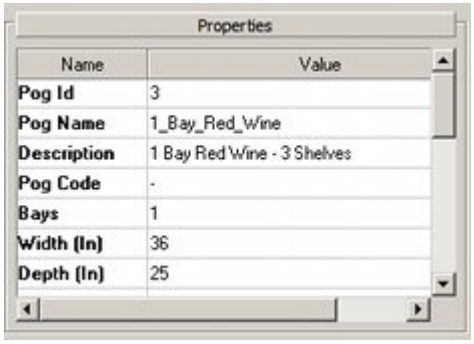



The Planograms hierarchical tree can be configured in the Merchandiser module using the Add, Edit and Delete options on the menu available by right clicking.



### The Properties Window

The Properties Window will show the properties for the currently selected product or planogram.

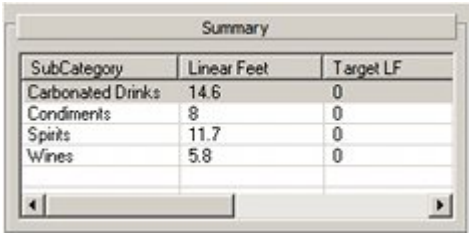



The Properties window can be minimized by clicking on the splitter bar.




### The Summary Window

The Summary Window will show a user defined list of products or planograms placed in the drawing.



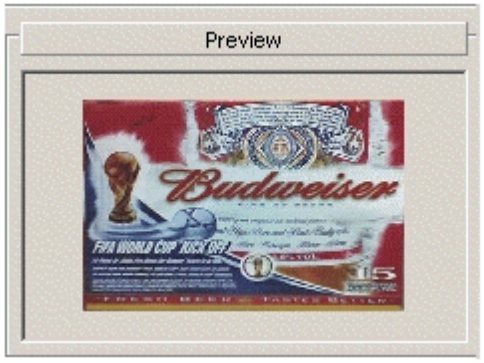

Clicking on a column heading will re-order that column. Clicking again will reverse the sort order.

The Summary window can be minimized by clicking on the splitter bar.




### The Preview Window

The **Preview Window** shows an image of the product or planogram selected in the hierarchical tree.




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.




# Product and Planogram Operations

### 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.



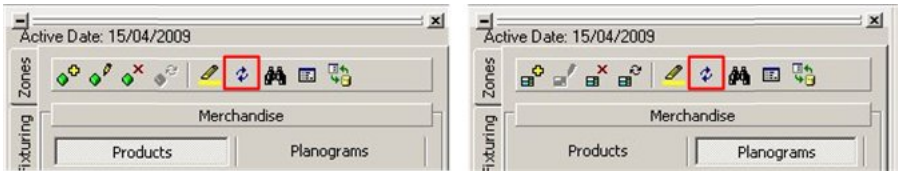

This is a feature that can be toggled On or Off. To toggle the option on, click on the icon. This will show as depressed on the toolbar. To toggled the option off, click on the icon again. It will no longer be depressed.

> **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.

### 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.



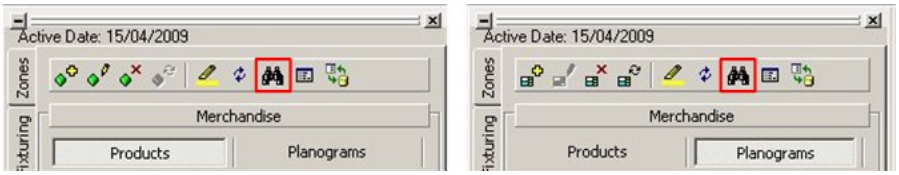

This is a feature that can be toggled On or Off. To toggle the option on, click on the icon. This will show as depressed on the toolbar. To toggled the option off, click on the icon again. It will no longer be depressed.

> **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.

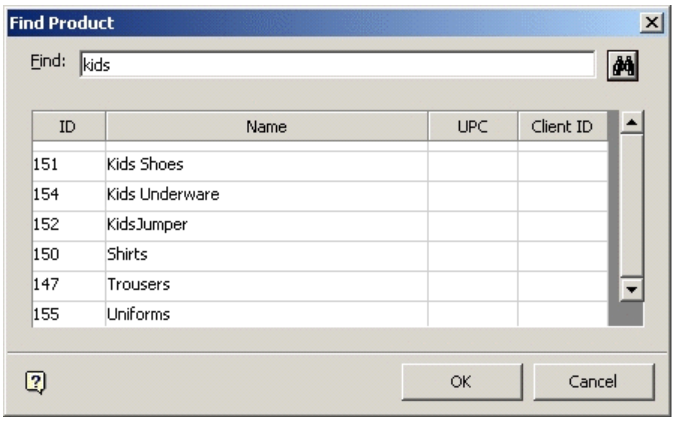
To highlight a product or planogram find the required item in the drawing and click on it. The item will then be highlighted in the hierarchical tree – the exact method of highlighting depending in the options selected in the Configuration Module.

### 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.

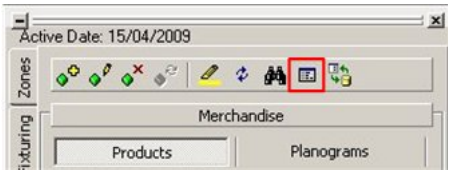


This will bring up a list of any blocks matching the search string.

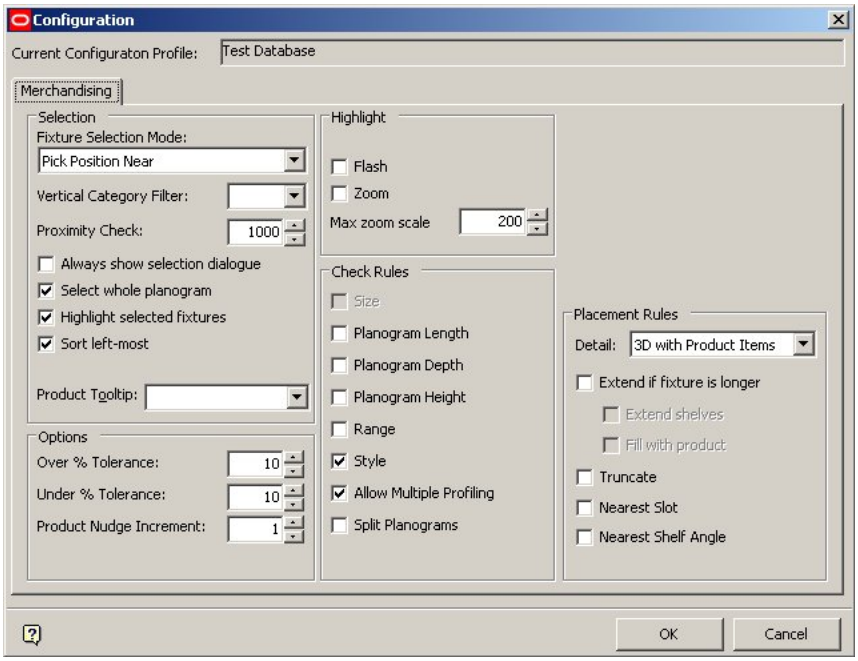
Left clicking on any result will return the user to the Merchandising Products Window, where the selected Product or Planogram will be highlighted in the hierarchy tree.

### 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.

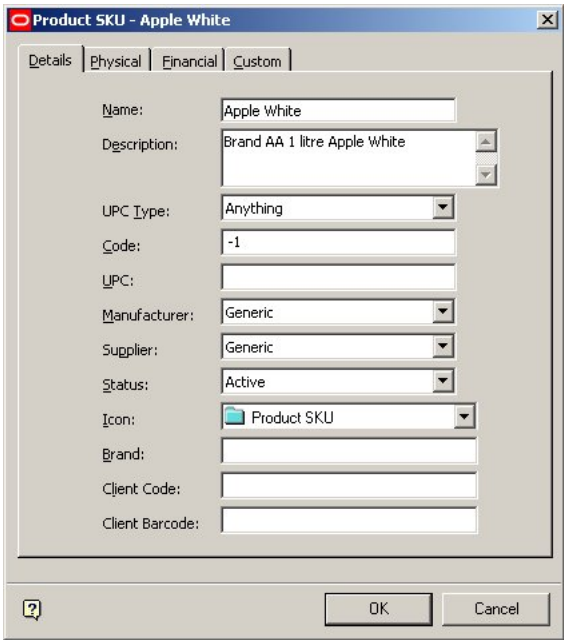



## Editing Product Definitions

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.

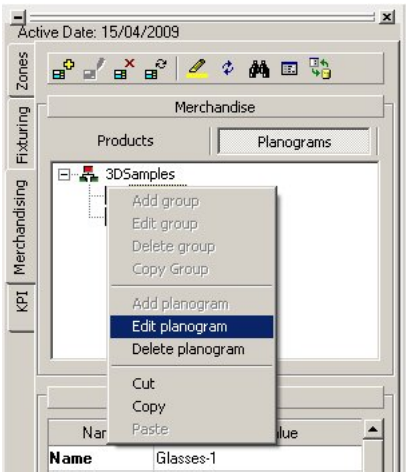


**Note:** The Product Studio dialogue box that opens will depend on what level in the product hierarchy has been selected.

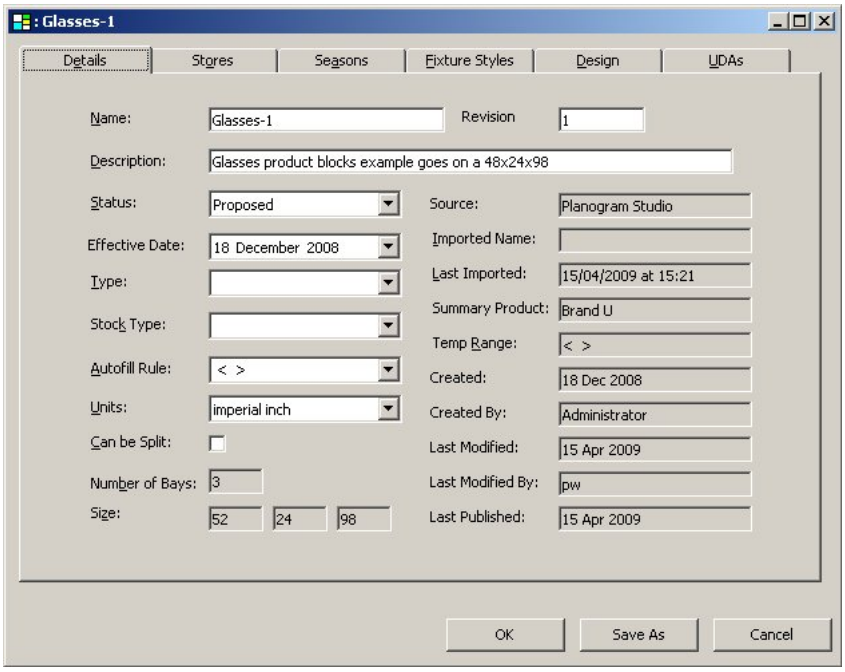
Once changes have been made and saved, they can be used within Merchandising after the Refresh option has been used on the Object Browser.

### Editing Planogram Definitions

To Edit a Planogram, highlight the required planogram in the hierarchy and right click to bring up the pop-up menu.



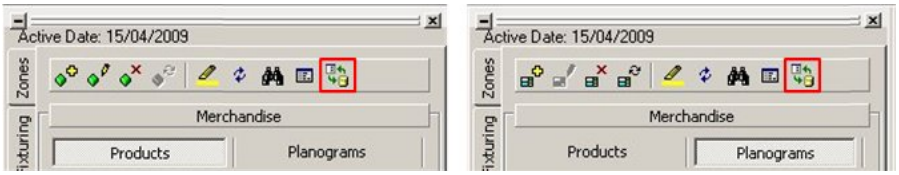

(If the merchandiser module is already open, it will be made the active window). The currently selected Planogram will then be presented for editing.




Once changes have been made and saved, they can be used within Merchandising after the Refresh option has been used on the Object Browser.

### The Refresh Option

The Refresh Icon refreshes the both Planogram and Product information in the hierarchical tree.

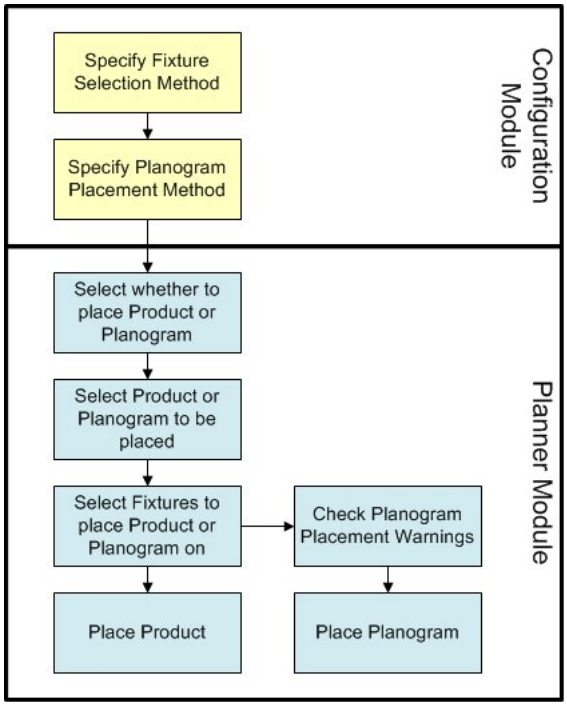



Using Refresh ensures that the information is brought up to date with any changes made in Merchandiser or Product Studio, both to the hierarchical tree and to any products or planograms added to, edited, or deleted from it.

# Adding Products or Planograms to Fixtures

## Overview of Adding Products or Planograms to Fixtures

The flowchart below specifies the sequence of actions required to place Products or Planograms on Fixtures.




#### Actions in the Configuration Module

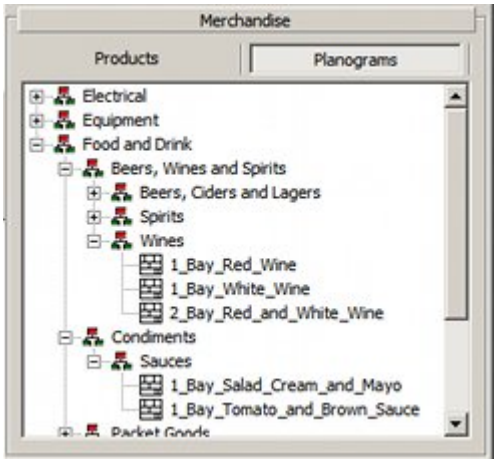
- Specifying the Fixture Selection Method enables the user to choose how fixtures for population will be selected.
- Specifying the Planogram Placement method enables the user to choose what options control how planograms place.
- The options will be specific to the user.

#### Actions in the Merchandising Module

- Clicking on the appropriate button will toggle the user between the Product and Planogram hierarchical trees, allowing them to select the class of object to be placed.
- The required Product or Planogram can then be found in the hierarchical tree.
- The Fixture on which the Product or Planogram is to be placed is selected.
- The Product or Planogram is placed.
- If a planogram is placed, the user may receive one or more warnings if the selected fixtures do not match the details in the planogram definition.
- The user may chose to override the warnings, in which case the planogram will place.

### Selecting Whether to Add Products or Planograms

Whether Products or Planograms are added will depend on whether the user has selected the Product or Planogram hierarchical tree.

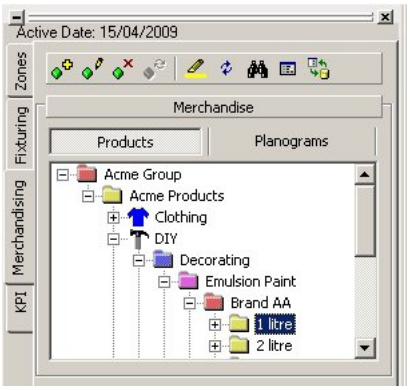



In the above example, the Planogram hierarchical tree has been selected.

### Selecting the Product or Planogram Required

There are two ways of finding the Product or Planogram required for merchandising a fixture.

1. The first is to select the required Product or Planogram directly from the hierarchical tree.
2. This can be done by clicking on the + or – sign to expand or contract the hierarchical tree as required, then highlighting the required Product or Planogram.



3. The second is to use the Find option in the merchandising toolbar. 
4. Typing the required search string into the Find Product dialogue box will bring up a list of any blocks matching the search string. Left clicking on any result will return the user to the *Merchandising Window*, where the selected Product or Planogram will be highlighted in the hierarchy tree.
5. When the required Product or Planogram has been found, it can be selected for insertion into the drawing in one of three ways:
   a. The Product or Planogram can be 'dragged' from the hierarchical tree and 'dropped' into the drawing.
   b. The Product or Planogram can be double clicked to activate it for insertion.
   c. The user can click on the Add Product or Add Planogram icons.

| Icon | Description |
|---|---|
|  | Add Product to Selected Fixture |
|  | Add Planogram to Selected Fixture |

## Constraints on Products that can be Added

**Product Effective or Product Expired dates outside File Effective date**

When a drawing is created, Store Manager allows the user to set an effective date for when that file will become active. Products that have a Product Effective Date (when they become current) dated after the File Effective Date will not be capable of being added to that drawing.

Products that have a Product Expired Date (when they become historical) dated before the File Effective Date will not be capable of being added to that drawing. This will prevent products that will not be current or will be historical at the date of implementation of the Store Plan being added to that drawing.

Products that are not current for the active store plan will be grayed out in the Object Browser and the Object Grid.

> **Note:** 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.
>
> **Note:** This functionality does not apply to planograms, which have parallel mechanisms for version change and planogram substitution.

**Placed Products Expiring before File is Effective**

Placed products that have Product Expired Dates (dates when the product will revert to historical status) before the File Effective Date will be transparent and colored grey in the graphic for the Merchandise Report and Merchandising window. The row in the Merchandise Report that refers to the expired product will also be grayed.

This will allow users to readily identify placed products that have become historical and need replacement.

## Selecting the Required Fixture(s)

The exact method of selecting the required fixtures will depend on the settings within the Configuration Module.

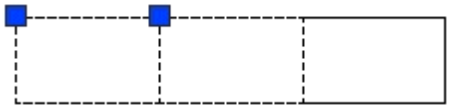
**Pick Near Position** selects the nearest position from a range of fixtures previously selected using Macro Space Management tools.

- If there is more than one bay to be placed, then the user will be prompted to pick another point to indicate the direction of placement.
- If one of the bays adjacent to the first selected fixture is already populated, that direction will automatically be excluded as a possibility and the opposite direction selected.
- If both fixtures adjacent to the first selected fixture are already populated, the user will be prompted to select another bay – the process continuing until the whole planogram has been placed.

The user can cancel the product or planogram placement at any time by pressing <Enter>, <Escape> or right clicking.

**Standard Select** uses the standard Planner selection boxes to pick the fixture(s). If this method is used, Planner will filter by layer, eliminating any fixtures that are not on the required layer. It will then determine groups of runs from fixture adjacencies and start placement at the leftmost fixture.

For all selection methods, selected fixtures will change from solid to dotted outlines, and the insertion point will show as a small blue square.

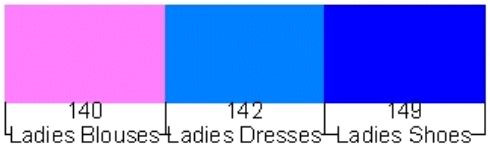


## Placing the Products or Planograms

Once the required fixtures have been selected, together with the required products or planograms, clicking on the add product or add planogram icon will result in the fixture(s) being populated.

| Icon | Description |
|---|---|
|  | Add Product to Selected Fixture |
|  | Add Planogram to Selected Fixture |

The fixture(s) will also be annotated with the number and description of the product or planogram placed.



## Reverse Planogram Population Direction

| Icon | Description |
|---|---|
|  | Reverse Planogram Placement Direction |
|  | Reverse Planogram Placement Direction |

Which option is currently active will depend on whether the user has selected Products or Planograms in the Merchandising hierarchical tree.

When placing the planogram, it will reverse the order of the profiles, and within each profile, it will reverse the positions of the products. A left justified planogram will then be right justified, and vice versa.

## Removing Products or Planograms from Fixtures

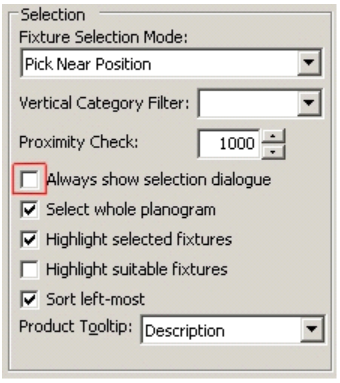
Products or planograms can be removed from fixtures using the remove icons.

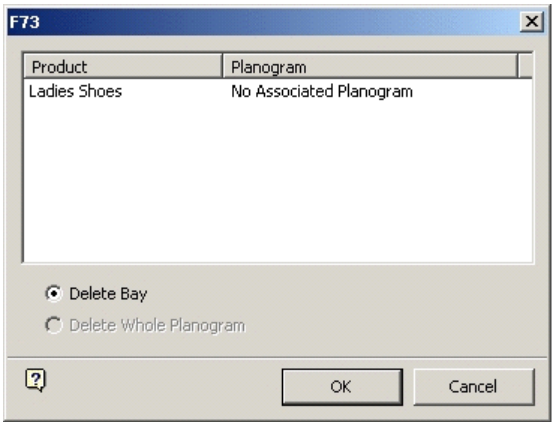
| Icon | Description |
|---|---|
|  | Remove Product from Fixture |
|  | Remove Planogram from Fixture |

Which option is currently active will depend on whether the user has selected Products or Planograms in the Merchandising hierarchical tree.

To remove a product or planogram select the fixtures from where they are going to be removed. When all required fixtures have been selected, click on the appropriate remove icon.

If the **Always show selection dialogue** is enabled in the Merchandising Tab of the Configuration Module, then a dialogue box will always come up to confirm the items to be removed. If the Always show selection dialogue is not enabled, then the dialogue box will only come up if more than one fixture is selected.



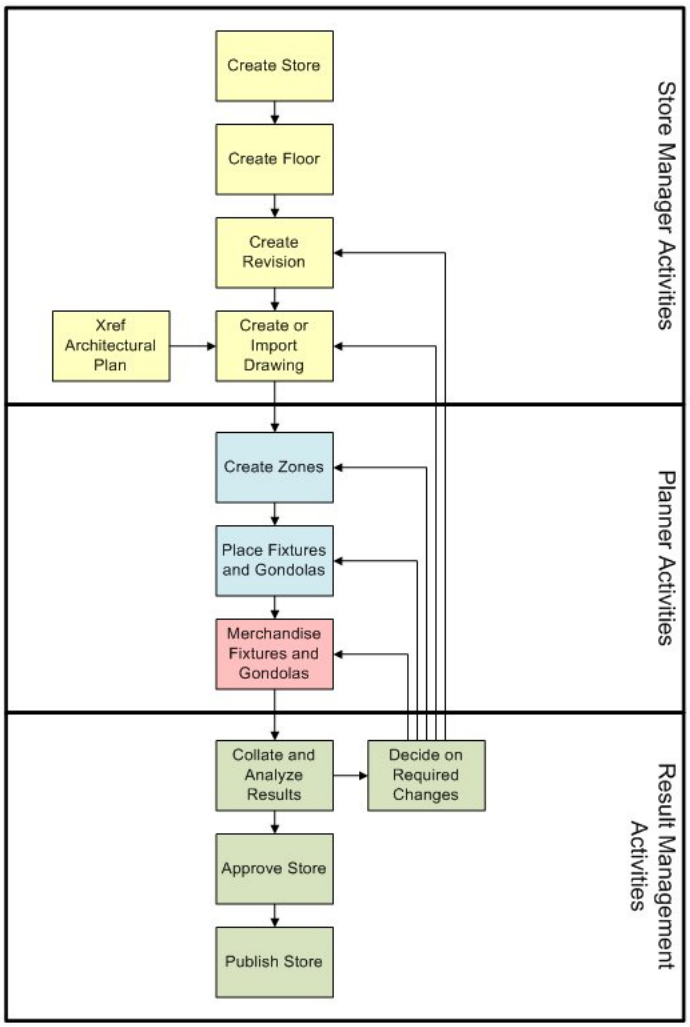

The number at the top of the dialogue box is the fixture number.

- Delete Bay and Delete Whole Planogram are mutually exclusive options selected by a radio button.
- Delete Bay will remove the planogram from the selected bay only. Delete Whole Planogram will remove the planogram from all bays that it has been placed in.

When the correct selection has been made, click on *OK* to remove the product or planogram, *cancel* to leave it in place.

# Other Information

## Business Flows in Merchandising




For Macro Space Management to operate effectively, detailed information has to be input on the stores to be managed.

The starting point is the Store Manager module. This allows stores to be organized into a logical structure. It also allows the individual stores to be sub-divided into floors.

Details of the floors can then be imported into Macro Space Management as Planner drawings. These floors can be subdivided into Zones dedicated to sales of particular product lines.

The Fixtures module within Macro Space Management then allows the detailed layouts of the floors to be planned (multiple plans for a floor within a store being administered by Store Manager).

Each fixture can subsequently be populated by a predetermined quantity and arrangement of sales products using the Merchandising Tab on the Object Browser.

Within the Merchandising Tab, Macro Space Management users can:

- Select single or multiple bays to be populated with merchandise.

- Quickly and efficiently select the required merchandise.
- Substitute merchandise as required.

The user can also see information on the effectiveness of the merchandising plan by switching to Merchandiser and looking at the Key Performance Indicators.

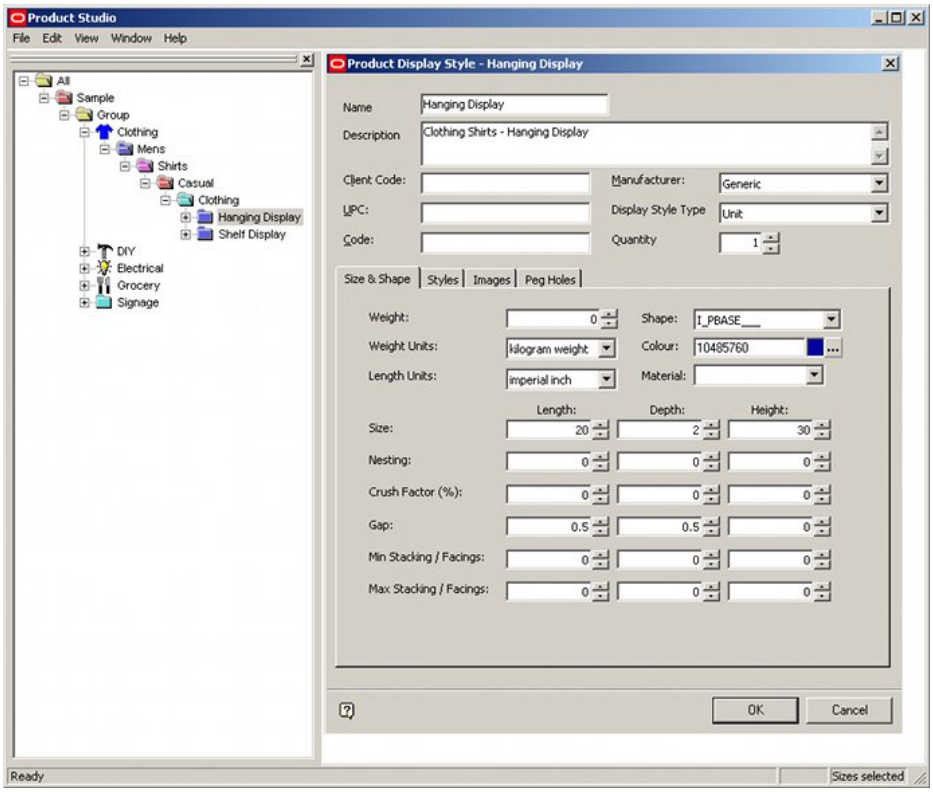
After the floor has been merchandised, Macro Space Management Reports can be used to analyze and report on the effectiveness of the layout. These are available from the Report Studio standalone module.

## 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.

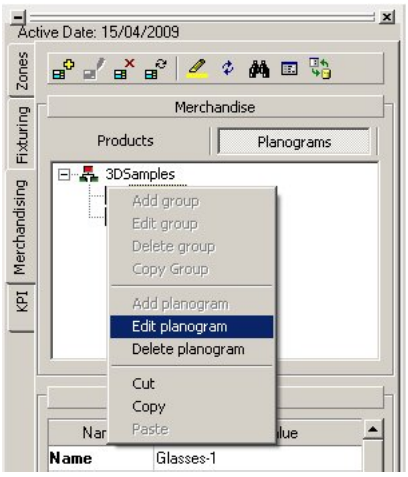
| | |
|---|---|
|  | Edit Definition |

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.



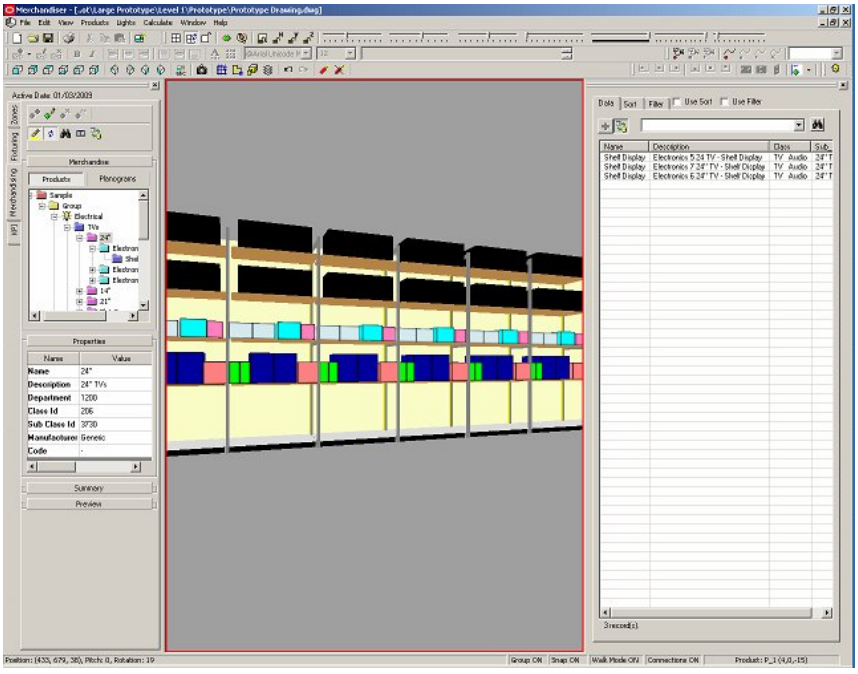
## Merchandiser

**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.

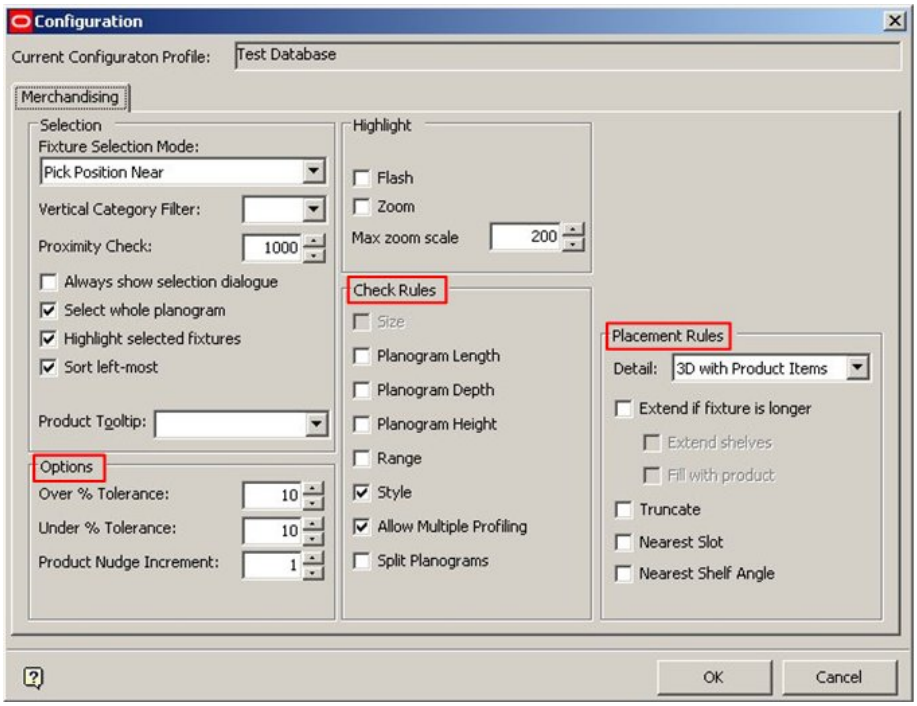
Merchandiser is also used to design and edit planograms (and to place them in a 3D environment).



Planograms can be designed in varying levels of detail. These planograms can be arranged in a hierarchy and subsequently used to populate a store.

## Planogram Placement Options

The **Configuration Module** also contains a series of options concerning how planograms place.



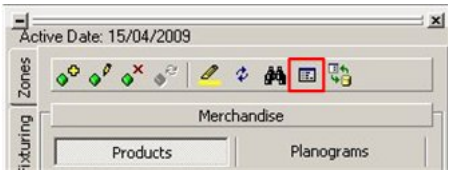

**Check Rules** specify what warnings are given if the selected fixtures do not match the data specified in the planogram definition.

**Options** allow the user to specify the tolerance allowed if the dimensions of the selected fixtures do not match that specified in the planogram definition.

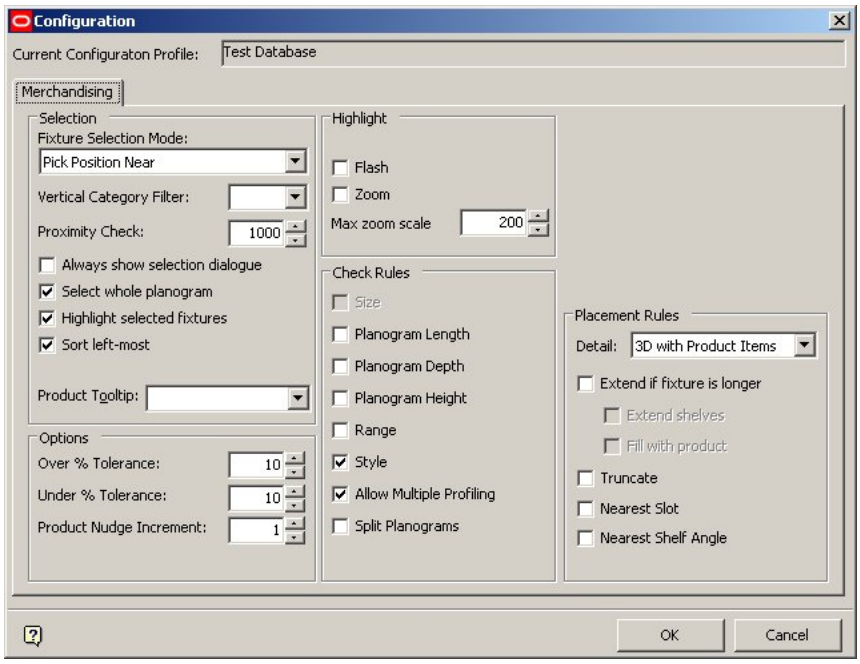
**Placement Rules** specify what will happen if the planogram is longer or shorter than the selected fixtures.

## Accessing the Configuration Options

The Configuration options can be accessed by clicking on the Properties icon on the Merchandising toolbar. (This is available when either Products or Planograms are selected).




This will bring up the Merchandising Tab from the Configuration Module.




## System Variables Used in the Merchandising Tab

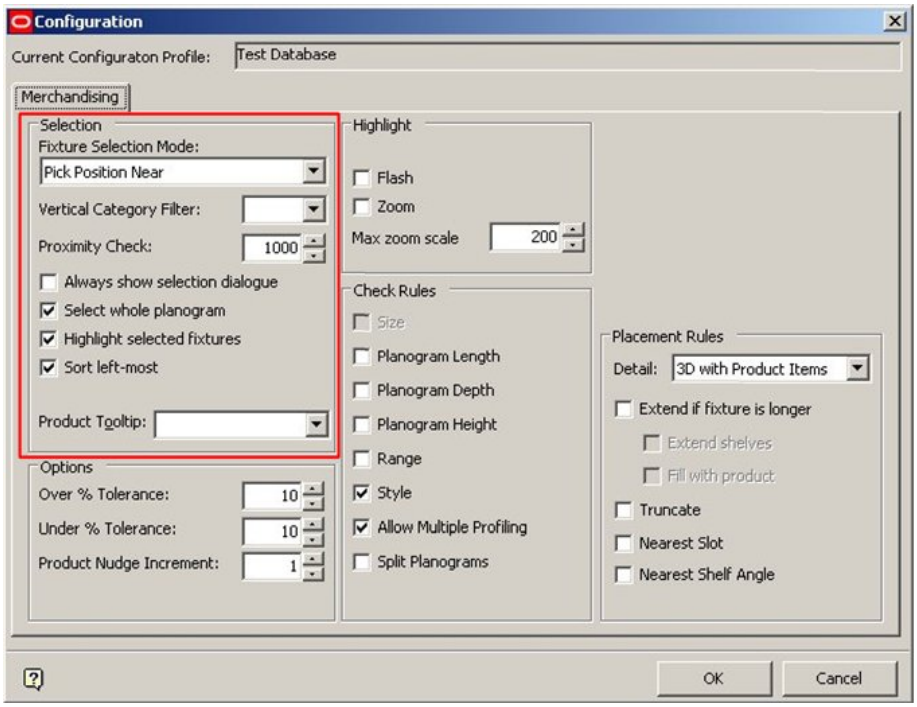
There are six **system variables** that affect the Merchandising Tab:

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.

## Selection Methods for adding Products or Planograms to Fixtures

The Selection frame in the Merchandising Tab of the Configuration Module specifies a series of options determining how fixtures are selected for placement of Products or Planograms.




**Fixture Selection Mode** is selected from a drop down list.




- Pick Position Near selects the nearest position from a range of fixtures previously selected using Macro Space Management tools.
- Standard Selection uses the standard Planner selection boxes to pick the fixture(s).

**Vertical Category Filter** enables the user to select Planograms that have previously been assigned to a vertical category within an aliased layer.

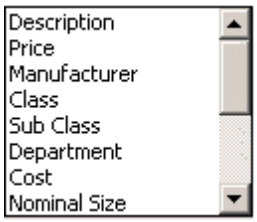
**Always show selection dialogue** permanently turns on the selection dialogue window when planograms are deleted. If this option is not enabled, then the dialogue will only show when multiple planograms are selected – single planograms will be deleted without the need for confirmation.

**Select whole planogram** is used when a Planogram requires multiple bays to be placed.

**Highlight selected fixtures** highlights fixtures previously selected using Macro Space Management tools.

**Sort left-most** sorts selected fixtures in a left to right order. If this option is not enabled, then fixtures are selected in the order they were placed on the drawing.

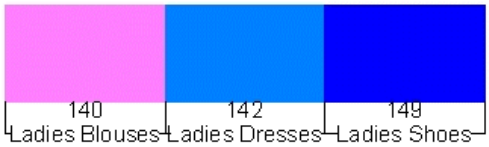
**Product tooltip** enables the type of tooltip to be selected from a drop down list.




# Annotation in Planner

## About Annotation

Annotation is used to label fixtures within the drawing as to what product or planogram has been placed.



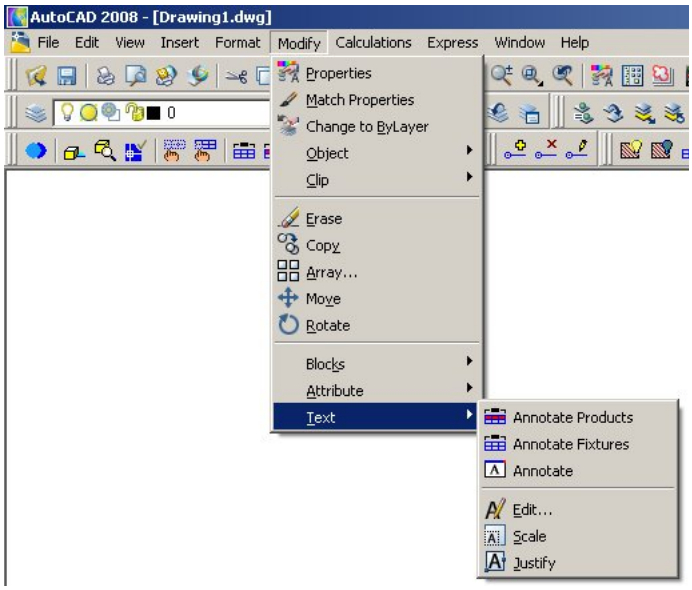

The number is the product or planogram identification code.

Annotation also displays the name of the product or planogram.

Products or planogram are annotated when placed, but the annotation requires refreshing when they are moved or deleted.

## Refreshing Annotation

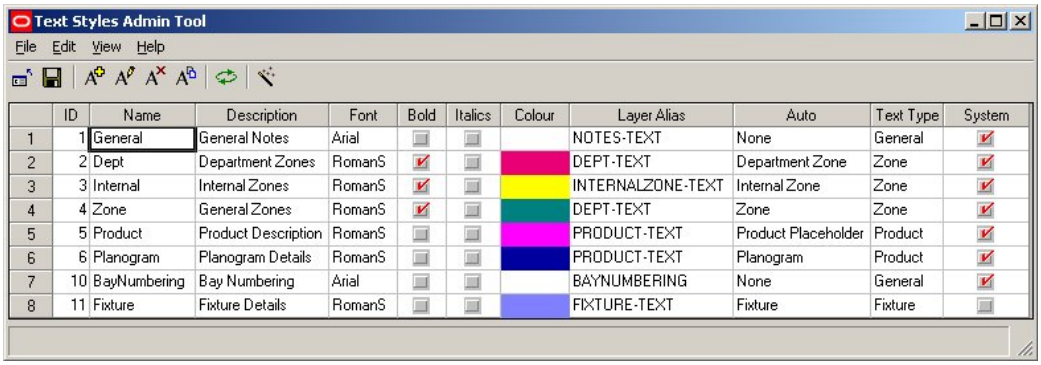
From the Modify menu, select the Text options. Use standard Planner techniques to select the required objects in the drawing. Right click to stop selecting objects. All selected objects will be re-annotated.



## Configuring Annotation

Annotation can be configured from using the Text Styles option within the Administration Module.

> **Note:** The Administration Module is only available to users with Administrator's privileges.




| | ID | Name | Description | Font | Bold | Italics | Colour | Layer Alias | Auto | Text Type | System |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 1 | General | General Notes | Arial | ☐ | ☐ | | NOTES-TEXT | None | General | ☑ |
| 2 | 2 | Dept | Department Zones | RomanS | ☑ | ☐ | | DEPT-TEXT | Department Zone | Zone | ☑ |
| 3 | 3 | Internal | Internal Zones | RomanS | ☑ | ☐ | | INTERNALZONE-TEXT | Internal Zone | Zone | ☑ |
| 4 | 4 | Zone | General Zones | RomanS | ☑ | ☐ | | DEPT-TEXT | Zone | Zone | ☑ |
| 5 | 5 | Product | Product Description | RomanS | ☐ | ☐ | | PRODUCT-TEXT | Product Placeholder | Product | ☑ |
| 6 | 6 | Planogram | Planogram Details | RomanS | ☐ | ☐ | | PRODUCT-TEXT | Planogram | Product | ☑ |
| 7 | 10 | BayNumbering | Bay Numbering | Arial | ☐ | ☐ | | BAYNUMBERING | None | General | ☑ |
| 8 | 11 | Fixture | Fixture Details | RomanS | ☐ | ☐ | | FIXTURE-TEXT | Fixture | Fixture | ☐ |

Please consult Oracle technical support for advice on how to configure these options.

# 7

# The Merchandiser Module

## Overview of Merchandiser

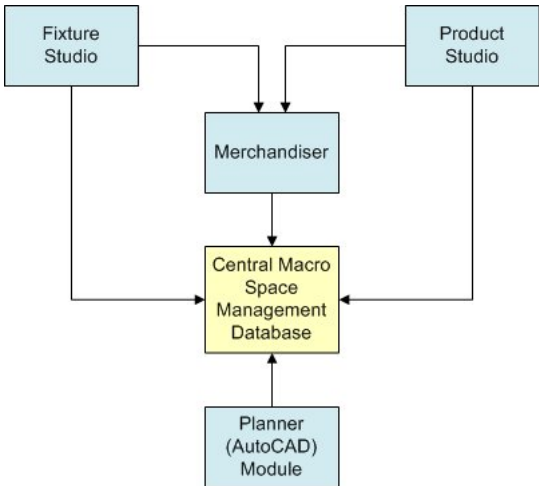
**Merchandiser** can be used to create, edit and review 3D Virtual Reality Stores.

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.

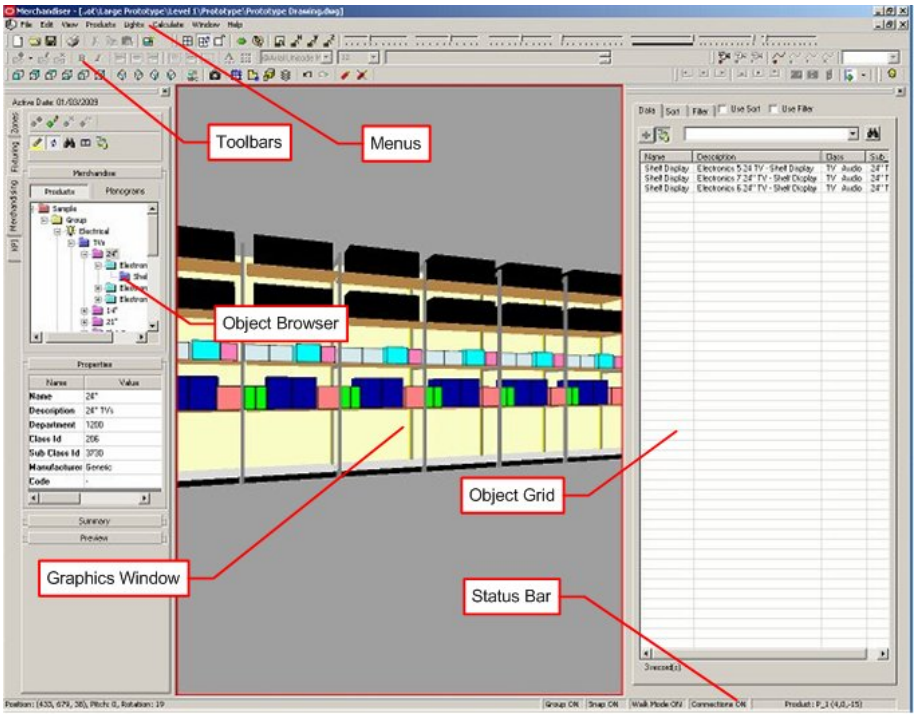
The results of these activities are stored in the Macro Space Planning database.




**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.

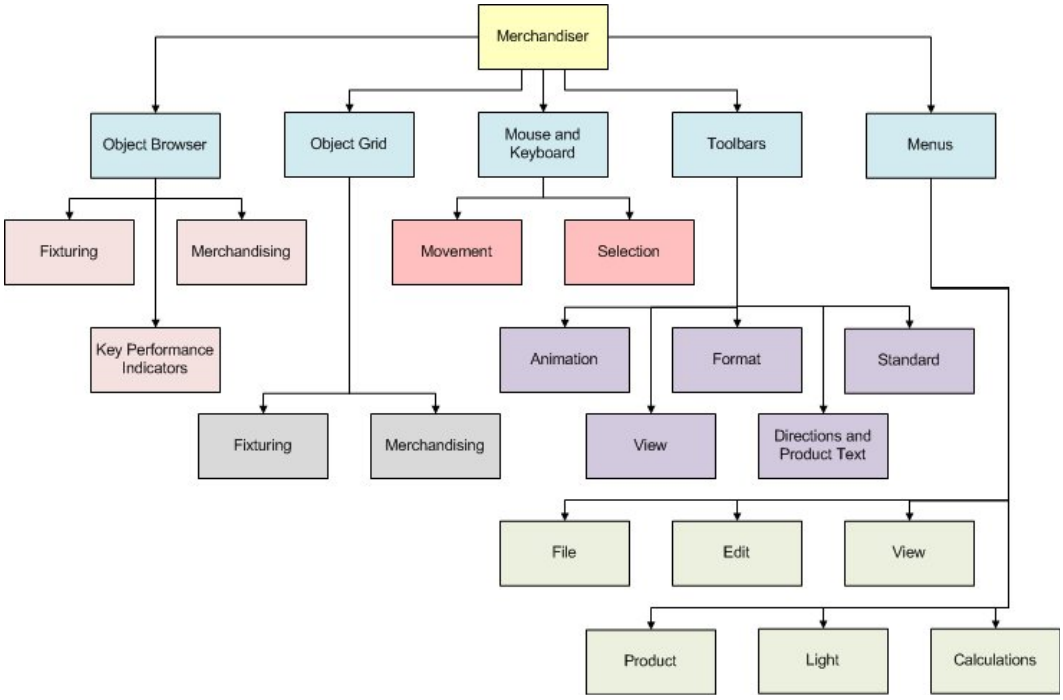
The **Object Grid** provides an alternative way to place equipment and merchandise.

The **Graphics Window** displays a 3D plan of the selected store.

The **Status Bar** gives information on current operations.

## Merchandiser Components

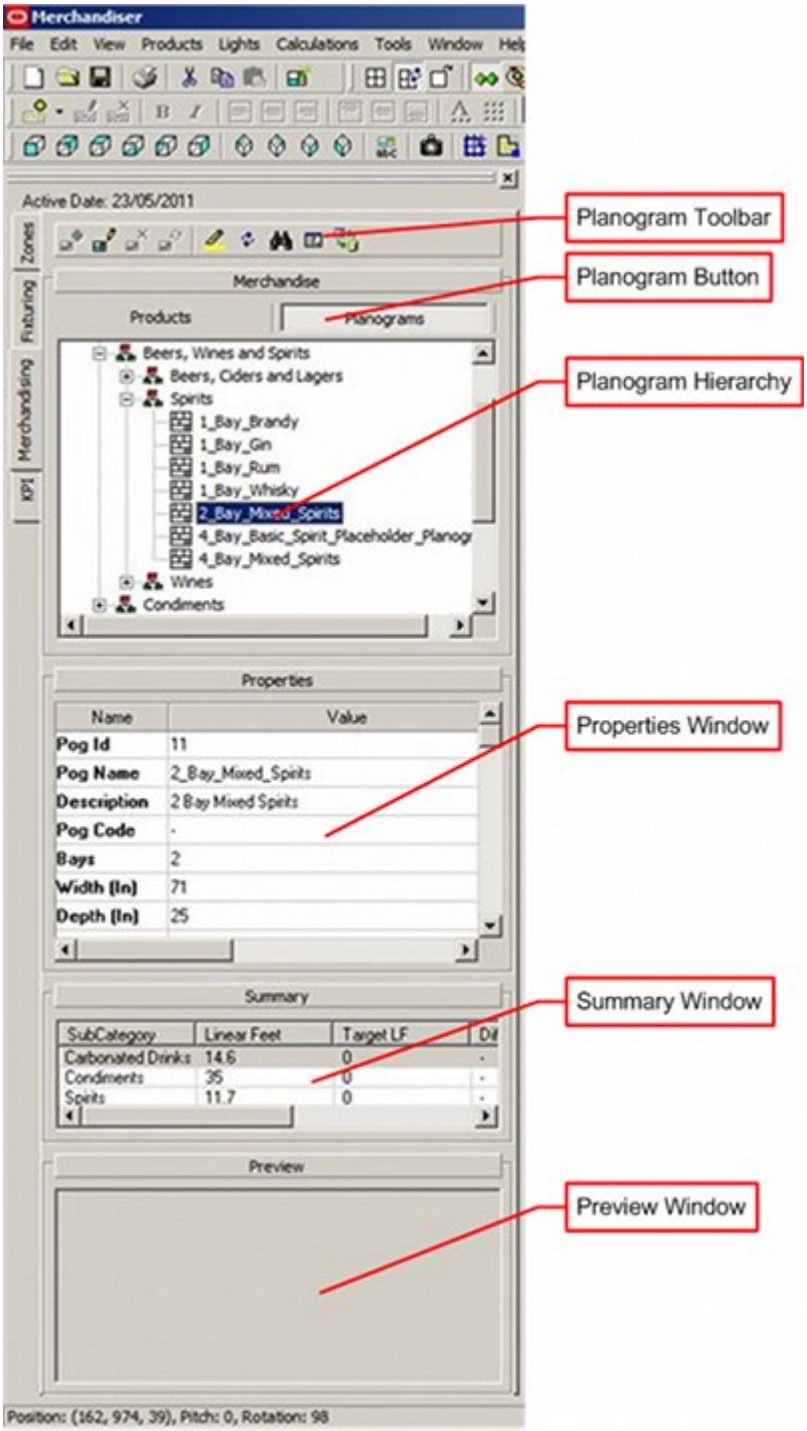
The varying operations within Merchandiser are controlled in one of four ways: from the Object Browser and Object Grid, from the Menu Bar, from the toolbars, or using the mouse and keyboard.



# 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).

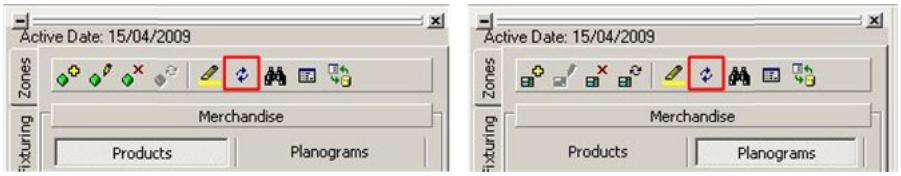
The **Properties Window** gives details of the currently selected object.

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 toggled 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 toggled 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.

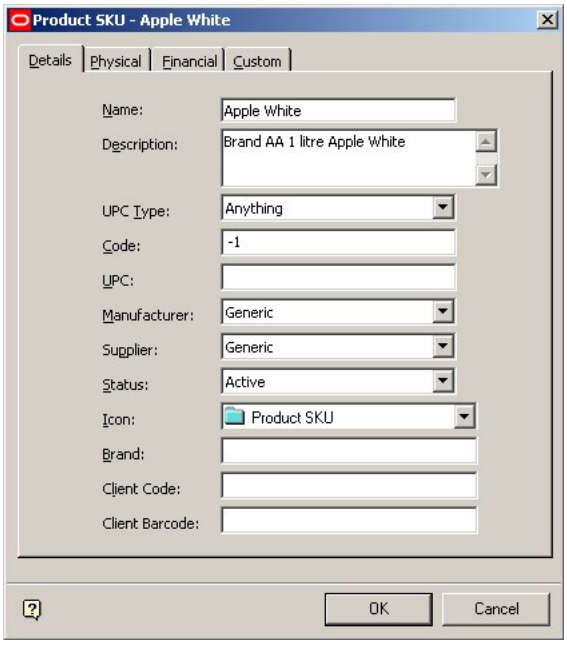
To highlight a product or planogram, find the required item in the hierarchical tree and click on it. The item will then be highlighted in the drawing – the exact method of highlighting depending in the options selected in the Configuration Module.

### 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.

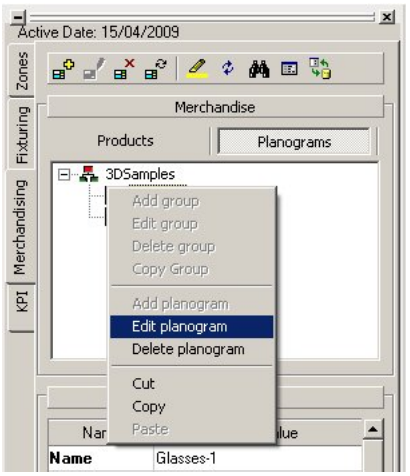



**Note:** The Product Studio dialogue box that opens will depend on what level in the product hierarchy has been selected.

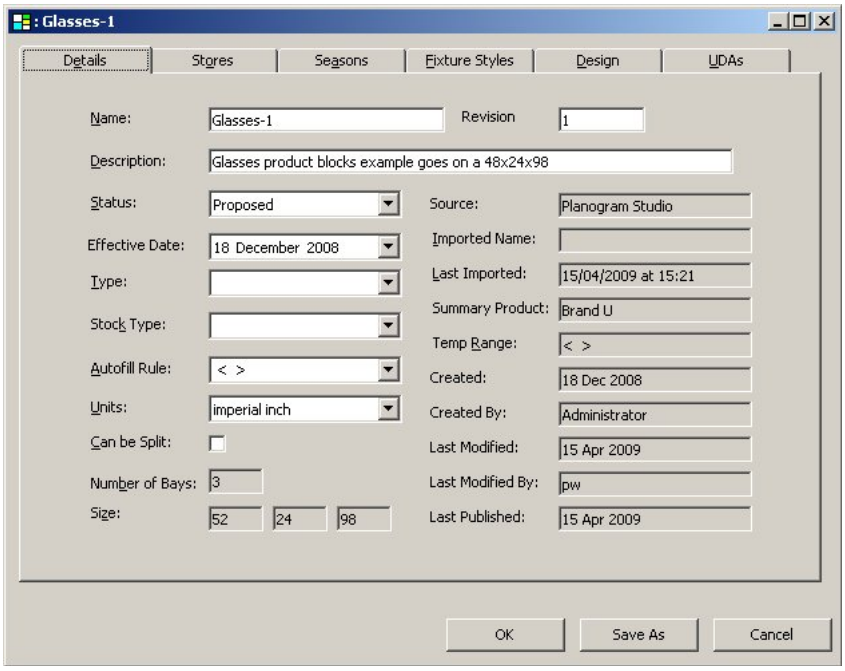
Once changes have been made and saved, they can be used within Merchandising after the Refresh option has been used on the Object Browser.

### Editing Planogram Definitions

To Edit a Planogram, highlight the required planogram in the hierarchy and right click to bring up the pop-up menu.



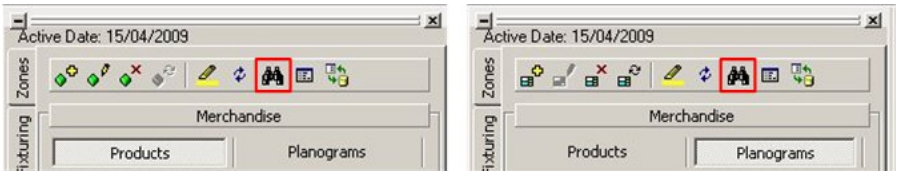

(If the merchandiser module is already open, it will be made the active window). The currently selected Planogram will then be presented for editing.



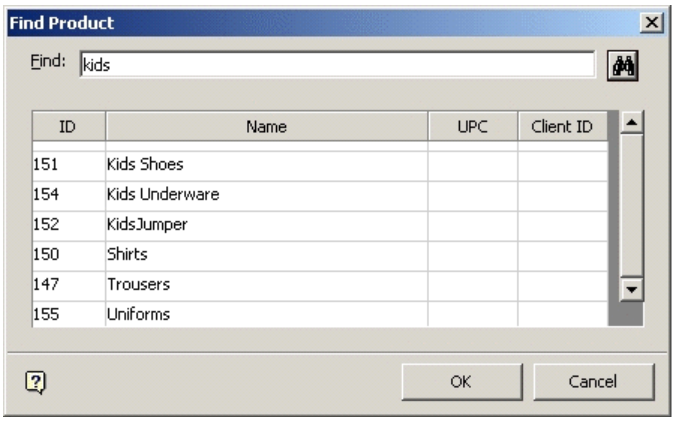

Once changes have been made and saved, they can be used within Merchandising after the Refresh option has been used on the Object Browser.

### 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.

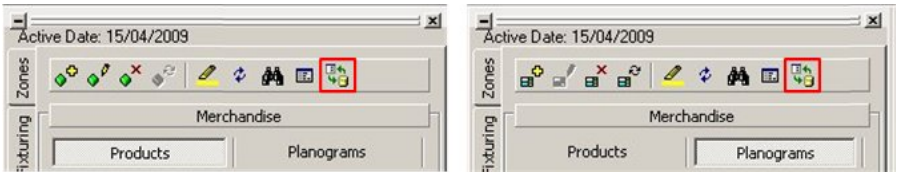


This will bring up a list of any blocks matching the search string.

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

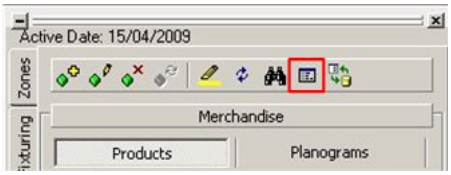
The Refresh Icon refreshes the both Planogram and Product information in the hierarchical tree.



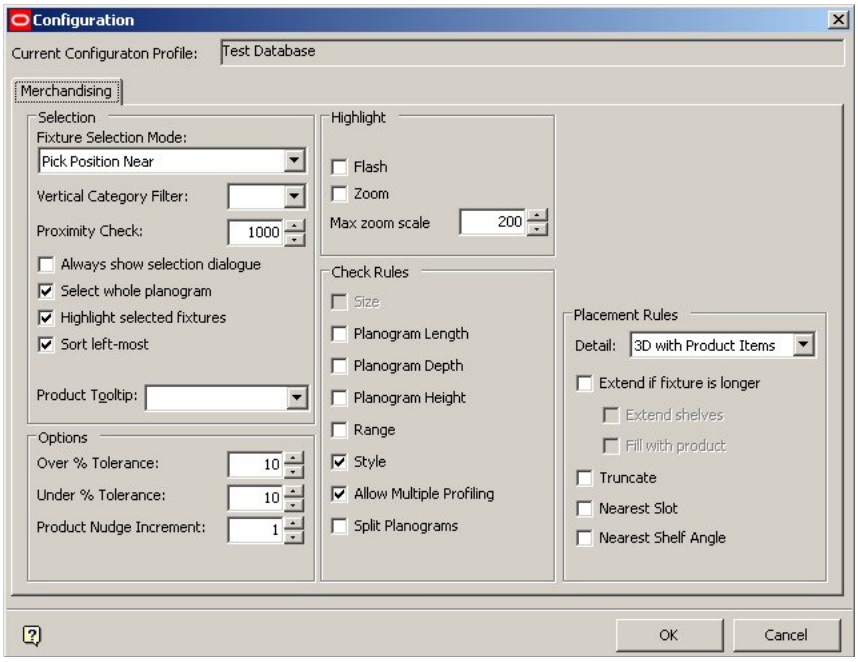

Using Refresh ensures that the information is brought up to date with any changes made in Merchandiser or Product Studio, both to the hierarchical tree and to any products or planograms added to, edited, or deleted from it.

### 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.




# 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 |

| Shortcut Keys | Also available from: | Function |
|---|---|---|
| <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

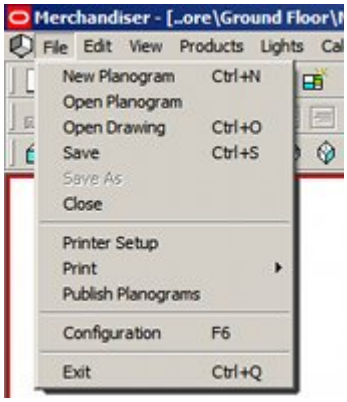
| Shortcut Keys | Also available from: | Function |
|---|---|---|
| <Ctrl> + G | Edit pull down menu | Toggle Group On or Group Off |
| <Ctrl> + A | Edit pull down menu | Select All |
| <Ctrl> + E | Edit pull down menu | Empty selected fixture/shelf of products |
| <Ctrl> + C | Edit pull down menu | 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 |

| Shortcut Keys | Also available from: | Function |
|---|---|---|
| <Shift> + up or down cursor keys | N/A | Move selected shelf up or down on parent object |

## Menu Options

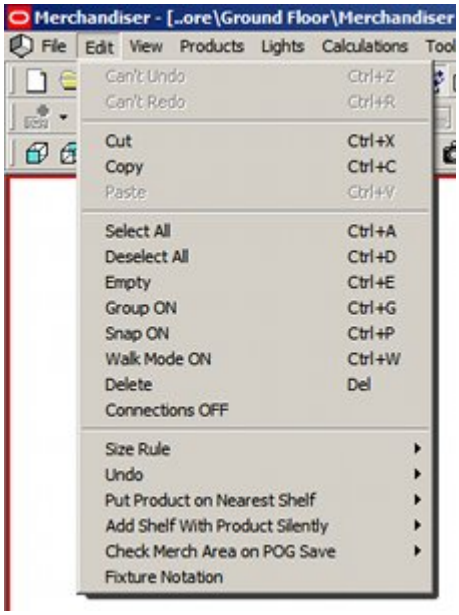
### File Menu

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.

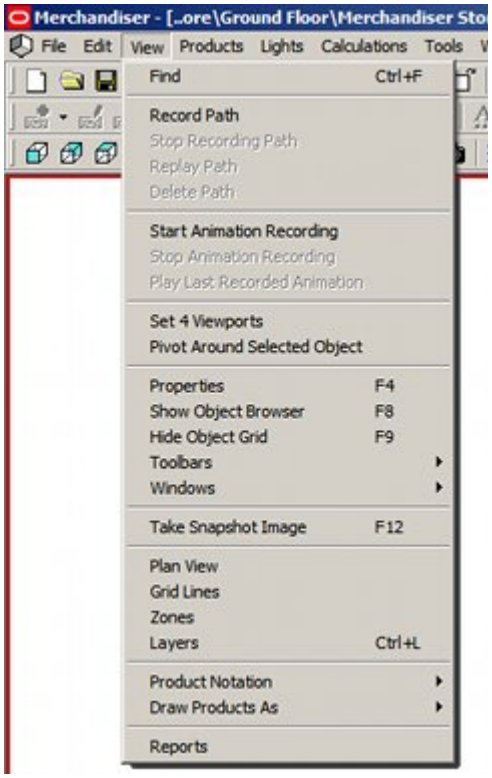
Select all, De-select all, Empty and Delete enable the user to carry out bulk opera6tions on the drawing.

Group On or Group Off determines how Families and Groups are selected.

Size Rule allows the user to specify whether on 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 though the drawing for the purpose of making a Virtual Reality movie of the store layout.

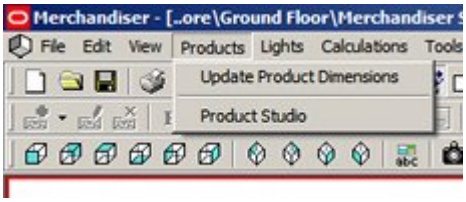
**Start Animation Recording**, **Stop Animation Recording** and **Replay Last Recorded Animation** are options concerned with Virtual Reality movies of the store layout.

**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.

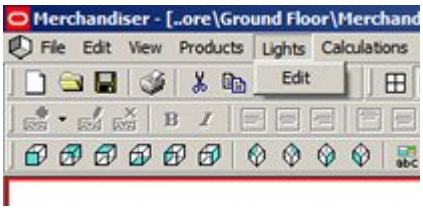
### Products Menu

The Product pull down menu enables Product Dimensions to be updated. It also allows access to Product Studio.

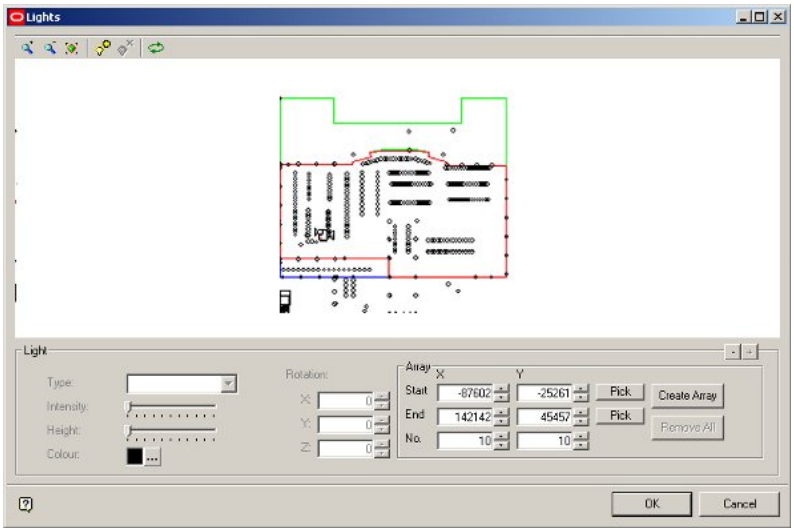



## Lights Menu

The Lights pull down menu calls up the Lights dialogue box

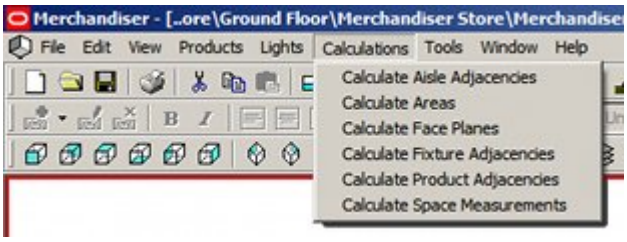



This allows the user to specify the lighting arrangements for the store.




## 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.

#### Window Menu

The Window menu allows users so arrange multiple store plans (if open) and to select which 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 |
|  | 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 |

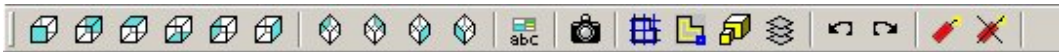
| Icon | Description |
|---|---|
|  | Play Recorded AVI |
|  | Start Recording Path |
|  | Stop Recording Path |
|  | Replay Path |
|  | Delete Path |
|  | Available Recorded Paths |

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 |

| Icon | Description |
|---|---|
|  | SE isometric view of selected object |
|  | SW isometric view of selected object |
|  | Show product text |
|  | Show product text |
|  | Show gridlines 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, gridlines, 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 |

| Icon | Description |
|---|---|
|  | Delete Selected Label |
|  | Bold Text |
|  | 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 |

| Icon | Description |
|---|---|
| | Print Options |
| | 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 |

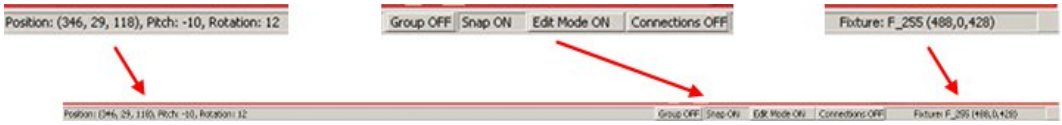
| Icon | Description |
|---|---|
|  | Lock Z axis movement |
|  | Set movement speed |
|  | Set texture quality |
|  | Set level of detail |
|  | Set front clipping plane |
|  | Set back clipping plane |
|  | Light Intensity |
|  | 2D Label Viewing Distance |

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.

1. **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.

2. **Snap On/Off**

Turning Snap On or Off determines whether the currently selected fixtures will attached to the Snap Grid (Grid lines option - View menu) or not.

3. **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.

4. **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.

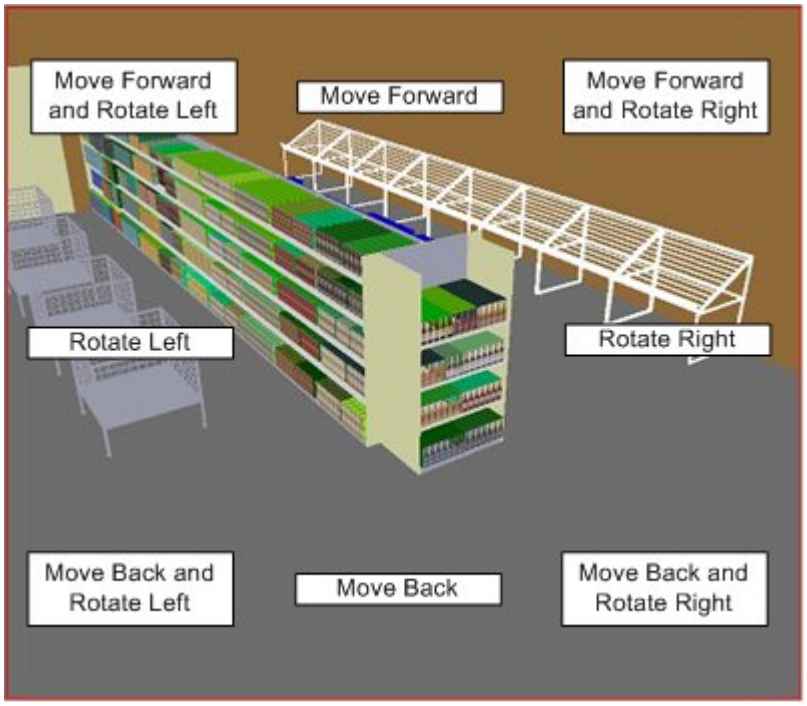
#### Movement Speed

Movement speed in the floor plan is determined by the setting in the Movement speed slider control.



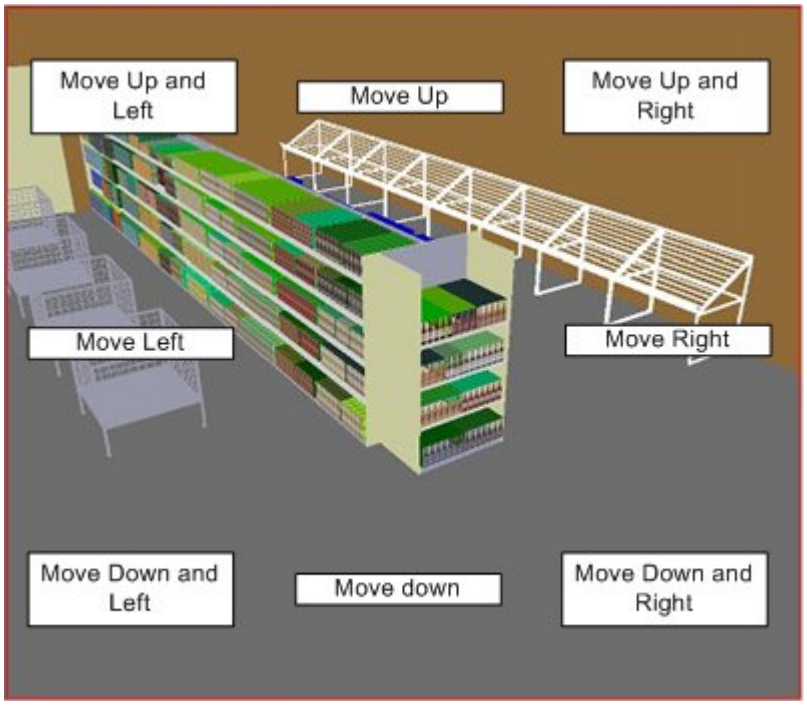

**Left Mouse Button**

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 of 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.

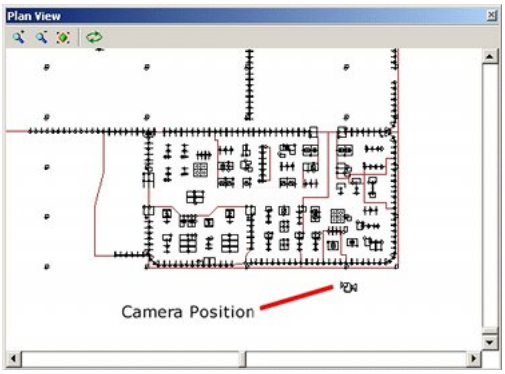
- **Lock Y Axis Movement** will freeze the drawing with respect to forward and back movement.
- **Lock Z Axis Movement** will freeze the drawing with respect to vertical movement.

**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.

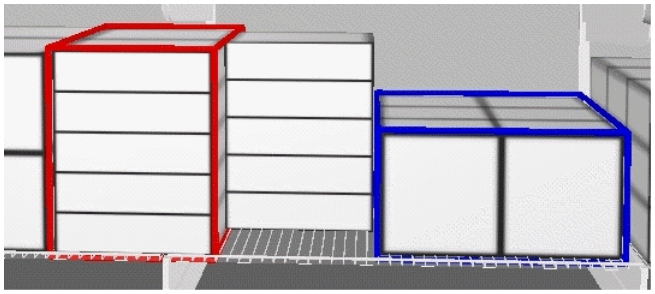
The camera position can be repositioned by holding down the left mouse key and dragging it to its new position.

## 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

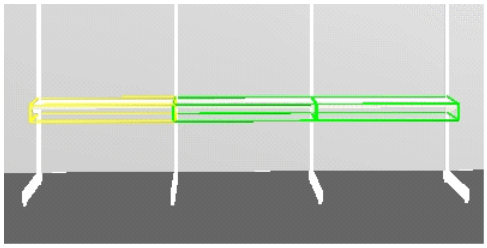
Standard Selection Sets occur when the objects are not in a Group or Family. The first object selected for a Standard Selection Set will be enclosed in a red frame. Subsequent objects selected for a set of objects will be enclosed in blue frames.



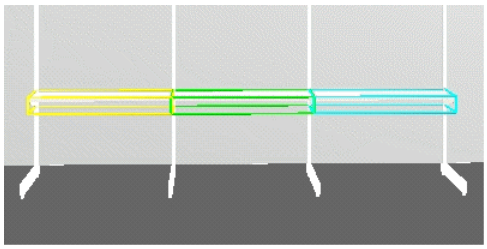
Individual objects can be de-selected by left clicking on them with the mouse for a second time. All objects in the Standard Selection Set can be de-selected by clicking on the first selected object (red frame) for a second time.

#### 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

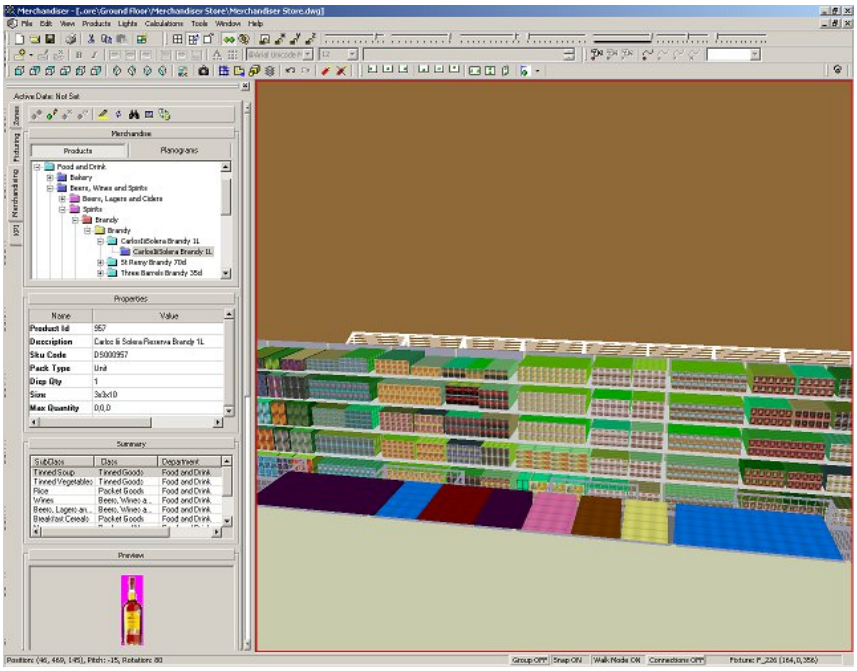
All currently selected objects can be de-selected by <Ctrl + D>.

# Floor Plan Display Options

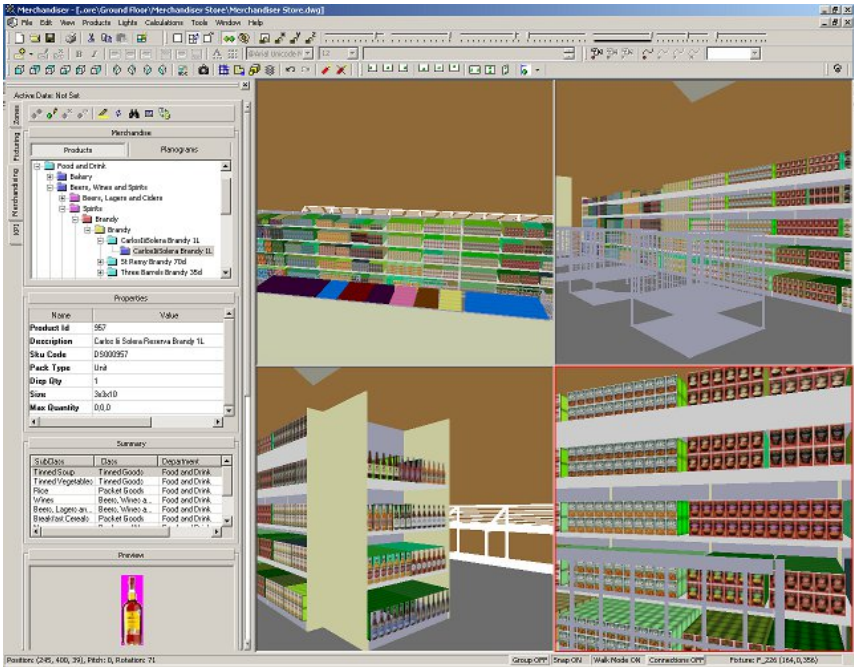
## Overview of Single and Four ViewPorts

Merchandiser 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

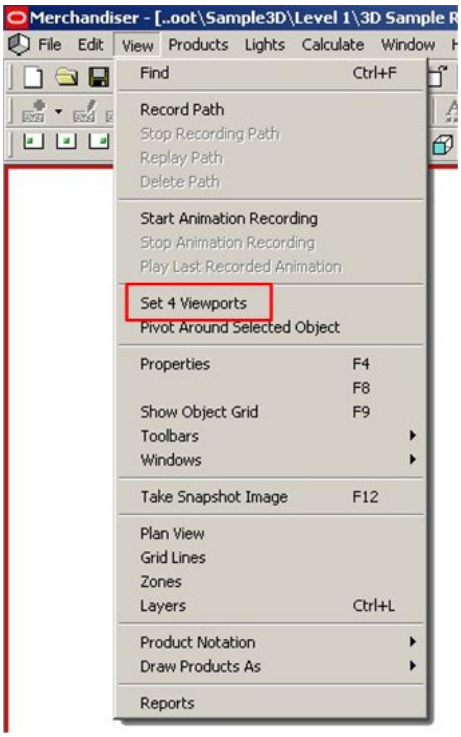
When the drawing opens, it will show a single view of the store plan.

(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.

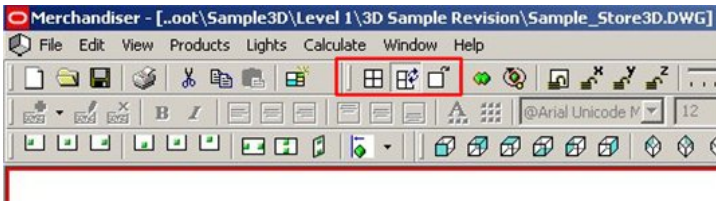
If using the View pull down menu, clicking on Set 4 ViewPorts will change the display from one to four viewpoints.

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.

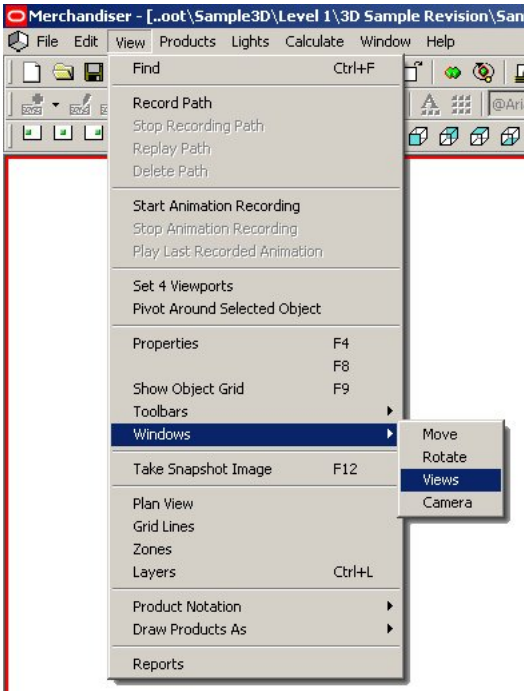
The Next View icon toggles between the available views.



| Icon | Description |
|---|---|
|  | Switch to 4 ViewPorts |
|  | 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.



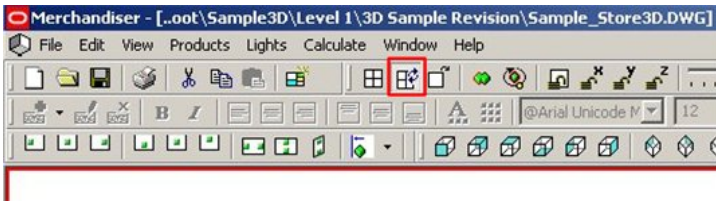

This will bring up the Views dialogue box.




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 to 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.

## 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

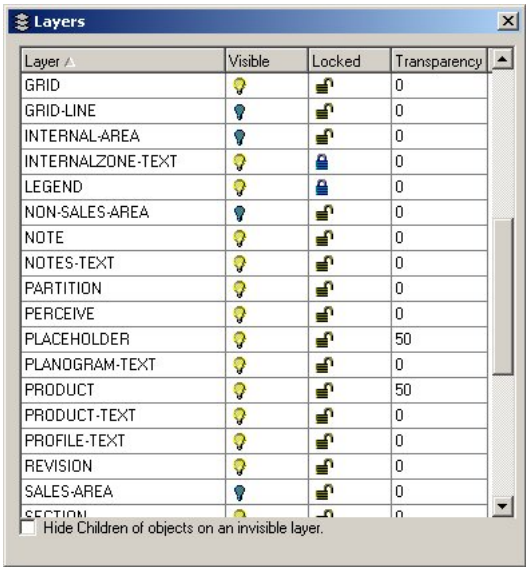
The transparency values for a layer (and the objects on that layer) can be changed anywhere within a range of 0% - 100%. If the transparency is set to 0%, objects are completely opaque. If the transparency is set to 100% objects are completely transparent.

## 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. |

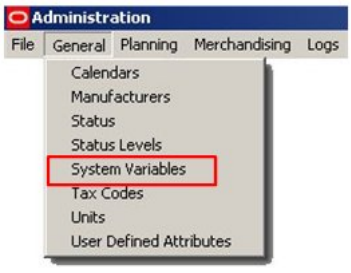
The lock for each layer can be toggled on or off by clicking on the appropriate icon.

> **Note:** Depending on the system variable settings, some layers will be automatically locked depending on which Object Browser tab the user is in.

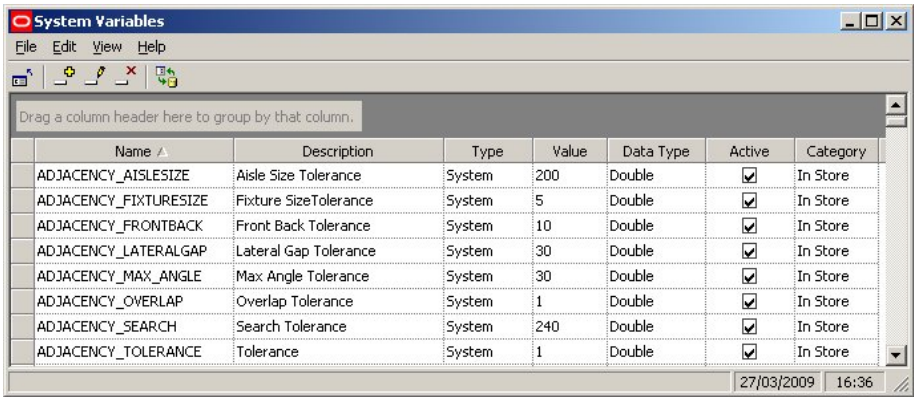
If the system variable is enabled, when in the Fixturing Tab, all layers associated with merchandising are locked. Similarly, when in the Merchandising Tab, all layers associated with fixturing are locked.

### LOCK_OBJECTS_ON TAB_CHANGE System Variable

The **LOCK_OBJECTS_ON_TAB_CHANGE** system variable is accessed from General Menu in the Admin Module.




This brings up the System Variables dialogue box.




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.

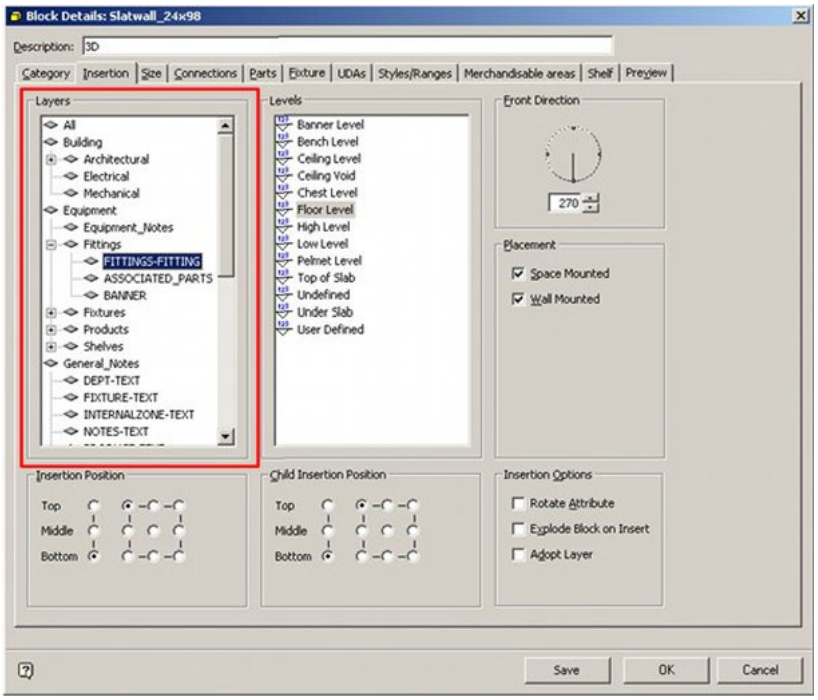
If set to 1, the layers will be automatically locked.

> **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.



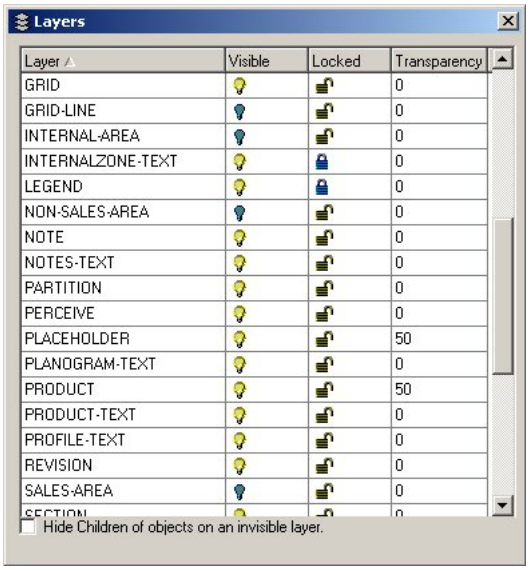

**Note:** If objects are locked, then they cannot be deleted, moved, etc. If it is desired to do this, the layer must first be unlocked.

## Changing the Transparency of Objects

It is possible to **change the transparency** of objects so that they become more or less opaque when in place in the Virtual Reality environment.

This is done by using the Transparency option in the Layers dialogue box, accessible from the View toolbar

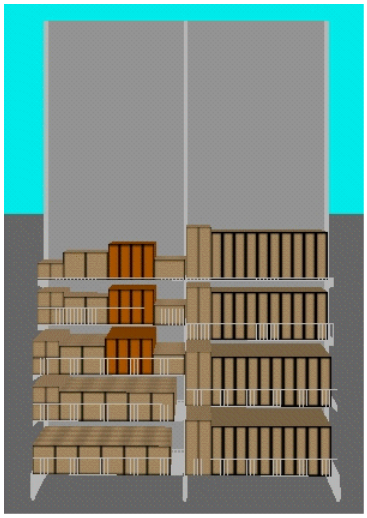




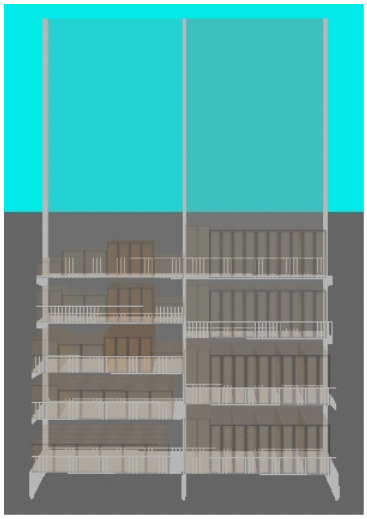

The degree of transparency for each layer can be set anywhere within a range of 0% - 100%.

If the transparency is set to 0%, objects are completely opaque. If the transparency is set to 100% objects are completely transparent

In the example below, the transparency is set to 0% - opaque.



In the example below, the products and back panels have been set to 75% transparency.

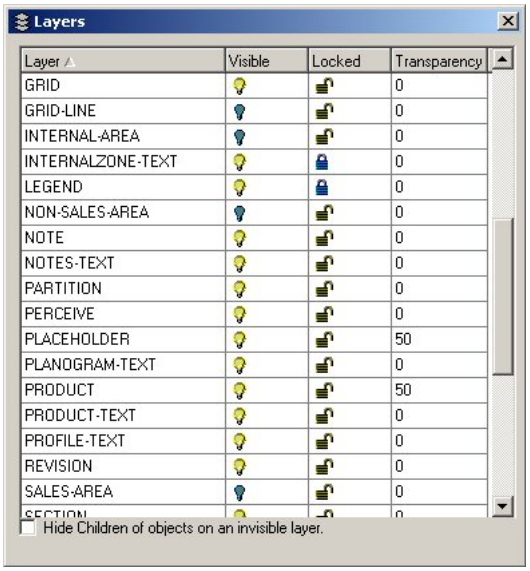


## Changing the Visibility of Objects

The **visibility of objects** can be changed so that they show or are hidden from view in store plans.

This is done by using the Visibility option in the Layers dialogue box, accessible from the View toolbar






This shows the layers and whether they are visible or not.

| Icon | Description |
|---|---|
|  | Layer visible |
|  | Layer not visible |

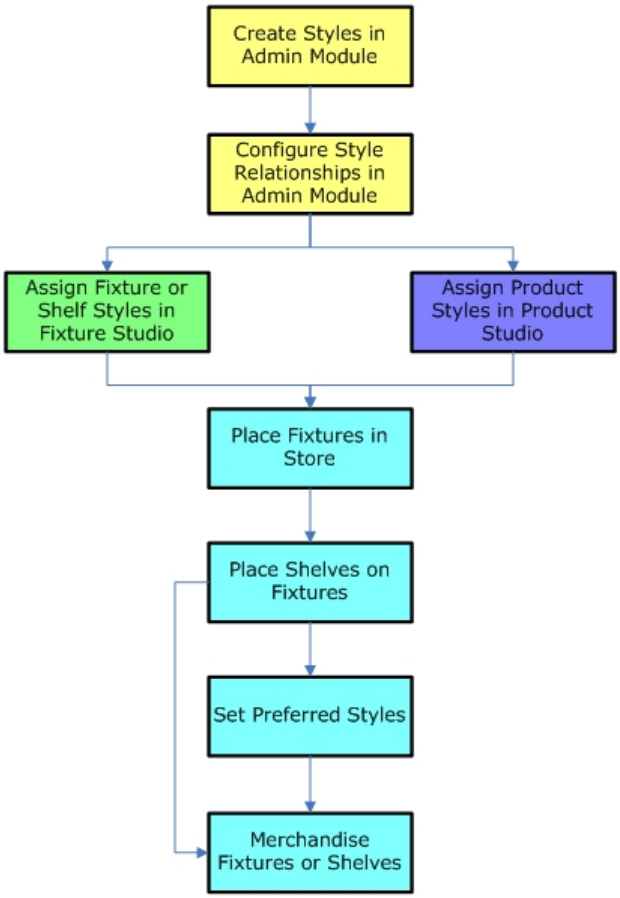
The visibility for each layer can be toggled on or off by clicking on the appropriate icon.

If the layer is not visible, all objects on the layer will be hidden.

# 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.



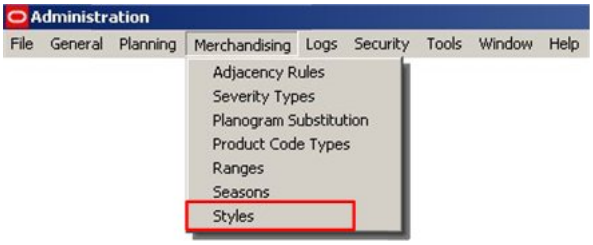

Each of these steps is discussed in more detail in the following topics.

## Configuring Styles

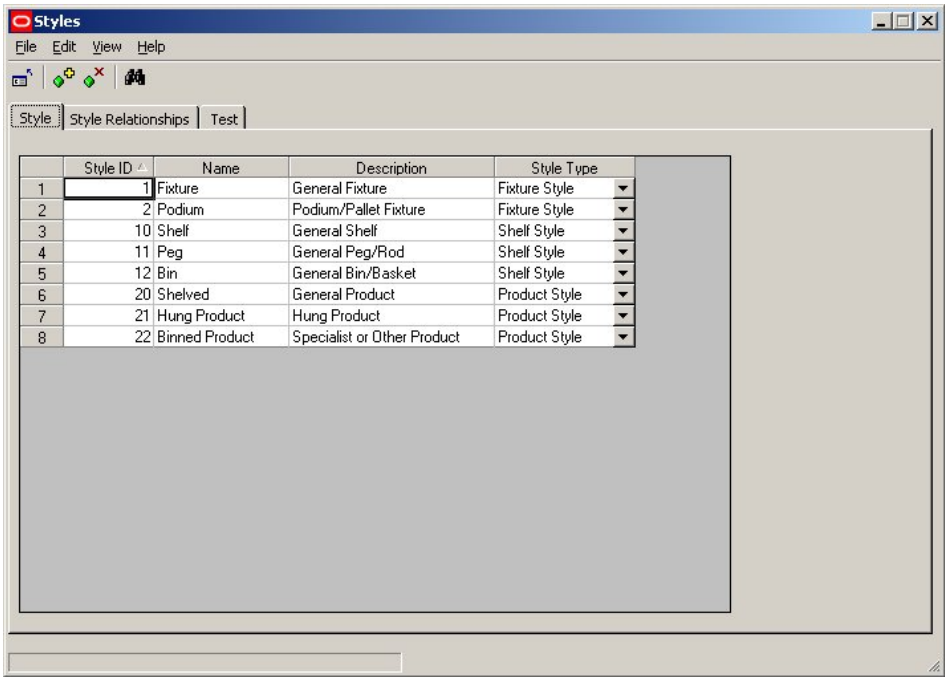
**Styles** can be configured from within the Admin Module.

> **Note:** The Admin 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

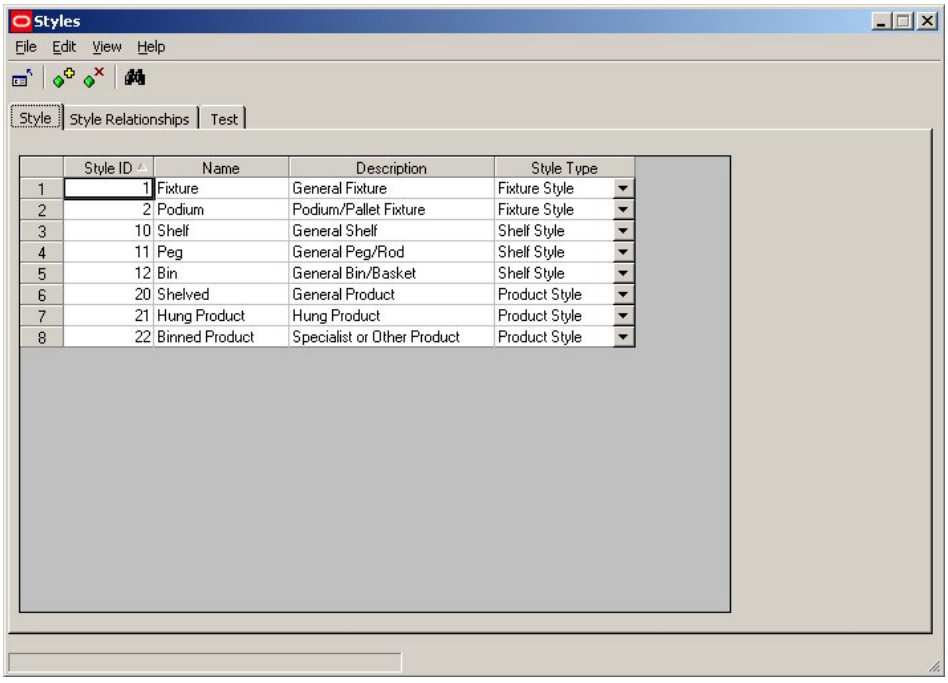
This allows relationships to be set up between different types of styles.

#### 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 Admin Module.




| Icon | Description |
|---|---|
|  | Add style |
|  | Delete style |

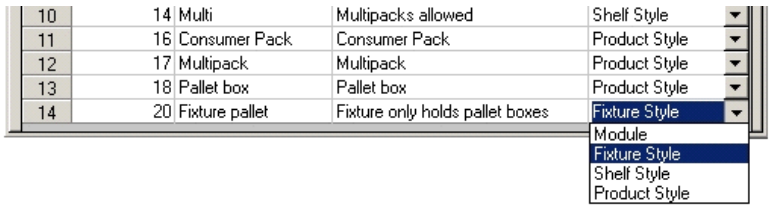
**Adding a Style**

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.




**Tip**: Fixture, Shelf and Product styles are in current use. Module style has yet to be implemented.

### Deleting a Style

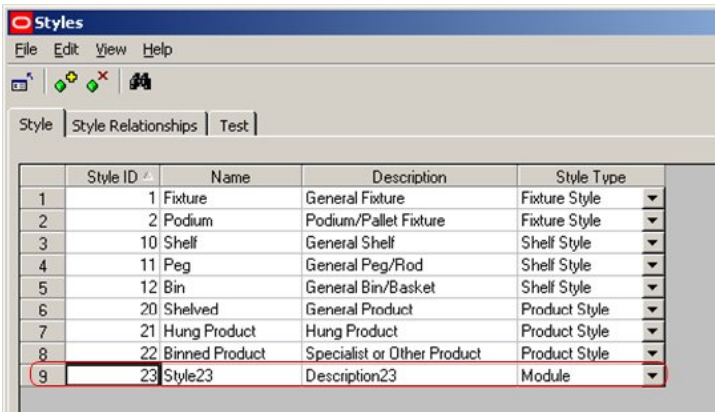
Styles can be deleted by highlighting a style and clicking on the Delete Style icon.

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 Admin 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

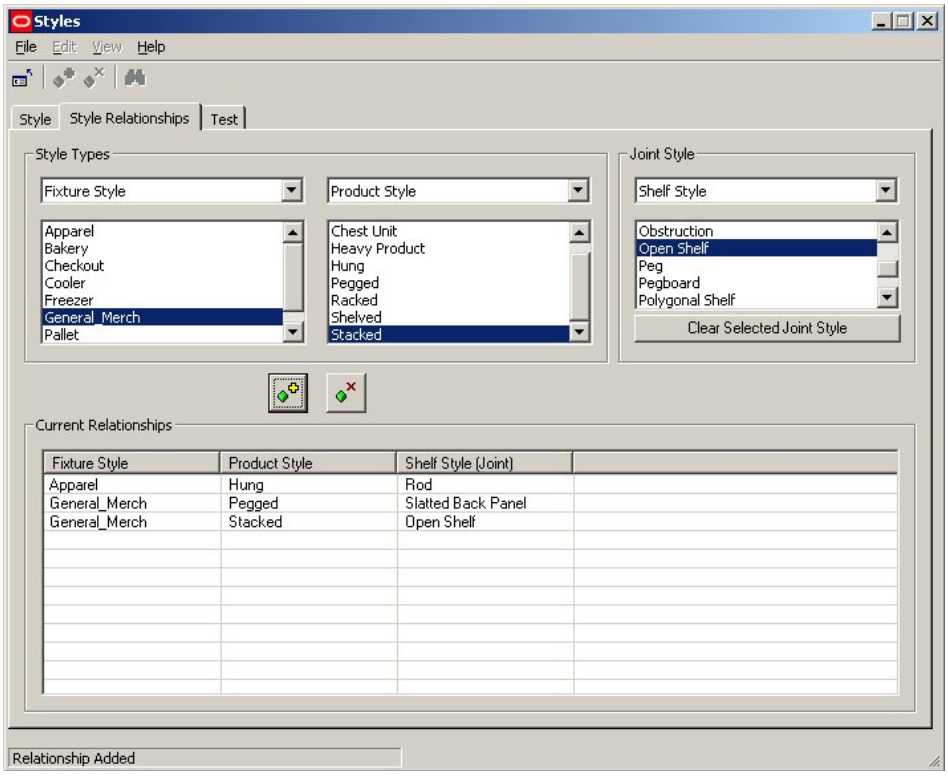
Styles relationships can be deleted by highlighting a style and clicking on the Delete Style Relationship icon.

**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.

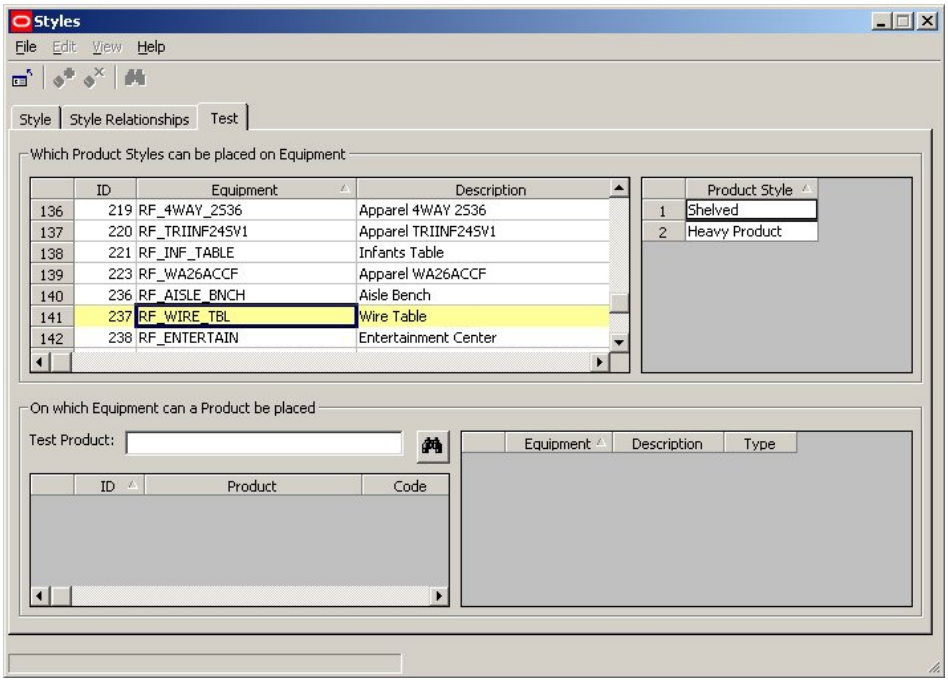
### Deleting a Joint

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.<br>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.<br>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.<br>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.

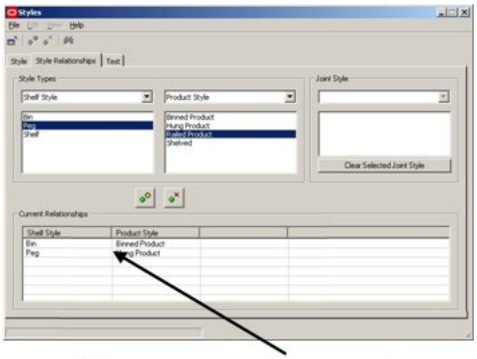
**JOINT**

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.<br><br>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 Admin) fixtures that have a Fixture Style of Metal assigned can accept shelves that have had either 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.

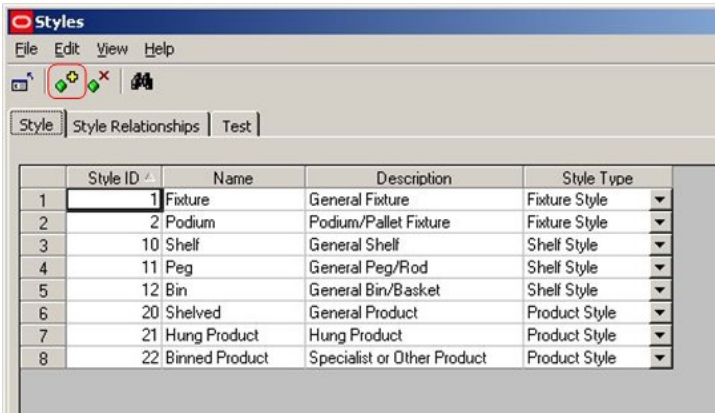
For example shirts could be available in both Hung and Folded Product (Display) Styles.

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.

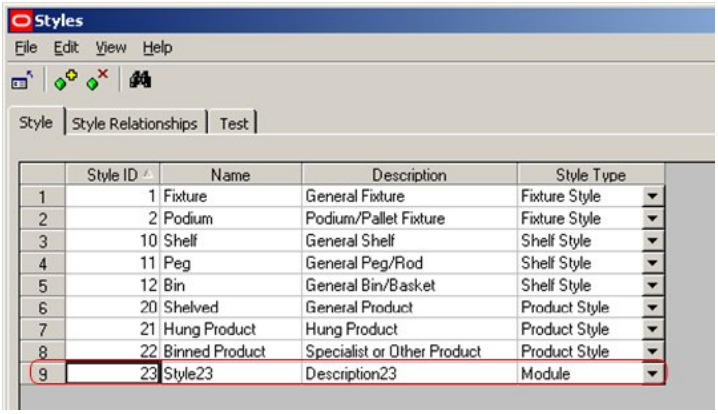
### Adding Styles in Admin Module

**To add styles** to the available list, open the Styles option in the Admin Module. Use the Style Tab and click on the Add Style Icon (circled).

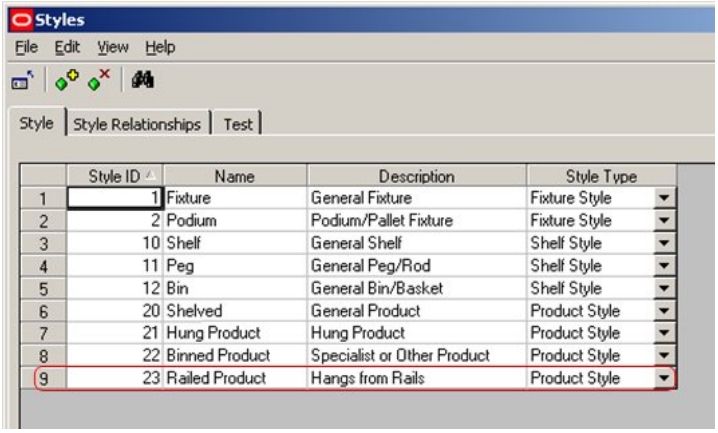



| | Style ID | Name | Description | Style Type |
|---|---|---|---|---|
| 1 | 1 | Fixture | General Fixture | Fixture Style |
| 2 | 2 | Podium | Podium/Pallet Fixture | Fixture Style |
| 3 | 10 | Shelf | General Shelf | Shelf Style |
| 4 | 11 | Peg | General Peg/Rod | Shelf Style |
| 5 | 12 | Bin | General 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 |

This will add another line to the information grid (circled).




Edit this line until it has the desired information.



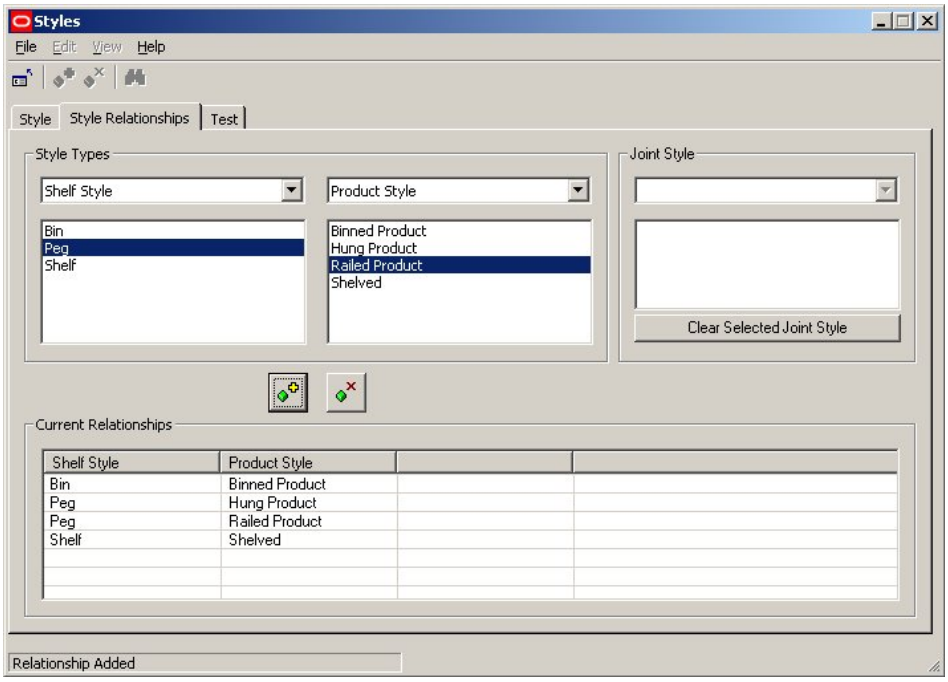

Other styles can be added as required.

Finally, exit to save the styles.

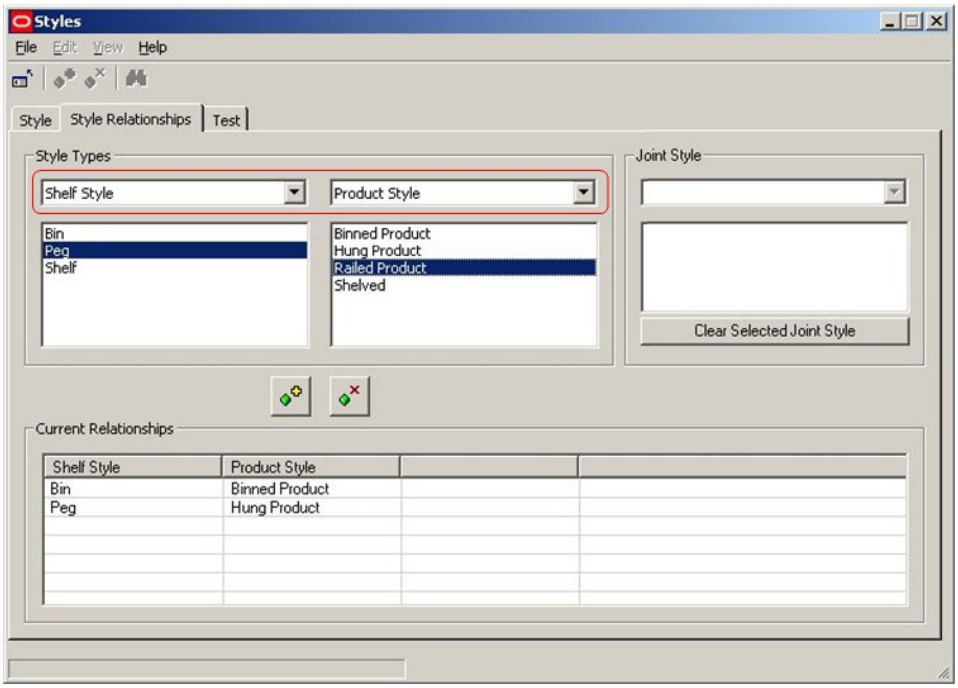
**Warning**: There is a known issue with the Styles option at present. Information is temporarily lost if a second style is added immediately after the first. To overcome this close the Styles dialogue box after each style is added, then re-open it to add the next.

### Setting up Style Relationships in Admin Module

To **Add Style Relationships** to the available list, open the Styles option in the Admin Module. Click on the Style Relationship Tab.



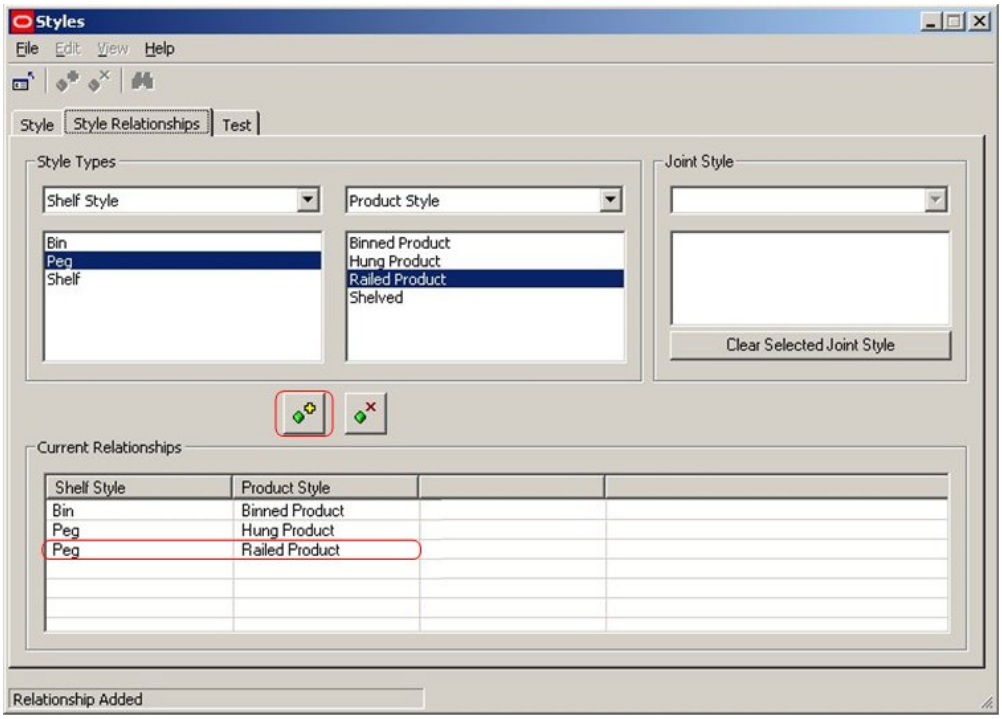

Set the options as required.




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.



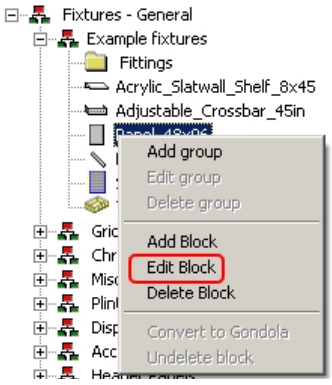

This means we can put these Railed Product styles of product onto any shelf object assigned the Peg style.

> **Note:** If we need place products directly onto a fixture, a Style Relationship would be required between the Fixtures Style and the Product Style.

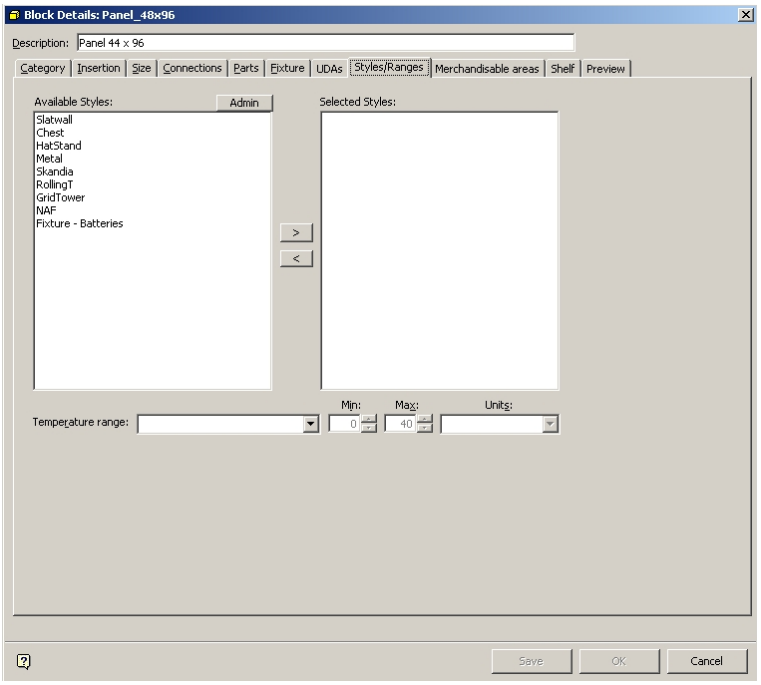
An example of this would be putting products of Boxed Style onto fixtures of Pallet Style.

### Adding Style to Fixture in Fixture Studio Module

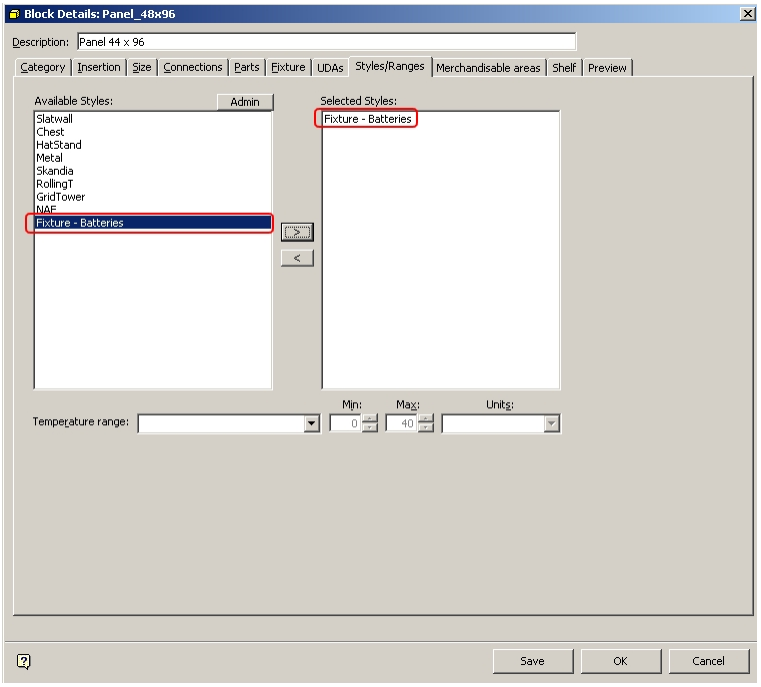
To **Add a Fixture Style** to a fixture, open Fixture Studio. Select the required fixture and right click to bring up the pop-up menu.




Click on Edit Block. This will bring up the block details dialogue box. Select the Fixture/Styles Tab.



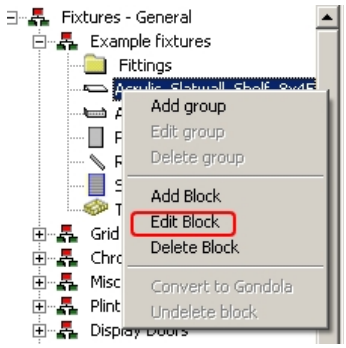

To add a Fixture Style (or styles) select the required style(s) from the list of available styles and move then over to the list of selected styles using the > arrow.



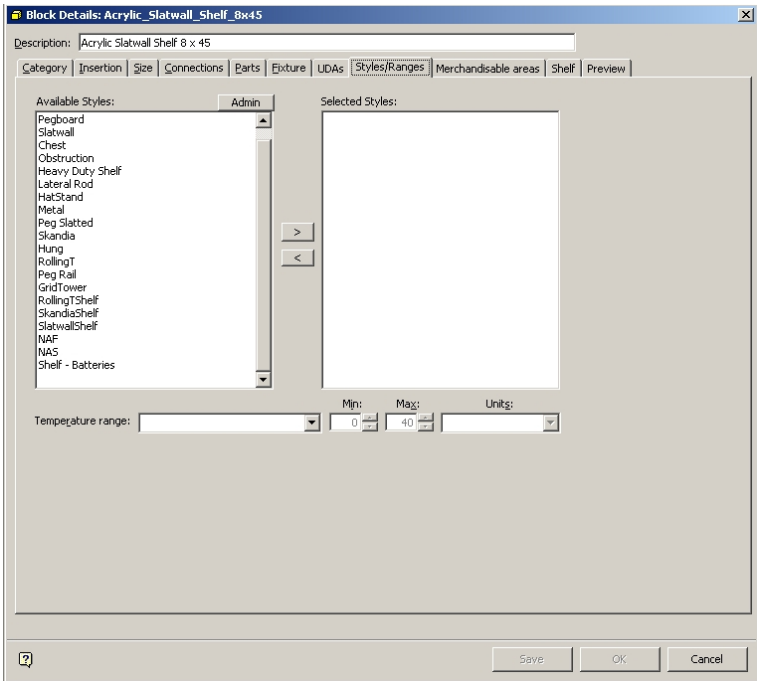

This means this fixture will now accept any shelves or products that have Style Relationships with the Fixture - Batteries Fixture Style.

### Adding Styles to Shelf in Fixture Studio Module

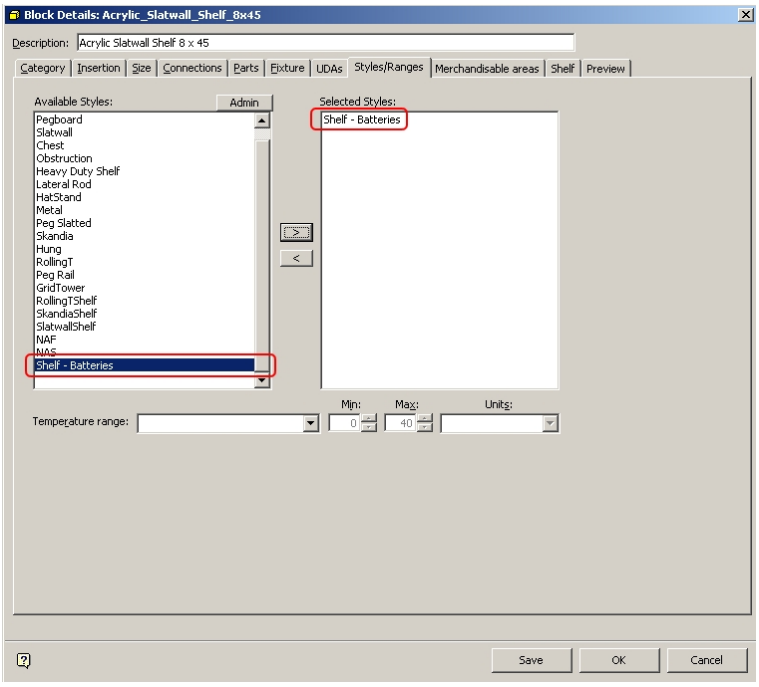
To **Add Fixture and Shelf Styles** to a shelf, open Fixture Studio. Select the required shelf and right click to bring up the pop-up menu.




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 then over to the list of selected styles using the > arrow.

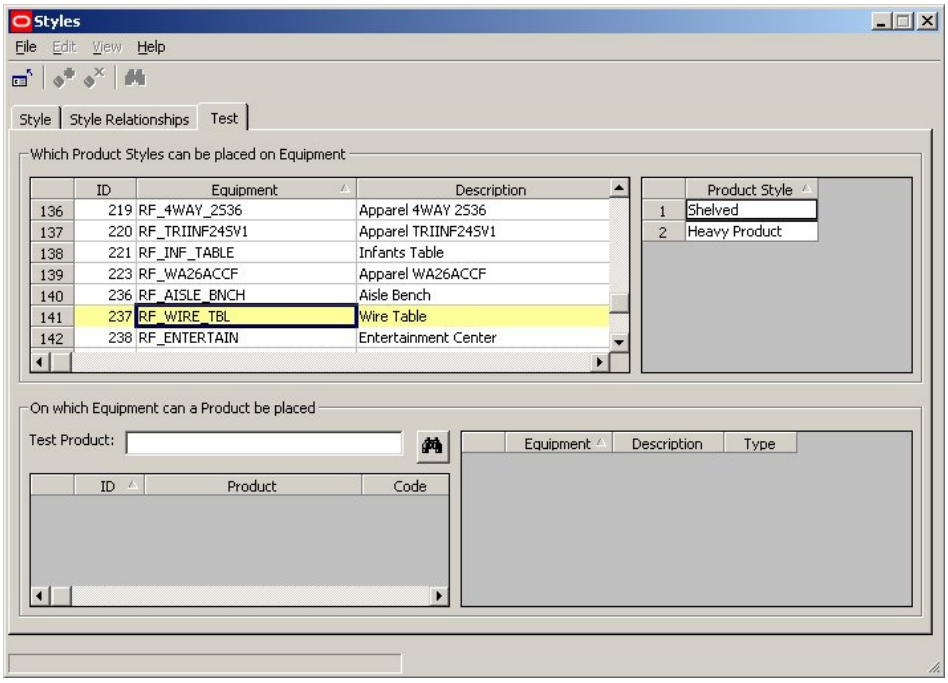



This means this shelf will now accept any fixtures or products that have style relationships with the Shelf - Batteries Shelf Style.

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.

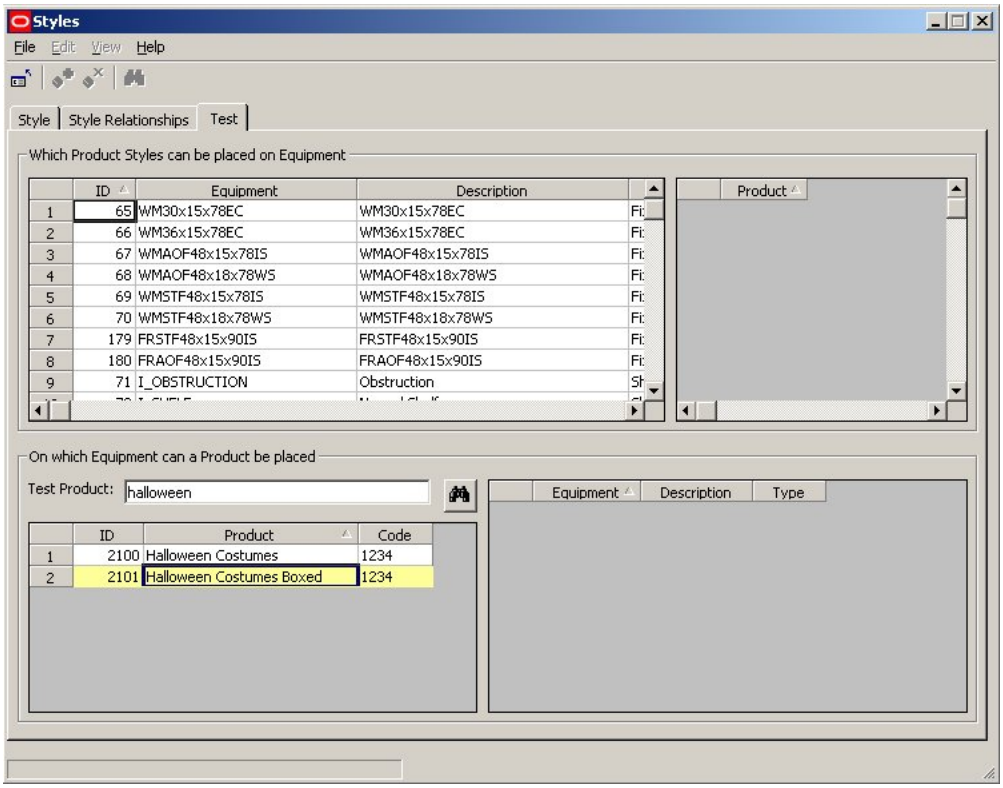
> **Note:** The list of equipment can be sorted in ascending or descending order by clicking on the column headers.

### 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.

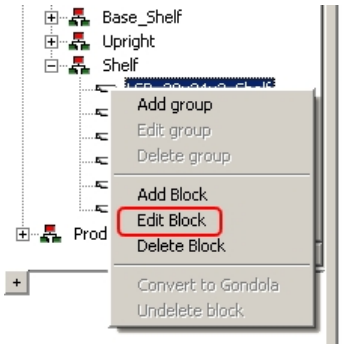
> **Note:** The list of products can be also sorted in ascending or descending order by clicking on the column headers.

### Joints

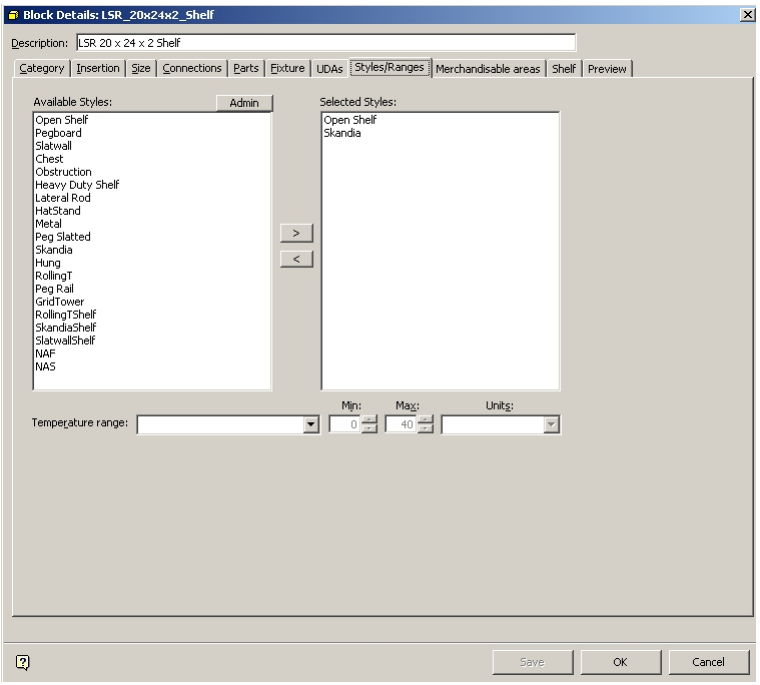
Joints cannot be tested in the Test Tab - they can only be verified by placing them on an item of equipment.

### 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.



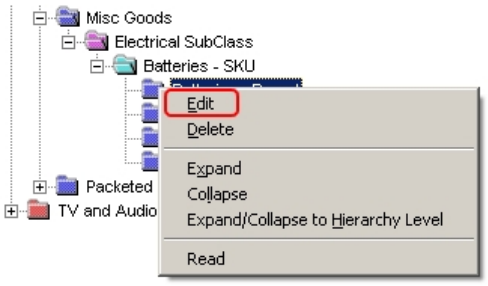

Styles can then be assigned or removed using the < and > arrows.

> **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.

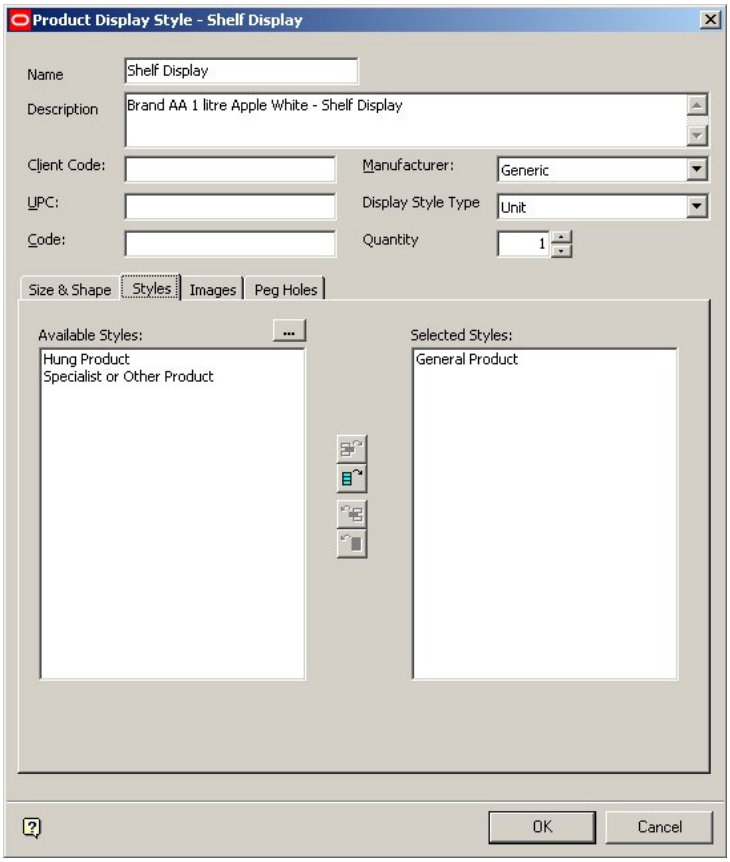
### Adding Style to Product in Product Studio

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 on Edit. This will bring up the Product Display Style dialogue box. Select the Styles Tab.

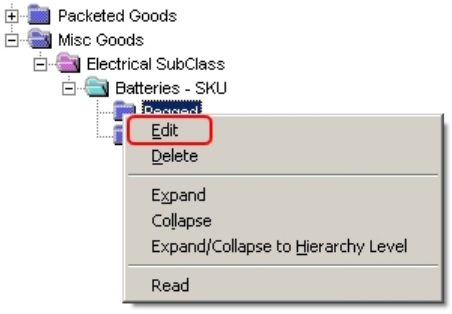



To add a Product Style (or styles) select the required style(s) from the list of available styles and move then over to the list of selected styles using the appropriate icon.

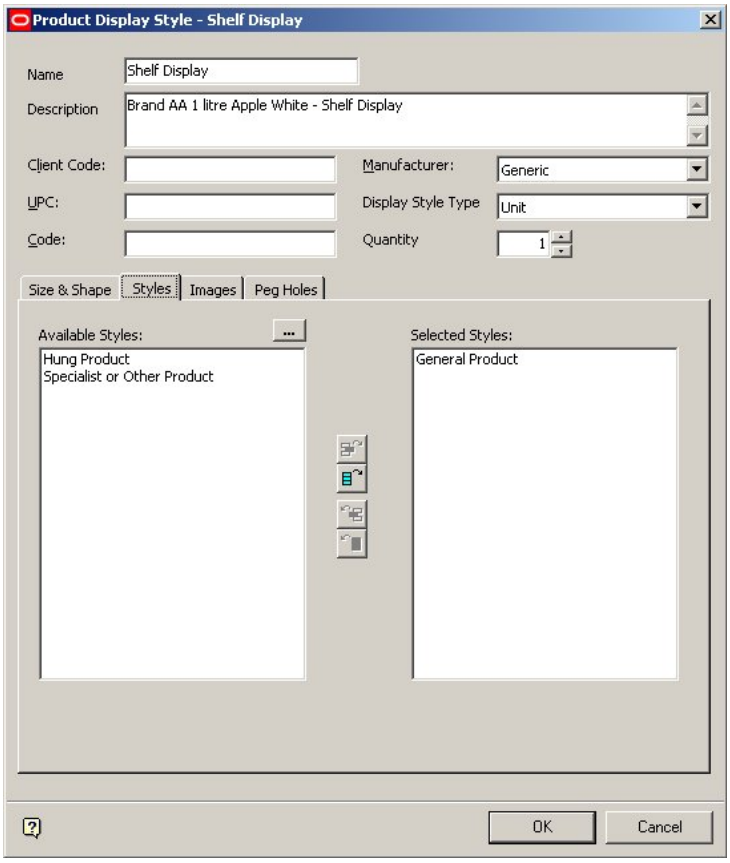
### Assigning Product Styles

> **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 to a primary object that places at floor level.

## Placing Shelf Objects

**Shelf Objects** can only be placed if they meet two criteria.

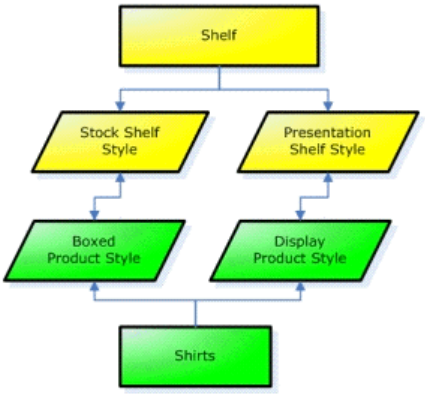
| | |
|---|---|
| **Connection Points** | The connections points assigned to the shelf must be compatible with the connection points assigned to the fixture it is to be placed on. |
| **Styles.** | The Fixture Style assigned to the shelf must be compatible with the Fixture Style assigned to the fixture it is to be placed on. |

## Setting Preferred Styles

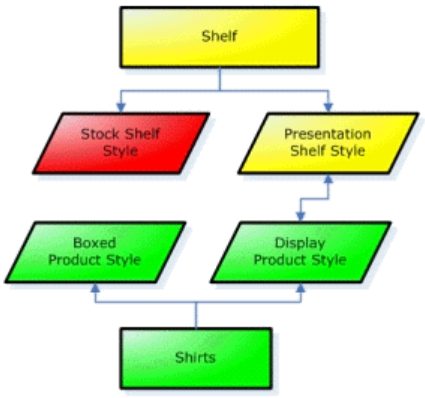
Because some objects can be associated with multiple styles, specific instances of shelves within the drawing can be given preferred styles.

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.

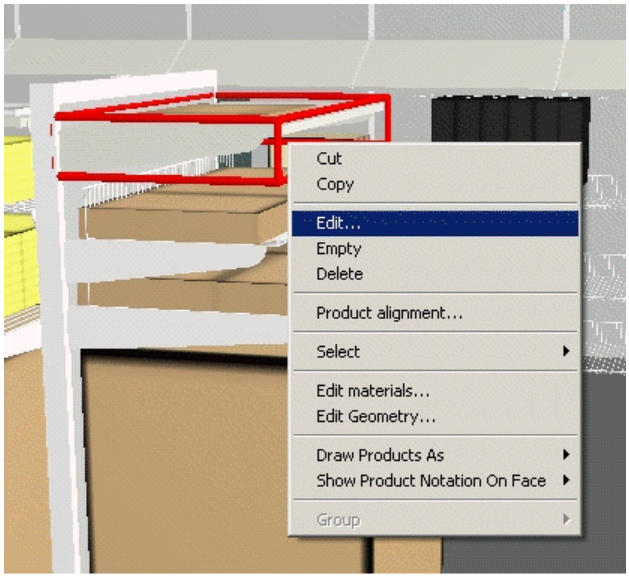



However, the user would be able to indicate the preferred style for a particular instance of a shelf as being Presentation, which would force the Display product to be placed for that particular shelf.

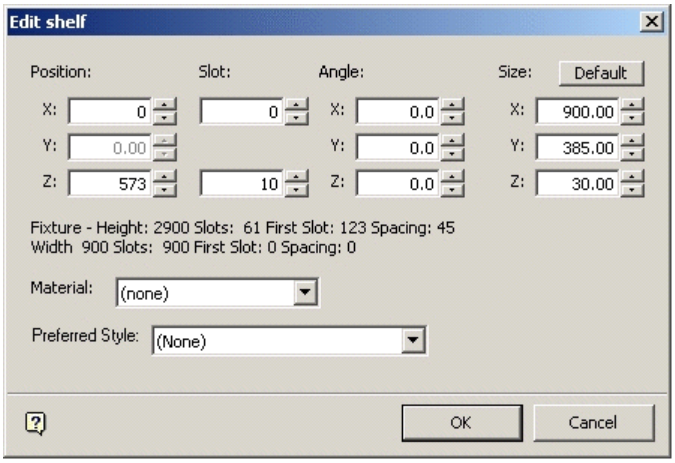



### Using Preferred Styles

**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.



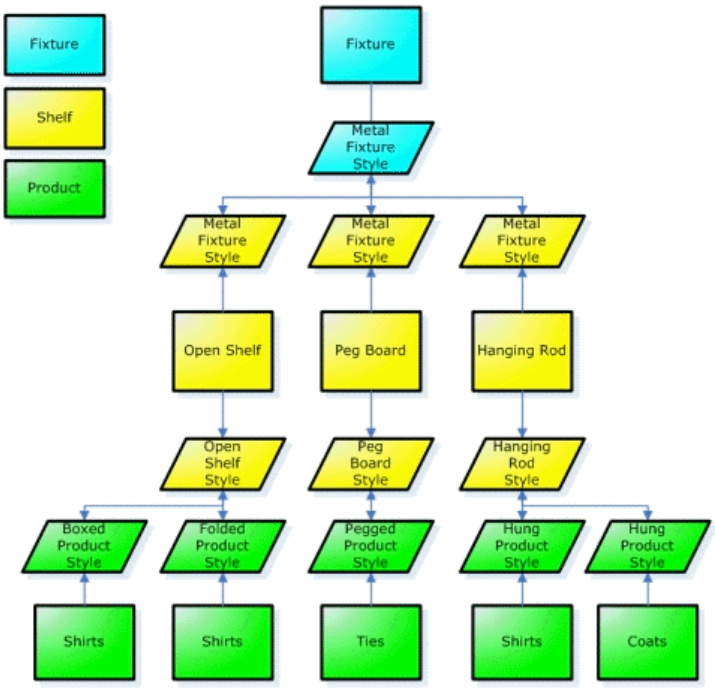

This can be used to set the preferences for that specific shelf or shelves.

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 shift 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.

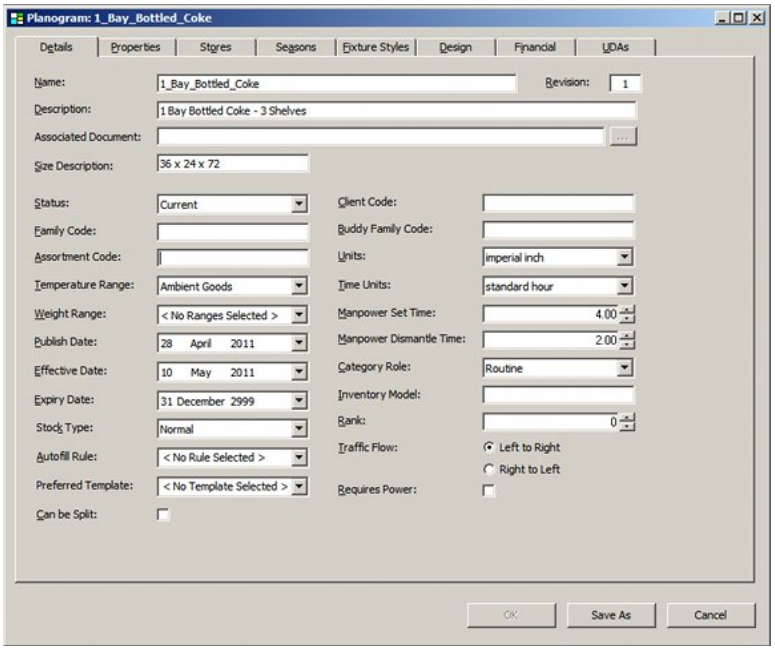
# Planogram Publishing

## 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 Admin module.

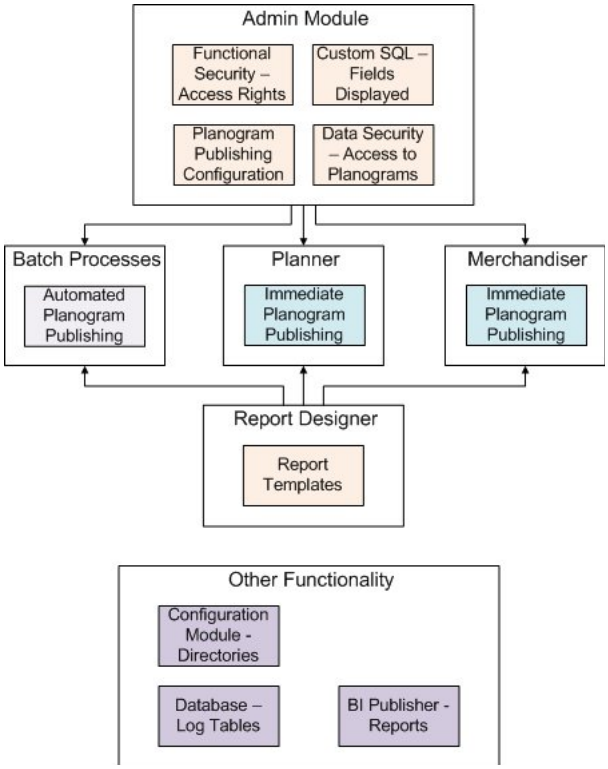
The purpose of publishing a planogram is to disseminate information on the type, quantity and location of shelves and merchandise to those tasked with implementing the change. Publishing a planogram design can be done in hard copy or electronic format. The date at which this is executed depends on the Publish Date set in the Details tab of the Planogram Design dialog box in the Merchandiser module.



The 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. Admin Module**

The Admin 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.

**a.** 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.

**b.** 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).

**c.** 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 ban 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 setting 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 Admin 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 Admin 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 Admin 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.

a. **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.

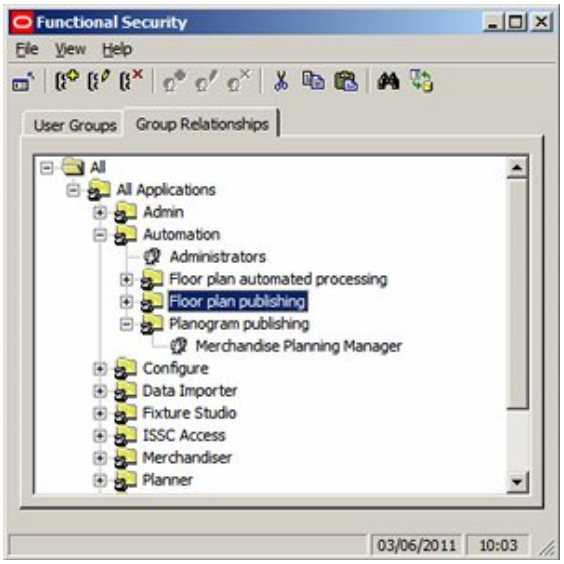
b. **Tables in the Macro Space Planning database** hold the results of planogram publishing operations.

c. **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

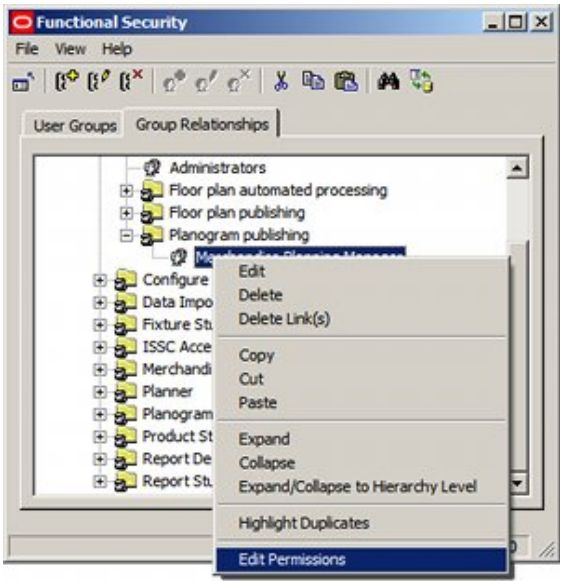
Before a user can run Immediate Planogram Publishing, they must first have been assigned the appropriate permissions in the Admin module. This is done using the Functional Security dialog box accessed from the Security menu.

> **Note:** This dialog box will only be accessible to users with access rights to the Admin Module.

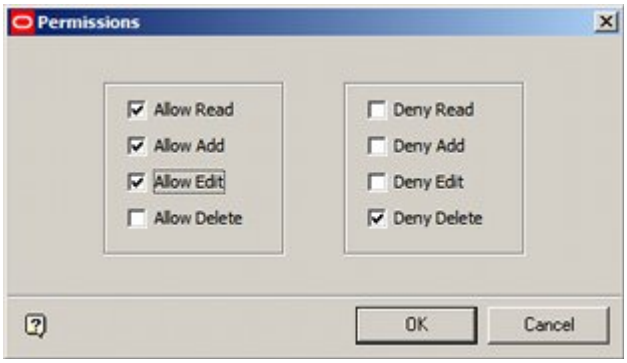



Users assigned to the Automation Command Group (such as the Administrator User Group) can run all Automation Functionality. User Groups assigned to the child Command Groups (Floor plan automated publishing, Floor plan publishing, Planogram publishing) have the ability to use that functionality. In the 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.

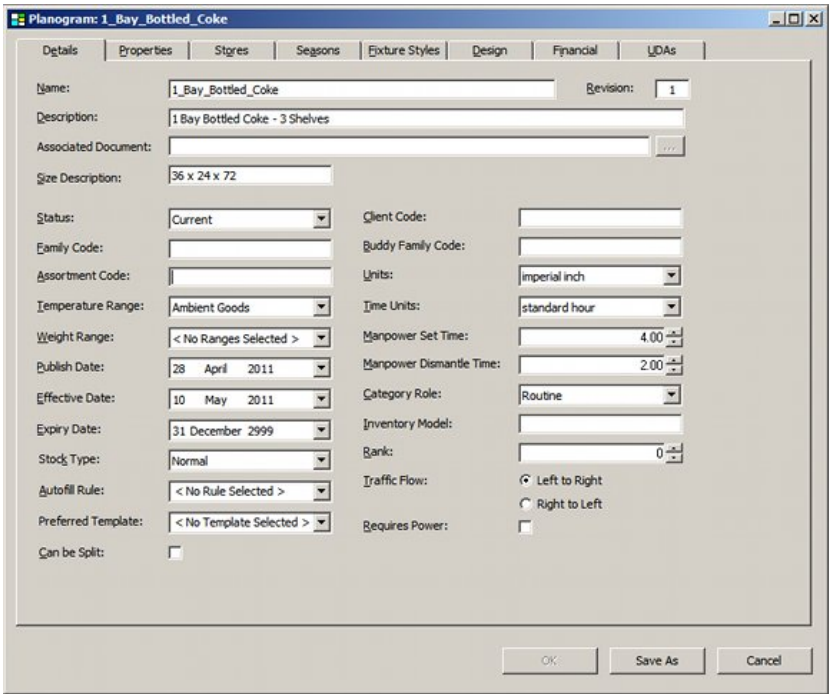



1. If the User Group belongs to a Command Group higher in the Command Group hierarchy, by default it will inherit the permissions from that higher Command Group. This permission can be varied at the lower level by changing the selections made using the check boxes.
2. If the User Group only exists at this level in the hierarchy, the Permissions dialog box will initially have all check boxes blank. The Administrator must then assign Allow of Deny permissions.

## Dates Planograms will be Published

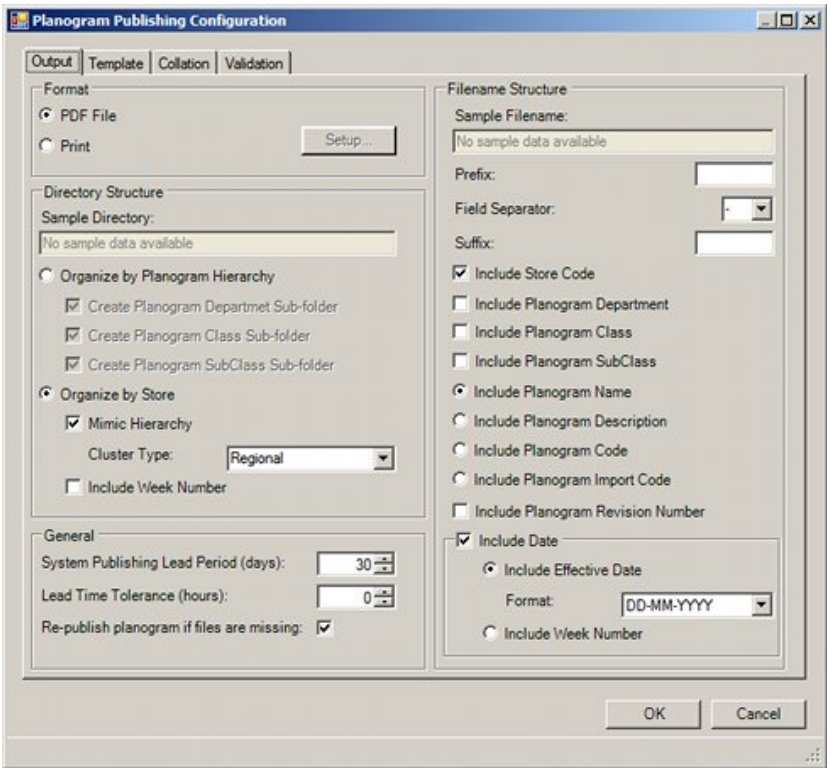
The purpose of publishing a planogram is to disseminate information on the type, quantity and location of shelves and merchandise to those tasked with implementing the change. Publishing a planogram design can be done in hard copy or electronic format. The date at which this is executed depends on the 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.




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 Admin Module.

> **Note:** This dialog box will only be accessible to users with access rights to the Admin Module.



Batch processes can be set to start at any time of the day. For example, the batch process might initiate at 8 pm (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

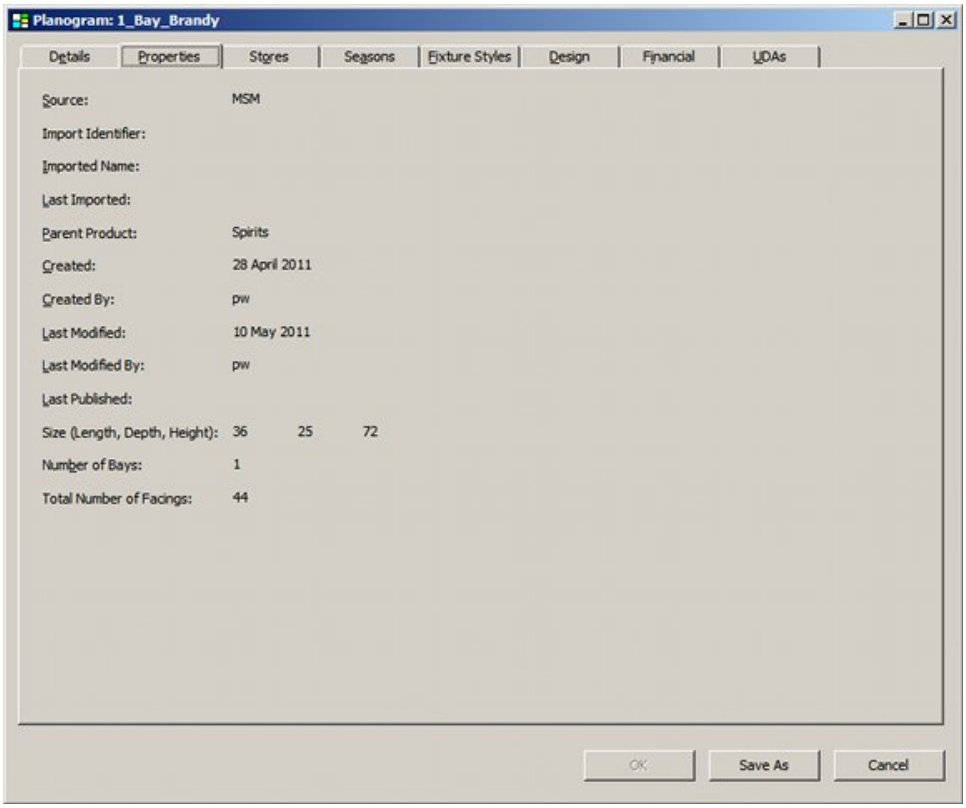
There are two criteria for publishing planograms:

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.

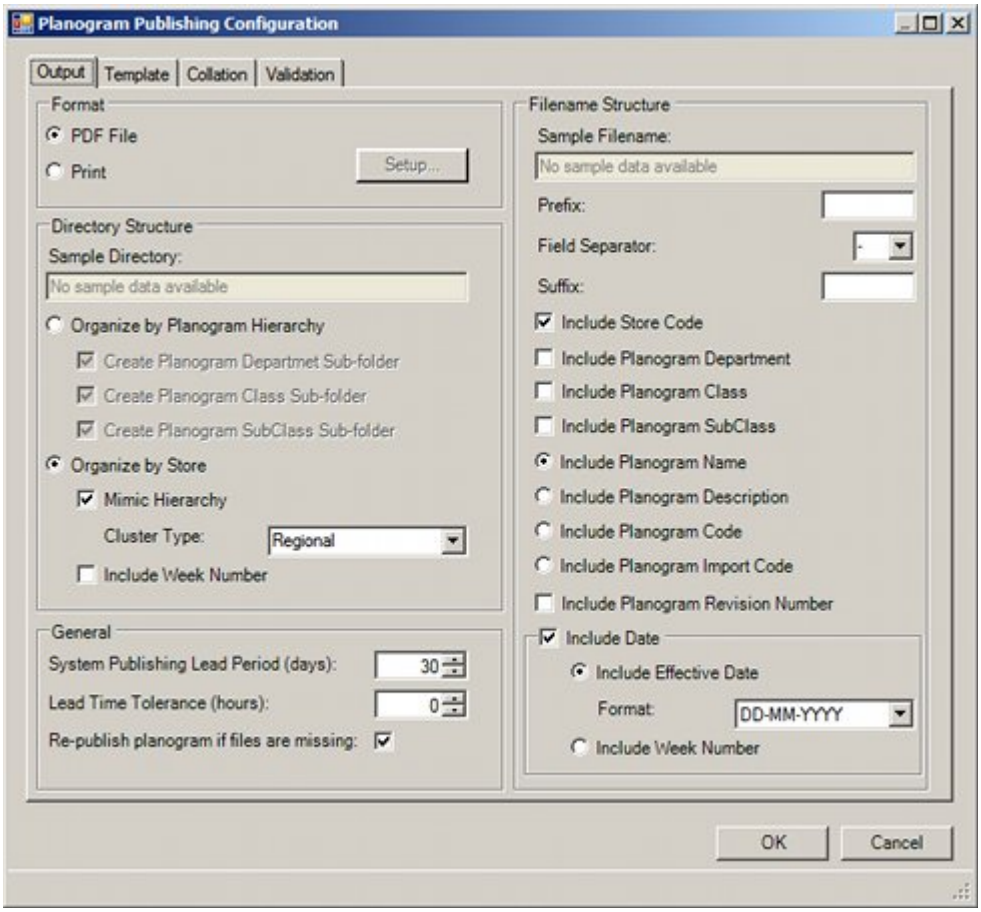


**Note:** Planograms may also be republished if the **Republish planogram if files are missing** option has been checked in the Planogram Publishing Configuration dialog box.

## Locations Planogram Designs will be Published To

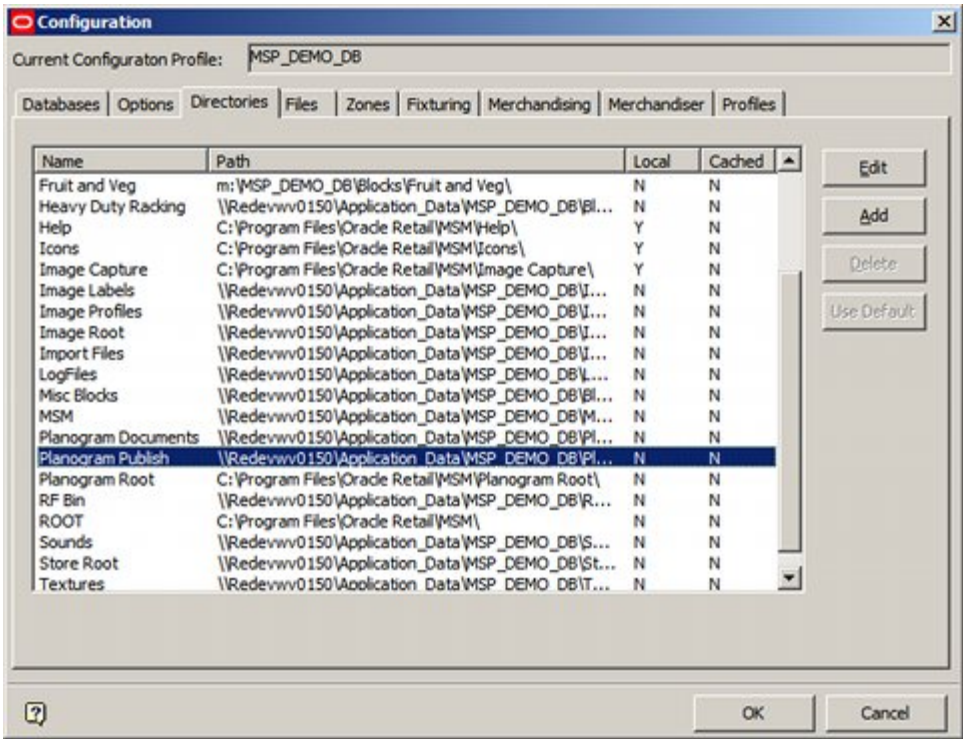
The locations Planogram designs will published to and the file names that will be used are specified in the Output tab of the Planogram Publishing Configuration dialog box in the Admin module.

**Note:** This dialog box will only be accessible to users with access rights to the Admin Module.



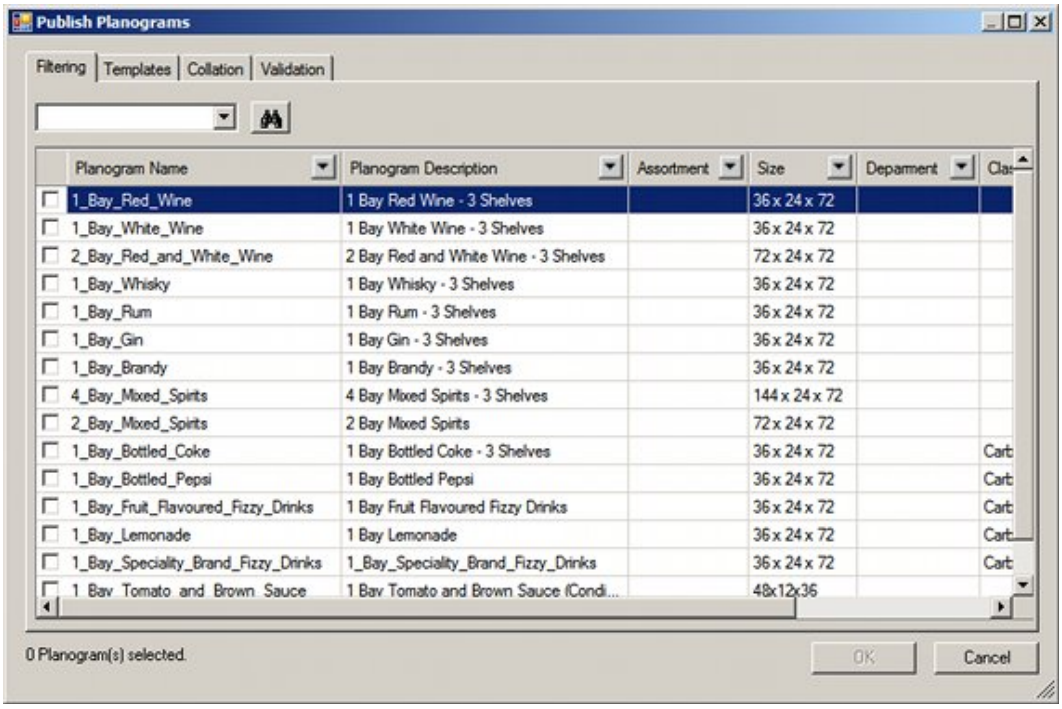

This dialog box allows Administrators to specify the directory structure, file format and file name that will be used when planogram designs are published.

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.




## 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.



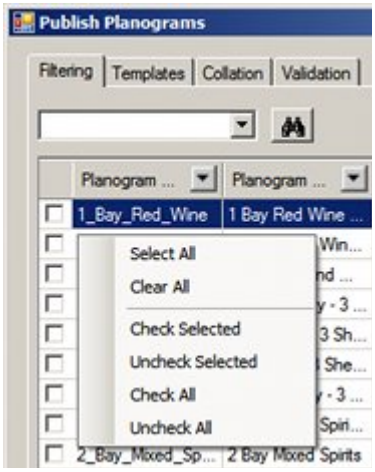

Find operates with explicit or implied wild cards. The explicit wild cards are:

| 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.



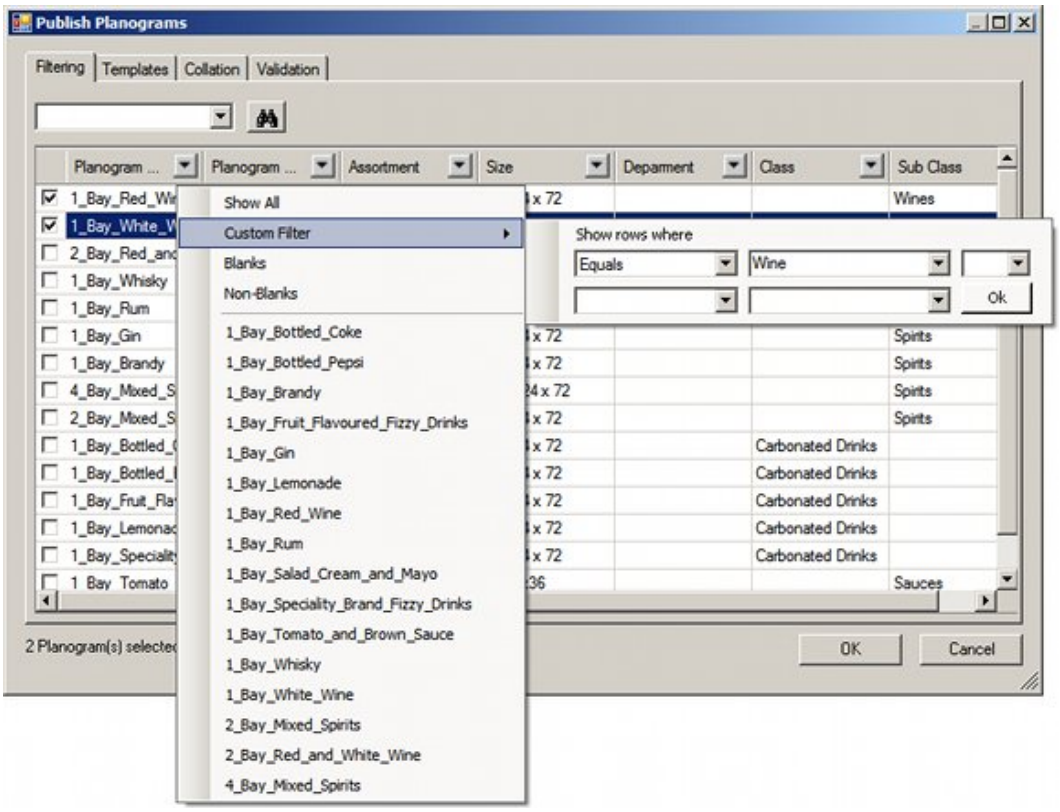

a. **Select All** will select (but not check) all rows of data
b. **Clear All** will deselect (but not uncheck) all rows of data
c. **Check Selected** will check all rows of selected data
d. **Uncheck Selected** will uncheck all rows of selected data
e. **Check All** will check all rows of data
f. **Uncheck All** will uncheck all rows of data
g. **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.



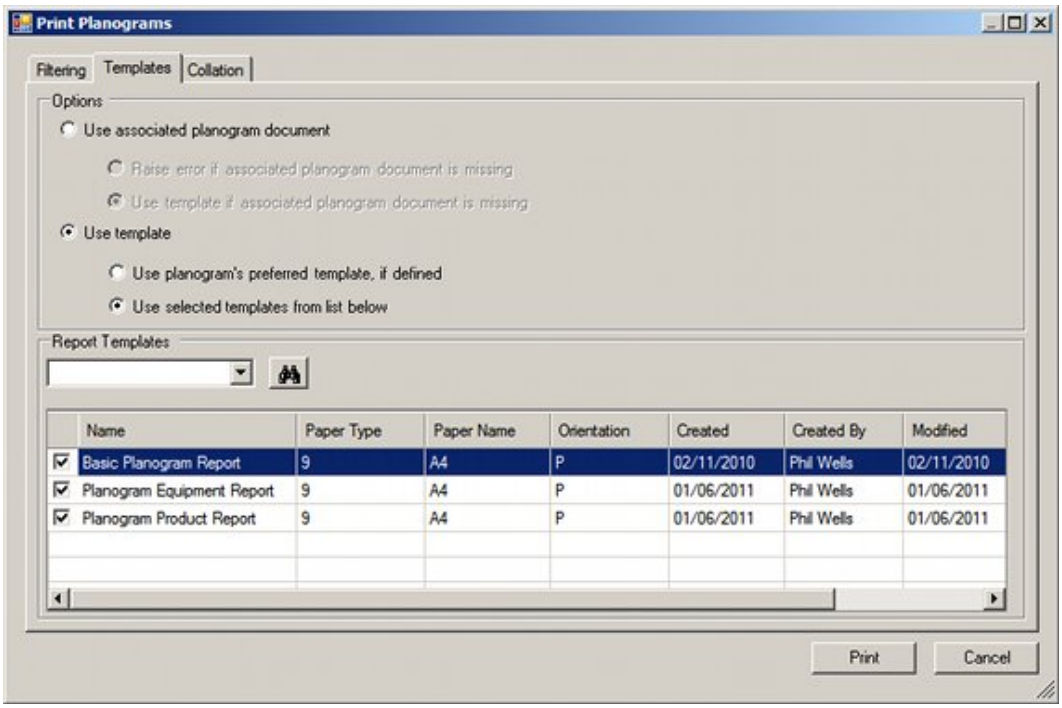

They are used as follows:

1. **Show All** - this option shows all results.
2. **Custom Filter** - this option allows users to set filters using Boolean logic. The options are:
   a. **Equal to**: will return rows that are an exact match for the entered text.
   b. **Not Equal to**: will return rows that do not match the text string
   c. **Contains**: will return rows where part of the data matches the text string. (Uses implied wild cards).
   d. **Does not contain**: will return rows where no part of the data matches the text string. (Uses implied wild cards).
   e. **Begins with**: will return rows where the text string is an exact match for the start of the data.
   f. **Ends with**: will return rows where the text string is an exact match for the end of the data.
   g. **Does not begin with**: will return rows there the text string is not an exact match for the start of the data.
   h. **Does not end with**: will return rows there 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.

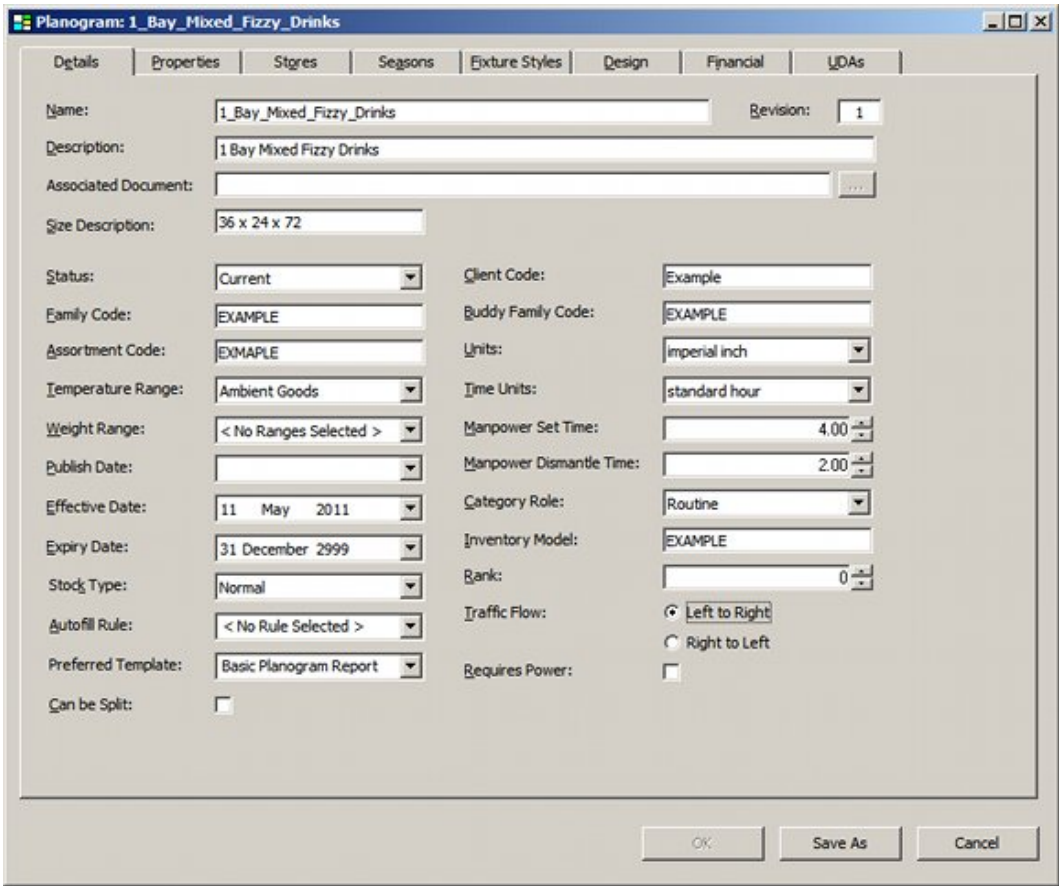
## The Template Tab

The **Template 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.

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

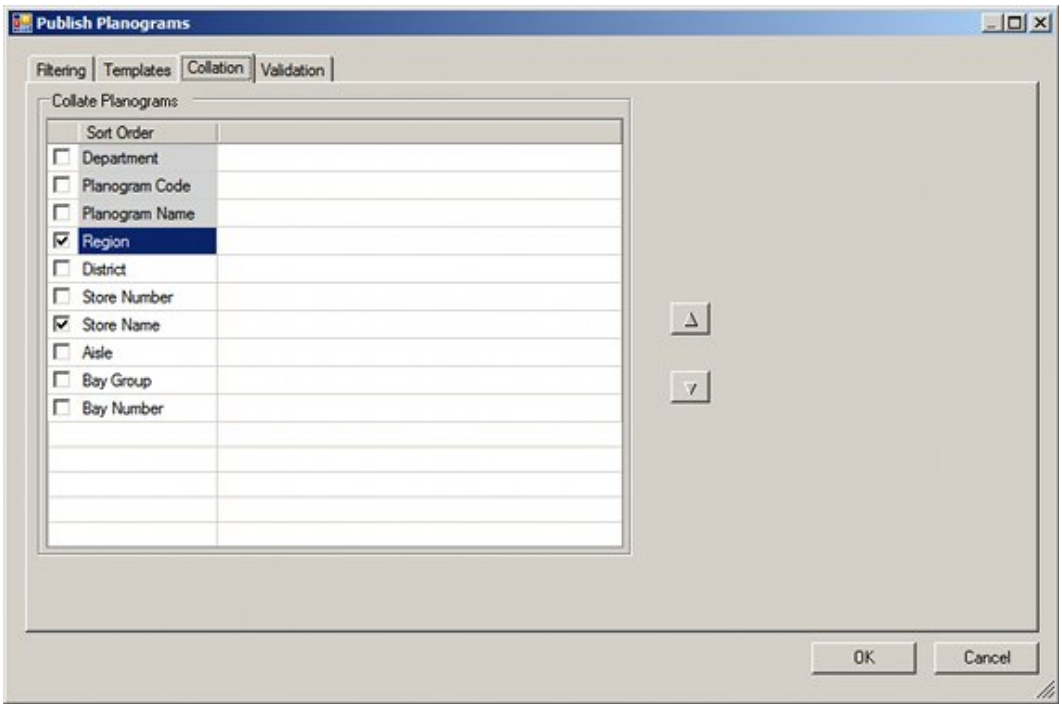
If necessary, the list of templates can be searched by entering a text string into the dropdown list, then clicking the **Find** button. (Actual or implied wild cards can be used). Each click of the Find button will cause the search engine to move forward through the matching results until no results are left.

> **Note:** The last 10 text strings can be selected using the drop down list in the text box.

## The Collation Tab

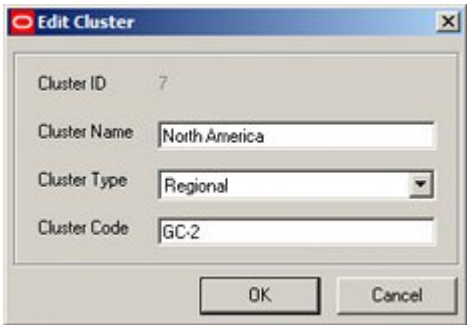
The Collation Tab allows users to specify the sequence the planogram designs will be published or printed in. Its main use is in printing hard copy versions of the designs where the sequence they are printed in makes it easier to sort and distribute them after printing.

At least one collation option must be selected, or the tab will show as having an error.

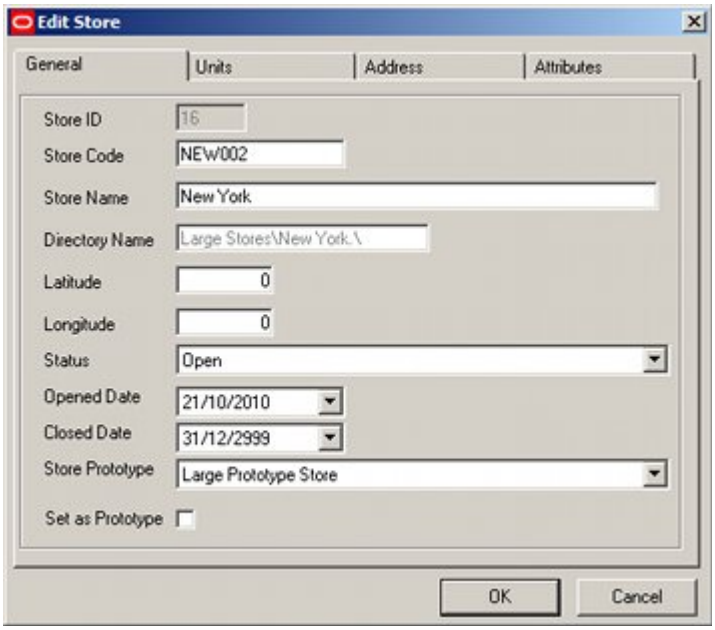



The available options can be ordered by highlighting them, then using the up or down arrows. The options are made active by using the check boxes.

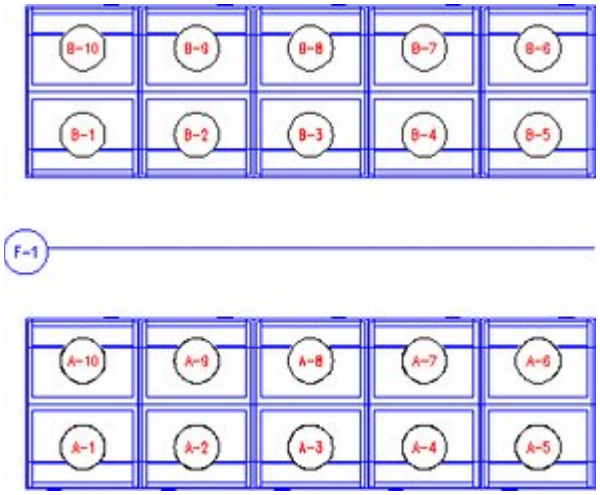
1. **Region** is a specific type of cluster set in the Cluster type drop down list in the Cluster dialog box in Store Manager.
2. **District** is a specific type of cluster set in the Cluster type drop down list in the Cluster dialog box in Store Manager.



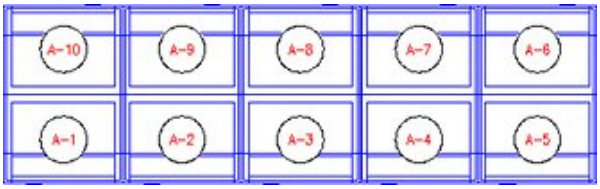

3. **Store Number** is the Store Code in the Store dialog box in Store Manager.
4. **Store Name** is the Store Name in the Store dialog box in Store Manager.



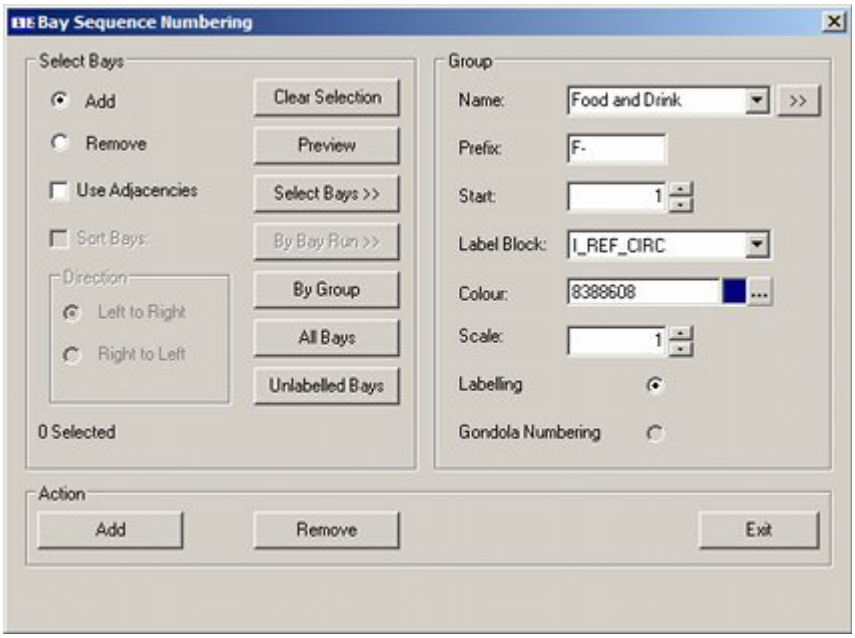

5. **Department** is the department (zone) in the floor plan the planogram is associated with.
6. **Aisle** is the aisle the planogram is associated with. For this option to operate, aisles must first be drawn in the floor plan in the Planner module. In the example below, Aisle F-1 has been drawn between two runs of fixtures.



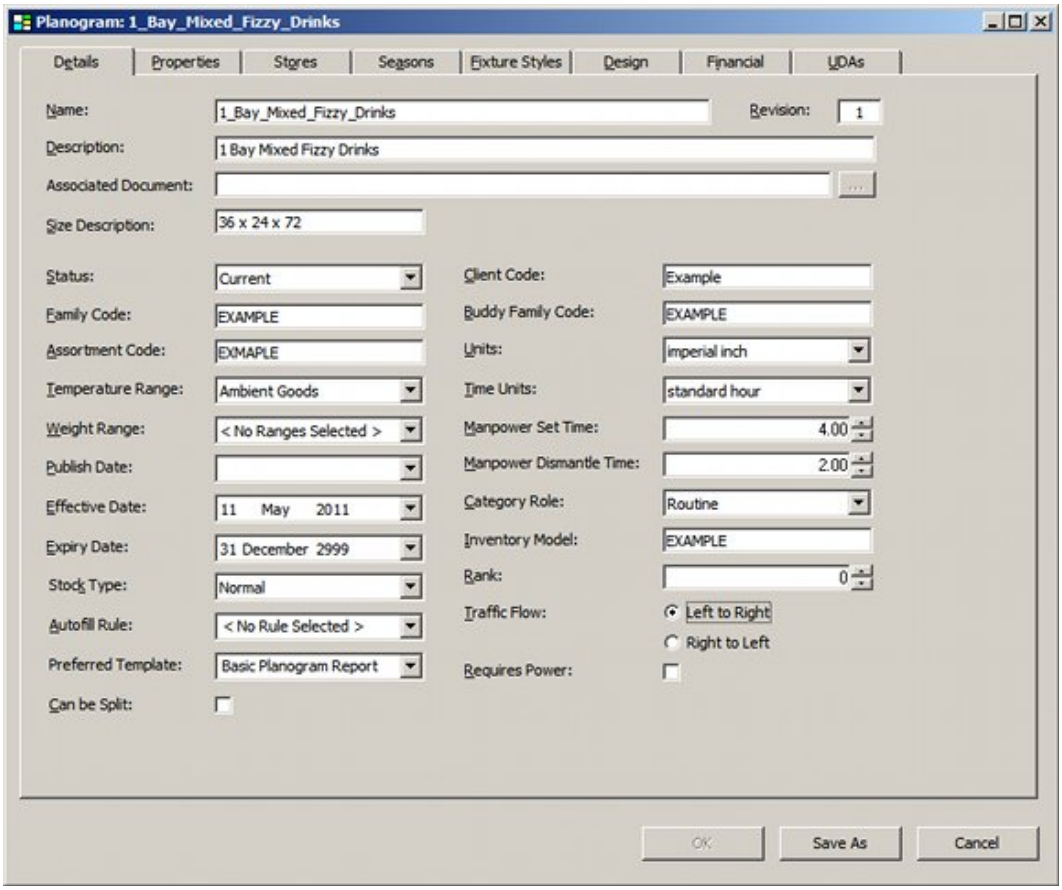

7. **Bay Number** is the bay number associated with the fixtures the planogram is placed on. For this option to operate, the fixtures in the floor plan must previously have been bay numbered.




8. **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.

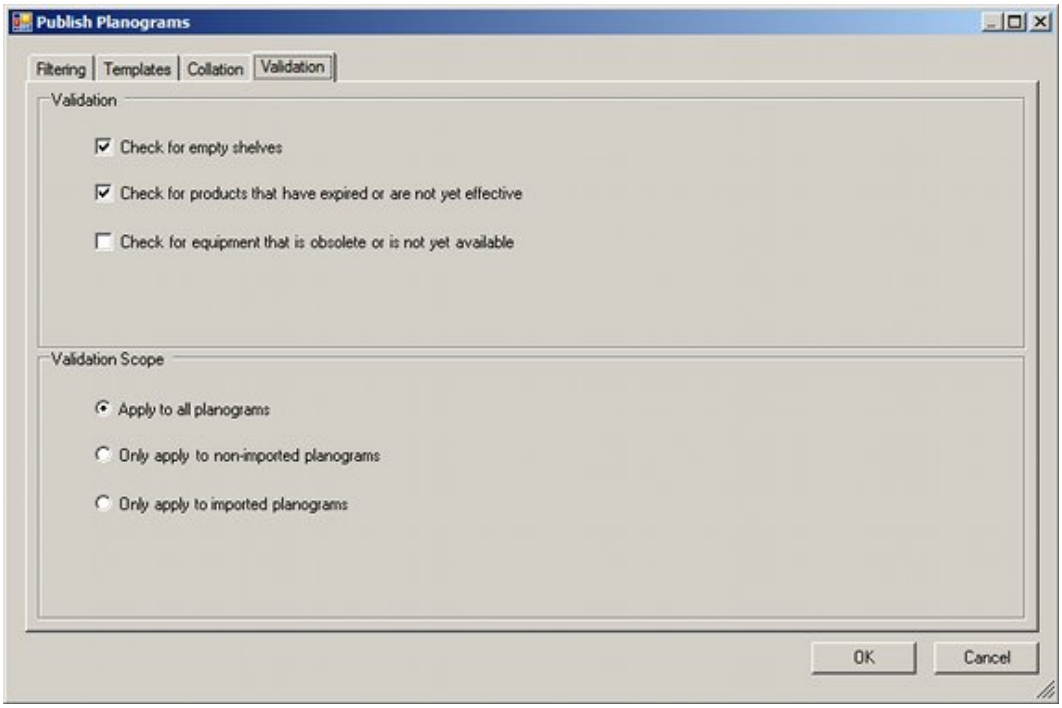



9. **Planogram Name** is the name of the planogram. This is set in the Name field of the Planogram Design dialog box in Merchandiser.
10. **Planogram Code** is the code for the planogram. This is set in the Client Code field of the Planogram Design dialog box in Merchandiser.



## The Validation Tab

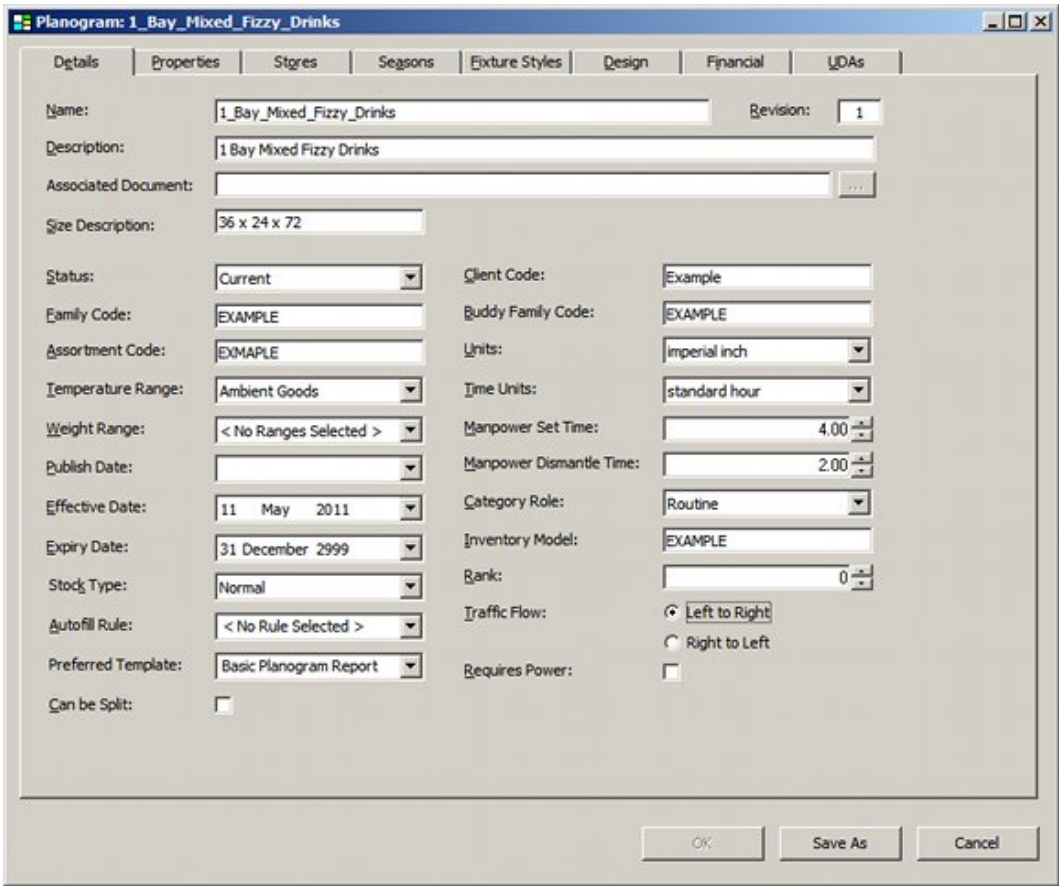
The Validation tab enables users to set a series of validation checks that must be satisfied before the planogram design is published. If any of the checks are failed, the details will be written to the AVTTB_PUBLISH_POG_LOG table. Information in this table can be read by means of a BI Publisher report or similar.



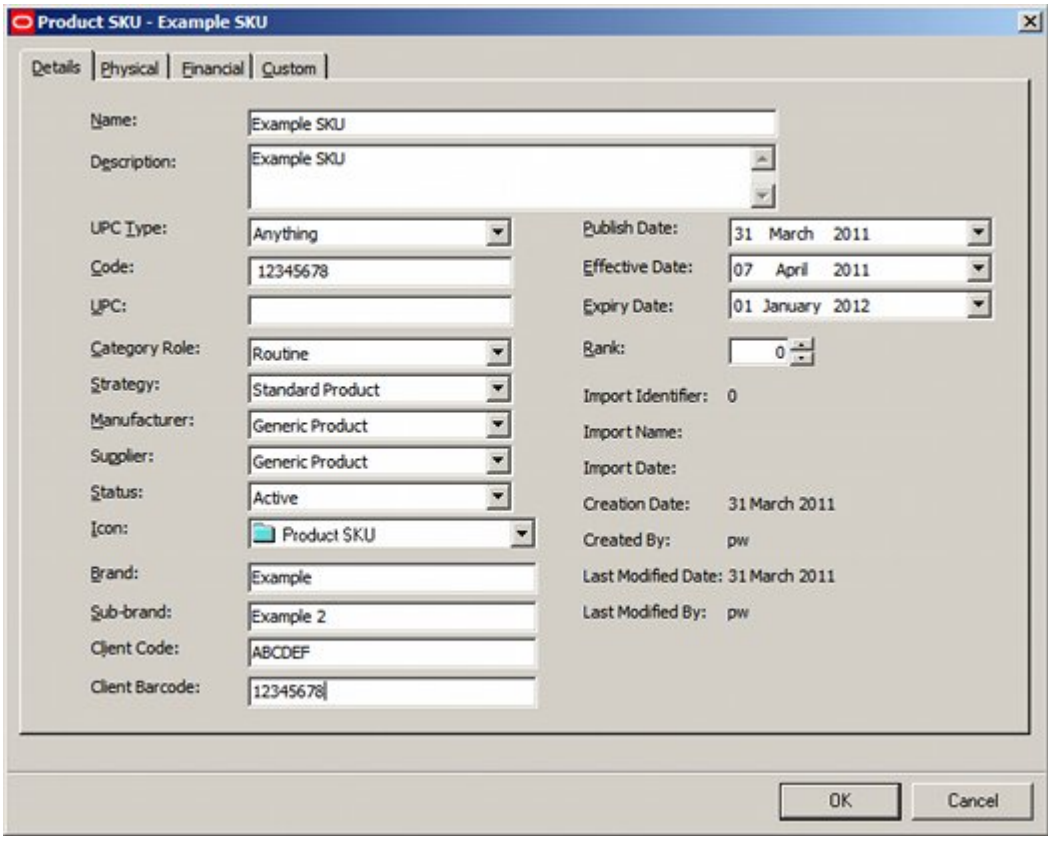

1. **Check for empty shelves** - this option will check the parent fixture and associated shelf objects. It will raise an error report if:
   a. The fixture and associated shelf objects can be populated with product placeholders, but no product placeholder has been placed.
   b. The fixture and associated 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:
   a. The Product Effective Date is after the Planogram Effective Date - i.e. the product is not yet available to place in the planogram.
   b. 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.



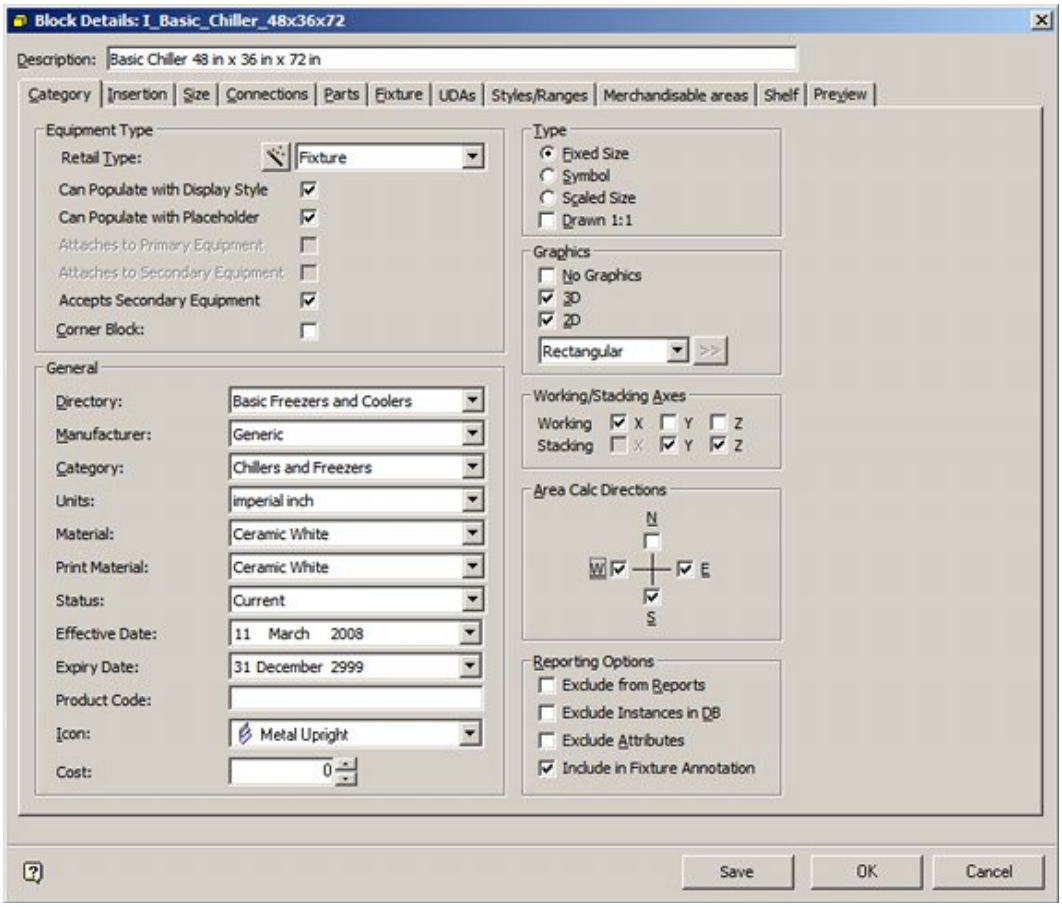

The Product Effective and Expiry dates are set in the Details tab of the SKU dialog box in Product Studio.




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:
   a. The Equipment Effective Date is after the Planogram Effective Date - i.e. the equipment is not yet available for the planogram.
   b. 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.

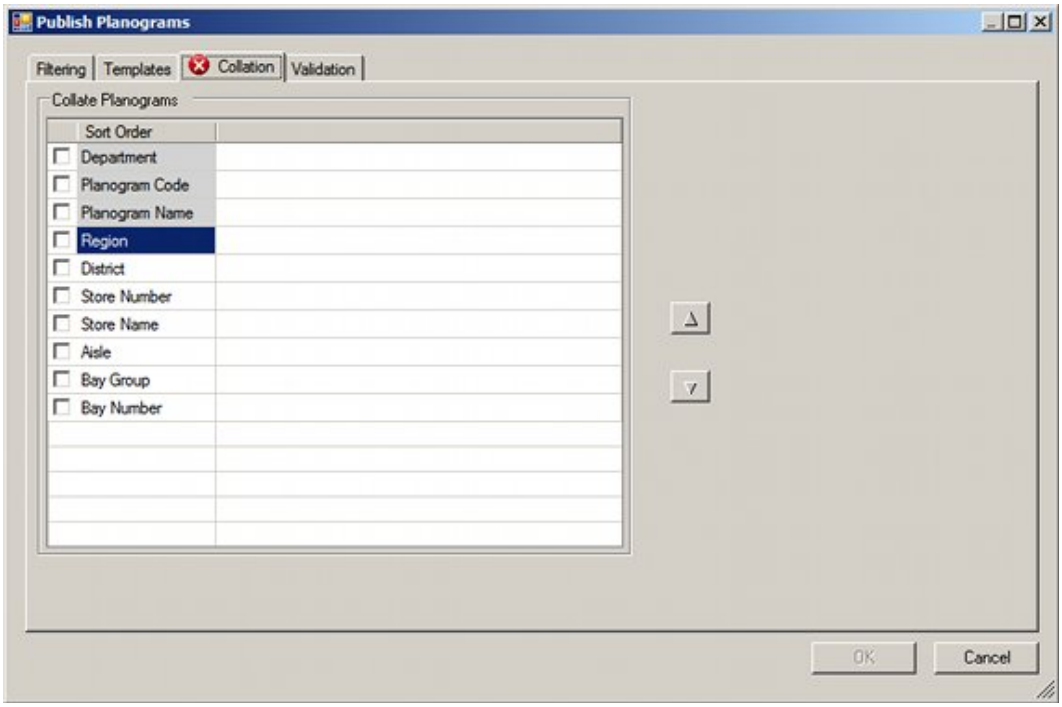



4. **Validation Scope** - this controls when to apply the validation checks. There are three options - selectable by the radio button.
   a. Apply to all planograms.
   b. Apply to non-imported (manually created) planograms.
   c. Apply to imported planograms.

The application will automatically distinguish between imported and manually created planograms by means of the information held in the Macro Space Planning database.

### 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.

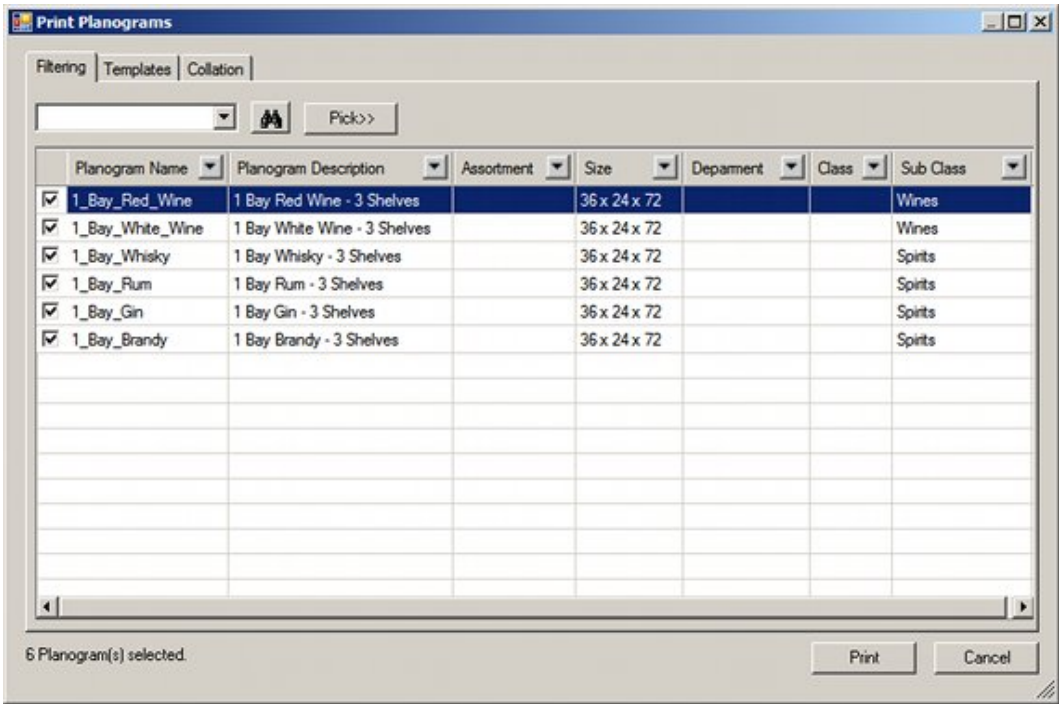
The results from Planogram Publishing are stored in two tables within the database. These results can be viewed via reports generated from BI Publisher (or similar software).

## Planogram Printing

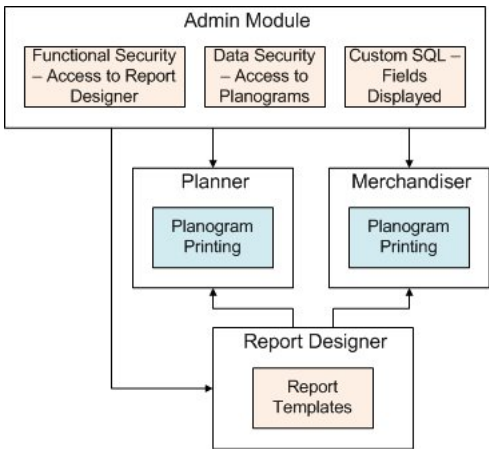
### Overview of Planogram Printing

**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 Admin module.




The basic method of operation is as follows:




1. **Admin Module**

Within the Admin Module:

   a. The planogram users have permissions to print are assigned in the Data Security dialog box - Planograms Tab.
   b. The fields that display in the Filtering Tab of the Print Planograms dialog box are configured in the Custom SQL dialog box.
   c. 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 Admin 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 Admin module.

#### Using Planogram Printing

The functionality is used as follows:

a. A floor plan containing planograms is opened in the Planner or Merchandiser module.
b. The Print Planogram option is selected from the File menu in the Planner or Merchandiser module.
c. The appropriate planograms are selected in the Filtering tab of the Print Planograms dialog box.
d. The report to use is specified in the Templates tab.
e. The sequence the selected floor plans are to be printed in is specified in the Collation Tab.
f. 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

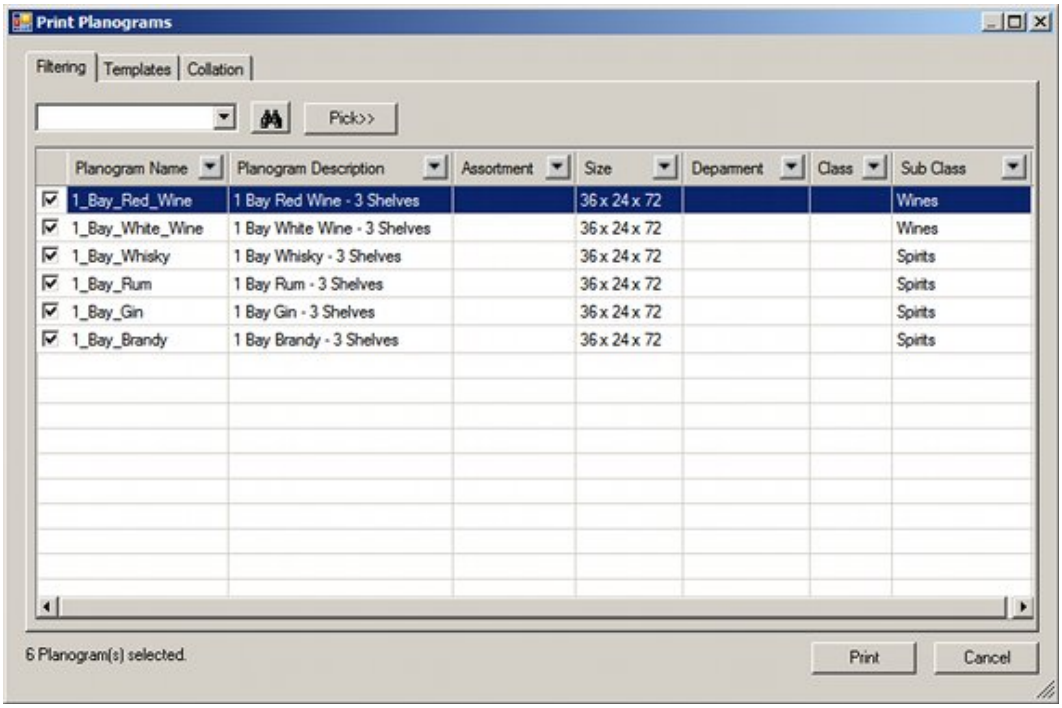
**Note:** Before accessing the Print Planogram functionality, users should open a floor plan containing planograms.

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

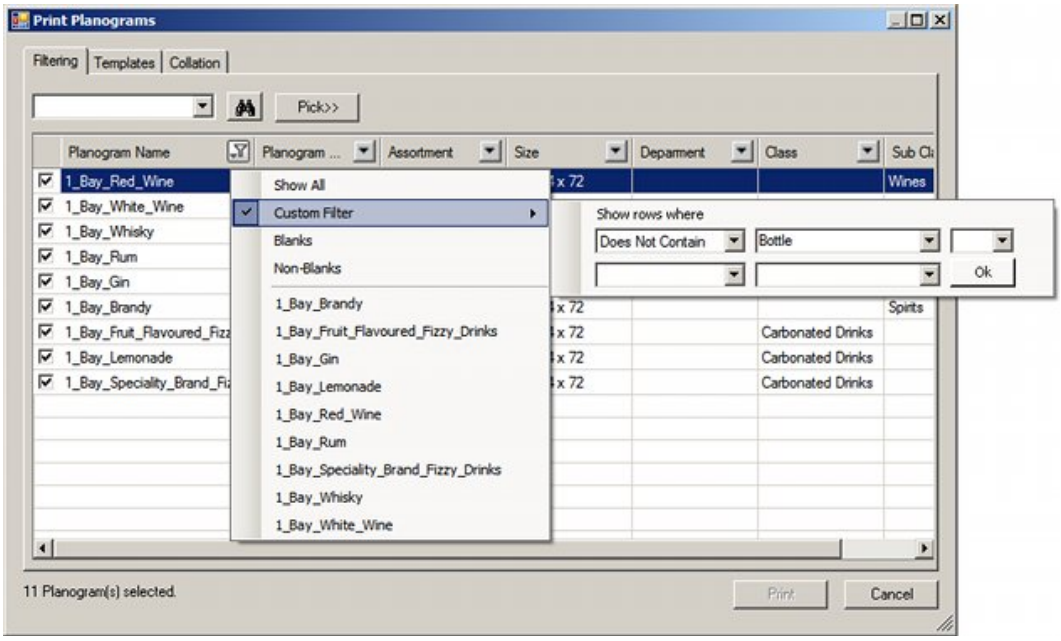
When the Print Planogram dialog box opens it will be populated with all planograms in the currently active floor plan. By default, they will be checked for selection.




**Note:** The columns that are displayed in the dialog box are configurable in the Custom SQL option available from the General Menu in the Admin 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.

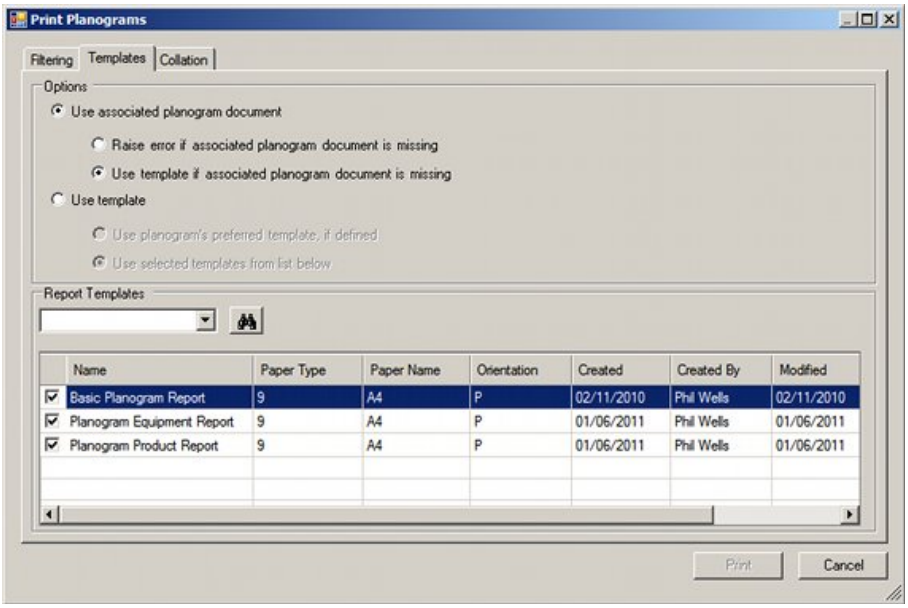



They are used as follows:

1. **Show All** - this option shows all results.
2. **Custom Filter** - this option allows users to set filters using Boolean logic. The options are:
   a. **Equal to**: will return rows that are an exact match for the entered text.
   b. **Not Equal to**: will return rows that do not match the text string
   c. **Contains**: will return rows where part of the data matches the text string. (Uses implied wild cards).
   d. **Does not contain**: will return rows where no part of the data matches the text string. (Uses implied wild cards).
   e. **Begins with**: will return rows where the text string is an exact match for the start of the data.
   f. **Ends with**: will return rows where the text string is an exact match for the end of the data.
   g. **Does not begin with**: will return rows where the text string is not an exact match for the start of the data.
   h. **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.

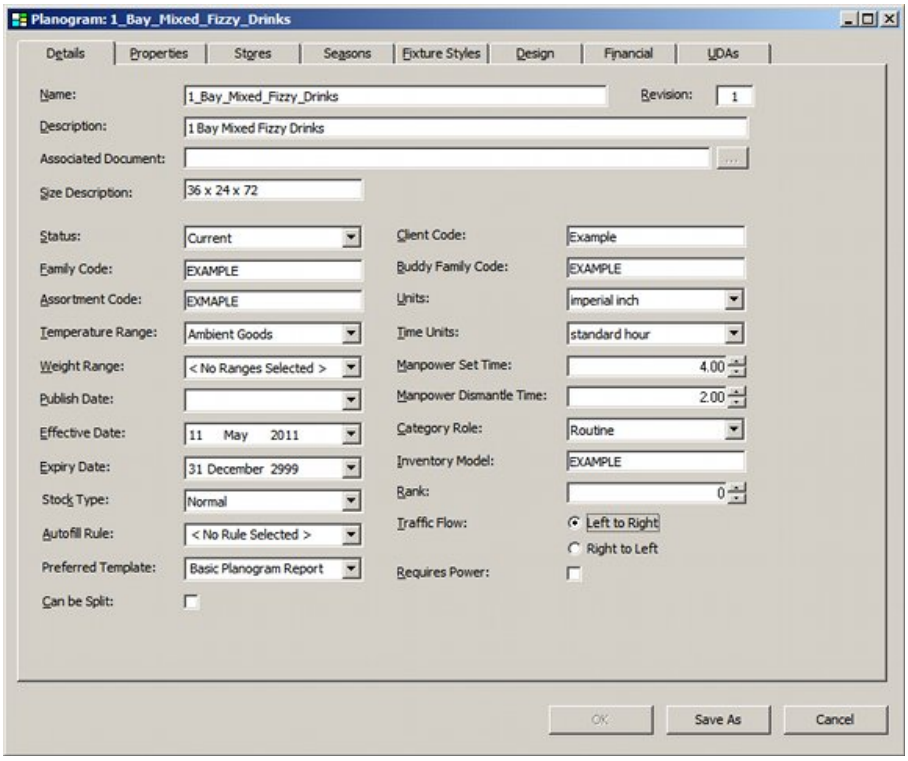
## The Templates Tab

The **Templates Tab** allows users to specify the template format to be used when printing planogram designs.




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 dropdown 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.

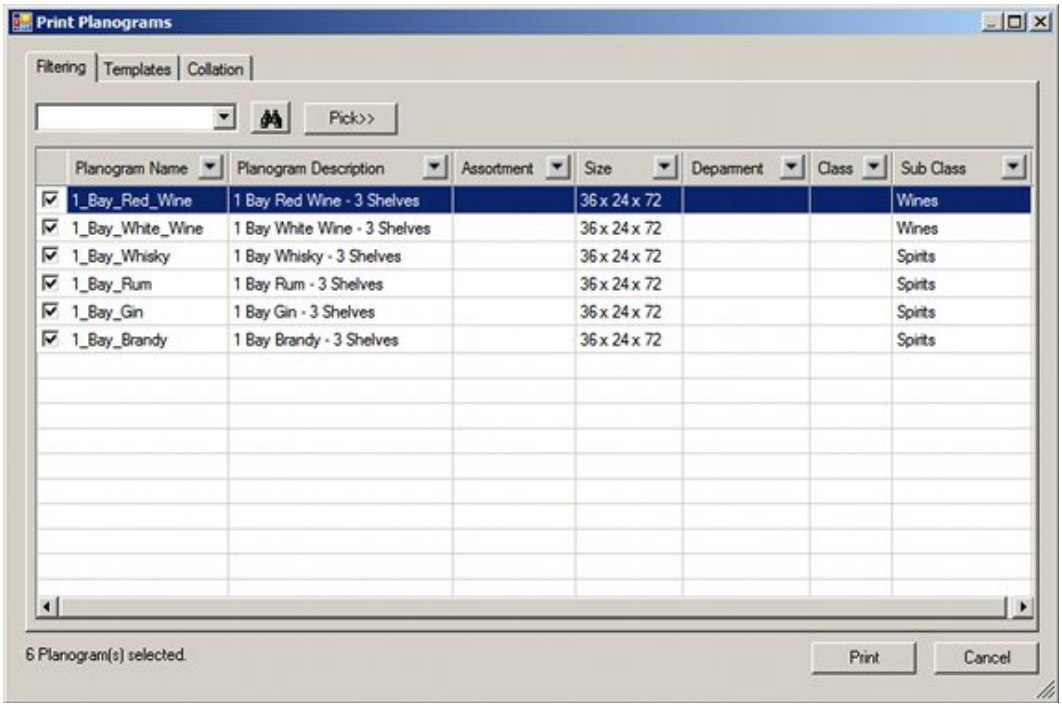
## The Filtering Tab

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 |

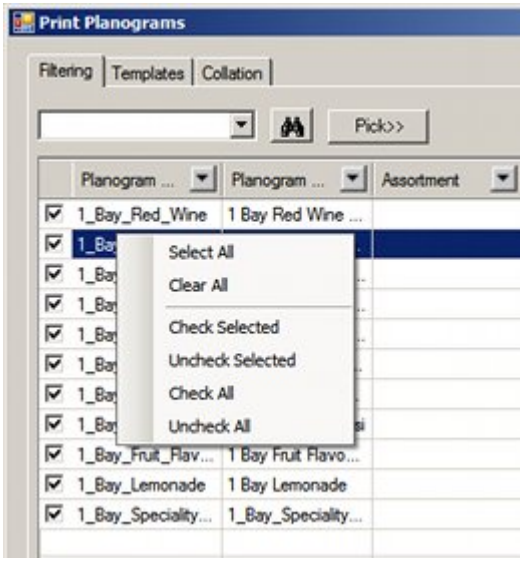
If explicit wild cards are not used, implicit wild cards will be assumed. For example the text entry 'Wine' will be treated as '*wine*' and will find I Bay Red Wine, 1 Bay White Wine, etc.

#### 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.




c. **Select All** will select (but not check) all rows of data
d. **Clear All** will deselect (but not uncheck) all rows of data
e. **Check Selected** will check all rows of selected data
f. **Uncheck Selected** will uncheck all rows of selected data
g. **Check All** will check all rows of data
h. **Uncheck All** will uncheck all rows of data
i. **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.

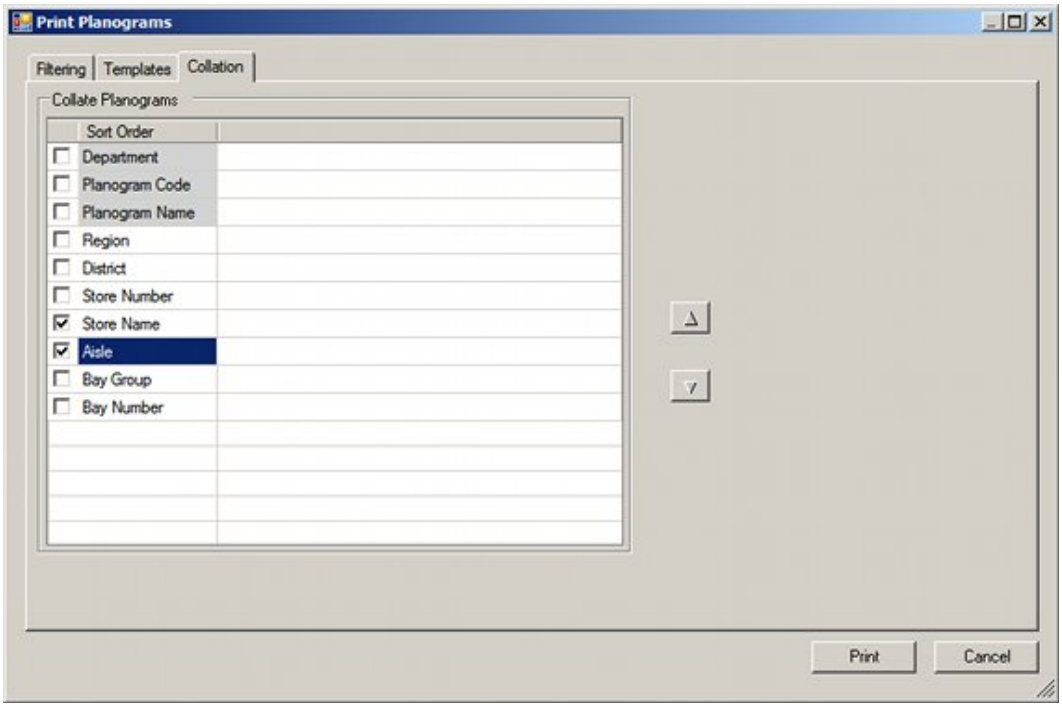
#### Selecting Planograms to Print

Planograms may be selected for printing by ticking the appropriate check box.

## The Collation Tab

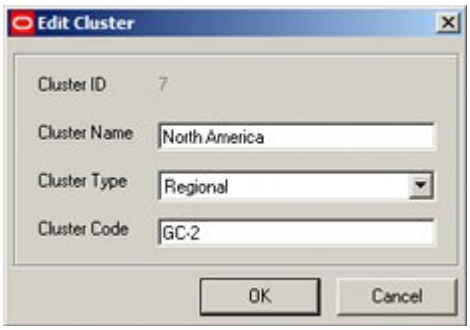
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At least one collation option must be selected, or the tab will show as having an error.

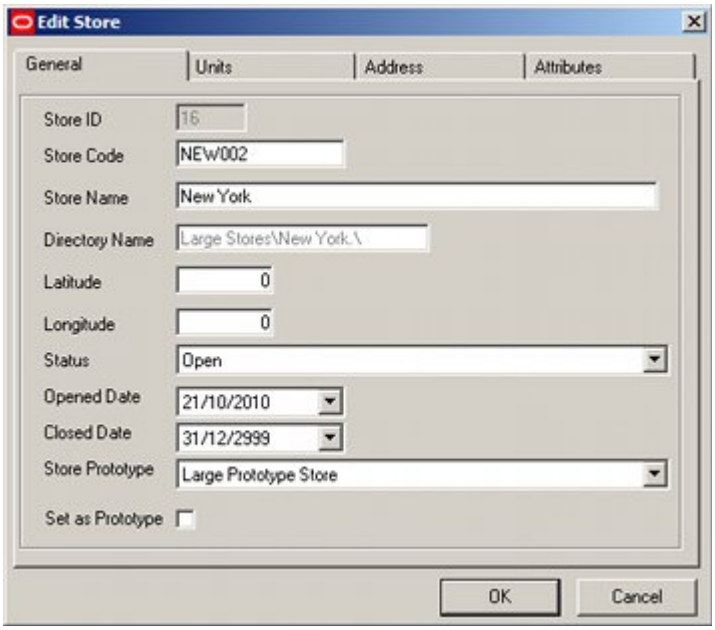



The available options can be ordered by highlighting them, then using the up or down arrows. The options are made active by using the check boxes.

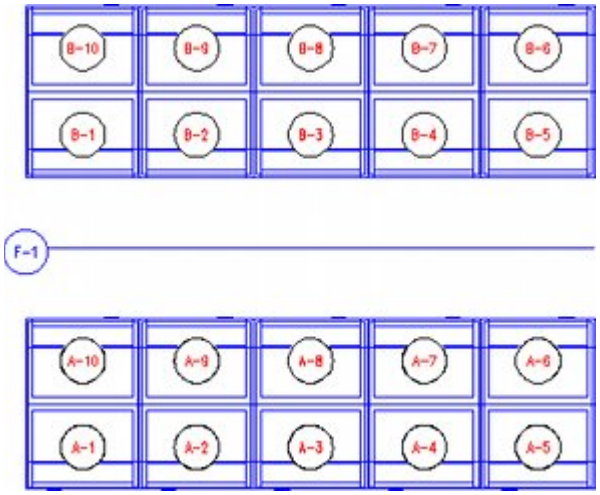
1. **Region** is a specific type of cluster set in the Cluster type drop down list in the Cluster dialog box in Store Manager.
2. **District** is a specific type of cluster set in the Cluster type drop down list in the Cluster dialog box in Store Manager.



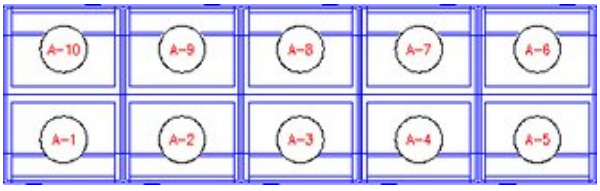

3. **Store Number** is the Store Code in the Store dialog box in Store Manager.
4. **Store Name** is the Store Name in the Store dialog box in Store Manager.



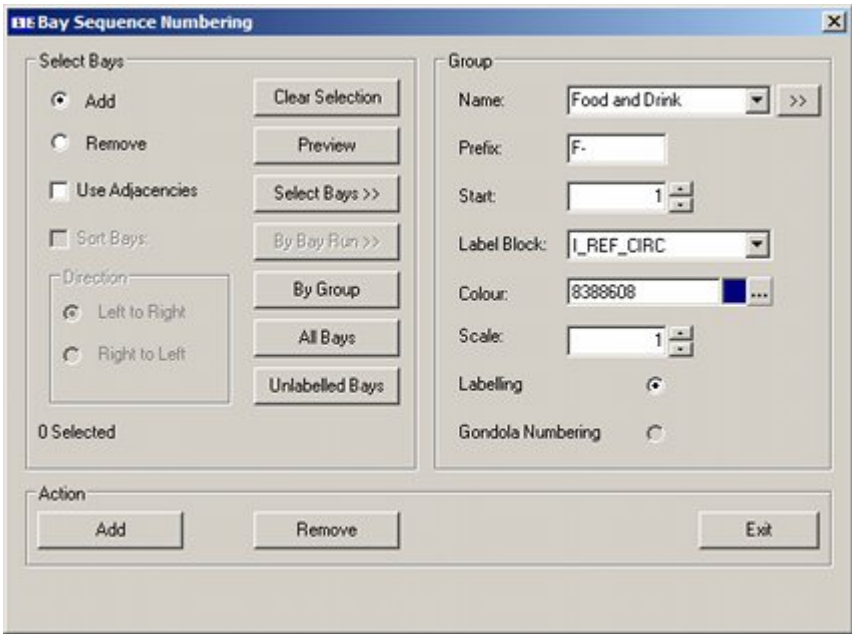

5. **Department** is the department (zone) in the floor plan the planogram is associated with.
6. **Aisle** is the aisle the planogram is associated with. For this option to operate, aisles must first be drawn in the floor plan in the Planner module. In the example below, Aisle F-1 has been drawn between two runs of fixtures.



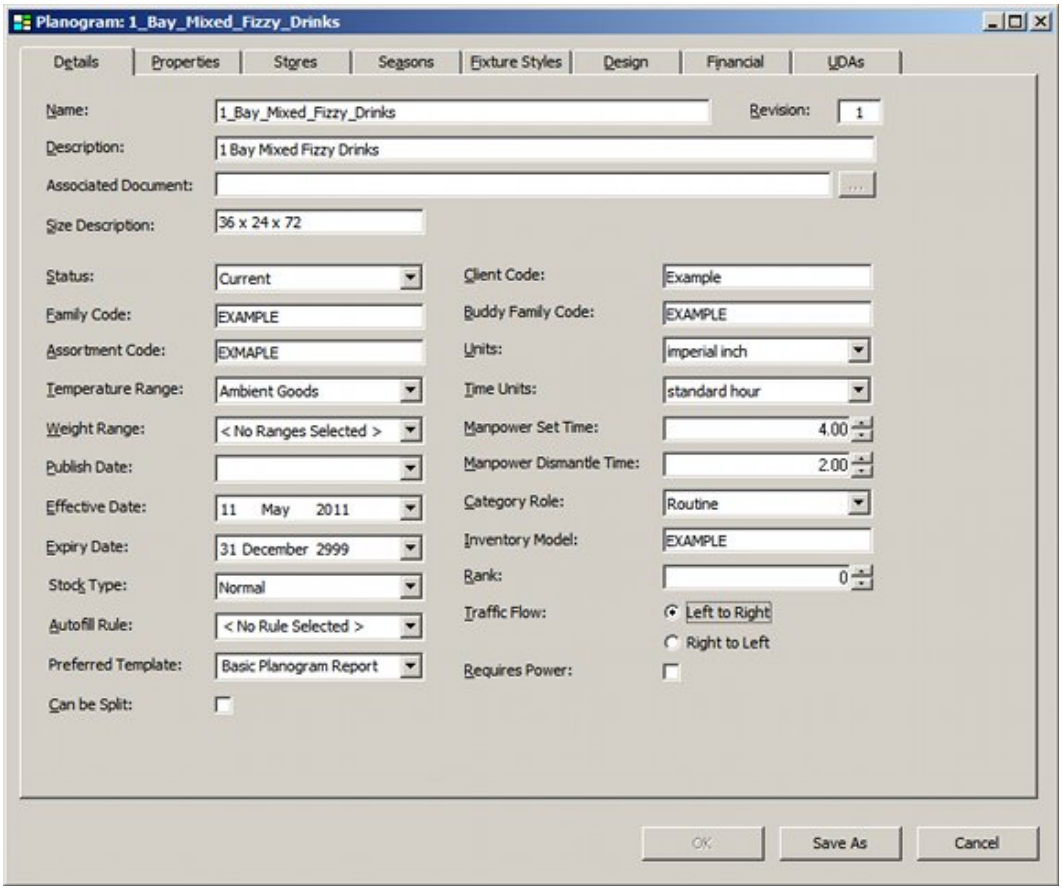

7. **Bay Number** is the bay number associated with the fixtures the planogram is placed on. For this option to operate, the fixtures in the floor plan must previously have been bay numbered.




8. **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.

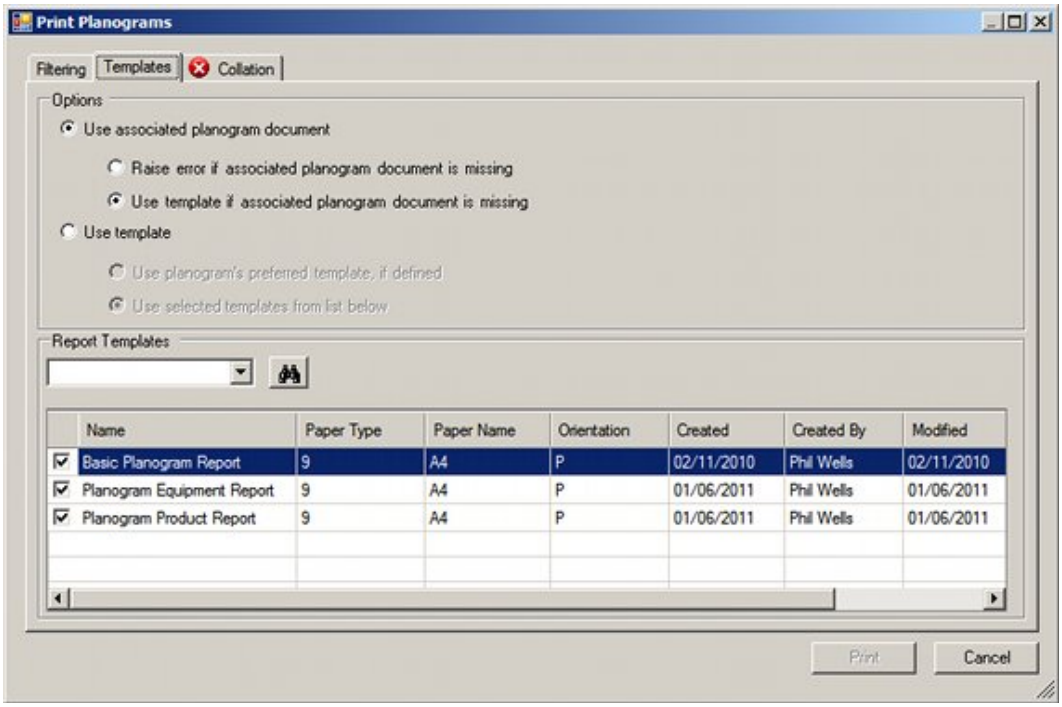



9. **Planogram Name** is the name of the planogram. This is set in the Name field of the Planogram Design dialog box in Merchandiser.
10. **Planogram Code** is the code for the planogram. This is set in the Client Code field of the Planogram Design dialog box in Merchandiser.



### 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).

## Zones in Merchandiser

### Overview of Zones

**Important:** 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 an Planner Polyline enclosing a specific section of floor. Further Polylines 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.

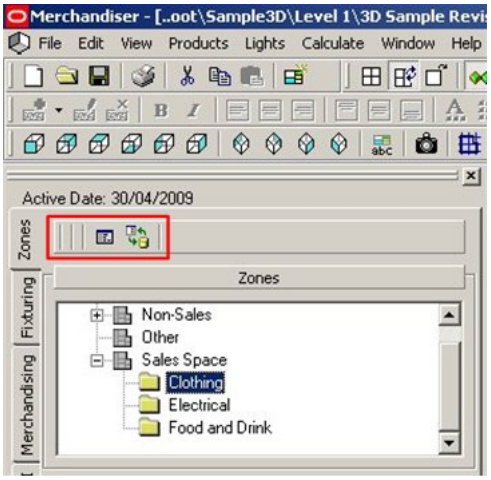
This sub-division of the store allows Planograms and fixtures to be filtered by Zone, allowing the store planner to rapidly establish which goods and which fixtures are in a specific part of the store.

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 Admin Module.

## The Zones Toolbar

The **Zones Toolbar** is found on the Object Browser.



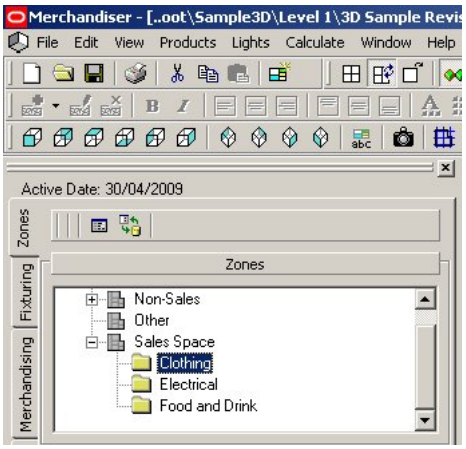

It contains two icons allowing operations to be carried relative to Zones.

| 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 Admin 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 Admin module.

### The Properties Window

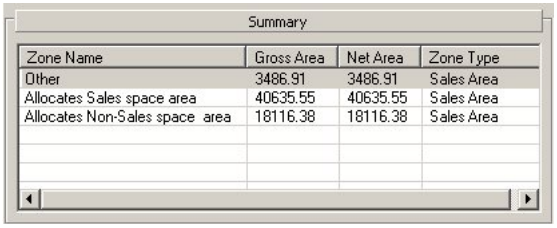
The **Properties Window** gives information on the selected Zone Definition.




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.




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.

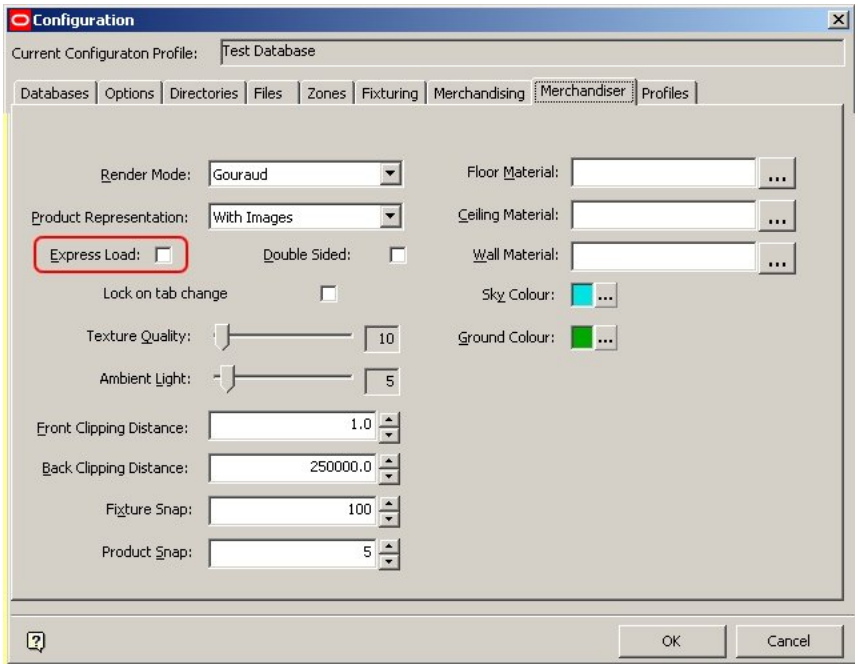
It will also slightly speed up movement in the Virtual Reality environment as less data is being manipulated when the user's viewpoint moves.

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.

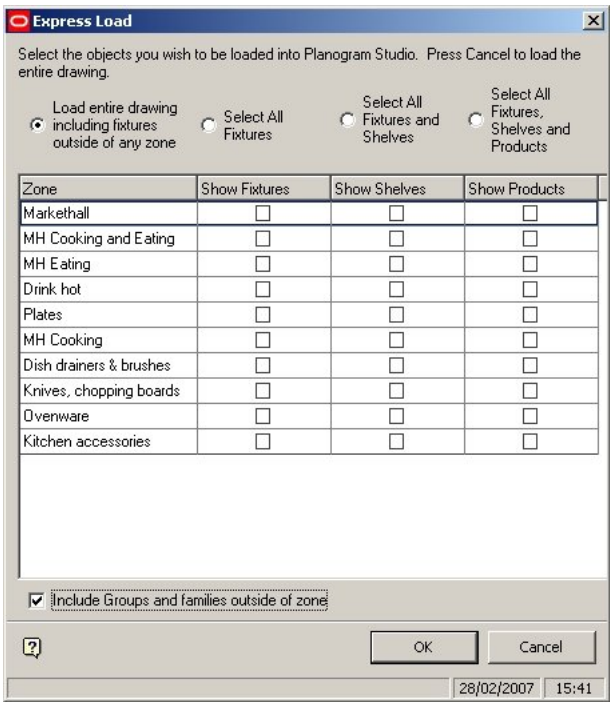
The Merchandiser Tab contains an Express Load checkbox.




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 un-checking 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 extends 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.

### Objects 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.

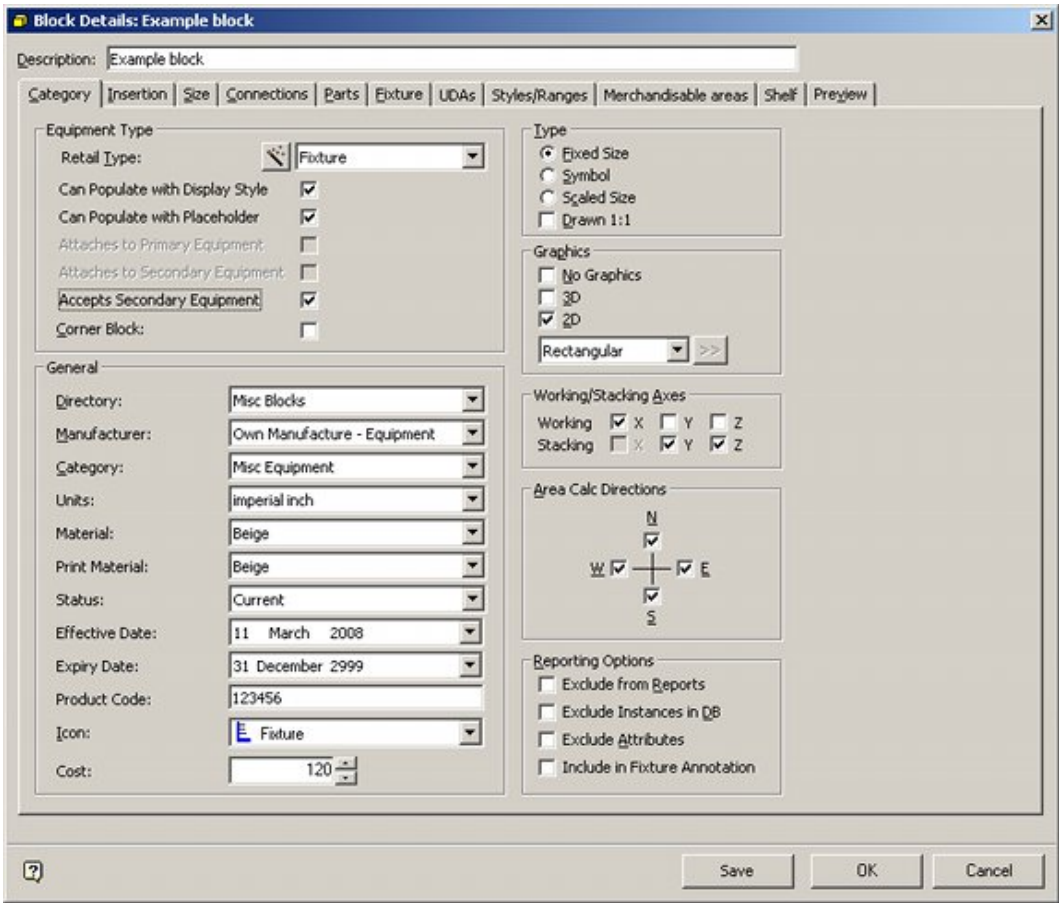
The user will be able to see these overlapping fixtures and fittings, together with their associated shelves and products.

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.

# Factors Affecting Equipment in Merchandiser

## Parameters Set in Fixture Studio

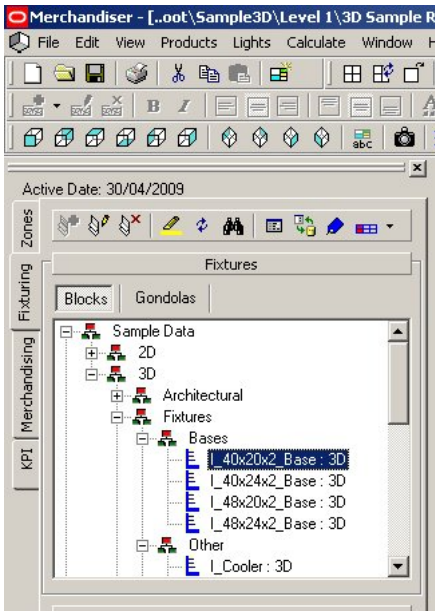
Fixtures (and gondolas) often behave in a specific way in the Merchandiser module. Much of this behavior is determined by settings in Fixture Studio. Specifically, the behavior is governed by options set in the Block Details dialog box.




**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.

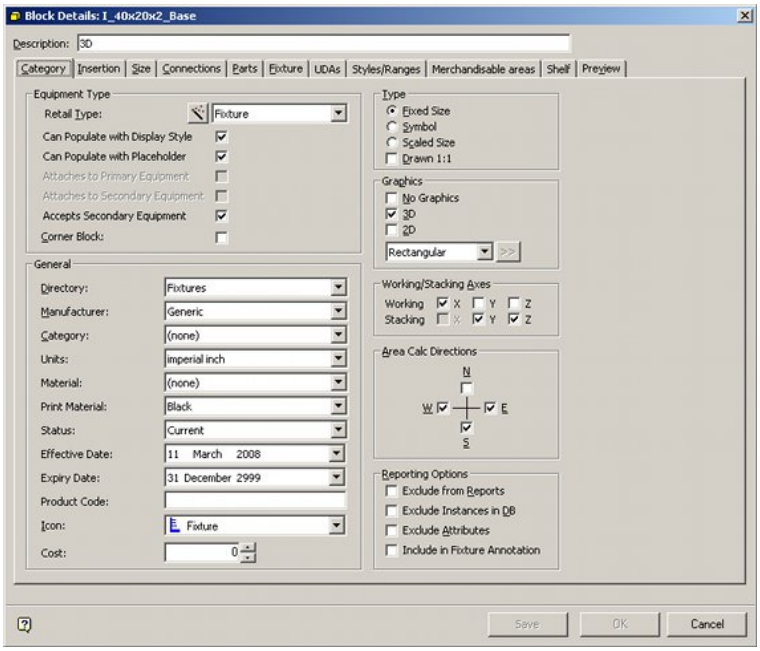
They are made up of groups and fixtures (or gondolas). Groups are the equivalent of windows folders and serve to hold fixtures (or gondolas) of a specific type.

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.



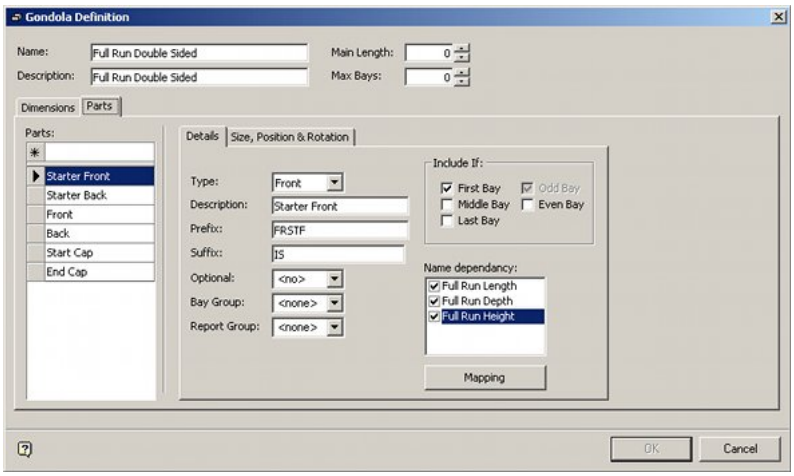

It contains a series of tabs that allow intelligent properties to be assigned to the graphic that appears in the drawing.

| 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. |
| Styles/Ranges Tab | |
| Merchandisable Areas Tab | Defines the volume that merchandise is allowed to occupy. |

| Tab | Options |
|---|---|
| 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.



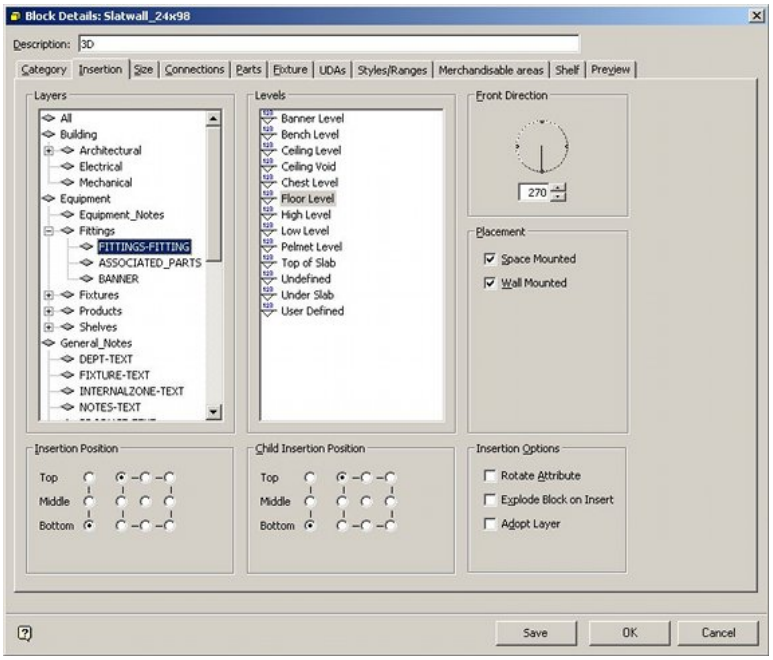

They allow gondolas to be defined from the available fixture blocks. Options include:

| | |
|---|---|
| **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 is this dialogue 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.

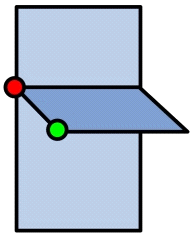
## Child Insertion Points

**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 Retail Focus 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.

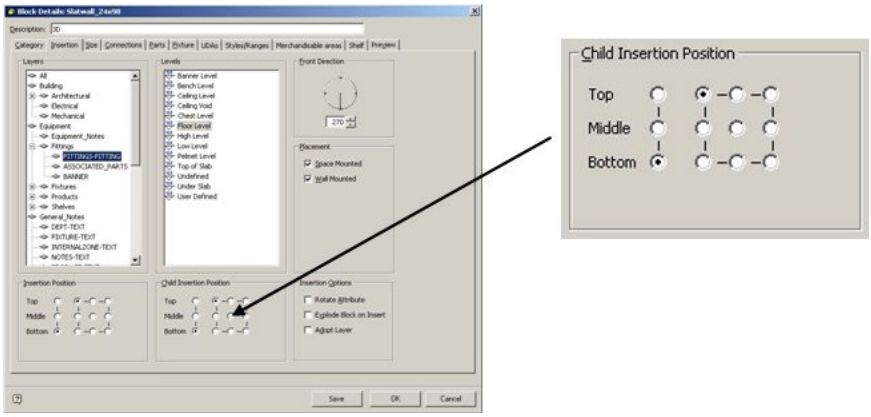
Any moving or editing operations for the shelf will be carried out relative to this insertion point.

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.

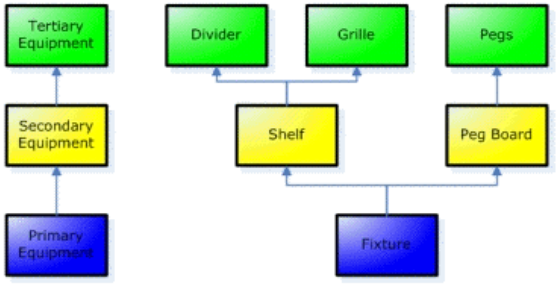
Examples of Secondary Equipment include shelves, peg boards and slatted back panels

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.

## Equipment Placement Options

The following table indicates how Macro Space Management fixtures and fittings can be inserted into the drawing and connected to each other.

| | Shelf Style Name | Can be placed on floor | Attaches to Fixture | Attaches to Shelf | Accepts Equipment |
|---|---|---|---|---|---|
| **Back Panel** | | X | | | X |
| **Basket Shelf** | Basket | | | X | X |
| **Booster Shelf** | | | | X | |
| **Crossbars, Lateral Rod** | Crossbar | | X | | X |
| **Divider** | Divider | | | X | |
| **Fittings, i.e. legs** | | | X | | |
| **Gravity Feed** | | | X | | |
| **Grille/Riser** | Grille | | | X | |
| **Hanging Bar** | Bar | | X | | X |
| **Metal Upright** | | X | | | X |
| **Obstruction, i.e. cross brace** | Obstruction | | X | | |
| **Pallet** | Pallet | X | | | |
| **Pegboards** | Pegboard | | X | | X |
| **Pegs** | Peg | | | X | |
| **Products** | | | | X | |

| | Shelf Style Name | Can be placed on floor | Attaches to Fixture | Attaches to Shelf | Accepts Equipment |
|---|---|---|---|---|---|
| **Rods** | Rod | | | X | |
| **Shelves** | Open Shelf | | X | | X |
| **Slatted Back Panels** | Slatted Back Panel | | X | | X |
| **Space Holder** | Space | | X | X | |

**Can be placed on floor** indicates equipment that can be placed directly on the floor. All other equipment must be attached to and supported by these types of equipment.

All equipment that places directly on the floor is Primary Equipment.

**Attaches to Fixture** indicates items of equipment that can be directly attached to a fixture.

All equipment that cannot be placed directly on the floor and requires attaching to a fixture is Secondary Equipment.

**Attaches to shelf** indicates equipment that can only be placed on a shelf -

All equipment that needs to be placed on a shelf is Tertiary Equipment.

**Accepts equipment** indicates that this item can have subsidiary items of equipment attached to it. For example, fixtures can accept shelves, shelves accept dividers and grilles and pegboards accept pegs.

## Equipment Merchandising Options

Macro Space Management equipment can be merchandised as follows.

(Fittings cannot hold products – only fixtures and shelves can hold merchandise).

| | Shelf Style Name | Can Populate with Placeholder | Can Populate with SKU |
|---|---|---|---|
| **Back Panel** | | X | |
| **Basket Shelf** | Basket | X | X |
| **Booster Shelf** | | X | X |
| **Crossbars, Lateral Rod** | Crossbar | | |

| | Shelf Style Name | Can Populate with Placeholder | Can Populate with SKU |
|---|---|---|---|
| **Divider** | Divider | | |
| **Fittings, i.e. legs** | | | |
| **Gravity Feed** | | X | X |
| **Grille/Riser** | Grille | | |
| **Hanging Bar** | Bar | | |
| **Metal Upright** | | X | X |
| **Obstruction, i.e. cross brace** | Obstruction | X | X |
| **Pallet** | Pallet | | |
| **Pegboards** | Pegboard | | |
| **Pegs** | Peg | X | X |
| **Products** | | | |
| **Rods** | Rod | X | X |
| **Shelves** | Open Shelf | X | X |
| **Slatted Back Panels** | Slatted Back Panel | | |
| **Space Holder** | Space | | |

Both fixtures and shelves (Open Shelves, Hanging Bars, etc) can be populated with products.

Other fixtures, such as back panels, cannot be populated with products directly but can hold shelves – which in turn can hold product.

**Can Populate with Placeholder** indicates that a placeholder can be placed on the fixture. Placeholders allow the user to indicate the fixture can be used for a general class of merchandise (for example men's clothing) than a more specific SKU (for example blue men's shirts).

**Can Populate with SKU** indicates that individual items of merchandise (SKU's or Stock Units) can be placed on the fixture.

## Working and Stacking Axes

**Working and Stacking axis's** 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.

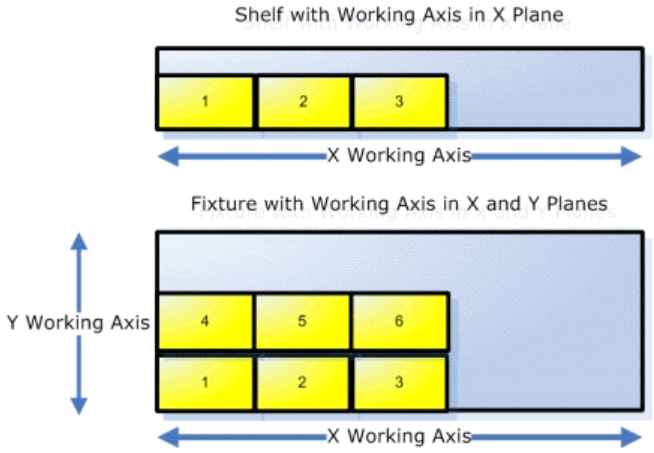
The working axis's of an item of shelf equipment are the axis's which product that is being sequentially placed is aligned along.

- 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

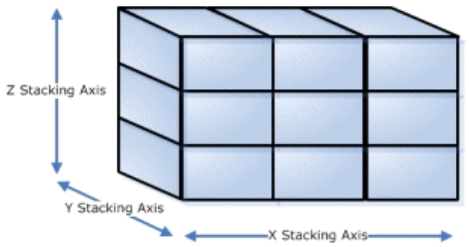



The working axis set should be appropriate for the type of fixture or shelf object.

### 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.

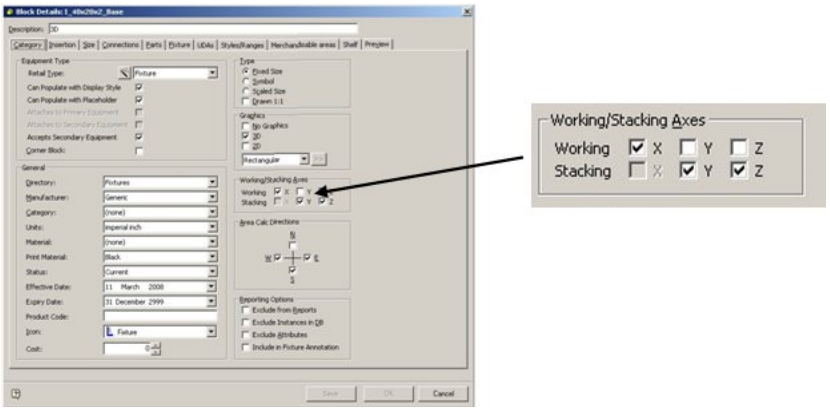
| SHELF | X | Y | Z |
|---|---|---|---|
| **Working** | ☑ | | |
| **Stacking** | ☑ | ☑ | ☑ |

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** | | ☑ | |
| **Stacking** | | ☑ | |

**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. |
| 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.

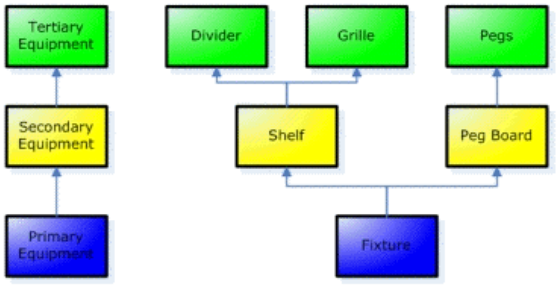
## Overview of Equipment Types and Connection Points

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.

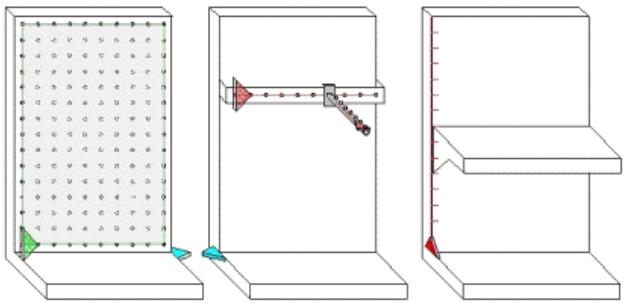
**Tertiary Equipment** indicates equipment that is attached to Secondary Equipment. Equipment can therefore be arranged in a hierarchy, as in the example below.




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.

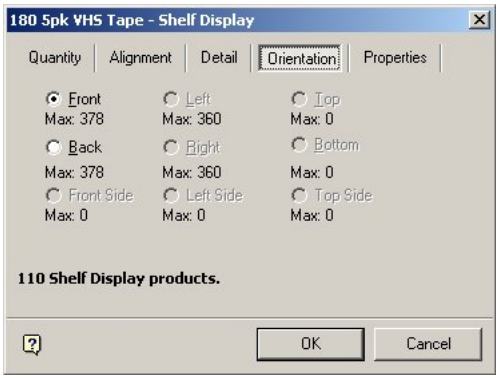
However, placing products in this orientation may not fill the shelf to its maximum capacity.

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.

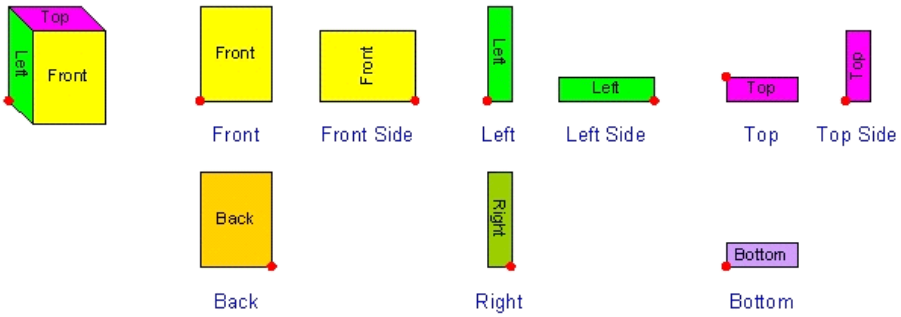
Product placed in orientations other than the main one are known as caps.

### Product Orientations

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).

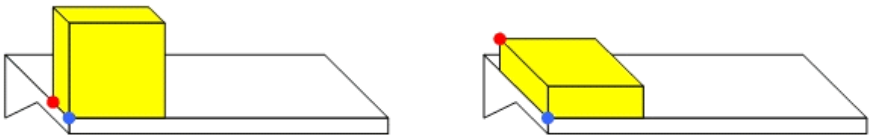
Front is the default orientation. The other orientations are achieved by the following rotations from the default.

| 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.

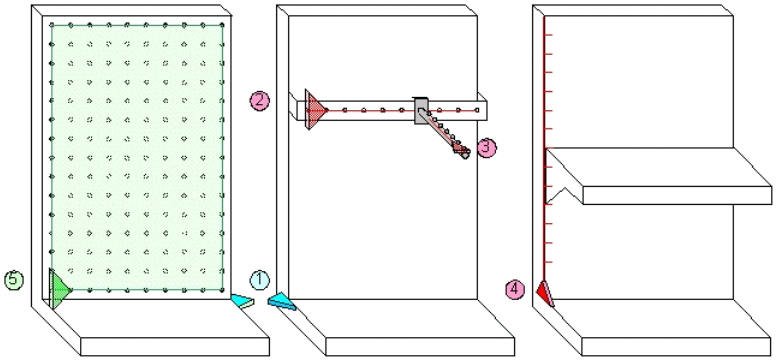
The increments between set positions along a connection line are defined in Fixture Studio.

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.

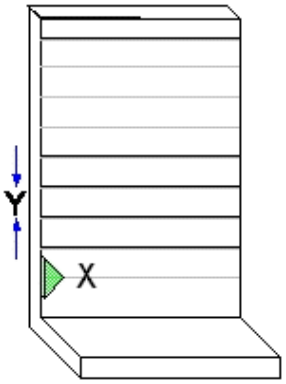
The increments between set positions in a connection plane are defined in Fixture Studio.

The position of the connection arrow defines the bottom left position of the first point on the connection plane.

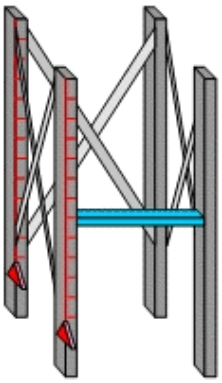



In the above diagram, blue arrows (1) represent Connection Points; red arrows (2, 3, 4) represent Connection Lines and the green arrow (5) represents a Connection Plane. The arrow direction indicates the X axis and the arrow lies in the X, Y plane.

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.



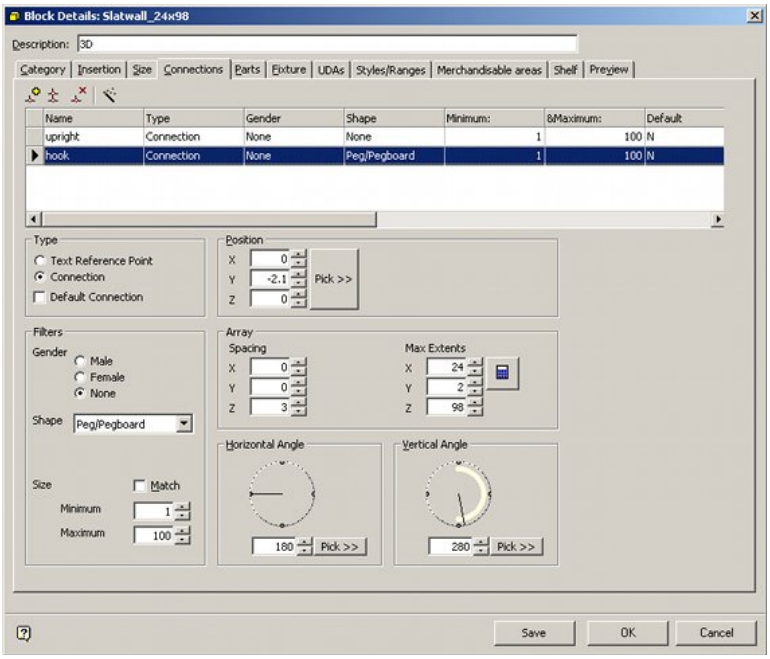
The fixture could be defined as two uprights (front and back), plus the cross-bracing. This would allow beams (blue) to be added to either the front or the back.

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.

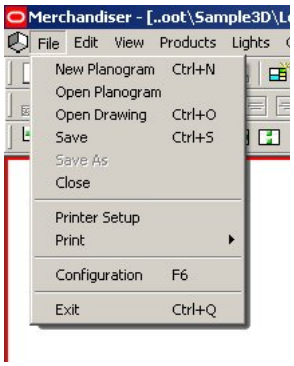
The defined connection points are the defaults for that fixture type and will be applied for every instance placed in the drawing.

**Note:** See the Fixture Studio Help File for more information.

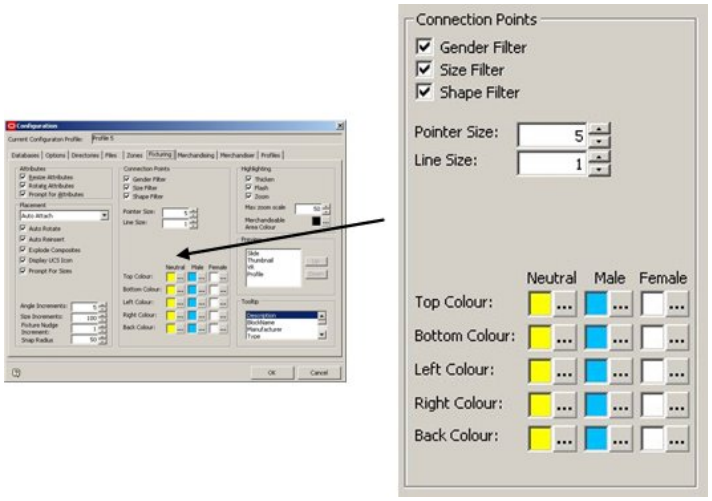
## The Connections Tab and the Configuration Module

**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 determines 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 |

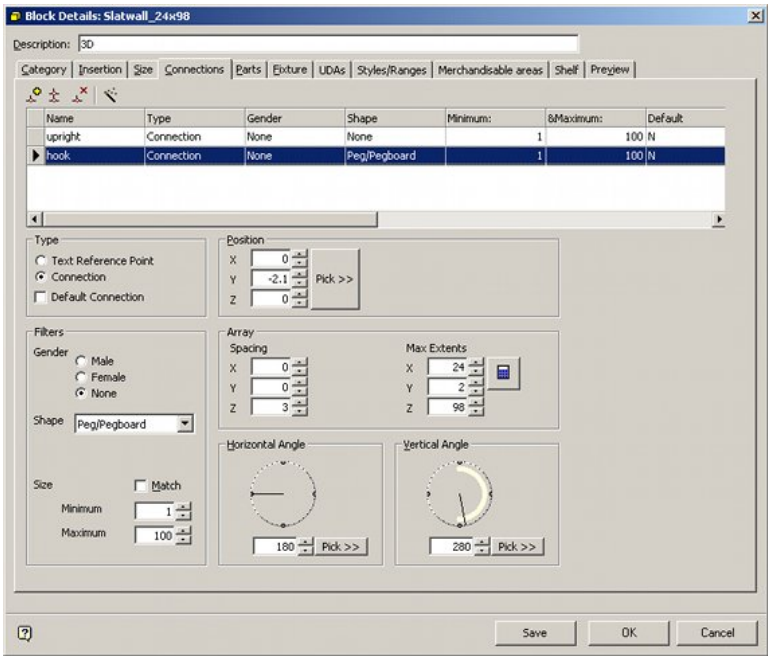
If any of these criteria are not true, then a connection cannot be made.

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.

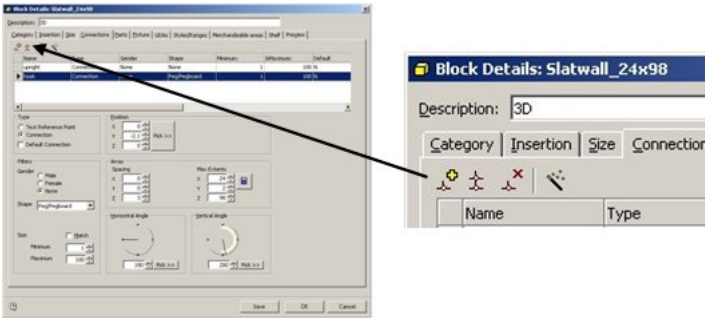



Brief details will be discussed in the following sections - see the Fixture studio help file for more detailed information.

### 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.

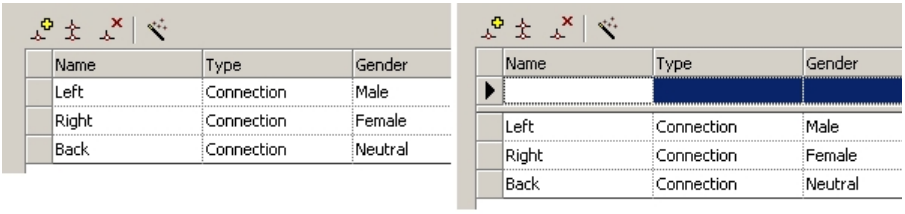
It allows users to Add, Copy and Delete Connections. It also allows the user to invoke the Connections Wizard.




| Icon | Description |
|---|---|
|  | Add a Connection |
|  | Copy a Connection |
|  | Delete a Connection |
|  | Connection Point Wizard |

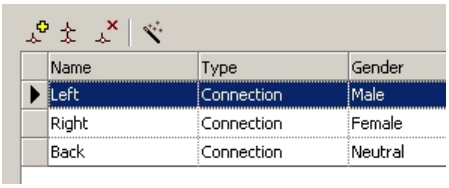
### Add a Connection

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.

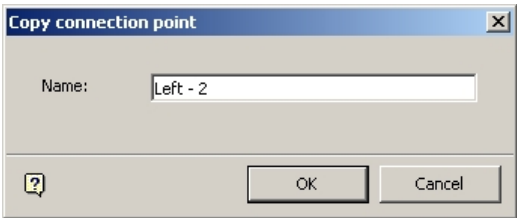



### Copy a Connection

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.

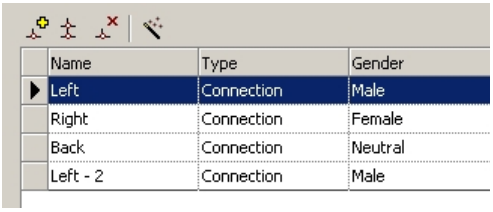



Before clicking the Copy icon, select the connection to be copied. Clicking on the icon will bring up the connection naming dialogue box.




Edit the name to one suitable for the new connection. In the example To be copied has been edited to Copied.

On clicking OK, a duplicate connection will be added, save for the changed name.




### Delete a Connection

To delete a connection, highlight the connection be to deleted and click on the Delete icon.

The User will be asked to confirm deletion.

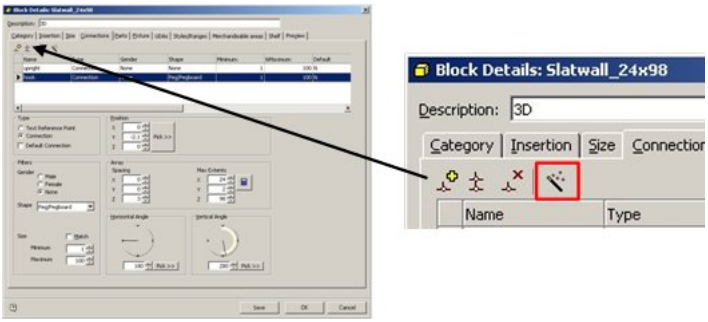


### Connection Wizard

The Connection Wizard is discussed in its own section.

## 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.

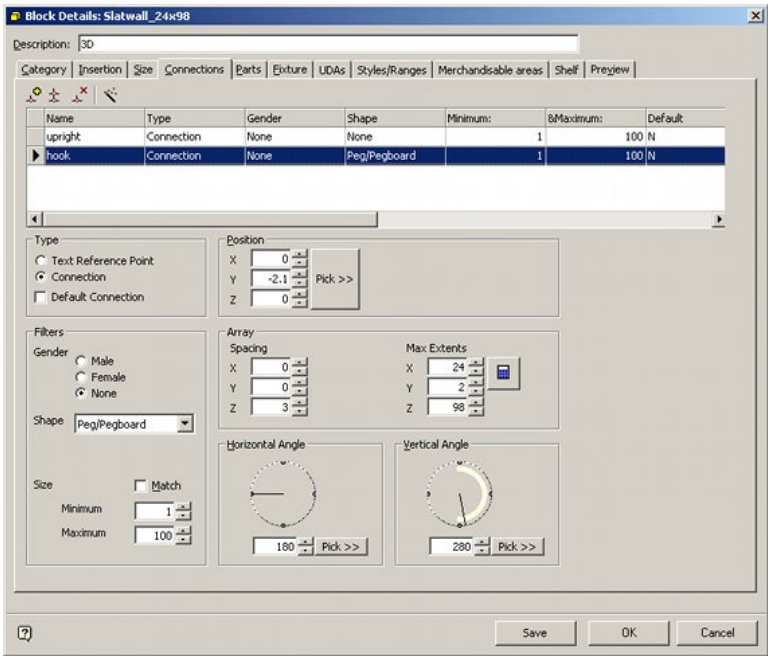
Checking the Clear Existing Blocks checkbox will remove any existing connections.

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.

(See the Fixture Studio Help File for more information).

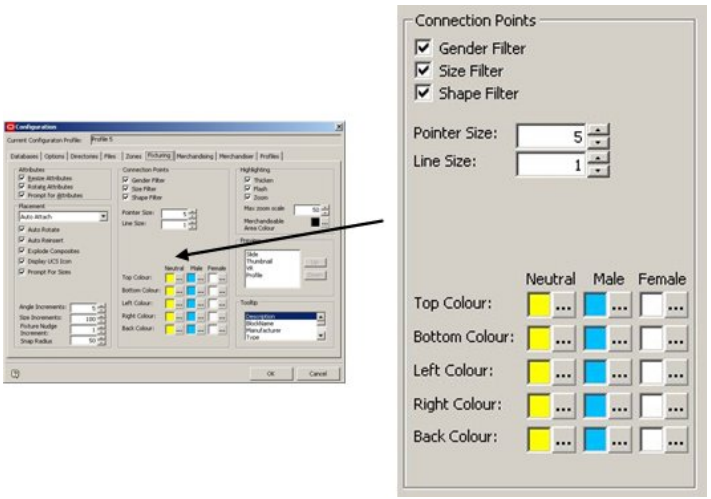
## Using Connection Points

### Overview of Using Connection Points

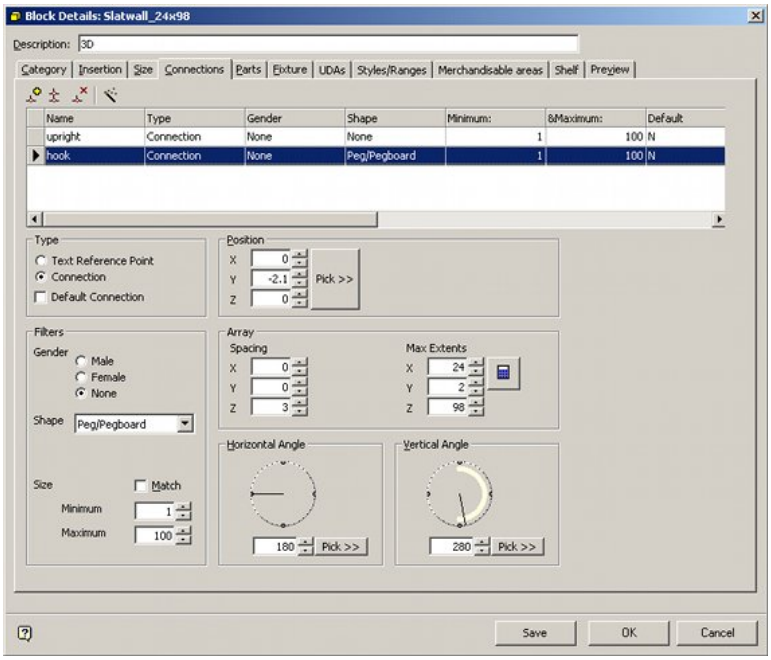
**Connection points** can be used to attach one piece of equipment to another.

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.

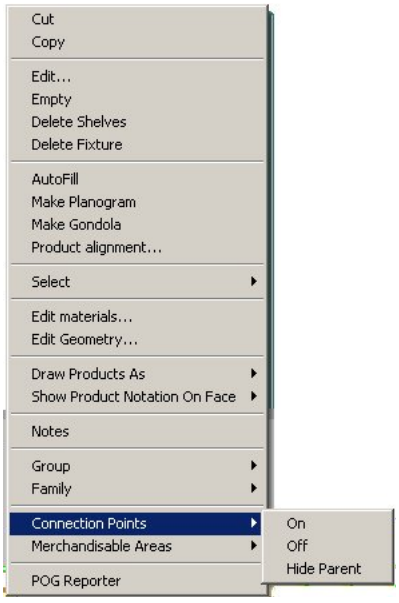



The combination of both sets of parameters will determine whether two connection points are compatible with each other.

### 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.

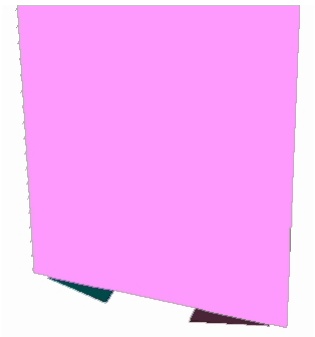



Clicking on the Connection points option in the pop-up menu allows connection display to be turned on and off.

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

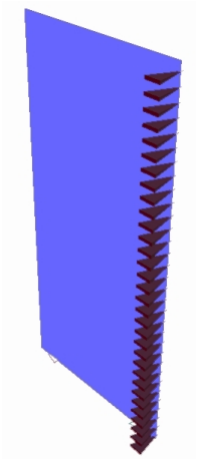
When visible, Connection Points are shown as triangles.



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 specified 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.

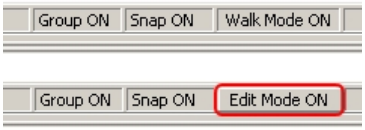
If the Match check box is not ticked, then the connections must have overlapping size ranges. If they are not overlapping, the connections will not mate.

| | 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

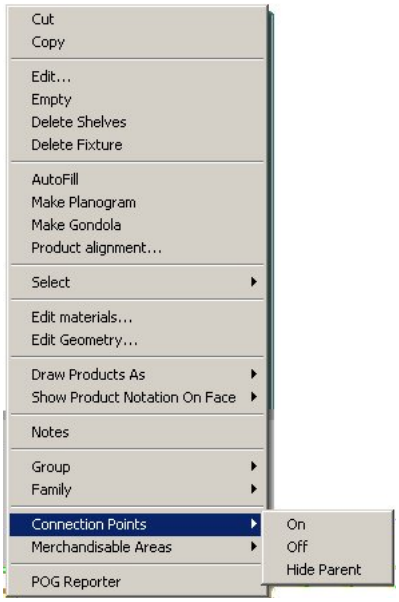
#### Swap to Edit Mode

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

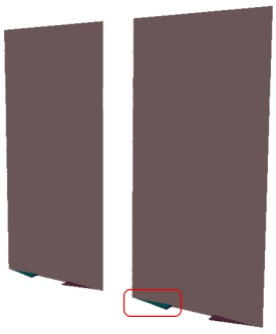
Next, ensure that the connection points have been toggled on by selecting a least two fixtures and use <Ctrl> plus right click to bring up the pop-up menu.



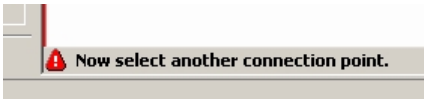

Turn connection points on and they will appear as triangles in the drawing.

Click First Connection Point and Follow Prompts

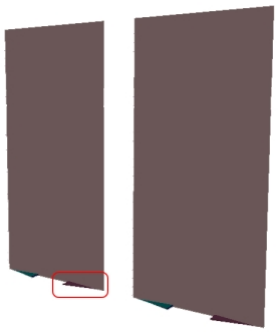
Click on the first connection point (circled in red in the image below).



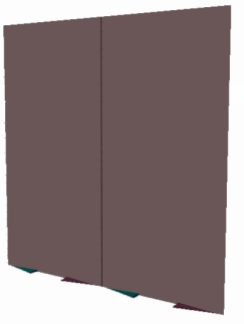
A prompt will then appear in the status bar asking the user to select the




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.



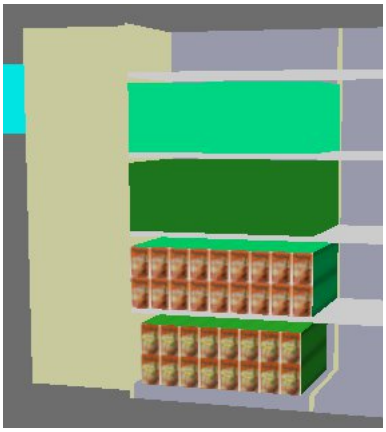
Note how the two connection points now meet:



# Adding Product Items

## Overview of 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 indicate that a particular type of merchandise is on the shelf or fixture but gives 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.

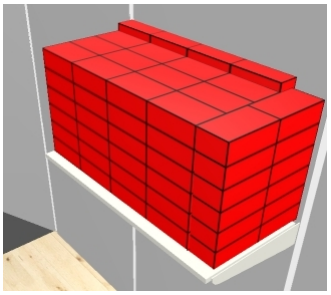
Products are added by dragging them from the window in the Merchandising tab on the Object Browser onto the fixture or shelf that they are intended to populate. Placeholders will be placed without taking into account the available dimensions. Display Styles can only be placed if the dimensions of the 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.



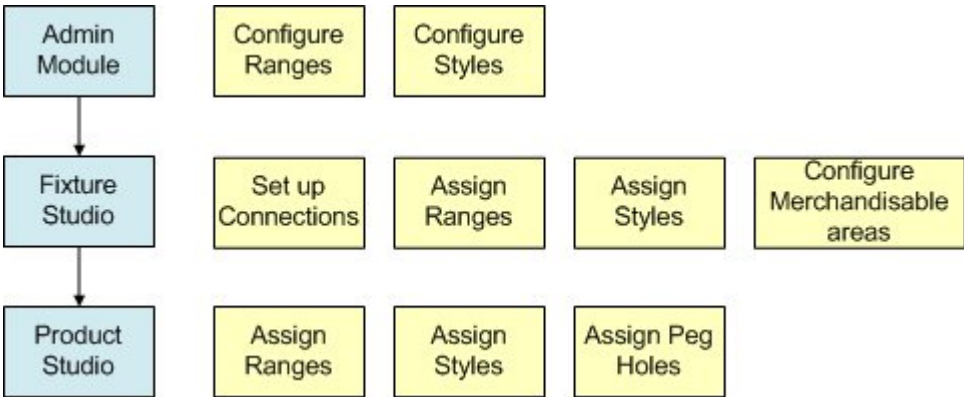
The above example has back and end caps. These could be placed manually, but this would be time consuming. They can be placed in a single operation when the quantity is calculated automatically.

**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.

## Overview of Preliminary Actions

**To add products in Merchandiser**, a series of preparatory parameters must be set in the Admin Module, Fixture Studio and Product Studio.

The process is as follows:



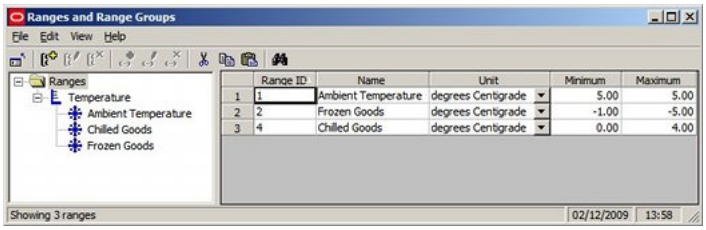

These parameters are generally set up on a 'one-off' basis when Macro Space Planning is implemented. They will not generally need significant change after that point.

### 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.

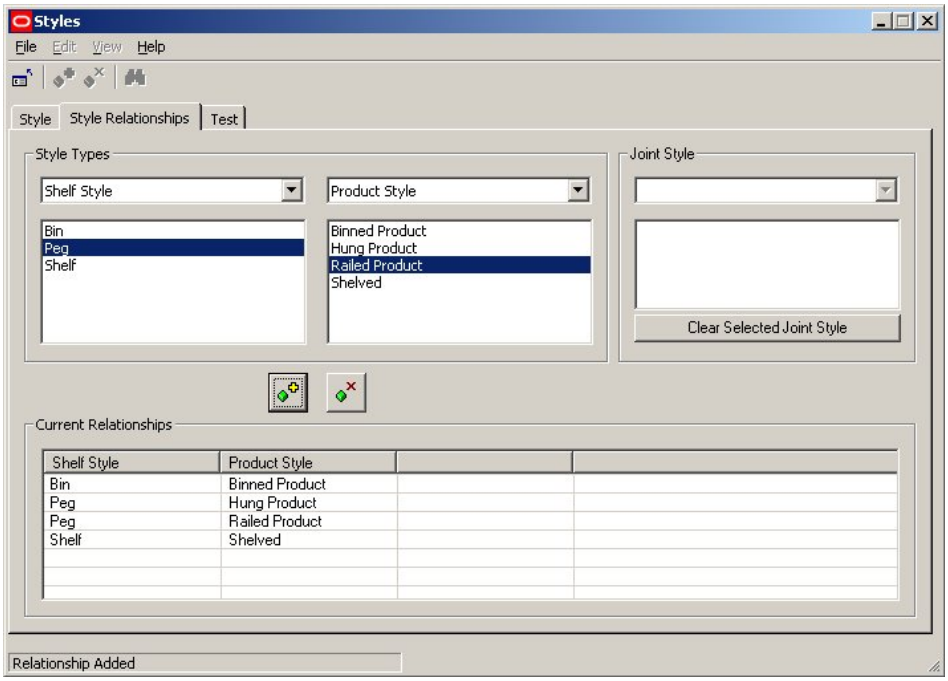
#### Ranges

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.

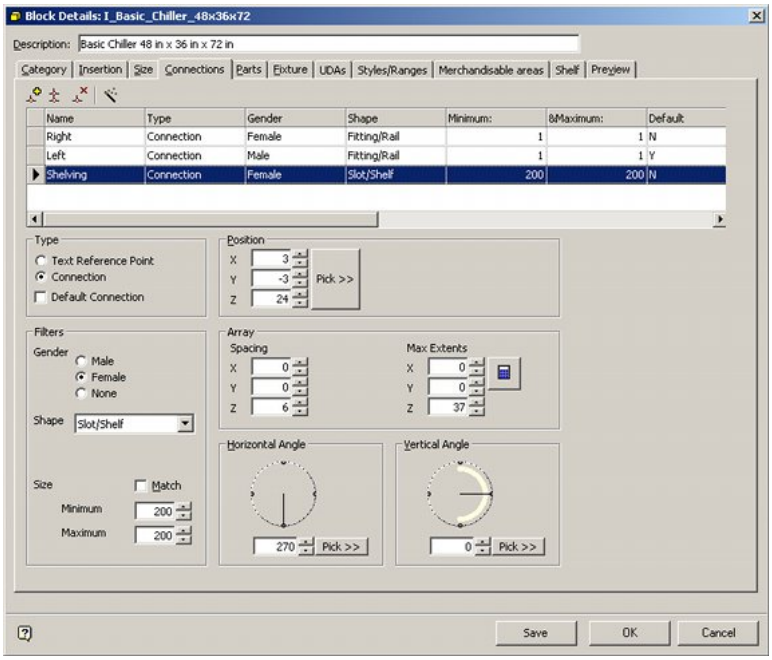
## Preliminary Actions required in Fixture Studio

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.

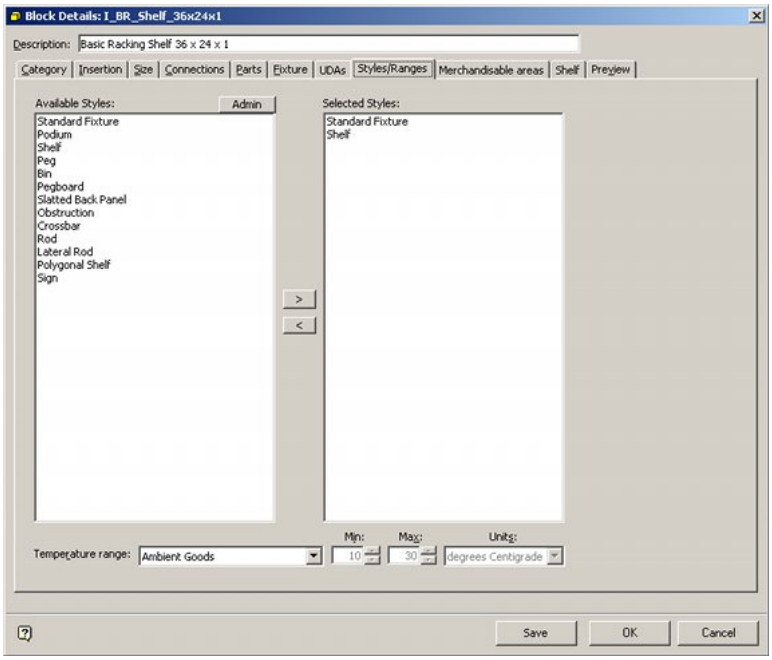
### Connection Points

Connection points are assigned in the Connections tab of the Block Details dialog box in Fixture Studio.




**Fixture and Shelf Styles/Temperature Ranges**

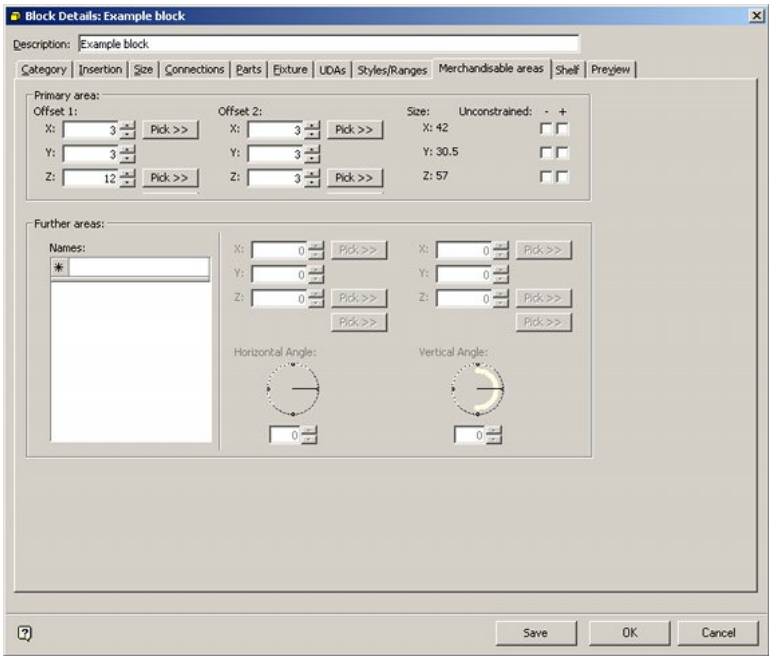
Fixture and Shelf styles are assigned in the Styles/Ranges tab of the Block Details dialog box in Fixture Studio. A Temperature range should also be assigned in this tab.




> **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.

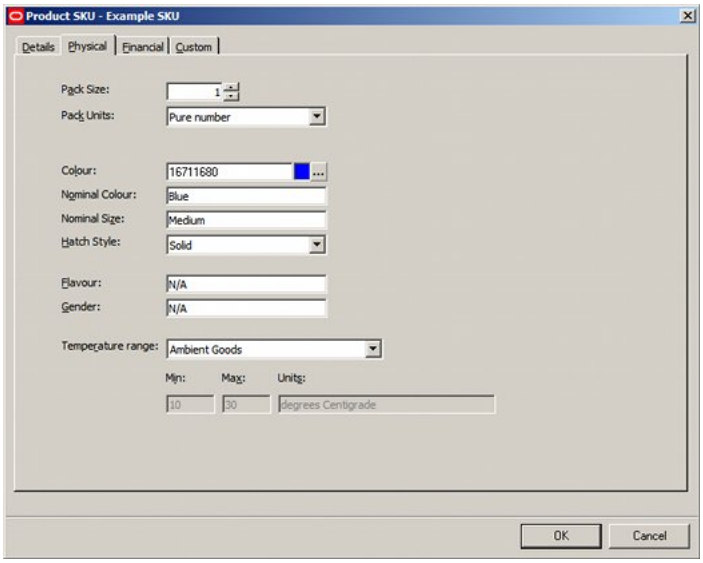
## Preliminary Actions required in Product Studio

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

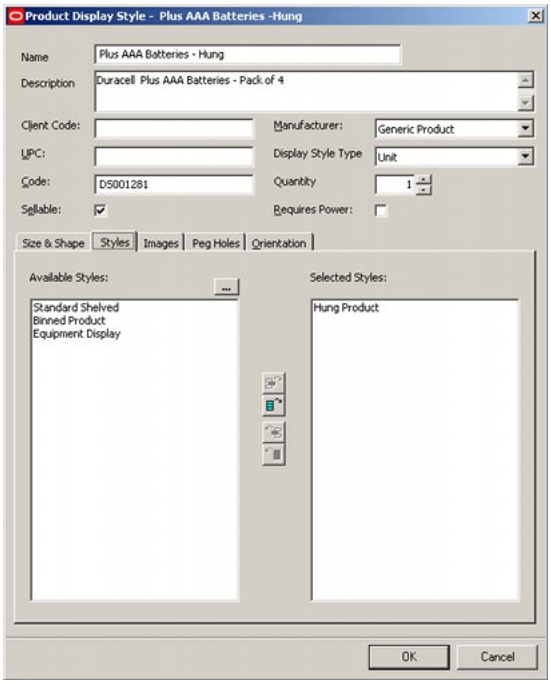
### Temperature Range

Temperature Ranges are assigned to display styles in Physical tab of the SKU dialog box for their parent SKU.



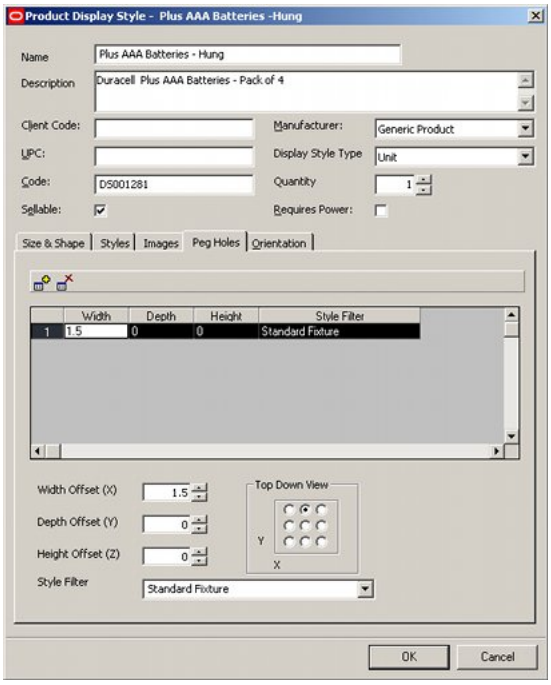

### Product Styles

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.



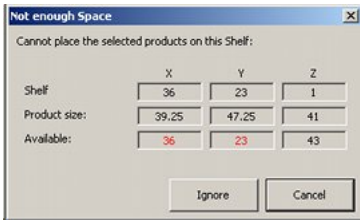

**Note:** For more detailed information see the Product Studio Help File.

## Common Problems Experienced When Adding Products

Some common problems experiences 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:

4. The correct temperature range has been assigned to the parent fixture, shelf or peg in Fixture Studio.
5. 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 se 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.

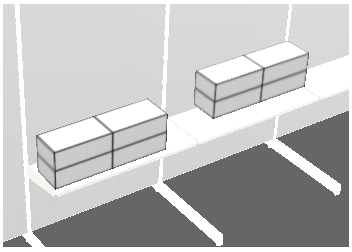
> **Note:** It is recommended that products are placed as grouped items as they can them be manipulated as a single object. If they are placed as a stack of ungrouped items, then each item in the stack has to be manipulated individually. This increases the amount of time required from the user, the amount 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.




**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.

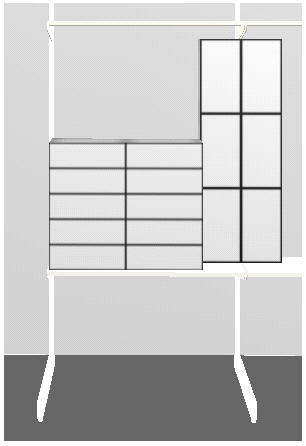
**Shelf Capacity** is the dimension of the shelf on which the products are being placed.

### 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 grayed out.

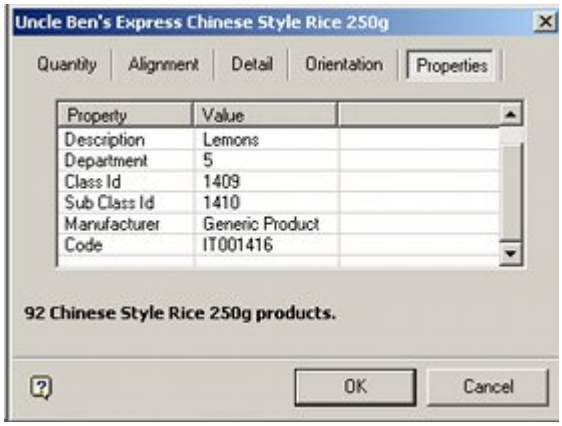


In the above example the product group on the left has been placed with the Front orientation. A second example of the same product group has then been placed to its right in the Top Side orientation.

> **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).



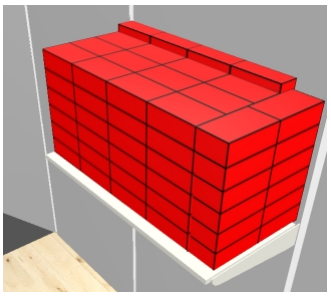

The information is intended to be of use to merchandisers populating the floor plan.

## 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 then 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.

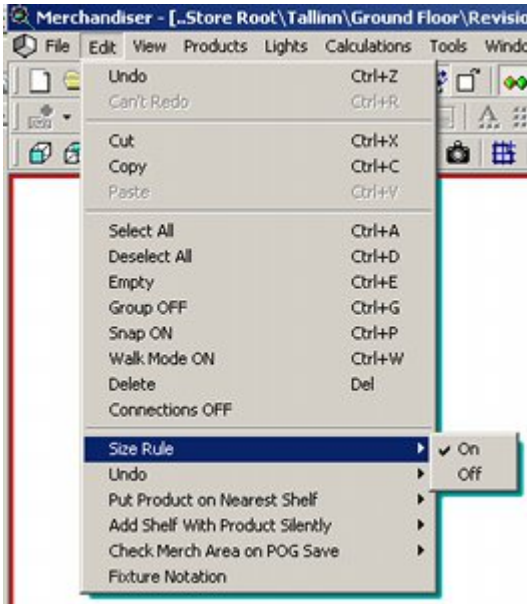


It is possible to achieve this manually by placing the main body of product, then placing the rear end cap and then the size end cap. This may require some time to achieve.

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

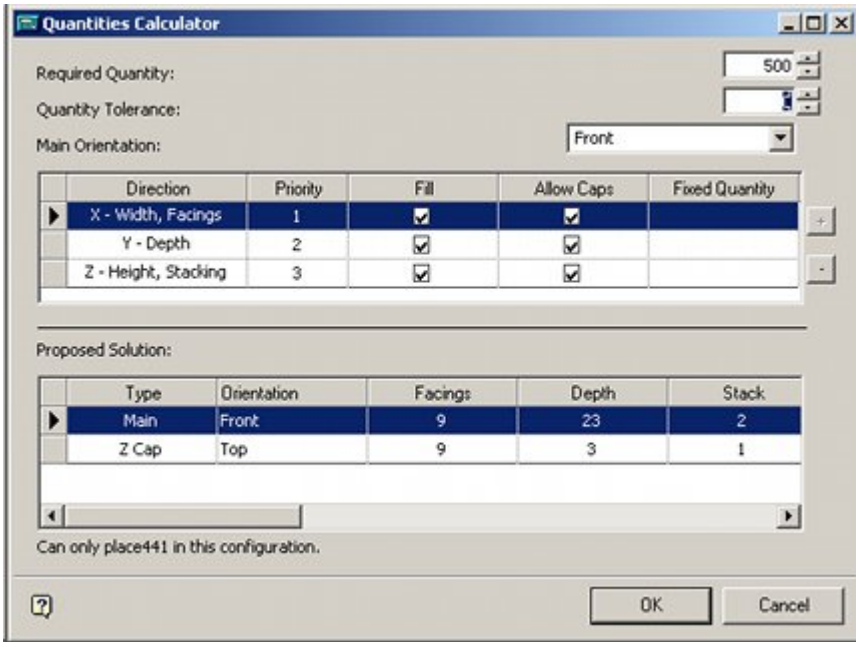
The **Add Products dialogue box** allows the user to control the calculated quantity and orientation of the product being placed.



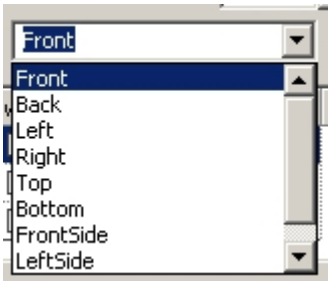

To calculate a quantity:

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.




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.

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.

8. 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

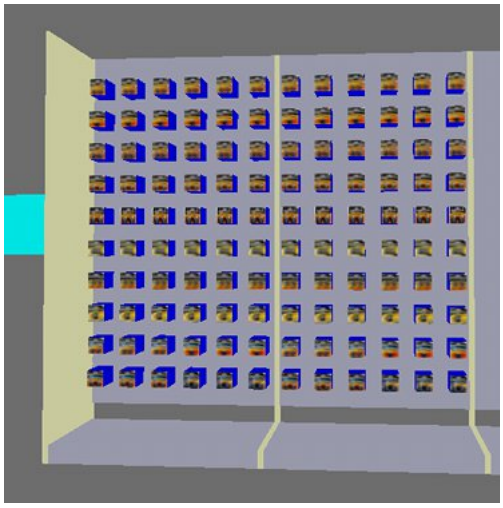
applies to products placed in the Main Orientation. If a quantity greater than the maximum number that will fit is entered then the number will default to the largest value possible.

9. End Caps can be allowed or prevented by selecting or un-selecting the check box as appropriate.
10. 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).
11. 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 Admin 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.

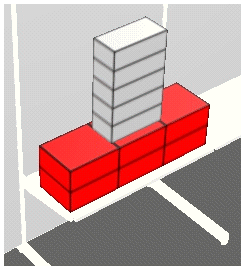
## Additional Ways of Placing Products

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 them 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.

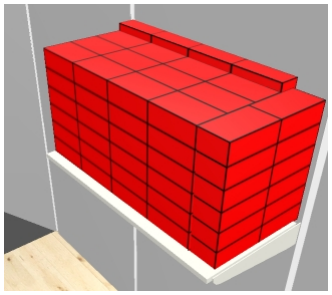
> **Note:** If the mouse cursor is just above the object to be placed on top of when the key is released, then the object being placed will be inserted to one side, rather than on top.



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.

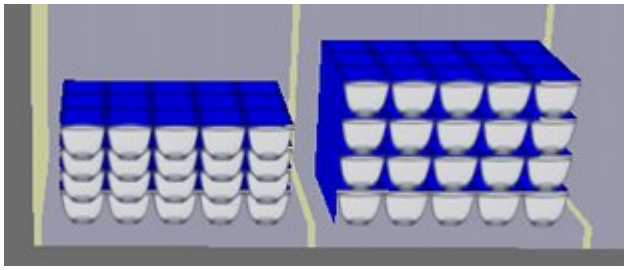


It can also be achieved automatically by making use of the Calculate option on the Add Products dialog box.

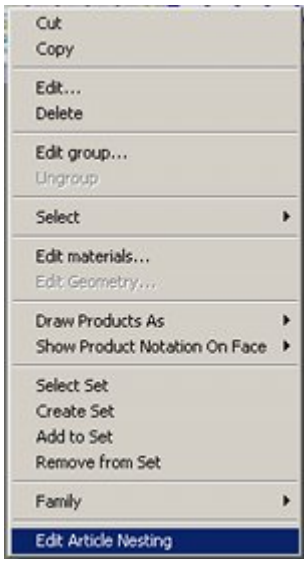



### Nesting

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, 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 onto 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.

## Alignment Operations

### Align to Left

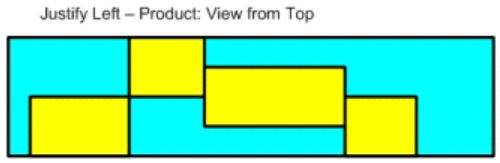
If one or more shelves/fixtures are selected before clicking the Align to Left button, then all child products will be aligned to the left. Alignment towards the front or back of the shelf will not be affected.

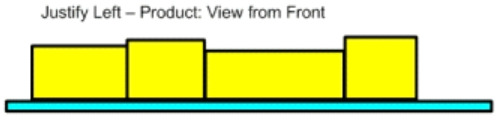
Products will first be sorted in order of position along the length of the shelf. The first product will then be placed at the left hand end of the shelf. The next product will be placed adjoining the first such that it is adjacent, but does not overlap. Successive products will be placed in a similar 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

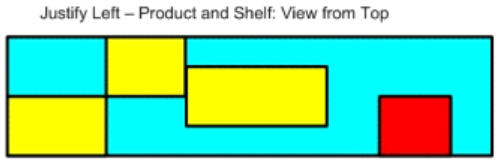
If only products are selected, then they will be aligned so that left-hand side of each product matches the right-hand side of the preceding product in the selection set.

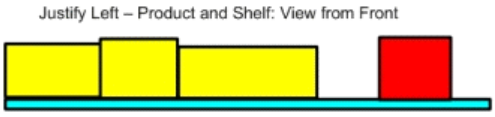



#### Shelf/Fixture and Products Selected

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.

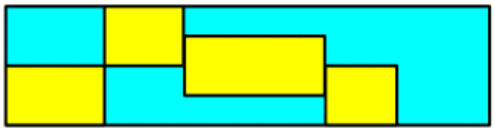



#### Shelf/Fixture Selected

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.

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

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.

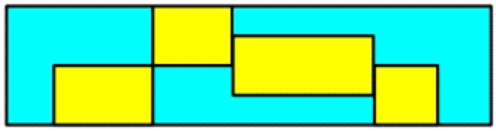
When all products have been aligned to center, there will be an equal unoccupied space to either side.

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.

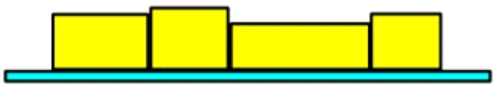
### Products Selected

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

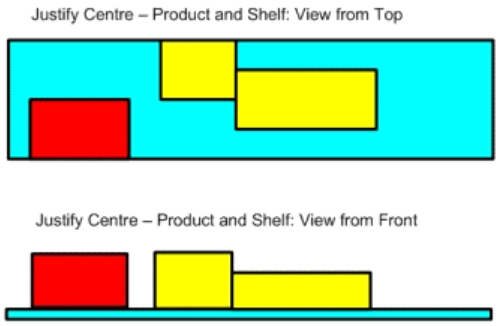


Justify Centre – Product: View from Front



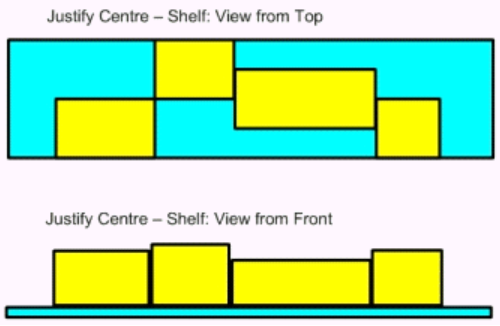
### Shelf/Fixture and Products Selected

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.




#### 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 Right

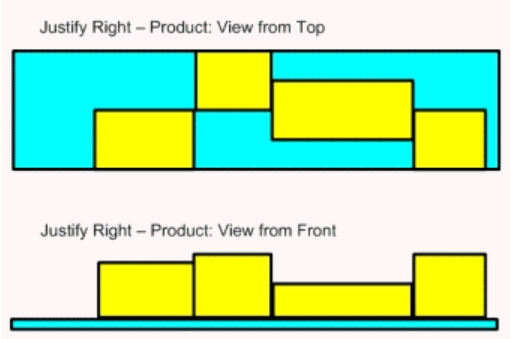
If one or more shelves/fixtures are selected before clicking the Align to Right button, then all child products will be aligned to the right. Alignment towards the front or back of the shelf will not be affected.

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.

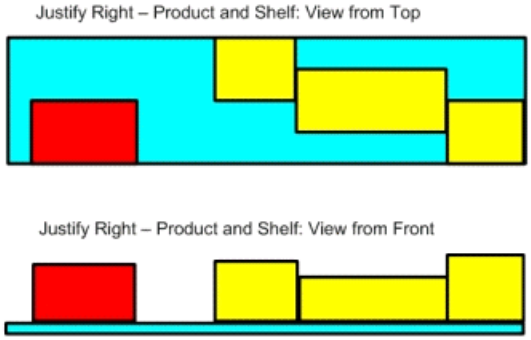
#### Products Selected

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.



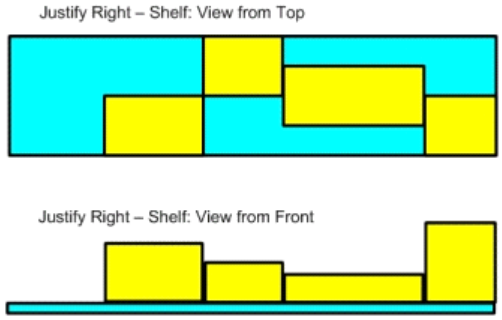

#### Shelf/Fixture and Products Selected

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

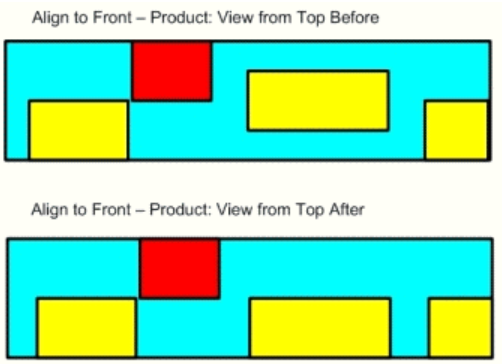
If one or more shelves/fixtures are selected before clicking the Align to Front button, then all child products will be aligned to the front. Alignment towards the left or right of the shelf will not be affected.

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.

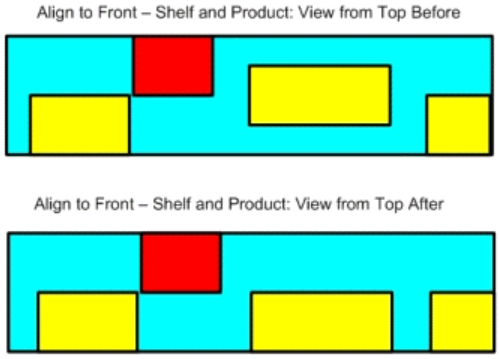
#### Products Selected

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.




#### Shelf/Fixture and Products Selected

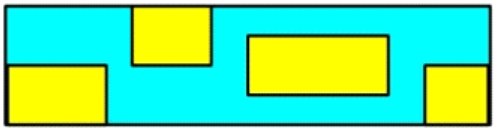
If the shelf/fixture, plus some of its child products are selected, then only those selected products will be aligned with the front of the shelf, rather than all the products on the shelf.



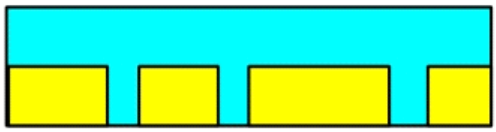

#### Shelf/Fixture Selected

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

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.

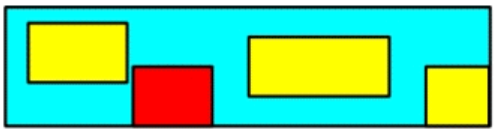
Products will first be sorted in order of position along the depth of the shelf. The first product will then be placed at the back edge of the shelf. The next product will be placed adjoining the first such that it is adjacent, but does not overlap. Successive products will be placed in a similar manner 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.

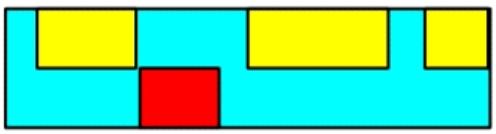
### Products Selected

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

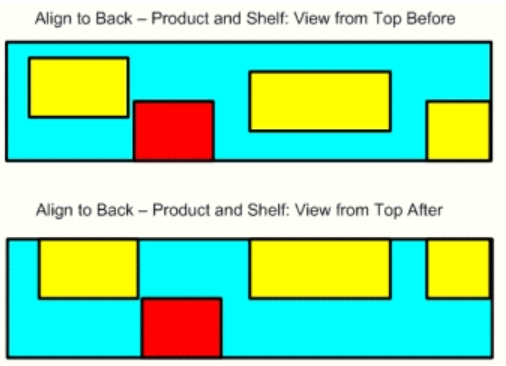


Align to Back – Product: View from Top After



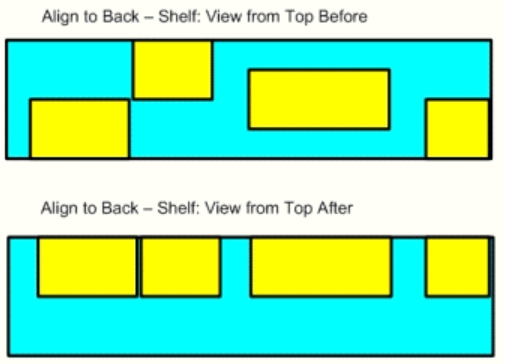
### Shelf/Fixture and Products Selected

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.




#### 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

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.

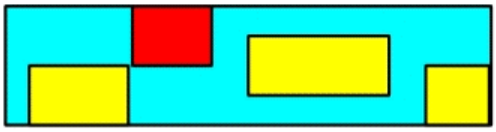
When all products have been aligned to the middle, there will be an equal unoccupied space to the front and rear.

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.

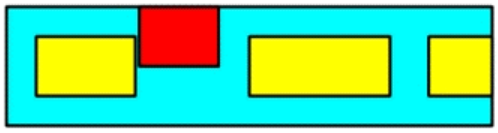
#### Products Selected

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



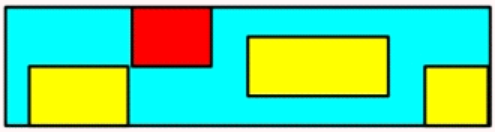
Align to Middle – Product: View from Top After



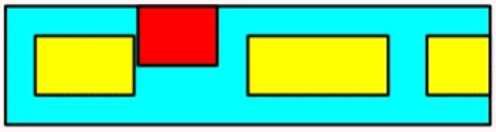
**Shelf/Fixture and Products selected**

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



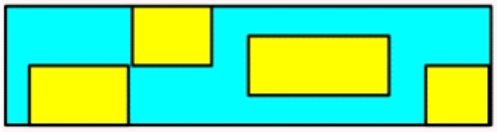
Align to Middle – Product and Shelf: View from Top After



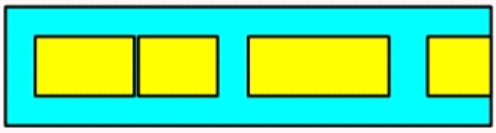
**Shelf/Fixture selected**

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.

Align to Middle – Shelf: View from Top Before



Align to Middle – 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.

### 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 rightmost product. It will then establish the combined length of all the products within that distance.

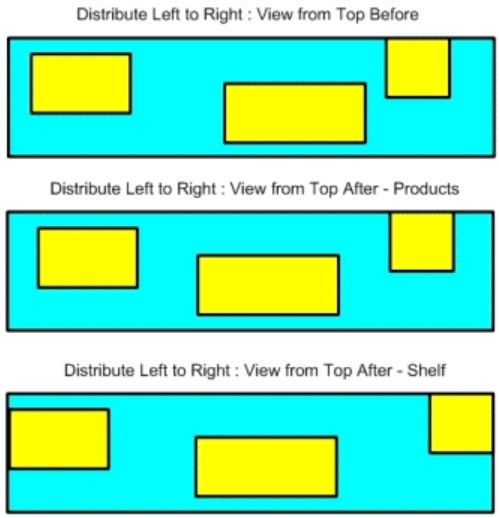
After comparing the total distance and the combined length, Distribute Left/Right will then move all selected products so that the gaps (or overlaps) between the selected products are equal.

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

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 rearmost product. It will then establish the combined depth of all the products within that distance.

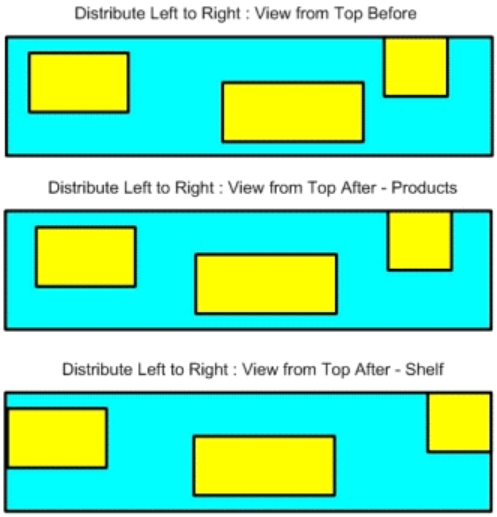
After comparing the total distance and the combined depth, Distribute Front/Back will then move all selected products so that the gaps (or overlaps) between the selected products are equal.

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.




> **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

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.

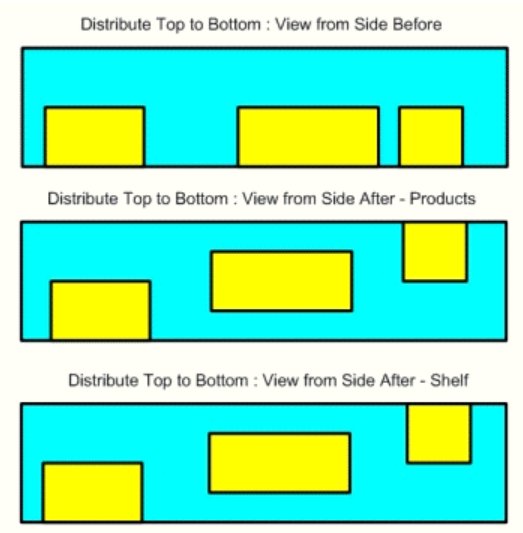
After comparing the total distance and the combined heights, Distribute Top/Bottom will then move all selected products so that the gaps (or overlaps) between the selected products are equal.

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

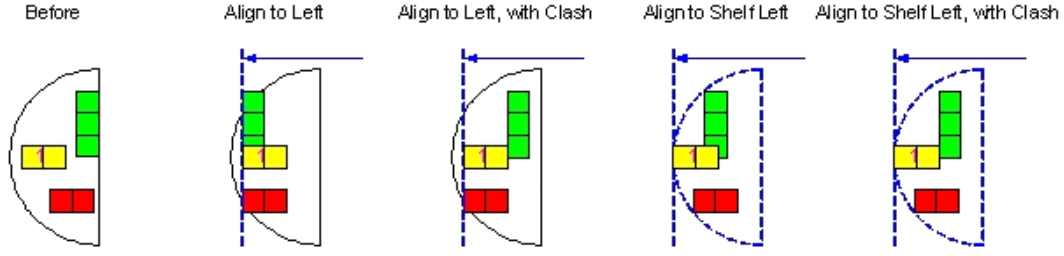
Macro Space Planning allows alignment to non rectangular objects such as semi-circular fixtures or corner shelves in Merchandiser.

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 help file for more information

### Shelves

Alignment on non-rectangular objects should be carried out using the Shelf alignment options and with clash detection on.




### Products

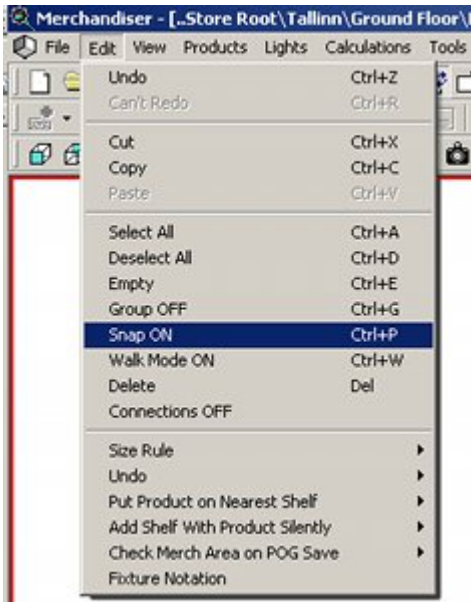
Non-rectangular products will be treated as boxes for alignment purposes.

### Aligning to Snap Grid

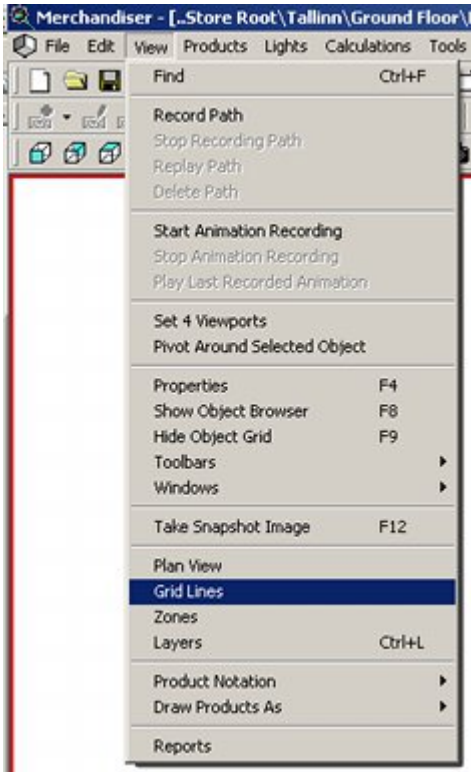
It is possible to **align objects to a regular grid**. This can be toggled On or Off by clicking on the Snap option on the Status bar.



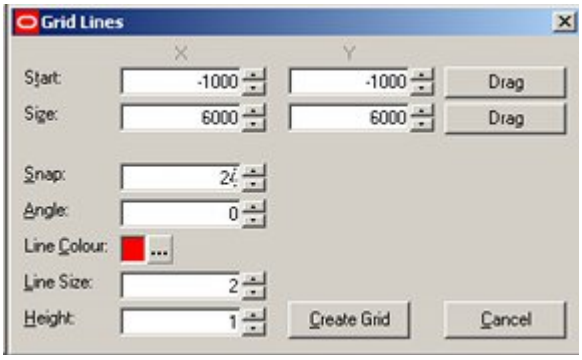

It is also possible to toggle it On or Off using the Edit menu.



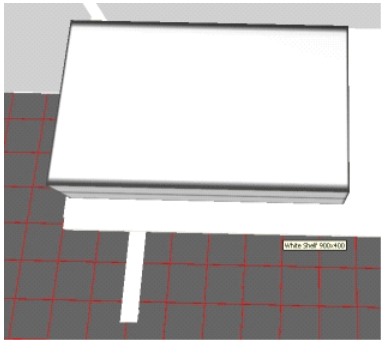

The grid itself can be set to be displayed using the Grid Lines Option in the View pull down menu.



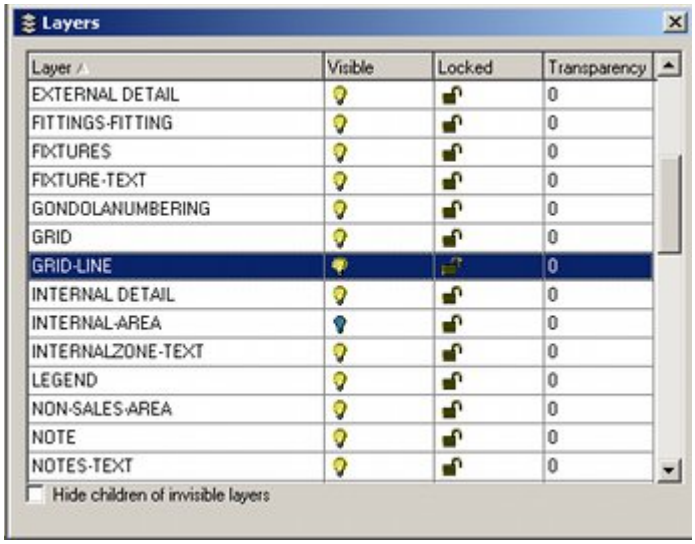

This brings up the Grid Lines dialogue box which can be used to set the parameters of the grid.




The grid will then appear in the Virtual Reality Environment.



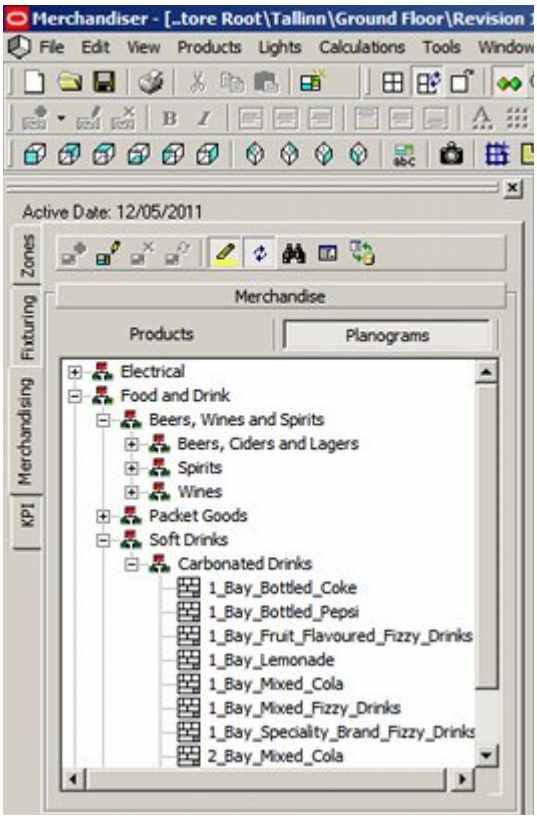
To turn the grid off, go to the layers dialogue box and turn off the Grid-Line layer.




# 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

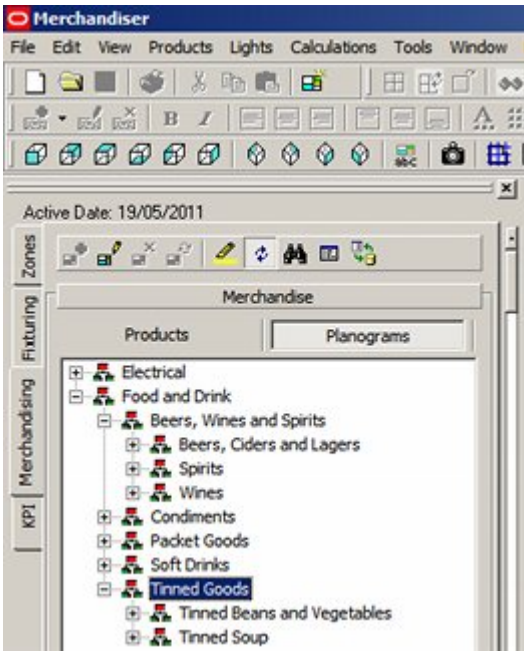
Groups hold collections of planograms. They can be set up in a hierarchical structure - for example Summer Promotion is a child of Promotional Items.

#### Planograms

Planograms can be assigned to groups. Each Group holds a collection of planograms of similar purpose.

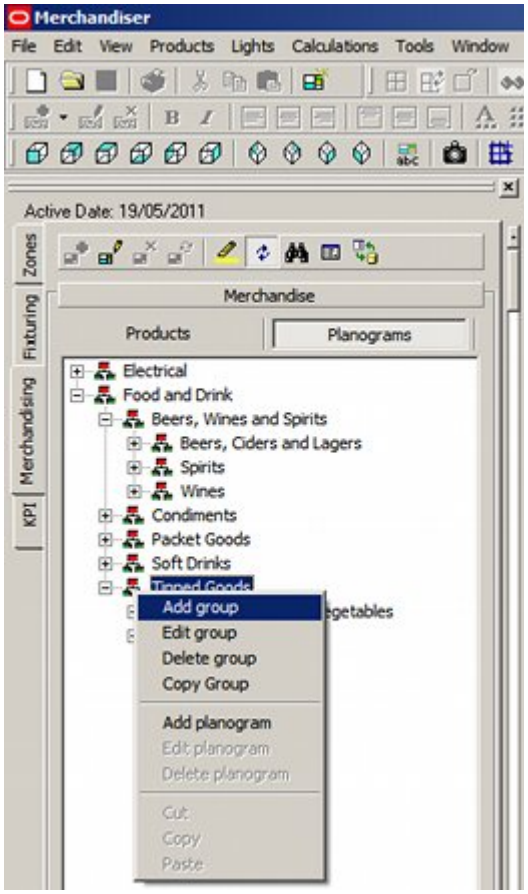
## Adding a Group

To **add a group**, highlight the node in the hierarchy the group is to be a child of.

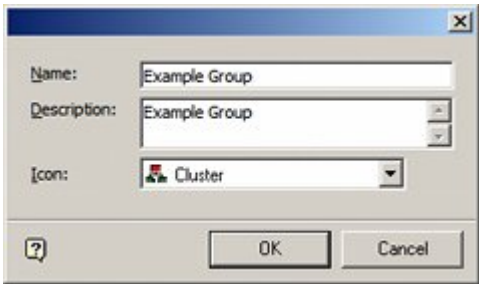



In this case the Tinned Goods Group has been selected.

Use <Ctrl> and Right click to bring up the pop-up menu.



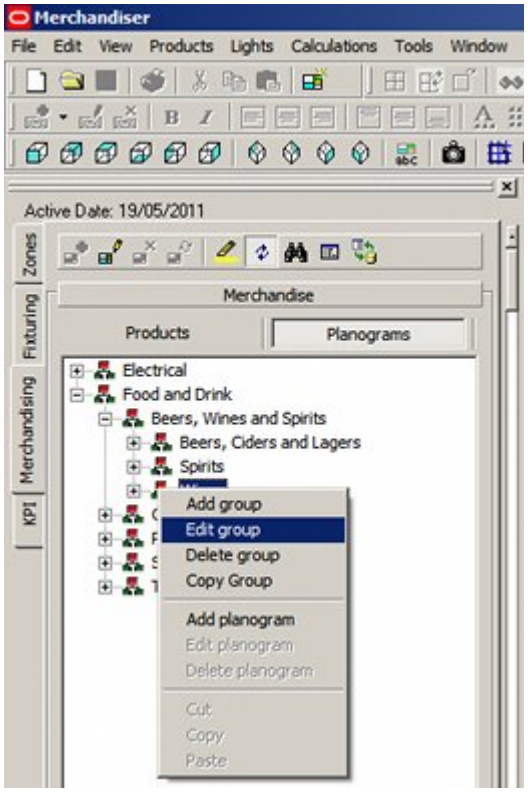

Select Add Group to bring up the Group dialogue box.



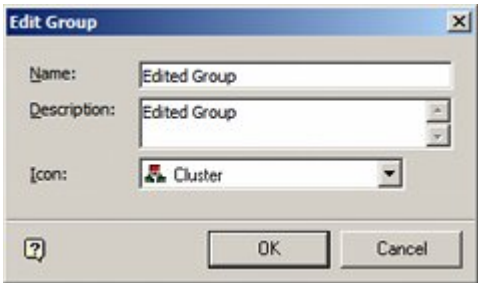

The Name and description can be typed in, and the pertinent icon selected from a drop down list. On clicking on OK, the group will be added to the hierarchy.

## 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 dialogue box. Modify it as required.

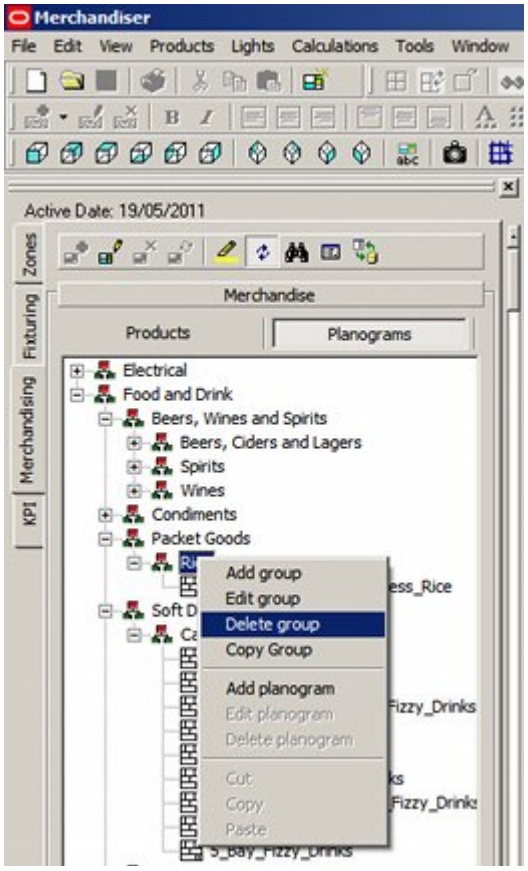



In this instance 'Example Planogram Group' has been changed to Modified Planogram Group'.

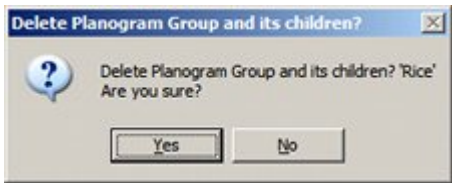
Click on OK and the details will be modified in the hierarchy.

## Deleting a Group

To delete a Planogram Group, highlight it in the hierarchy, then bring up the right click menu.

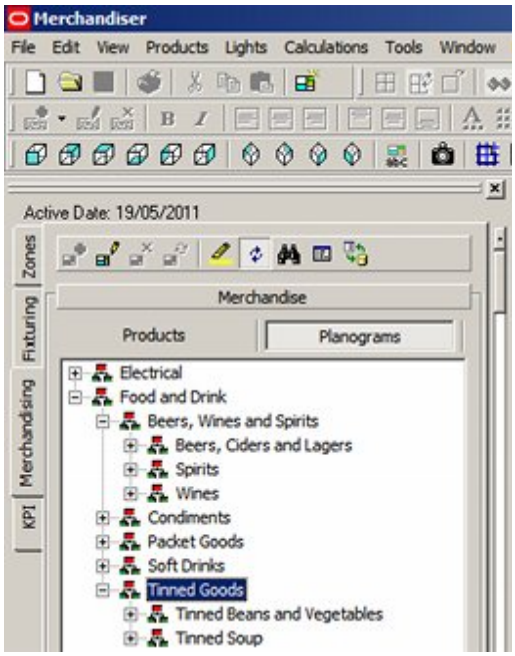



Click on Delete Group and the group will be deleted. If the Planogram group has planograms associated with it, these will be deleted as well. Before this can occur, a confirmatory dialog box will appear.




## Adding Planograms

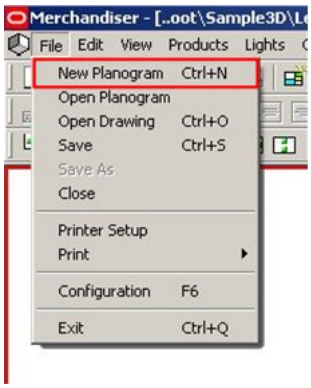
**Planograms are added** by selecting a parent group and highlighting it.




In this case we wish to add a Planogram to the 3D Samples Group.

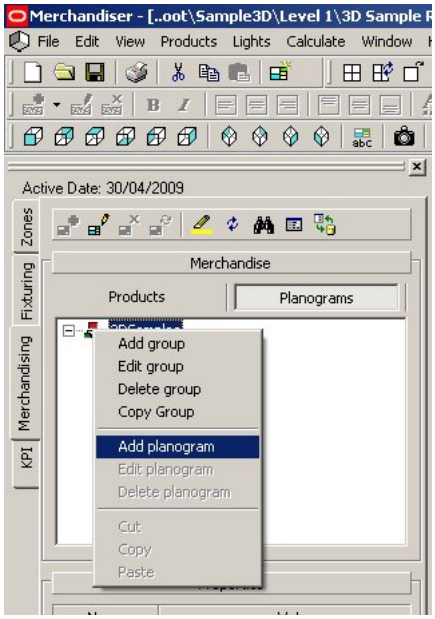
Once the group is highlighted, there are two ways to add a planogram; from the menu bar and from the pop-up menu.

- Planograms can be added from the File pull down menu:

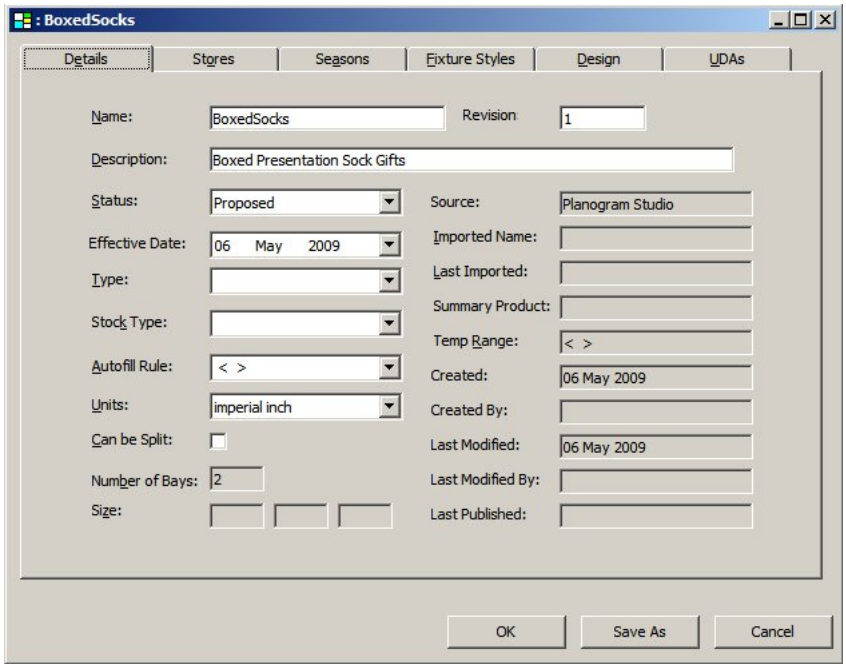



Clicking on New Planogram will cause a blank Planogram dialogue box to appear, ready for the details of the planogram to be entered.

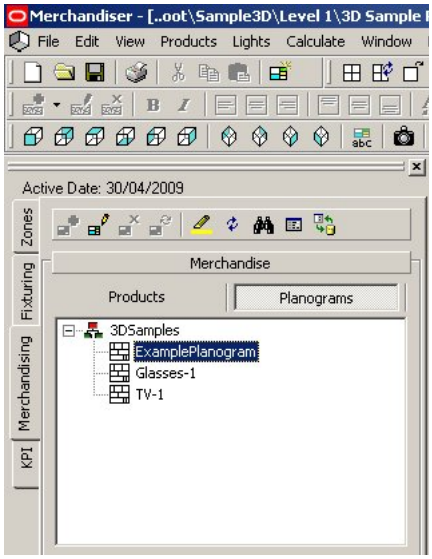
  - Planograms can also be added by using <Ctrl> plus right click to bring up the pop-up menu.




The add planogram option will then cause a blank Planogram dialogue box to appear, ready for the details of the planogram to be entered.

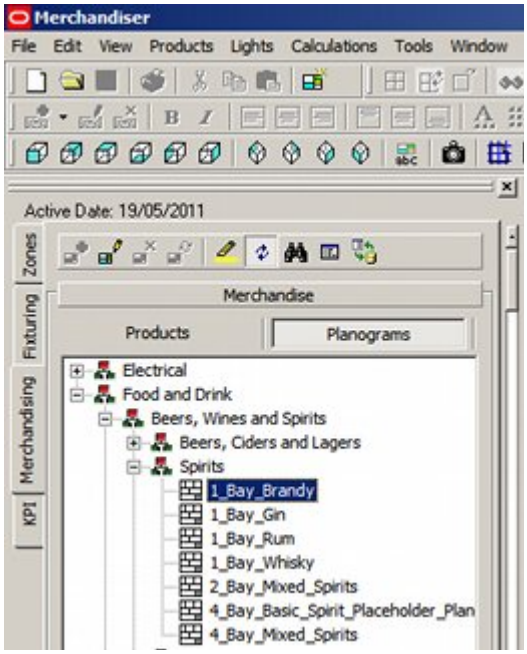



On saving of the Planogram dialogue, the new planogram will appear in the hierarchy.




## Editing Planograms

**Planograms are edited** by selecting a planogram and highlighting it.

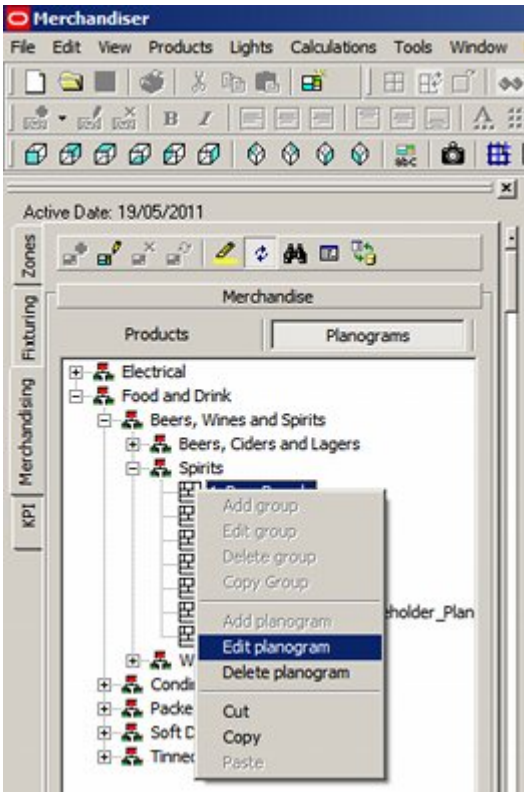



Planograms can be opened for editing in one of two ways: from the menu bar and from the pop-up menu.

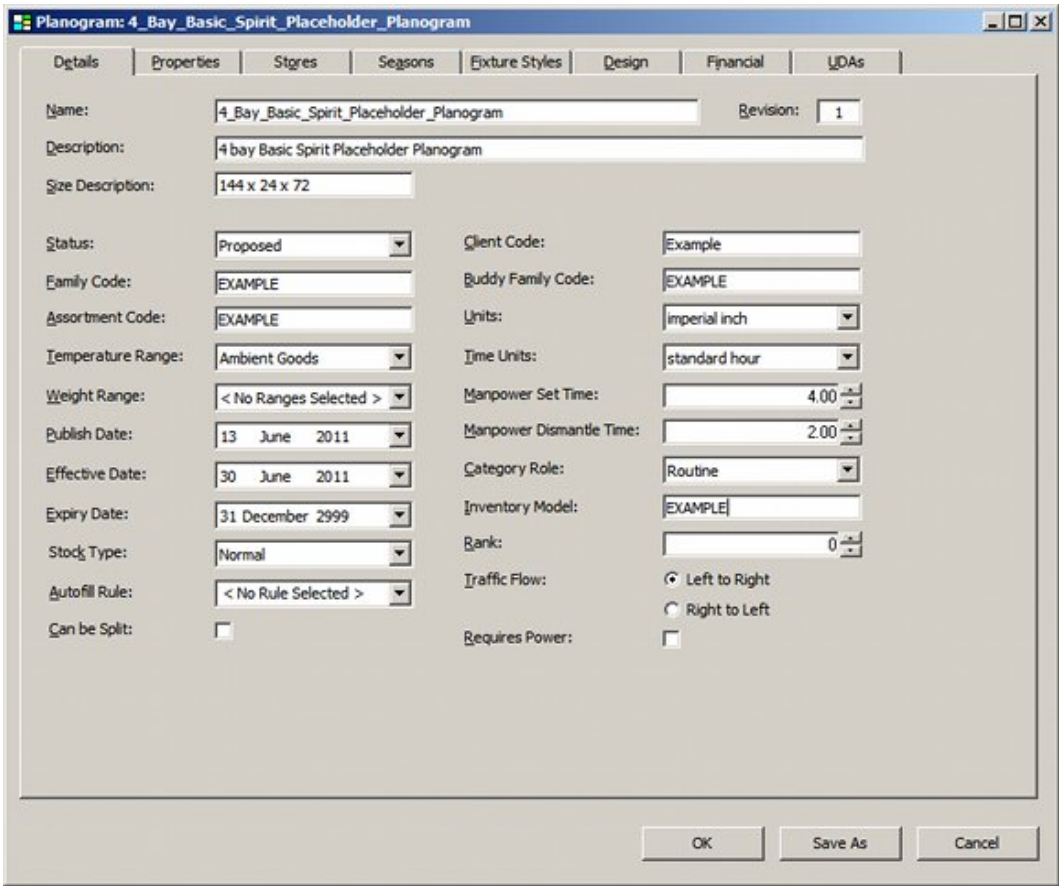
- Planograms can be opened for editing from the File pull down menu:




- Planograms can also be edited by using <Ctrl> plus right click to bring up the pop-up menu.



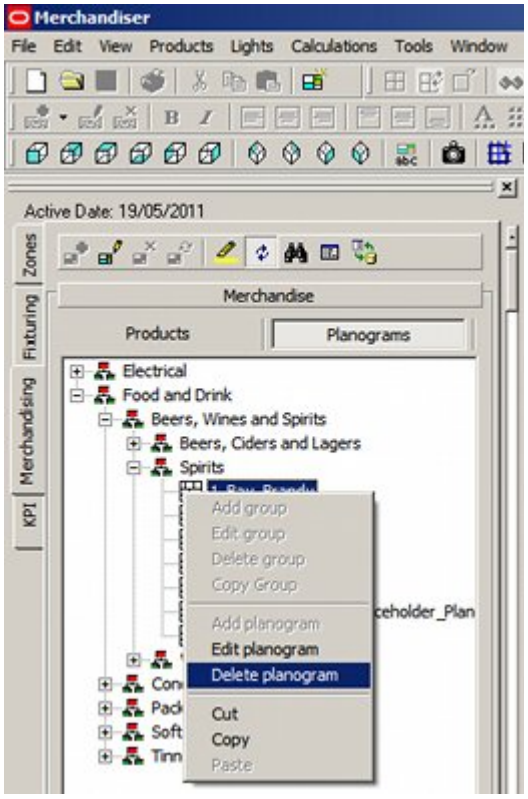

In both cases the Planogram dialogue box will open to allow the properties of the planogram to be edited.



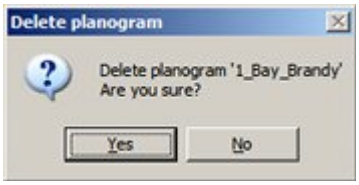

## Deleting Planograms

**Note:** Planograms that have been deleted from the hierarchy have not yet been removed from the database. To remove them from the database, the purge option in the Admin Module must be used.

To delete a planogram from the hierarchy first highlight it, then bring up the right click menu.




Clicking on the Delete Planogram option will bring up a confirmation dialogue.

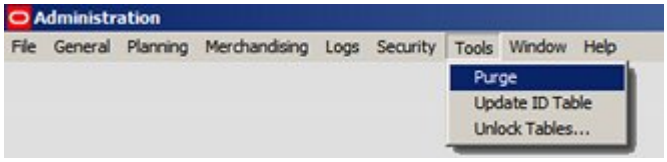



Clicking on Yes will cause the planogram to be deleted from the hierarchy (but not yet from the database).

In order to permanently delete the planogram from the database it must be removed using the Purge option in the Administration Module.

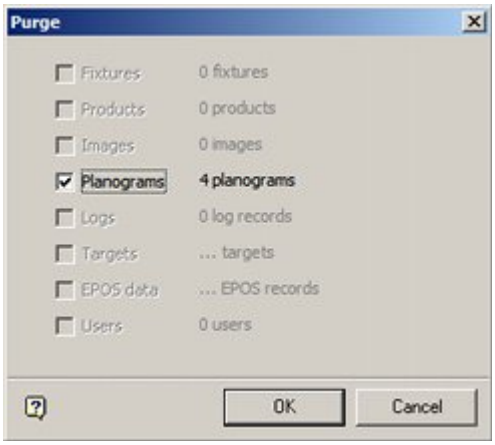
## Purge Planograms Option

**Purge options** are available using the Purge option on the Tools pull down menu in the Admin Module.

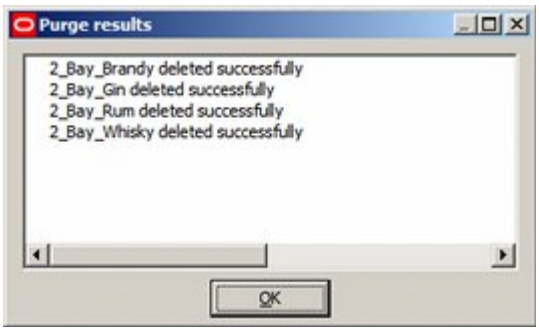



**Note:** The Admin module is only available to users with Administrator's privileges.

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:

1. Allow users to add, edit or delete Planogram groups in the Planogram Hierarchy
2. Allow users to add, edit or delete individual planograms

## Overview of Planogram Creation

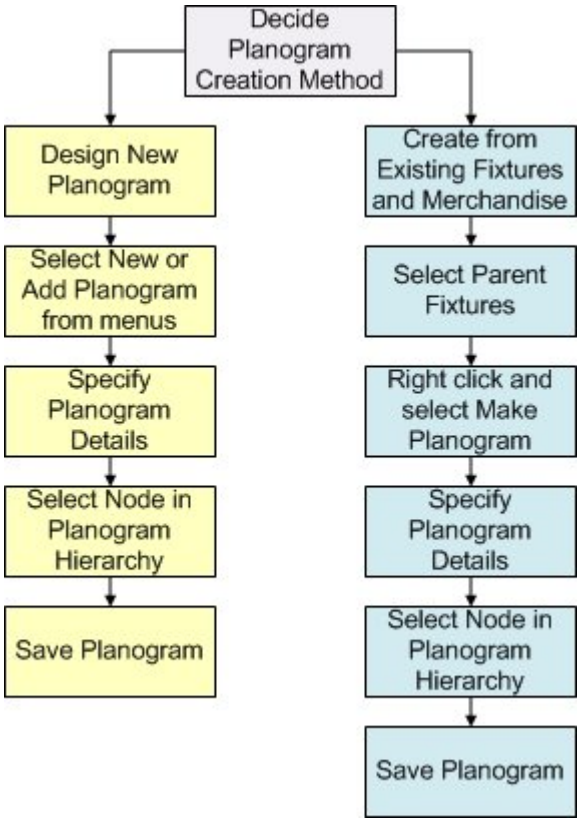
There are **two basic ways of creating planograms**.

1. By designing a planogram in the planogram design dialog box.
2. 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.

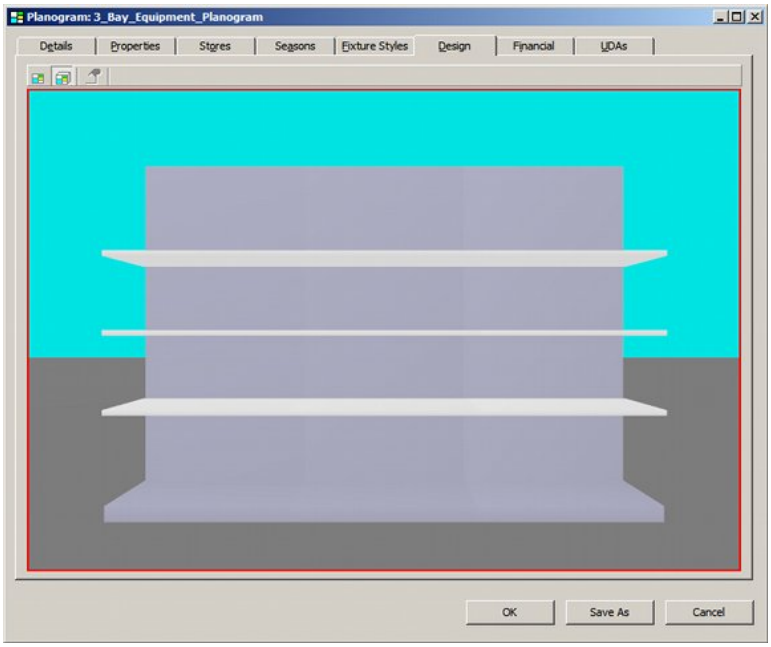



## Special Forms of Planograms

There are two forms of planograms that can be used to supplement fully detailed, finished planogram designs.

#### Equipment Planograms

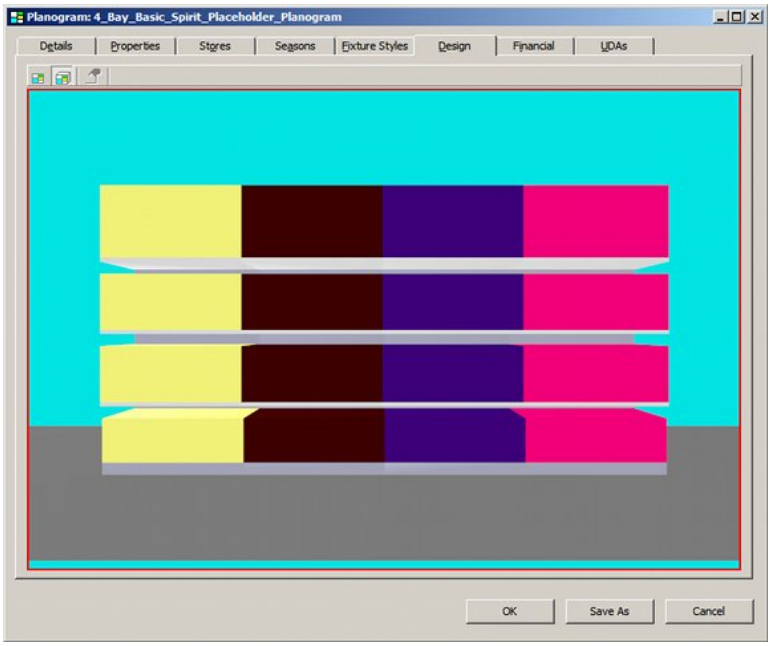
If a store plan is being developed, but planograming is still at an early stage, it is possible to create equipment planograms. These can be used to lay out the shelves, etc, in the floor plan so that a bill of materials can be generated.




**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.



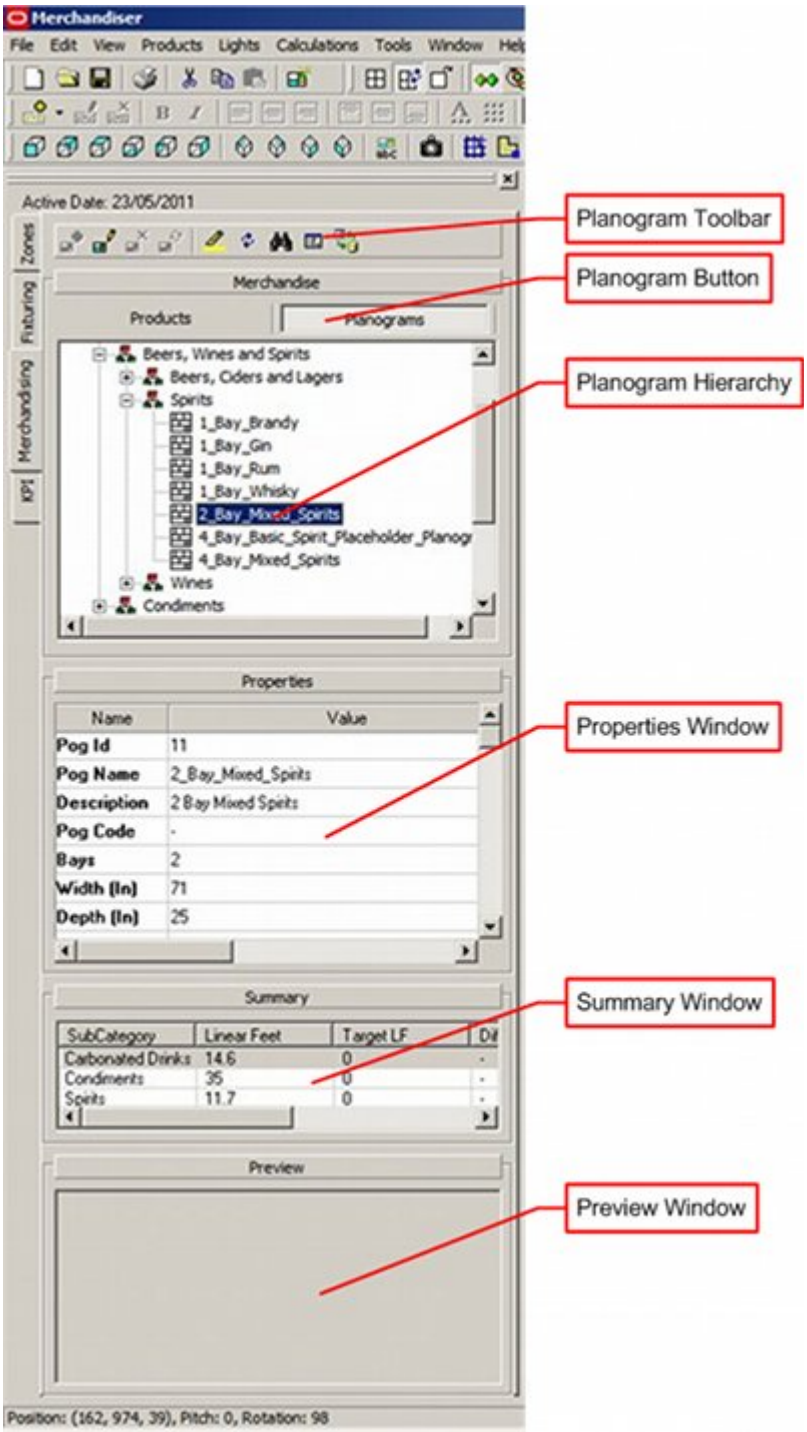

The usual purpose of this sort of planogram is to allow store planning to start before planogram design. The placeholder planogram is saved as Revision 1. When the design is finalized, it is saved as Revision 2.

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 Toolbars

### 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).

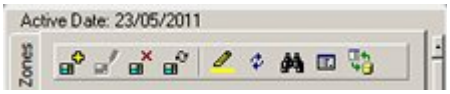
The **Properties Window** gives details of the currently selected object.

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.



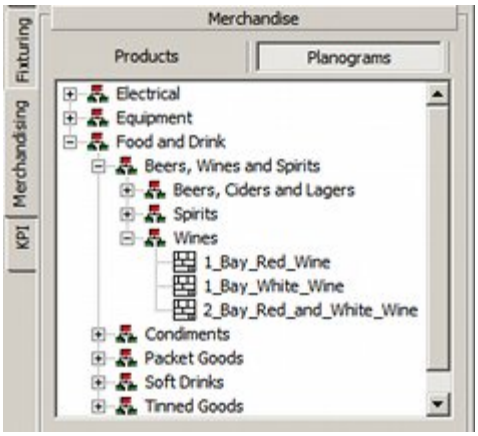

It contains a series of icons allowing various operations to be carried out on Planograms.

| 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.

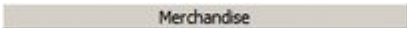
### The Merchandising Hierarchy Window

The **Merchandising window** shows a hierarchical tree of all the available products or planograms.



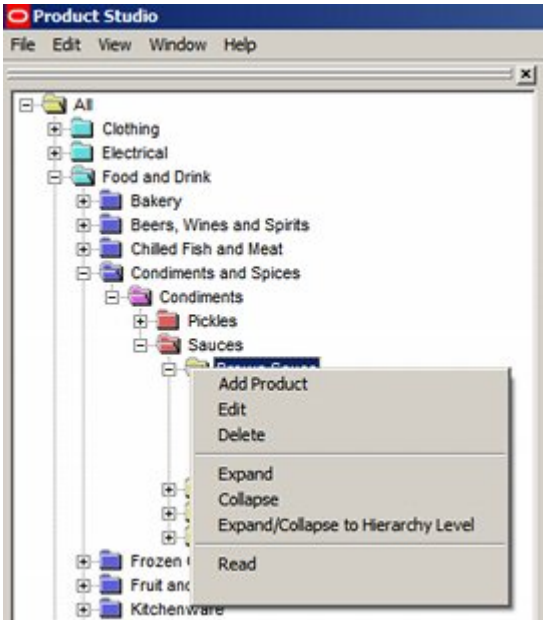

The tree can be expanded or contracted by clicking on the + or – icons.

The Merchandising window can be minimized by clicking on the splitter bar.

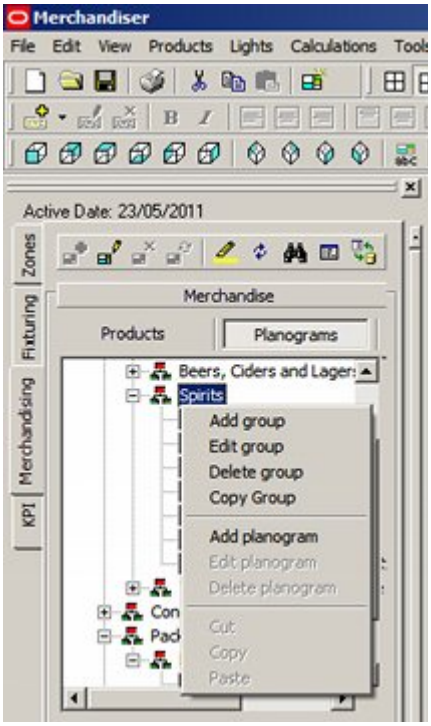



The Products or Planograms buttons immediately below the splitter bar determine whether the hierarchical tree shows products or planograms.

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.



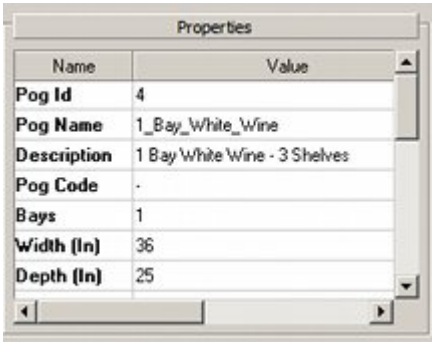

The Planograms hierarchical tree can be configured in Merchandiser using the Add, Edit and Delete options on the menu available by right clicking.



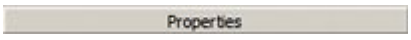

The Group or Planogram options will be available or greyed out depending on whether a group or a planogram has been highlighted in the hierarchy.

### The Properties Window

The **Properties Window** will show the properties for the currently selected product or planogram.

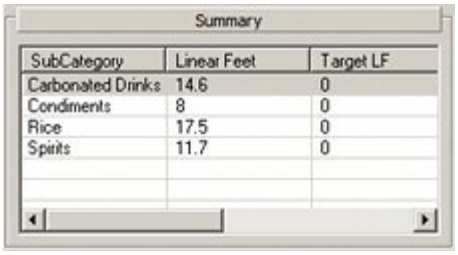



The Properties window can be minimized by clicking on the splitter bar.



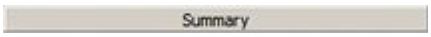

### The Summary Window

The **Summary Window** will show a user defined list of products or planograms placed in the drawing.




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.



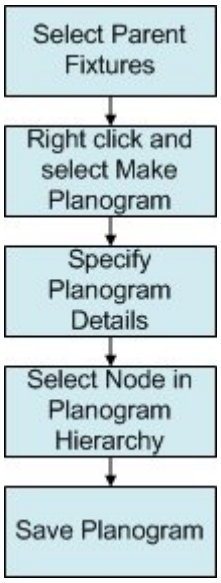

The Preview window can be minimized by clicking on the splitter bar.



# 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

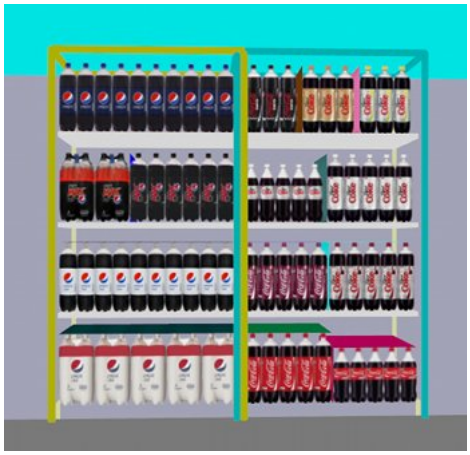
This determines where the planogram will be saved in the hierarchy one it has been defined.

#### 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.



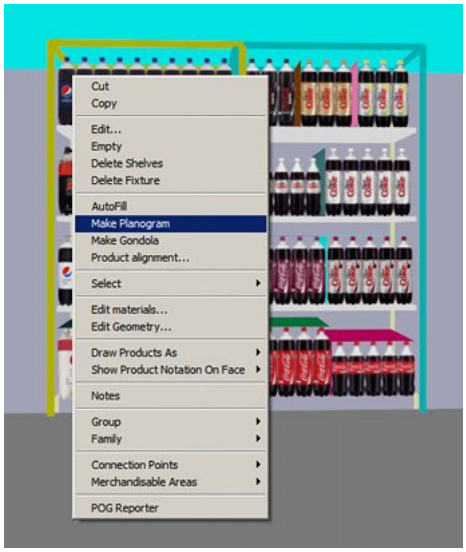
In this example, the first selected fixture is enclosed by a red selection box, and the second in a blue selection box. Other selection box colors may occur depending on whether multiple fixtures have been selected, or whether the fixtures belong to a group or family.

All selected fixtures will be included in the planogram.

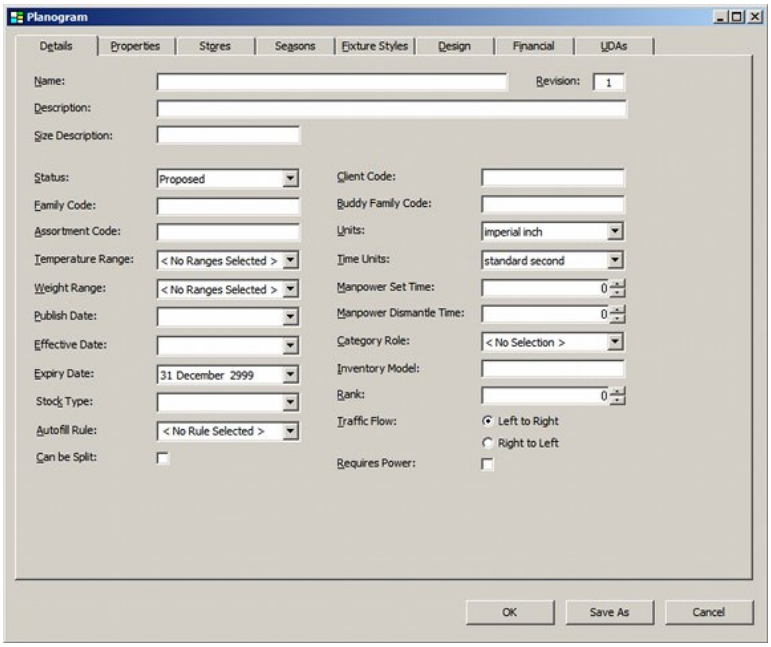
## Right click and select Make Planogram

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.



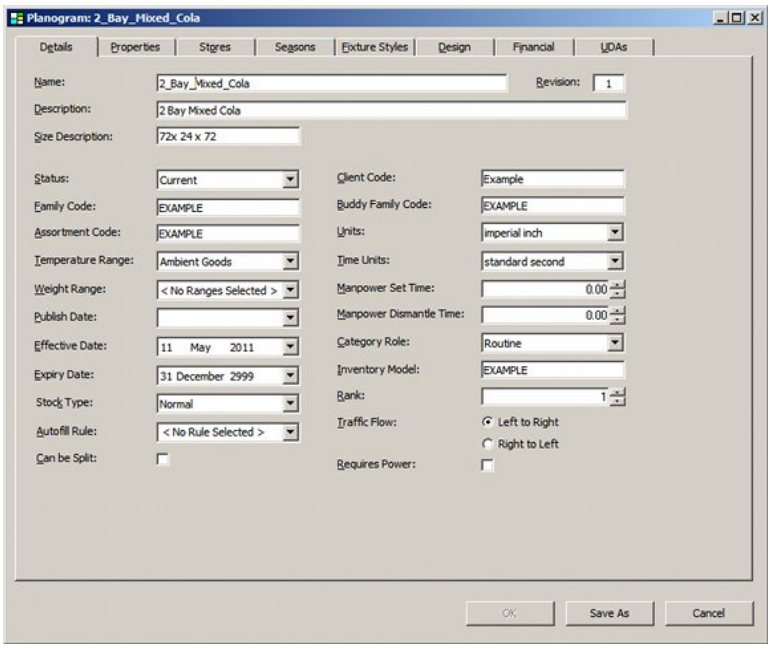

Selecting the Make Planogram Option will bring up a new Planogram dialogue box.




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.

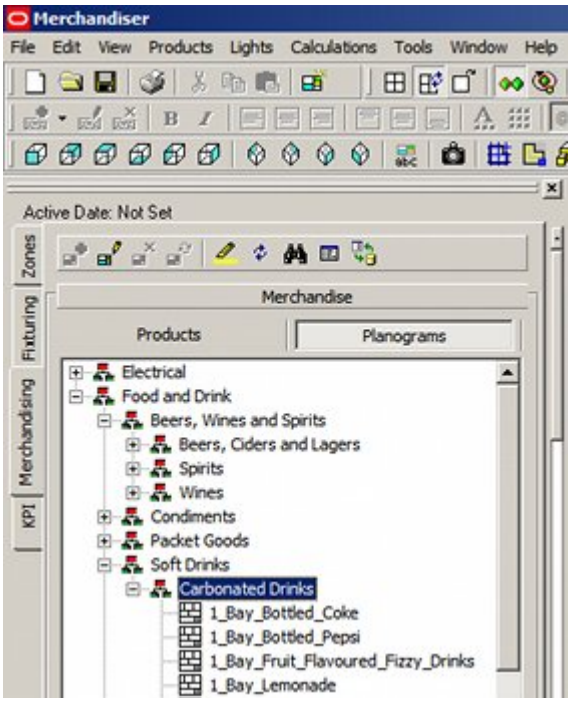
The **Design Tab** allows the planogram design to be modified relative to the fixtures and merchandise selected in the store.

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

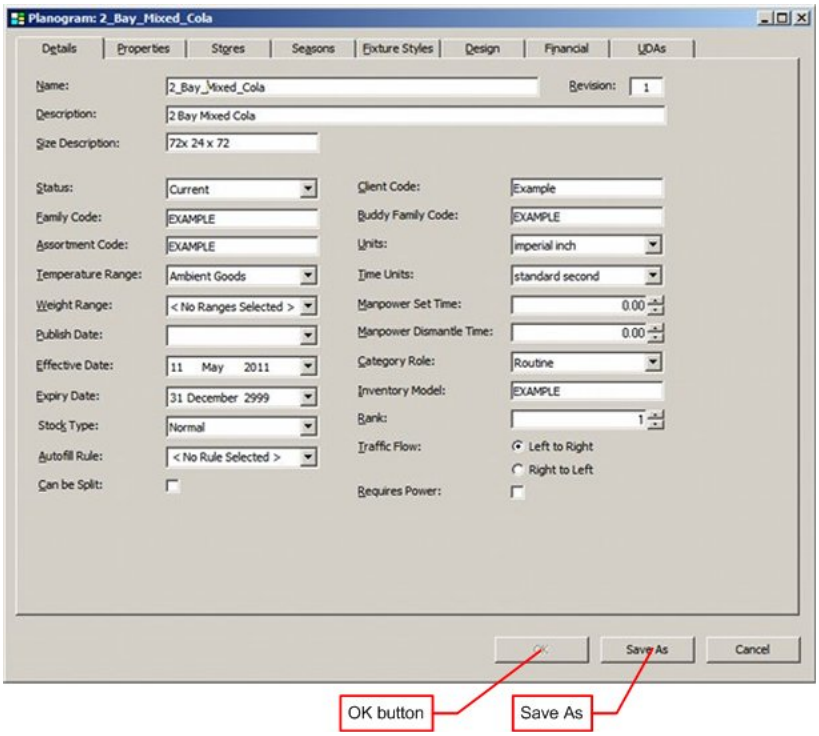
**Selecting the node in the hierarchy** determines where the planogram will be saved once it has been created.




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.

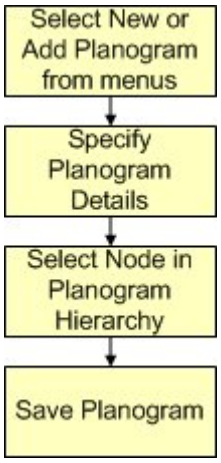



**Note:** The **Save As button** is used to save a different version of an existing planogram. It is not normally used when creating a planogram from new.

# 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, (UDA's).

It also allows the user to modify the fixtures and products originally selected for the planogram design.

#### Select Node in Planogram Hierarchy

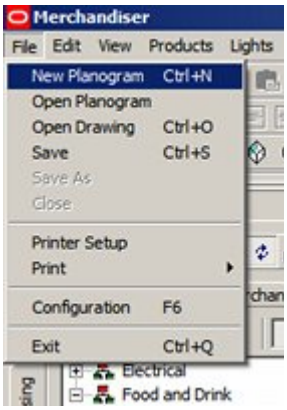
This determines where the planogram will be saved in the hierarchy one it has been defined.

#### Save Planogram

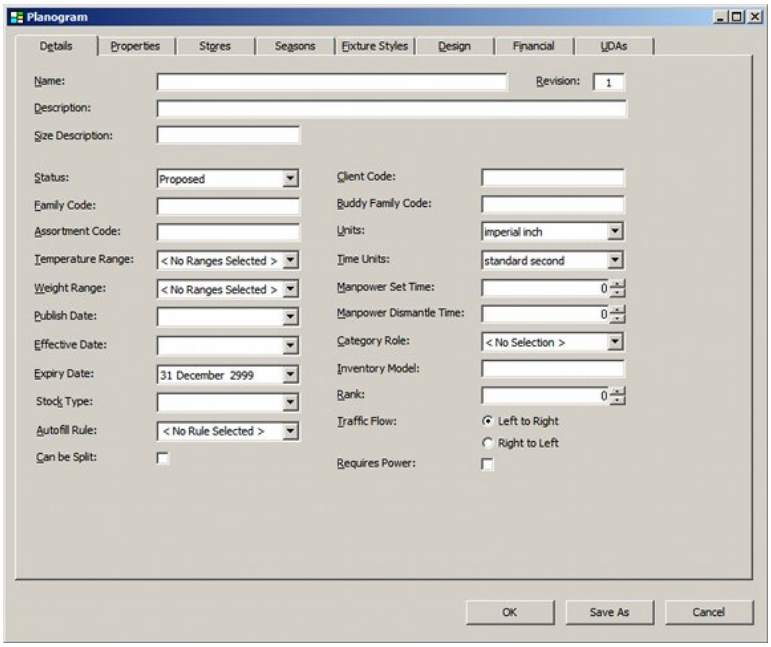
This saves the defined planogram to the specified point in the planogram hierarchy in the Object Browser.

### Select 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).

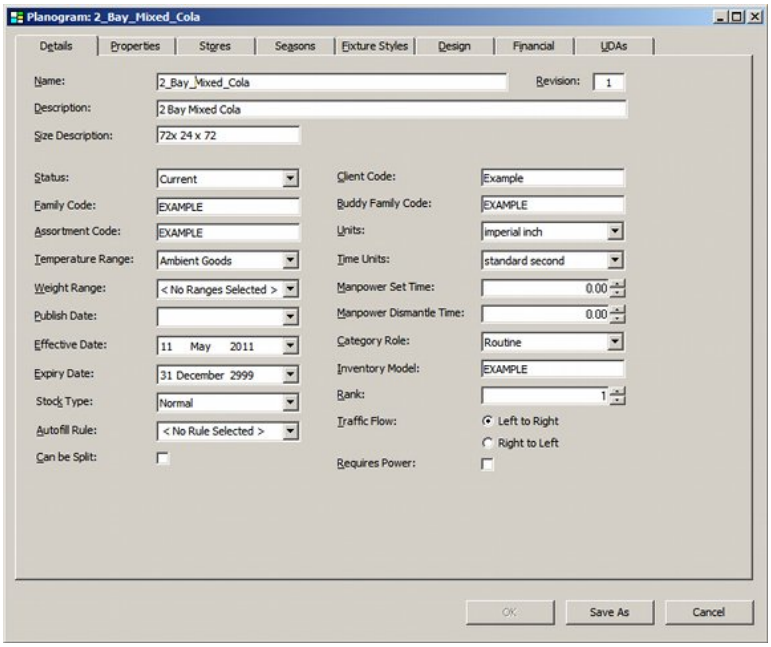



This will bring up a blank Planogram definition dialogue to allow the details of the planogram to be specified.



### Specify Planogram Details

The **Planogram dialogue box** allows users to specify full details for the planogram.




The **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.

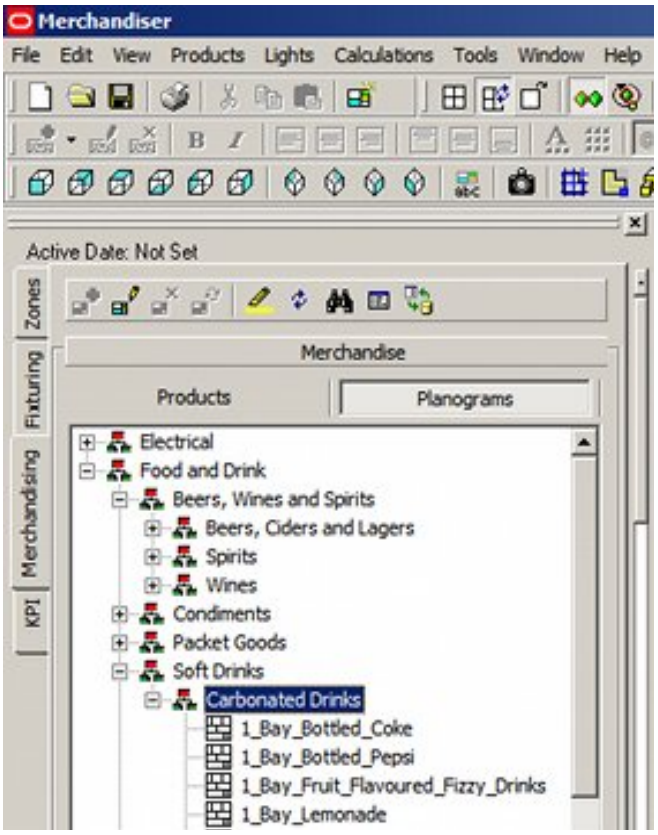
The **Design Tab** allows the planogram design to be created from the available fixtures and merchandise.

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.

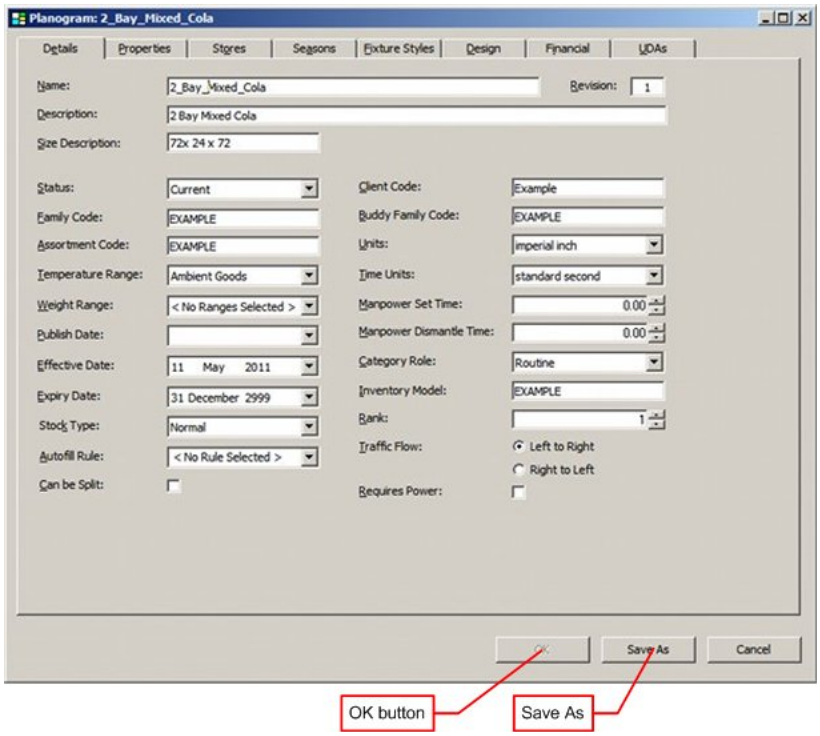



In this example, only a simple hierarchy has been created, but considerably more complex hierarchies can exist in large retail organizations.

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.

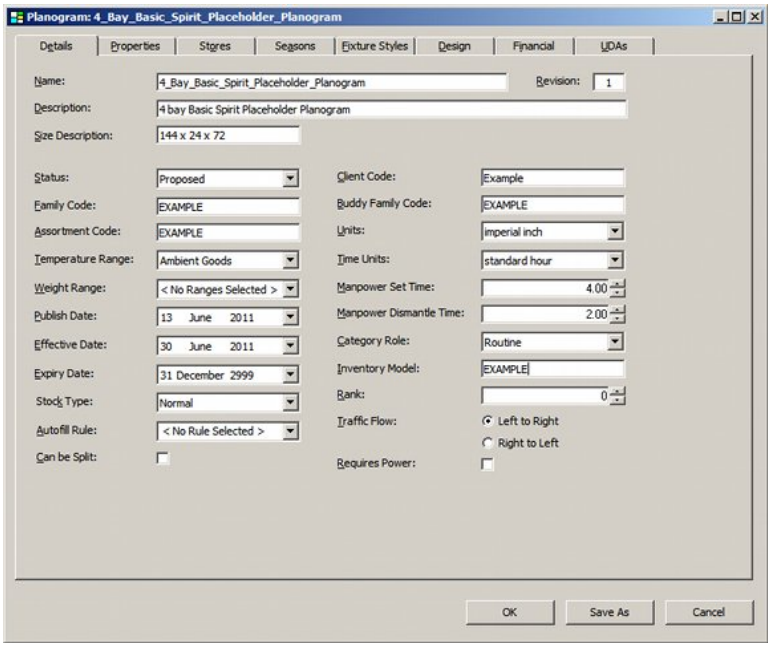



**Note:** The Save As button is used to save a different version of an existing planogram. It is not normally used when creating a planogram from new.

# Planogram Design Options

## Overview of Planogram Design Options

The Planogram dialogue box allows users to specify full details for the planogram.




The **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.

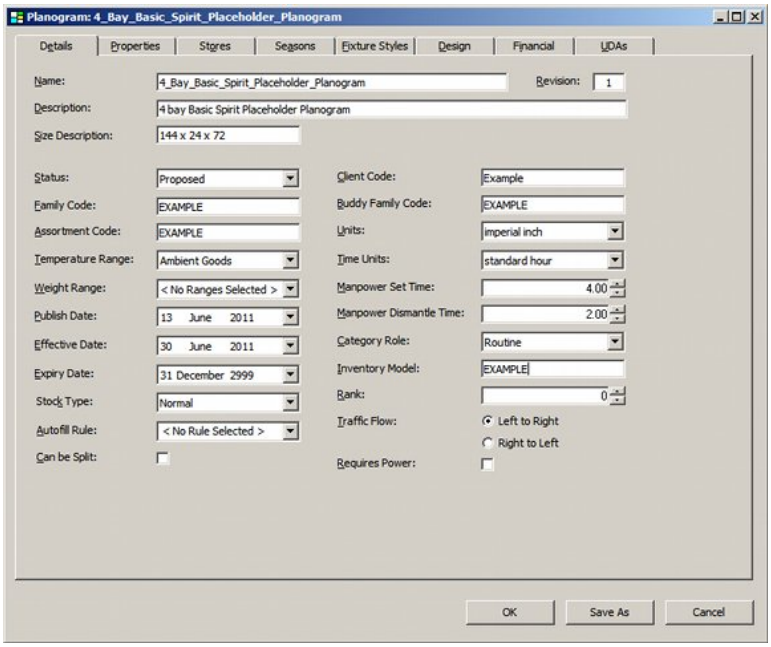
The **Financial Tab** contains performance data for the planogram.

The **UDA Tab** allows User Designed Attributes to be set for the Planogram.

## The Details Tab

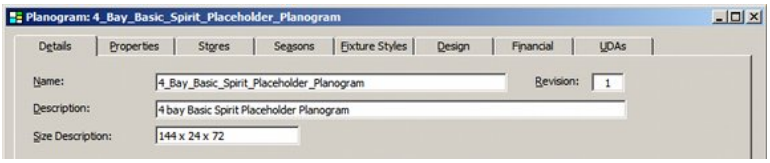
### Overview of the Details Tab

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.

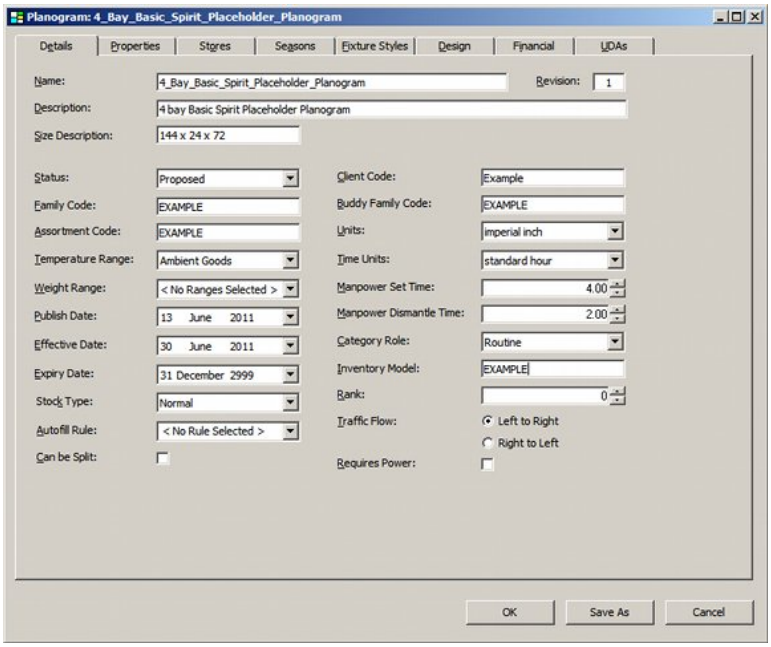
**Description** is a longer and more informative version of the name.

**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.

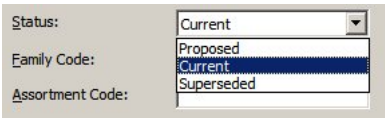
## Planogram Status and Dates

The dates the planogram will come into service (Effective Date), be published to the store (Publish Date) and go out of service are set in the appropriate drop down lists.




### Status

Status is set from the Status drop down list in the Details tab.




Status can be set to one of three options:

- Proposed - the planogram is still in the process of being deigned 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 Admin 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 (Admin 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

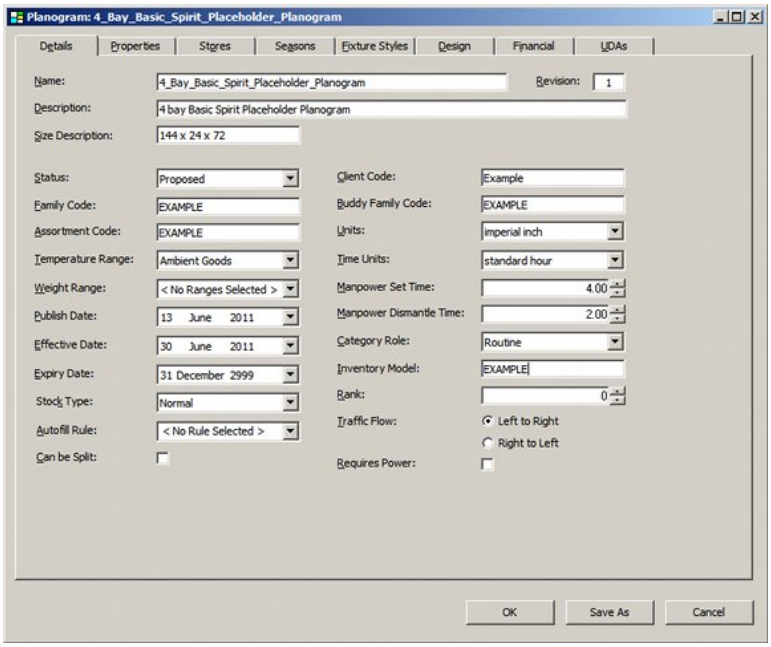
#### Expiry Date

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




> **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** give 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 Admin 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 Admin 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 Admin 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

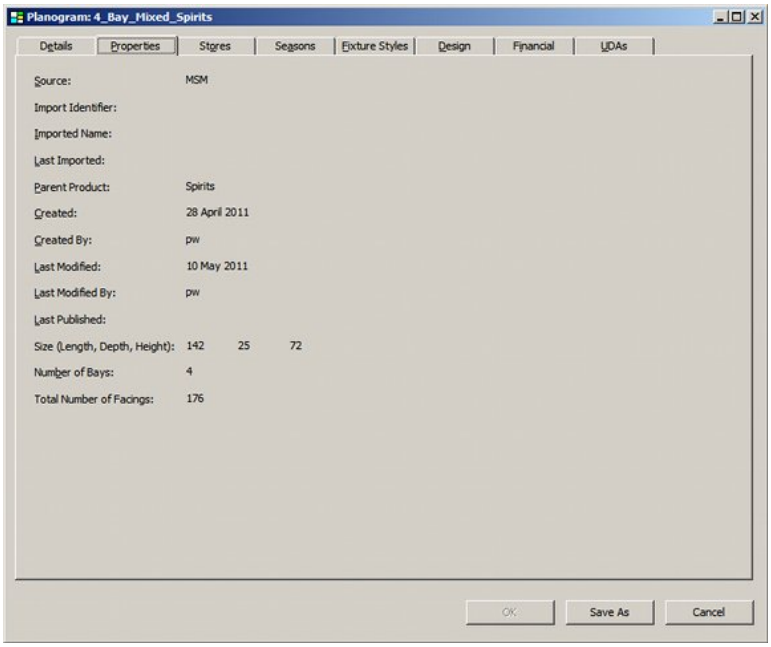
**Traffic Flow** indicates whether the planogram is designed to be viewed by people walking left to right or right to left.

**Requires Power** is a flag

## The Properties Tab

### Overview of the Properties Tab

The Properties tab (which is read only) gives information on the planogram.




**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.

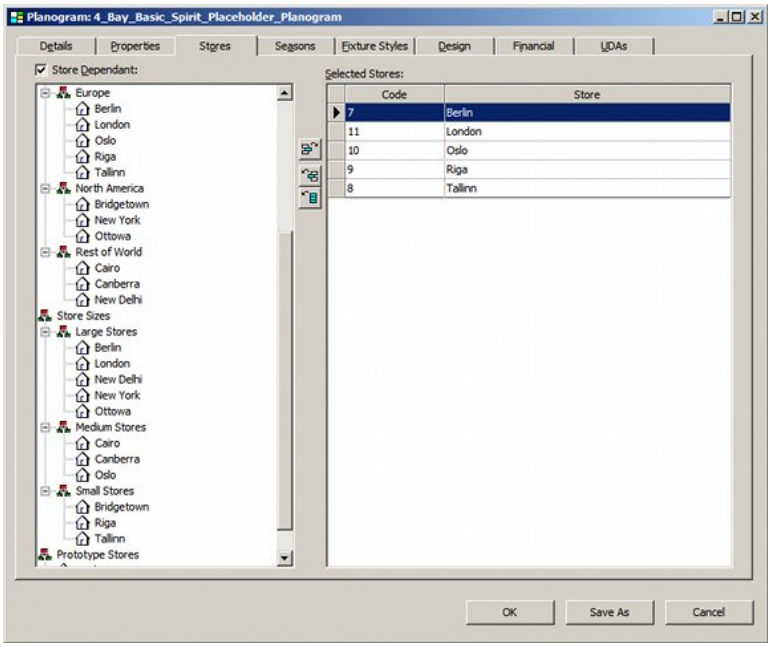
**Number of Bays** is the number of profiles (bays) in the planogram.

**Total Number of Facings** is the number of facings in the planogram.

# The Stores Tab

## Overview of the Stores Tab

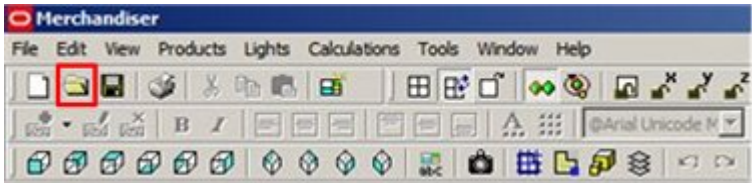
The **Stores** Tab is used to select the Stores the planogram is valid for.



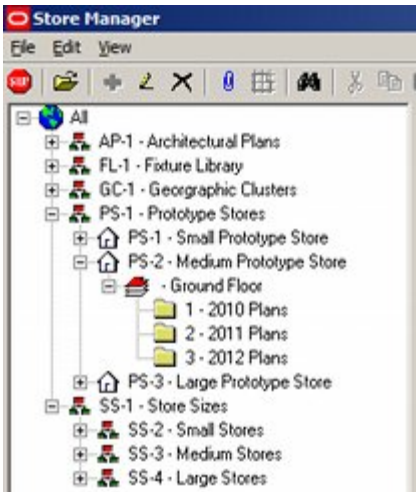

This information is for reporting purposes only and does not put any constraints on planogram placement.

## 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.

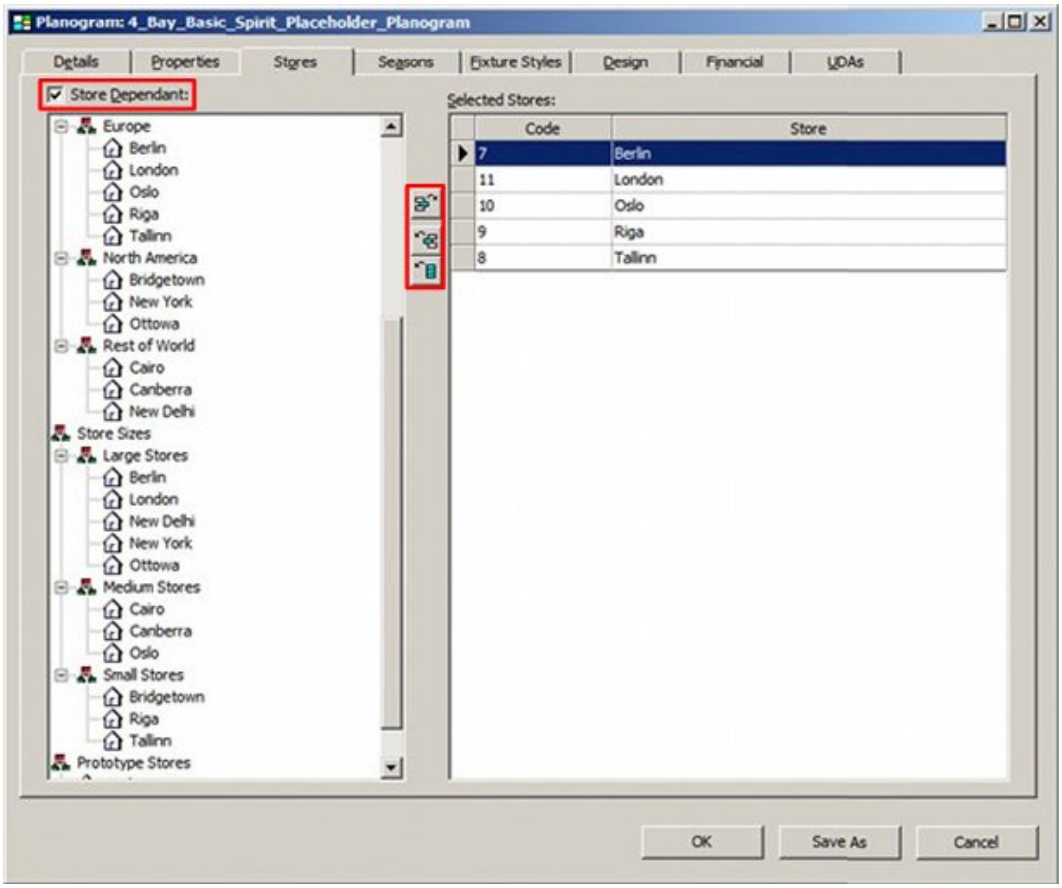



Store Manager allows the hierarchy of clusters and stores to be added to, edited and deleted from.




### 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 |

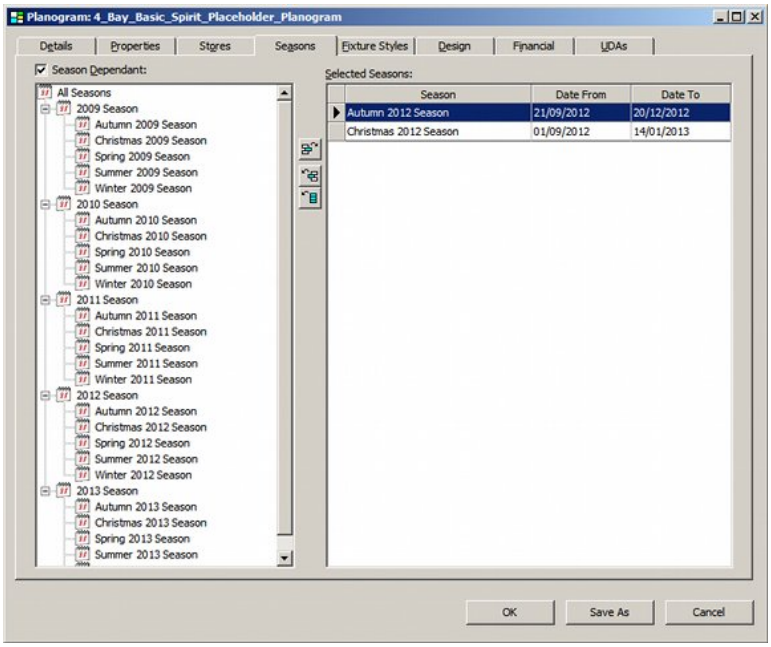
Individual Stores can be added or removed by using the Add Season or Remove Season icons.

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.



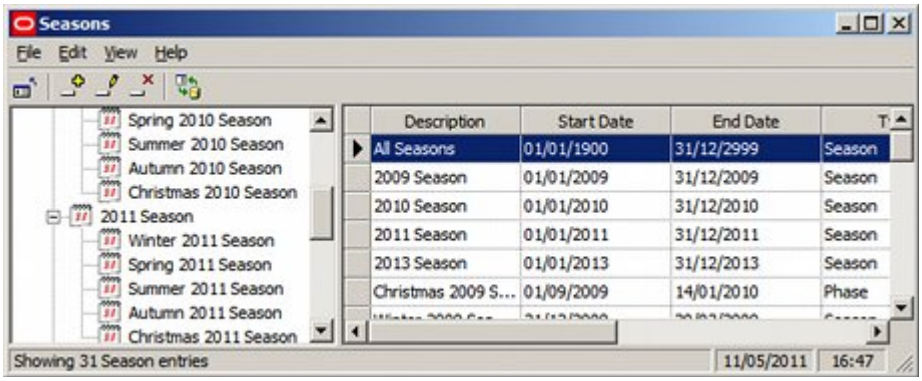

This information is for reporting purposes only and does not put any constraints on planogram placement.

### Configuring the List of Seasons

The list of seasons is configured in the Admin Module. Select the Seasons option from the Merchandising Menu.



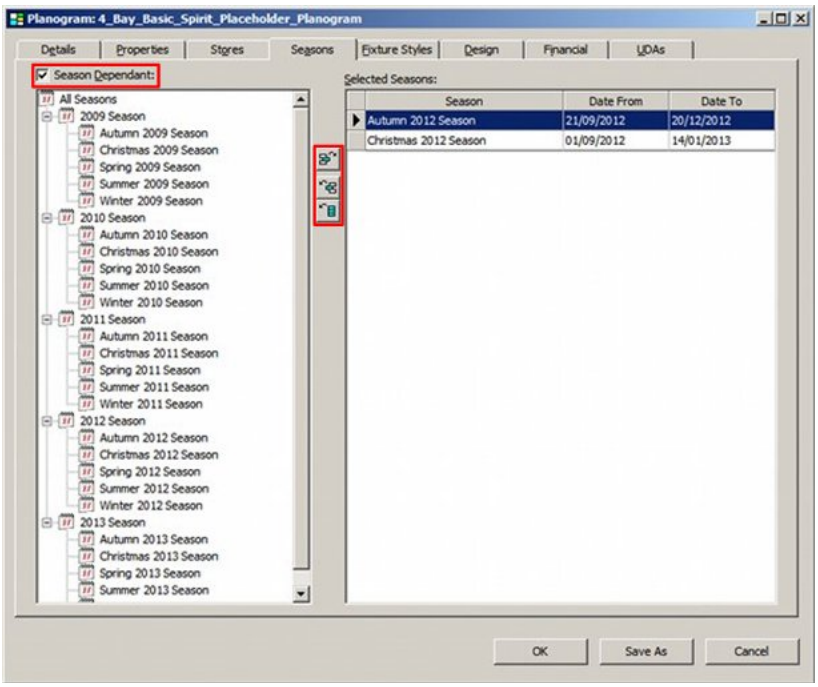

This will bring up the Seasons dialogue box.




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.

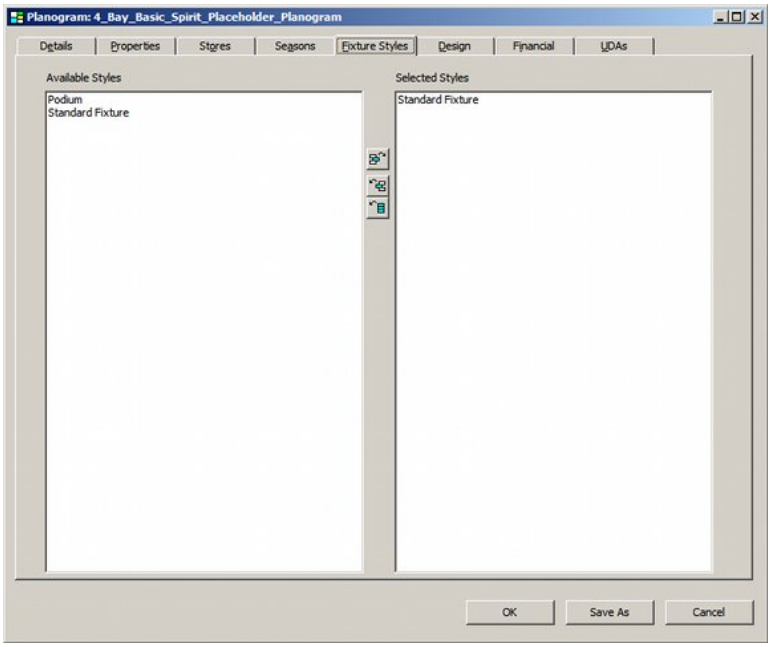
Individual seasons can be added or removed by using the Add Season or Remove Season icons.

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.

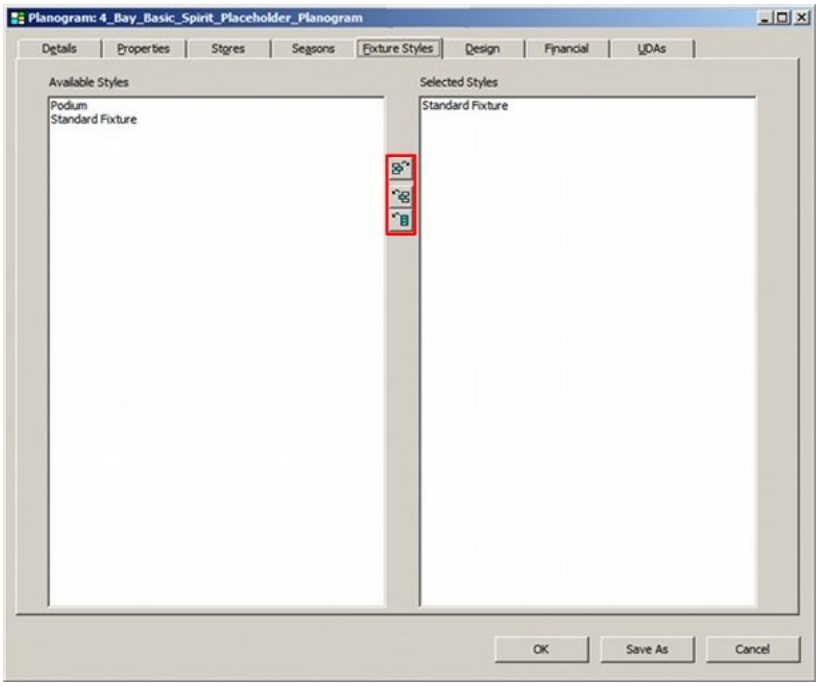
In the example above, the planogram can only be placed on fixtures that have been assigned the Standard Fixture style.

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

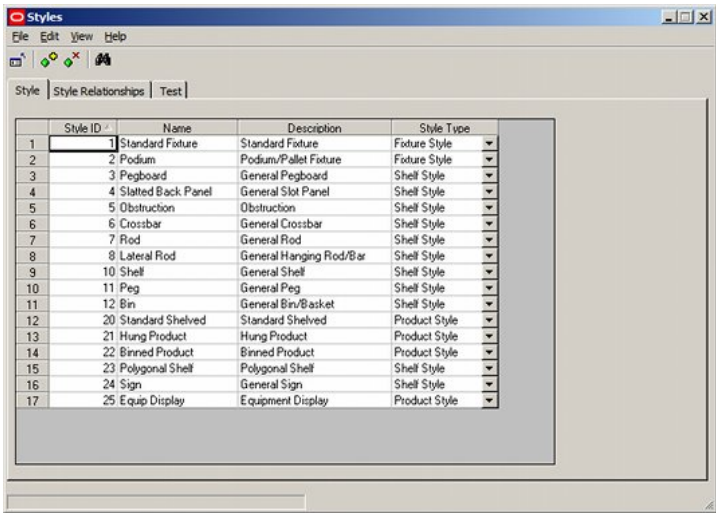
The list of available styles is configured in the Admin Module.

**Note:** Users will require the appropriate privileges to use the Admin Module

Select Styles from the Admin Module Merchandising Menu.



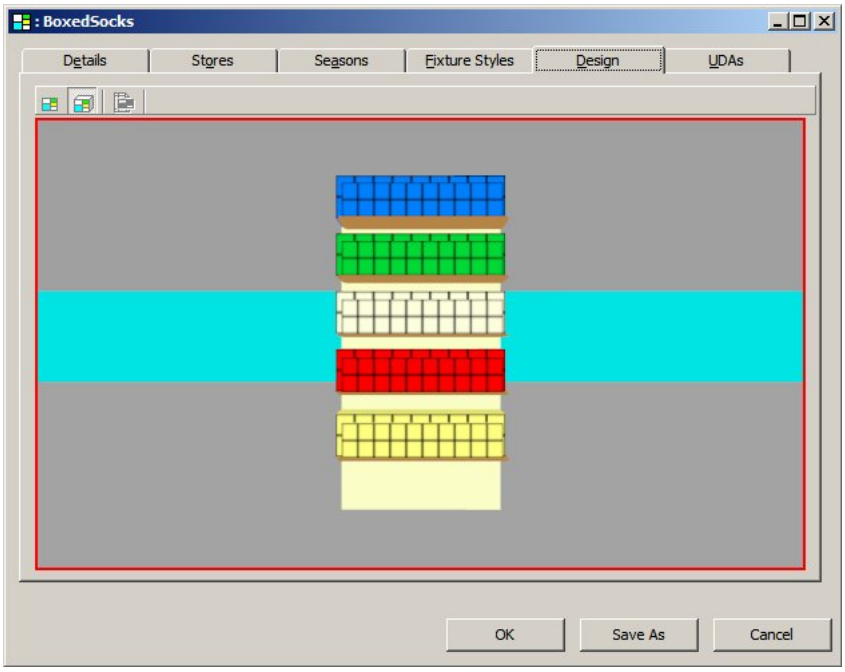

This will bring up the Styles dialogue box. This allows Styles to be defined, Style Relationships to be set and those style relationships to be tested.




## The Design Tab

### Overview of the Design Tab

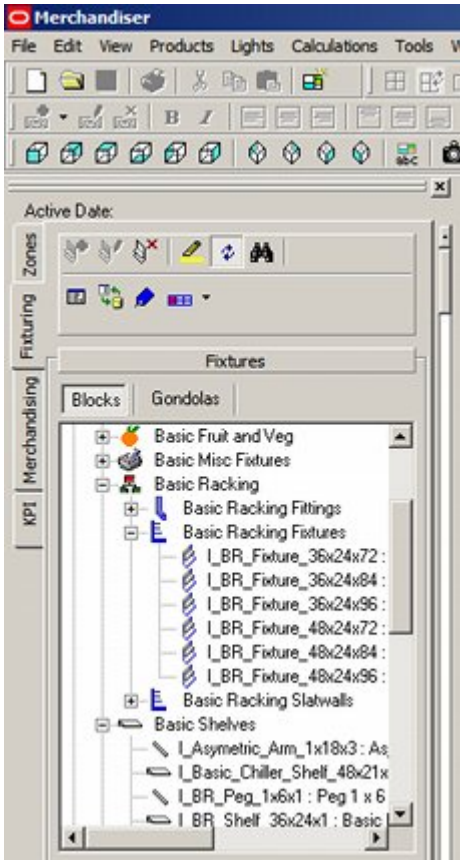
The **Design Tab** is used to design the planogram.



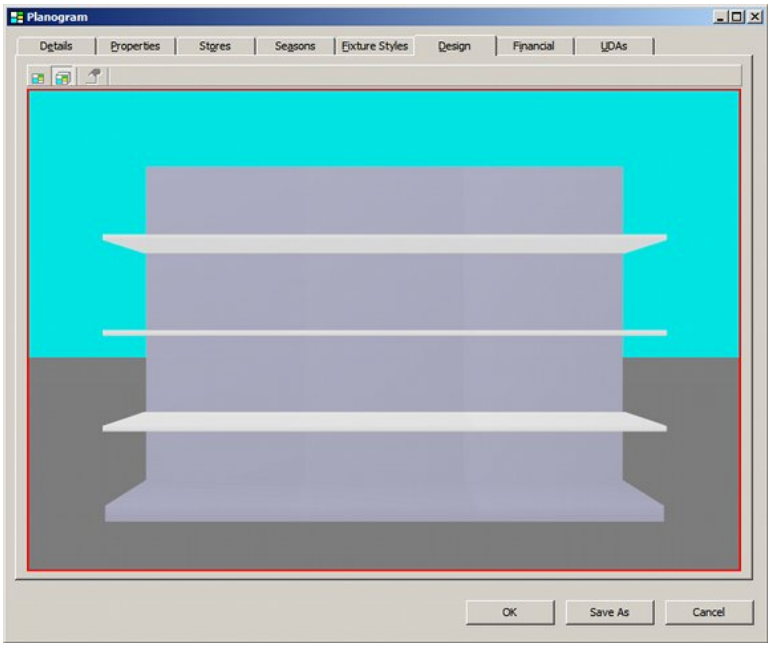

### Selecting the Fixtures and Shelf Objects for the Planogram

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.

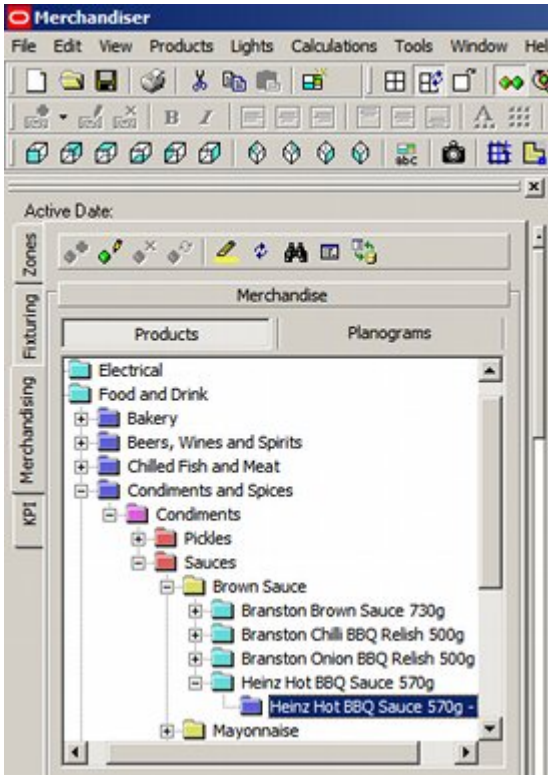



Similarly, shelf objects can be added by selecting the required parent fixtures and adding as necessary.

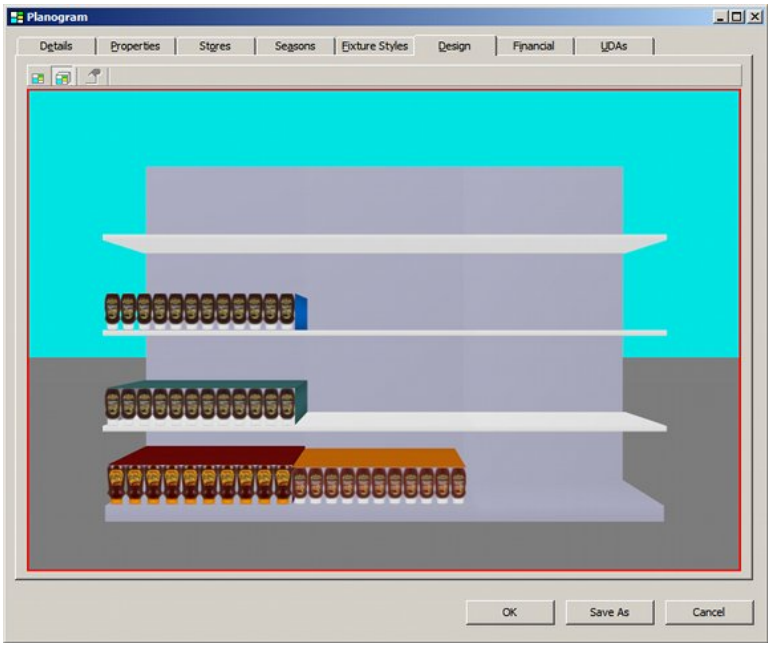
Selection details work in a similar manner to in a floor plan, as do Walk Mode and Edit Mode.

### Selecting the Products for the Planogram

**Products** can then be placed using those available from the hierarchy in the Object Browser.



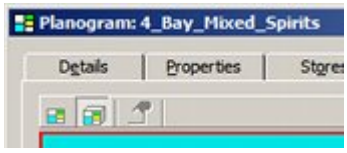

If objects are selected at SKU level or above, they will be placed as placeholders - indicating that type of merchandise is on that fixture or shelf, but giving no indication of position, size or quantity. If objects are selected at display style level, position, size and quantity are specified.




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.



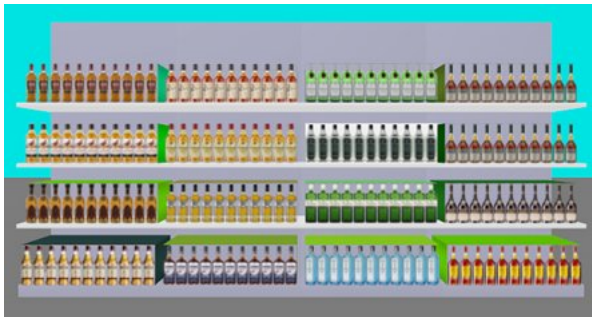

### 2D

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 options 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.

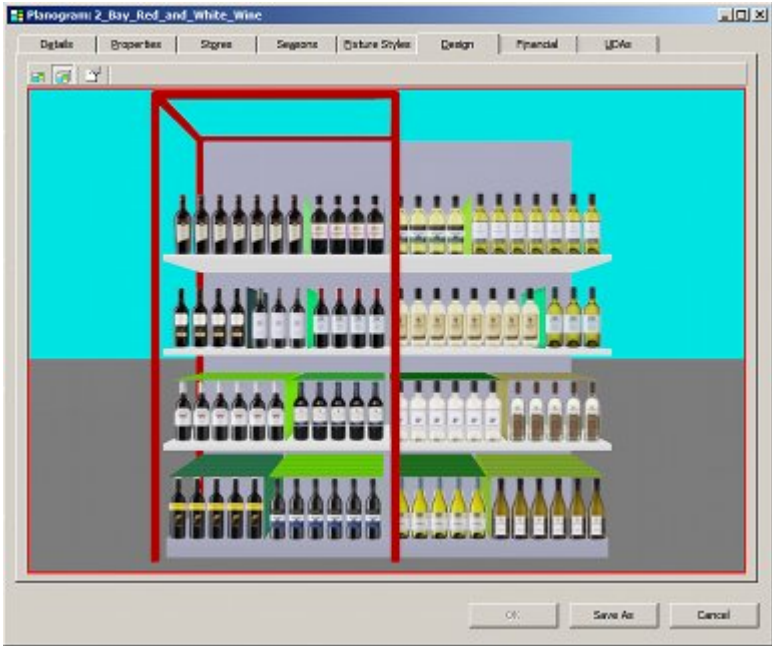


## User Defined Attributes

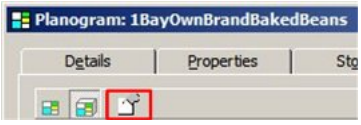
As well as the User Defined Attributes assignable to the planogram in general on the UDA tab, it is also possible to assign UDA information to individual profiles (bays), as to specific shelves and products.

### UDA's associated with Planogram Profiles (bays) in the planogram design

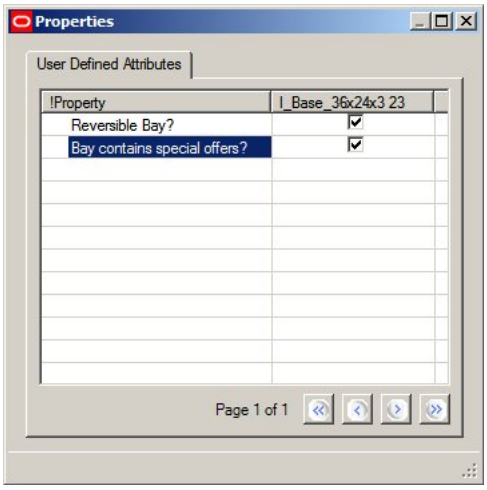
UDA's associated with a specific profile (bay) in a planogram can be seen by highlighting that bay in the Design tab.




Clicking the Object Properties icon on the toolbar will bring up the Profile User Defined Attributes dialog box.



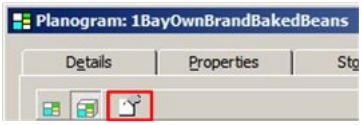

This will bring up the Profile User Defined Attributes dialog box.



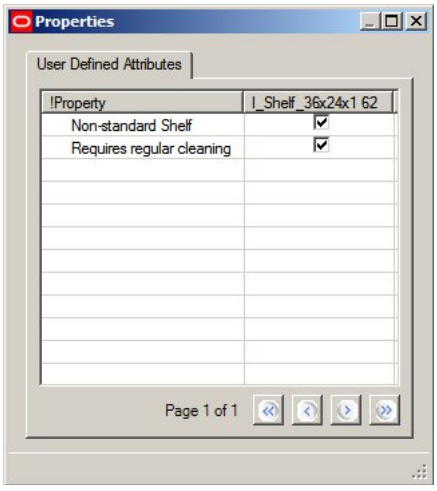

**Note:** The number after the parent fixture for the profile (23 in the above example) is the PRD_ID from the AVTTB_PROFILE table. It is a unique identifier for the profile/bay the UDA refers to.

#### 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.



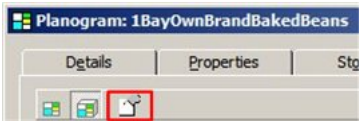

This will bring up the Equipment User Defined Attributes dialog box.



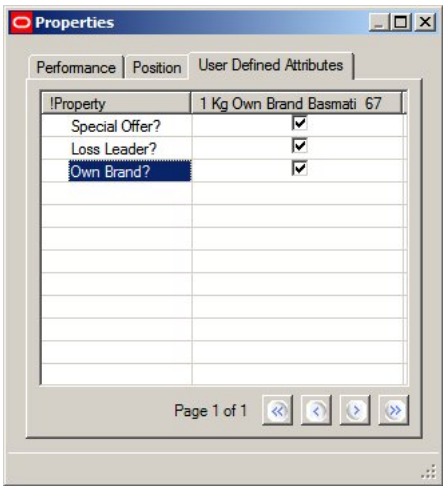

**Note:** The number after the item of equipment (62 in the above example) is the FXL_ID from the AVTTB_POG_FIXEL table. It is a unique identifier for the item of equipment the UDA refers to.

#### 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.

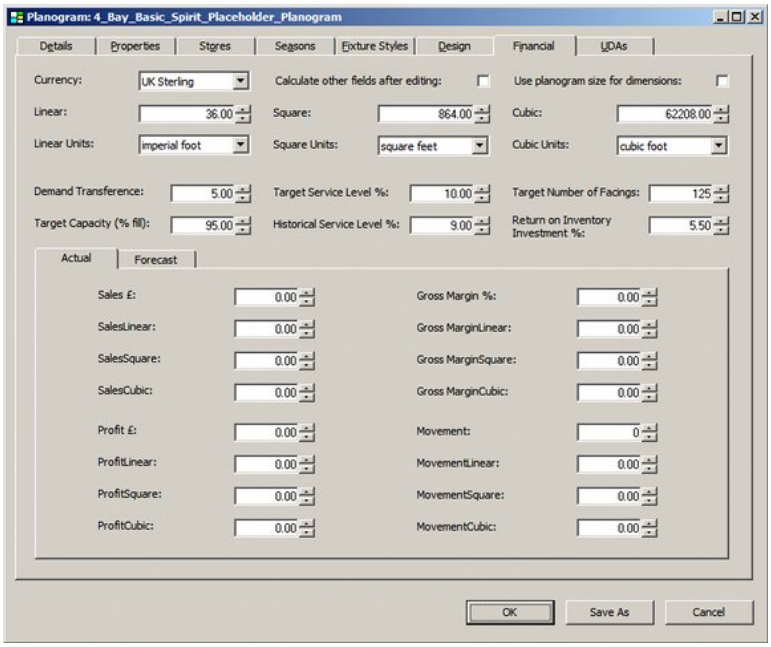



**Note:** The number after the item of merchandise (67 in the above example) is the PPR_ID from the AVTTB_POG_PRODUCT table. It is a unique identifier for the item of merchandise the UDA refers to.

## The Financial Tab

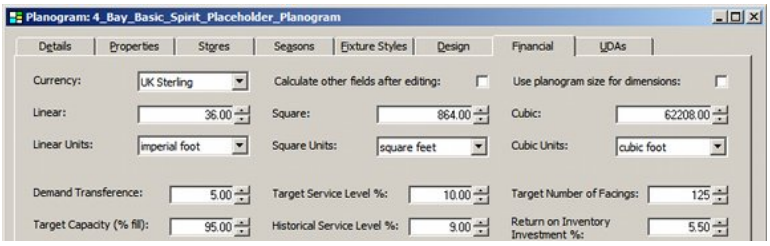
### Overview of the Financial Tab

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.




## Financial Tab - Basic Details

The Basic Details




### 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

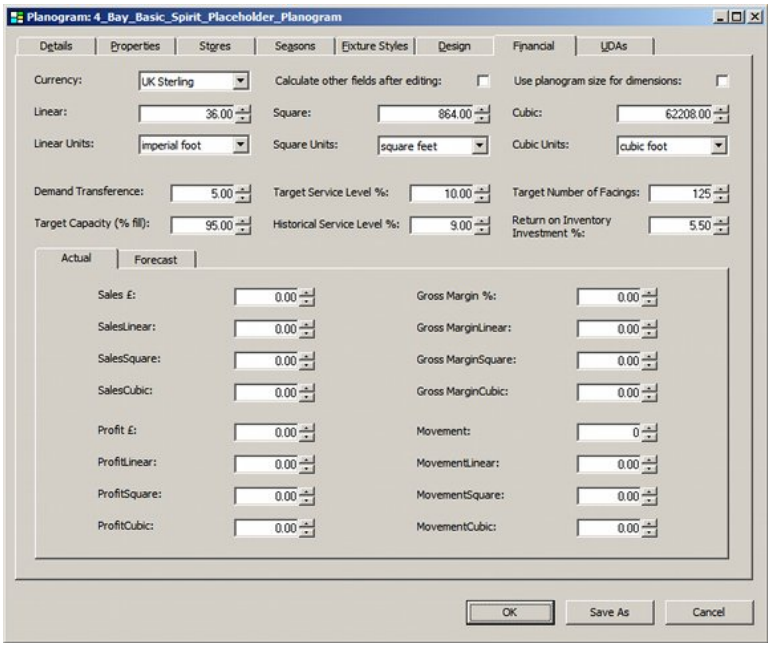
#### Return on Inventory Investment

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.




**Note:** The currency units for the financial data are 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 Gross Margin = (Profit/Sales) x 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

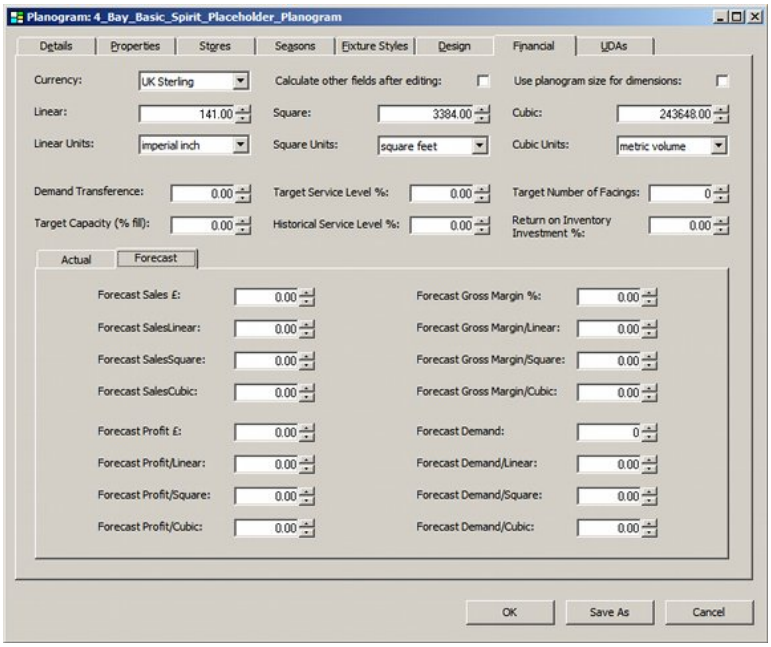
This is the movement divided by the Square (footprint) value for the planogram.

#### 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 units for the financial data are 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 Gross Margin = (Profit/Sales) x 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

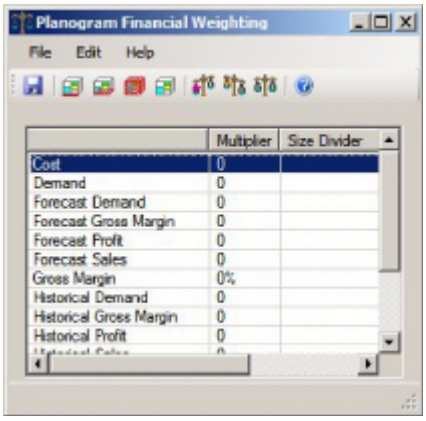
This is the forecast movement divided by the Square (footprint) value for the planogram.

#### 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 Admin module.

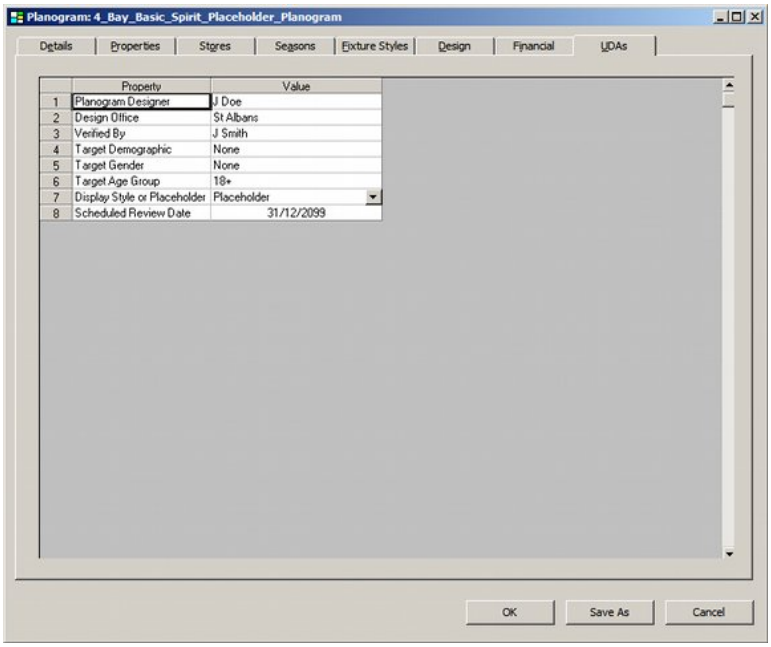



This option allows users to set up a system for calculating the relative performance of planograms from the imported or manually entered financial performance data.

# The UDA Tab

## Overview of the UDA Tab

The UDA Tab is used to add User Defined Attributes (UDA's) to the Planogram.



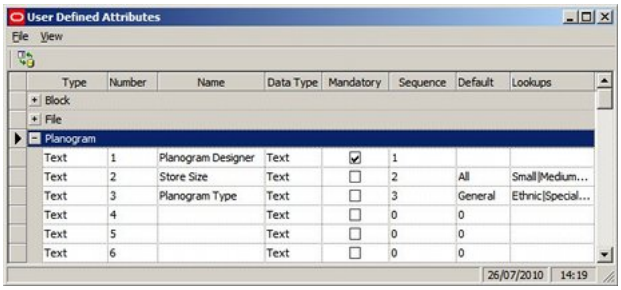

UDA's are implementation specific and can be customized according to customer requirements.

## Configuring the Fields for the UDAs

The fields for the UDAs are configured in the Admin Module. Select the User Defined Attributes option from the Merchandising Menu.



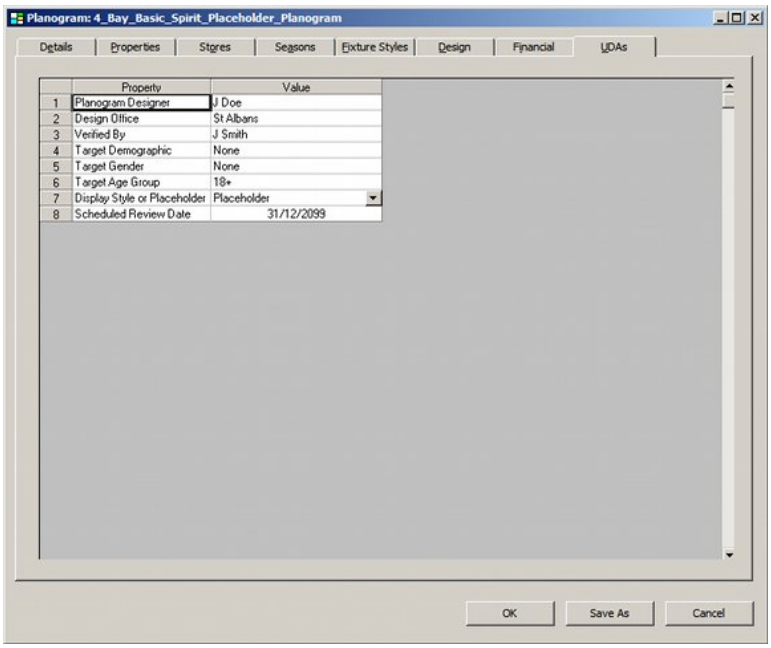

This will bring up the User Defined Attribute dialogue box.



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 Admin 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:

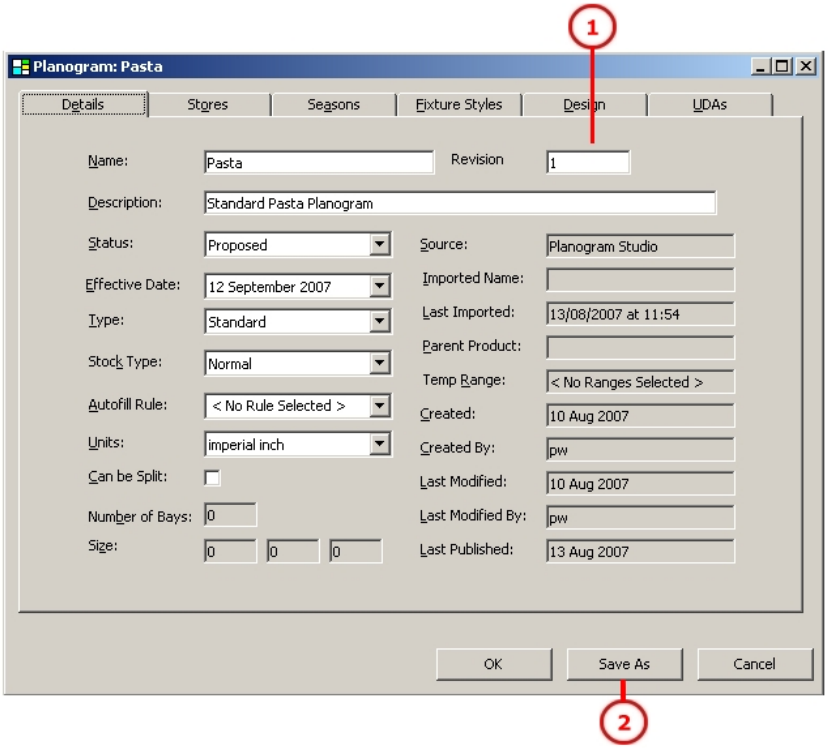
| Type | Description |
|---|---|
| Text | A text field, for example a name |
| Whole Number | An integer, such as 1, 2 or 3 |
| Decimal | A number with values after the decimal point, for example 1.234 |
| Date | A date - for example a review date |
| Boolean | A Yes/No field. This appears as a checkbox. |
| Currency | Currency: a financial value. |

## Saving Planograms

### Saving Planograms as New Designs and New Revisions

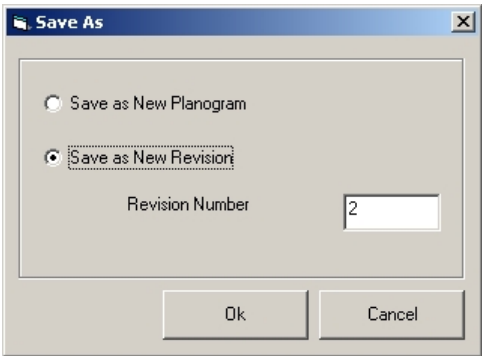
Once a planogram has been designed; that design can be updated at a later date.

**Changing the Revision Number** of a planogram is straightforward.




The 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',

## Planogram Import

### 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.

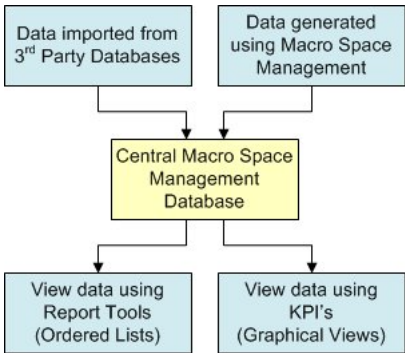
# KPI's and Time Dependent Data

## 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.

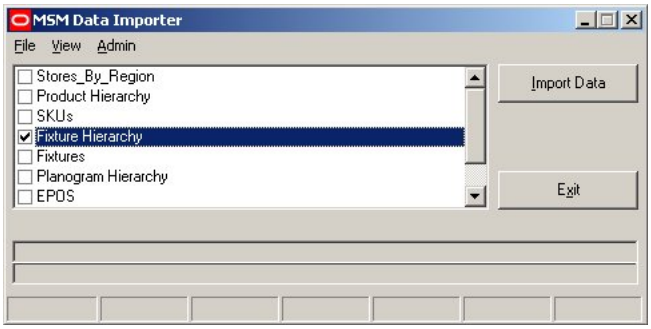
The two methods are complementary; enabling the user to see information in two different ways.

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.



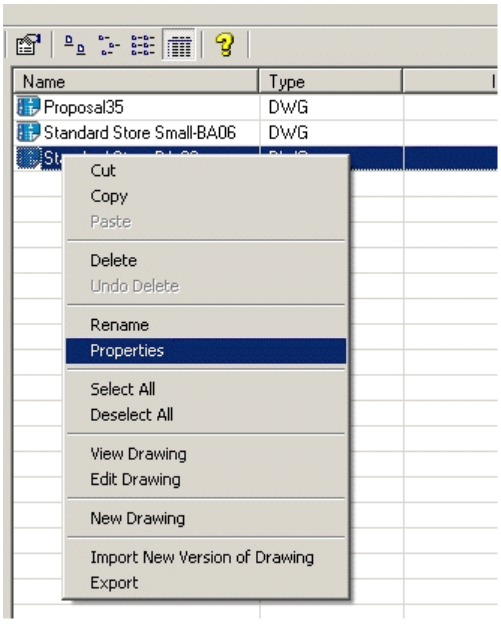

This data is then stored in tables within Macro Space Management's central database.

Such data might include sales values, product volumes, etc.

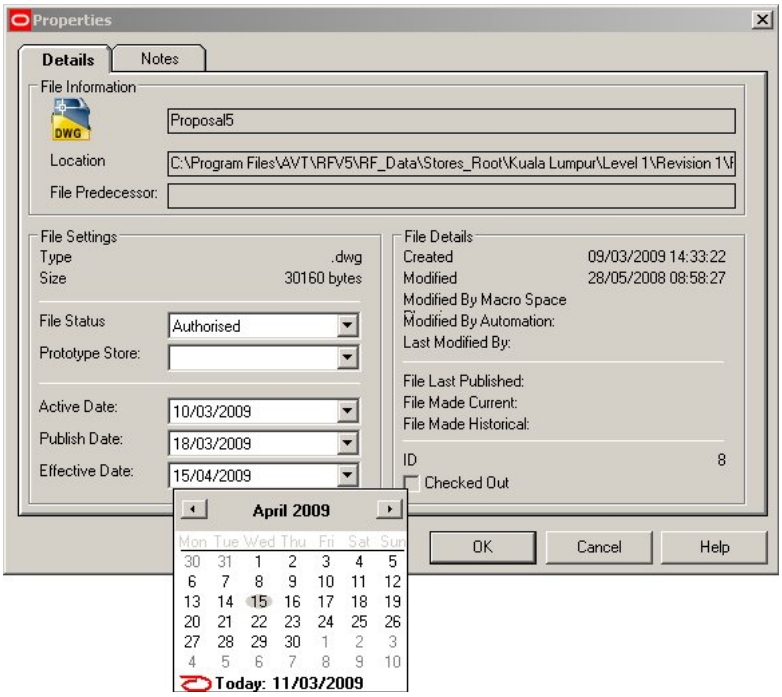
Imported data can then be analyzed using Report Studio or KPI's, (Key Performance Indicators).

## 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 Effectives data for the drawing.

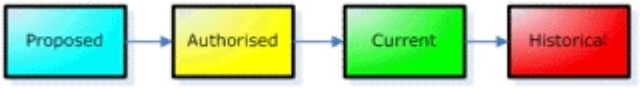
> **Note:** Publish and Effective dates can only be set when a drawing has Authorized status.

## 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 these 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.

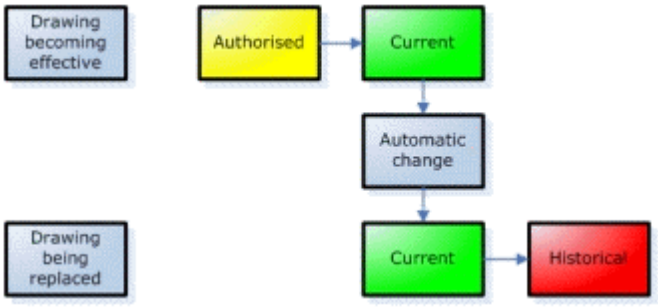
The Effective Date is the date at which the drawing becomes the active version of the layout within the affected stores.

> **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.

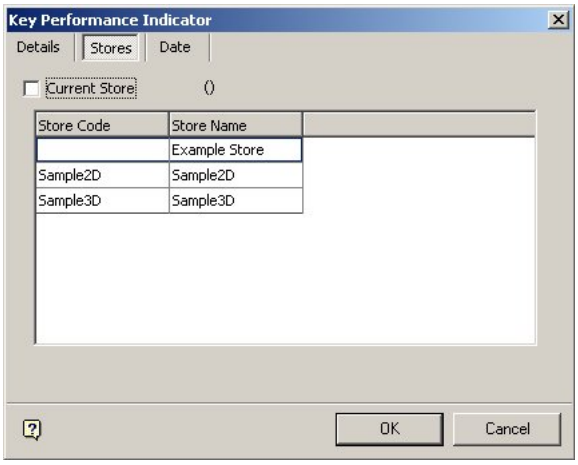



## Overview of using KPI's

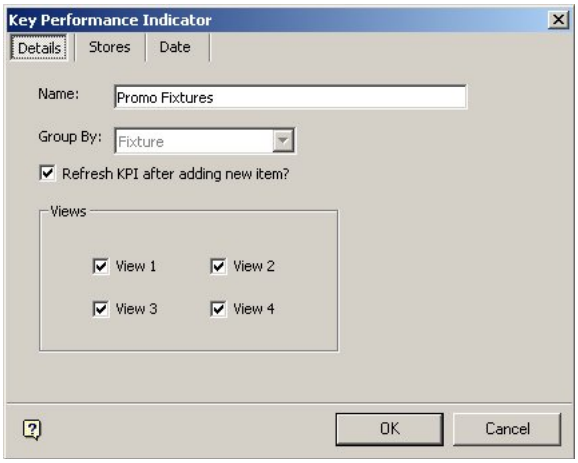
**KPI's can be produced** using data from on the store associated with the current drawing, or from a user specified store.

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.

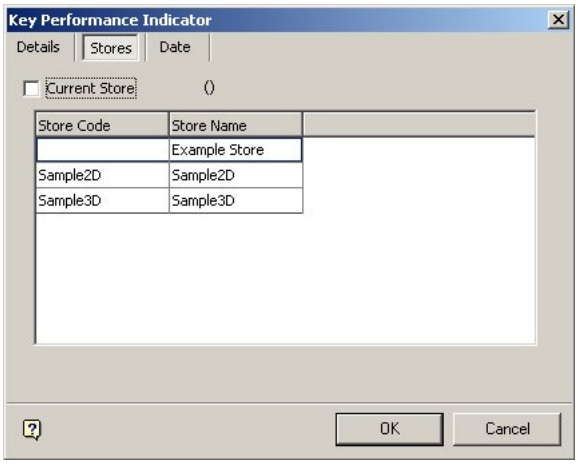
It also lets the user specify which ViewPort(s) to use.

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.

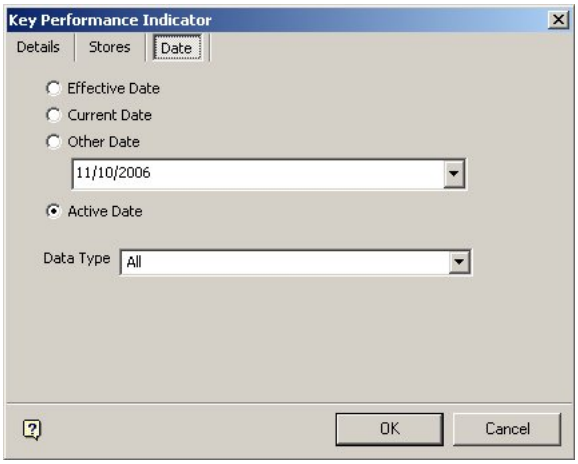



If the Current Store check box is selected, then KPI's will be displayed for the store associated with the currently active drawing.

If the Current Store check box is un-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.

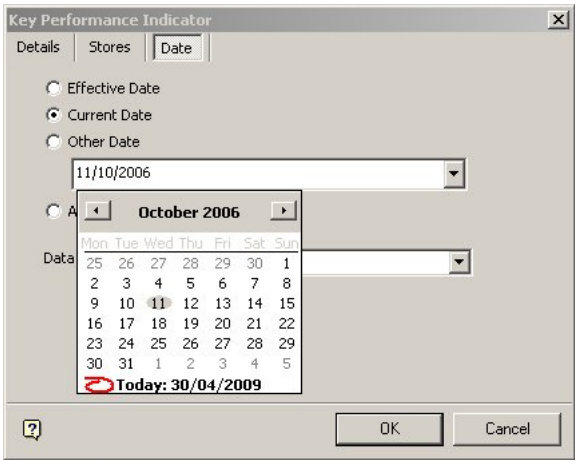
### Selecting Dates

Date Ranges for which KPI's can be displayed can be selected using the Date Tab in the Key Performance Indicator dialogue box.

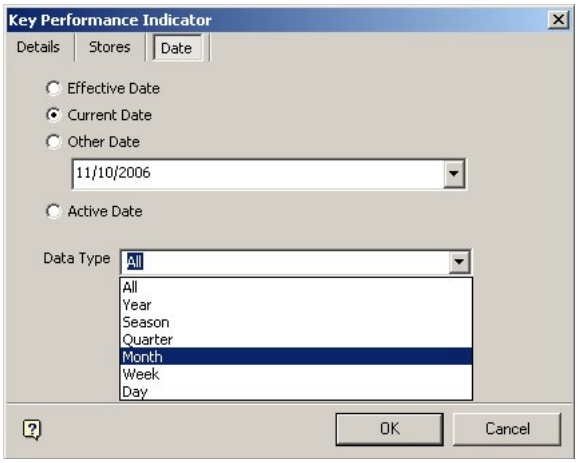



Radio buttons enable the user to specify whether the date on which the KPI should be based is the Effective Date (the date on which the drawing became current), the Current Date (today's date), or a user specified date.

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.

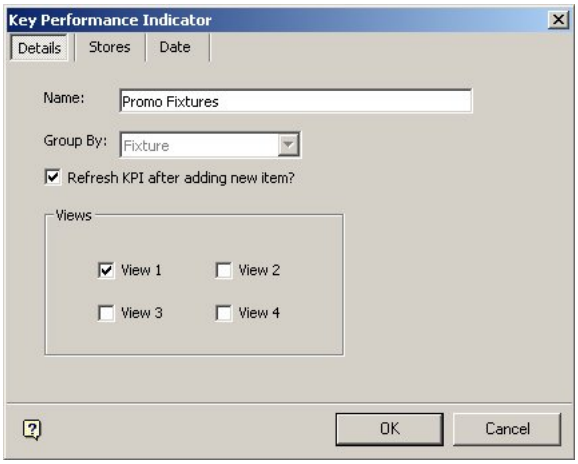
All date ranges are after the selected date.

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.

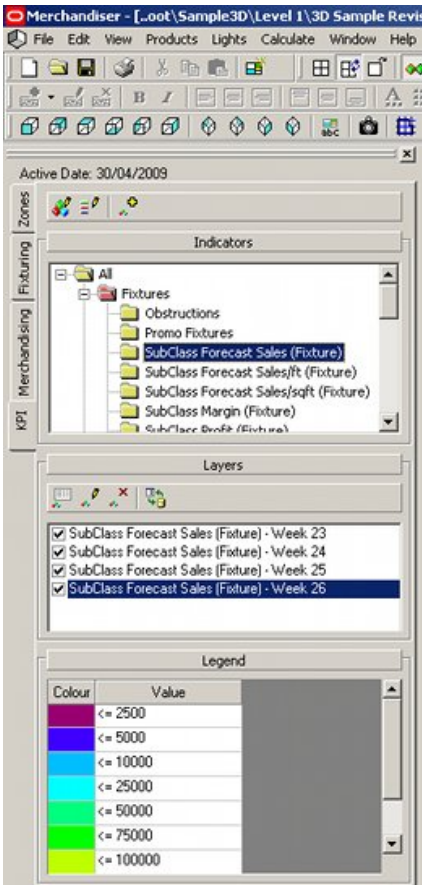



In the above example, the KPI has been selected to show in ViewPort 1.

### 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.

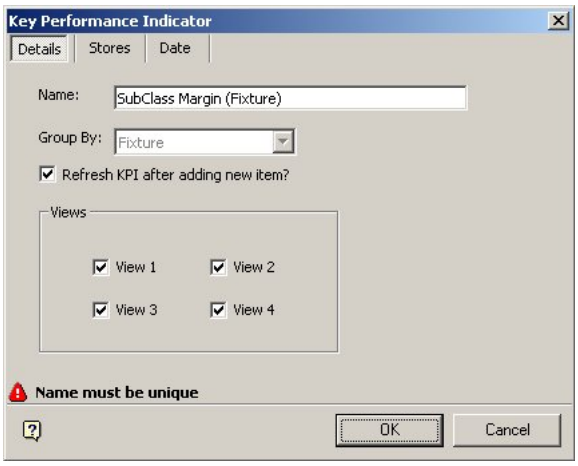
Each instance of the KPI can be set to show in a different ViewPort window, allowing the Macro Space Management user to see compare how performance changes over time or how performance varies from store to store.



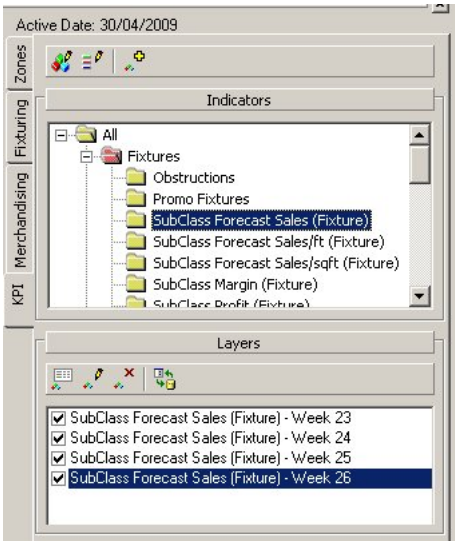
In the above example the Weekly Sales KPI has been set to show in four different ViewPorts, each showing a different weeks data.

### 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.

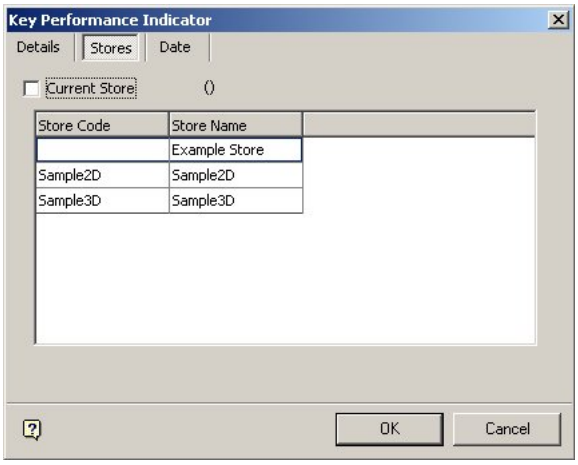



In the example below the SubClass Forecast Sales (Fixture) KPI has been renamed to each instance has a unique name.




### 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.

