Oracle® Retail Macro Space Management
Merchandiser User Guide
Release 14.1

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Oracle® Retail Macro Space ManagementMerchandiser User Guide, Release 14.1

Value-Added Reseller (VAR) Language

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Preface

The *Oracle Retail Merchandiser User Guide* describes the functionality in the Oracle Retail Macro Space Management Merchandiser Module.

Audience

This document is intended for the Oracle Retail Macro Space Management Merchandiser module administrators and users.

Related Documents

For more information, see the following documents:

- *Oracle Retail Macro Space Management Release Notes*
- *Oracle Retail Macro Space Management Administration Module User Guide*
- *Oracle Retail Macro Space Management Configuration Module User Guide*
- *Oracle Retail Macro Space Management Data Importer User Guide*
- *Oracle Retail Macro Space Management Fixture Studio User Guide*
- *Oracle Retail Macro Space Management Product Studio User Guide*
- *Oracle Retail Macro Space Management Report Designer User Guide*
- *Oracle Retail Macro Space Management Merchandiser User Guide*
- *Oracle Retail Macro Space Management Planner User Guide*
- *Oracle Retail In-Store Space Collaboration Release Notes*
- *Oracle Retail In-Store Space Collaboration User Guide*
- *Oracle Retail In-Store Space Collaboration Mobile User Guide*
- *Oracle Retail Macro Space Planning Installation Guide*
- *Oracle Retail Macro Space Planning Data Model*
- *Oracle Retail Macro Space Planning Security Guide*

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- 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, 14.1). If you are installing the base release and additional patch releases, read the documentation for all releases that have occurred since the base release before you begin installation. Documentation for patch releases can contain critical information related to the base release, as well as information about code changes since the base release.

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Improved Process for Oracle Retail Documentation Corrections

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This process will prevent delays in making critical corrections available to customers. For the customer, it means that before you begin installation, you must verify that you have the most recent version of the Oracle Retail documentation set. Oracle Retail documentation is available on the Oracle Technology Network at the following URL:

http://www.oracle.com/technetwork/documentation/oracle-retail-100266.html

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Oracle Retail Documentation on the Oracle Technology Network

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http://www.oracle.com/technetwork/documentation/oracle-retail-100266.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

The following text conventions are used in this document:

Convention	Meaning
boldface	Boldface type indicates graphical user interface elements associated with an action, or terms defined in text or the glossary.
italic	Italic type indicates book titles, emphasis, or placeholder variables for which you supply particular values.
`monospace`	Monospace type indicates commands within a paragraph, URLs, code in examples, text that appears on the screen, or text that you enter.

Overview of Macro Space Planning

Overview of Macro Space Planning

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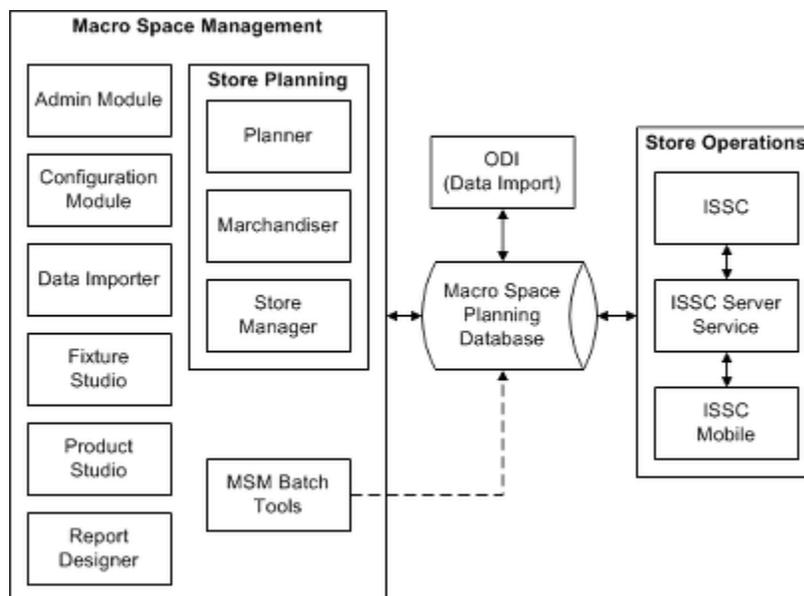
Macro Space Planning

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

Macro Space Management

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

1. **Store Planning Modules**

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

2. **Support Modules**

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

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

- Libraries of information maintained include the fixture and gondola libraries (Fixture Studio), product library (Product Studio) and the planogram library (planogram design within the Merchandiser module).

- Batch tools include Data importer (for bulk import of data) and Report Designer (configuring planogram reports for bulk output)

In-Store Space Collaboration

In-Store Space Collaboration uses a common database with Macro Space Management. ISSC is more portable than MSM and is often deployed to stores to allow store managers to become involved in the store planning process. It can also be used to ensure compliance with store plans. It has an extension - ISSC Mobile. ISSC Mobile is designed for use by store associates allowing them to identify changes in fixturing and merchandise in the store the associate works in.

Differences between Planner and Merchandiser Modules

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

	Planner	Merchandiser
Zones	▪ Can be added, edited and deleted.	▪ Can be viewed 'read only'
Fixtures and Gondolas	▪ Can be accurately positioned using standard AutoCAD functionality. ▪ Shelves generally not shown ▪ Position of signage shown, but no text/images available.	▪ Can be positioned accurately, but not as easily as in Planner. ▪ Can work with additional detail for equipment - shelves and pegs for instance. ▪ Can see writing/images on signage
Products	▪ 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. ▪ Can be associated with images - giving a photorealistic appearance.
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.

	Planner	Merchandiser
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.

Retail Operations and the Planner and Merchandiser Modules

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

This section of help gives a high level overview of store planning and how it integrates into the rest of the retail planning process.
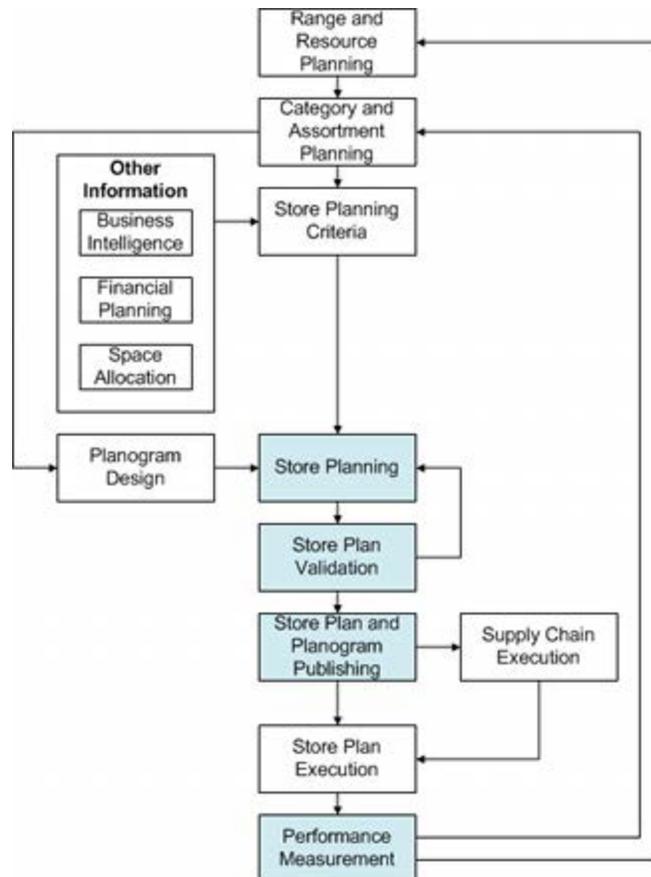
Note: Boxes coded in blue are Macro Space Planning operations.

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

Range and Resource Planning

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

Category and Assortment Planning

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

Store Planning Criteria

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

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

Planogram Design

Planogram design will also have been carried out, often based on information from category management combined with guidelines on visual merchandising. Planograms can be of two types:

- Individual planograms. These are specific designs that are created or updated as required by the planogram designer.
- Master Planograms: these act as placeholders for categories and sub-categories. There is a mapping between individual and master planograms.

Store Planning

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

> **Note**: Within Macro Space Planning, store planning is generally called floor planning.

Store Plan Validation

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

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

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

Store and Planogram Publishing

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

Floor Plan Publishing

Macro Space Management has the capability to publish floor pans using a batch process. This is run by a scheduling tool at regular intervals. The floor plans will be published in a specified form to a pre-defined location.

Planogram Publishing

Macro Space Management also has the capability to publish planogram designs using a batch process. This is run by a scheduling tool at regular intervals. The floor plans will be published in a specified form to a pre-defined location.

- If master planograms have been placed, the planogram publishing process will identify a specific individual planogram associated with the master planogram and publish that individual planogram.
- If just individual planograms have been placed, those individual planograms will be published.

> **Note**: Using master planograms can reduce the frequency that floor plans need to be published.

Supply Chain Execution

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

Store Plan Execution

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

Performance Measurement

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

Overview of Store Planning

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

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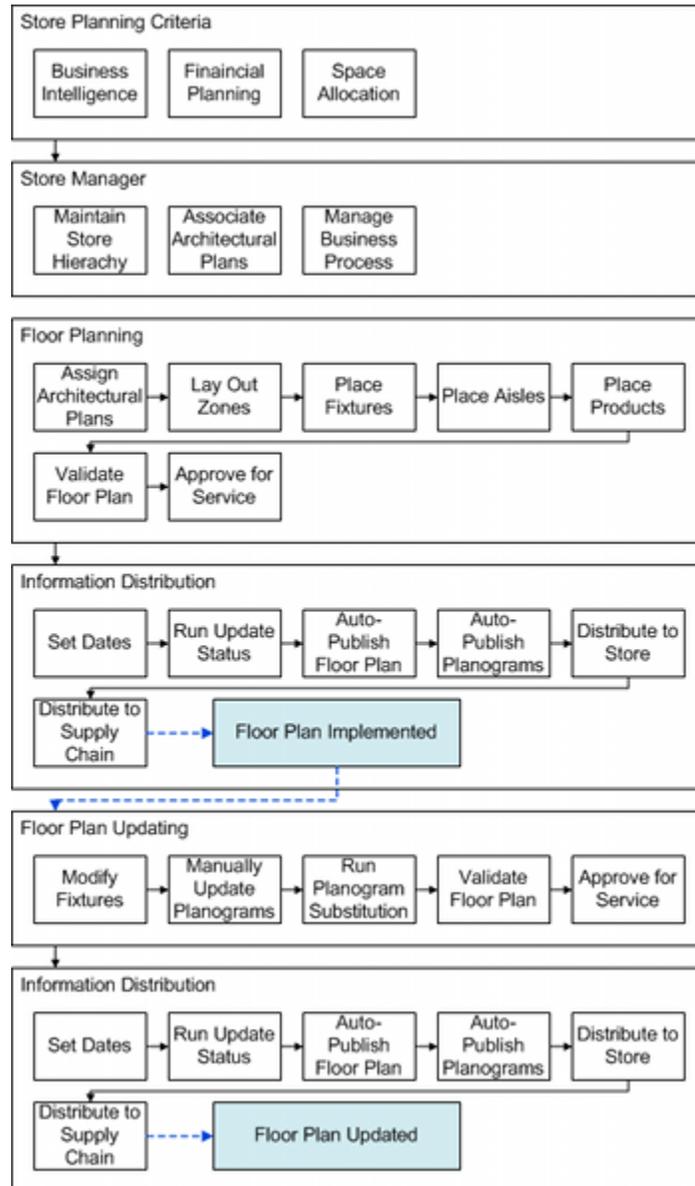
Store Planning Criteria

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

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

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

Store Manager

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

- **Maintaining the Store Hierarchy**

  Maintaining the store hierarchy includes adding, editing and deleting stores, floors, revision and floor plans as required.

- **Associating Architectural Plans**

  Architectural plans are used as underlays for floor plans in order to show the position of walls, doors, windows, lighting and services. Associating architectural plans is a two-part process, with the second step required when a floor plan is open.

- **Managing Business Processes**

  Stores, Floors, Revision and floor plans all go through different stages in their business life cycle. For example a store may be at the design stage, in service, closed for refurbishment or sold and out of service.

Floor Planning

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

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

- **Assign Architectural Plan**

  An architectural plan should already have been associated with the parent floor for the floor plan in Store Manager. This can now be assigned to this specific floor plan.

- **Lay Out Zones**

  The next stage is to lay out the zones within the floor plan. These can be used to indicate the positions and areas of departments, sub-departments, aisles, etc. This can only be done in the Planner module. Zones come in several broad types:

  – Internal Area: There is only one zone of this type in a floor plan. It is used to indicate the maximum extents and area used for retail purposes.

  – Department: This type is used to indicate the departments within a retail outlet. Any floor plan that is to be viewed in In-Store Space Collaboration must have zones of this type for it to open.

  – Other: This type is often used to indicate sub-departments within a main department, aisles, etc.

- **Place Fixtures**

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

- **Place Aisles**

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

- **Place Products**

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

- **Validate Floor Plan**

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

  – Whether planograms have been placed on appropriate fixtures.

  – Whether the planogram adjacencies will maximize (for example) impulse buying.

  – Whether financial performance criteria will be met.

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

- **Approve for Service**

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

Information Distribution

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

- **Set Dates**

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

  - The Publish Date is when information is distributed in preparation for putting the floor plan into service. This date is set far enough in advance of the implementation date that all preparations for putting the floor plan into service (including ordering equipment and merchandise) can be put in hand.

  - The Effective Date is when the floor plan will be put into service (made current). This date will usually be integrated with the retailers strategic planning so that the change is made in coordination with promotional and advertising campaigns, etc.

- **Run Update Status**

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

- **Auto-Publish Floor Plan**

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

- **Auto-Publish Planograms**

  A further Macro Space Management application can be scheduled to publish the planograms on the Publish Date. A copy of the specified floor plan (typically in PDF or Word format) will be sent to a pre-defined location. From there the retail chain can make arrangements to distribute the information to the store - typically by e-mail.

- **Distribute to Supply Chain**

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

- **Run Update Status**

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

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

- **Implementing the Floor Plan**

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

Floor Plan Updating

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

- **Modify Fixtures**

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

- **Manually Update Planograms**

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

- **Run Planogram Substitutions**

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

  – One to One Substitutions: A planogram is swapped out for one of identical size.

  – One to Many Substitutions: A large planogram is swapped out for several smaller ones.

  – Many to One Substitutions: Several smaller planograms are swapped out and replaced by a single large one.

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

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

  – Seasonal Changes: Swapping out seasonal goods; for example changing Halloween products for Christmas ones.

  – Special Offers: Swapping out standard planograms for planograms containing products in modified packaging for the special offer.

- **Validate Floor Plan**

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

Information Distribution

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

Using Prototype Stores

Overview of Prototype Stores

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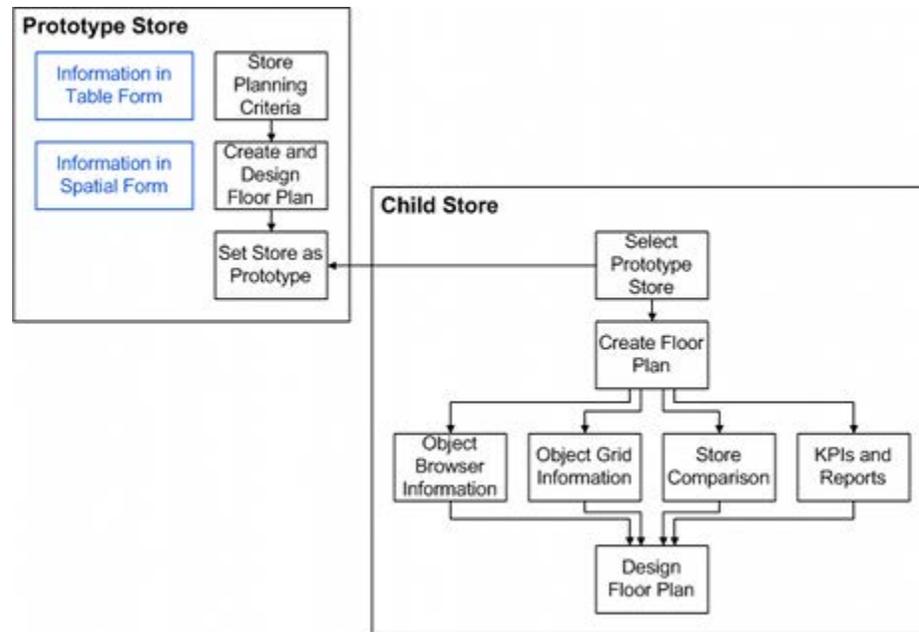
Prototype Stores are exemplars of a store that has an idealized layout. They may be actual stores that are performing better than average. Alternatively they may be 'paper' stores that have been designed as guidance for real store layouts. The process is as follows:

1. **Store Planning Criteria**

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

2. **Create and Design Prototype Store**

   The planning criteria are then used to design the prototype store. This results in the tabular information in the planning criteria being transformed into a series of spatial relationships where departments, equipment and merchandise are placed relative to each other. After the store plan has been optimized by means of reports and KPIs, it is ready for use as a reference.

3. **Set Store as a Prototype**

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

4. **Select Prototype Store and Create Floor Plan**

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

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

5. **Design Floor Plan**

Using the Prototype Store, the child floor plan can then be designed. A typical use of the functionality would be to take a prototype store of 30,000 ft^2 and create a child plan of similar area but different physical layout containing broadly similar department sizes and equipment/merchandise placements.

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

MSM Batch Processes

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

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

Batch Processes

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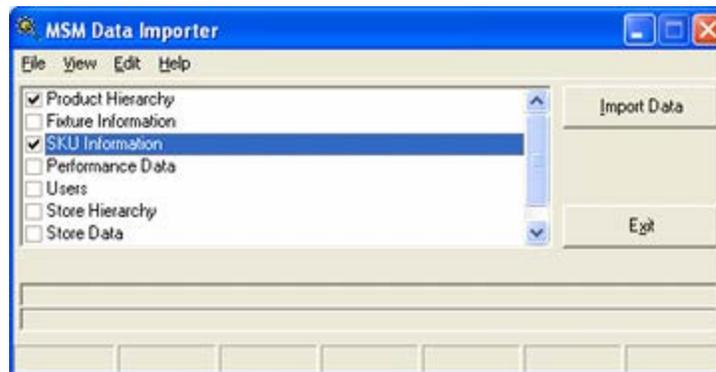
Data Importer is a Macro Space Management (MSM) module that allows imports of data into the MSM database to be configured and executed. In principle any table (including custom information) can be imported into the database and used for reporting purposes.

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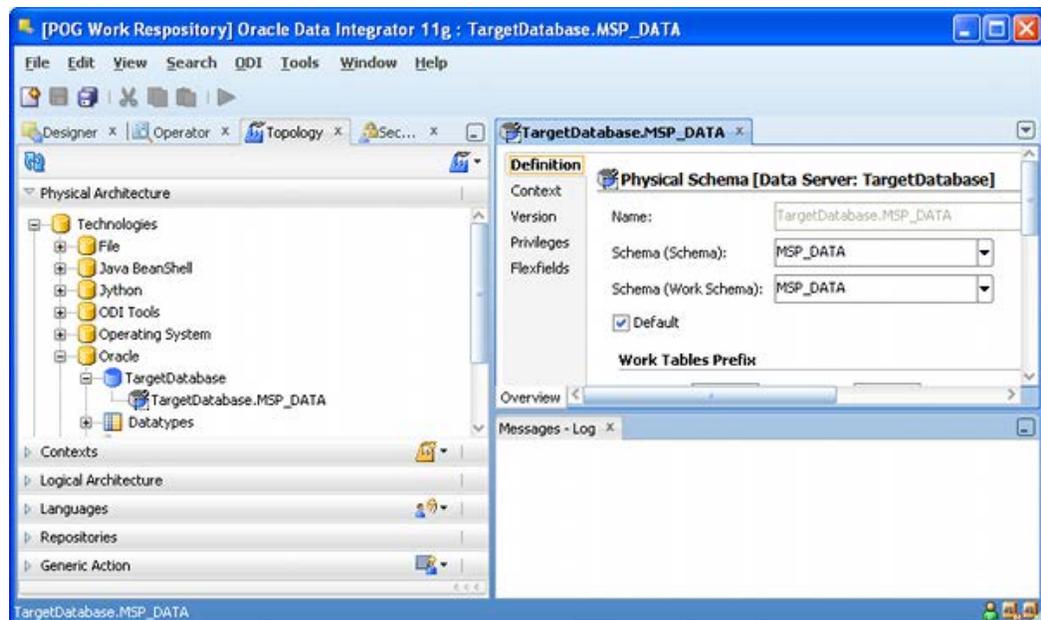
Oracle Data Integrator (ODI) is another Oracle application. It can be configured to import planogram definitions. This requires an XML file to be configured by the retailer in a very specific format. This XML file can then be imported into the MSM database by ODI.

Automated Calculations

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

- Allocated Areas: Allocating floor area to fixture to take into account the aisles around them when generating performance data.
- Aisle Adjacency: Identifying which fixtures are associated with an aisle.
- Fixture Adjacency: Identifying which fixtures are to the left, right above or below each other.
- Product Adjacency: Identifying which products are to the left right or on the same fixture.
- Face Planes: Calculating the frontal area of each product for performance metrics.
- Space Measurement: Calculating the volume of each product for performance metrics.

Update Status

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

Floor Plan Processing

Floor Plan processing enables the user to update a Planner floor plan prior to publishing by carrying out items such as synchronization, refreshing annotation or updating calculations.

Floor Plan Publishing

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

Planogram Publishing

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

Custom SQL

Administrators

 This information is for DBAs and Administrators only. Standard users cannot access the database and modify the requisite tables. It is given to indicate that information in a number of parts of Macro Space Planning can be customized to meet specific requirements.

Definition of Custom SQL

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

- In Standard SQL, a simple statement would be `Select PRODUCT_NAME from PRODUCT where FIL_ID = 123`

- Custom SQL is of the form `Select PRODUCT_NAME from PRODUCT where FIL_ID = {Fileid}`

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

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

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

5.1 Planograms Placed — 17 Item(s) — Merchandiser Store.dwg

Where Custom SQL Can Be Used

Custom SQL can be used in the following ways:

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

Where Custom SQL is Stored

The primary repository for Custom SQL is in the **Custom SQL** table in the database; although other tables come into use. The Custom SQL itself is stored in the CSQ_SQL field. This can be edited to change the table referenced and fields displayed. Some custom SQL can be modified by using the **Custom Query dialog box** accessed from the General menu in the Administration module.
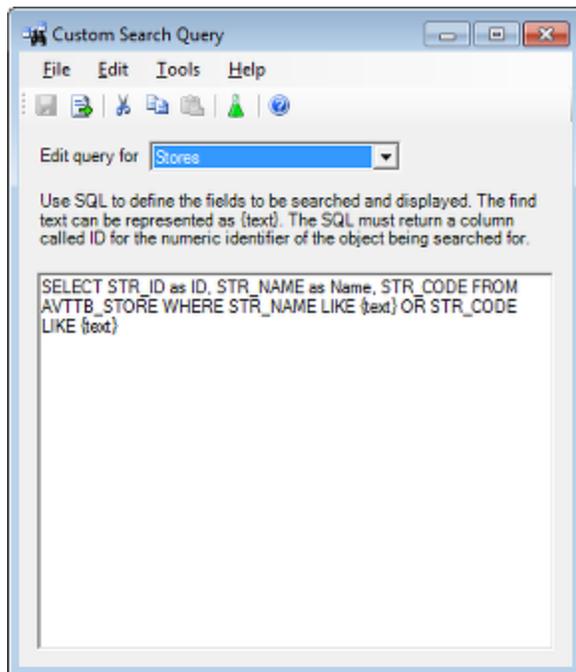
> **Note**: See the *Oracle Retail Macro Space Planning Data Model* for more information.

Overview of Other MSM Modules

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

> **Note:** Users will need the appropriate privileges to access these modules.
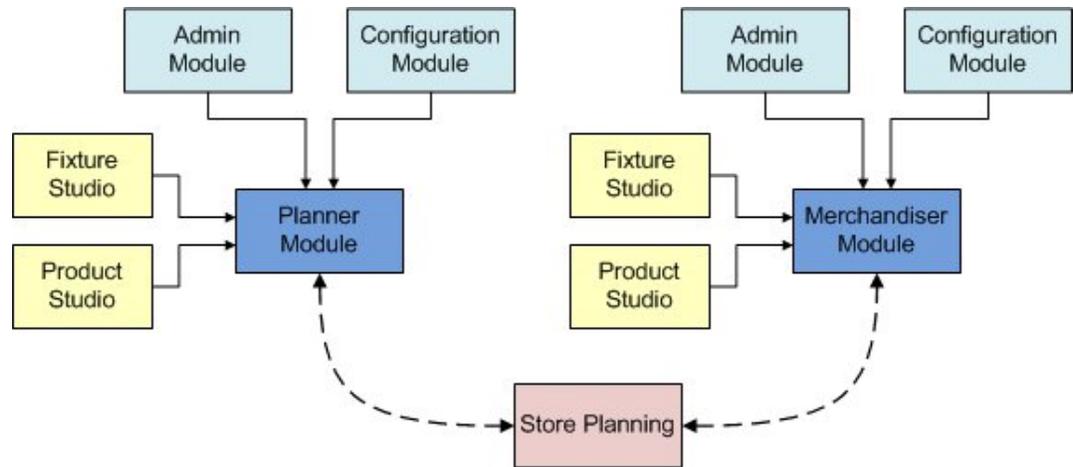
Administration Module

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

Option	Description	Planner	Merch
Floor Plan Publishing	How floor plans are published (made available to stores for implementation)	X	X
Planogram Publishing	How planograms are published (made available to stores for implementation)	X	X
Statuses	The statuses available to show how far a store, item of equipment, item of merchandise, etc, is through its business life cycle.	X	X
Annotation (Text Styles)	How annotation for zones, fixtures, products and planograms draws	X	
Zones	The hierarchy of available zones to place in a floor plan	X	
Ranges	The list of temperature ranges that can be assigned to equipment and merchandise. This affects equipment and merchandise when display styles are used.		X
Styles	The list of styles that can be assigned to equipment and merchandise. This affects equipment and merchandise when display styles are used.		X
Planogram Substitution	How to automatically substitute one planogram for another in floor plans	X	X
Data Security	What access rights users have for specific objects such as stores or planograms.	X	X
Title Blocks	How a 'frame' of information is added to the floor plan before it is published. Information in the title block can include store name, floor plan 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. ▪ How zones are highlighted in the floor plan.	X X	
Fixturing tab	▪ How the Add Fixture dialog box functions ▪ How Connection Points function ▪ Highlighting of Fixtures	X X X	 X
Merchandising Tab	▪ Selection Method for Fixtures ▪ Highlighting of Products ▪ Checking Planogram Placement Validity	X X 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
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

Logging In

How Passwords and Privileges are Configured

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

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

Access rights to the Macro Space Management modules are set using the Functional Security option.
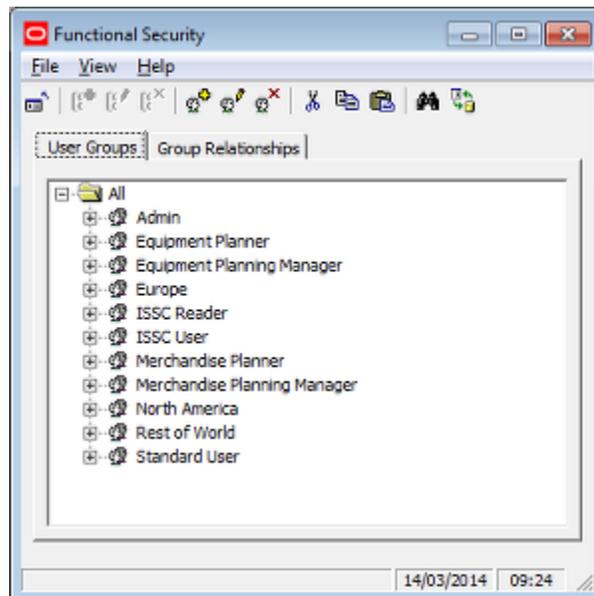
Users are assigned to User Groups in the User Groups Tab. Which modules a User Group can access is specified in the Group Relationships tab. A user's privileges thus depend on what user groups they are assigned to.
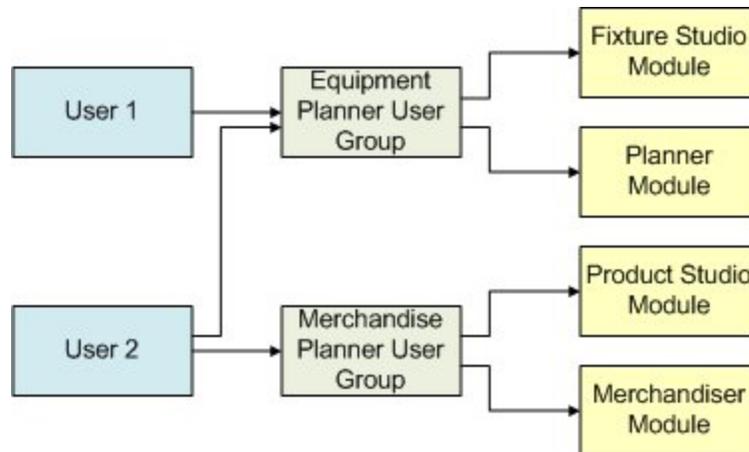
In the above example, User 1 is only a member of the Equipment Planner user group. Accordingly, their access is restricted to the Fixture Studio and Planner modules. User 2 is a member of the Equipment Planner and Merchandiser Planner user groups. They have wider access and can use the Fixture Studio, Planner, Product Studio and Merchandiser modules.

Logging in to Macro Space Management Modules

When a user first attempts to access a Macro Space Management module, the **Log In dialog box** will appear.
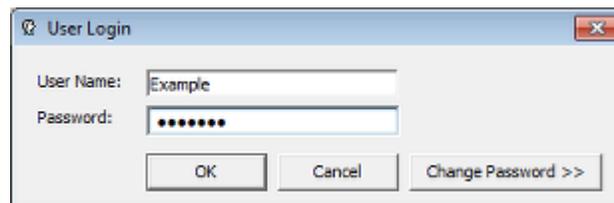
This requires the user to enter a User Name and Password. If these are correct, the user will be able to access the desired module. After the initial log in, information will be held in **Security Server**. Users will therefore be able to access all other Macro Space Management modules they have permissions for without the need to log in again. If the user enters an incorrect user name or password, a warning will result.
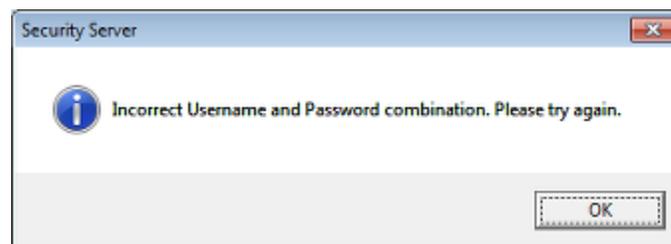
If the user attempts to log into a module for which they do not have permissions for, a warning will appear and the log in attempt will be terminated.
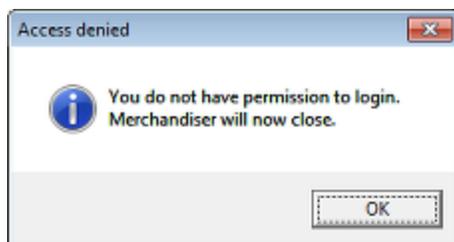
> **Note:** The permissions for which modules can be accessed
> are configured in the Administration module.

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.
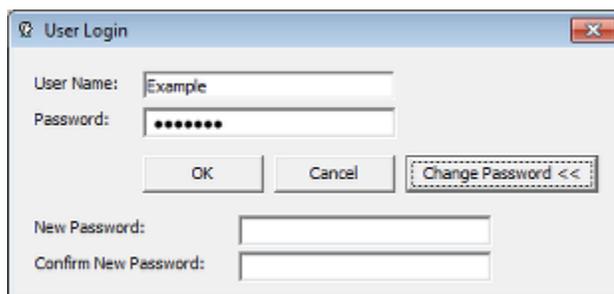
Security Server

Security Server is a Macro Space Management process that runs in the background and is normally not visible to users. When running, it can be seen in the Processes tab of Windows Task Manager as the **AVT5SecurityServer.exe *32** process.
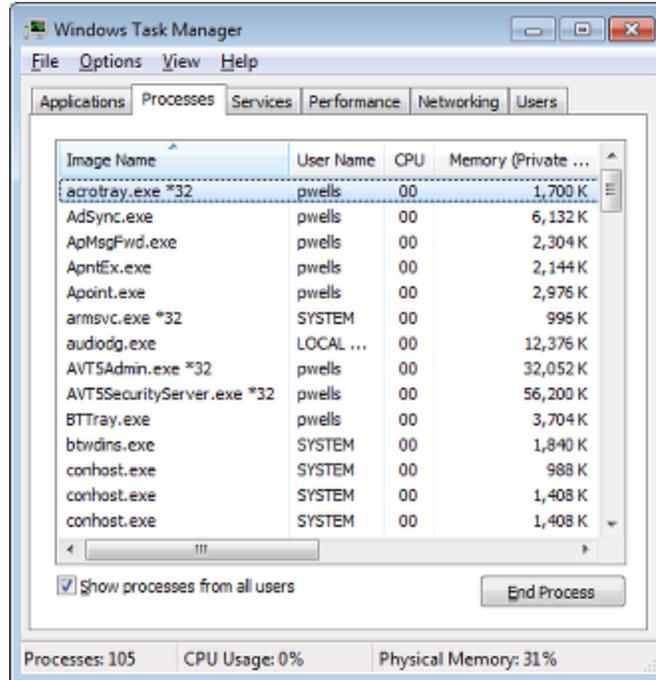
How Security Server operates is shown in the following flowchart.
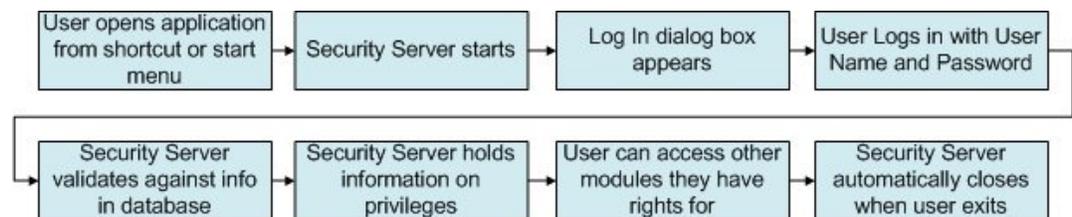
1. The user opens a Macro Space Management module from a shortcut or the Windows start menu.

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, select the Processes tab, highlight the AVT5SecurityServer.exe *32 process and click End Task.

When Security Server has closed, the required Macro Space Management modules can be restarted.

Store Manager Business Processes

Store Manager Business Processes

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

Grouping Together Stores of Common Purpose in the Hierarchy

Stores can be assigned to multiple clusters in the Store Hierarchy. This enables stores with similar characteristics to be grouped together for reporting of control purposes. For example the New York Store could be a member of The North America, Large store and Regional Manager 1 clusters. This enables groups of stores to be selected - for example all stores in North America, or all stores of size over 50,000 square feet.
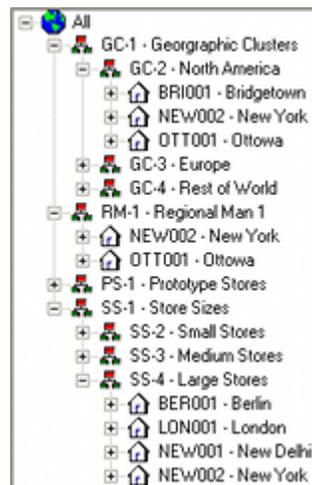
It also allows stores sharing (for example) similar demographic characteristics to be grouped together. For example clusters could be created according to the ethnic mix of the store catchment area. If a 'Hispanic' cluster was created, that would enable all stores with a predominantly Hispanic shopper base to be grouped together. This would allow the product mix going into the stores to be optimized to suit that specific customer base. For example, the stores might have a higher proportion of burritos, enchiladas and fajitas than a store catering to a predominately Asian or Caucasian clientele.

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

Controlling Business Life Cycle

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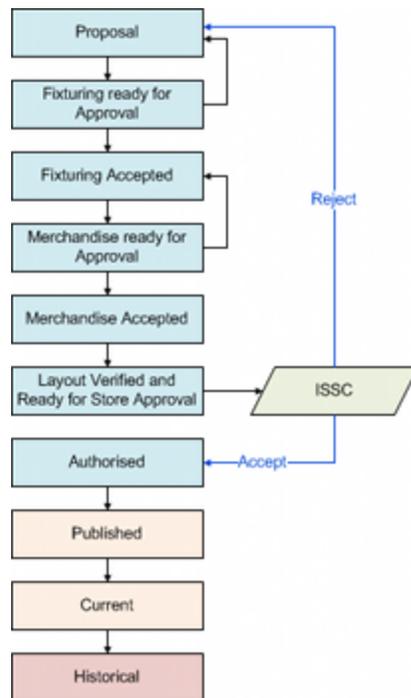
In the above example, it can be seen that the floor plan goes through a number of statuses during the creation process. For example the fixturing is placed then approved by a manager, before the merchandise is placed and approved. It is also possible to use In-Store Space Collaboration (ISSC) to control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

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

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

Communicating Information

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

File Notes

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

- MSM Users can only add File notes, together with reading and deleting existing notes.
- ISSC users can add notes to zones, fixtures, shelves, product and planograms. They can also mark notes as resolved and delete notes.
- ISSC Mobile users can add new notes to zones, fixtures, shelves, product and planograms. They can also add notes to existing notes, continuing a conversation. Finally, they can make notes as resolved.
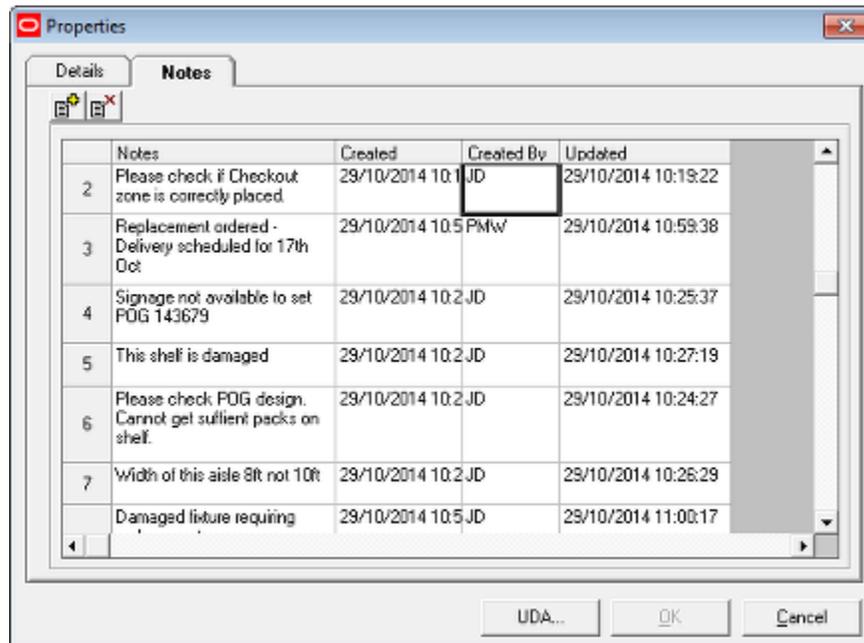
Publishing a Floor Plan

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

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

Making a Floor Plan Effective (Current)

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

Reports and the Macro Space Planning Database

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

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

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

Integrating Store Manager into Retail Processes

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

Identify Need for Floor Plan Change

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

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

Floor Plan Created in Store Manager

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

Floor Plan Ready for Approval

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

Floor Plan Set to Authorized Status

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

1. **The Publish Date**

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

2. **The Effective Date**

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

Update Status Changes Floor Plan Status to Published

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

Publishing Planogram Designs and Floor Plan

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

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

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

Update Status Changes Floor Plan Status to Current

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

Financial KPIs and Reports

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

Importing Data and Setting up Store Manager

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

Importing Data

Macro Space Management has a Data Import module. This enables data to be taken from external databases and imported into the Macro Space Planning central database. Activating this module brings up the MSM Data Importer dialogue box.
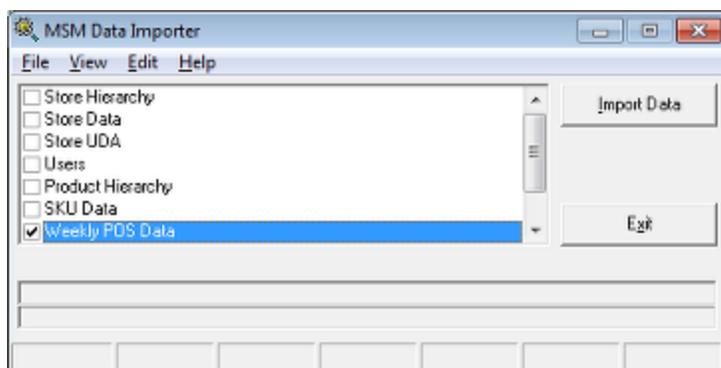
This allows the classes of data to be imported to be selected. Data Importer is fully configurable. Oracle's consultants can configure the exact nature of the data import so that specified data is selected from the designated databases and imported into the required fields within Macro Space Management's central database.

Configuring the Store Manager Hierarchy

General

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

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

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

Planning the Structure

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

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

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

For example, a store could be associated with three separate and distinctive clusters. One cluster would enable the store to be compared against those in other regions, one against stores of similar turnover, and the third against stores of similar size. Consideration should also be given to which stores can be designated as Prototypes for comparison purposes. Correctly assigned prototype stores will also allow swift and effective comparison of individual store performance against an exemplar. A correctly planned structure can significantly improve the performance of a retail organization – a poorly planned structure could prevent the full power of Macro Space Management being used.

Overview of Store Manager

Overview of Store Manager Module

Accessing the Store Manager Module

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

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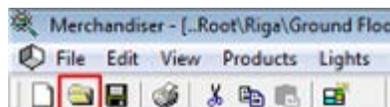
Overview of Store Manager Module

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.
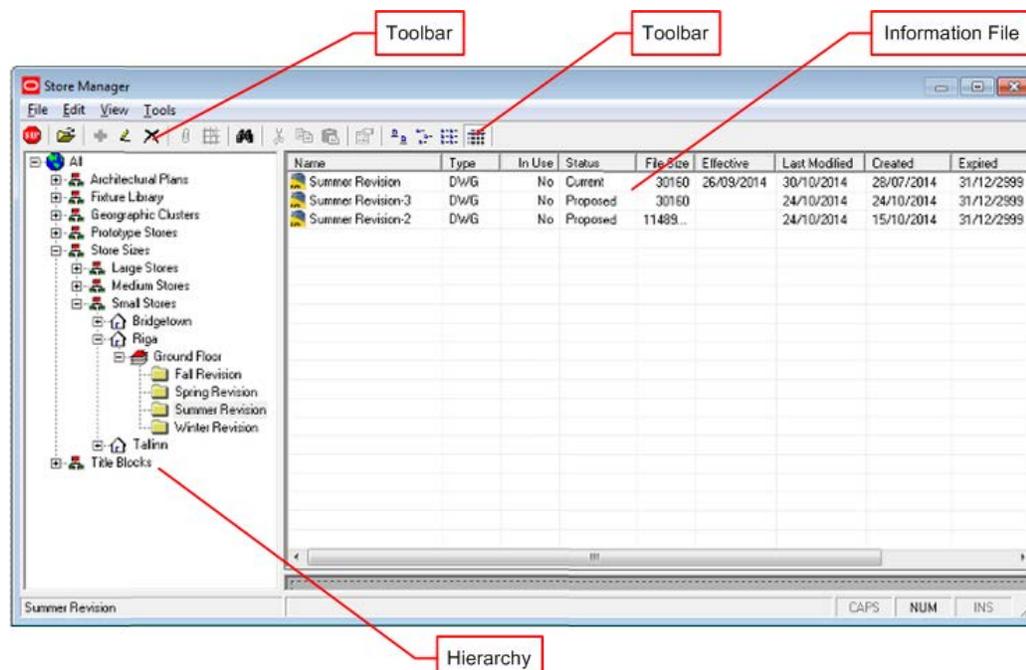
The menu and tool bars can be seen to the top left of the window. The hierarchical tree of Clusters, Stores, Floors and Revisions can be seen to the left of the window. The files associated with a particular Revision can be seen in the frame to the upper right. A preview of the drawing to be selected can be seen at the bottom.

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 Planning database.

The Store Manager Menu Bar

The **Store Manager Menu bar** contains gives access to four menus:

File Menu

The **File** option activates a pull down menu with options primarily concerned with the store hierarchy. 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. If a file is highlighted, it can also be used to call the File Properties dialog box.
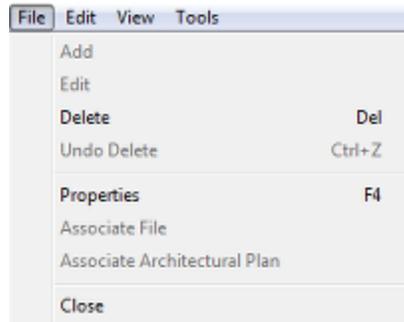
Edit Menu

The **Edit** option activates a menu with options to cut, copy and paste some objects in the hierarchy such as clusters, stores and files. Some of these may be grayed out depending on what item in the hierarchy is selected.
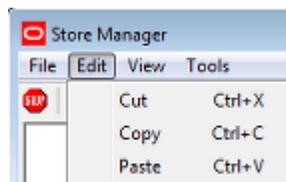
View Menu

The **View** option activates a menu with various options controlling the appearance of Store Manager and the way it displays information.
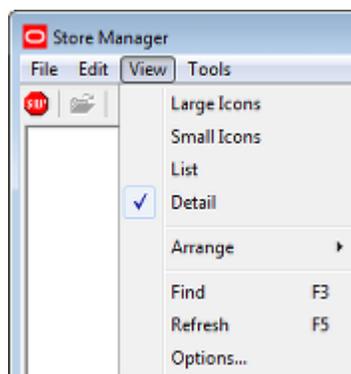
Tools Menu

The **Tools** option contains a series of options used to check in files, check directory integrity, import files and create hierarchies.
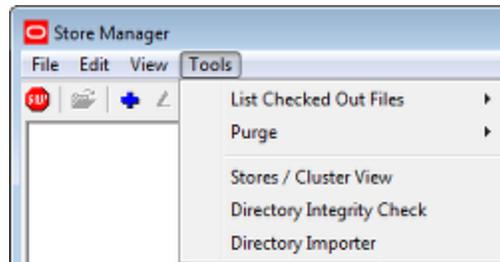
The Store Manager Toolbar

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
	Associate File
	Associate Architectural Plan
	Search
	Cut
	Copy

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

Basic Concepts

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

Hierarchical Structures

A **Hierarchical structure** is one where objects are organized in the form of a tree. The more fundamental data is close to the trunk, while the more dependent data is further out on the branches.
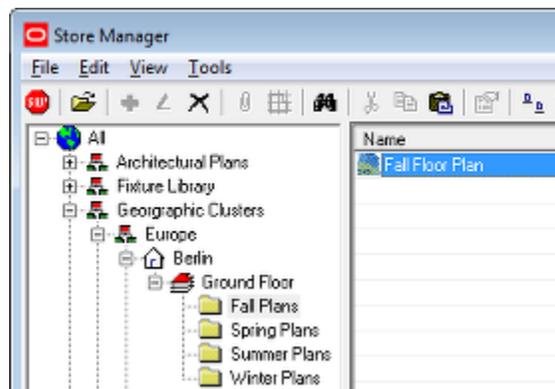
The store manager hierarchy has the following levels:

Level	Description
Root	The top level of the hierarchy
Cluster	Acts as a container for stores. (The arrangement of clusters can be extended by the use of sub clusters.
Store	A physical retail outlet.
Floor	Stores can be assigned multiple floors. A minimum of one floor must be present in each store.
Revision	Revisions hold floor plans of a common purpose. Any example might be the floor plans

Level	Description
	for a specific season. A floor can have multiple revisions. A minimum of one revision must be present for each floor.
Floor Plan	The lowest level in the hierarchy.

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.
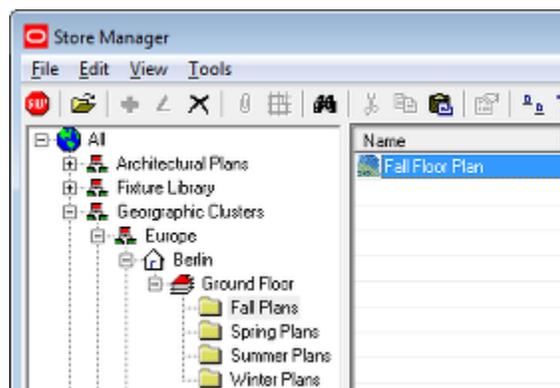
In the above example, the Ground Floor is a child of the Berlin store, but is a parent several Revisions - including Fall Plans.

Status

Status defines the current standing of an object within the business life cycle. For example, Stores generally have three statuses.

At the beginning of the process, the Store has a **Proposed** status as it is only at the design stage. When the store has been built, its status will change to **Open**. Finally, if the store has reached the end of its useful life, it will be assigned **Closed** status. The status of an object thus changes as Macro Space Management users move through the business cycle.

Publish and Effective Dates

Publish and **Effective** dates are associated with the status of a floor plan. The Publish date is the date at which the floor plan is issued to the stores. Floor plans are typically published a number of days or weeks in advance of the time the changes are required. The Effective date is the date at which the published drawing becomes current. Publish and Effective dates can be turned on or off by making changes to the **ENABLE_FILE_TRIGGER_DATES** system variable in the Administration Module. If 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 C:\Oracle Retail\MSM\Apps Windows folder

> **Note:** UpdateStatus.exe can be set to run on a daily or weekly basis by the Windows task manager or a scheduling tool, allowing some degree of automation of common tasks.

RFBin

The **RFBin** is Macro Space Management's equivalent of the Recycle Bin. Files marked for deletion are sent to the RFBin, but will not be permanently deleted until the **Purge** option is used in the Tools menu. Its location is specified in the Directories tab of the Configuration module. The directories tab can only be accessed when the Configuration Module is opened from within the Administration module.
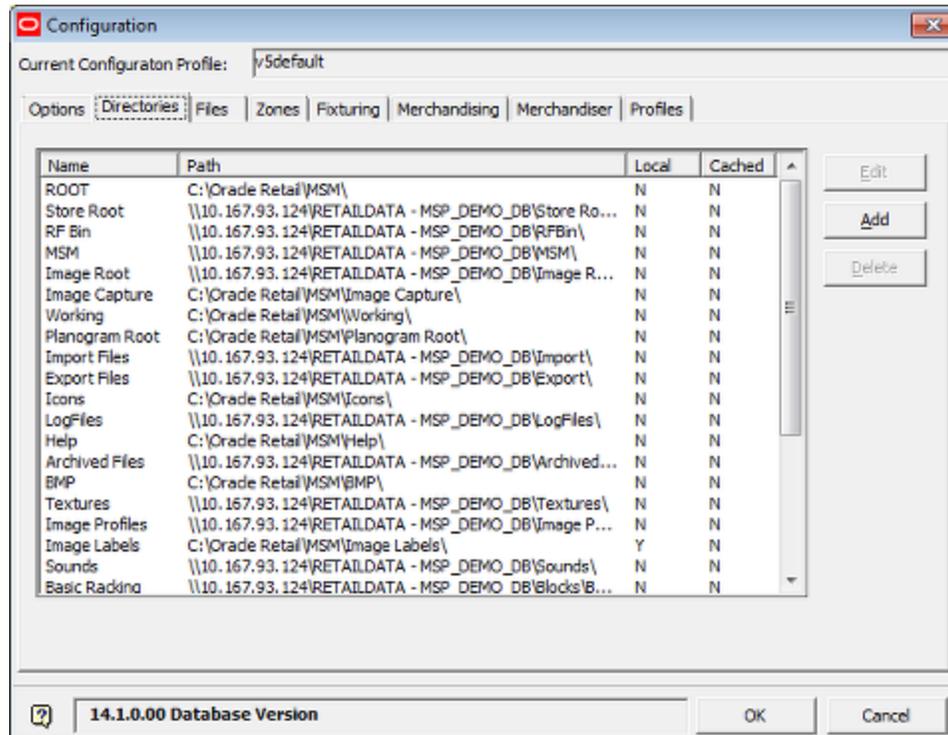
The Store Manager Hierarchy

General Note on Adding, Editing and Deleting Objects

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

File Menu

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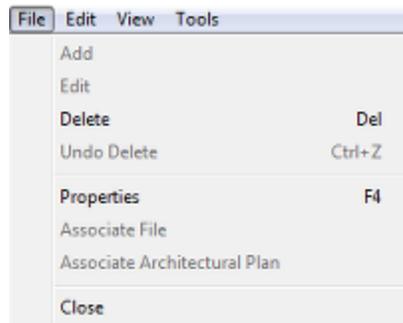
Toolbar

Objects can be added to, edited in or deleted from the hierarchy by highlighting an appropriate object and selecting the pertinent option from the **Toolbar** menu. Some of these functions may not be active depending on the object selected.

Right Click Menu

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

Deleted Objects

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

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

Adding, Editing and Deleting Clusters

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

Adding (and Editing) Clusters

To add a Cluster, highlight the Store Root or another cluster and select **Add** from the **File Menu**, **Toolbar** or **Right Click Menu**. The **Add Cluster** dialog box will appear.
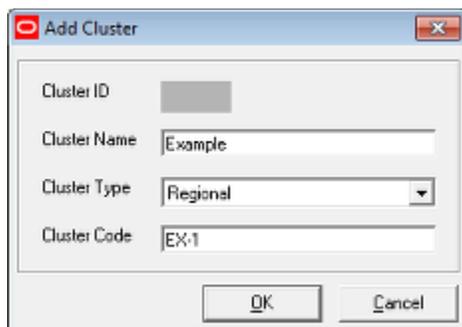
Option	Description
Cluster ID	Once the dialog box is saved, this field will populate with the ID from the pertinent table in the database.

Option	Description
Cluster Name	This is the name assigned to the cluster.
Cluster Type	This is assigned from a drop down list. It is normally used as a filter for reporting purposes.
Cluster Code	This is the unique identifying code assigned to the cluster.

Deleting Clusters

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

Adding, Editing and Deleting Stores

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

Adding (and Editing) Stores

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

General Tab

Option	Description
Store ID	Once the dialog box is saved, this field will populate with the ID from the pertinent table in the database.

Option	Description
Store Code	This is the unique code used to identify the store.
Store Name	This is the name of the store.
Directory Name	This is the name of the directory that will be automatically created to hold the files associated with the store. It will be created below the **Store Root** specified in the **Directories Tab** of the **Configuration Module**.
Latitude	This can be entered to identify the position of the store.
Longitude	This can be entered to identify the position of the store.
Status	This is set from a drop down list. It specifies where the store is in its business life cycle.
Opened Date	This is the date the store is scheduled to open. If the store is not at Open status when this date is reached, Update Status will automatically change the status to Open.
Closed Date	This is the date the store is scheduled to close. If the store is not at Closed status when this date is reached, Update Status will automatically change the status to closed.
Store Prototype	This enables the user to specify another store to be used as a prototype for comparison purposes. Available prototypes are set by selecting the Set as Prototype check box.
Set as Prototype	This check box designates the store as a Prototype. If set as a prototype, it cannot have a prototype store assigned to it.

Units Tab

Option	Description
Input Units	
Length:	These are the default length units used for the floor plan.

Option	Description
Area	These are the default area units used for the floor plan.
Display/Output Units	
Length	These are the default length units used for displaying information the floor plan.
Alternative Length	These are the alternative length units used for displaying information for the floor plan.
Area	These are the default area units used for displaying information the floor plan.
Alternative Area	These are the alternative area units used for displaying information for the floor plan.

Address Tab

Option	Description
Address	There are 4 lines available to enter the address of the store.
Post Code	This field holds the post code of the store. This might be used in the UK.
Area Code	This field holds the area code of the store. This might be used in the US.
Telephone	This field holds the telephone number of the store.

Attributes Tab
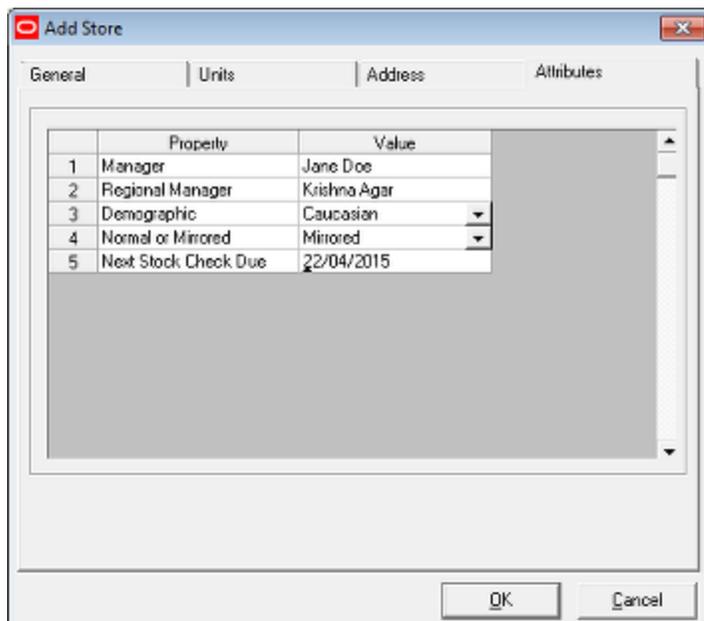
The attributes tab contains the name and value of the User Defined Attributes assigned to the store. The available attributes are configured in the Administration Module and will vary from retailer to retailer. Users can enter then pertinent data in the dialog box.

Deleting Stores

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

Adding Stores to Multiple Clusters

Stores can belong to more than one cluster. This enables stores sharing a common characteristic to be grouped together for reporting, control or planning purposes.
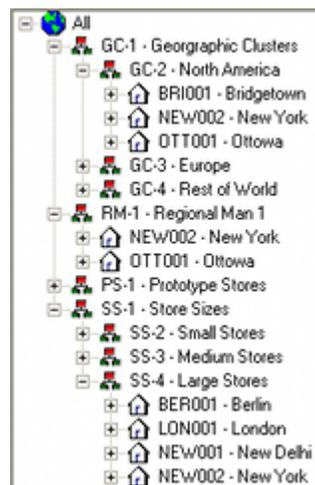
In the above example, the New York store is in the following clusters:

- North America
- Large Stores
- Regional Manager 1

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

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

Adding Stores to Multiple Clusters

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

Removing Stores from Multiple Clusters

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

Adding, Editing and Deleting Floors

Add and Edit Dialog Boxes

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

Adding (and Editing) Floors

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

Option	Description
Floor ID	Once the dialog box is saved, this field will populate with the ID from the pertinent table in the database.
Floor Type	This is the type of floor. It is set from a drop down list which is pre-populated with names like Basement, Ground Floor, and so on. The list of available names can be configured directly in the database.
Description	This is the directly input information on the floor.
Directory	This is the name of the directory that will be automatically created to hold the files associated with the floor. It will be created below the directory for the parent store.
Status	This is set from a drop down list. It specifies where the floor is in its business life cycle.
Allocated Area Tolerance	This is a value that can be entered for reporting purposes. It allows the actual area allocated for retail purposes to be compared with some theoretical value if a report is created.
Elevation	This field can be used to specify the height above ground level for reporting purposes.
Edit Levels	This button can be used to open a dialog box for editing the default levels for items of equipment that are to be placed at levels other than floor level. Examples would be posters and banners. If not activated during the creation of the floor, these levels cannot be edited later.

Level Details Dialog Box

When fixtures and fittings are configured in the fixture studio, they can be set to place at floor level or some other specified height. These other heights are specified in the database as defaults, but it is possible to change those values for a specific floor. This is done by clicking **Edit Levels...** in the Add floor dialog box. This will bring up the Level Details dialog box. The available insertion heights can be selected from the **Level Description** drop down list and values typed into the Level Elevation text box. When all values have been changed as required, click **OK**.
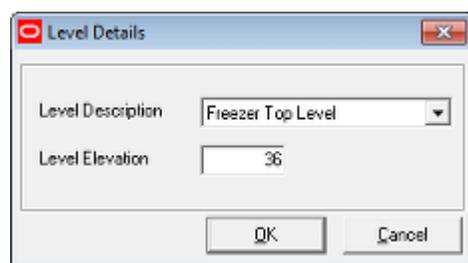
> **Note**: This dialog box must be opened from the **Add Floor dialog box** when the floor is created. It will then be available for editing. If it is not opened when the floor is created, no subsequent editing will be possible.

Deleting Floors

To delete a floor, highlight it and select **Delete** from the **File Menu**, **Toolbar** or **Right Click Menu**. The floor is now marked for deletion but will not be permanently removed

until purged using the **Purge** option from the **Tools** menu. All child objects will be deleted as well.

Adding, Editing and Deleting Revisions

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

Adding (and Editing) Revisions

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

Option	Description
Revision ID	Once the dialog box is saved, this field will populate with the ID from the pertinent table in the database.
Revision Number	This is a number that can be assigned to the revision.
Revision Description	This is the name of the revision.
Directory	This is the name of the directory that will be automatically created to hold the files associated with the floor. It will be created below the directory for the parent floor.
Status	This is set from a drop down list. It specifies where the revision is in its business life cycle.
Season Description	This drop down list allows the user to select a season from a list of predefined seasons. If set, this can be used (in conjunction with the **Custom SQL**) to filter data in the **Object Grid**.
Birth Date	This is the date the revision was created.
Death Date	This is the date the revision went out of service.

Deleting Revisions

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

Adding, Editing and Deleting Floor Plans

Adding Floor Plans

If the **Add Proposal Drawing** check box is selected when a new revision is created, a new floor plan will be automatically created in the new revision. To add a new or additional floor plan, go to the right hand pane in Store Manager and bring up the right click menu. Select **New Drawing**. A new floor plan will be created.

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

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

Editing Floor Plans

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

Details Tab

The Details tab contains information of the floor plan.
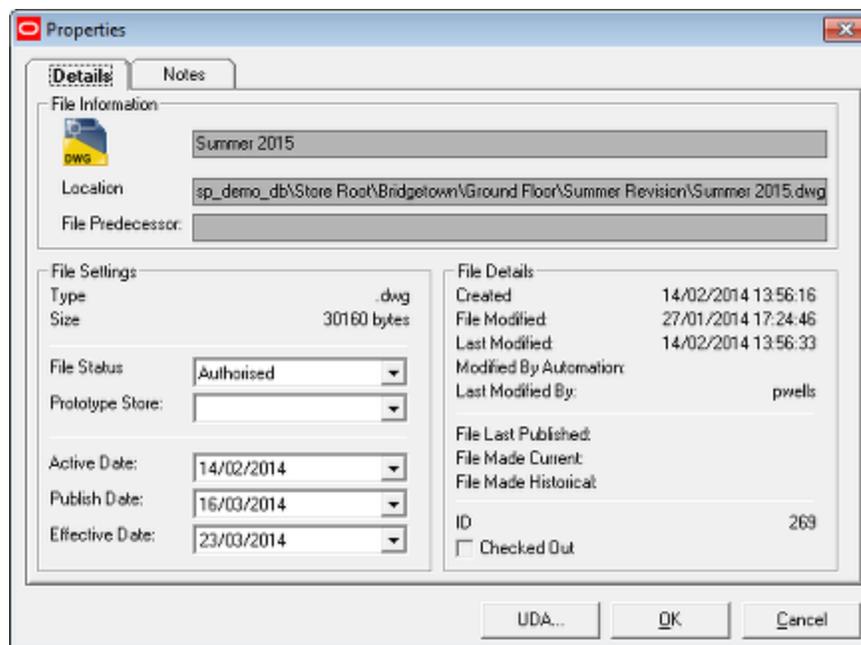
File Name is the name assigned to the file - this will typically be the name of the floor plan.

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

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

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

Size is the physical size of the file.

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

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

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

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

Effective Date will be grayed out and unavailable until the floor plan is at Authorized status. Once set, the effective date is the date at which **Update Status** will automatically change the status of the floor plan to Current. This is the signal (via an appropriate reporting system) for the store to put the floor plan into effect. When the Effective Date first appears, it will be set to a default value by the software.

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

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

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

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

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

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

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

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

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

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

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

Notes Tab

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

Macro Space Management

Macro Space Management users can add or delete notes.

- Notes are added by clicking Add and typing data into the blank line. Notes in MSM only apply to the floor plan itself and cannot be applied to objects within that floor plan.

- Notes are deleted by highlighting them and clicking Delete.

- If the floor plan is at a status that is not Read Only (for example not at Current or Historical status), the notes can be edited. As well as the note text being modified, the Updated date will change.

Notes added in ISSC and ISSC Mobile can also be associated with zones, fixtures, shelves, products and planograms. There is no way of identifying the type of note in the Notes tab.

In-Store Space Collaboration

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

ISSC Mobile

ISSC Mobile users can add notes to zones, fixtures, shelves, products and planograms, but not floor plan notes. They can also add additional notes to an existing note, stating a conversation. These notes can be read in MSM. ISSC mobile users can only add notes to floor plans at Current status.

UDA Option

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

The list of available fields can be configured using the User Defined Attributes option from the General Menu in the Administration module. Users in Store Manager can then set the values for each floor plan. Depending on how each field has been configured in the Administration module, users can enter numeric, text or currency values, select from a drop down list, enter a date from a calendar or select or deselect a check box. Some values can be defined as mandatory when they are configured in the Administration module. These are indicated by a blue asterisk. A mandatory value is not filled will be indicated by a red cross. An example of this as can be seen for the Responsible Planner field in the screen shot below.

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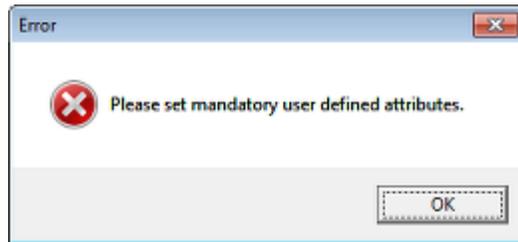
Accessing the File UDA dialog box directly

If required, the File UDA dialog box can be accessed directly from the right click menu in the list pane in Store Manager.
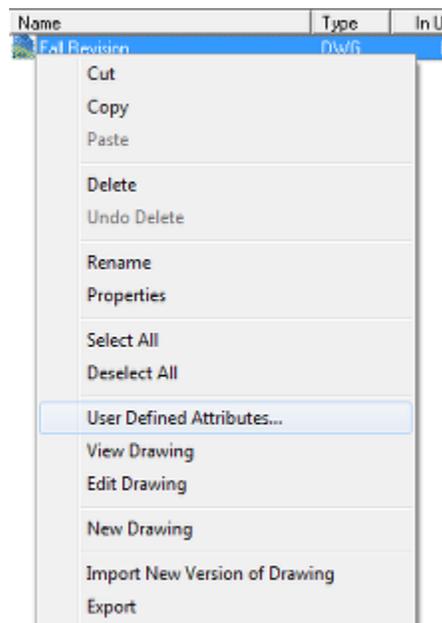
If multiple floor plans have been selected, the File UDA dialog box will display the attributes for the last floor plan selected.

Importing, Exporting and Copying Floor Plans

Floor plans can be either imported or copied.

Importing Floor Plans

Floor plans can be imported into Store Manager. This is done by highlighting an existing floor plan (this can be a blank) and then selecting the **Import New Version of Drawing** option from the right click menu.
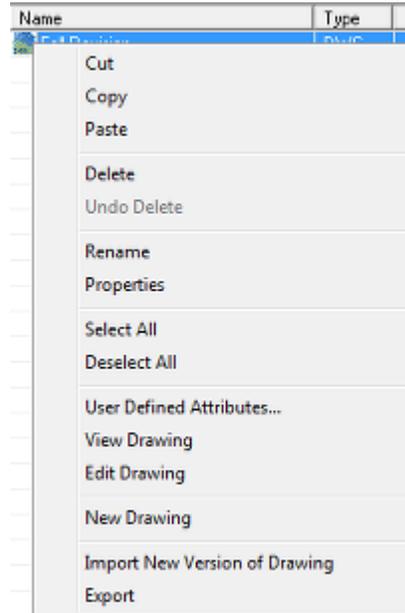
This will bring up the **Import Drawing** dialog box.
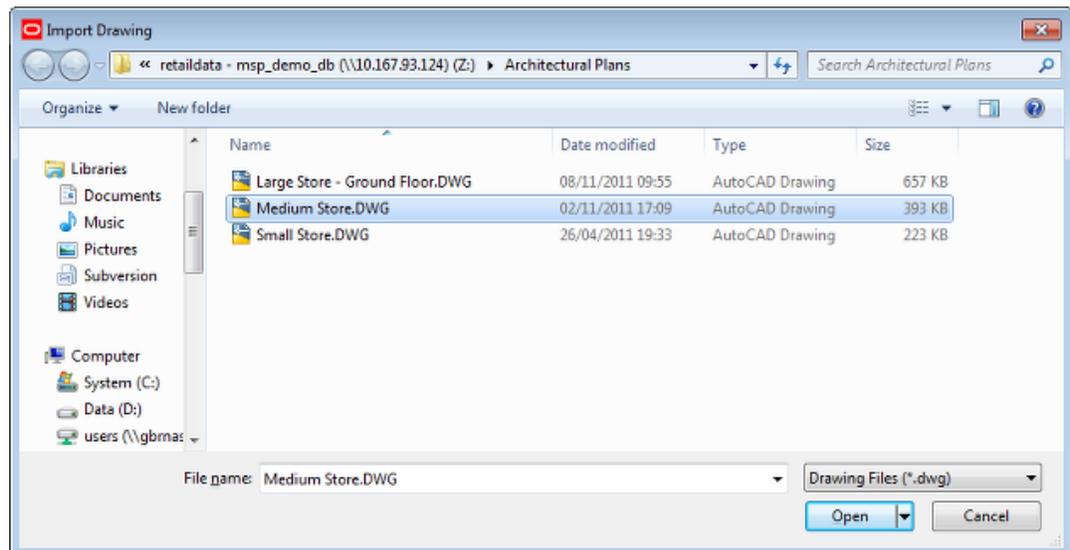
This enables users to browse to the Windows folder holding the floor plan and select it. On clicking the **Open** button, the **Import New Version of File** dialog box will appear.
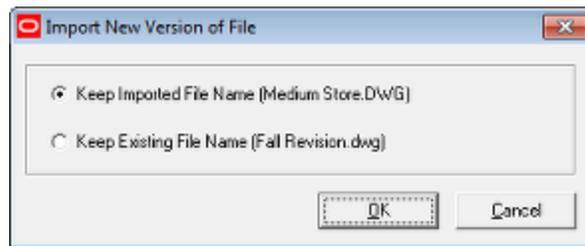
Users can select whether to keep the existing file name or use that of the file to be imported.

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

Exporting Floor Plans

Floor plans can be exported from Store Manager by highlighting the pertinent floor plan then selecting **Export** from the right click menu. This will bring up the **Export Drawing** dialog box.
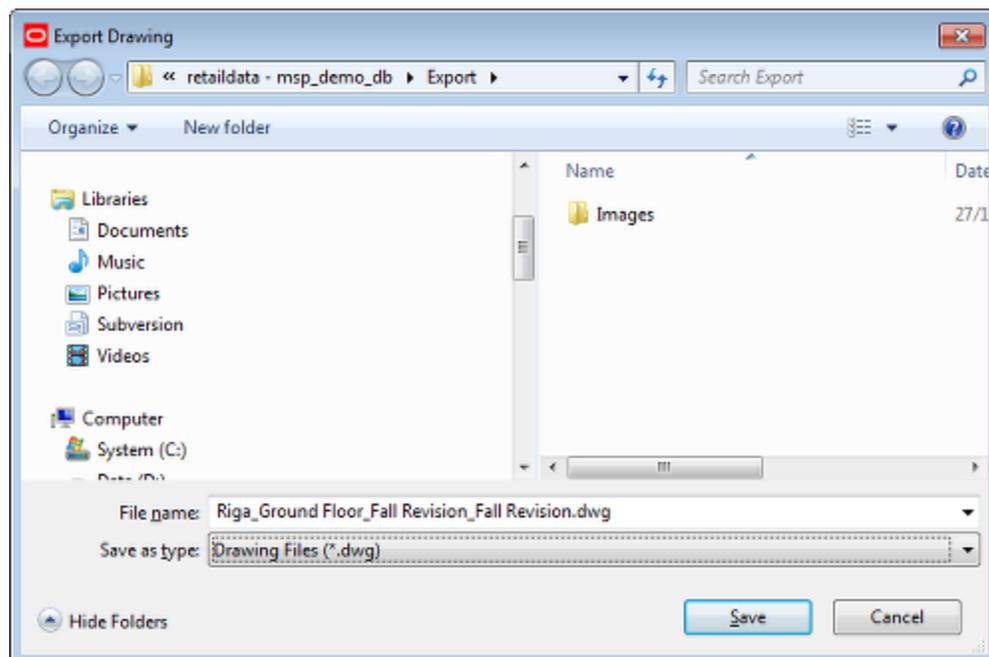
The filename will be a composite of the form: **Store_Name_Floor Name_Revision_Name_File_Name**. After selecting an appropriate directory, the file can be exported by clicking the **Save** button.

Copying Floor Plans

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

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

Associating Architectural Plans

Overview of Architectural Plans

Architectural Plans can only be associated with Floors. They contain information on the structure and fabric of the building including the position of walls, doors, electrical systems and other services.
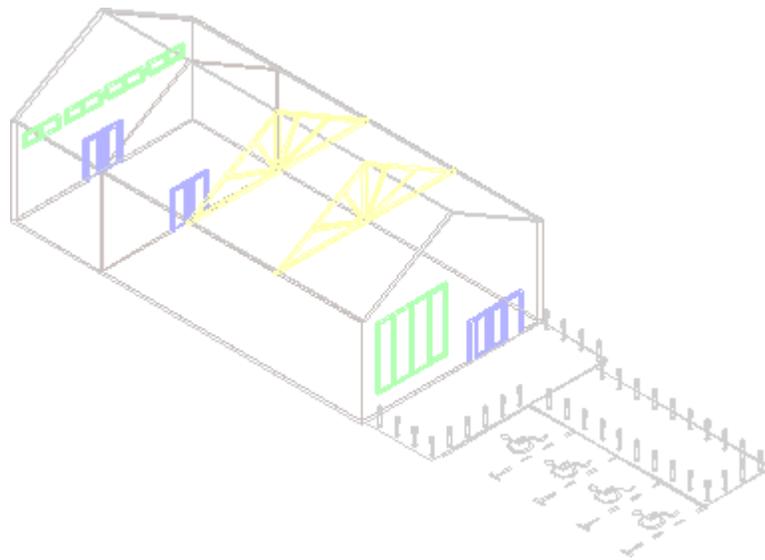
The above screen shot shows a DWG type architectural plan in isometric view. Its outlines show fainter than other objects in the floor plan because it effectively servers as an underlay to the floor plan. This architectural plan shows the structure of the store and allows the zones to be correctly drawn and the fixtures correctly positioned with respect to the walls, doors and windows.

Architectural plans are used in two stages:

1. They must first be associated with a parent floor in Store Manager.

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

Types of Architectural Plans

Macro Space Planning recognizes two forms of architectural plans:

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

Associating an Architectural Plan

Architectural plans can only be associated with floors. Once associated this makes them available for use within any floor plan associated with the parent floor. Architectural Plans can be associated by highlighting the required floor then selecting the Associate Architectural Plan command from the **File menu**, the **Toolbar** or the **right click menu**. This will bring up the Architectural Plan Association dialog box.
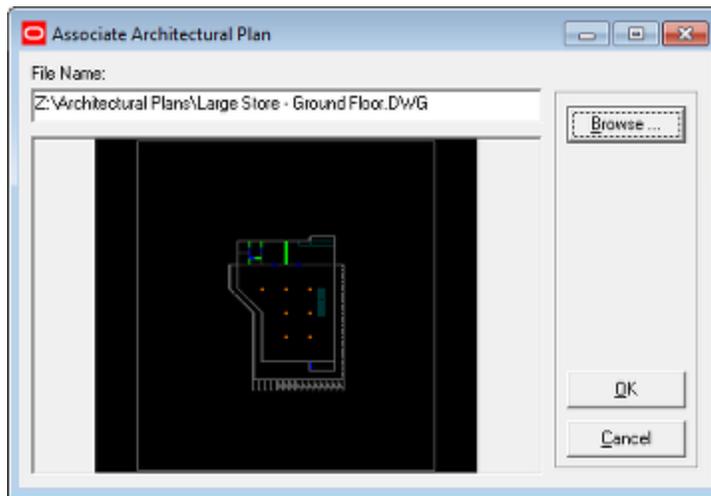
1. Browse to the required file
2. Click OK
3. The file will be copied to the specified folder and will become available for use within individual floor plans.

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

Associating Files

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

- Word documents
- Excel spreadsheets
- PDF Files

These files can be used for many purposes including:

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

How to Associate Files

Files can be associated by highlighting the required object in the hierarchy and then selecting the Associate File command from the **File menu**, the **Toolbar** or the **right click menu**. This will bring up the File Association dialog box.
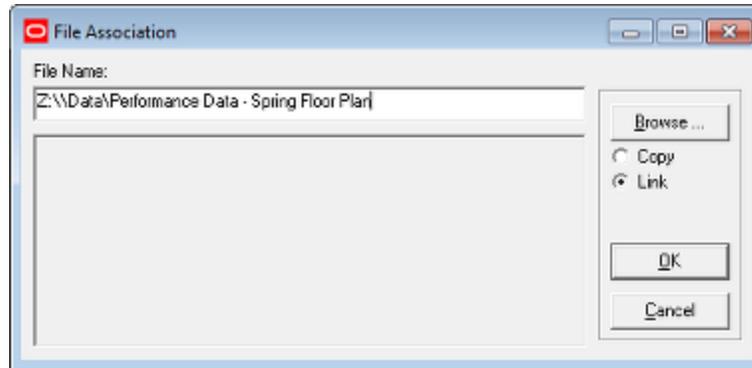
1. Browse to the required file.
2. Specify whether the file is to be copied into Store Manager or whether a link is to be created to an external file.
3. Click OK.
4. If the file is copied, a copy will be imported into the appropriate folder in Store Manager.

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

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

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

Deleting Associated Files

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

Status

Overview of Statuses

Concept of Statuses

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

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

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

Configuring Statuses

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

> **Note**: See the *Oracle Retail Macro space Management Administration Module User Guide* for more information.

Users and In-Store Space Collaboration

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

Non-Reversible Statuses

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

Non-Selectable Statuses

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

Example of Controlling Business Flows with Statuses

The following is a simple example of how statuses can be used to control business flows:
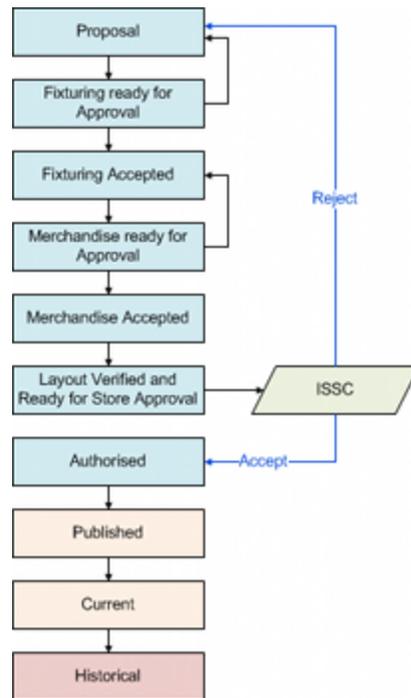
1. The process flow starts with a floor plan at Proposal status.

2. After laying out the fixturing, the store planner changes the status to Fixturing ready for Approval. This alerts his manager.

3. The manager reviews the layout of the fixturing. If they disagree with it, they set the status back to Proposal - causing the store planner to rework the fixturing. If the manager agrees with the layout of the equipment they change the status to Fixturing Accepted.

4. Once the status has been changed to Fixturing Accepted, the store planner places the merchandise. When this is complete, the store planner sets the status to Merchandise ready for Approval.

5. The manager reviews the layout of the merchandise. If they disagree with it, they set the status back to Fixturing Accepted - causing the store planner to rework the products and planograms. If the manager agrees with the layout of the equipment they change the status to Merchandise Accepted.

6. At an appropriate time, the manager then changes the status to Layout Verified and Ready for Store Approval. This makes the floor plan visible in In-Store Space Collaboration.

7. The store manager opens the floor plan in ISSC. They have two choices when saving it. Clicking Reject will change the status back to Proposal, starting the whole planning process again. Clicking Accept will change the status to Authorized. The Publishing and Effective dates will then be set.

8. When the Publish date is reached, the Update Status tool will change the status to Published, causing a copy of the floor plan to be sent to the store in preparation for its implementation.

9. When the Effective date is reached, the Update Status tool will change the status to Current. The store will then be notified to put the plan into effect.

10. When another floor plan for that store becomes current, the existing store plan will be superseded and will be set to Historical status.

Changing the Status of Objects

Changing Statuses

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

Clusters

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

Stores

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

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

Floors

Statuses for floors are set using the **Status** drop down list in the Floor dialog box.
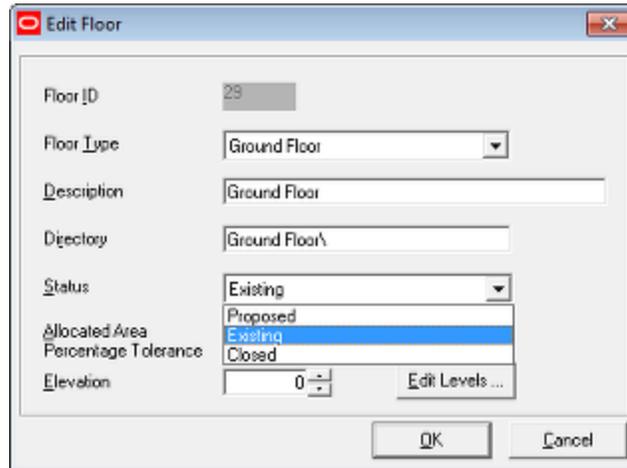
If a floor is set to **Closed**, all associated floor plans will be set to **Read Only** status. Any attempt to open those files for editing will result in the appearance of a warning dialog box.
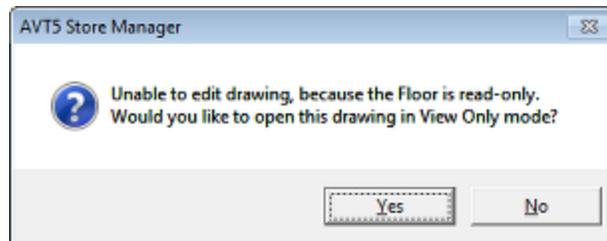
Revisions

Statuses for revisions are set using the **Status** drop down list in the Revision dialog box.
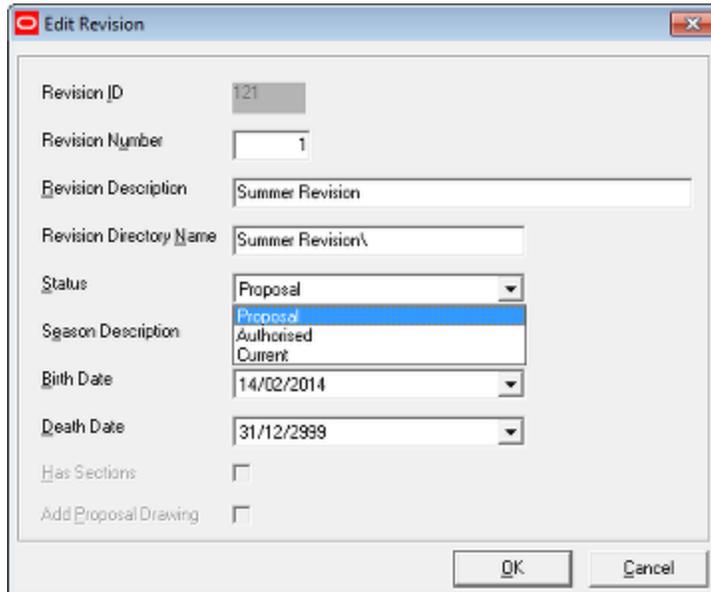
If a revision is set to **Closed**, all associated floor plans will be set to **Read Only** status. Any attempt to open those files for editing will result in the appearance of a warning dialog box.
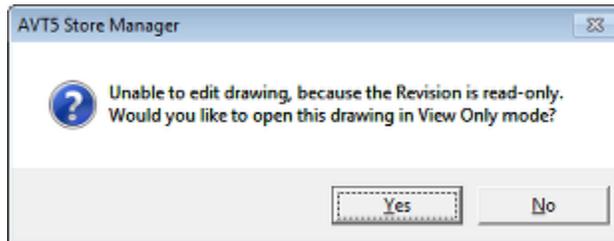
Files

Statuses for revisions are set using the **Status** drop down list in the File Properties dialog box.
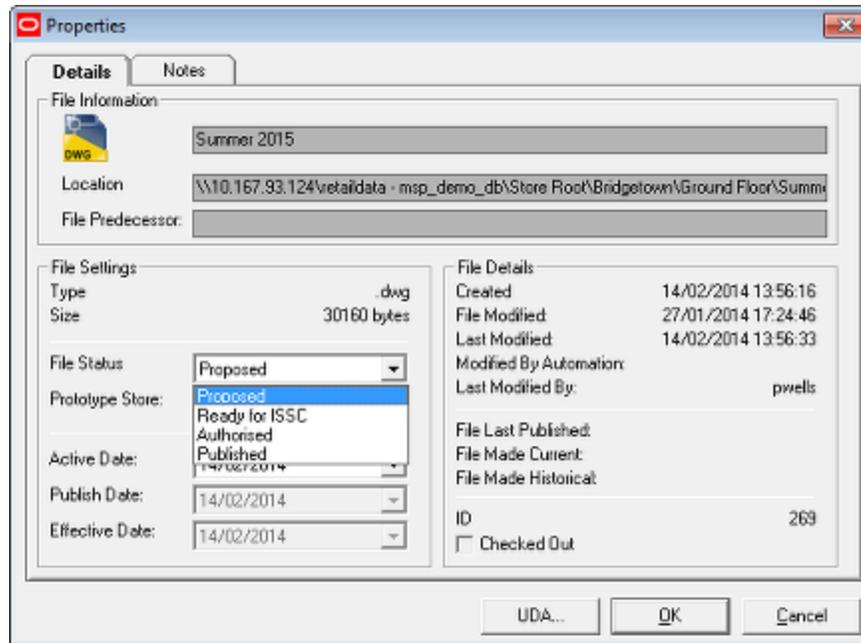
Some statuses for floor plans may not be **reversible** - for example, if the status is set manually to Published, it may not be possible to set it back to an earlier date. Other statuses are not **selectable** - for example it is not generally possible to set the status to Current manually as this is normally done automatically when Update Status is run.

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

- ▪ When the Publish Date is reached, if Update Status is run, this will change the status to Published.

When the Effective Date is reached, if Update Status is run, this will change the status to Current.

Advanced Administration

Customizing Display Options

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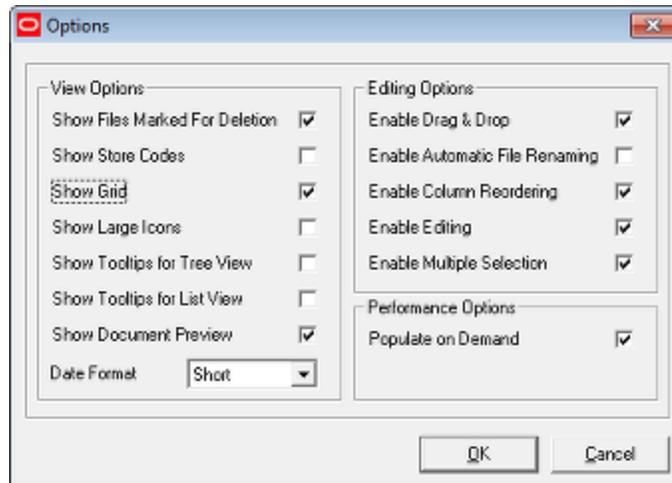
Display Options

Show Files Marked for Deletion

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

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

Show Store Codes

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

Show Grid

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

Show Large Icons

This check box changes the icon size.

Show Tooltips for Tree View

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

Show Tooltips for List View

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

Show Document Preview

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

Date Format

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

Enable Drag and Drop

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

Enable Automatic File Renaming

This option is not currently active.

Enable Column Reordering

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

Enable Editing

This option is not currently active.

Enable Multiple File Selection

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

Populate on Demand

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

Windows Folders and the Store Hierarchy

Store Manager has a specified structure. Objects are ordered in this sequence:

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

Specific files associated with specific levels on the hierarchy will be in the appropriate folders. For example architectural plans will be associated with floors and floor plans in folders associated with revisions.
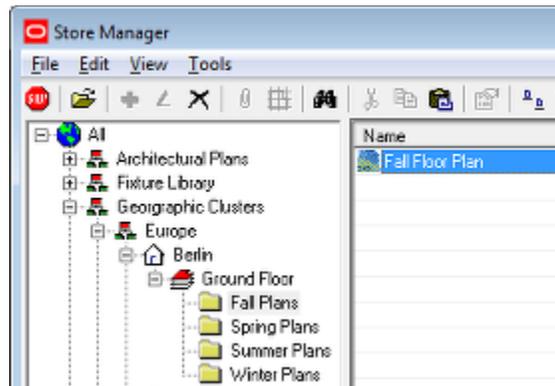
Clusters only exist in the Macro Space Planning database. For Stores, Floors and Revisions, Windows folders are created below the Store Root specified in the Directories tab of the Configuration module - this tab can only be accessed if the Configuration module is accessed via the Administration module.
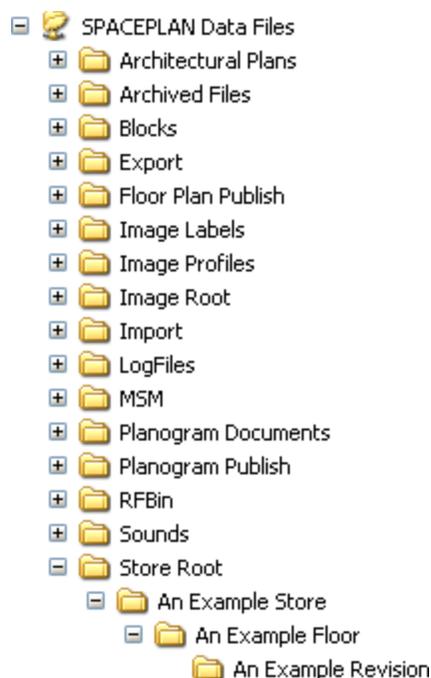
Any physical files associated with specific levels on the hierarchy will be in the appropriate folders. For example Architectural plans will be in folders associated with floors and floor plans in folders associated with revisions.

Searching the Store Hierarchy

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

This brings up a dialogue box with a dialogue box with a series of options. Select the required options and click on OK.
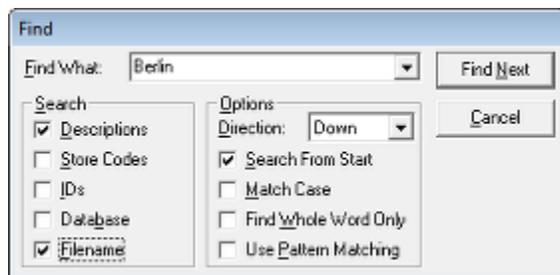
The search function in Store Manager performs an *in-string* search and does not support wild-cards. It will thus only return exact matches.

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

Significance of Dates in File Properties Dialog Box

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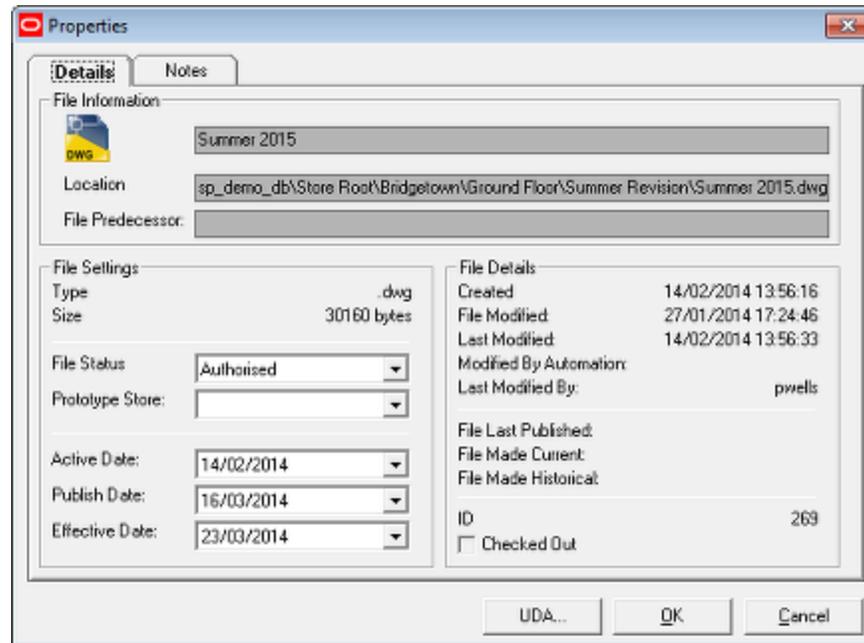
These dates have the following significance:

Option	Description
Created	This is the date the floor plan was originally created in Store Manager. Alternatively, if the floor plan was imported, this will be the date it was originally created in raw AutoCAD.
File Modified	This is the date the floor plan was last modified in raw AutoCAD.
Last Modified	This is the date the file was last saved by a user in the Planner or Merchandiser modules or in In-Store Space Collaboration.
Modified by Automation	This is the date the file was last modified by a batch process such as planogram substitution.

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

> **Note:** See the section on synchronization for more information.

List Checked Out Files

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

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

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

> **Note:** If the file is manually checked back in, all changes since the previous save will be lost.
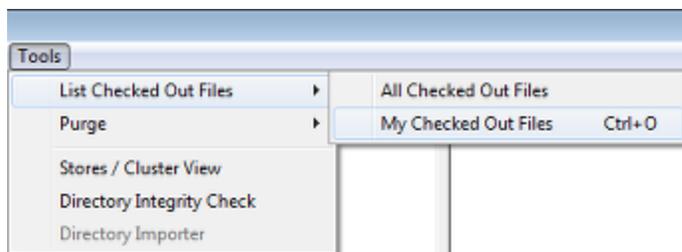
- Selecting All Checked Out Files lists every file checked out from Store Manager. This option is only available to users with the Administrators role.
- Selecting My Checked Out Files lists the files checked out by that particular log in identity. (This can also be accessed by <Ctrl + O>).

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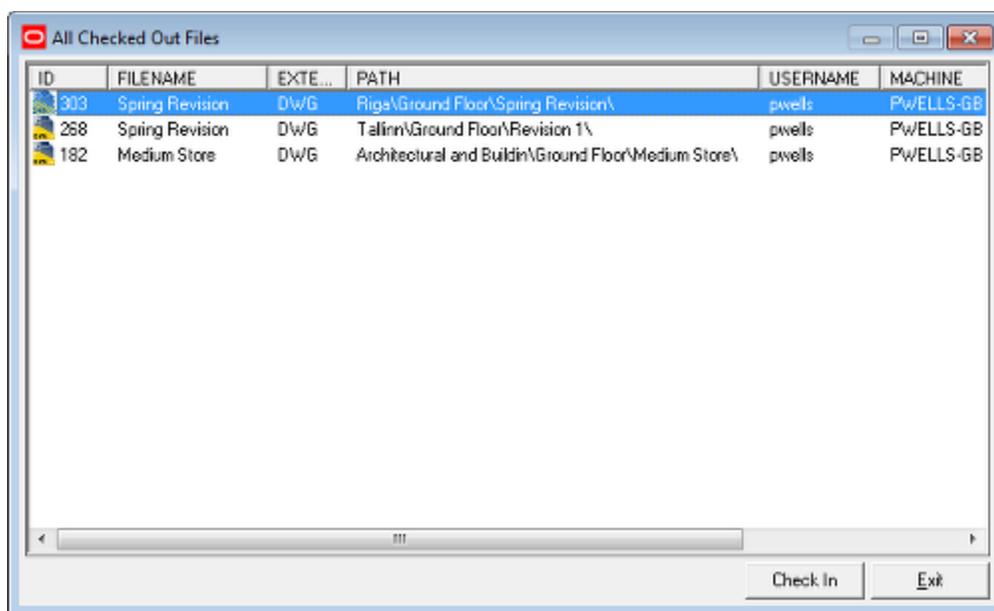
Purging from Store Manager

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

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

Removing Objects from the Store Manager Hierarchy

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

1. The required object is marked for deletion in the store hierarchy. If the selected object is a DWG file, it will be moved to the RFBin. The location of this folder is specified in the Directories tab of the Configuration Module. (This tab is only accessible when the Configuration module is accessible via the Administration module).

2. The objects are permanently deleted using the Purge option from the Tools menu.

Deleting Objects

Depending on settings in the **Options dialog box** (View menu), objects marked for deletion will either be hidden from view or denoted with the Deleted icon.
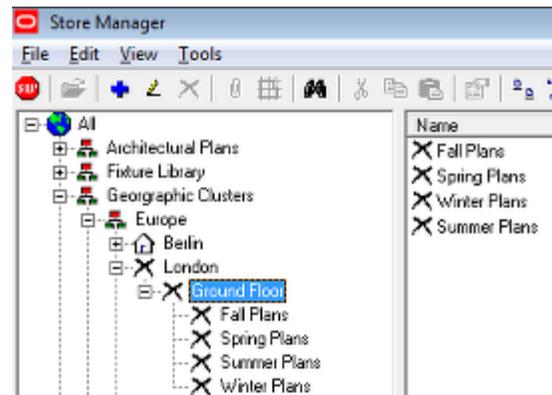
If a top level object (for example a store) is marked for deletion, all child objects will be marked for deletion as well. If the up level object is undeleted, all child objects will have to be manually undeleted.

Purging Objects

Purging objects results in their permanent removal from the Macro Space Planning database. In the case of the DWG files used for floor plans, these will also be physically deleted from the RFBin - where they were move to when marked for deletion. This option is only available to users with the Administrator's role.

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

To purge objects, select the **Purge** option from the **Tools** menu.
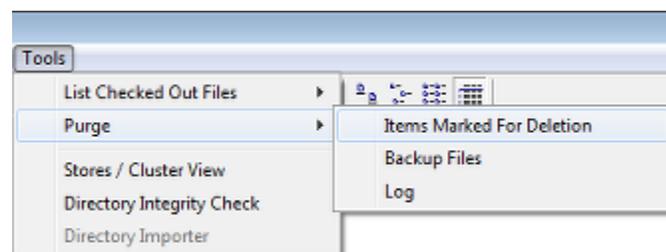
This will bring up the **Items Marked for Deletion** dialog box
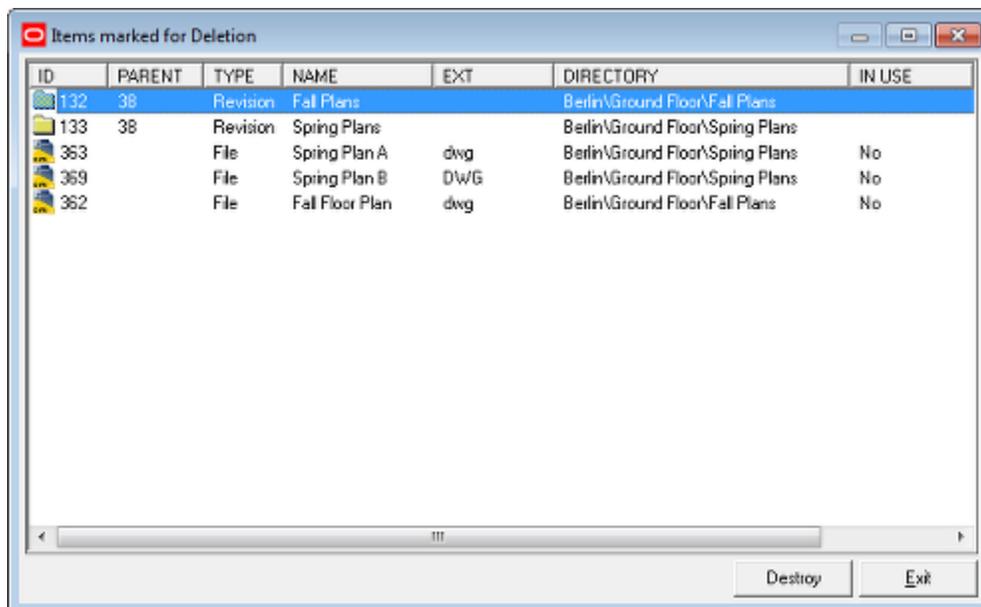
Items marked for deletion are highlighted and then removed by clicking **Destroy**.

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

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

Purging .BAK files

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

Purging Log Files

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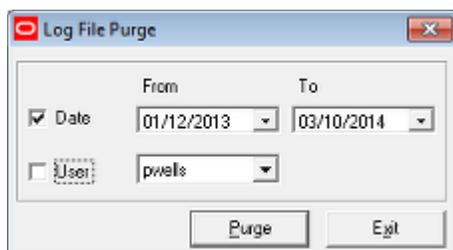
Importing directories

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

Preparation

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

Importing

1. 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. If any other object than a cluster is selected, this option will be grayed out and unavailable.

2. The Import Directory option should then be selected from the Tools menu. This will bring up a dialogue box called Directory Structure Import. This has three options called Preview, Options and Results.
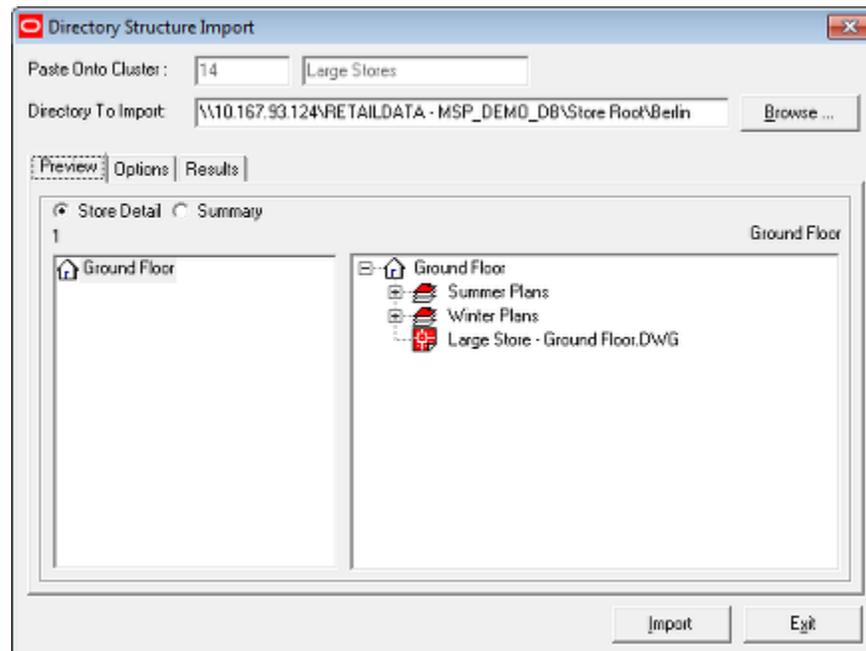
3. In the Preview tab, use the Browse button to navigate to the require source for the directories to be imported.

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

5. Click the Import button to import the information.

6. The results can be seen in the Result tab.

Store/Cluster view

Selecting the **Store/Cluster view** option brings up a window allowing an alternative way of viewing the information held within the hierarchical data structure within Store Manager. Stores are listed in the sequence determined by their unique identification code. The cluster to which the store has been allocated is displayed immediately below the store. Where stores are assigned to multiple clusters, this will be shown. For example the Berlin store belongs to both the Europe and Large Store clusters.
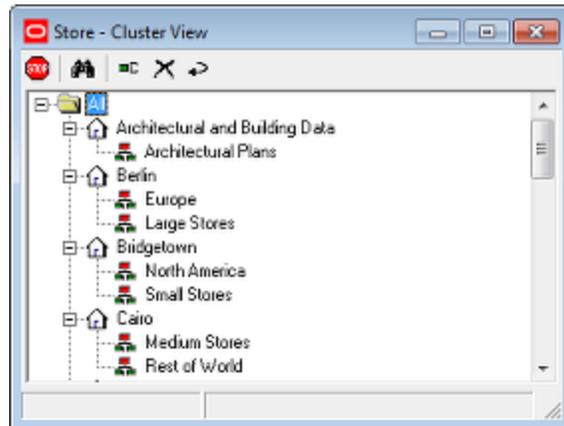
Integrity Check

The **Integrity Check** compares the store directory structure shown in the current display window with that registered in the database. Any errors found are displayed and should be brought to the attention of the Systems Administrator for rectification.
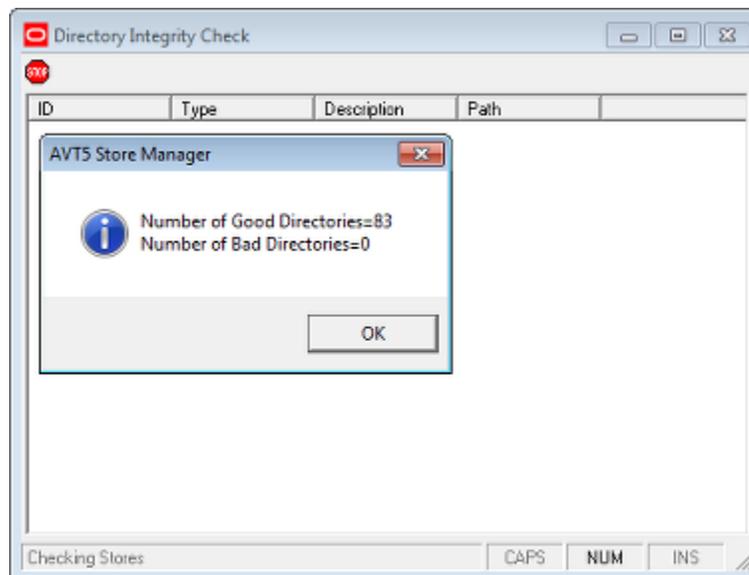
 The **ID** column contains a list of the File ID's used by Macro Space Management as references for the files. If a File ID is missing, this means a problem with the directory structure.

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

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

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

Log Files

Log files are files recording events and problems during operation of Macro Space Management. This enables problems to be investigated at a later date. They can be found at the location specified in the Directories tab of the Configuration Module - this tab is only available if the configuration module is open via the Administration module.
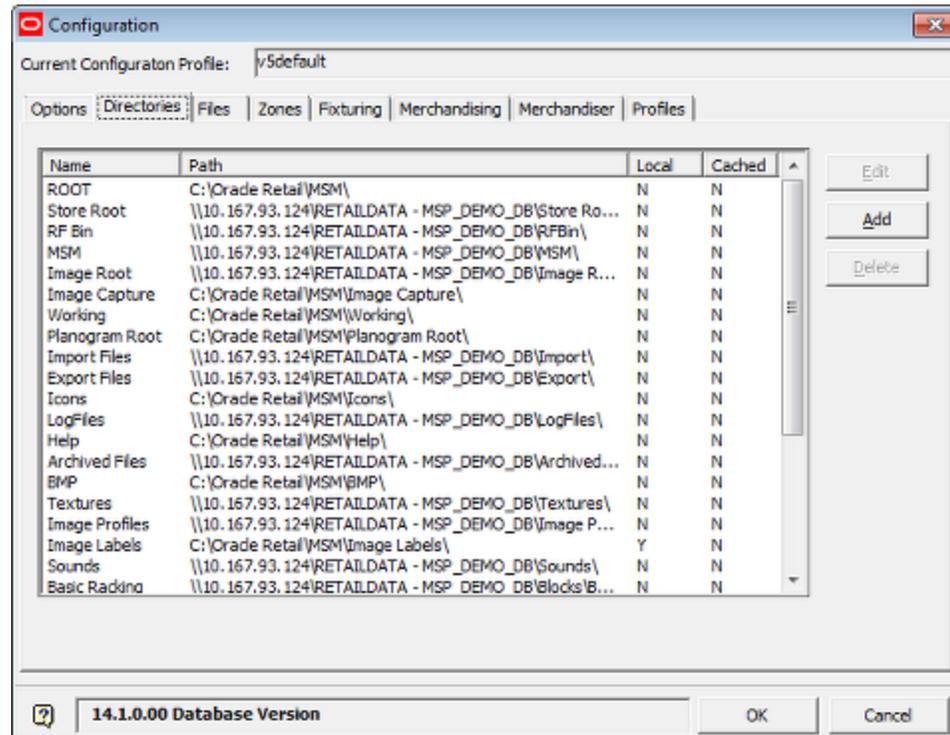
Double clicking on a specific file will bring up a log of that aspect of Macro Space Management's operations.

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

8

Update Status

Overview of UpdateStatus.exe

UpdateStatus.exe is a small Macro Space Management tool that can be used to change the status of floor plans.
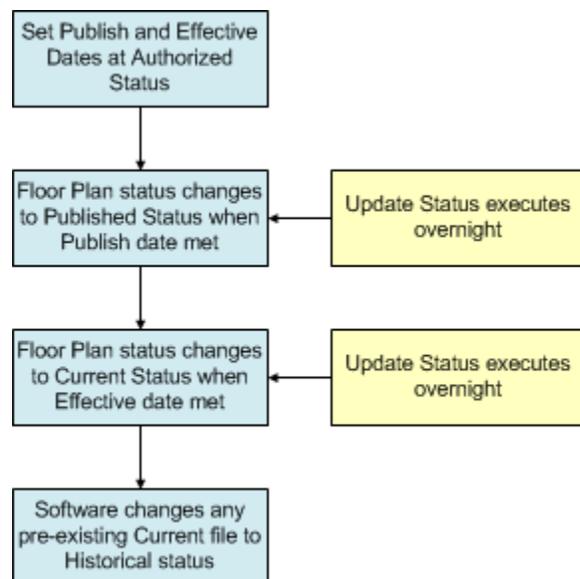
1. The initial stage is to set the Publish and Effective dates when a floor plan reaches Authorized status

2. Update status is set to execute every night by means of a scheduling tool.

3. When the Publish date is met or exceeded, the status of the floor plan is changed to Published.

4. When the Effective Data is met or exceeded, the status of the floor plan is changed to current.

5. At the same time as the status of the floor plan is changed to current any pre-existing current file for that floor is changed to Historical status.

Running Update Status

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

1. Running Directly

To run UpdateStatus.exe directly, navigate to the C:\Program Files\Oracle Retail\MSM\Common directory on the batch server.
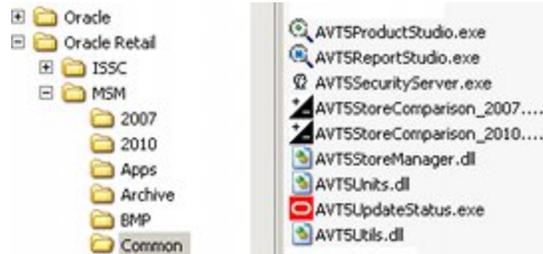
Click on AVT5UpdateStatus.exe to run the file.

2. Through Windows Scheduler

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

3. Through other Batch Scheduling Tools

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

Command Line Switches

If run through via a batch scheduling tool, the command line switch **/Silent** allows the user to run it without confirmatory dialog boxes appearing.

Using UpdateStatus.exe

To use UpdateStatus.exe the following actions are required.
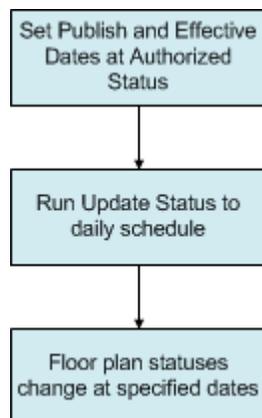
The process is carried out as follows:

1. Open the file Properties dialog box

This is done by highlighting the required file within the right hand pane of Store Manager then right clicking to bring up the pop-up menu. Selecting Properties from this menu will bring up the Properties dialogue box.
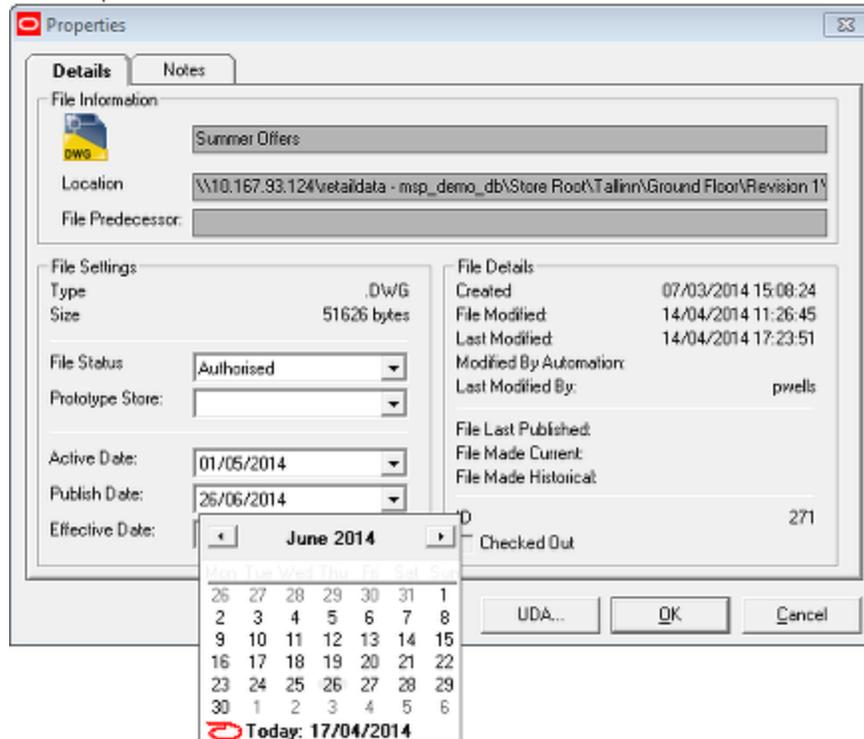
> **Note:** setting the varying values required for Update Status
> is carried out by clicking the down arrow on the pertinent
> field. In the above screenshot, the effective date is being set.

2. **Set File status to Authorized**

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

3. **Set the Publish Date**

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

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

4. **Set the Effective Date**

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

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

5. Run UpdateStatus.exe

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

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

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

If run directly, a small pop-up window will report the results.
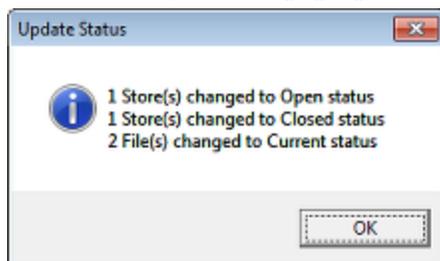
> **Note:** UpdateStatus.exe will not actually publish the file or notify the store that Publish or Current status has been reached. This has to be done via MSMs Automated Floor Plan Publishing functionality and the retail organizations own reporting tools.

Potential difficulties with UpdateStatus.exe

Multiple Authorized Files within a Floor

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

Multiple Revisions

Each Revision for a floor can only contain one Authorized file. Therefore, if a floor is to have multiple Authorized files, multiple Revisions must be created for that floor. If a floor only has a single Revision then this can only contain a single Current file and a single Authorized file. (It can contain multiple Proposed and Historical files. If a floor has multiple revisions, then care must be taken to keep track of which Revision contains the Current version of the drawing. Files with an Effective Date greater than the date UpdateStatus.exe is run will not have their status changed. All Effective Dates set to a date before the date UpdateStatus.exe is run will be changed to Current status in the sequence based on the date and time they were authorized. This will result in all but the last file set to Authorized being set first to current, and then to historical status. This means that only the last file to be set to Authorized will retain Current status.

Status of Revisions

UpdateStatus.exe does not currently change the status of Revisions when floor plans within the Revision have their status changed. It is therefore currently possible to have a Current file in a Revision that is not of Current status.

Dates

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

Object Browser

About the Object Browser

The **Object Browser** offers Merchandiser 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 Planner and Merchandiser, but is slightly different in each application. This section of help is specific to the Object Browser in Merchandiser. The Object Browser can also be used in conjunction with the Object Grid - see the section on the Object Grid for more information.
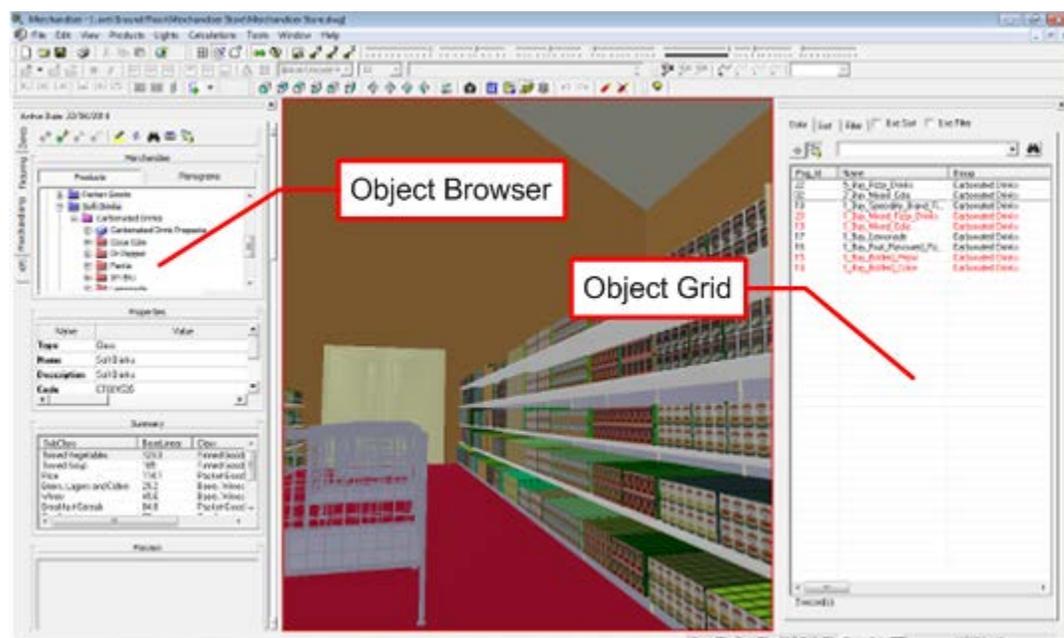
The **Object Browser** can be turned off by clicking on the 'x' in the upper right corner. It can be opened by selecting the Show Object Browser option on the View drop down menu.

The **Object Browser** has a series of parts. These are described below.
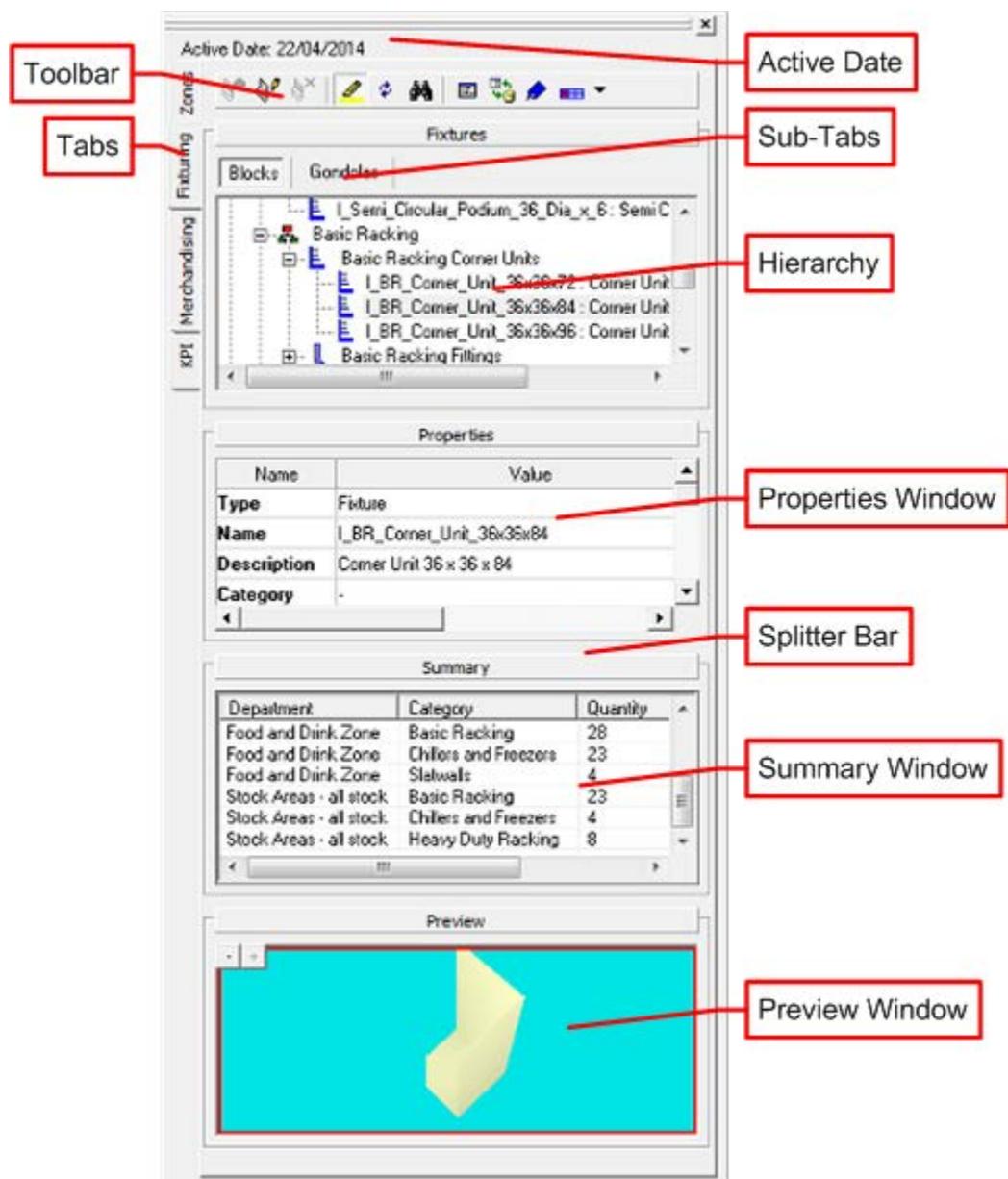
The **Active Date** is used as a filter to ensure that equipment and merchandise that are placed in the floor plan are going to be physically available at the time the floor plan is anticipated going into service.

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. It can also be used to display and hide KPIs.

Each tab has the same general components.

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

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

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

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

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

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

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

The Refresh Option

All toolbars have a Refresh option.

Clicking Refresh will update the application with the latest information from the database. This means that if information has been updated in another module (for example the Administration module) since Merchandiser was opened the Object Browser will be updated to match. For example, if the zone definitions have been updated in the Administration Module after Merchandiser was opened, clicking Refresh will bring the updated information into Merchandiser.

The Active Date

The Active Date can be seen at the top of the Object Browser. It can be used as a filter to ensure that equipment and merchandise being placed in the floor plan will be physically available at the time the floor plan is anticipated as going into service. This is done by comparing the Effective Dates for equipment and merchandise with the Active Date. Any equipment or merchandise with an Effective Date (the date at which it comes into service) after the Active Date for the floor plan will not be available for placement as they will not be physically available when the floor plan is implemented.

Setting the Active Date

The Active Date can be set in one of two ways: from the Object Browser or in Store Manager.

Setting from the Object Browser

To set from the Object Browser, double click on the Active Date. This will bring up the Active Date dialog box.

The Active Date can then be set by means of the radio button:

- If an Effective Date has been set for the Floor Plan in Store Manager, selecting that radio button will import that date.

- Selecting the Current Date radio button will set the data to Today's date.

- Selecting the Other Date radio button allows the user to select a date of their choice.

Setting in Store Manager

If setting in Store Manager, navigate to the pertinent floor plan in the list of files, right click and select Properties. This will bring up the File Properties dialog box. The Active Date can then be set using the calendar control.
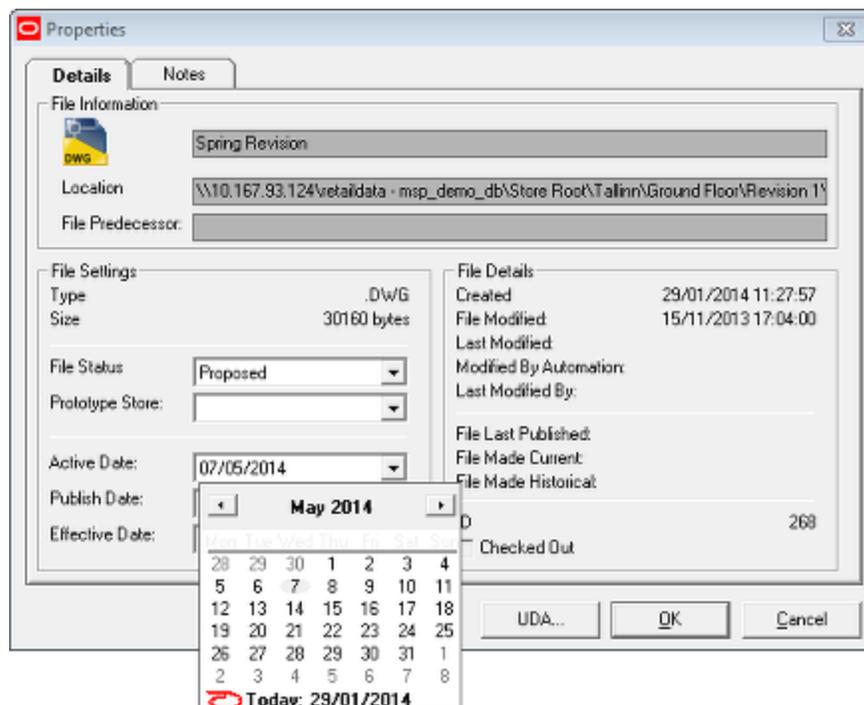
The Zones Tab

Overview of the Zones Tab

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

The Zones tab is divided into four sections:

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

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

Toolbar
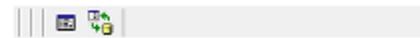
Icon	Option	Description
	Options	This option brings up the Zones Tab of the Configuration module, allowing users to customize their settings.
	Refresh	This option refreshes the Object Browser with the latest information on zones in the database.

The Hierarchy Window

The hierarchy window displays the zone hierarchy. This hierarchy is defined in the Administration module and shows all the zones that can be added to a store plan.
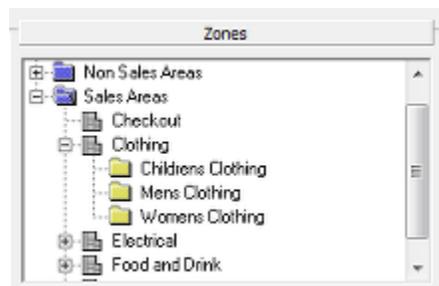
The hierarchy can be expanded using the plus control next to each item on the hierarchy. It can also collapsed by using the minus control next to each item.

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 by modifying the Custom SQL in the database. This allows an implementer to specify the information that appears in the window.

> **Note**: See the *Oracle Retail Macro Space Planning Data Model* for information on Custom SQL.
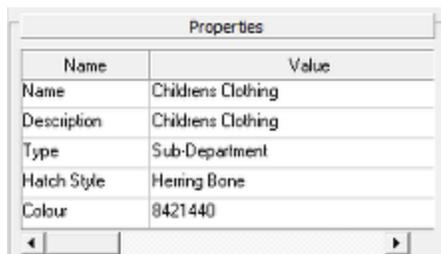
Properties	
Name	Value
Name	Childrens Clothing
Description	Childrens Clothing
Type	Sub-Department
Hatch Style	Herring Bone
Colour	8421440

The Summary Window

The Summary window displays information on the zones placed in the currently open floor plan. The content of this window is by modifying the Custom SQL in the database. This allows an implementer to specify the information that appears in the window. As an example, the window could include a comparison between the zones in the currently open floor plan and any designated prototype store.

> **Note**: See the *Oracle Retail Macro Space Planning Data Model* for information on Custom SQL.

Summary		
Zone Name	Gross Area (sq ft)	Net Area (sq
Checkout and Exit Merchandise	446.42	446.42
Food and Drink Zone	1596.67	1596.67
Entrances and Aisles - not for s...	316.91	316.91
Stock Areas - all stock	760	760
Internal Area Zone - Max Retail ...	3120	3120

The Fixturing Tab

Overview of the Fixturing Tab

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

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

▪ The Preview window – shows an image of the object selected in the fixture hierarchy.

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

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

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

Fixturing Toolbar

Icon	Option	Description
	Add Fixture	This option is grayed out and unavailable in Merchandiser.
	Edit Fixture in Fixture Studio	This option will take the user to Fixture Studio to edit the fixture. They must have access rights to the module.
	Delete Fixture	This option is grayed out and unavailable in Merchandiser.
	Highlight Fixture in Floor Plan	This option does not operate in Merchandiser.
	Highlight selected item in tree	If selected, selecting a fixture in the floor plan will cause the pertinent fixture to be highlighted in the Object Browser Fixture Hierarchy
	Find	This option brings up the Find dialog box, allowing users to search for objects in the Fixture Hierarchy.
	Options	This option brings up the Fixturing Tab of the Configuration module, allowing users to customize their settings.
	Refresh	This option refreshes the Object Browser with the latest information on fixtures and gondolas in the database.
	Show Attributes	This option shows the fixture attributes for any selected fixtures. Fixture attributes are customizable items of information assigned to specific fixtures.
	Promotional Fixtures	This option allows the user to assign or remove the Promotional Attribute and to highlight fixtures with the promotional attribute.

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

Gondola Toolbar

Icon	Option	Description
	Add Fixture	This option is grayed out and unavailable in Merchandiser.
	Edit Fixture in Fixture Studio	This option is grayed out and unavailable in Merchandiser.
	Delete Fixture	This option is grayed out and unavailable in Merchandiser.
	Highlight Fixture in Floor Plan	This option is grayed out and unavailable in Merchandiser.
	Highlight selected item in tree	This option is grayed out and unavailable in Merchandiser.
	Find	This option is grayed out and unavailable in Merchandiser.
	Options	This option is grayed out and unavailable in Merchandiser.
	Refresh	This option refreshes the Object Browser with the latest information on fixtures and gondolas in the database.
	Show Attributes	This option shows the fixture attributes for any selected fixtures. Fixture attributes are customizable items of information assigned to specific fixtures.
	Promotional Fixtures	This option allows the user to assign or remove the Promotional Attribute and to highlight fixtures with the promotional attribute. This option has no effect in the merchandiser module.

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.
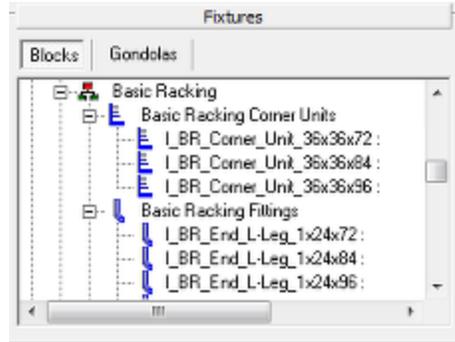
The Properties Window

The Properties window displays information for the block that has been selected in the blocks hierarchy. The content of this window is by modifying the Custom SQL in the database. This allows an implementer to specify the information that appears in the window.

> **Note**: See the *Oracle Retail Macro Space Planning Data Model* for information on Custom SQL.
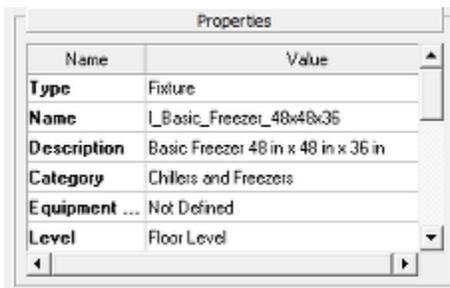
The Summary Window

The Summary window displays information on the blocks placed in the open store plan. The content of this window is by modifying the Custom SQL in the database. This allows an implementer to specify the information that appears in the window.

> **Note**: See the *Oracle Retail Macro Space Planning Data Model* for information on Custom SQL.

The Preview Window

The Preview window shows a sample picture of the block selected in the block hierarchy. Clicking on the plus or minus signs will step through any alternative forms of preview available.
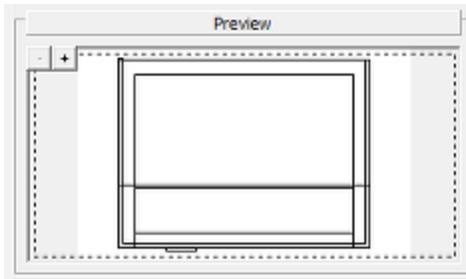
The preview is not updated when the Gondola hierarchy is displayed.

Placing Fixtures and Gondolas

Placing Fixtures

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

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

Placing Gondolas

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

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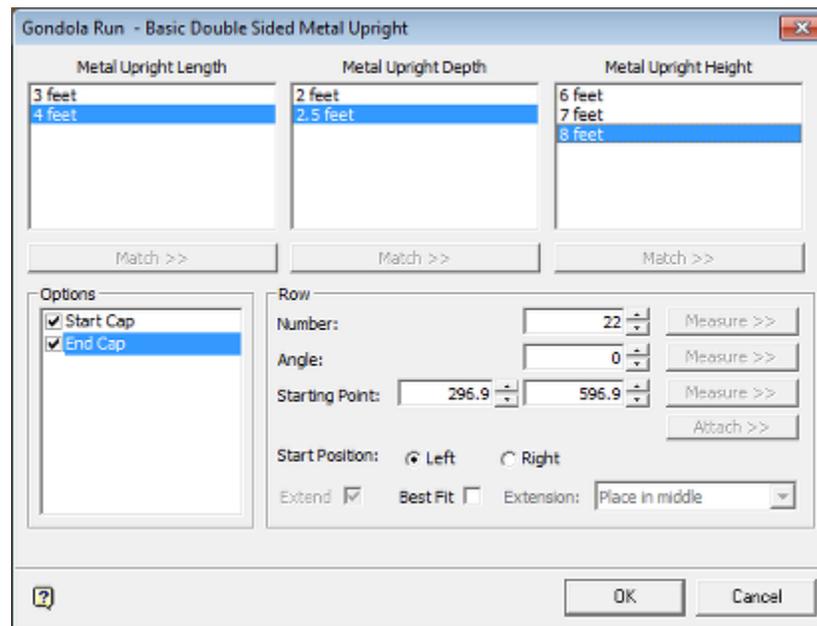
The Gondola Run dialog box allows the user to select the dimensions of the blocks to use in the gondola. It also allows the number of bays or length of the gondola to be set. Once the desired options have been set, pressing the OK button closes the dialog and places all the blocks required for the gondola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

The Merchandising Tab

The **Merchandising tab** allows users to add product placeholders (products), and planogram placeholders (planograms) to the store plan. A product is any category, sub-category, or SKU that is included in the product hierarchy, i.e. any level in the hierarchy. Planograms are also organized in to a hierarchy of planogram groups. However, you can only place planograms in to the store plan. Planogram groups cannot be placed. Placeholders are markers that can be placed on to fixtures to indicate the product category or 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.
- The Summary window – shows details of products and planograms placed based on the active store plan. The content of this window is customizable.
- The Preview window – shows a sample picture of product display styles selected in the product hierarchy

> **Note**: Product display styles (which show the physical form of the SKU) are only available in Merchandiser. In Merchandiser, products and planograms can only be added by dragging and dropping from the hierarchy. The Add icon is not active

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

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

Products Toolbar

Icon	Option	Description
	Add Product	This option is grayed out. Products can be added by dragging and dropping.
	Edit Definition	This option will take the user to Product Studio to edit the product. They must have access rights to the module.
	Delete Product	This option is grayed out and unavailable in Merchandiser. Products can be directly deleted in the floor plan.
	Reverse Product Placement Direction	This option is grayed out. It is not appropriate for products.
	Highlight in Store	This option does not operate in Merchandiser.
	Highlight in Tree	If selected, selecting a product in the floor plan will cause the pertinent product to be highlighted in the Object Browser Fixture Hierarchy
	Find	This option brings up the Find dialog box, allowing users to search for objects in the Fixture Hierarchy.
	Options	This option brings up the Merchandising Tab of the Configuration module, allowing users to customize their settings.
	Refresh	This option refreshes the Object Browser with the latest information on products and planograms in the database.

Planogram Toolbar

Icon	Option	Description
	Add Planogram	This option is grayed out. Planograms can be added by dragging and dropping.
	Edit Definition	This option will open the Planogram design window so the planogram can be edited.
	Delete Planogram	This option is grayed out and unavailable in Merchandiser. Planograms can be directly deleted in the floor plan.
	Reverse Planogram Placement Direction	This option is current grayed out. .
	Highlight in Store	This option does not operate in Merchandiser.

Icon	Option	Description
	Highlight in Tree	If selected, selecting a planogram in the floor plan will cause the pertinent planogram be highlighted in the Object Browser Fixture Hierarchy
	Find	This option brings up the Find dialog box, allowing users to search for objects in the Fixture Hierarchy.
	Properties	This option brings up the Merchandising Tab of the Configuration module, allowing users to customize their settings.
	Refresh	This option refreshes the Object Browser with the latest information on products and planograms in the database.

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.

Product Hierarchy

The product hierarchy is show down as far as SKU level. Products at Display Style level are not shown in Planner because they can neither be placed nor seen.
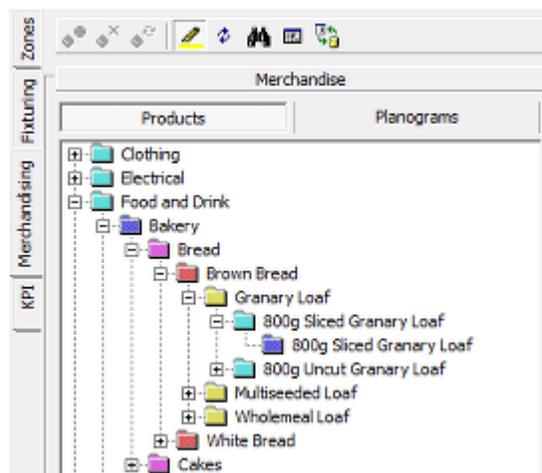
The different colored folders show the different levels in the hierarchy.

Icon	Description
📁	Product Company
📁	Product Group
📁	Product Division
📁	Product Department
📁	Product Class
📁	Product Sub-Class
📁	Product Item
📁	Product SKU

Planogram Hierarchy

Planograms are organized in a hierarchy of planogram groups, with planograms associated with a specific group.
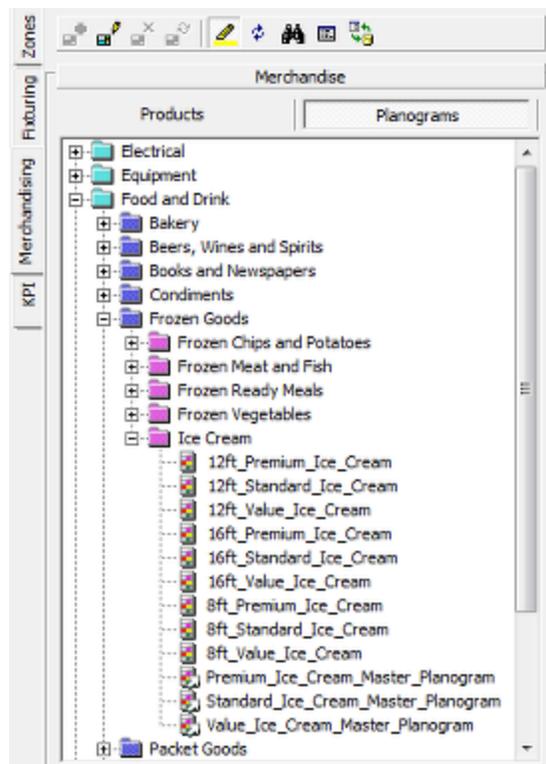
The different colored folders show the different levels in the hierarchy.

Icon	Description
	Planogram Company
	Planogram Group
	Product Division
	Product Department
	Planogram Class
	Planogram Sub-Class
	Planogram

If Master Planograms have been implemented, there will be two different icons to indicate the type of planogram.

Icon	Description
	Individual Planogram
	Master Planogram

The Properties Window

The Properties window displays information for the merchandise that has been selected in the product or planogram hierarchy. The content of this window is by modifying the Custom SQL in the database. This allows an implementer to specify the information that appears in the window.

> **Note**: See the Oracle Retail Macro Space Planning Data Model for information on Custom SQL.

Name	Value
Pog Id	69
Name	1_Bay_Brown_Bread
Description	1 Bay Brown Bread
Code	00000069
Bays	1
Status	Authorized
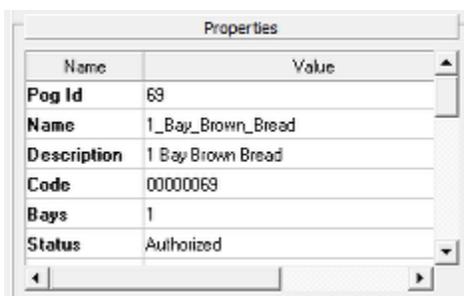
The Summary Window

The Summary window displays information on the merchandise placed in the open store plan. The content of this window is by modifying the Custom SQL in the database. This allows an implementer to specify the information that appears in the window.

> **Note**: See the Oracle Retail Macro Space Planning Data Model for information on Custom SQL.
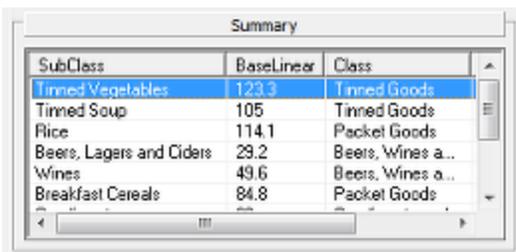
The Preview Window

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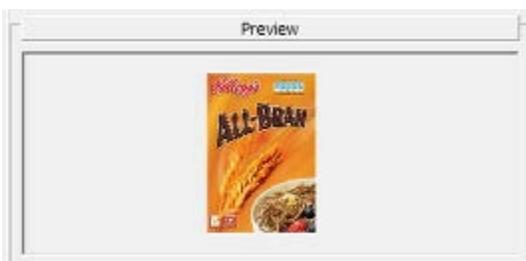
It will always be blank for Planograms.

The KPI Tab

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

The KPI tab is divided 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.

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

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

Upper Toolbar

Icon	Description
✚	Add KPI

> **Note:** The Edit Indicator functionality allows the user to specify the data returned for KPIs using SQL statements and stored procedures. The functionality has been disabled by default. Please refer to the Functional Security section in the Administration Module User Guide for information on how to give access to this functionality.

Lower Toolbar

Icon	Description
▦	View Data
✎	Edit KPI in list of those displaying
✕	Delete KPI from list of those displaying
⟳	Refresh All

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

Running a KPI

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

Details Tab

Pressing the **Add KPI** button opens the Key Performance Indicator dialog for the highlighted KPI with the Details tab active. Slightly different versions of the Details tab appear in Planner and Merchandiser. Merchandiser has more options because it can show up to four views of the floor plan simultaneously.
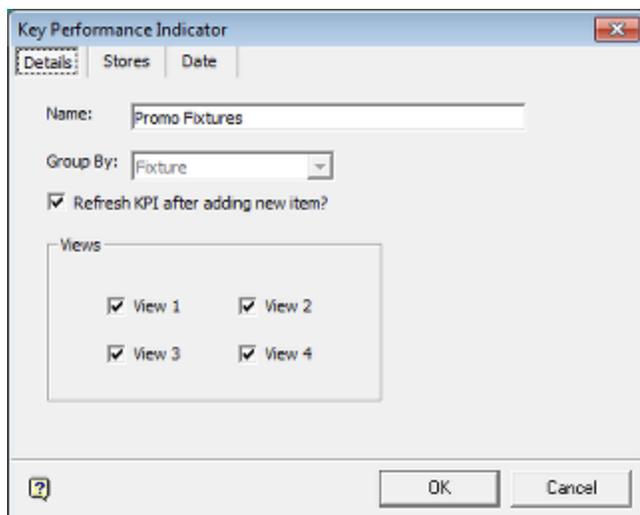
The Details tab shows the name of the selected KPI in the **Name** field. The user can edit this if they wish. This will only change the name that is shown in the Layers section of the KPI tab on the Object Browser and not the name of the KPI definition saved in the database. The **Group By** field is automatically populated with the KPI Type that was saved in the KPI definition.

Stores Tab

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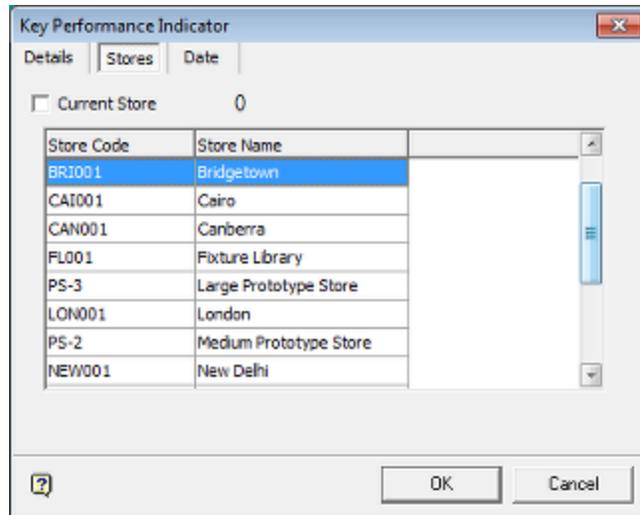
Date Tab

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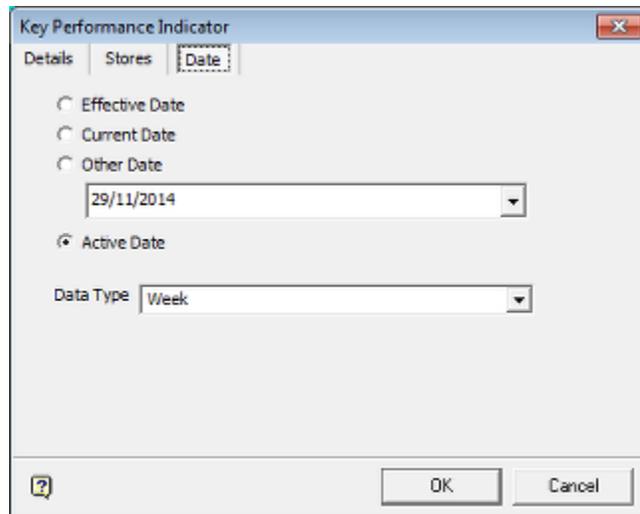
The next stage is to set the specified date for the date.

- ▪ Effective Date will use the Effective Date specified in the File Properties dialog box in Store Manager. This can only be used if the floor plan has not yet reached Current status and the Effective Date has been set.

- ▪ Current Date will use the Current Date specified in the File Properties dialog box in Store Manager. This can only be used if the floor plan is at Current status.

- ▪ Other Date can be manually set by the user using the Calendar control

- ▪ Active Date will use the Active Date specified at the top of the Object Browser.

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

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

Running the KPI

Pressing the OK button will close the dialog and apply the KPI to the store plan drawing. The Layers frame will show the KPI that has just been run and the legend will be updated with the Color Theme for the KPI.
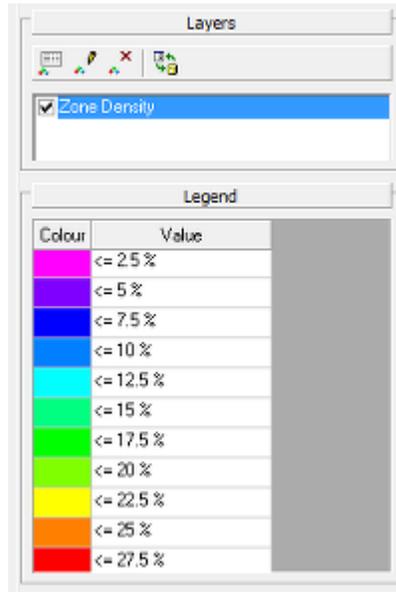
KPI's can be turned off in the store plan view by un-ticking the tick box next to the KPI name in the Layers pane on the Object Browser. If no KPI's are ticked the store plan view returns to the normal view mode.

Deleting the KPI

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

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

Configuration Options on the Object Browser

Several toolbars on the Object Browser provide shortcuts to specific tabs of the Configuration Module. These allow individual users to customize the ways Macro Space Management operates to suit their individual needs. Full information can be found in the help for the Configuration Module (accessed from the File menu).

Zones Tab of Configuration Module
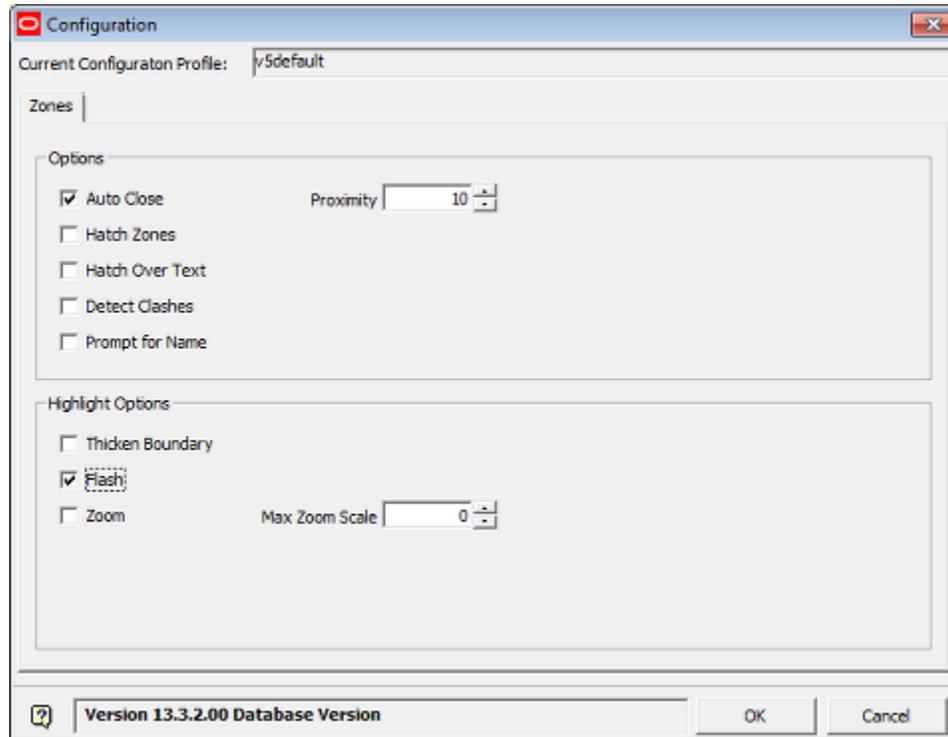
These options are intended for use in Planner and have no effect in the Merchandiser Module.

Fixturing Tab of the Configuration Module
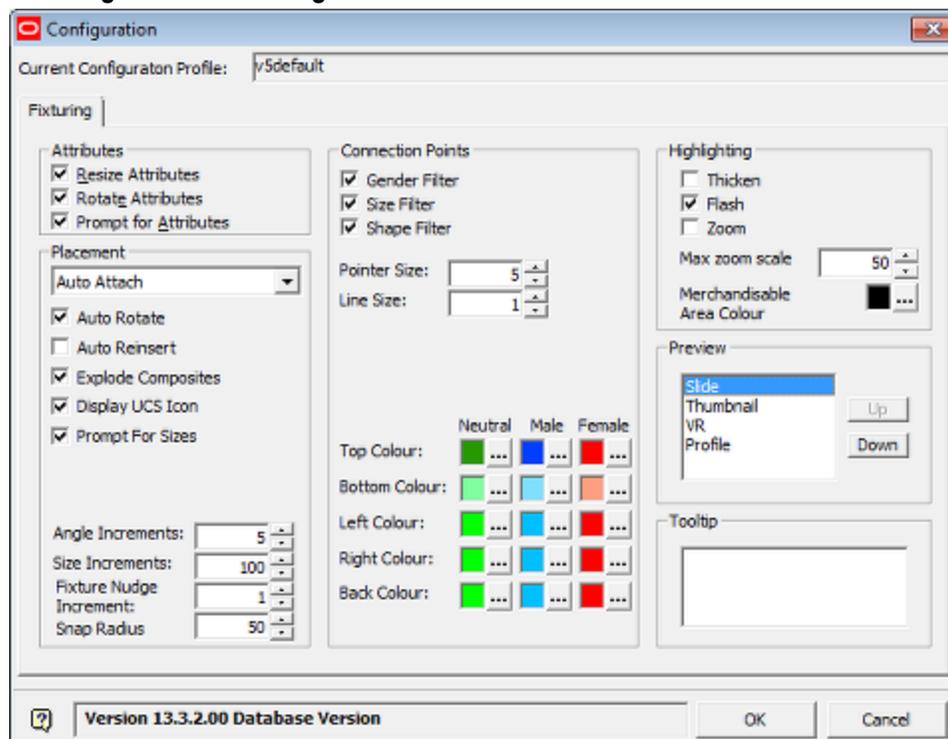
Attributes Frame

These options are intended for use in Planner and have no effect in the Merchandiser Module.

Placement Frame

These options are intended for use in Planner and have no effect in the Merchandiser Module.

Connection Frame

The options in this frame can be used to control the behavior and appearance of connection points.

> **Note**: For more information see the section on connection points

Highlighting Frame

The majority of these options are intended for use in the Planner module and have no effect in the Merchandiser Module. The Merchandisable Area Color sets the color used to display the merchandisable areas for a fixture. (Display is controlled by the right click menu when a fixture is selected in the floor plan).

Preview Frame

This affects the sequence preview objects are shown in the Preview Window of the Object Browser.

Tooltip Frame

This option is intended for use in Planner and has no effect in the Merchandiser Module.

Merchandising Tab of the Configuration Module
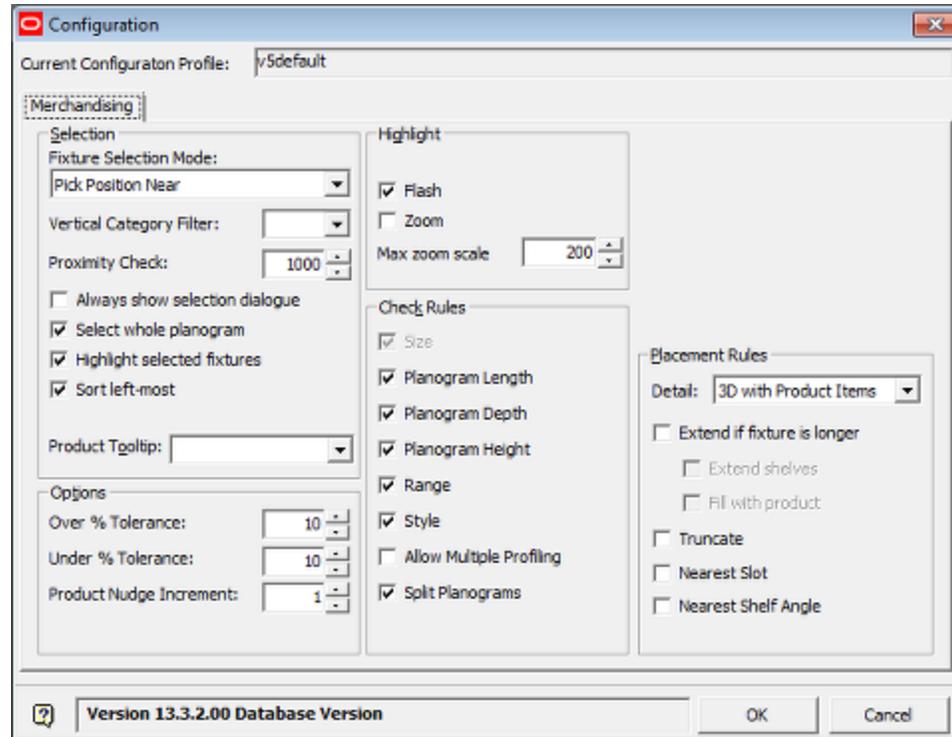
Selection Frame

These options are intended for use in Planner and have no effect in the Merchandiser Module.

Options Frame

These options are intended for use in Planner and have no effect in the Merchandiser Module.

Highlight Frame

These options are intended for use in Planner and have no effect in the Merchandiser Module.

Check Rules Frame

The options control the warnings that will be displayed when a planogram is being placed.

Placement Rules Frame

These options are intended for use in Planner and have no effect in the Merchandiser Module.

Object Grid

About the Object Grid

The **Object Grid** provides an alternative to selecting lower level objects in the Object Browser, including Zones, Fixtures, Products and Planograms.
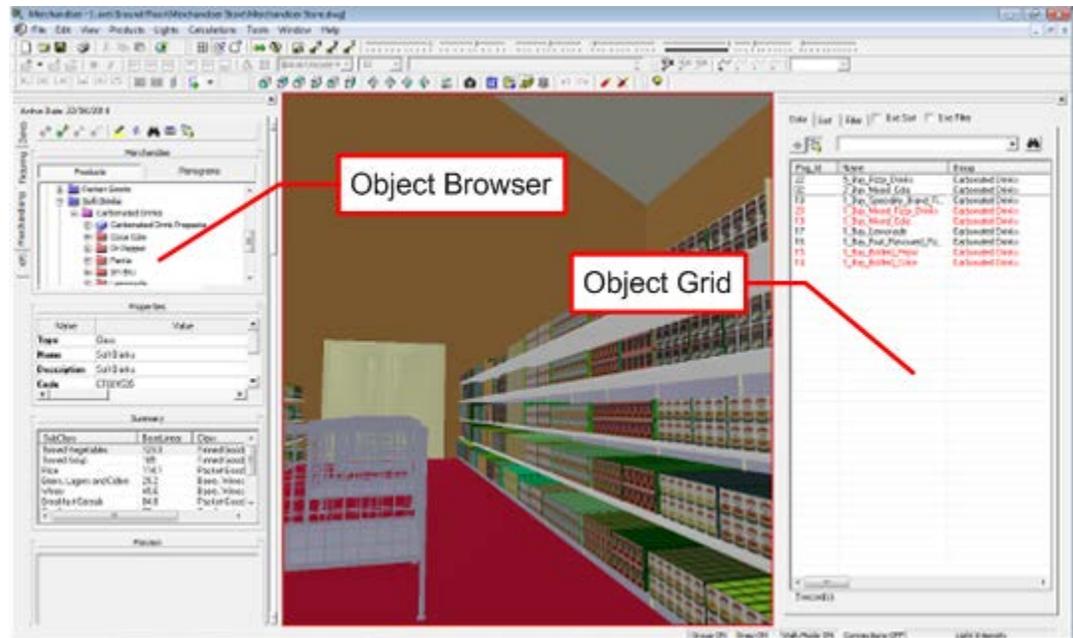
It is used in conjunction with the Object Browser and is available in both the Planner and the Merchandiser environments. The Object Grid can be docked on any side of the screen or floated.

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

The Object Grid has the following major parts:
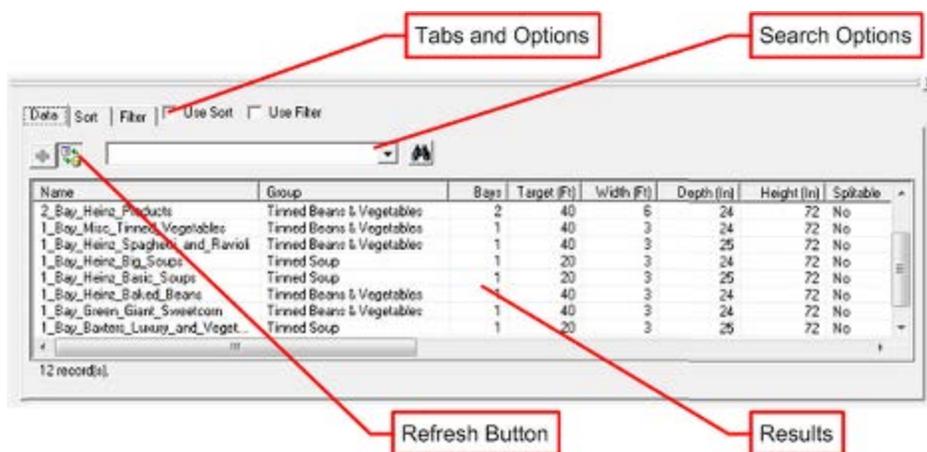
Tabs and Options

There are three tabs:

- The Data Tab contains a list of all returned results up to the limit set in the OBJECT_GRID_DATALIMIT system variable. Results are also constrained by the filters in use.

- The Sort Tab allows the user to select the fields the data will be ordered by and whether the data will be in ascending or descending order.

- The Filter Tab allows the raw data sent to the Object Grid to be filtered to a smaller sub-set before it is displayed in the Object Grid.

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

Search Options

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

Refresh and Add Buttons

For data to be added to the Object Grid, the refresh button must be toggled on (depressed). Clicking on a node in the appropriate hierarchy will return the results associated with that note. For Merchandiser, the Add button is not enabled. Objects must be 'dragged and dropped' in order to add them to a floor plan.

Columns

The columns can be hidden or displayed by right clicking in them. The order can be changed by 'dragging and dropping' them to a different order.

Determining the Data that Appears in the Object Grid

The data that appears in the Object Grid is determined by the Custom SQL in the **Custom SQL** table. System DBAs with access to the database can modify this Custom SQL to change the information that appears. See the *Oracle Retail Macro Space Planning Data Model* for details.

> **Note**: 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.

Turning Object Grid Display On or Off

The **Object Grid Display** can be turned off by clicking the close button in the upper right corner. It can be turned back on by using the Object Grid option on the View pull down menu in both the Planner and Merchandiser environments.

Object Grid Position

The Object Grid can be mowed to different positions by right clicking at the top and selecting, Left, Right, Top or Bottom. It cannot be floated in the Merchandiser module.

The Object Grid Sort and Filtering Tabs

The Sort Tab

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

The selected fields determine both the fields that will be used for sorting. The sequence they are selected in specifies the priority that will be used. The available fields for sorting will match the fields in the Data tab. The order specifies whether data will be shown ascending (A -->Z) or descending (Z-->A).

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

The Filter Tab

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

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

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

Using the Object Grid

The Object Grid will behave in different ways depending on which tab of the Object Browser is selected. The results returned can be customized by modifying the information in the AVTTB_CUSTOM_SQL table. This table is only accessible by Administrators with access rights to the database, but those with such access have complete control over the results returned.

> **Note**: In order to use the Object Grid, the Refresh button must be toggled to On. Unless this is done, information in the Object Grid will not update when nodes are clicked in the Object Browser hierarchy.

Zones Tab

The Zones Tab gives the opportunity to return lists of products or planograms associated with specific zones. This can serve as a pre-filtering process. In the example below, highlighting the Packet Goods zone in the Object Browser (with the Refresh button toggled on) in the Object Grid has returned all planograms associated with that zone. The Custom SQL for the Object Browser has been configured to show placed planograms in red and non-placed planograms in black.

> **Note**: This functionality is only applicable to floor plans - it does not operate in the planogram design window.
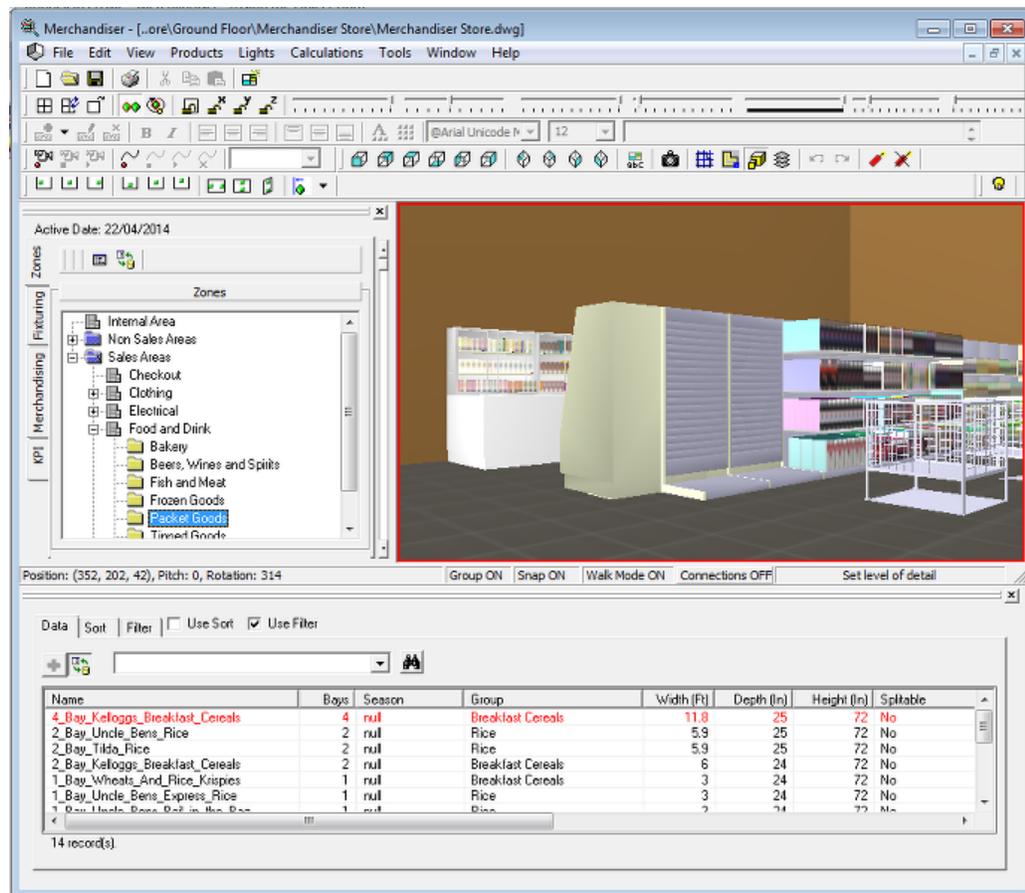
Fixturing Tab

The Fixturing Tab allows users to select fixtures based on their parent fixture group in the Object Browser. In the example below, the Basic Racking Shelving Fixture Group has been selected in the Object Browser. With the Refresh button on the Object Grid toggled on, this returns all shelves associated with that fixture group (and any child fixture groups).

> **Note**: This functionality is only applicable to floor plans - it does not operate in the planogram design window.
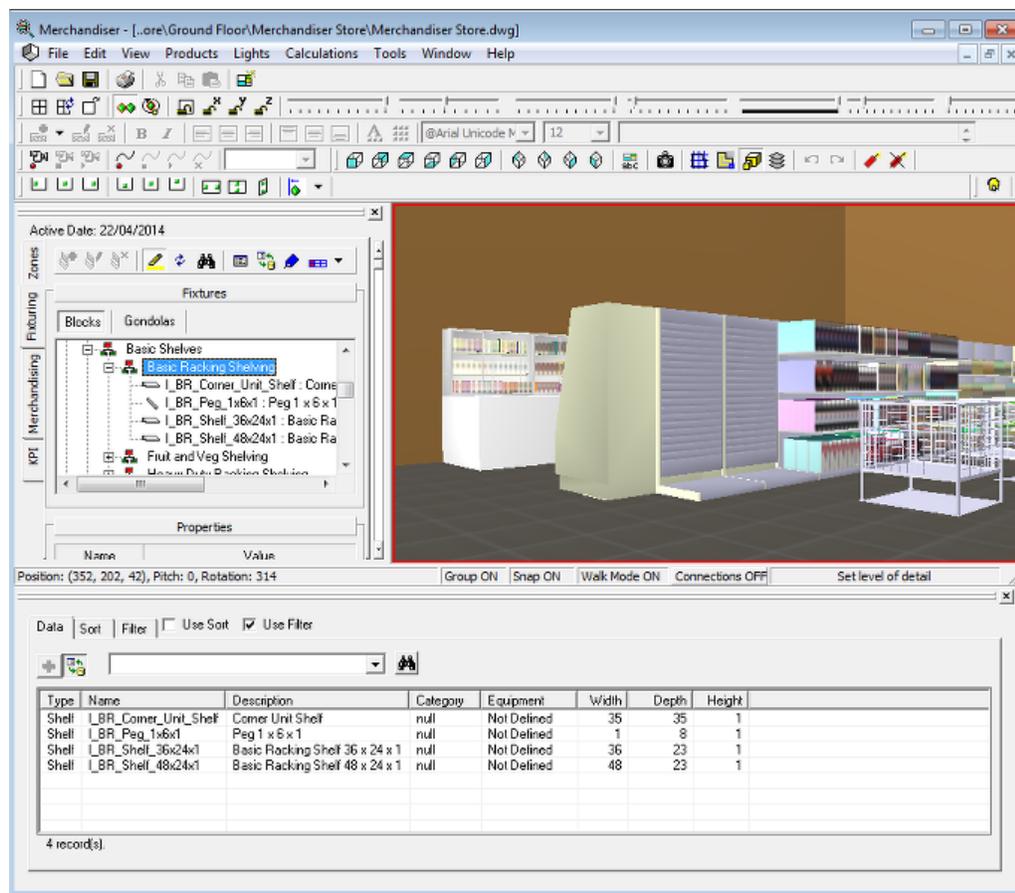
Note: Gondolas cannot be selected using the Object Grid.

Merchandising Tab

The Merchandising Tab allows users to select products or planograms based on their parent group in the Object Browser. This functionality operates in both the floor plan and the planogram design window - although it operates differently in both. There are two custom SQL statements powering the Object Grid - one for floor plans and one for planogram design. Each piece of Custom SQL can return results for either products or planograms. Many retail chains configure the Custom SQL to return planograms while in the floor plan and products while in the planogram design window. This section of help will discuss that situation.

Returning Planograms for Floor Plans

The general way of setting up the Custom SQL for floor plans is to get it to return results of planograms. This will happen when the appropriate level in is clicked in either the product or planogram hierarchies. Clicking on a group in the planogram hierarchy will return all planograms that are associated with that group or its children. Clicking on a Department, Class or Sub-Class is the product hierarchy will return all planograms associated with that type of product. Clicking at other levels in the product hierarchy (for example Item) will result in an error message. As with other results in the Object Grid, the precise results returned can be configured by Administrators using the custom SQL.
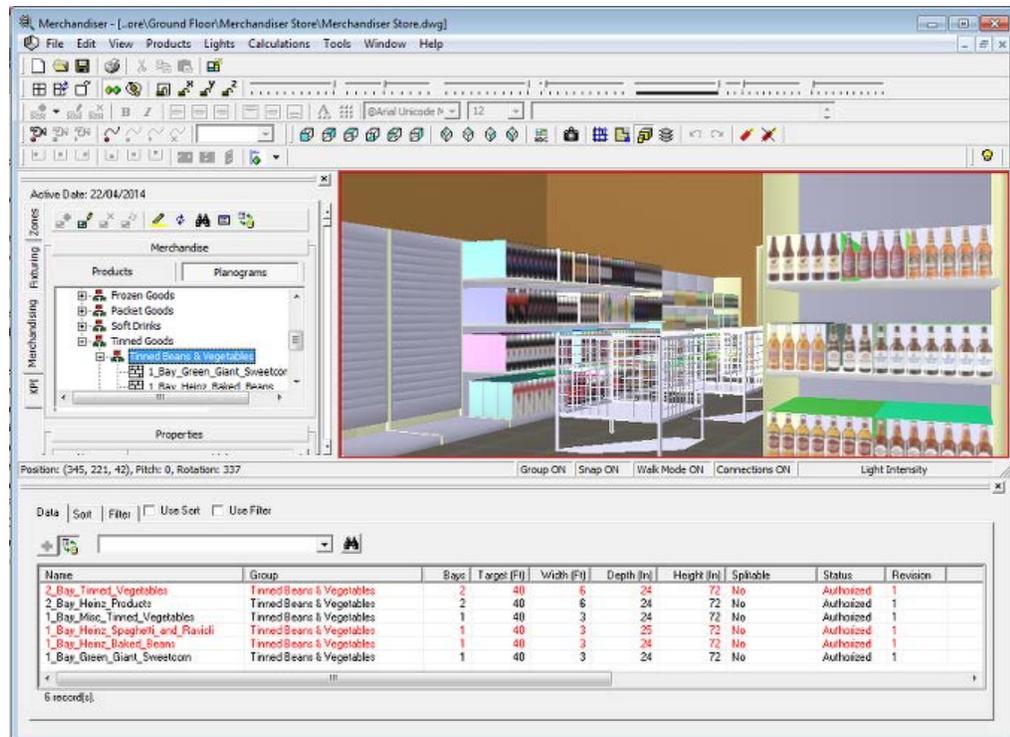
Returning Products for Planogram Designs

The Custom SQL is set up to operate on the product hierarchy in the Object Grid. Selecting a Department, Class or Sub-class in the hierarchy will populate the Object Grid with a list of all products below that node. This is useful when selecting products for planogram design. Selecting a Planogram Group in the Planogram hierarchy will have no effect.
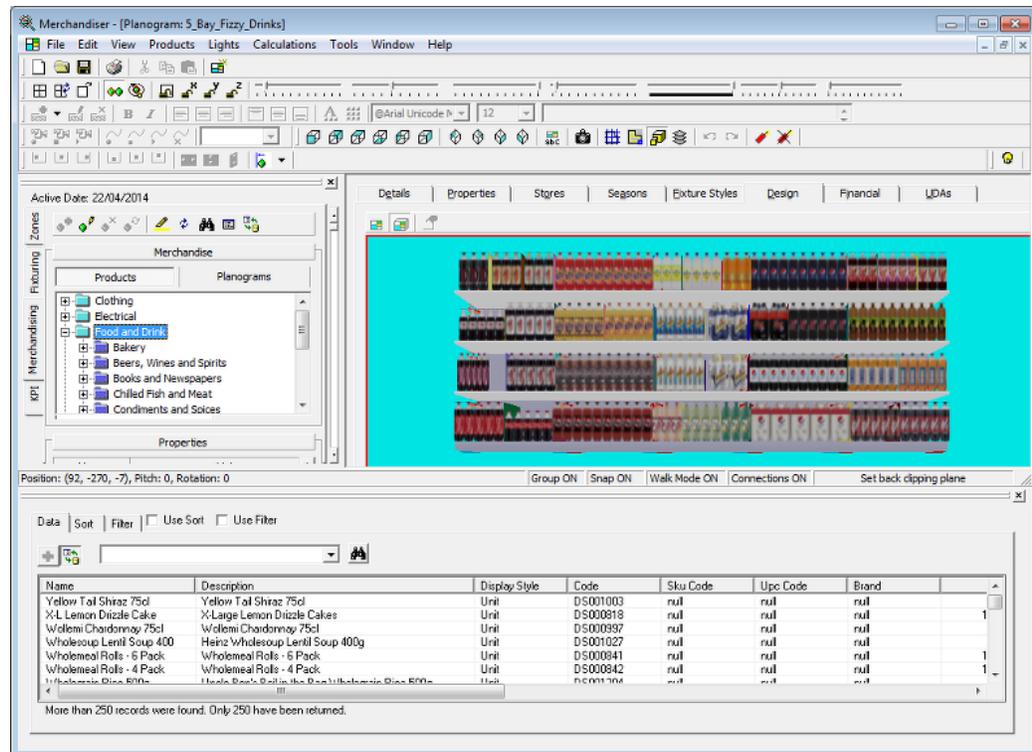
Note: In the above example, more results have been returned than permitted by the maximum limit. This limit is set using the OBJECT_GRID_DATALIMIT system variable accessed using the System Variable option from the General menu in the Administration module.

Key Performance Indicators

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

Overview of Merchandiser

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.
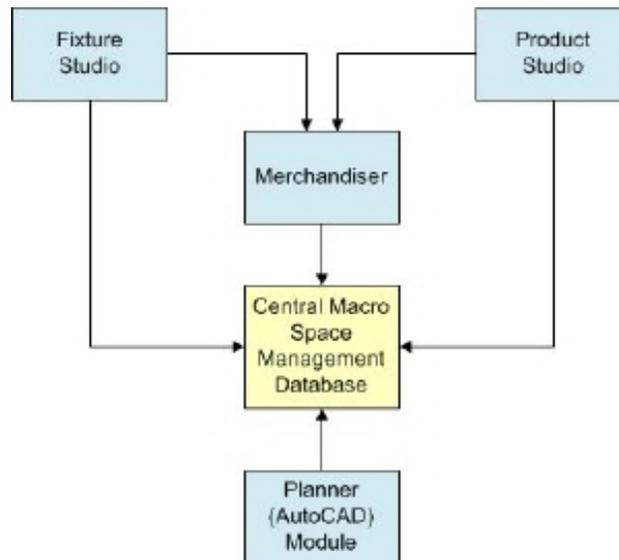
Note: The Macro Space Planning database is also used by the Planner (AutoCAD) module, which provides an alternative way to create and edit store layouts. Macro Space Management users may therefore work in which environment they find most convenient as the results of activities in either environment are stored in the central database and are available to the other environment.

The Merchandiser Window

The Merchandiser Window has six main parts.
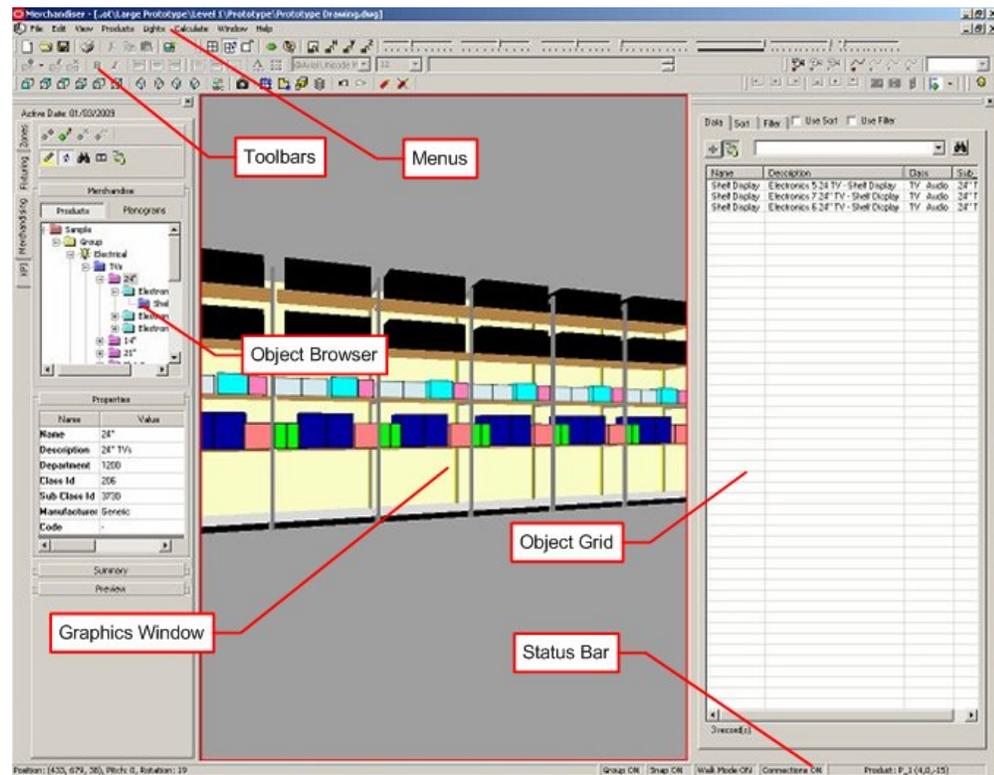
The **Menu Bar** gives access to a series of drop down menus that control many of the operations in Merchandiser.

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.
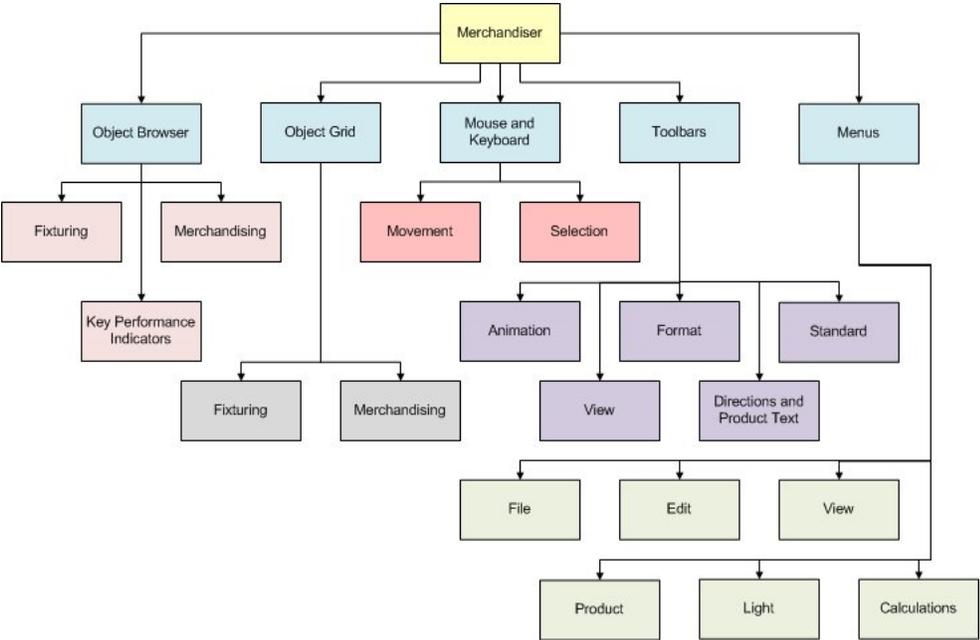
The Configuration Module

The **Configuration Module** can be accessed from several modules within Macro Space Management. Full access is only granted to Administrators who access it via the Administration Module. This allows them to configure many aspects of the global operation of the application. Standard users get more restricted access and can configure their local settings.

> **Note**: For full details of the Configuration Module see the Configuration Module help file.

Accessing the Configuration Module

There are three ways the Configuration Module can be accessed from within the Merchandiser Module:

- By selecting the Configuration option from the File menu.
- By Pressing the F6 key.
- By selecting Options on one of the toolbars on the Object Browser.

The Configuration Module Tabs

Standard users can access four configuration Module tabs: Zones, Fixturing, Merchandising and Merchandiser. These tabs are explained in full detail in the Configuration Module help file. There are also discussed in more detail in any pertinent sections of this help file.
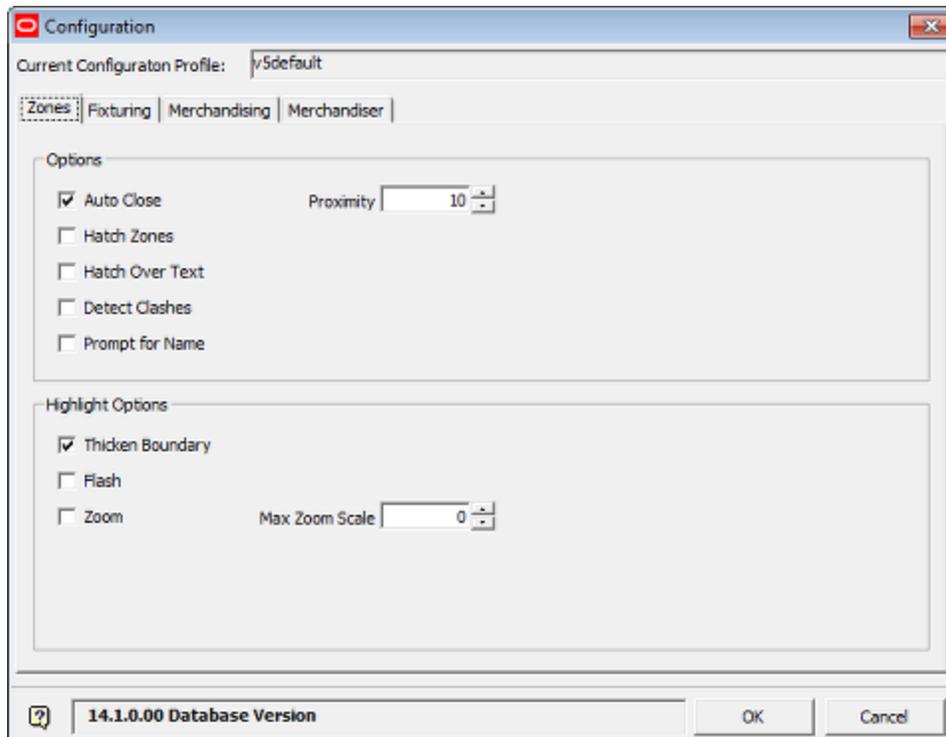
Zones Tab

This tab specifies the behavior of zones in the Planner Module and has no effect in Merchandiser.

Fixturing Tab

This tab has limited utility in the Merchandiser module. Its primary use is to allow the user to customize the color and behavior of connection points.

Merchandising Tab

Again, this tab has limited utility in the Merchandiser module. Its primary use is to allow the user to set the Check rules which are used to validate the fixtures a planogram is being placed on.

Merchandiser Tab

Several settings on this tab are of use in Merchandiser:

- Express Load enables express loading of zones. This allows users to specify what is loaded into the floor plan. It enables them to only load part of the floor plan and thus to make the plan of a large store more responsive.

- Double Sided: If some objects are not drawing correctly in the floor plan, selecting this option may correct it. The floor plan will require more processing capacity from the user's computer if this option is active.

Lock Objects on Tab Change. If this option is selected, Fixtures can only be manipulated while in the Fixturing tab of the Object Browser and Merchandise in the Merchandising tab.

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Controls in Merchandiser

Shortcut Keys

Shortcut keys are available. These provide alternatives to calling the required function from pull down menus of toolbars.

General Shortcuts

Shortcut Keys	Also available from:	Function
<Ctrl> + O	File pull down Menu or Standard Toolbar	Open Drawing (Via Store Manager)
<Ctrl> + P	Standard Toolbar	Show Print Preview
<Ctrl> + <Shift> + C	File pull down menu	Show Configuration Module
<Ctrl> + S	File pull down menu	Save Drawing
<Ctrl> + Q	File pull down menu	Quit Application
<Ctrl> + N	File pull down menu	Create New Planogram
F8	View Menu	Show/Hide Object Browser
Delete	N/A	Delete all selected objects

Display Shortcuts

Shortcut Keys	Also available from:	Function
<Ctrl> + F	Edit pull down menu	Display Find Dialogue
<Ctrl> + L	Directions and Product Text Toolbar	Display Layers Dialogue
F12	View Menu	Take snapshot of Virtual Reality Store

Editing Shortcuts

Shortcut Keys	Also available from:	Function
<Ctrl> + G	Edit pull down menu	Toggle Group On or Group Off
<Ctrl> + A	Edit pull down menu	Select All
<Ctrl> + E	Edit pull down menu	Empty selected fixture/shelf of products
<Ctrl> + C	Edit pull down menu	Copy the Selected Products to the Clipboard

Shortcut Keys	Also available from:	Function
<Ctrl> + X	Edit pull down menu	Cut the Selected Products and Paste on Clipboard
<Ctrl> + V	Edit pull down menu	Paste the Selected Products onto the selected fixture/shelf
<Ctrl> + Z	Edit pull down menu	Undo last action
<Ctrl> + D	Edit pull down menu	Deselect all selected objects
<Shift> + up or down cursor keys	N/A	Move selected shelf up or down on parent object

Menu Options

File Menu

The **File** menu gives access to several options. The most important of these are the creating and editing of planogram definitions, accessing Store Manager, Printing and Publishing planograms and accessing the Configuration Module.
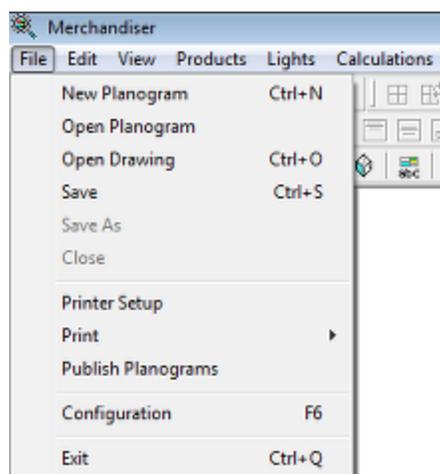
Option	Description
New Planogram	This option allows a user to create a new planogram design in the Merchandiser module. It can be created at a specific point in the planogram hierarchy by highlighting a node before invoking the New Planogram command.
Open Planogram	This command can be used to open an existing planogram design for editing.
Open Drawing	This accesses the Store Manager module which can be used to initiate the creation, editing or deletion of floor plans.
Save	This saves the current version of the floor plan.

Option	Description
Save As	This option is grayed out and unavailable.
Close	This closes the currently active floor plan. If there are outstanding changes, a warning dialog box will be displayed.
Printer Setup	This brings up a dialog box allowing the user to select a printer and specify the printer properties.
Print	This enables users to take a snapshot of the current floor plan or to print planogram designs.
Publish Planograms	This option enables the user to manually publish planograms that have met or exceeded their Publish Date or Effective Date.
Configuration	This brings up the Configuration module. This allows the user to select a number or user specific settings.
Exit	This option closes the Merchandiser module. If there are outstanding changes, a warning dialog box will be displayed.

Edit Menu

The **Edit** menu gives access to a series of options mainly concerned with editing. Options that are not currently active will be grayed out and unavailable.
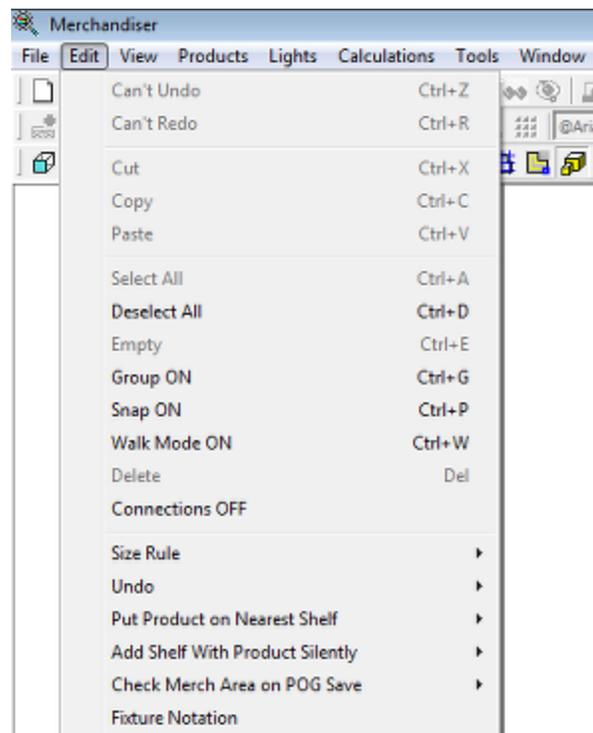
Some of the options are as follows:

Option	Description
Undo and Redo	If active, the user can undo or redo actions in the floor plan. The maximum number of undo or redo actions is set by a system variable in the Administration module.
Cut, Copy and Paste	These allow the user to carry out standard Cut, Copy and Paste option on objects in the floor plan.
Select All and Deselect All	These options allow the user to select all or deselect all objects in the floor plan.
Empty	If one or more fixtures have been selected, all merchandise will be removed from them.
Group On or Group Off	This option turns Grouping on or off. If it is turned on, selecting one object from a set of objects selects all objects in the set. If turned off, objects have to be selected individually. A good example is a gondola. With grouping on, all objects in the gondola can be selected by selecting just one part of it. With Grouping off, parts have to be selected individually. This option can also be set using the button in the status bar.
Snap On or Off	This option determines whether fixtures or other floor mounted objects will snap to the Snap grid. The grid lines can be turned on by the **Show Grid Lines Form** option in the **Directions and Product Text** toolbar.
Edit Mode or Walk Mode On	This determines whether **Edit mode** is one (movement in the floor plan is off) or **Walk Mode** is on (users can navigate through the floor plan using the mouse cursor keys.
Delete	This deletes any selected objects in the floor plan.
Connections On or Off	This option determines whether connection points are visible or not.
Size Rule	This allows the user to specify whether or not product size is to be taken into account when placing products on shelves. It is generally useful to have it on as is restricts the size of products placed to those practical for the fixture or shelf.
Undo	This determines whether the undo and Redo options are active. If set to Off, the options will be permanently grayed out and unavailable.
Put Product on Nearest Shelf	If this option is turned on, the product will be placed on the nearest shelf to the mouse cursor. If the option is off the product will be placed on the parent fixture unless a shelf has been preselected.
Add Shelf with Product Silently	This option controls the appearance of the Add Product dialog box. If set to On it appears. If set to Off, it will not appear and just a single product will be placed on a shelf.
Check Merch Areas on POG Save	If this option is turned on a warning dialog box will appear when saving a planogram design (creating or editing planograms) if any products are outside the merchandisable area of the fixture.
Fixture Notation	This option bring up a dialog box controlling the visa; appearance of fixture annotation. The visibility of the annotation is controlled by a slider control on the toolbar.

View Menu

The **View** menu allows the user to specify a number of options affecting the view on screen.
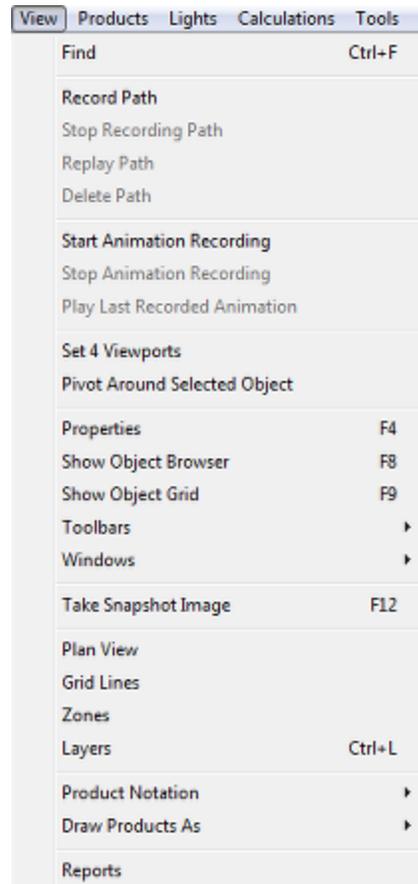
Option	Description
Find	This option brings up a Find dialog box that enables user to identify fixtures, shelves or products by their ID.
Record Path	This option is used to record a path prior to recording an AVI movie. When the command is initiated, the user can navigate through the floor plan using the mouse keys. This path will be recorded and can later be followed when creating the movie.
Stop Recording Path	This stops recording the path the user is navigating through the store.
Replay Path	This replays any recorded path. If there are no recorded paths the command will be grayed out.
Delete Path	This deletes any current recorded path. If there are no recorded paths the command will be grayed out.
Start Animation Recording	This command allows the user to record and save an AVI movie. If the **Replay Path** command is started immediately afterwards, the movie will be recorded along the previously recorded path.

Option	Description
Stop Animation Recording	This stops recording the movie.
Play Last Animated Recording	This plays the last created movie.
Set 4 Viewports	This enables the user to toggle between one and four view ports. A single view port shows the floor plan in a single window. 4 Viewports shows the floor plan in four smaller windows. The views in these windows can either me moved independent of each other or moved in synchronization.
Pivot Around Selected Object	If an object has been selected in the floor plan, the user can use the mouse keys to orbit around the selected object.
Properties	This option opens and closes the Properties window on the Object Browser.
Show/Hide Object Browser	This option allows the user to toggle display of the Object Browser On or Off.
Show/Hide Object Grid	This option allows the user to toggle display of the Object Grid On or Off.
Toolbars	This option allows users to show or hide specific toolbars.
Windows	This option allows users to select the Move, Rotate, Views or Camera dialog boxes. This assist navigation in the floor plan.
Take Snapshot Image	This option takes a snapshot (jpeg image) of the view in the current floor plan. The images are stored in the images sub-folder of the Export directory. The location of the Export directory is specified in the Directories tab of the Configuration module. This tab is only accessible if the Configuration module is accessed via the Administration module.
Plan View	This opens up the Plan View dialog box. This allows users to drag around a small camera icon and rapidly reposition themselves in the floor plan.
Grid Lines	This option opens the Grid Lines dialog box. This option allows users to configure and display the grid lines that form the snap grid. If the snap grid is toggled on (status bar) fixtures can be positioned using this grid. If activated, the grid lines can be turned off using the Layers dialog box accessed from this menu.
Zones	This option brings up the Zones dialog box. This enables the user to go to a specific zone in Merchandiser. The zones must first have been created in Planner for this option to work.
Layers	This option brings up the Layers dialog box. This enables the user to turn on and off the layers in the floor plan. This effect is global - if a layer is turned off, it will be for all users.
Product Notation	This option turns product notation on or off.
Draw Products As	This option allows users to select which of three alternative forms to show display style products in.
Reports	This option brings up Quick Reports - customizable reports that can be used to list information about specific parts of the floor plan.

Products Menu

The **Product** menu enables two actions associated with products to be carried out.

Option	Description
Update Product Dimensions	If products placed in the floor plan have had their dimensions subsequently updated in the database, this will change the product sizes in the floor plan to the later dimensions held in the database. For this option to work, the **Refresh** option must first have been used on the toolbar of the Merchandising tab of the Object Browser.
Product Studio	This option will allow the user to open Product Studio if they have the appropriate permissions.

Lights Menu

The Lights menu calls up the Lights dialogue box
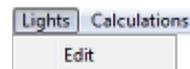
This allows the user to specify the lighting arrangements for the store.
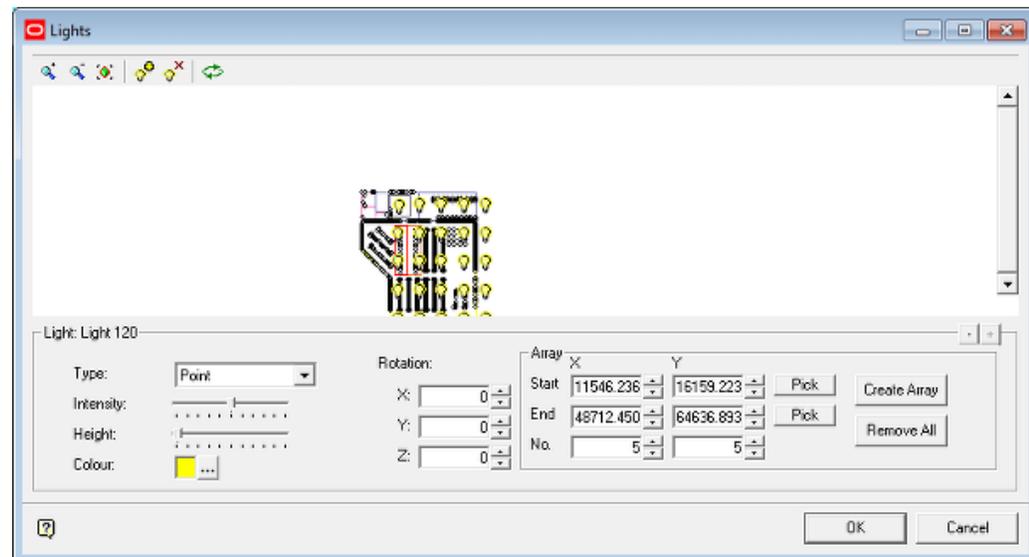
Calculations Menu

The Calculations menu gives access to calculations required for accurate reporting.
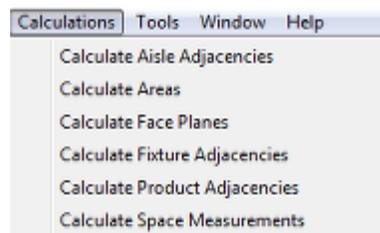
Option	Description
Calculate Aisle Adjacencies	This enables the user to determine which fixtures and merchandise are present in an aisle and what relationship the bear to each other.
Calculate Areas	This calculates the floor area that should be apportioned to individual fixtures
Calculate Face Planes	Calculate Face Planes enables users to calculate the respective frontal area of products in planograms. This information can then be used for reporting purposes.
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. Fixture Adjacencies must have been calculated first as the Product Adjacency calculation is dependent on them.
Calculate Space Measurements	This enables users to calculate the respective volumes of products in planograms. This information can then be used for reporting purposes.

Tools Menu

The Tools menu gives access to Planogram Substitution functionality if users have been assigned access tights. It also allows the user to run any predefined
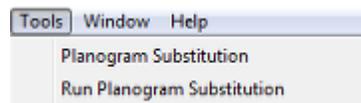
Window Menu

The Window menu allows users to arrange multiple store plans (if open) and to select the store plan they wish to be active if multiple floor plans are open.

Window	Help

Cascade
Tile Horizontal
Tile Vertical

1 ..Root\Riga\Ground Floor\Spring Revision\Spring Revision.DWG
✓ 2 ..Root\Riga\Ground Floor\Summer Revision\Summer Revision.dwg

Option	Description
Cascade	This will arrange all open floor plans and planogram designs of a diagonal cascade of windows.
Tile Horizontal	This will arrange all open floor plans and planogram designs of a horizontal layer of windows.
Tile Vertical	This will arrange all open floor plans and planogram designs of a vertical layer of windows.
Listed floor plans	All floor plans currently open in Merchandiser are listed. The currently active floor plans

Help Menu

The **Help** menu gives access to this help file.

Help

Help   F1

About
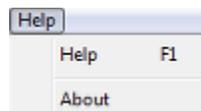
It also allows the version of the software to be checked.

Right Click Menus

Options are also available from right click menus. These are invoked by selecting an object in a floor plan and right clicking. The menu that appears will depend on the object selected. The example resulted from selecting a fixture.
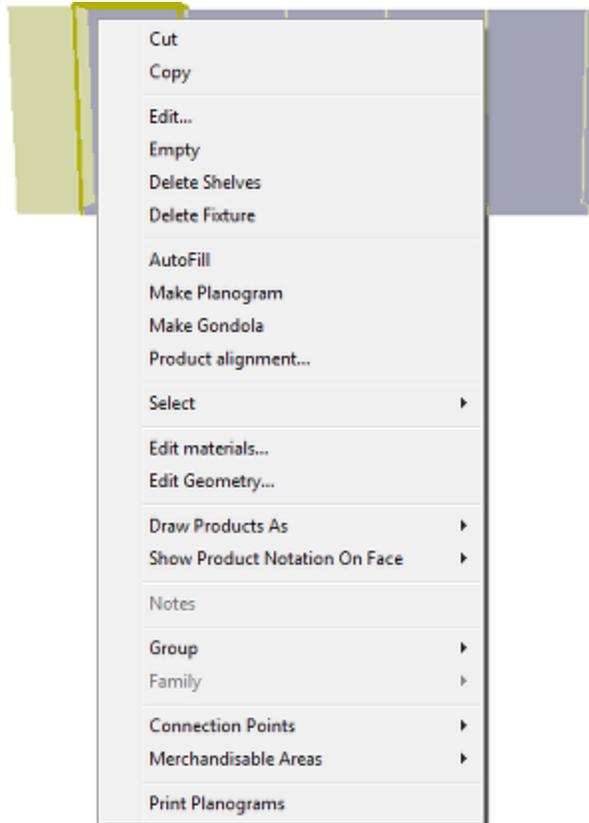
Toolbar Options

Controlling the Display of Toolbars

The toolbars can be turned on or off by right clicking in the toolbar area. This will bring up a right click menu. Toolbar display can then be turned on or off by selecting or deselecting them.
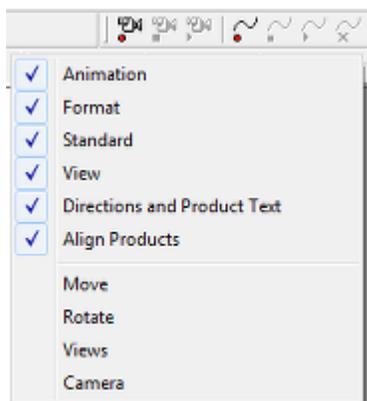
Align Products

The **Align Products toolbar** allows shelves or products to be aligned. The type of object is selected from the drop down list to the right of the toolbar.

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 options work as follows:

Option	Description
Align Products	To align products, there should be at least three products on the fixture or shelf. To align them select the parent fixture or shelf and then click the required alignment button. The products should align accordingly.
Align Shelves	This option is normally used for shelf objects such as pegs or small baskets where you can have multiple objects distributed across a fixture. To align then select the parent fixture and then click the required alignment button.

Animation Toolbar

The **Animation Toolbar** enables the user to make define and store paths through a floor plan for taking movies. It also allows users to record movies of the store layout in the Virtual Reality Environment.

Icon	Description
	This command allows the user to record and save an AVI movie. If the **Replay Path** command is started immediately afterwards, the movie will be recorded along the previously recorded path.
	This stops recording the movie.
	This plays the last created movie.
	This option is used to record a path prior to recording an AVI movie. When the command is initiated, the user can navigate through the floor plan using the mouse keys. This path will be recorded and can later be followed when creating the movie.
	This stops recording the path the user is navigating through the store.
	This replays any recorded path. If there are no recorded paths the command will be grayed out.
	This deletes any current recorded path. If there are no recorded paths the command will be grayed out.
	This control allows the user to save and use up a number of recorded paths. Each time a new path is recorded, the path number will be incremented by one. Earlier recorded paths can be replayed or deleted by setting the drop down list to an appropriate number.

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.

Directions and Product Text Toolbar

The **Directions and Product Text** Toolbar is mainly concerned with views of selected objects.

Icon	Description
	After one or more objects have been selected in the floor plan, clicking this will centre the view on the front of these selected items.
	After one or more objects have been selected in the floor plan, clicking this will centre the view on the back of these selected items.
	After one or more objects have been selected in the floor plan, clicking this will centre the view on the top of these selected items.
	After one or more objects have been selected in the floor plan, clicking this will centre the view on the bottom of these selected items.
	After one or more objects have been selected in the floor plan, clicking this will centre the view on the left side of these selected items.
	After one or more objects have been selected in the floor plan, clicking this will centre the view on the right side of these selected items.
	After one or more objects have been selected in the floor plan, clicking this will give a north west isometric view of the selected objects.
	After one or more objects have been selected in the floor plan, clicking this will give a north east isometric view of the selected objects.
	After one or more objects have been selected in the floor plan, clicking this will give a south east isometric view of the selected objects.
	After one or more objects have been selected in the floor plan, clicking this will give a south east isometric view of the selected objects.
	This option toggles product text display on or off.
	Take Snapshot. The images are stored in the images sub-folder of the Export directory. The location of the Export directory is specified in the Directories tab of the Configuration module. This tab is only accessible if the Configuration module is accessed via the Administration module.
	This option opens the Grid Lines dialog box. This option allows users to configure and display the grid lines that form the snap grid. If the snap grid is toggled on (status bar) fixtures can be positioned using this grid. If activated, the grid lines can be turned off using the Layers dialog box accessed from this menu.
	This option brings up the Zones dialog box. This enables the user to go to a specific zone in Merchandiser. The zones must first have been created in Planner for this option to work.

Icon	Description
	This allows the user to specify whether or not product size is to be taken into account when placing products on shelves. It is generally useful to have it on as is restricts the size of products placed to those practical for the fixture or shelf. It can be toggled on or off.
	This option brings up the Layers dialog box. This enables the user to turn on and off the layers in the floor plan. This effect is global - if a layer is turned off, it will be for all users.
	Undo the past action. This option will only be active if there is an action to undo. It will also be grayed out and unavailable if the Undo option has been turned off using the option on the edit menu.
	Redo the past undo action. This option will only be active if there is an action to redo. It will also be grayed out and unavailable if the Undo option has been turned off using the option on the edit menu.
	The explode option explodes planograms in the floor plan to 3D form. This shows the planogram with all shelves and products visible. If a planogram is exploded to this form, no product block will show in Planner after synchronizing 'match the database' although the annotation will show that the fixture is populated. (It is also possible to use a KPI to show fixtures in Planner containing planograms that have been exploded to 3D form and are not directly visible.
	In implode option implodes 3D planograms to 2D (placeholder) form. This shows the planogram is present on the fixture but gives to indication of products, shelves and so on. If a planogram is imploded to this form, the product block will show in Planner after synchronizing 'match the database'

After an object (or objects) have been selected it may viewed from any of six axes or four isometric directions. Other options specify whether zones, grid lines, etc., display.

Formatting Toolbar

The **Formatting Toolbar** has a series of options concerning the appearance of annotation in Merchandiser. For the options to be active a fixture, shelf objector label must be selected.
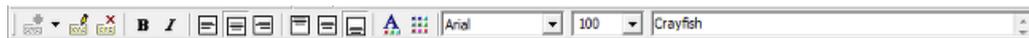
Icon	Description
	Add a label to a fixture or shelf. A fixture or shelf object must be added for this option to become active. Clicking on the list beside the icon will bring up the Label dialog box which can be used to configure the label before it is added.
	Edit an existing label. An existing label must be selected for this option to become active. Clicking on the icon will bring up the Label dialog box which can be used to reconfigure the label.

Icon	Description
X XYZ	Delete the selected label. An existing label must be selected for this option to become active. Clicking the icon will delete the label without further confirmation.
B	If an existing label is selected, this will toggle the text between standard and bold.
I	If an existing label is selected, this will toggle the text between standard and italic.
(left justify icon)	If an existing label is selected, this will change the text to left justified.
(centre justify icon)	If an existing label is selected, this will change the text to centre justified.
(right justify icon)	If an existing label is selected, this will change the text to right justified.
(top justify icon)	If an existing label is selected, this will change the text to top justified.
(middle justify icon)	If an existing label is selected, this will change the text to middle justified.
(bottom justify icon)	If an existing label is selected, this will change the text to bottom justified.
A	If an existing label is selected, using this option will bring up a color pallet which enables the user to change the color of the text.
(color grid icon)	If an existing label is selected, using this option will bring up a color pallet which enables the user to change the color of the background to the label.
Arial	If an existing label is selected, the font type can be changed using the drop down list.
100	If an existing label is selected, the font size can be changed using the drop down list.
Crayfish	If an existing label is selected, the text can be edited using this control.

Controls in Merchandiser **143**

Lights Toolbar

The **Lights toolbar** can be use to toggle on or off the effects of the lights set using any lights create using the Lights option available from the **Lights menu**. If off then only a general, non-specific lighting effect will be used. If turned on, then the floor plan will be illuminated using any placed lights.

Standard Toolbar

The **Standard toolbar** enables the user to carry out a series of common actions.

Icon	Description
	This option allows a user to create a new planogram design in the Merchandiser module. It can be created at a specific point in the planogram hierarchy by highlighting a node before invoking the New Planogram command.
	This accesses the Store Manager module which can be used to initiate the creation, editing or deletion of floor plans.
	This saves the current version of the floor plan.
	Print Options
	If a fixture, shelf or item of merchandise is selected in the floor plan it will be removed and put in the clipboard
	Items of merchandise can be copies and put into the clipboard.
	Paste works differently depending on whether a fixture, shelf or product has been selected. If a fixture is pasted into the floor plan, a dialog box will appear allowing the user to select the position. If a shelf is pasted, it requires a parent fixture to be selected first. Similarly, if a product is pasted, it requires a parent shelf or fixture to be selected first.
	The AutoFill functionality allows auto-placement of products on a fixture. Before this can be made functional it needs to be configured by an implementer. Ask your administrator for details.

View Toolbar

The **View Toolbar** enables the user to set varying options for viewing in the floor plan.

Icon	Description
	This option enables the user to toggle between one and four view ports. This allows the floor plan to be viewed in a single window or in four, smaller windows. If four view ports are in use, the active window will have a red outline.
	If four view ports are in use, this option enables the user to toggle synchronization on or off. If synchronization is on, movement in the active window will result in a similar movement in the other windows.
	If four view ports are in use, this will move the active window to the next view port. The active window will have a red outline.
	Clash Detection. This option toggles clash detection on or off. If clash detection is on, products cannot occupy the same physical space.
	If this option is toggled and one or more objects are selected in the floor plan, user can orbit around that object by positioning the cursor in the floor plan and using the mouse keys.
	Lock view position. If this option is toggled on, all movement in the floor plan is locked. A similar effect can be achieved by selecting **Edit** mode in the status bar. As both options work independently of each other, both must be off to allow movement in the floor plan.
	Lock X axis movement. If this option is toggled on, movement in the X axis (left and right) will be locked. This option will only take effect if **Walk** mode is enabled in the status bar.
	Lock Y axis movement. If this option is toggled on, movement in the Y axis (forward and back) will be locked. This option will only take effect if **Walk** mode is enabled in the status bar.
	Lock Z axis movement. If this option is toggled on, movement in the Z axis (up and down) will be locked. This option will only take effect if **Walk** mode is enabled in the status bar.

> **Note**: the prompt showing the purpose of the slider controls appears in right hand end of the status bar.

Group OFF	Snap ON	Walk Mode ON	Connections OFF	Set movement speed

Icon	Description
	Set movement speed. This option control how fast the user can move through the floor plan. High movement speeds increase the effect of the mouse keys when controlling movement.
	Set texture quality. This option increases the level of detail shown when graphics are visible.

Icon	Description
	Set level of detail. This option controls the general level of detail visible. Setting this control to a lower level reduces the realism of the floor plan but increases responsiveness to commands.
	Set front clipping plane. This sets the distance at which objects in the foreground become invisible. An example of using the front clipping distance would be the remove fixtures on the near side of an aisle on view while editing products on fixtures on the far side of the aisle.
	Set back clipping plane. This sets the distance at which objects in the rear of the view become invisible. Briningg the back clipping plane forwards can remove necessary detail and improve responsiveness when working in a very large store.
	Light Intensity. This option controls the light level on the floor plan. This option will only have an effect if lights have been turned on using the Lights toolbar. If no lights have been assigned, the general level of lighting will be changed. If lights have been assigned from the Lights menu option
	2D Label Viewing Distance. This affects some basic labels that show the type of fixture. The control determines the distance these labels are visible from. Moving the slider control to 0 hides them completely.

The Status Bar

The Status Bar contains a number of options and some useful information
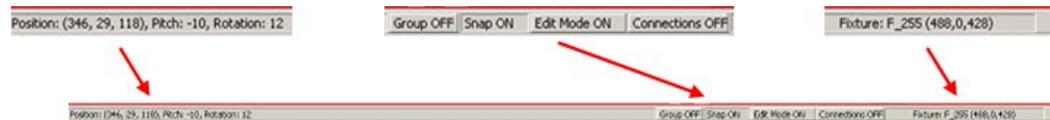
Camera Position

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.

Option	Description
Group On/Off	Turning Grouping on or off determines the behavior when groups of objects (for example fixtures in a gondola) are selected. If grouping is On, selecting a single fixture will select all associated fixtures - for example an entire gondola run. If Grouping is Off, fixtures can be selected one at a time without selecting the whole group.
Snap On/Off	Turning Snap On or Off determines whether the currently selected fixtures will attach to the Snap Grid or not. The Snap grid can be turn on and made visible by the Grid Lines option in the View menu or the Directions and Product Text toolbar. The grid lines can be hidden by turning the appropriate layer off in the Layers dialog box accessed from the View menu or the Directions and Product Text toolbar.

Option	Description
Edit Mode/Walk Mode	Toggling between Edit Mode and Walk Mode determines whether the user can move in the floor plan. If Edit Mode is selected, the user will be fixed to one spot in the floor plan. This is convenient for editing shelves and merchandise. If Walk Mode is on, then the user can move in the floor plan via the mouse buttons and mouse wheel.
Connections On/Off	If Connections are On, connection points will be displayed in the floor plan. If Connection Points are Off, then connection points are hidden. 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.
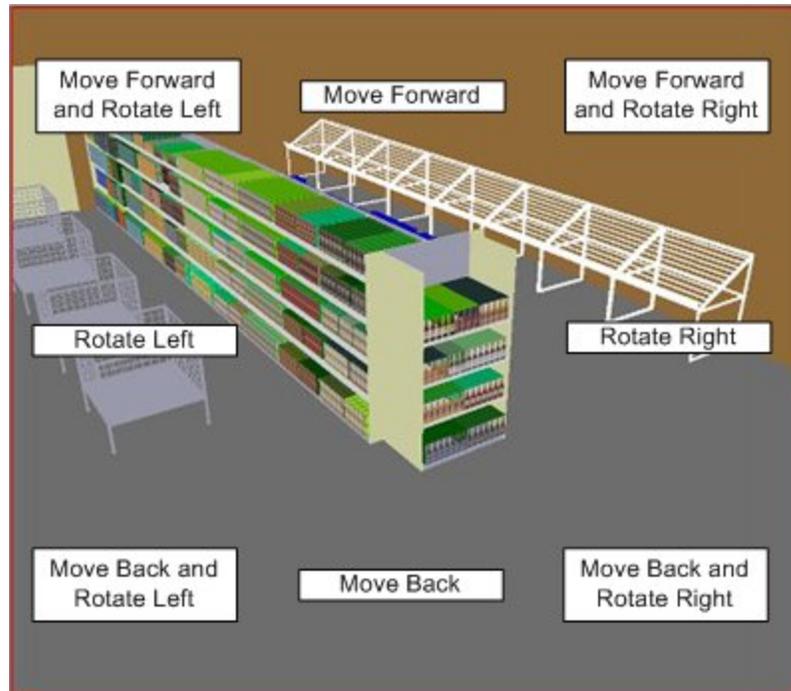
Movement Speed

Movement speed in the floor plan is determined by the setting in the Movement speed slider control.
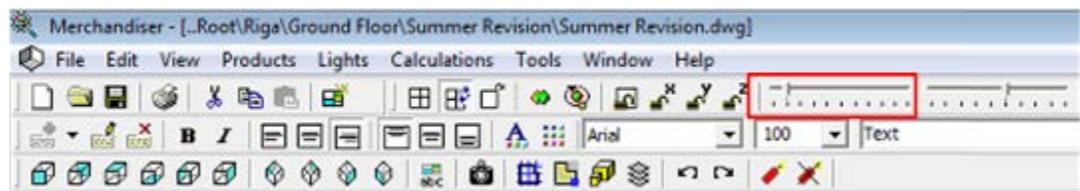
Left Mouse Button

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.
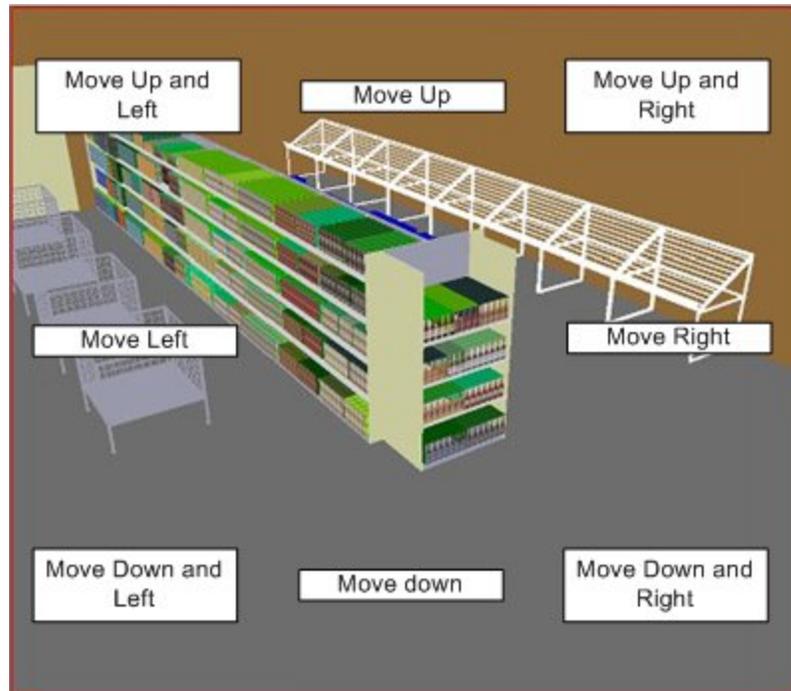
Mouse Wheel

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.
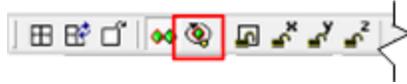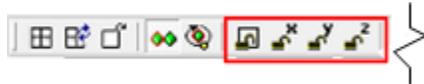
Viewing Objects from Specified Directions

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. If this option is toggled on, all movement in the floor plan is locked. A similar effect can be achieved by selecting **Edit** mode in the status bar. As both options work independently of each other, both must be off to allow movement in the floor plan.
	Lock X axis movement. If this option is toggled on, movement in the X axis (left and right) will be locked. This option will only take effect if **Walk** mode is enabled in the status bar.
	Lock Y axis movement. If this option is toggled on, movement in the Y axis (forward and back) will be locked. This option will only take effect if **Walk** mode is enabled in the status bar.
	Lock Z axis movement. If this option is toggled on, movement in the Z axis (up and down) will be locked. This option will only take effect if **Walk** mode is enabled in the status bar.

Plan View

The Plan View Option can be activated from the Plan View option on the View pull down menu.
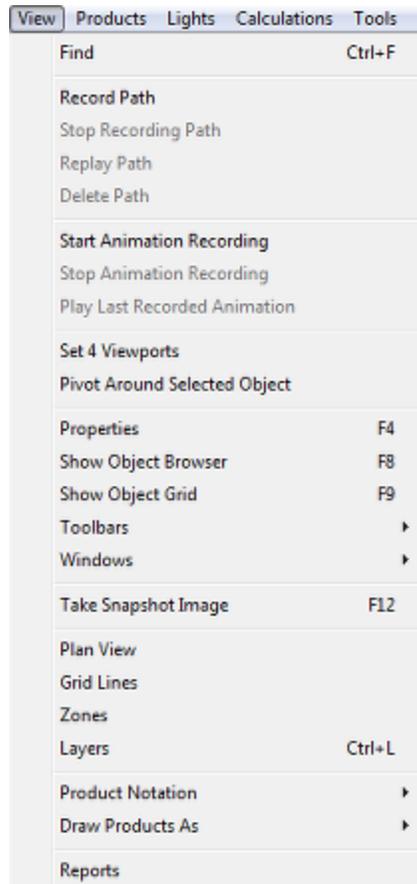

This brings up the Plan View window.
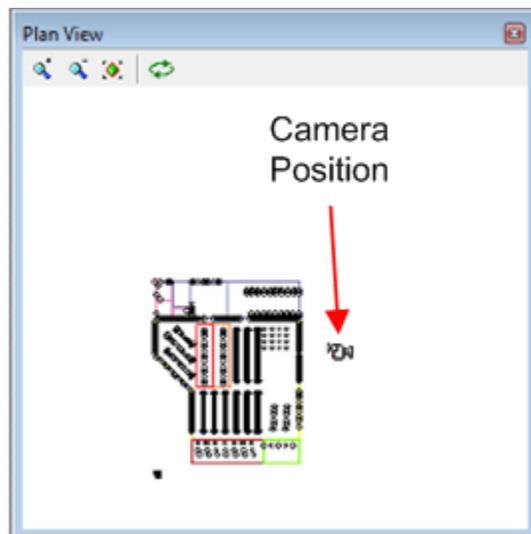
This shows a plan view of the store and the current position of the camera within the store. The camera position can be repositioned by holding down the left mouse key and dragging it to its new position.

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.
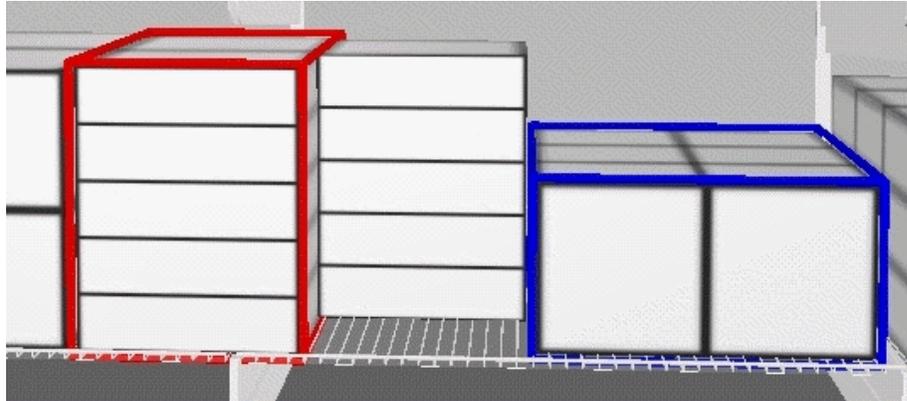
Individual objects can be de-selected by left clicking on them with the mouse for a second time. All objects in the Standard Selection Set can be de-selected by clicking on the first selected object (red frame) for a second time.

Family and Group Selection Sets

Objects that have been put into Families or Groups will be enclosed by yellow and green frames.
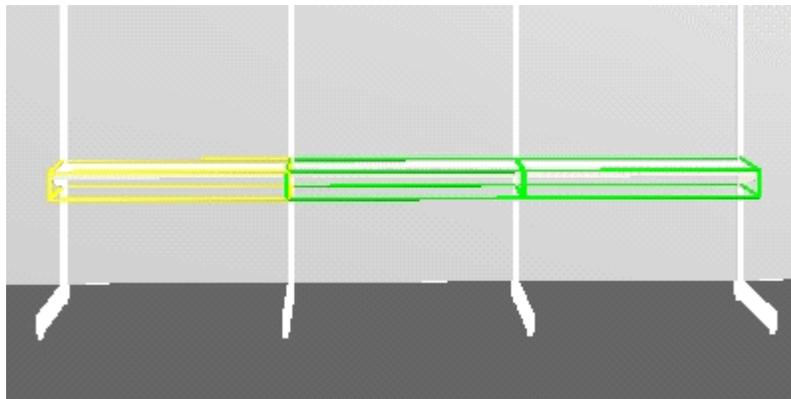
If Grouping is Off it is also possible that cyan frames will be visible.

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,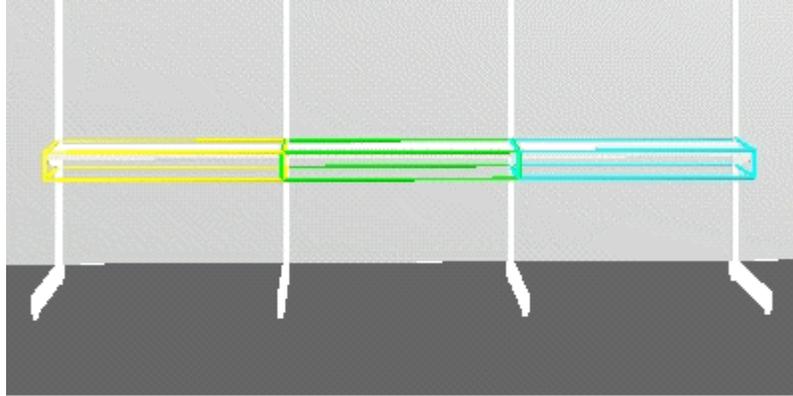 individual objects can be de-selected by left clicking on them with the mouse for a second time. All objects in the set can be de-selected by clicking on the first selected object (yellow frame) for a second time.

General De-Selection

All currently selected objects can be de-selected by <Ctrl + D>.

Using ViewPorts

Viewports enable the user to view the floor plan through a single window or four windows.
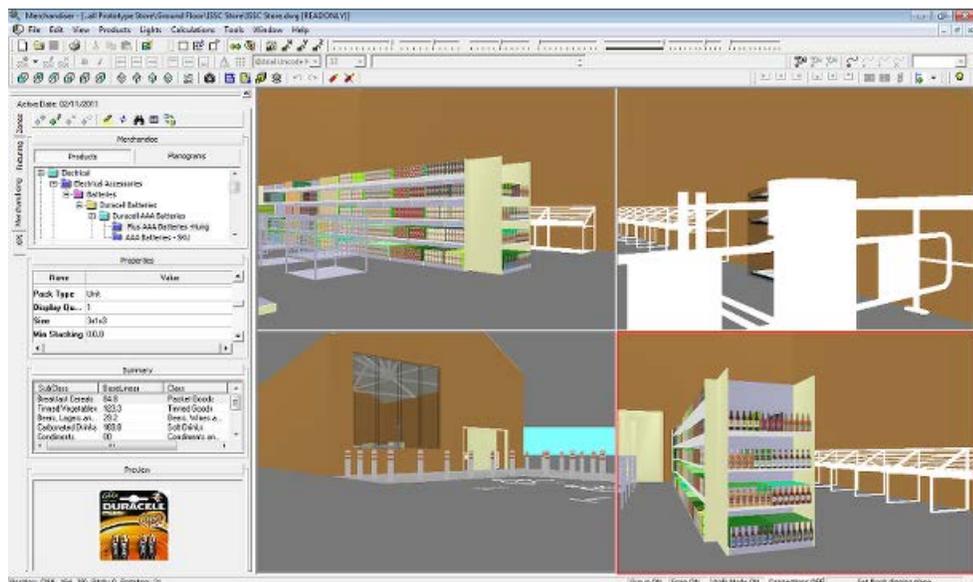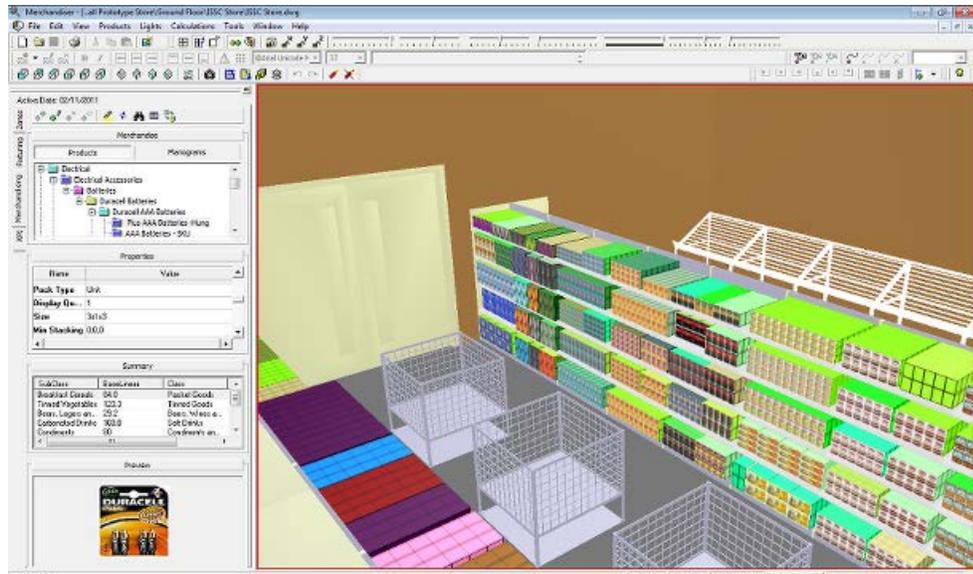
Display is controlled from the **View menu** where users can toggle between one and four view ports. Alternatively, if can be controlled using the options on the view toolbar.

Icon	Option
	Toggle between one and four view ports. The icon displayed will change dependent on the current choice.
	Synchronize view ports. This can be toggled on or off. If toggled off, the view in the active viewport (denoted by a red outline) can be moved independently of the other windows. If synchronization is toggled on, the view on the other windows will change to match that in the active window. If a movement is then made in the active window, the other windows will follow suit.

Icon	Option
	Next view. Slicking this makes the next wind in a clockwise direction active.

Saving and Restoring View Ports

It is possible to save the position of a specific viewport then restore it for later use. This is done from the **Views option** from the View menu.
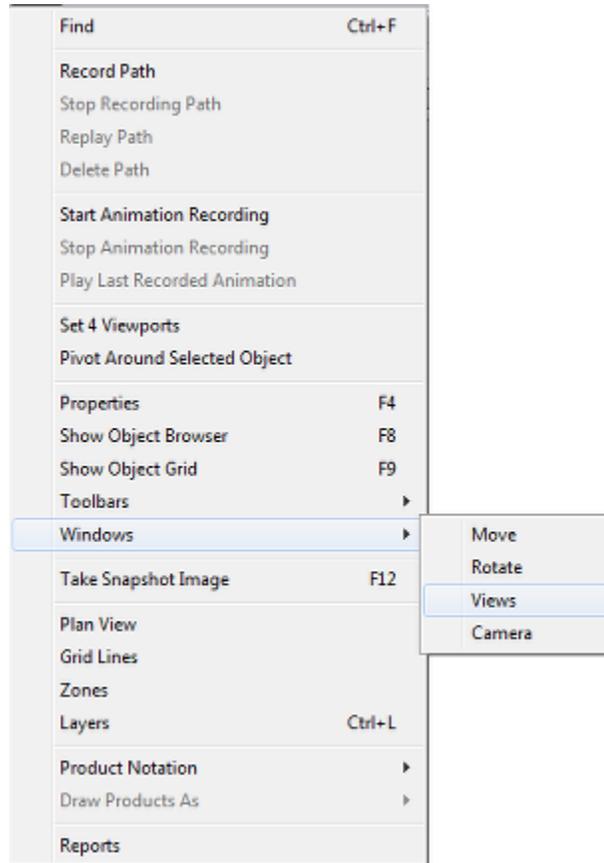
This will bring up the Views dialog box.

Clicking **Save** will save the position of the view in the currently active window. Clicking a number will take the user back to that stored location. Up to ten locations can be stored, active locations being shown by a black numeral. These positions are only held for the active floor plan. Closing the floor plan or switching to another floor plan will cause them to be cleared.

Locking and Viewing Objects

Objects can be locked to protect them from change. They can also be hidden from view or made partially transparent.

Locking Objects

There are two ways of locking objects from being changed: by means of a system variable and by locking the layer the object is on.

LOCK_OBJECTS_ON_TAB_CHANGE System Variable

This system variable is set in the System Variables dialog box (General menu) in the Administration module, generally during implementation. It has two settings:

Setting	Effect
0	Functionality disabled.
1	Functionality enabled. When the Fixturing tab of the Object browser is selected, product placeholder and display style merchandise will be locked and cannot be edited or deleted. When the Merchandising tab of the Object browser is selected, fixtures and fittings will be locked and cannot be added or deleted.

Consult your system administrator to see which setting is in use for a specific implementation.

Locking the Layer

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**. Locking a layer means objects on it cannot be added, edited or deleted.
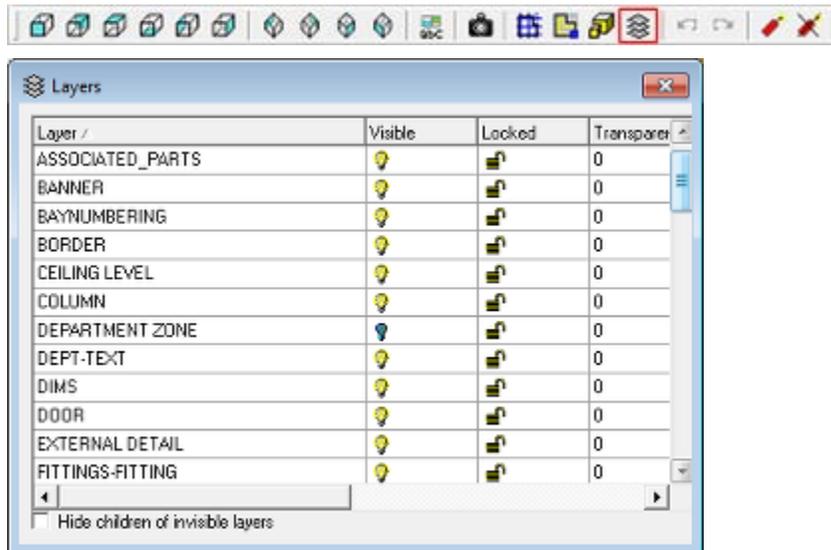
Icon	Description
	Layer unlocked
	Layer locked.

The lock for each layer can be toggled on or off by clicking on the appropriate icon.

> **Note**: Depending on the
> **LOCK_OBJECTS_ON_TAB_CHANGE** system variable
> settings, some layers will be automatically locked depending
> on which Object Browser tab the user is in.

Changing the Transparency and Visibility of Objects

The transparency and visibility of objects can be changed in the floor plan. This is done by using the options in the **Layers dialogue box**, accessible from the **View toolbar**.
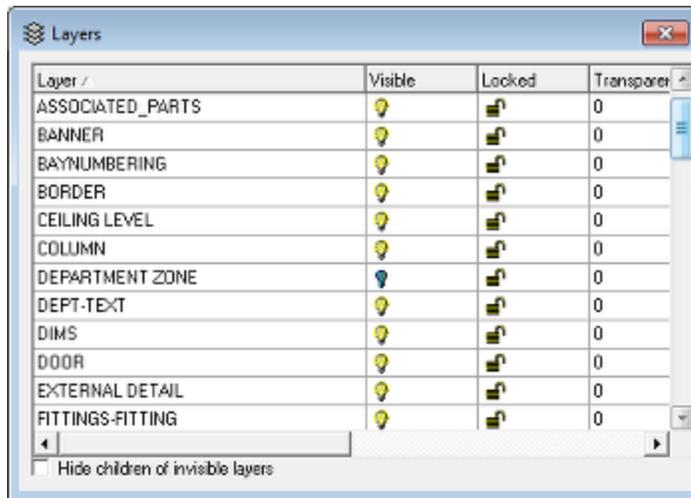
Changing the Visibility of Objects

When objects are placed in a Merchandiser floor plan they go onto a specific layer in that floor plan. For example fixtures go on the FIXTURES layer, Fixture Text on the FIXTURE-TEXT layer. The layer can be turned on or off. If the layer is turned off, that layer and all the objects on it will no longer be visible in the floor plan. They can be restored to view by turning the layer back on.

| Icon	Description
	Layer turned on. Objects on the layer are visible.
	Layer turned off. Objects on the layer are hidden,

If is desired to show fixtures without any accompanying text, the FIXTURES layer can be left turned on, while the FIXTURE-TEXT layer can be turned off. The fixture text can be returned to view at any time by turning the FIXTURE-TEXT layer back on.

Changing the Transparency of Objects

The transparency of objects can also be modified in the Layers dialog box. Each specific layer can have its transparency set to any value from 0 (completely opaque) to 100 (completely transparent). In the example below, a fixture and its shelves and products are shown fully opaque and then 75% transparent.
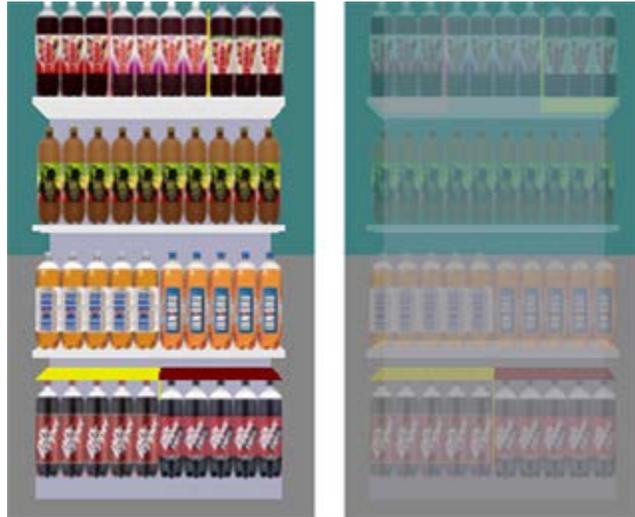
Planogram Publishing

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. The default settings for the Planogram Publishing dialog box are derived from settings in the Planogram Publishing Configuration dialog box in the Administration module.

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

The Planogram Publishing functionality is used to disseminate planogram designs to specified printers or Windows folders to facilitate implementing those planogram designs.

> **Note:** a retail organization will still need a method of distributing the planogram designs from the printer or Windows folder to the end user.

The basic method of operation is as follows:
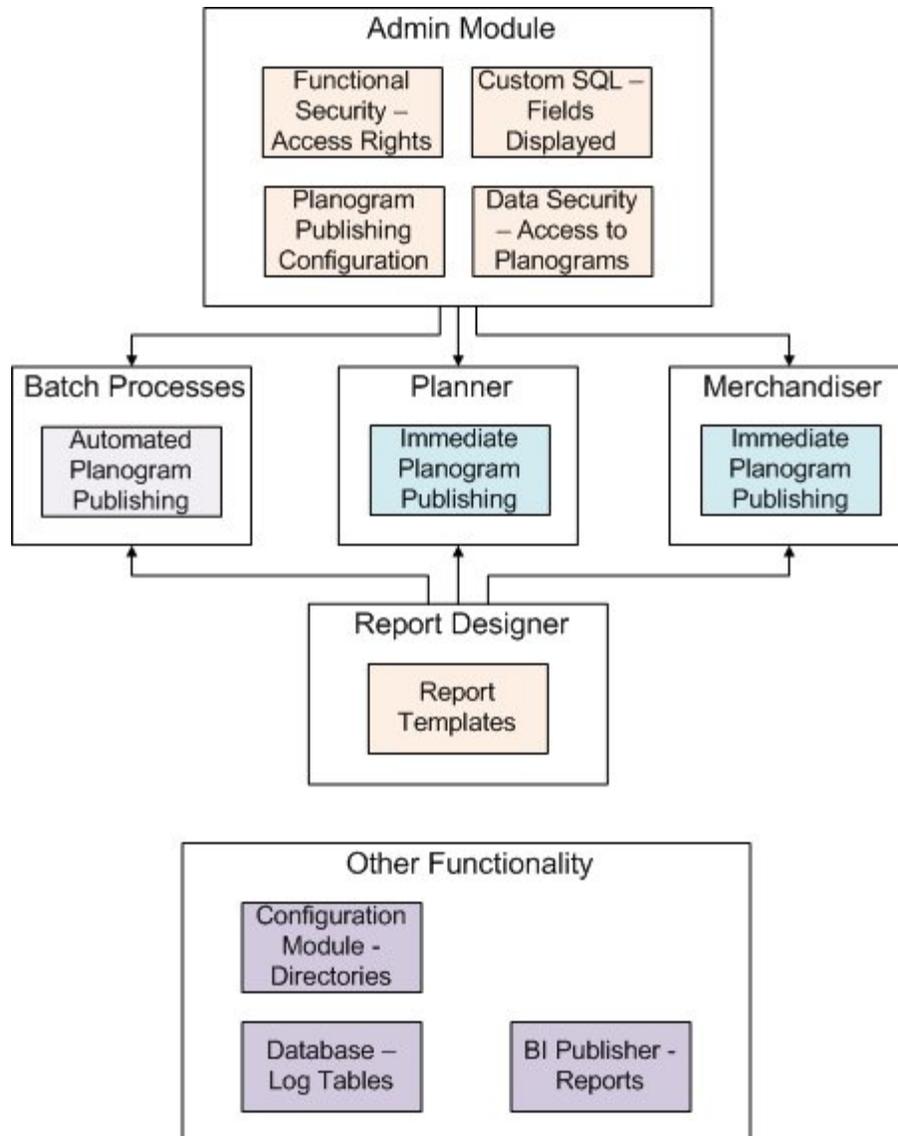
1. **Administration Module**

   The Administration module is used to configure access to the different parts of the functionality. It is also used to assign permissions to print or publish specific floor plans and planograms. Finally, it is used to configure how the batch processes for publishing floor plans will work. There are three options that affect publishing and printing of floor plans.

   - The Functional Security option (Security menu) allows Administrators to control who can run Planogram Publishing as a batch process. It also controls who can access Immediate Planogram Publishing in the Planner Module. It also allows Administrators to control who can access Report Designer to create report templates for publishing planogram designs.

   - The Data Security option (Security menu) allows Administrators to control what planograms a user can print or publish from in the Planner and Merchandiser modules (and in In-Store Space Collaboration).

   - The Custom Query dialog box allows an Administrator to specify what fields will appear in the Immediate Planogram Publish dialog box in the Planner module.

2. **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.

3. **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 settings determining how this operates are set in the Planogram Publishing Configuration dialog box.

   The rights to do this are set in Functional Security in the Administration Module.

4. **Planner Module**

   Within the Planner module, the Immediate Publishing of Floor Plans functionality can only be used by users for whom permissions have been granted in the Administration module.

5. **Merchandiser Module**

   Within the Merchandiser module, the Immediate Publishing of Floor Plans functionality can only be used by users for whom permissions have been granted in the Administration module.

6. **Report Designer**

   Report Designer can be used to create report templates that determine the format the planogram design is published in.

7. **Other Functionality**

There are three other items of functionality that affect planogram publishing.

- Configuration Module - the Directories tab allows users to specify where the root folders holding published planograms are located. Sub-folders holding specific planograms will be created as children of this root folder.

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

- BI Publisher (or a similar application) can be used to generate reports based on the information held in the database - for example the names and results of planograms that have been published.

Permissions to Run Immediate Planogram Publishing

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

> **Note:** this dialog box will only be accessible to users with access rights to the Administration Module.
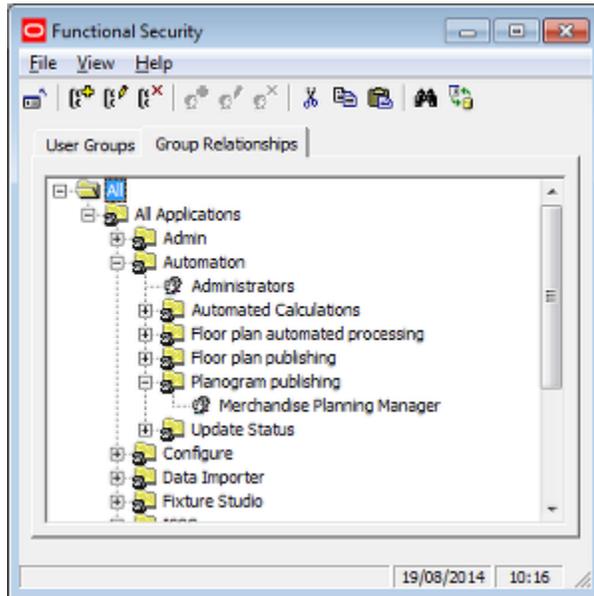
Users assigned to the Automation Command Group (such as the Administrator User Group) can run all Automation Functionality. User Groups assigned to the child Command Groups (Floor plan automated publishing, Floor plan publishing, Planogram publishing) have the ability to use that functionality. In the example above, the Merchandise Planning Manager User Group has been assigned permission to use the Planogram Publishing functionality. The User Group's precise rights depend on settings in the Permissions dialog box. This is accessed by highlighting the User Group and selecting the **Edit Permissions** option from the right click menu. This will bring up the Permissions dialog box.
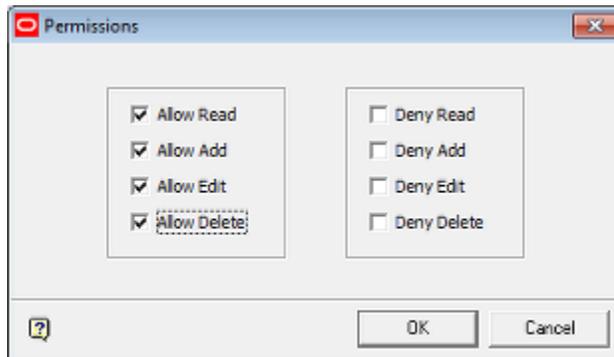
1. If the User Group belongs to a Command Group higher in the Command Group hierarchy, by default it will inherit the permissions from that higher Command Group. This permission can be varied at the lower level by changing the selections made using the check boxes.

2. If the User Group only exists at this level in the hierarchy, the Permissions dialog box will initially have all check boxes blank. The Administrator must then assign Allow or Deny permissions.

Dates Planograms will be Published

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

> **Note:** the Publish Date operates purely on the date only and takes no account of the time of day. Publish Dates are stored in Date/Time format in the database, but the functionality only references the Date.

Another factor affecting the date at which at which planograms will be published is the Lead Time Tolerance (Hours) setting on the Output tab of the Planogram Publishing Configuration dialog box in the Administration Module.

> **Note:** this dialog box will only be accessible to users with access rights to the Administration Module.
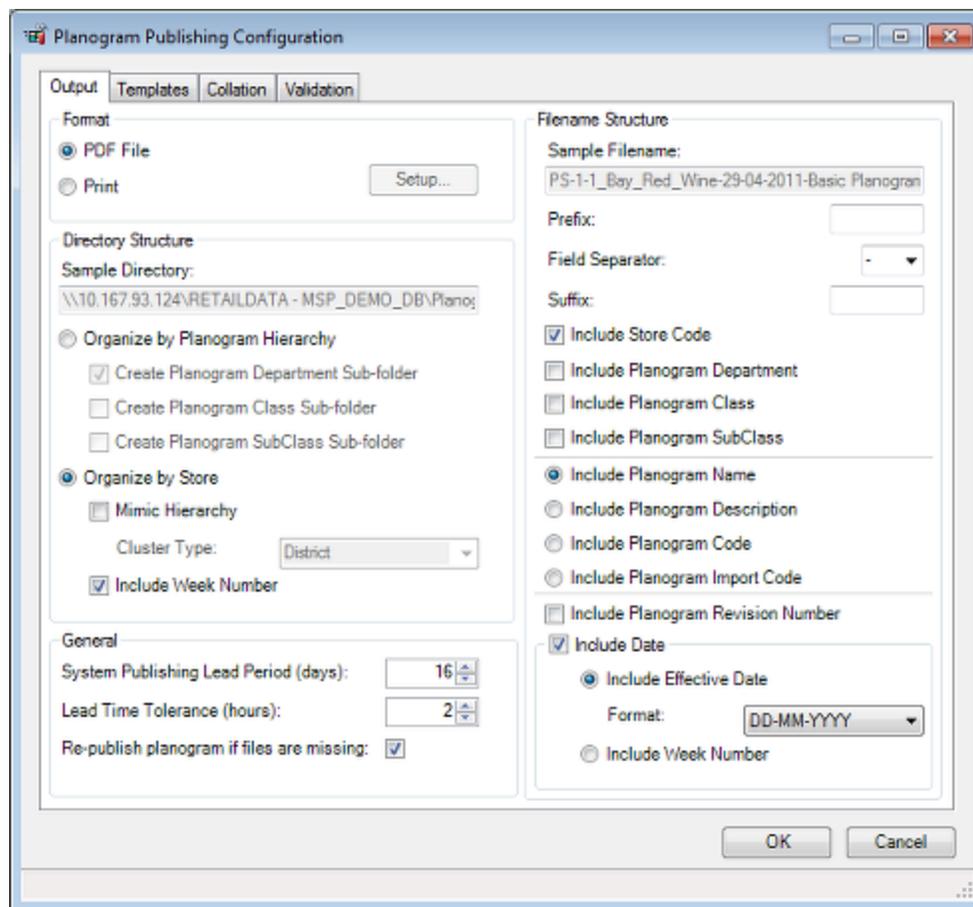
> **Note**: For the Master Planogram functionality to work, the output format must be set to **Organize by Store**.

Batch processes can be set to start at any time of the day. For example, the batch process might initiate at 8 p.m. (20.00 hrs) in the evening to allow the maximum number of batch processes to be run before users come in for work again the following morning. However, the Publish date for the floor plan might be set for when the following day begins at midnight. The Lead Time Tolerance (Hours) setting allows for this.

For example, if batch process is run on the 2nd June at 20.00 hrs in the evening and has no lead time tolerance, a planogram that has a Publish Date of 3rd June would be ignored for publishing purposes by this run of the batch process. If however, the Lead Time Tolerance (Hours) setting is set to 5 hours, this will be added onto the Date and Time for the batch process and cause the batch process to operate as if it were running at 01.00 hrs in the morning of 3rd June. All planograms with a Publish Date of 3rd June would then be published.

Criteria for Publishing Planograms

There are two criteria for publishing planograms:

1. **Publish Date has been exceeded**

If the Publish Date set in the Details Tab of the Planogram Design dialog box in Merchandiser exceeds the current date (taking into account the Lead Time Tolerance (Hours) setting in the Planogram configuration dialog box in the Administration module), 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.
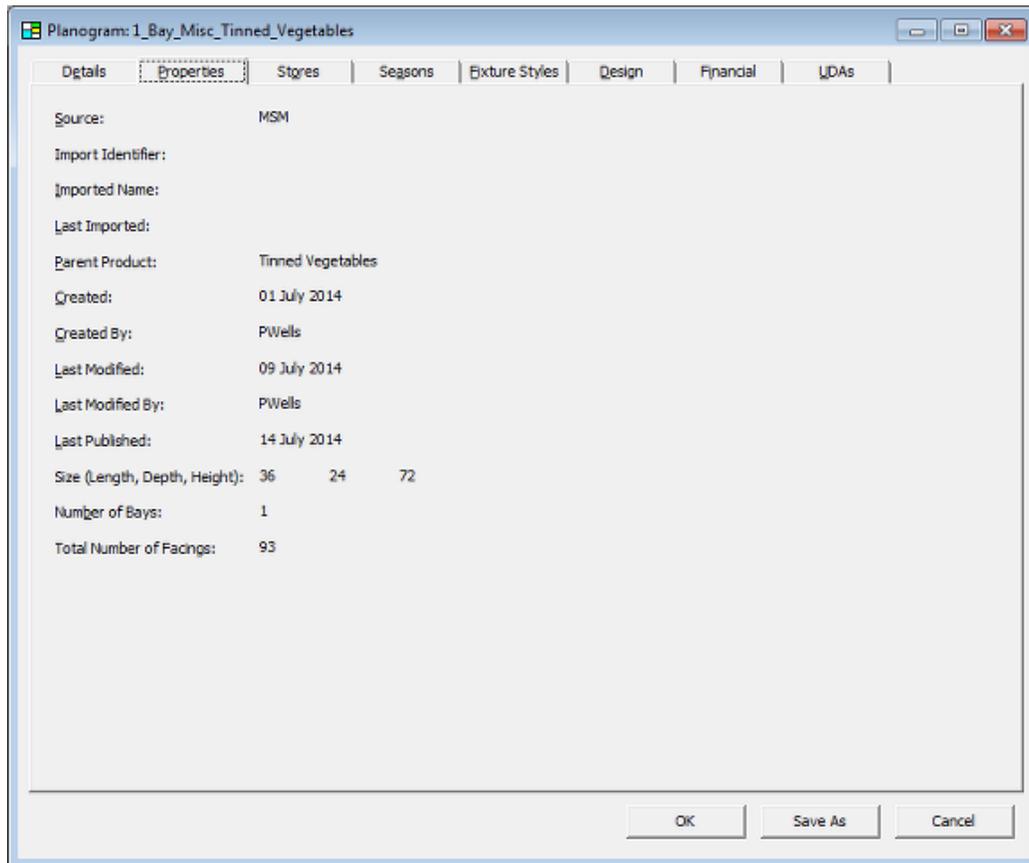
> **Note**: Planograms may also be republished if the Republish planogram if files are missing option has been checked in the Planogram Publishing Configuration dialog box.

Master Planograms

Master planograms act as placeholders in floor plans - see the detailed section on master planograms in the section on Merchandise. Because a master planogram acts as a placeholder for individual planograms, there is no need to update the floor plan every time an individual planogram is changed. Instead, when the planogram is published, the functionality will substitute the individual planogram for the master planogram present in the floor plan.

Locations Planograms will Be Published To

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

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

This dialog box allows Administrators to specify the directory structure, file format and file name that will be used when planogram designs are published. The starting point for the location planograms will be published to in electronic form can be seen in the details for the Planogram Publish system directory specified in the Directories Tab of the Configuration module.
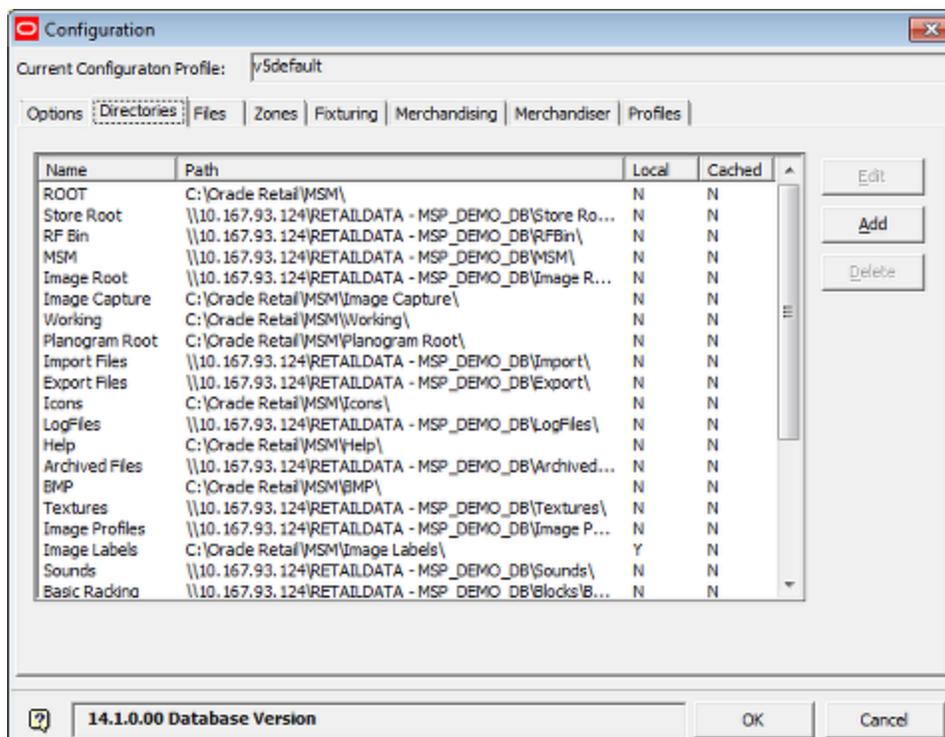
The Filtering Tab

The Filtering tab enables the user to select the Planograms to publish. 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.

Planograms may be selected for printing by ticking the appropriate check box. The report to be used can be selected on the Template tab, while the order in which the planograms will print is specified on the Collation tab.

Master Planograms

If master planograms are in a floor plan, these should map to individual planograms. The individual planogram that will print will be the one where the floor plan date is set to between the planograms Effective and Expiry dates.

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 '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.

Option	Effect
Select All	This will select (but not check) all rows of data.
Clear All	This will deselect (but not uncheck) all rows of data.
Check Selected	This will check all rows of selected data.
Uncheck Selected	This will deselect all rows of selected data.
Check All	This will select all rows of data.
Uncheck All	This will deselect all rows of data.

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

Filters

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. If a filter is active it will be shown by the symbol on the column header.

They are used as follows:

Option	Description
Show All	This option shows all results. It can be used to remove the effects of any applied filters.
Custom Filter	This option allows users to set filters using Boolean logic. The options are: ▪ Equal to: will return rows that are an exact match for the entered text. ▪ Not Equal to: will return rows that do not match the text string ▪ Contains: will return rows where part of the data matches the text string. (Uses implied wild cards). ▪ Does not contain: will return rows where no part of the data matches the text string. (Uses implied wild cards). ▪ Begins with: will return rows where the text string is an exact match for the start of the data. ▪ Ends with: will return rows where the text string is an exact match for the end of the data. ▪ Does not begin with: will return rows where the text string is not an exact match for the start of the data. ▪ Does not end with: will return rows where the text string is not an exact match for the end of the data.
Blanks	Column will be filtered to only show rows with null values.

Option	Description
Non-Blanks	Column will be filtered to only show rows containing a value
Planogram list	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.

Use Associated Planogram document

This option publishes the planogram design information using a pre-generated report using one of the following file formats: BMP, GIF, JPEG, JPG, PDF, PNG, TIFF or WMF. This report will be imported when a planogram is imported using Oracle Data Integrator (ODI). The Associated Document (if available) is specified in the Associated Document text box in the Details tab of the Planogram Design dialog box in the Merchandiser module.

There are two options (selected using the radio button) for when the pre-generated report is missing.

- Write an error to the Publish POG Log table. Information in this table can be read by means of a BI Publisher report or similar.
- Use the default Report Designer template.

If Master Planograms are in use and individual planograms are using Associated documents, it is important that the option chosen allows the user to determine if a master planogram has been published. If it has, this means there was no link between a master planogram and a specific individual planogram. This is a problem that needs to be corrected as no instructions will be sent to the replenishment system for new products. Neither will the store receive an executable planogram design.

> **Note**: For full information on database tables, see the *Oracle Retail Macro Space Planning Data Model*.

Use Template

This option allows the user to define the way the template from the Report Designer module is selected. There are two options (selected using the radio button):

- Use Planograms preferred template, if defined - this option is specified in the Preferred Template drop down list in the Details tab of the Planogram Design dialog box in the Merchandiser module.

- Use Selected Template from List Below - this option can be set by checking items in the list of available templates. One or more templates may be selected. If multiple templates are selected, the name of the template will be added to the file name in brackets - for example 1_Bay_Mixed_Fizzy_Drinks (Basic Planogram Report).pdf

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

> **Note:** The last 10 text 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. At least one collation option must be selected, or the tab will show as having an error. The order of the collation options can be modified highlighting them and then using the **Up** or **Down** arrows.

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

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

- Store Number is the Store Code in the Store dialog box in Store Manager.
- Store Name is the Store Name in the Store dialog box in Store Manager.

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

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

- Bay Group is the Name assigned to a number of fixtures sharing a common characteristic. It is assigned in the Name field of the Bay Numbering dialog box in the Planner module.

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

The 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.
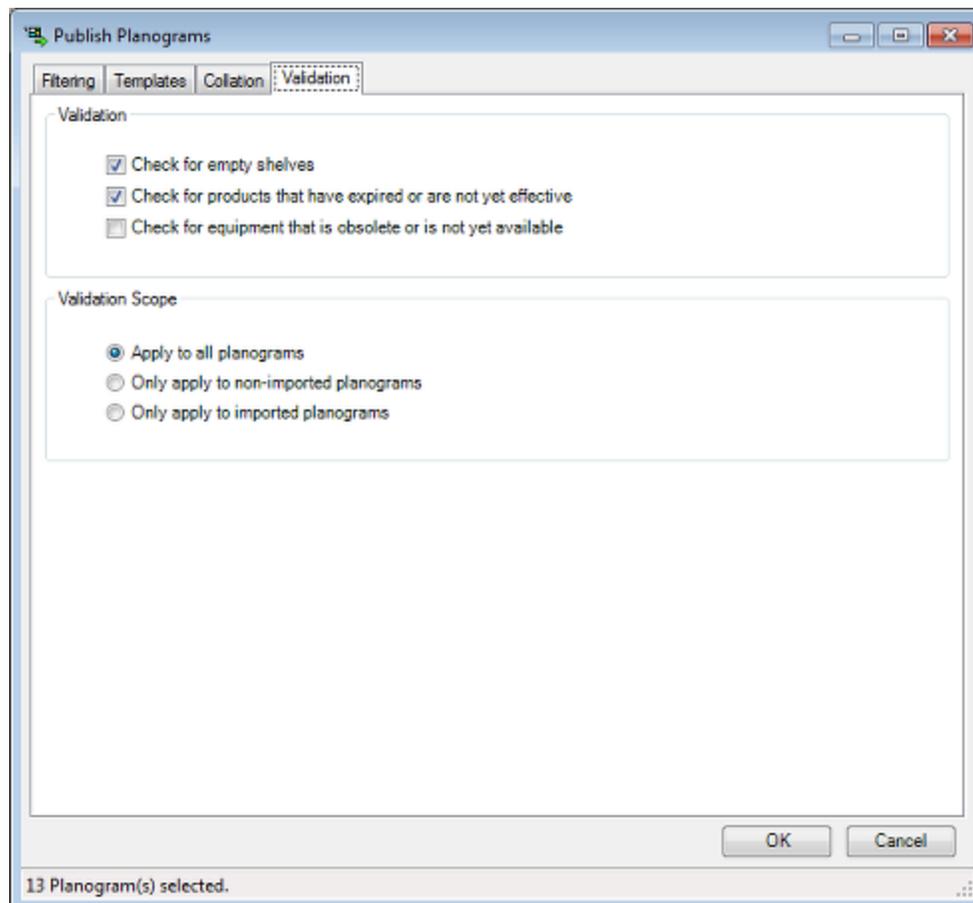
- Check for empty shelves - this option will check the parent fixture and associated shelf objects. It will raise an error report if:
  - The fixture and associated shelf objects can be populated with product placeholders, but no product placeholder has been placed.
  - The fixture and associated shelf objects can be populated with display styles, but no display styles have been placed.
- Check for products that have expired or are not yet effective - this option will check all products in the planogram against the effective date of the planogram. It will raise an error report if:
  - The Product Effective Date is after the Planogram Effective Date - i.e. the product is not yet available to place in the planogram.
  - The Product Expiry Date is before the Planogram Effective Date - i.e. the product will expire while the planogram is still in service.

The check will be ignored if the product effective or expiry date is undefined.

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

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

- Check for equipment that is obsolete or not yet available - this option will check all equipment in the planogram against the effective date of the planogram. It will raise an error report if:
  - The Equipment Effective Date is after the Planogram Effective Date - i.e. the equipment is not yet available for the planogram.
  - The Equipment Expiry Date is before the Planogram Effective Date - i.e. the equipment will be taken out of service while the planogram is still in use.

The check will be ignored if the equipment effective or expiry date is undefined. The Equipment Effective and Expiry dates are set in the Category tab of the Block Details dialog box in Fixture Studio.

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

The application will automatically distinguish between imported and manually created planograms by means of the information held in the Macro Space Planning database.

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 (output it in electronic or hard copy form with permanent changes) should use the Immediate Planogram Publishing option from the File menu.

> **Note:** The default settings for this dialog box are derived from settings in the Planogram Publishing Configuration dialog box in the Administration module.
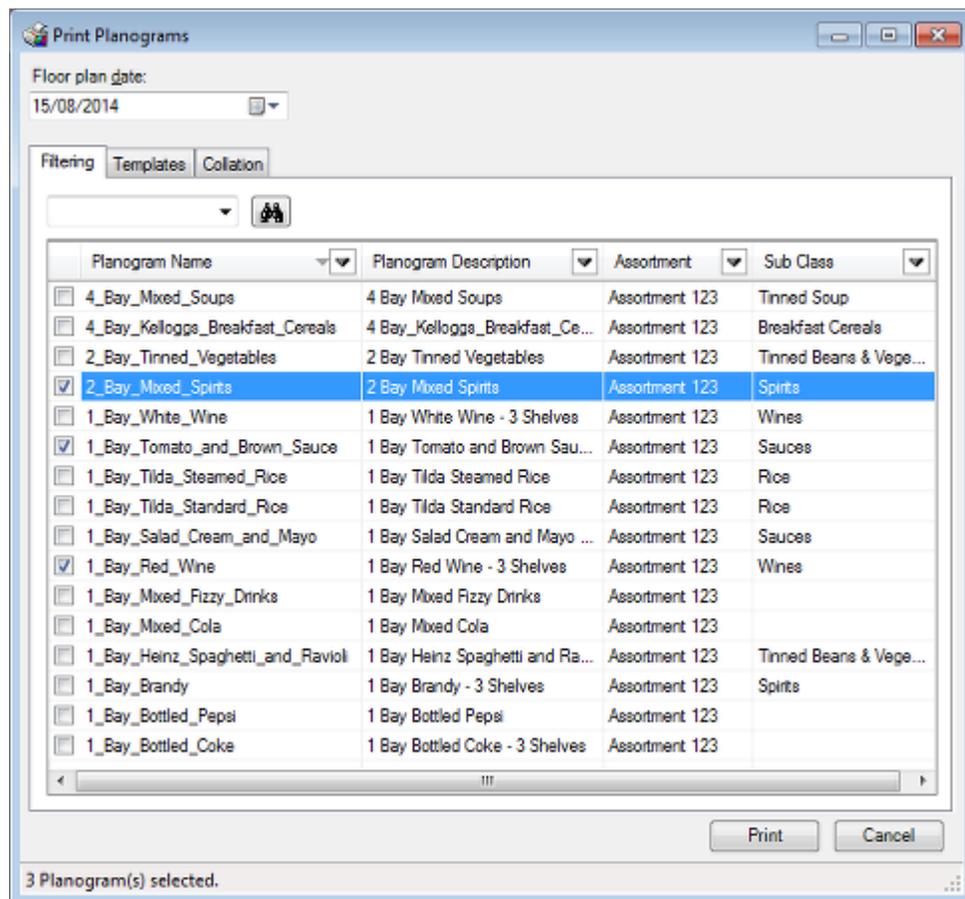
The basic method of operation is as follows:
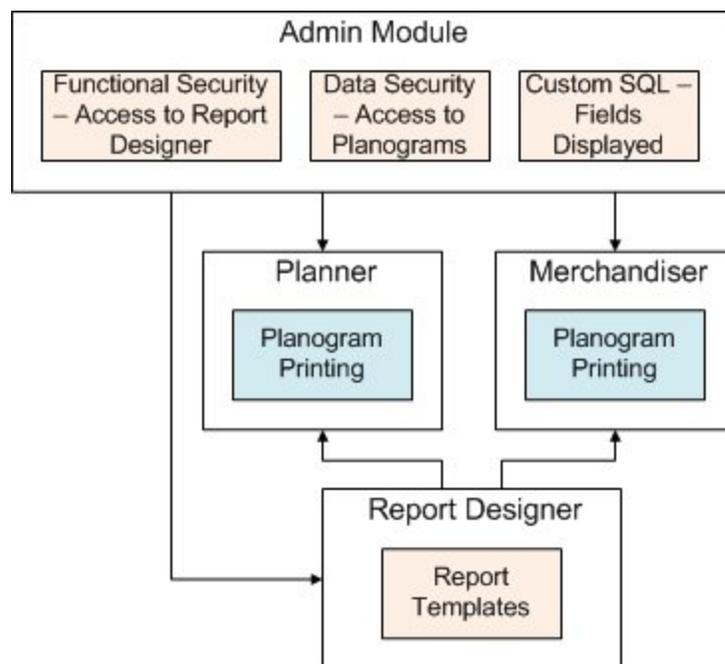
1. **Administration Module**

   Within the Administration Module:

   ▪ The planogram users have permissions to print are assigned in the Data Security dialog box - Planograms Tab.

   ▪ The fields that display in the Filtering Tab of the Print Planograms dialog box are configured in the Custom SQL dialog box.

   ▪ Planograms can be printed using report templates specified in the Report Designer module. Permission to access this module is specified in the Functional Security dialog box.

   These settings determine what will appear in the Print Planograms dialog box (and the reports that will be available) when it is accessed in the Planner and Merchandiser modules.

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

2. **Planner Module**

   The Print Planograms dialog box may be accessed from the File Menu - a floor plan containing planograms must previously have been opened. Users with permissions to access the Planner module automatically have permission to use the functionality.

3. **Merchandiser Module**

   The Print Planograms dialog box may be accessed from the File > Print Menu - a floor plan containing planograms must previously have been opened. Users with permissions to access the Merchandiser module automatically have permission to use the functionality.

4. **Report Designer**

   The Report Designer module is used to design report templates that can be specified for use in the Print Planograms dialog box. Permissions to access this module are assigned in the Functional Security dialog box in the Administration module.

Master Planograms

Master planograms act as placeholders in floor plans - see the detailed section on master planograms in the section on Merchandise. Because a master planogram acts as a placeholder for individual planograms, there is no need to update the floor plan every time an individual planogram is changed. Instead, when the planogram is published, the functionality will substitute the individual planogram for the master planogram present in the floor plan.

Using Planogram Printing

The functionality is used as follows:

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

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

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

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

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

6. On clicking the Print button, the selected planogram reports will be printed on the default printer associated with the user's computer.

Accessing the 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 > Print option. Users with permissions to access the Planner module will automatically have permission to use the functionality.
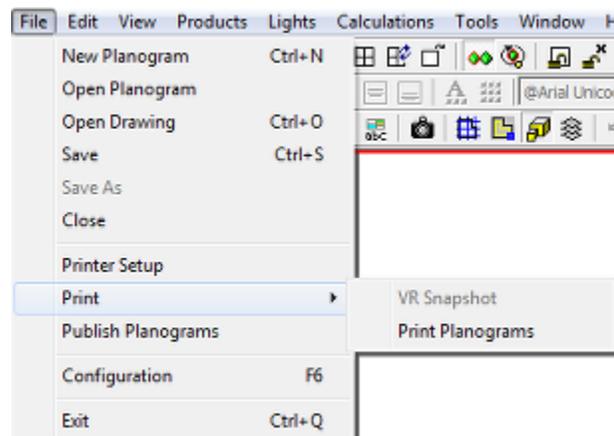
When the Print Planogram dialog box opens it will be populated with all planograms in the currently active floor plan. By default, they will not be selected. The columns that are displayed in the dialog box are configurable in the Custom SQL option available from the General Menu in the Administration module.

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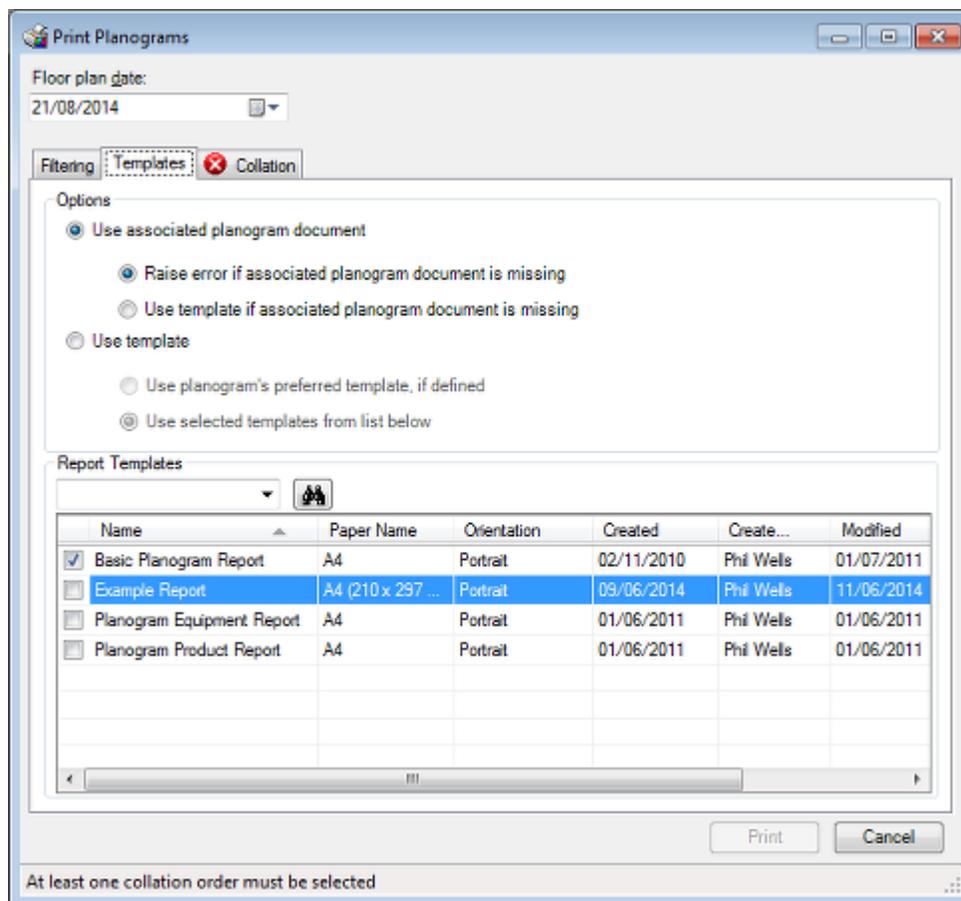
Users must correct the problems before the Print button will activate.

The 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.

Planograms may be selected for printing by ticking the appropriate check box. The report to be used can be selected on the Template tab, while the order in which the planograms will print is specified on the Collation tab.

Floor Plan Date

The Floor Plan Date is for use with the Master Planogram functionality. When master planograms are present, this date is used to determining which corresponding individual planogram to print. The initial date set depends on the floor plan status.

Status	Initially Set Date
Proposed	The date will be set to the floor plans active date. If this has not been set, it will be set to today's date.
Authorised	The date will be set to the floor plans effective date. If the floor plans effective date has not been set, it will be set to the active date. If neither date has been set, it will be set to today's date.
Published	The date will be set to the floor plans effective date. If the floor plans effective date has not been set, it will be set to the active date. If neither date has been set, it will be set to today's date.
Current	The date will be set to today's date.
Superseded (Historical)	The date will be set to the floor plans expiry date - the date it was replaced by a more recent floor plan.

It is possible to use the control to change the set date. If the effective and expiry date have been set, the date can only be varied between those limits. If these dates have not been set, these is no limit to that date can be set.

Floor Plan Date and Master Planograms

If master planograms are in a floor plan, these should map to individual planograms. The individual planogram that will print will be the one where the floor plan date is set to between the planograms Effective and Expiry dates.

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.

Option	Effect
Select All	This will select (but not check) all rows of data.
Clear All	This will deselect (but not uncheck) all rows of data.
Check Selected	This will check all rows of selected data.
Uncheck Selected	This will uncheck all rows of selected data.
Check All	This will check all rows of data.
Uncheck All	This will uncheck all rows of data.

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

Filters

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. If a filter is active it will be shown by the symbol on the column header.

They are used as follows:

Option	Description
Show All	This option shows all results. It can be used to remove the effects of any applied filters.
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.

Option	Description
Blanks	Column will be filtered to only show rows with null values.
Non-Blanks	Column will be filtered to only show rows containing a value
Planogram list	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.

Use Associated Planogram document

This option publishes the planogram design information using a pre-generated report using one of the following file formats: BMP, GIF, JPEG, JPG, PDF, PNG, TIFF or WMF. This report will be imported when a planogram is imported using Oracle Data Integrator (ODI). The Associated Document (if available) is specified in the Associated Document text box in the Details tab of the Planogram Design dialog box in the Merchandiser module.

There are two options (selected using the radio button) for when the pre-generated report is missing.

- Write an error to the AVTTB_PUBLISH_POG_LOG table. Information in this table can be read by means of a BI Publisher report or similar.
- Use the default Report Designer template.

If Master Planograms are in use and individual planograms are using Associated documents, it is important that the option chosen allows the user to ensure a master planogram will be been published if there is no link between a master planogram and a specific individual planogram. This helps identify a problem that needs to be corrected.

Use Template

This option allows the user to define the way the template from the Report Designer module is selected. There are two options (selected using the radio button):

- Use Planograms preferred template, if defined - this option is specified in the Preferred Template drop down list in the Details tab of the Planogram Design dialog box in the Merchandiser module.

- Use Selected Template from List Below - this option can be set by checking items in the list of available templates. One or more templates may be selected. If multiple templates are selected, the name of the template will be added to the file name in brackets - for example 1_Bay_Mixed_Fizzy_Drinks (Basic Planogram Report).pdf

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

> **Note:** the last 10 text 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 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 order of the collation options can be modified highlighting them and then using the **Up** or **Down** arrows.

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

- ▪ Region is a specific type of cluster set in the Cluster type drop down list in the Cluster dialog box in Store Manager.

- ▪ District is a specific type of cluster set in the Cluster type drop down list in the Cluster dialog box in Store Manager.

- ▪ Store Number is the Store Code in the Store dialog box in Store Manager.
- ▪ Store Name is the Store Name in the Store dialog box in Store Manager.

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

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

- Bay Group is the Name assigned to a number of fixtures sharing a common characteristic. It is assigned in the Name field of the Bay Numbering dialog box in the Planner module.

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

Zones in Merchandiser

Zones in Merchandiser

Overview of Zones

Zones are specified areas of floor within a store used for a defined purpose. Zones can only be added, edited and deleted in the Planner module. They can be viewed read only in Merchandiser. Zones serve a number of purposes including:

- Identifying equipment and merchandise for reporting purposes.
- Filtering merchandise to speed up placement.

Zones on the Object Browser
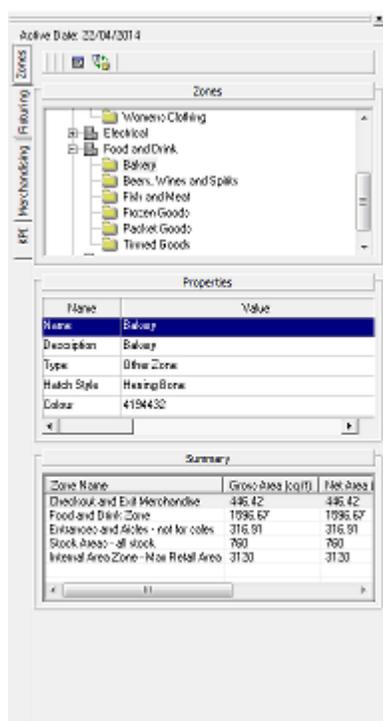
The Object Browser allows users to view information on zones, but not to modify them in any way. Users can see the zone hierarchy, information on specific zones and a summary of zones placed in the currently selected floor plan.

Selecting a Specific Zone

Users can go to a specific zone in the floor plan by selecting the Show zones form from the Directions and Product Text toolbar.

This will bring up the Zones to Show dialog box. Users can then highlight a zone in the hierarchy, bring up the right click menu and select **Go to Zone in VR**.
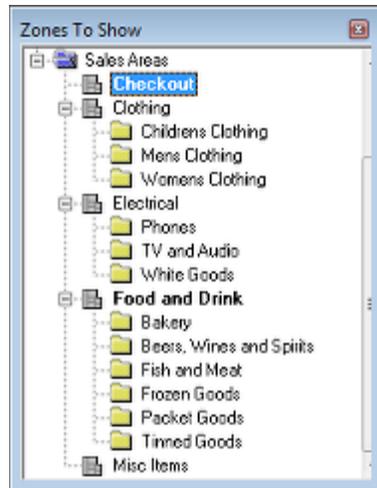
Express Loading

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 floor plan that are of interest to them and 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 - selecting it results the **Express Load dialog box** appearing when a floor plan is opened.
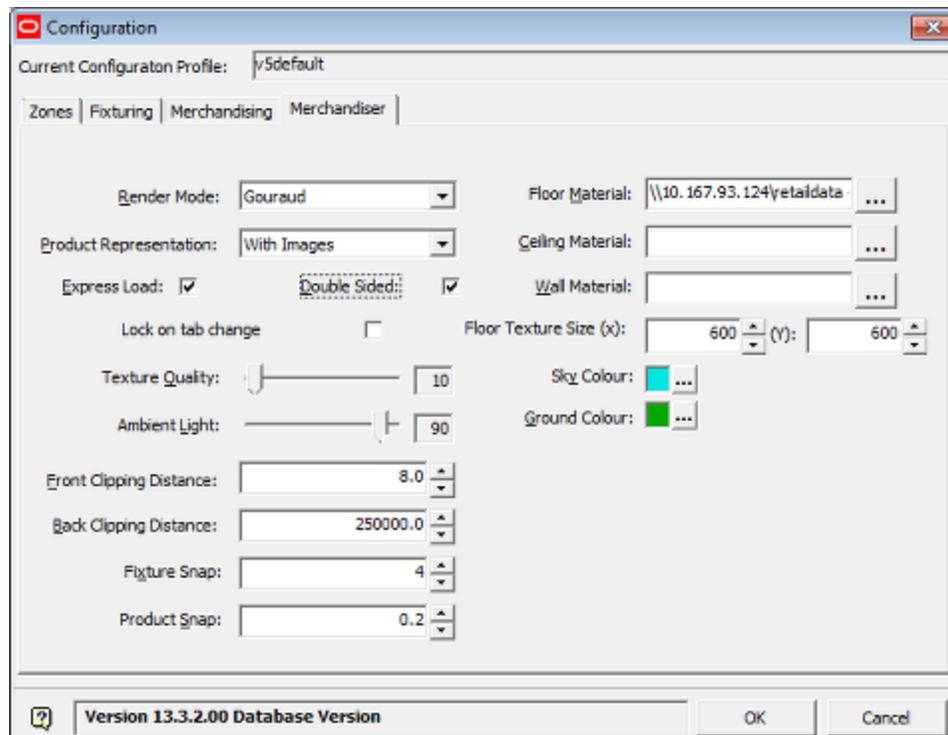
The **Express Load dialogue box** allows the user to select which Zones, Fixtures, Shelves and Products will be loaded.
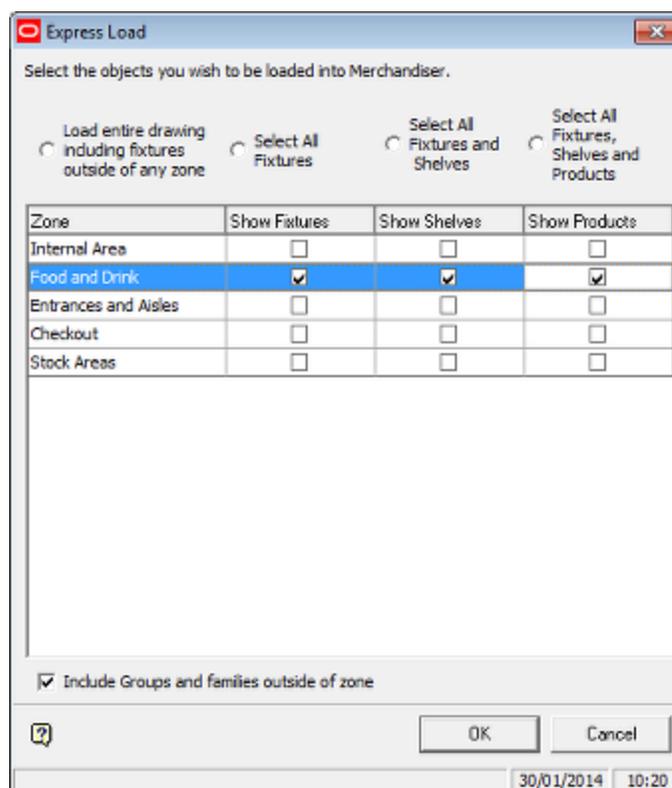
The four radio buttons at the top of the dialogue box provide a way to control what is loaded in all zones in the floor plan.

Option	Description
Load entire drawing	This results in every zone in the drawing being loaded. This will include any fixtures not included within a zone.
Select all Fixtures	This will select the fixtures in every zone in the floor plan.
Select all Fixtures and Shelves	This will select the fixtures and shelves in every zone in the floor plan.
Select all Fixtures, Shelves and Products	This will select the fixtures, shelves and products in every zone in the floor plan.

> **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 selecting or deselecting the respective boxes for Fixtures, shelves and Products for those zones.

Objects that are not at floor level (for example banners) are still associated with the zone they are within and will be displayed accordingly - i.e. the level of an object does not affect whether it is associated with a zone. The **Include Groups and Families outside of the Zone** checkbox (if selected) will result in all fixtures (and their associated shelves and products) belonging to a group or family that extend outside the selected zone or 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.

Zone Display and the Zone Grid

Zone Display

Zones show as colored backgrounds at floor level. These colors are set in the Administration module and cannot be varied by standard users. The display of Zones can be turned on or off by means of the Layers dialog box. This is accessed from the Directions and Product Text toolbar.

This will bring up the Layers dialog box.
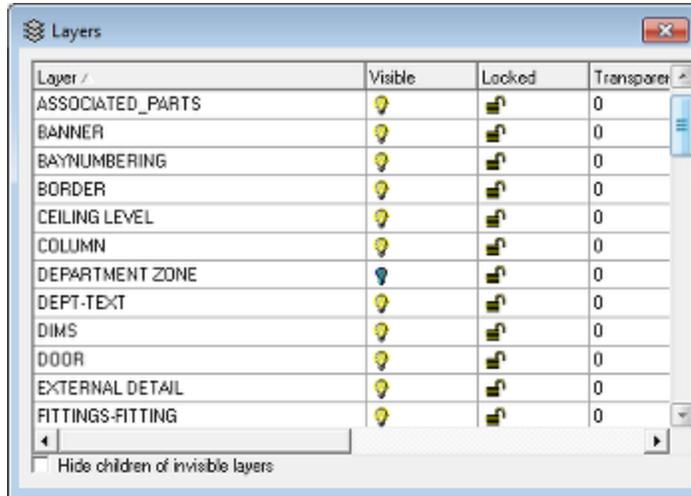
Zone display can then be turned on or off by clicking on the icon for any appropriate layers - for example Department zone.

The Zone Grid

The Zone Grid provides a way of locating fixtures when they are placed in a floor plan. It is activated by clicking the Grid Lines option on the directions and Product Text Toolbar.

This will bring up the Grid lines dialog box.
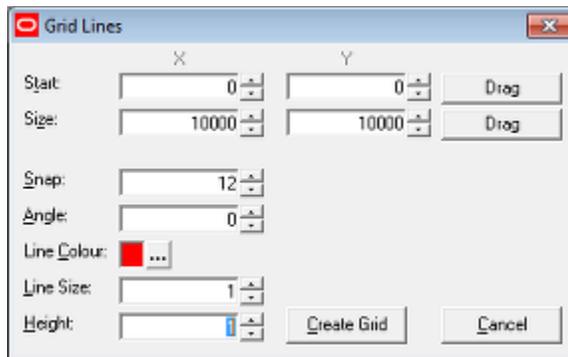
Option	Description
Start X and Y Coordinates	This pair of coordinates specifies the starting point of the grid.
Size X and Y coordinates	This pair of coordinates specifies the opposing corner or a rectangle and hence the size of the grid.
Snap	This specifies the size of the squares in the grid whose intersections the mouse cursor will snap to when placing equipment.
Angle	This specifies the default rotation of the grid
Line Color	This specifies the color the grid will be drawn.
Line Size	This specifies how thick the lines in the grid will be drawn.

Option	Description
Height	This specifies how high the lines will be drawn above floor level.

Clicking the Create Grid option will display the grid in the current floor plan - the settings are specific to that floor plan.
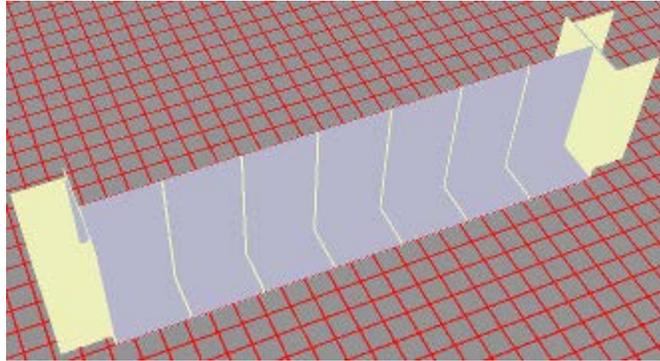
Grid display can then be turned on or off by turning the Grid lines layer on or off in the **Layers** dialog box (accessed from the Directions and Product Text toolbar.

Equipment in Merchandiser

Equipment on the Object Browser

Equipment (fixtures and gondolas) can be added, edited, moved and deleted in Merchandiser. Many of the controls are located on the Object Browser. (For more information see the section on the Object Browser)
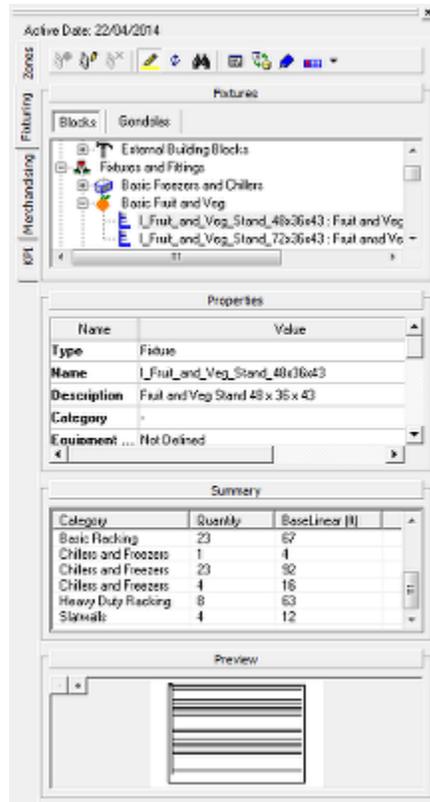
- Fixturing is selected by clicking the Fixturing tab.
- Users can then toggle between fixtures and gondolas by blocking on the Blocks or Gondolas sub-tabs.
- The toolbar allows users to select from a number of possible actions.
- A list of fixtures or gondolas is shown in the hierarchy.
- Details of any selected Fixture are shown in the Properties window. (No information is available for gondolas).
- The Summary window gives a list of equipment placed in the currently active floor plan.
- The Preview window will show a preview of any currently selected Fixture. (No information is available for gondolas).

Equipment in Fixture Studio

This section gives a high level overview of the creation and configuration of fixtures and gondolas in Fixture Studio. It is intended for users without access to Fixture Studio and gives a basic idea of the capabilities of that module. Many of the configuration options chosen govern hoe individual fixtures, fitting and shelves behave in Merchandiser. For more information see the *Oracle Retail Macro Space Management Fixture Studio User Guide.*

Fixture and Gondola Hierarchies

Fixture and Gondola Hierarchies are created and edited in Fixture Studio. They then appear in the Object Browser.

Fixtures, Fittings and Shelves

Fixtures, Fittings and **Shelves** are created and properties assigned in the Fixture Studio module. The process is as follows:

1. A raw AutoCAD drawing of the fixture, fitting or shelf is created in the Planner module.

2. The drawing is imported into Fixture Studio. This registers it in the Macro Space Planning database.

3. Macro Space Planning specific properties are then assigned in the Block Details dialog box. These properties control some of the behavior of the equipment in Merchandiser.
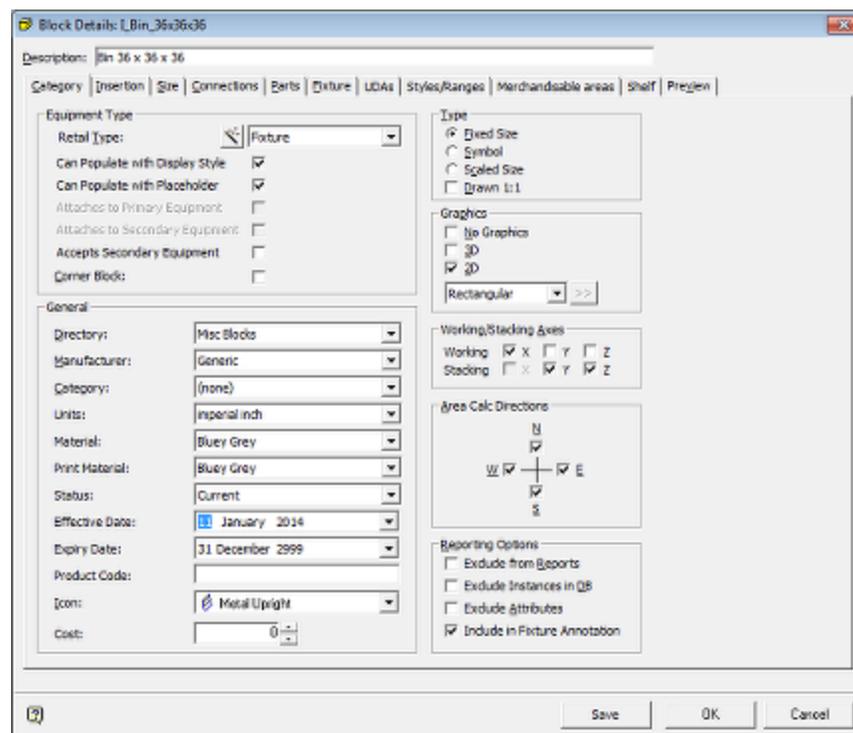
4. The AutoCAD block is used to create as 3DS file - this is what is displayed in Merchandiser.
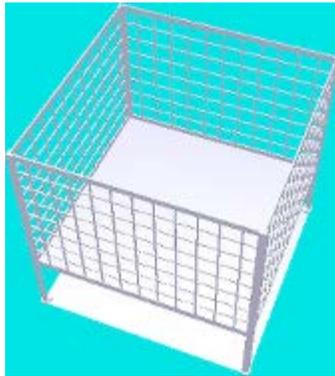
Defining Gondolas

Gondolas are created and configured in Fixture Studio using the Gondola Definition dialog box.
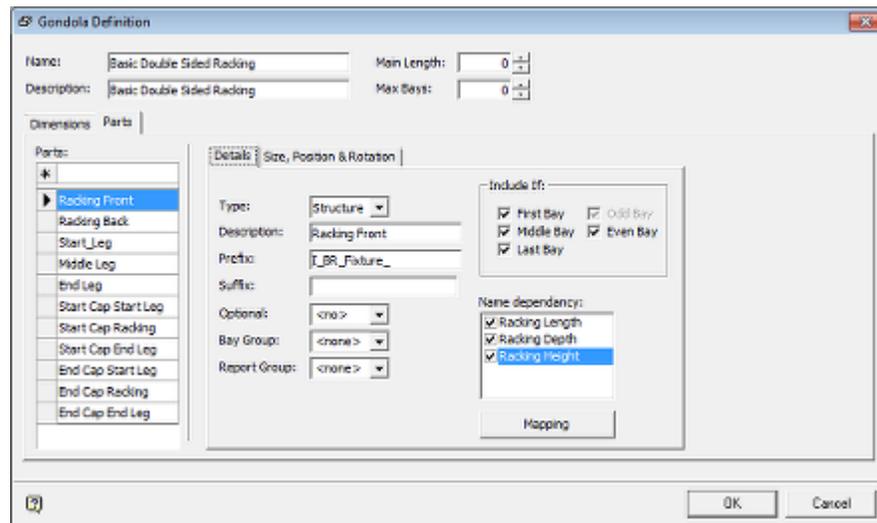
Settings in this dialog box affect the information that appears in the Add Gondolas dialog box. Examples that can be configured include the sizes displayed and whether end caps are optional or not.
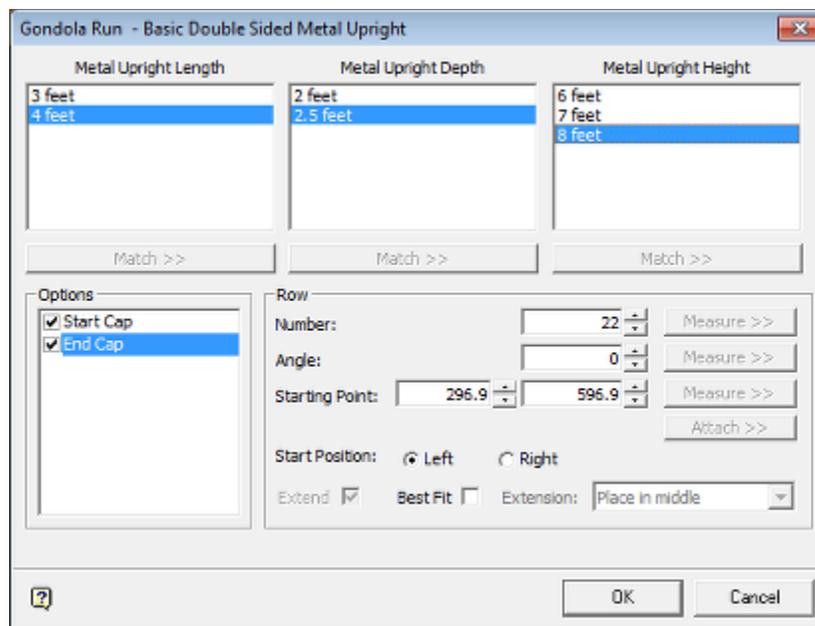
Factors Affecting the Use of Equipment in Merchandiser

The behavior of fixtures, fittings and shelf objects in Merchandiser is determined by setting in Fixture Studio. The definition of these types of objects is as follows:

Object	Definition	Examples
Fixture	A type of equipment that can hold merchandise They normally place on the floor. Less commonly fixtures are wall mounted or placed on top of fittings. An example of the latter would be a display cabinet on top of a checkout.	Metal uprights, slat walls.
Fitting	A type of equipment that does not hold merchandiser. Fittings can be floor mounted, wall mounted or be attached to another piece of equipment. An example of floor mounted fitting would be a support leg for a slat wall. An example of a fitting attached o another would be a divider for a shelf	Legs, entrance gates, dividers, grilles.
Shelf Object	This is any form of shelf or peg used to display merchandise. Shelf Objects must have a fixture for a parent object - they cannot have a fitting as a parent.	Open shelves, basket shelves, pegs, rods.

Note: The fixture hierarchy can also contain composites. These are collection of blocks designed to be exploded immediately after they have been placed. This enables (for example) a checkout, checkout cupboard, display unit, till and operators chair to be placed in a single operation and then exploded into individual items of equipment. Composites are intended for use in the Planner module and do not appear in the fixture hierarchy in Merchandiser.

The behavior of fixtures, fitting and shelves is affected by settings in the Block Details dialog box in Fixture Studio. If a user cannot complete an action in Merchandiser, it is possible that settings in Fixture Studio do not permit it. The basic settings are discussed below - see the *Oracle Retail Macro Space Management Fixture Studio User Guide* for full information.

Category Tab
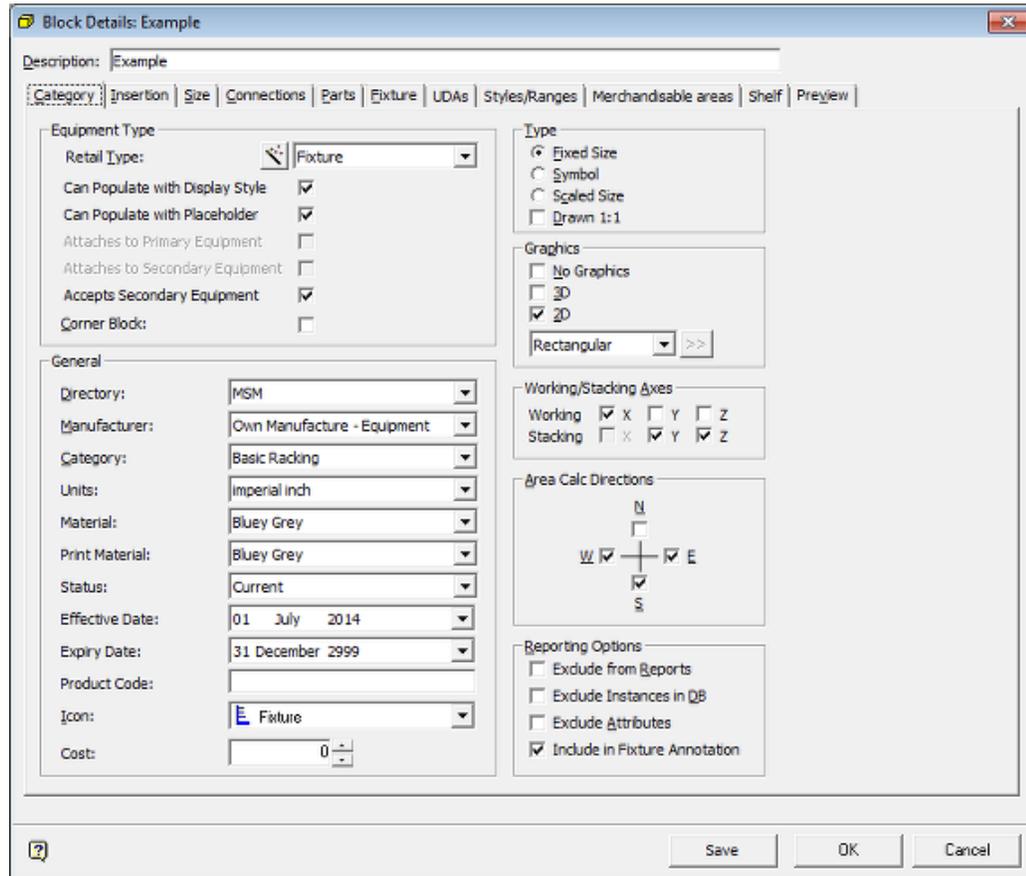
Option	Description
Retail Type	This affects the general behavior of the equipment. Common settings are Fixture, Fitting or Shelf.
Can Populate with Display Style	If this option is selected, a shelf or fixture can be populated with a display style. A display style can be used to represent one or more instances of a SKU, together with their position and dimensions.
Can Populate with Placeholder	If this option is selected, a shelf or fixture can be populated with a product placeholder. A placeholder indicated that a fixture or a shelf is populated with merchandise but gives no information on quantity or position.
Attaches to Primary Equipment	If this option is selected, the item of equipment can be attached to an object situated on the floor - typically a fixture or fitting. An example of secondary equipment would be a shelf placed on a fixture.
Attaches to	If this option is selected, the item of equipment attaches to secondary

Option	Description
Secondary Equipment	equipment (for example a shelf). An example of this for tertiary equipment would be a grille placed on a shelf.
Accepts Secondary Equipment	This option is used for primary equipment that has to accept secondary equipment such as shelves.
Working and Stacking Axes	These define how product is placed onto fixtures and shelf objects. Fixtures and shelf objects that do not have at least one working axis defined to accept product.

Working and Stacking Axes

When different products are placed onto a shelf object they have to be aligned with each other during placement. Single products can be placed as groups with defined numbers of facing, depth and stack.
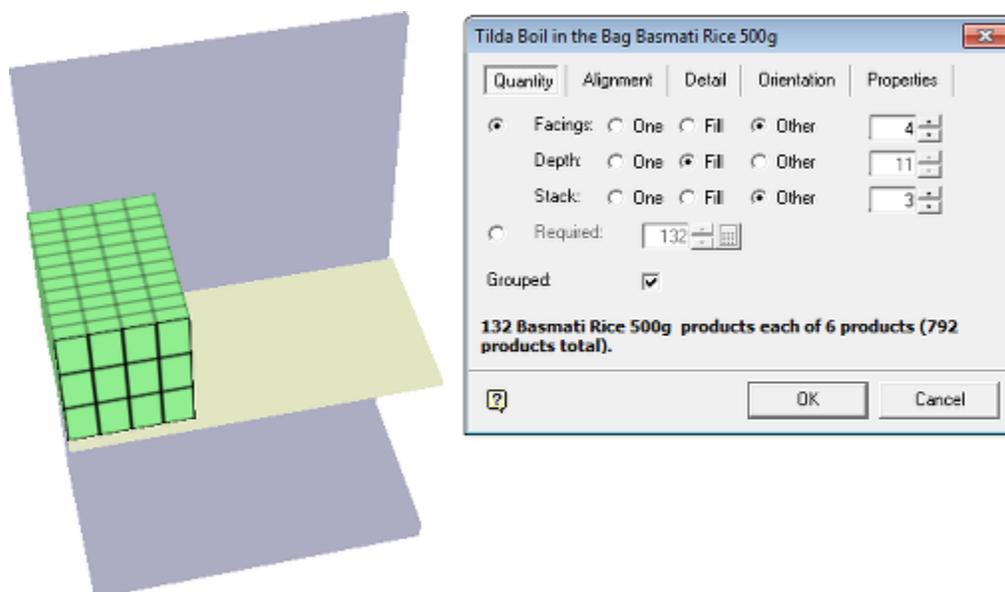
However, the way different products place next to each other needs to be defined. In this case different groups of products have been placed next to each other. The way different products are placed is based on the working and stacking axes defined.
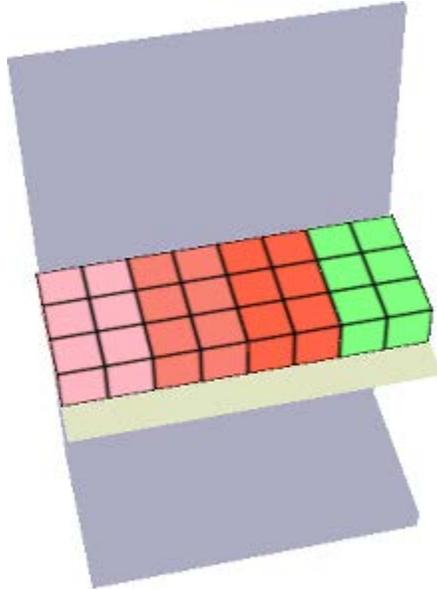
The working axis of an item of shelf equipment is the axis which product that is being sequentially placed is aligned along. The stacking axis (or axis's) is the additional direction(s) that products may be stacked on a fixture or shelf object.

- The X axis is from left to right.
- The Y axis is from front to back.
- The Z axis is used for vertical placement.
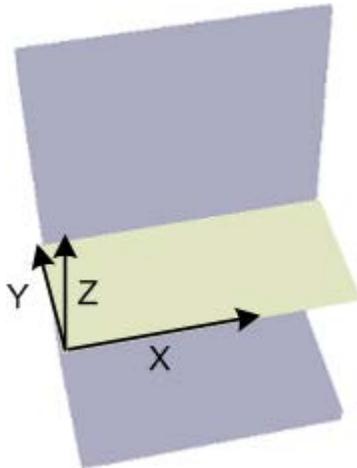
In the example below, the shelf is used to display products that are normally displayed one facing high and next to each other. An example would be packet goods like rice on closely spaced shelves. In this case only an X working axis is required.

Working Axis
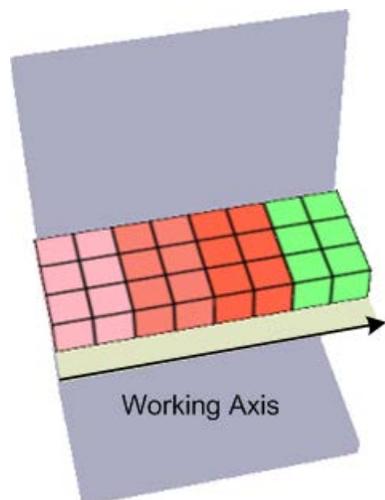
In the next example a product like boxed shirts is being displayed on a shelf. Here, each style of shirt will be presented in sequence along the shirt. Each style of shirt will come in different sizes such as small, medium and large. Accordingly, as well as an X working axis to allow different styles of shirts to be placed along the length of the shelf, it requires a Z stacking axis to enable different sizes of the same style to be stacked above each other.

Stacking
Axis Option
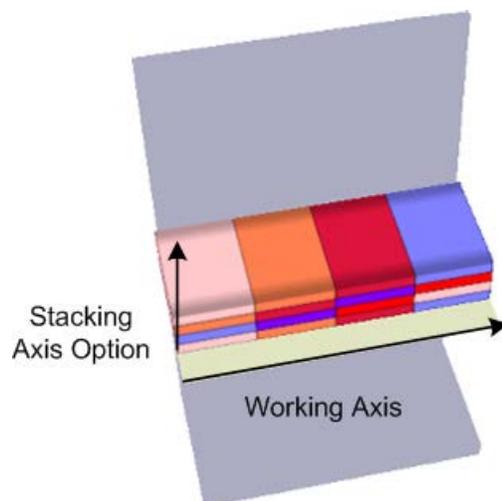
Working Axis

Different types of fixture or shelf object will require different working and stacking axes. For example a freezer unit might require X and Y working axes to arrange pizzas, while a peg would require a Y working axis to hand products.

Insertion Tab
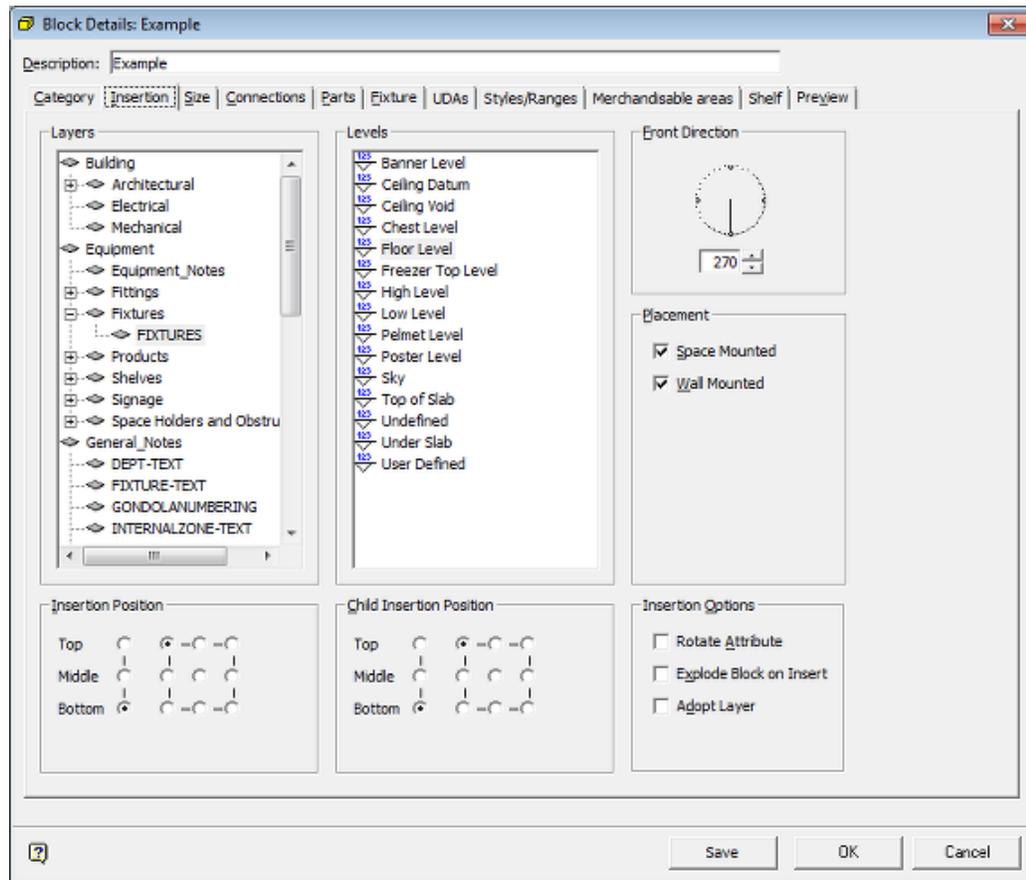
Option	Description
Layers	This determines what layer the item of equipment is placed on in the floor plan. Layers can be turned on or off to show or hide objects. Layers can also be lock to prevent objects on that layer being changed.
Levels	This determines the height at which the item of equipment is placed in the floor plan. For example some signage would be placed at Banner level.
Insertion Point	This is the datum used to place the item of equipment in the floor plan.
Child Insertion Point	This determines the location of the first display style product placed on the item of equipment.

Connections Tab
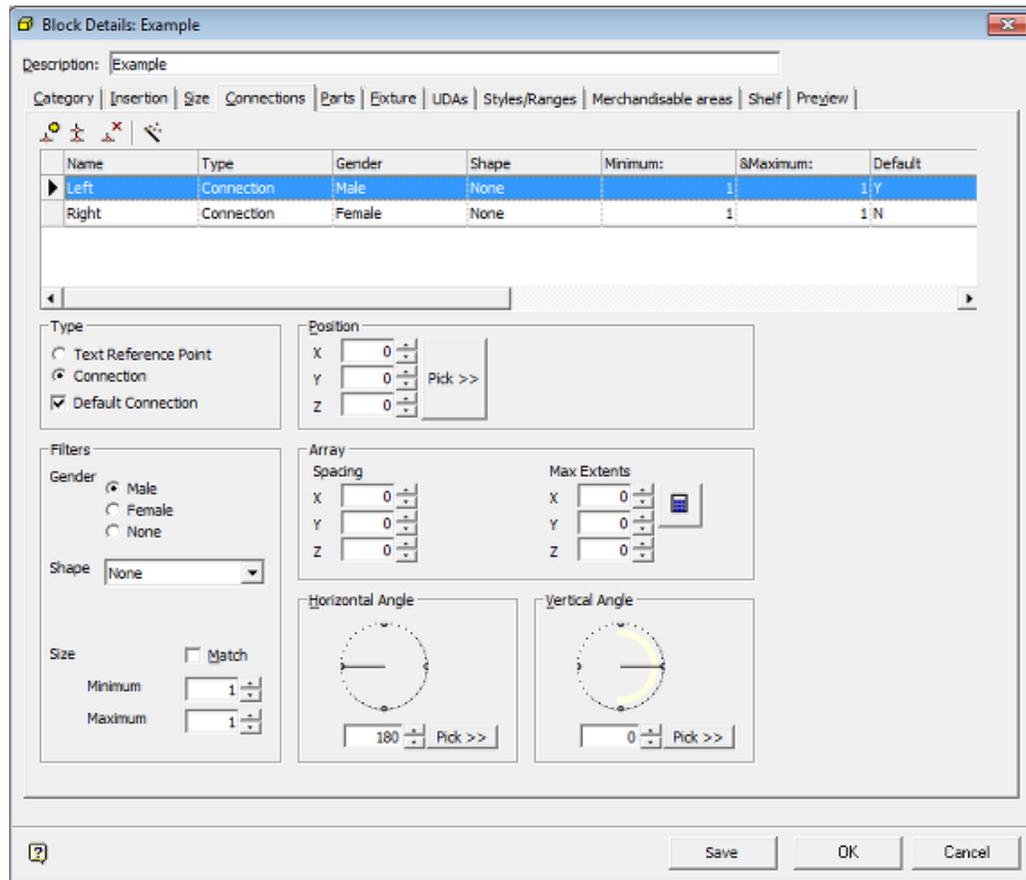
The connection tab is used to configure details of **Connection Points**. Connection points can be used to accurately align one item of equipment to another.

UDAs Tab
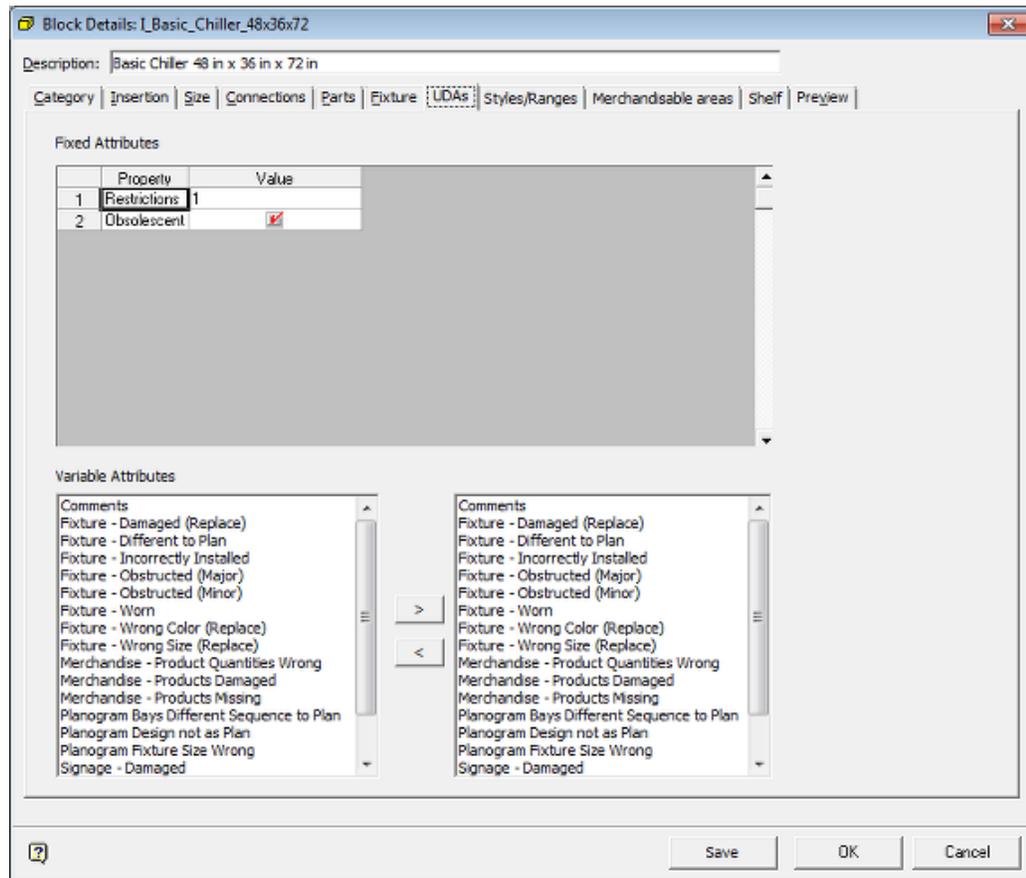
The UDAs tab enables someone configuring a fixture to determine the options that appear in the **Attributes dialog box** (accessed from the Attributes option on the toolbar of the Fixturing tab of the Object Browser. The data in the Attributes can then be edited to provide custom data for each instance of a fixture placed in a floor plan.
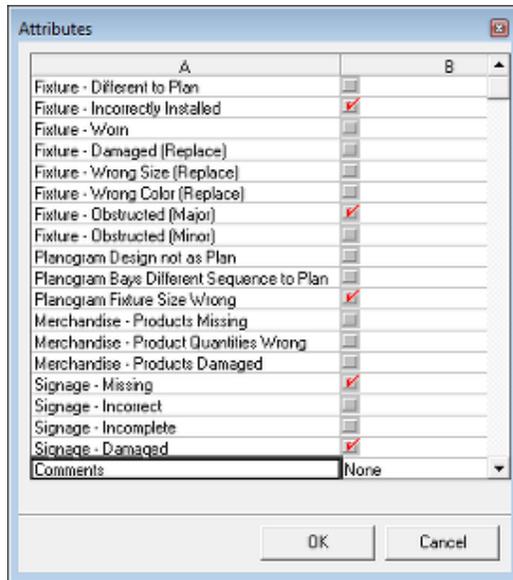
Styles and Ranges
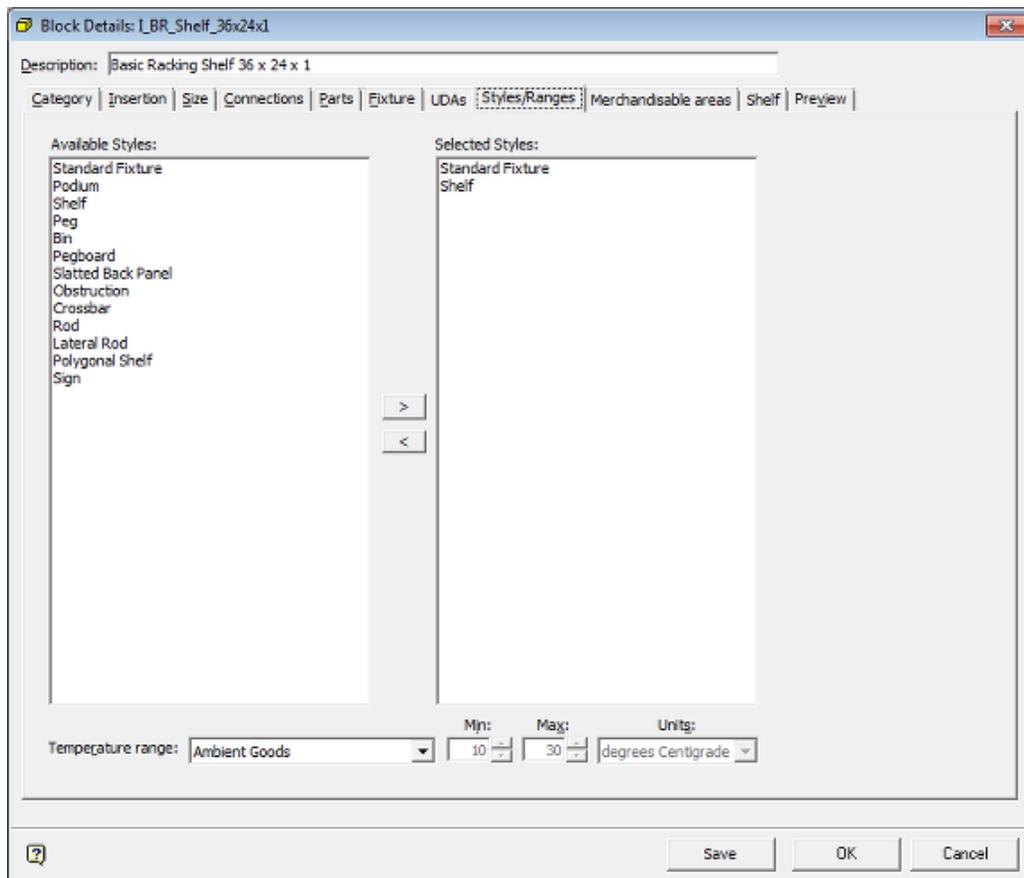
The Styles/Ranges tab enables someone configuring a fixture to assign a style and a temperature range to that fixture or shelf.

Parameter	Description
Style	Styles are used in several ways. They can be used to ensure that shelf objects s are compatible with the fixtures they are placed on. They can also be used to ensure that display style products are compatible with the fixtures or shelves they are to be placed on. For example styles can be used to ensure that hung styles only go on a peg.
Temperature Range	Temperature ranges are also used as filters to ensure equipment and products are only place on compatible objects.

Merchandisable Areas
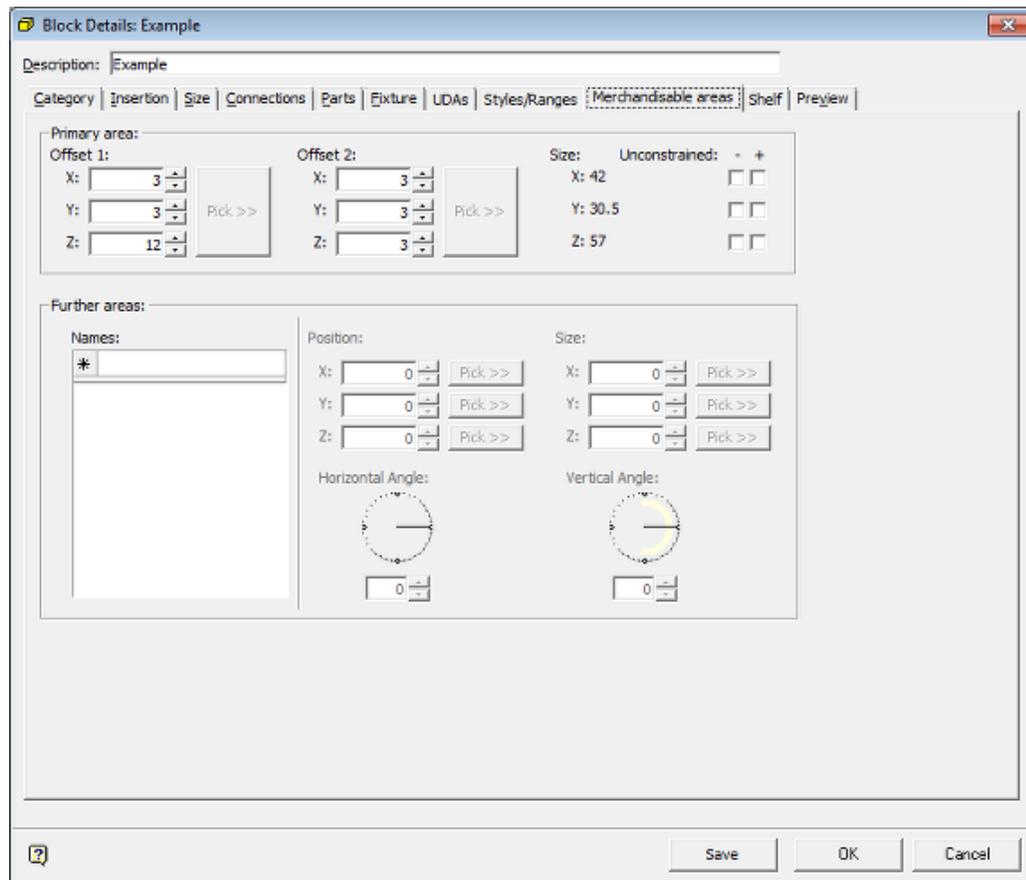
The Merchandisable Areas tab is used to specify the space that merchandise can occupy on a fixture or shelf. In the chiller unit on the left, the merchandisable volume is less than the overall dimensions of the fixture. In the shelf on the right, product can occupy the full area of the shelf and to a height constrained by the presence of a shelf above or the overall height of the fixture.
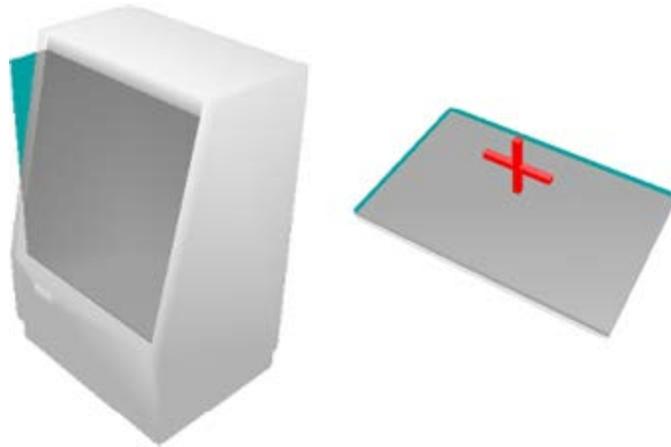
Fixture Annotation

Fixtures can be annotated in Merchandiser.
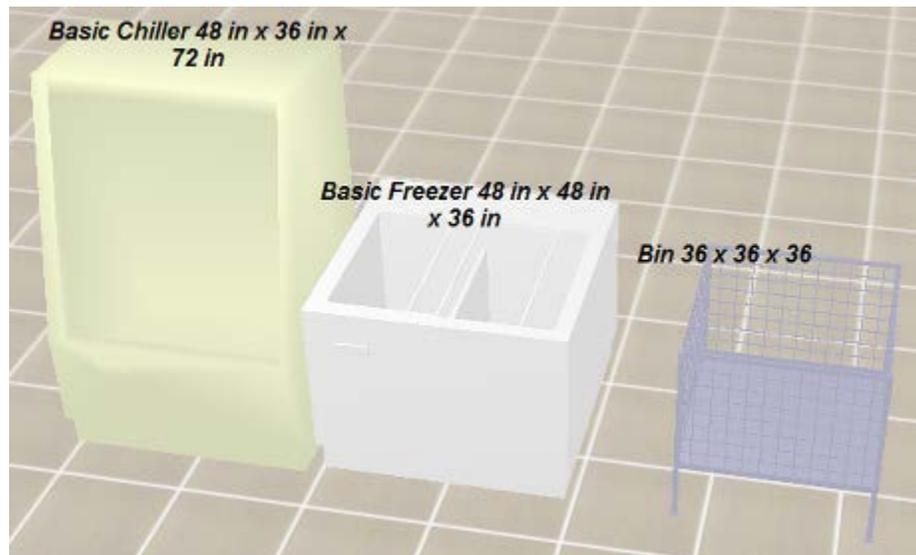
Configuring Fixture Annotation

Fixture annotation is configured by selecting the **Fixture Notation** option on the **View** menu. This will bring up the Fixture Notation dialog box.
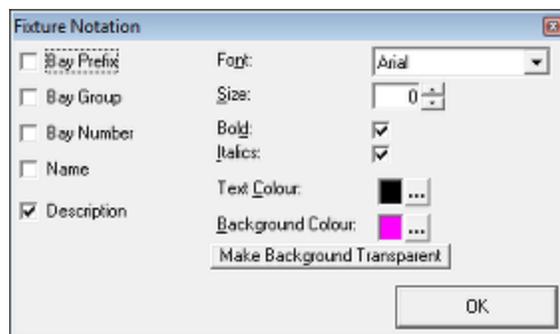
The check boxes on the left determine the information that is displayed. For the Bay Prefix, Bay Group and Bay Number options to display, Bay Numbering must first have been applied to the fixtures in the Planner module.

Option	Description
Bay Prefix	If selected, the Bay Prefix from the Bay Numbering set in Planner will be displayed.
Bay Group	If selected, the Bay Group from the Bay Numbering set in Planner will be displayed.
Bay Number	If selected, the Bay Number from the Bay Numbering set in Planner will be displayed.
Name	If selected, the fixture name assigned in Fixture Studio will be displayed.
Description	If selected, the fixture description assigned in Fixture Studio will be displayed.
Font	The drop down list can be used to set the font type for fixture annotation.
Size	The spin control can be used to set the font size for fixture annotation.
Bold	If selected, the font used will be bold.
Italics	If selected, the font used will be in italics.
Text Color	This option can be used to select the color of the text used for annotation.
Background Color	This option can be used to select the background color for the text used in annotation.
Make Background Color Transparent	Clicking this button will set the background to the color specified in the **DEFAULT_TRANSPARENCY_COLOUR** system variable set in the System Variables dialog box in the Administration module. This color will not be displayed in Merchandiser, making the background transparent.

Changes in the appearance of the annotation can be seen in the floor plan by clicking **OK**. When the appearance of the text is satisfactory then close the Fixture Notation dialog box by clicking the 'X' in the upper right corner.

Controlling Display of Fixture Annotation in the Floor Plan

Display of Fixture Annotation in the floor plan is controlled by the **2D Label Distance** slider control in the **View** toolbar. If this is reduced to a small value the fixture annotation will be hidden from view. Increase it and the fixture annotation will reappear.

Fixtures

Adding Fixtures

Fixtures are placed in the Merchandiser module by selecting a fixture from the Object Browser and dragging and dropping into the floor plan.
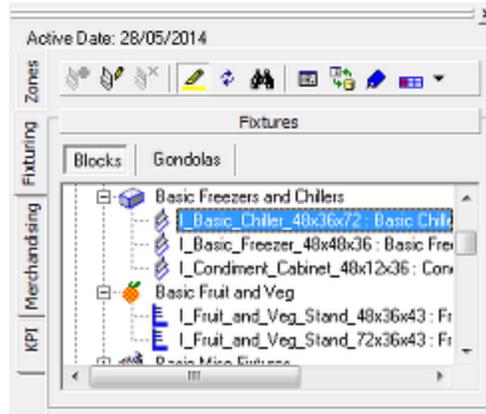
The fixture will then place in the floor plan.

Editing and Deleting Fixtures

Editing Fixtures

To edit a fixture, select it and right click to bring up the right click menu. Select the **Edit** option from the menu. This will bring up the Edit Fixture dialog box.
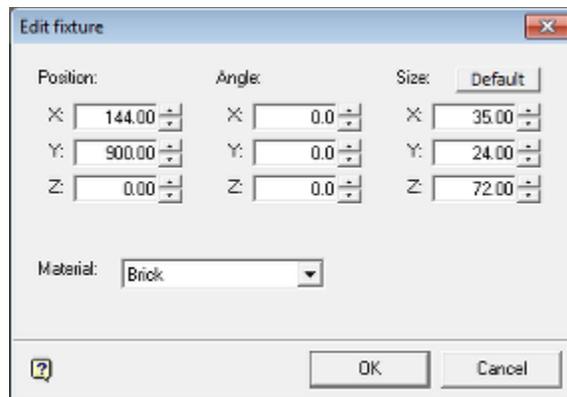
Position

These spin controls enable the user to adjust the position of the fixture within the floor plan.

Angle

These spin controls enable the user to modify the angle at which the fixture is in the floor plan.

Size

These spin controls enable the user to change the size of the fixture. Hitting the **Default** button returns the fixture to its specified dimensions.

> **Note**: Changing the size of the fixture is not recommended if a bill of materials is to be produced from the floor plan - it could render it inaccurate.

Material

The options in the Material drop down list enable the user to change the displayed color of the fixture from its default color.

Making the Changes

Clicking **OK** will make the specified changes to the fixture.

Deleting Fixtures

A fixture can be deleted by turning Grouping **Off**, selecting the specific fixture and clicking **Delete**. It will be deleted without further confirmation.

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Gondolas

Placing a Gondola

Gondolas are pre-defined arrangements of fixtures and fittings. This enables long runs of fixtures to be put down quickly, making it easy to lay out or modify equipment in a floor plan.
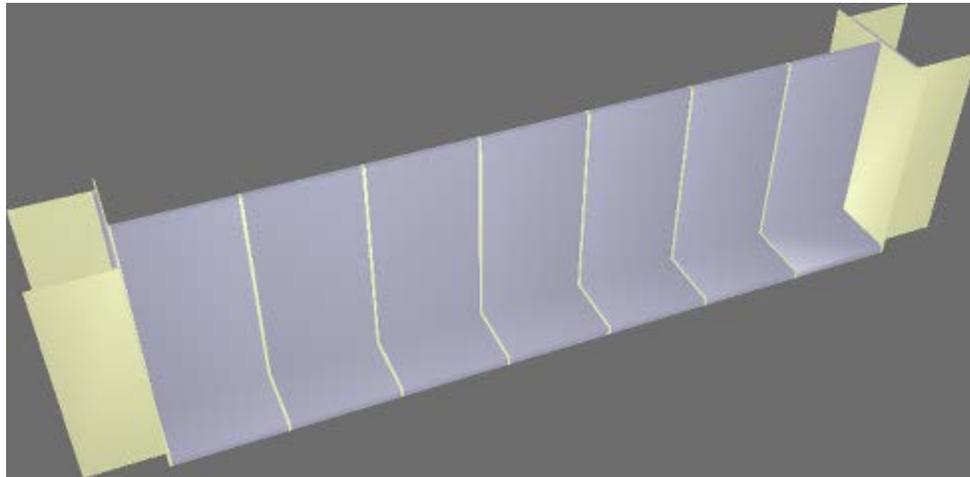
The above example shows a double sided gondola with end caps as placed in merchandiser.

> **Note**: Gondolas can be added in both the Planner and Merchandiser. Most users add them in the Planner module as it is easier to achieve accurate placement.

Fixture Studio

Gondolas are configured in the Fixture Studio Module in the Gondola Definitions dialog box. This enables all details of the gondola to be configured including which options will appear in the Add Gondola dialog box in the Planner and Merchandiser modules.
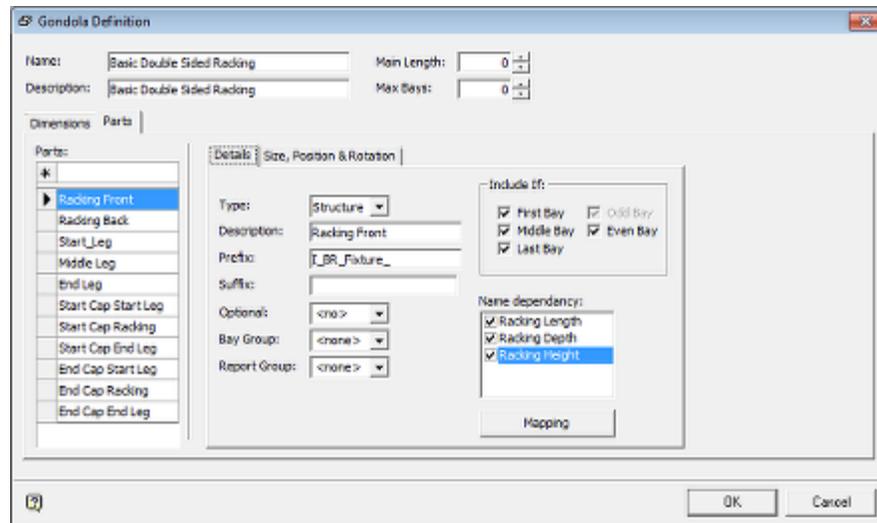
Placing a Gondola

Gondolas are placed in the Merchandiser module by selecting a Gondola from the Object Browser and dragging and dropping into the floor plan.
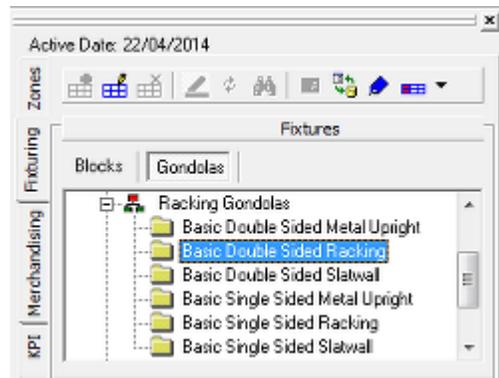
After being invited to select a start position, the Add Gondola dialog box will appear. Some options will be grayed out because they are only available in the Planner module.
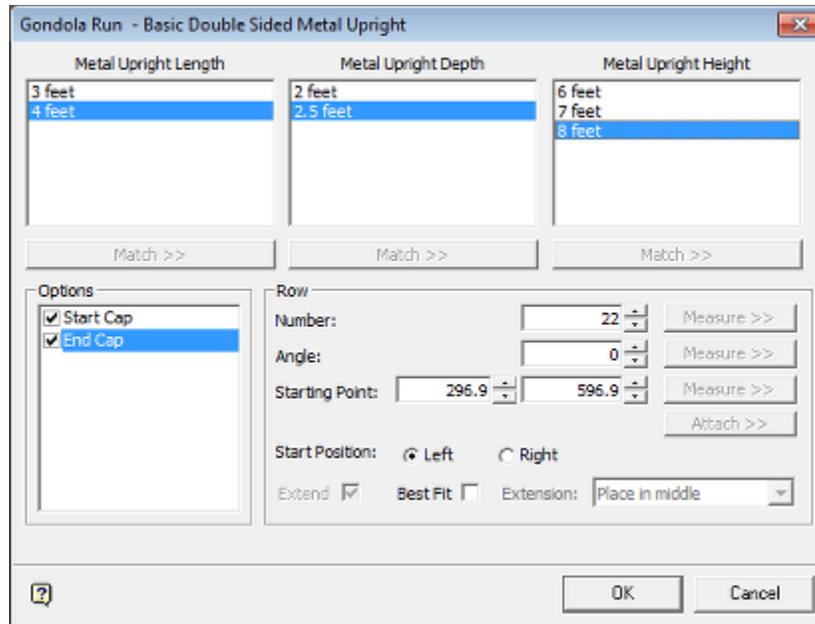
- Number allows the user to draw a line in the floor plan. This specifies the length of the gondola and which end of the line the first bay of the gondola will be drawn at.
- Starting Point enables the user to specify point in the drawing which will be the origin from where the gondola will be drawn. This is specified in Cartesian coordinates from the origin (0,0) of the floor plan.
- Start Position (left or right) specifies whether the first bay of gondola is at the left end or right end of the gondola run.
- Extend or Best Fit determines whether the number of bays drawn will fit entirely inside the line or partially extend outside of the line.

Make the required selections, click **OK** and the gondola will be placed.

Problems with Gondola Placement

For a gondola to draw correctly, the block used to draw it must have been registered in Fixture Studio. If the block does not exist a warning will be generated.
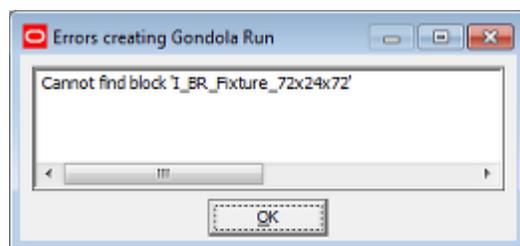
A common reason for this problem is that the combination of dimensions chosen in the Add Gondola dialog box does not correspond to an existing block. This problem can be addressed by looking at how the gondola has been configured in Fixture Studio.

Editing and Deleting Gondolas

Grouping

Once gondolas are placed, they effectively become a collection of associated fixtures. The behavior of a gondola for editing is determined by whether grouping is on or off. This is set using the Grouping option on the status bar. If grouping is on, selecting a single fixture on the gondola will automatically select all fixtures. If grouping is off, individual fixtures in the gondola can be selected.
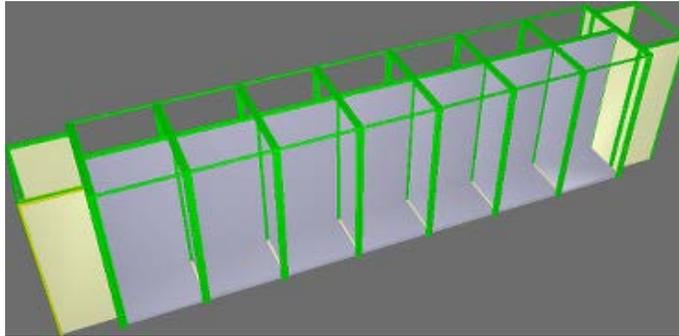
This screen shot shows a gondola selected with Grouping **On**. The selection frames are green.
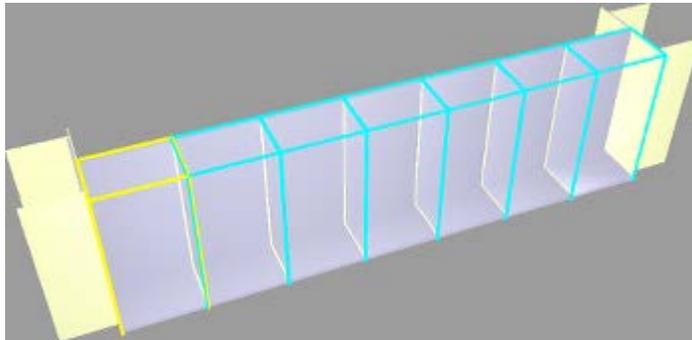
This screen shot shows individual fixtures selected in a gondola with Grouping **Off**. The selection frames are cyan and yellow.

Moving Gondolas

Once selected, gondolas can be moved in one of two ways:

- They can be moved in both Walk and Edit modes by means of the cursor keys.
- They can be moved in Edit mode by moving the mouse cursor over the selected fixtures, holding the left mouse key down, dragging the fixtures to the required position and releasing the mouse key.

Deleting Gondolas

A gondola can be deleted by turning Grouping **On**, selecting the gondola and clicking the **Delete** key. It will be deleted without further confirmation.

Planner and Synchronization

Dependent on settings in Planner, users opening the same floor plan in planner may need to synchronize the floor plan so read the changes made in Merchandiser into the floor plan used in Planner.

Shelves

Adding Shelves

Shelves can be added to fixtures in Merchandiser (but not in Planner).

Restrictions on Adding Shelves

In order for shelves to be added, their styles must be compatible, as must their temperature ranges. If they do not, an error message will result.
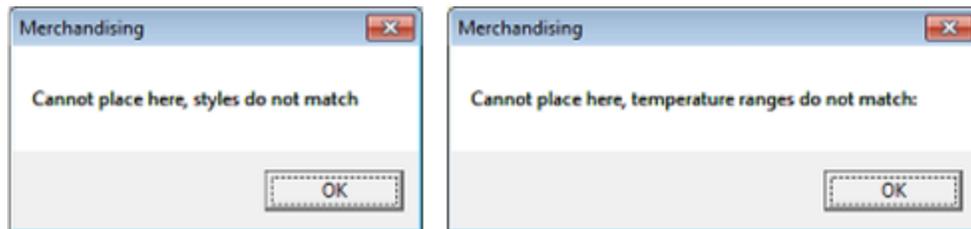
Styles and temperature ranges are assigned in Fixture Studio. It is possible to use custom SQL configure the Properties window in the Object Browser to show the assigned styles and temperature ranges for specific items of equipment - see the *Oracle Retail Macro Space Planning Data Model* for more information.

Selecting the Fixtures

If no fixtures are selected, they will be added to the fixture they are dragged and dropped on. Alternatively shelves will be placed on any pre-selected fixtures they are dragged and dropped to.

There are two ways of selecting fixtures:

- With Grouping (button on status bar) Off, select individual fixtures by clicking on them in turn.
- With Grouping On, select a set of fixtures by clicking on any fixture in the group. If this option is selected, any fittings must be de-selected. This is done by right clicking on a fixture and then selecting Group>Select without Fittings from the right click menu.

The above example shows selecting the fixtures along one side of a double sided gondola with Grouping set to **Off**.

> **Note**: If fittings are not de-selected, shelves may place on them. This would lead to reporting errors if a bill of materials is generated from a floor plan.

Adding the Shelf

Once the fixtures have been selected, a shelf can be selected from the hierarchy in the Object Browser and dragged and dropped onto the selected fixtures. This will result in the Add Shelves dialog box appearing.

This will appear in its basic form and allows a number of aspects of the shelf to be edited. The most common way is to use the **Slot** spin control to adjust the height of the shelf. However, most users want to place multiple shelves. This can be done by clicking the **Array>>** button on the upper right of the dialog box. This will result in the full version of the dialog box being revealed.

To place multiple shelves:

1. Set the Z Quantity to the required number of shelves.

2. Set the Z First Shelf to the required height. This is the height of the first shelf.

3. Set the Z Spacing to the required spacing between shelves.

4. Click the Add button to add the shelves to the list of those to be added in the list view on lower left.

5. Click the OK button to add the shelves to the fixtures.
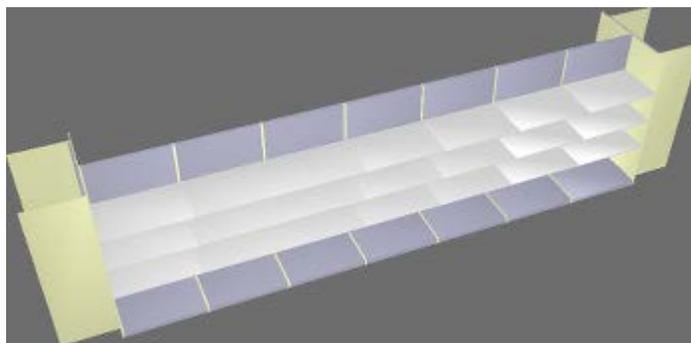
Adding an Array of Pegs

There are two ways to add an array of pegs to a fixture: via connection points, or via the Shelf dialog box. This section of help discusses how to do it via the Shelf dialog box.

Restrictions on Adding Shelves

In order for pegs to be added, their styles must be compatible, as must their temperature ranges. If they do not, an error message will result.
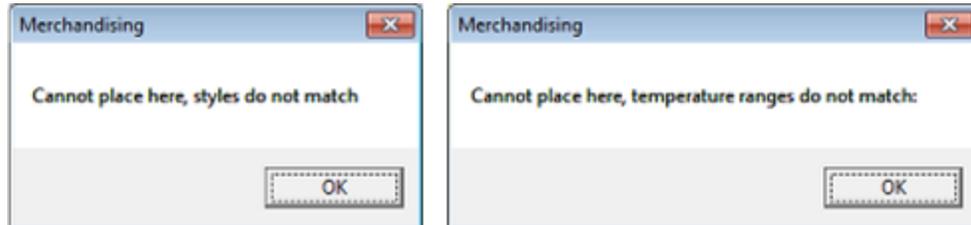
Styles and temperature ranges are assigned in Fixture Studio. It is possible to use custom SQL configure the Properties window in the Object Browser to show the assigned styles and temperature ranges for specific items of equipment - see the *Oracle Retail Macro Space Planning Data Model* for more information.

Selecting a Fixture

If no fixtures are selected, they will be added to the fixture they are dragged and dropped on. Alternatively shelves will be placed on any pre-selected fixtures they are dragged and dropped to.

There are two ways of selecting fixtures:

- With Grouping (button on status bar) Off, select individual fixtures by clicking on them in turn.
- With Grouping On, select a set of fixtures by clicking on any fixture in the group. If this option is selected, any fittings must be de-selected. This is done by right clicking on a fixture and then selecting Group>Select without Fittings from the right click menu.

The above example shows selecting a fixture along one side of a double sided gondola with Grouping set to **Off**.

> **Note**: If fittings are not de-selected, shelves may place on them. This would lead to reporting errors if a bill of materials is generated from a floor plan.

Adding the Pegs

Once the fixtures have been selected, a peg can be selected from the hierarchy in the Object Browser and dragged and dropped onto the selected fixture. This will result in the Add Shelves dialog box appearing.

This will appear in its basic form and allows a number of aspects of the shelf to be edited. The most common way is to use the **Slot** spin control to adjust the height of the shelf. However, most users want to place multiple shelves. This can be done by clicking the **Array>>** button on the upper right of the dialog box. This will result in the full version of the dialog box being revealed.

To place:

1. Set the Z Quantity to the required number of vertical pegs.

2. Set the Z First Shelf to the required height. This is the height of the first peg.

3. Set the Z Spacing to the required vertical spacing between pegs.

4. Set the X Quantity to the required number of horizontal pegs.

5. Set the X First Shelf to the required value. This is the distance of the first peg from the left edge of the fixture.

6. Set the X Spacing to the required horizontal spacing between pegs.

7. Click the Add button to add the pegs to the list of those to be added in the list view on lower left.

8. Click the OK button to add the pegs to the fixture.
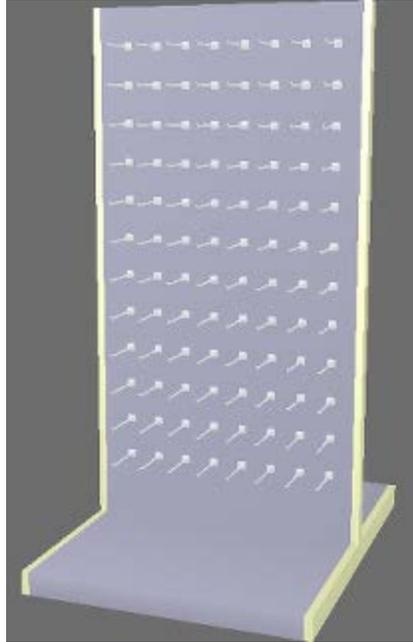
Editing and Deleting Shelves

Editing Shelves

To edit a shelf, select it and right click to bring up the right click menu. Select the **Edit** option from the menu. This will bring up the Edit Shelf dialog box.

Position

These spin controls enable the user to adjust the position of the shelf on the fixture. For shelves, the most common use would be to alter the Z value to change the height of the shelf on the fixture. For a peg the position can be changed by means of the Z (height) and X (horizontal position) values.

Slot

If slots or a pegboard grid (connection points) have been defined for the parent fixture in Fixture studio, these spin controls enable the user to move the shelf (or peg) from one predefined position to another.

Angle

These spin controls enable the user to modify the angle at which the shelf or peg is at on the fixture.

Size

These spin controls enable the user to change the size of the shelf or peg. Hitting the **Default** button returns the fixture to its specified dimensions.

> **Note**: Changing the size of the shelf or peg is not recommended if a bill of materials is to be produced from the floor plan - it could render it inaccurate.

Material

The options in the Material drop down list enable the user to change the displayed color of the e from its default color.

Preferred Style

This option can be used where multiple style relationships have been defined in the Administration Module. If it is possible to place a display style in a shelf in both a Folded and a Loose style, it is possible to select the preferred style so that it is automatically selected when a user places a product.

Making the Changes

Clicking **OK** will make the specified changes to the shelf.

Deleting Shelves

There are two methods for deleting shelves: directly or by selecting the parent fixture.

Deleting a Shelf or Peg Directly

A shelf or peg can be deleted by turning Grouping **Off**, selecting the specific object and clicking the **Delete** key. It will be deleted without further confirmation.

Deleting a Shelf via the Parent Fixture

Shelves can also be deleted by selecting the parent fixture, bring up the right click menu and selecting **Delete Shelves**.

Connection Points

Overview of Connection Points

Connections points are used to join items of equipment together. They can either be used singly, or aligned in lines, planes or boxes.

Connection Points are used to attach items of equipment together.

Connection Lines are used where items like crossbars have set positions along their length that can accommodate Tertiary Equipment such rods.

- The position of the arrow indicates the position of the connection point.
- The increments between set positions along a connection line are defined in Fixture Studio.
- The position of the connection arrow defines the leftmost position of the first point on the connection line.

Connection Planes are used where Secondary Equipment such as peg boards or slotted back panels have a 2 dimensional array of possible connection points for Tertiary Equipment such as pegs.

The increments between set positions in a connection plane are defined in Fixture Studio. The position of the connection arrow defines the bottom left position of the first point on the connection plane.
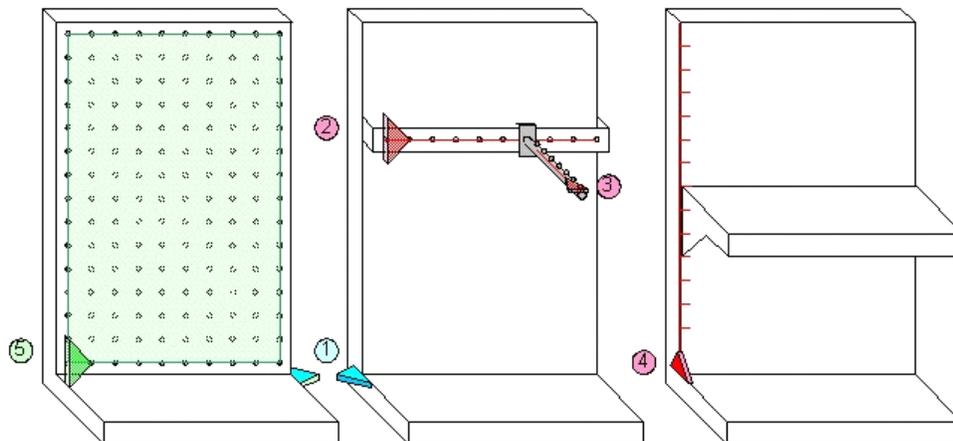
In the above diagram, blue arrows (1) represent Connection Points; red arrows (2, 3, and 4) represent Connection Lines and the green arrow (5) represents a Connection Plane. The arrow direction indicates the X axis and the arrow lies in the X, Y plane. Slatted back panels use a connection plane with the X spacing set to 0 so that rods can be slip to any position along the slot. The Y spacing is set to the distance between slots.
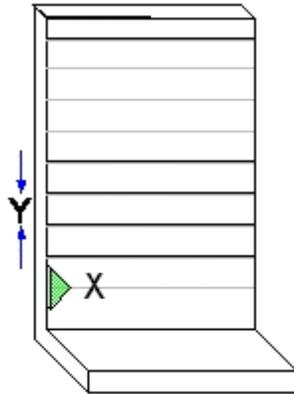
It is also possible to use more than one connection line, as for example with racking.
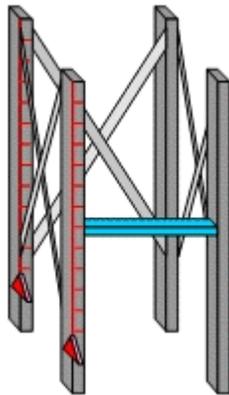
The fixture could be defined as two uprights (front and back), plus the cross-bracing. This would allow beams (blue) to be added to either the front or the back. Macro Space Management will use the nearest connection arrow to the drop/pick point when deciding which to use. Connection points are used to define the exact point on the dropped object (shelf or peg or rod) that attaches to the notch position. The connection line/plane filters must match the connection point filters. If no connection point is defined for the dropped object, it will use the insertion point of the shelf/peg.

The Connections Tab in Fixture Studio

The **Connections Tab** in the Block Details dialogue box in Fixture Studio lets the user specify the connection options for Macro Space Management blocks.
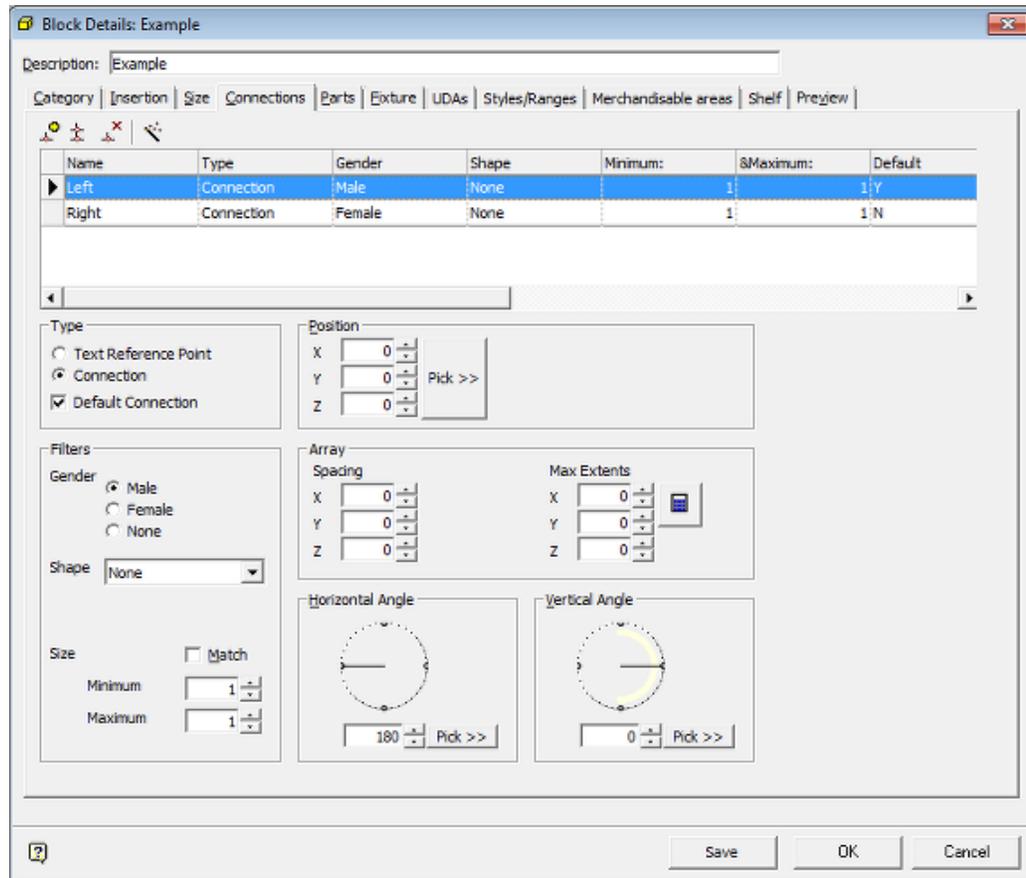
A small Toolbar at the top lets users Add, Copy and Delete connections, while the Wizard on the toolbar allows the user to add three basic connections. The Connections List below the toolbar lists all current connections for the Macro Space Management Block. The defined connection points are the defaults for that fixture type and will be applied for every instance placed in the drawing.

Note: See the *Oracle Retail Macro Space Management Fixture Studio Help File* for more information.

The Connections Tab and the Configuration Module

Settings in the Configuration Module can affect how connection points appear and behave. Settings are local and can be customized for the user.

Access the Configuration Module by selecting the Configure Option in the file pull down menu.
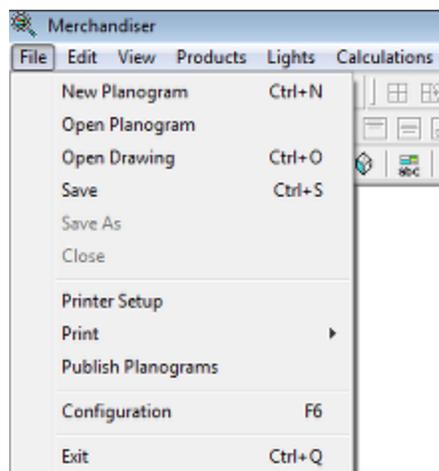
Within the Configuration module, select the Fixturing Tab. The Connection Points frame can then be used to change their appearance.
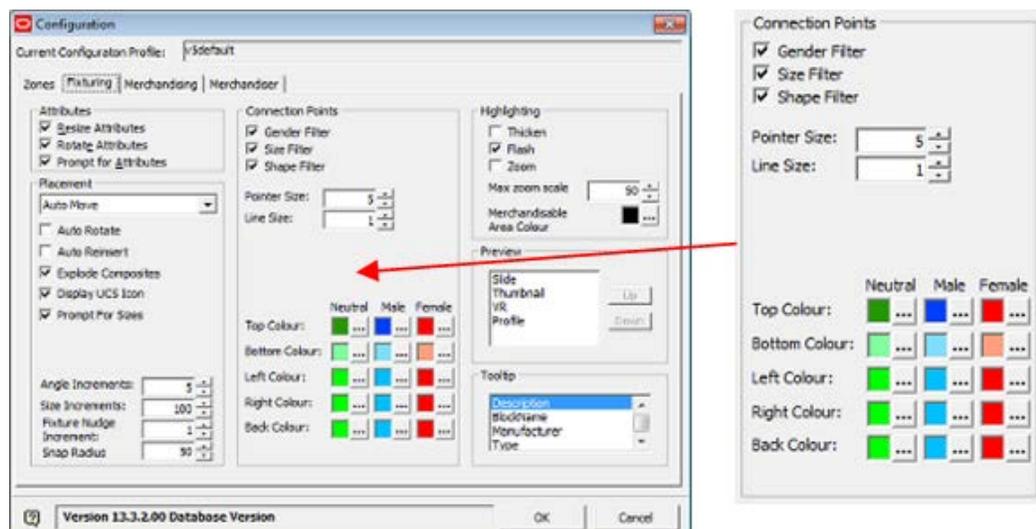
Pointer Size and **Line Size** affect the appearance of the connection points as displayed.

Colors for Neutral, Male and Female connection points can also be set.

A series of check boxes allow users to configure some aspects of how connection points operate:

- Gender Filter determines whether connection genders are taken into account when deciding if connections are compatible.

- Size Filter determines whether connection sizes are taken into account when deciding if connections are compatible.

- Shape Filter options determine whether connection shapes are taken into account when deciding if connections are compatible.

These settings are local and will not affect other users of Macro Space Management.

Connection Details

Each **connection** needs the following information to be specified for it in Fixture Studio.

- Name
- Type
- Layer
- Gender
- Shape
- Size
- Whether it is the Default
- Position, Array and Angle settings

For one item of equipment to connect to another the following must be true.

	Requirement	Optional or Mandatory
Gender	The connection points must have compatible genders	This requirement can be disabled in the Configuration Module
Shape	The connection points must have the same shape	This requirement can be disabled in the Configuration Module
Size	The connection points must have compatible sizes	This requirement can be disabled in the Configuration Module

If any of these criteria are not true, then a connection cannot be made. In addition, if the details of the connections are not correctly specified relative to each other, equipment may connect together in unintended alignments.

Connection Point Parameters

Setting Connection Point Parameters

The **Connection Point parameters** are set using the Block Details dialogue box in Fixture Studio.
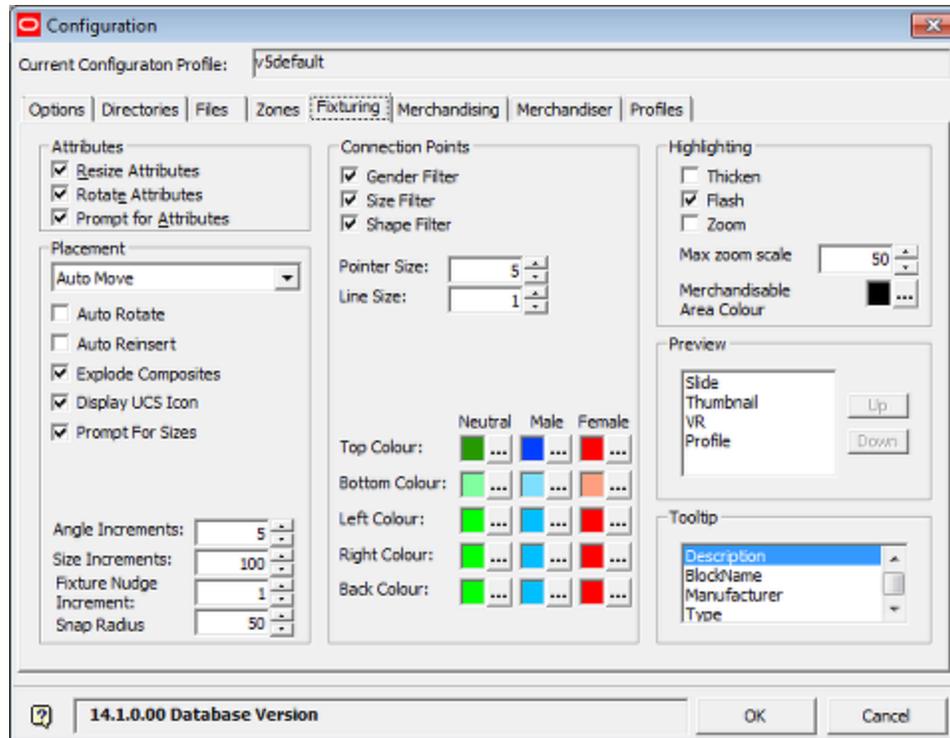
Brief details will be discussed in the following sections - see the Fixture studio help file for more detailed information.

The Connections Toolbar

The **Connections Toolbar** is found to the upper left of the Connections Tab in the Block Details dialogue box in Fixture Studio. It allows users to Add, Copy and Delete Connections. It also allows the user to invoke the Connections Wizard.
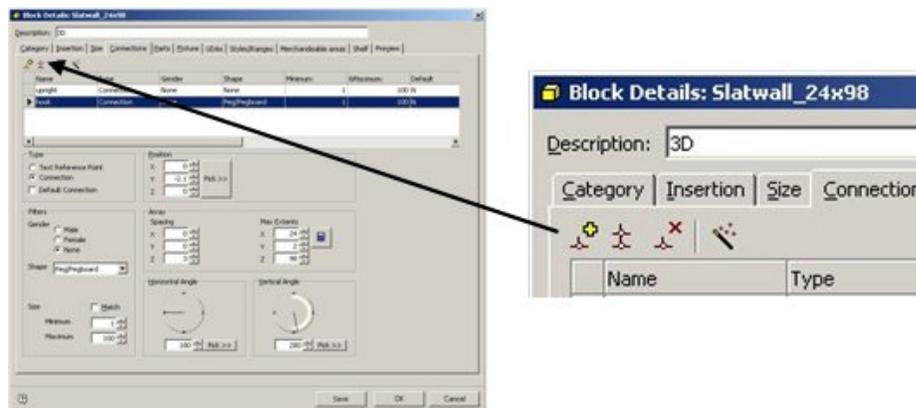
Icon	Description
	Add a Connection
	Copy a Connection
	Delete a Connection
	Connection Point Wizard

Add a Connection

Clicking on the Add a Connection icon causes a line to be added to the Connections List ready for further details of the connection to be added.

	Name	Type	Gender
	Left	Connection	Male
	Right	Connection	Female
	Back	Connection	Neutral

	Name	Type	Gender
▶			
	Left	Connection	Male
	Right	Connection	Female
	Back	Connection	Neutral
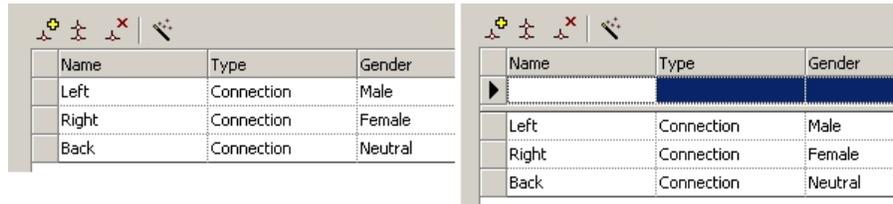
Copy a Connection

Clicking on the Copy a Connection icon causes a line to be copied again to the Connections List mirroring details of the connection to be added.

	Name	Type	Gender
▶	Left	Connection	Male
	Right	Connection	Female
	Back	Connection	Neutral
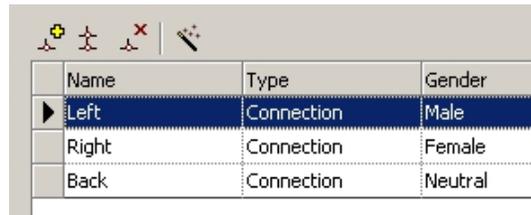
Before clicking the Copy icon, select the connection to be copied. Clicking on the icon will bring up the connection naming dialogue box.

Copy connection point

Name: Left - 2

OK   Cancel

Edit the name to one suitable for the new connection. In the example Left has been edited to Left - 2. On clicking OK, a duplicate connection will be added, save for the changed name.

Delete a Connection

To delete a connection, highlight the connection to be deleted and click on the Delete icon. The User will be asked to confirm deletion.

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.
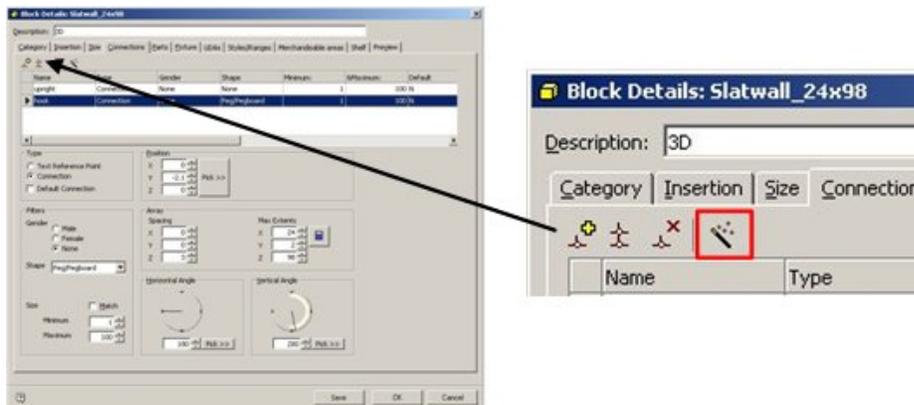
This will bring up the Connections Wizard dialogue box.

- ▪ 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.
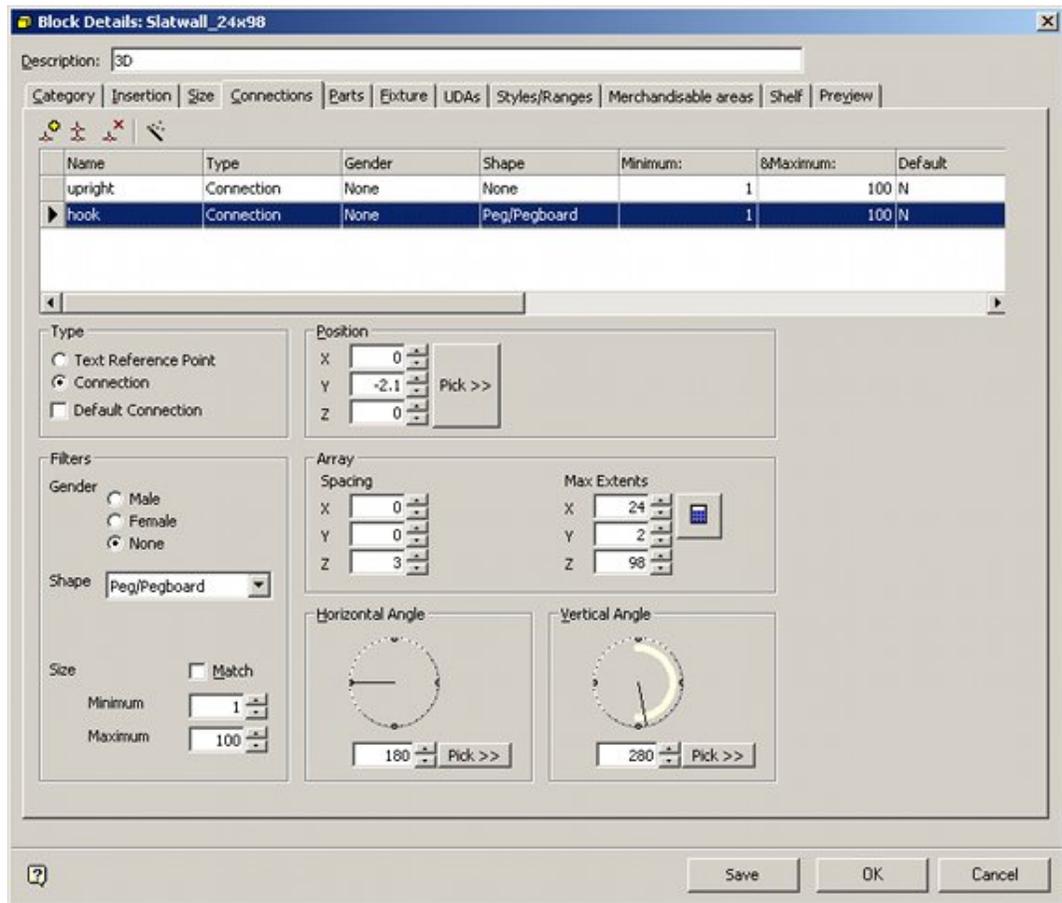
These include Type, Position, Array Spacing, Gender, Shape, Size, Horizontal Angle and Vertical Angle. (See the *Oracle Retail Macro Space Management Fixture Studio Help File* for more information).

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.
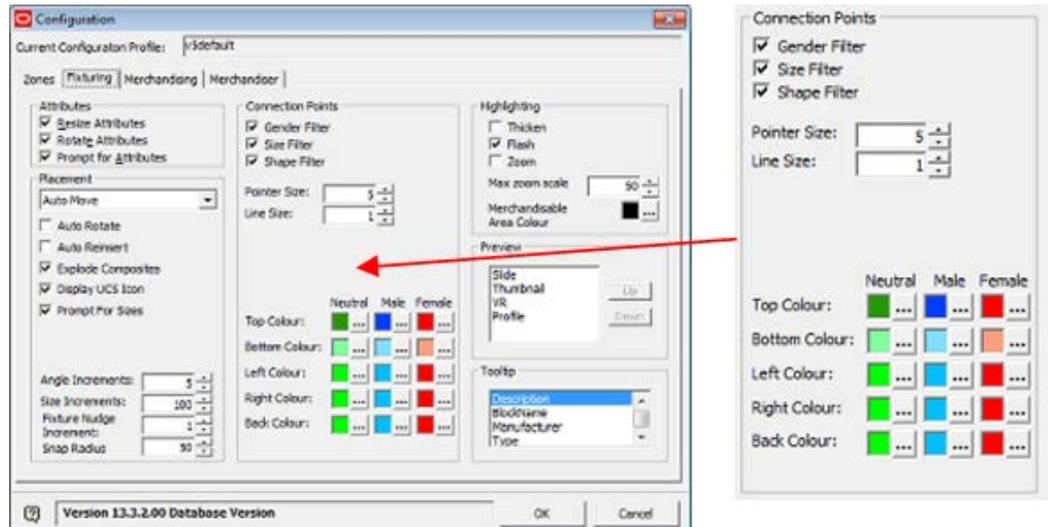
Other fixture specific factors are set in the Configuration Tab of the Block Details dialogue box in Fixture Studio.
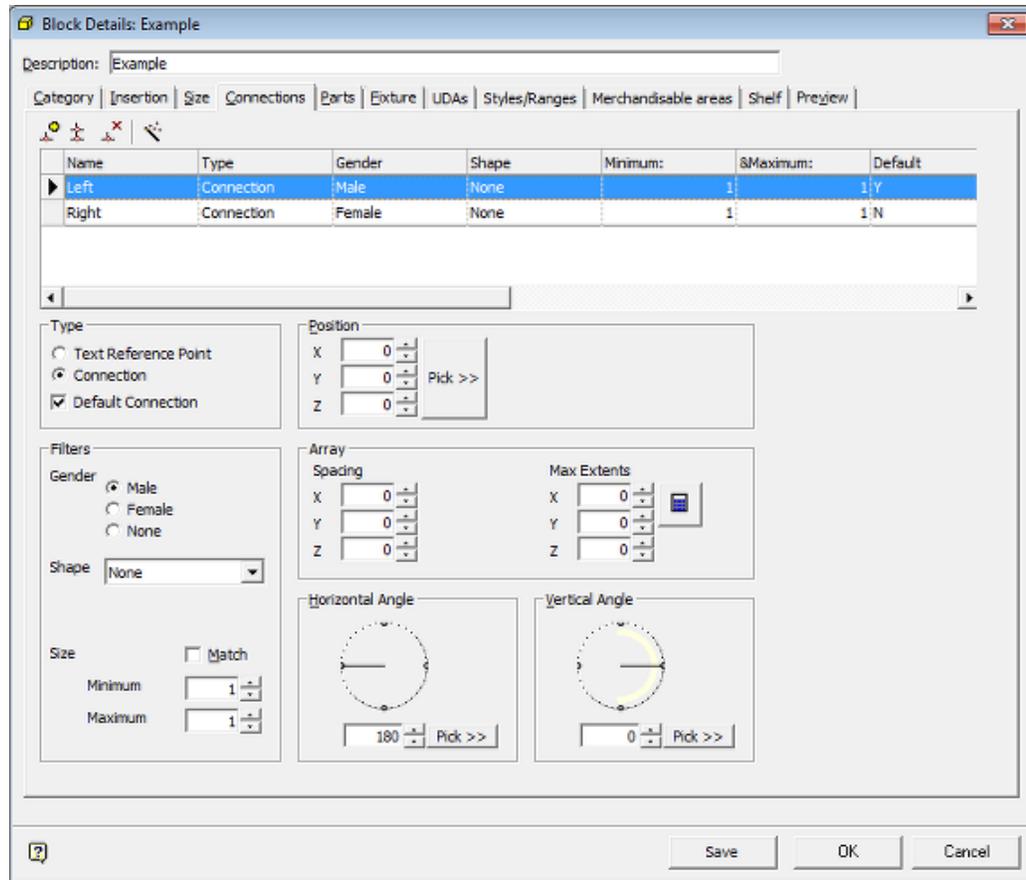
The combination of both sets of parameters will determine whether two connection points are compatible with each other.

Turning Connection Point 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.

Cut
Copy
Edit...
Empty
Delete Shelves
Delete Fixture
AutoFill
Make Planogram
Make Gondola
Product alignment...
Select ▶
Edit materials...
Edit Geometry...
Draw Products As ▶
Show Product Notation On Face ▶
Notes
Group ▶
Family ▶
Connection Points ▶
Merchandisable Areas ▶
Print Planograms

On
Off
Hide Parent
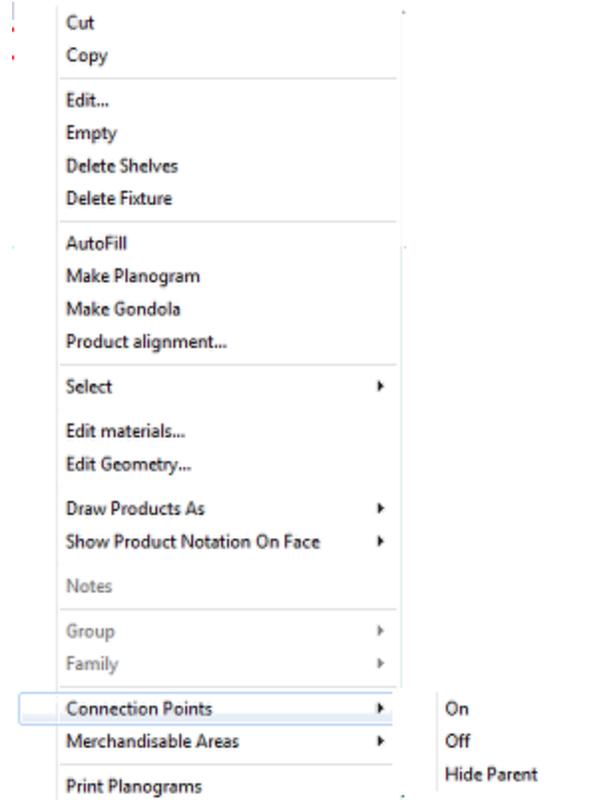
Clicking on the Connection Points option in the pop-up menu allows connection display to be turned on and off. Hide parent will turn off connection point display the parent fixture when (for example) a child object such as a shelf is selected.

Connection Point Appearance

When visible, Connection Points are shown as triangles.
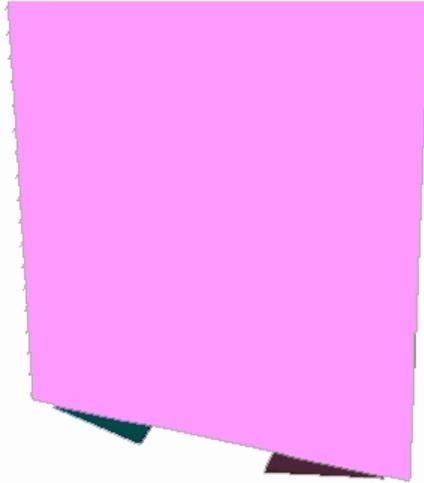
The color and size of the connection points can be specified in the Configuration Module. Their angle, gender, and so on for a specific fixture can be defined in Fixture Studio. Connection Points can appear in lines and arrays, as well as discrete points. The example below shows a Connection Line.
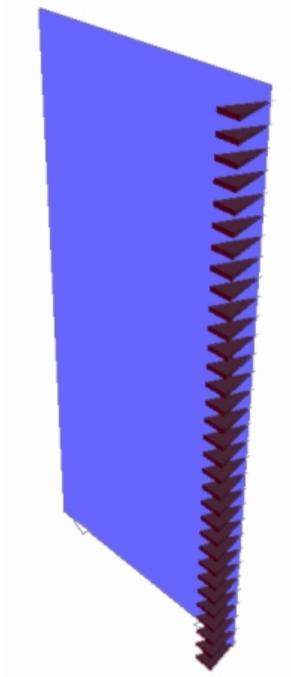
Checklist for Compatibility

For one item of equipment to connect to another the following must be true.

	Requirement	Optional or Mandatory
Gender	The connection points must have compatible genders	This requirement can be disabled in the Configuration Module
Shape	The connection points must have the same shape	This requirement can be disabled in the Configuration Module
Size	The connection points must have compatible sizes	This requirement can be disabled in the Configuration Module

Gender

The gender of a connection determines whether that connection is compatible with another. There are three genders; male, female and neutral. They connect as follows:

	Can connect with	
Male	Female	Neutral
Female	Male	Neutral
Neutral	Any other connection	

Shape

The shape of a point connection can be specified from a list provided by Oracle. They connect as follows:

	Can connect with	
None	Any other connection shape	
Rectangle	Rectangle	None
Circle	Circle	None
Oval	Oval	None
Triangle	Triangle	None
Hexagonal	None	None

The shape of a connection point is a theoretical concept used to make it easier to remember what connects to what - i.e. fixtures with 'Oval' connection points can only connect to other fixtures with 'Oval' connection points. (When displayed in Merchandiser, all connection points will appear visually as triangles).

Size

A maximum and minimum size for the connection can be set in Fixture Studio. A pair of connection points must have compatible sizes to connect together. If the Match check box is ticked, then the connections must have identical maximum and minimum sizes. If they are not identical, the connections will not mate. If the Match check box is not ticked, then the connections must have overlapping size ranges. If they are not overlapping, the connections will not mate.

	Connection 1	Connection 2	Result
Size Range	0 - 50	25 - 75	Compatible
Size Range	0- 25	50 - 75	Incompatible

Connecting two objects in Edit Mode

Swap to Edit Mode

To connect two objects in edit mode, first ensure that edit mode has been selected by toggling from Walk Mode to edit mode on the status bar.

Turn Connection Points On

Next, ensure that the connection points have been toggled on by selecting a least two fixtures and use <Ctrl> plus right click to bring up the pop-up menu.
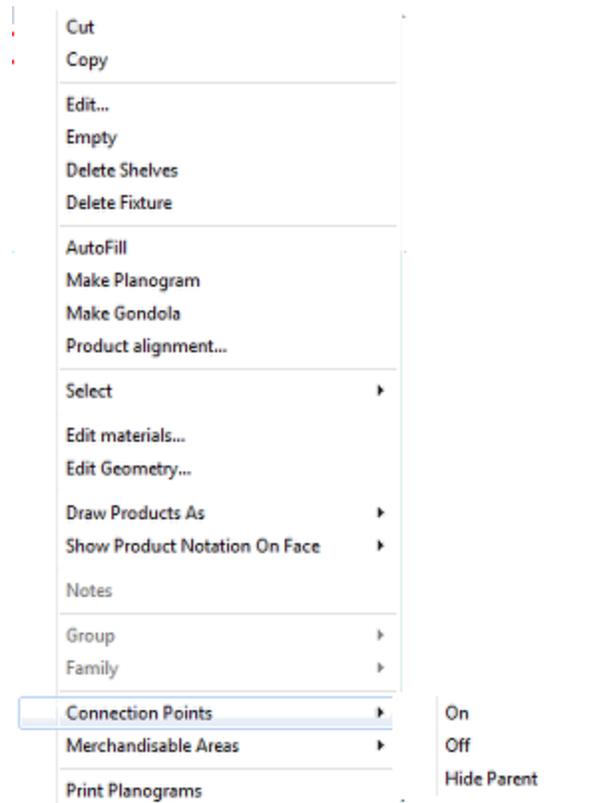
1. Turn connection points on and they will appear as triangles in the drawing.
2. Click First Connection Point and Follow Prompts
3. Click on the first connection point. (Circled in red in the image below)
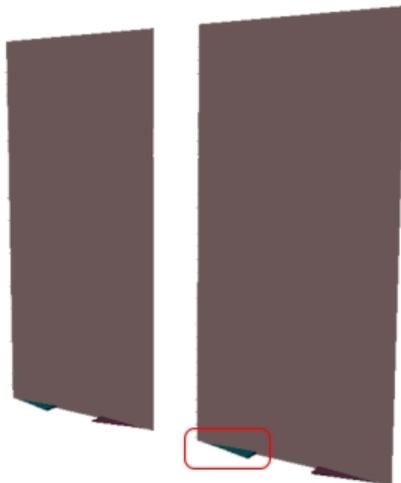
A prompt will then appear in the status bar asking the user to select the

Select a connection point on the other fixture (circled in red in the image below).
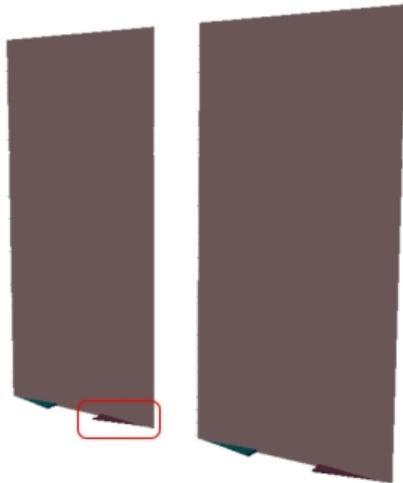
As soon as the second connection point is clicked, the first object will be connected to the second one.
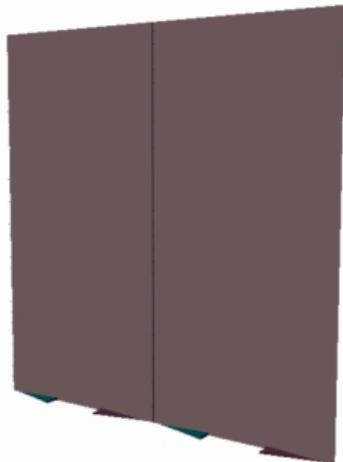
Note how the two connection points now meet:
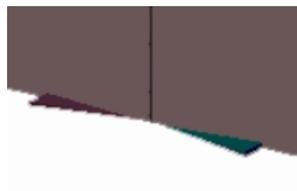
Merchandise in Merchandiser

Overview of Adding Merchandise

Merchandise can be added in two forms in Merchandiser: as products (or product placeholders) and as planograms. Settings in other modules determine what merchandise can be placed where in the Merchandiser module. Settings in the Administration Module, Fixture Studio and Product Studio constrain what products and planograms can be placed on what items of equipment. The settings may prevent products being physically placed. Planograms can still be placed after a warning dialog is overwritten.

Products

Products at display style level in merchandiser are assigned a style in Product Studio. If this style is not compatible with the style assigned in Fixture Studio to the fixture or shelf it is being placed on, a warning will result. This is intended to prevent (for example) products designed to go onto shelves being assigned to pegs by mistake.
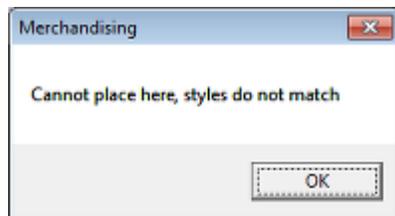
This can be corrected by ensuring that:

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.

Similarly, temperature ranges are assigned to products and equipment in Product Studio and Fixture Studio respectively. If they do not match, another warning will result. This is designed 9for example) to prevent ice cream being placed anywhere but a freezer unit.

This can be corrected by ensuring that:

1. The correct temperature range has been assigned to the parent fixture, shelf or peg in Fixture Studio.

2. The correct temperature range has been assigned to the parent SKU for the display style in Product Studio.

Finally, fixtures and shelves are assigned a merchandisable area. This is the maximum area that can be taken up by products for sale. Display of these merchandisable areas can be turned on or off by the **Merchandisable Areas** option on the menu accessed by highlighting an item of equipment and right clicking. In the example below, the chiller and freezer unit show different forms of merchandisable areas.
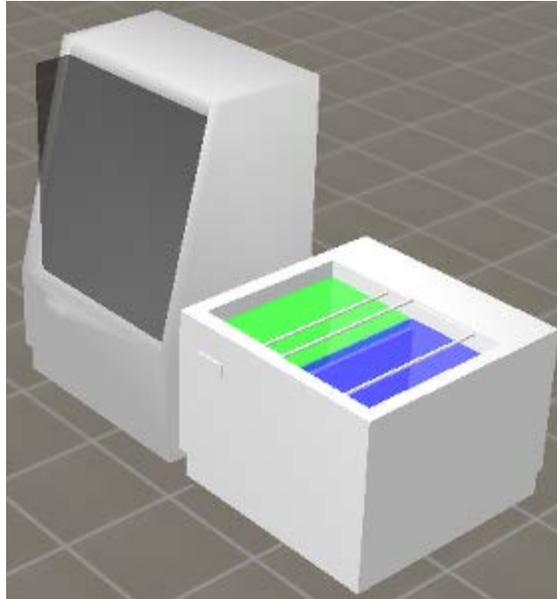
If users attempt to place a product at display style level for which there is insufficient space, a warning will result.
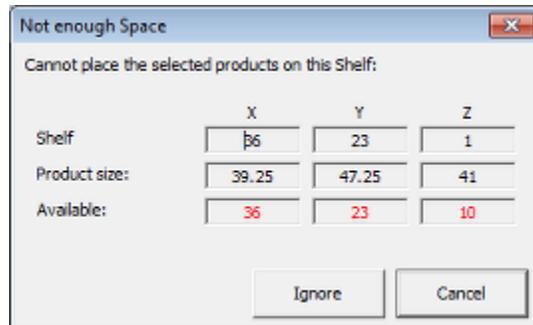
If the error is minor, the problem can be overcome by reducing the space assigned to other display styles on the parent fixture, shelf or peg. If there is a serious mismatch of dimensions, an alternative item of equipment may be indicated.

Planograms

Planograms are validated against the fixtures on which they are to be placed. The factors which are checked are set in the Check Rules frame of the Merchandising Tab of the Configuration Module.
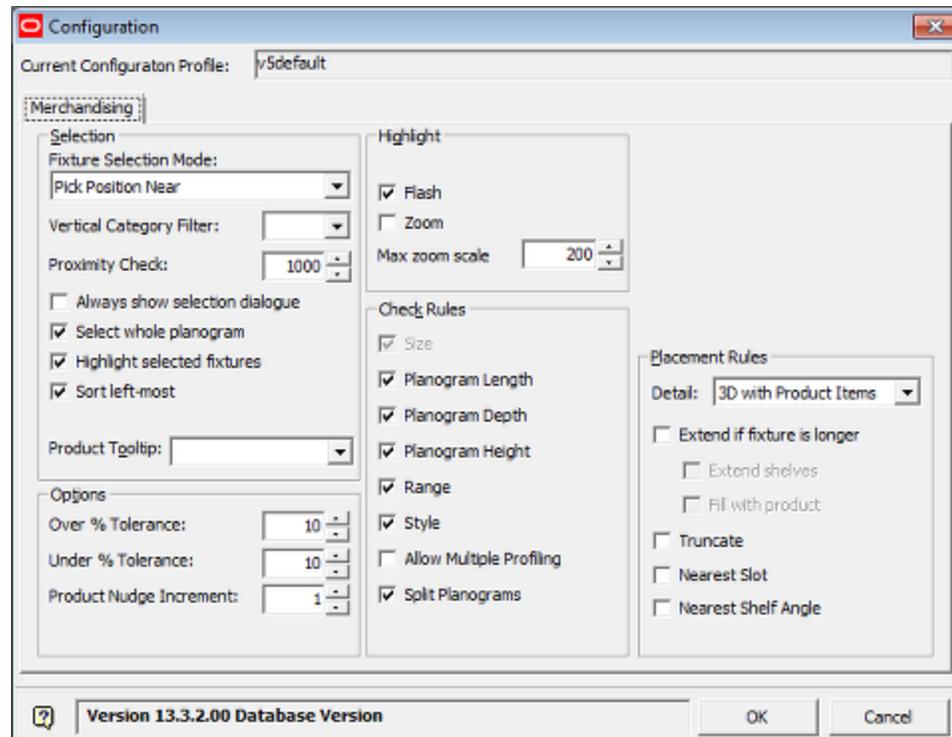
If a planogram is placed on equipment for which it was not designed, a warning will result.
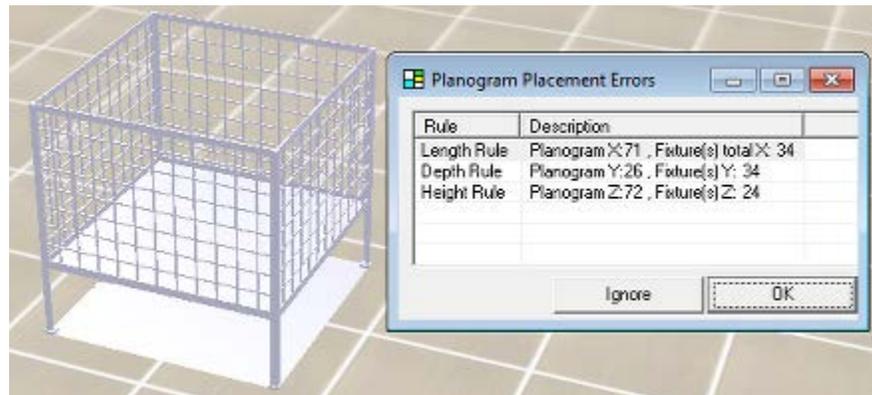
Clicking the **OK** button will stop the planogram being placed, clicking **Ignore** will allow it. If planograms are placed by using the Ignore option, this may lead to compliance problems when the planogram is set in the store. For example, if the fixture size is smaller than that which the planogram was designed for, there will not be enough space for the designed facings of products.

Forms Merchandise can be Added

Merchandise can be added in several forms.

Products

Products can either be added as placeholders or display styles. In the example below, the lower two products are in placeholder form; the upper two in display style form.
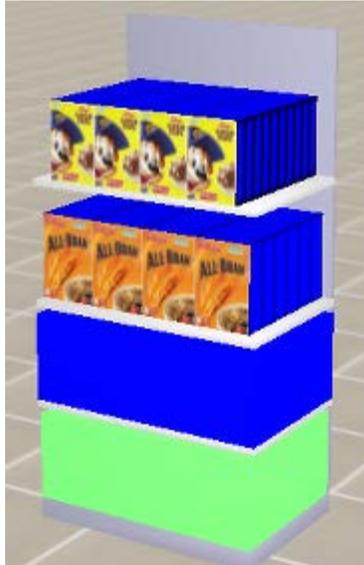
- Placeholders represent products at any level in the hierarchy from SKU upwards. They show what form of object is on the fixture or shelf but give no information as to quantity, position or orientation.
- Display Styles represent a physical form of a specific SKU. For example a specific shirt may come in boxed, folded or hung styles. When a display style is placed, this allows information to be stored on quantity, position, and orientation.

Planograms

Planograms can be displayed in one of three forms: 2D, 2.5D or 3D
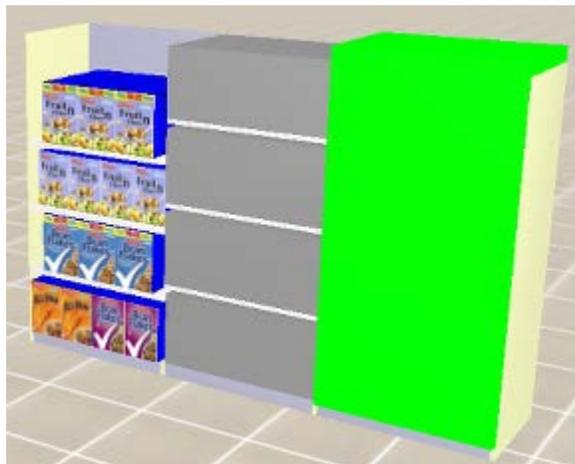
- A 2D planogram (shown on the right of the image above) indicates the presence of the planogram, but gives no information on the shelves or the products.
- A 2.5D planogram (shown in the centre) shows the position of the shelves and represents the products as placeholders.
- A 3D planogram (shown on the left) shows the position of the shelves and full details of the products in display style form.

The form in which planograms will be initially placed is determined by what the user selects using the **Placement Rules** drop down list in the Merchandising Tab of the Configuration Module.

Planograms can be exploded to 3D form and imploded to 2D form using the Implode and Explode options on the directions and Product Text Toolbar.

If one or more fixtures are selected, the planograms on those fixtures will be imploded or exploded. If no fixtures are selected, all planograms in the floor plan will be imploded or exploded.

Merchandise on the Object Browser

Merchandise (products and planograms) can be added, edited, moved and deleted in Merchandiser. Many of the controls are located on the Object Browser. (For more information see the section on the Object Browser)
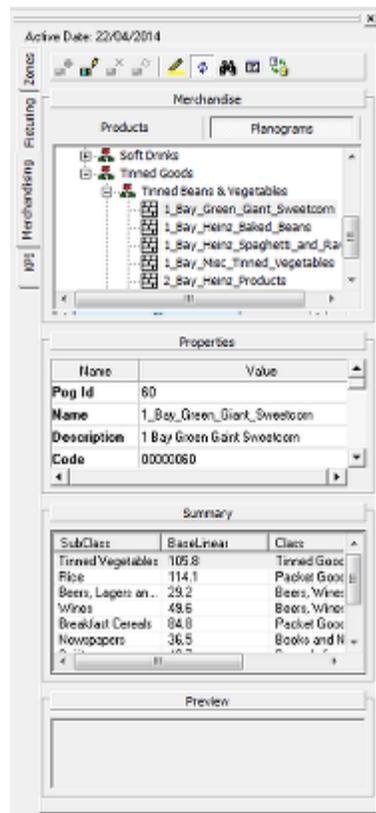
- Merchandising is selected by clicking the Merchandising tab.
- Users can then toggle between products or planograms and gondolas by clicking on the Products or Planograms sub-tabs.
- The toolbar allows users to select from a number of possible actions.
- A list of products or planograms is shown in the hierarchy.
- Details of any selected fixture or planogram are shown in the Properties window.
- The Summary window gives a list of equipment placed in the currently active floor plan.

The Preview window will show a preview of any currently selected product. (No information is available for planograms).

Adding Products

Adding Products

Products are added by selecting a product from the hierarchy in the Object Browser or the list on the Object Grid. They can then be dragged and dropped into a fixture or shelf. If the parent object is compatible with the product, the **Add Products dialog box** will appear.

Quantity Tab

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.
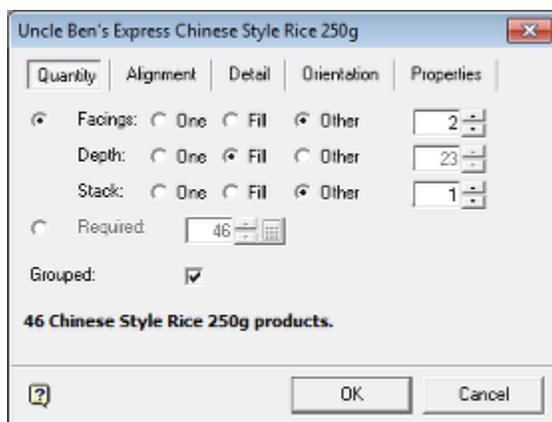
If the top radio button is selected (as in the above screen shot) then the user can manually select the product quantities.

> **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 of times product can be stacked on top of each other (the Z direction).

These quantities are constrained by the dimensions of the shelf or fixture. The minimum possible value in each direction is one, while the maximum number is determined by the dimensions of the product.

> **Note:** the minimum and maximum values for facings, depth and stack can be limited by settings in the Size and Shape tab of the Display Style dialog box in Product Studio.

For each of the directions products can be placed, there are three options; initially specified by the pertinent radio buttons:

- One: a single instance of the product
- Fill: the shelf or fixture will be filled to its maximum capacity
- Other: the user can use the spin controls to set the quantity of any value between one to the maximum capacity of the shelf or fixture.

> **Note**: Automatic setting by the program does not place caps, but only places the product in the primary orientation. If the user wants to place products with side, rear or top caps, it is recommended they select the Calculate option by clicking on the appropriate radio button - (2) in the annotated diagram above.

The **Grouped** check box determines whether products are placed as product groups, or as a stack of ungrouped items.

> **Note**: It is recommended that products are placed as grouped items as they can then be manipulated as a single object. If they are placed as a stack of ungrouped items, then each item in the stack has to be manipulated individually. This increases the amount of time required from the user, the amount of information stored in the database and the amount of processor time required to display the products on screen.

Alignment Tab

The **Alignment Tab** allows alignment of the initial product placement to be adjusted horizontally, i.e. in the X, Y plane.
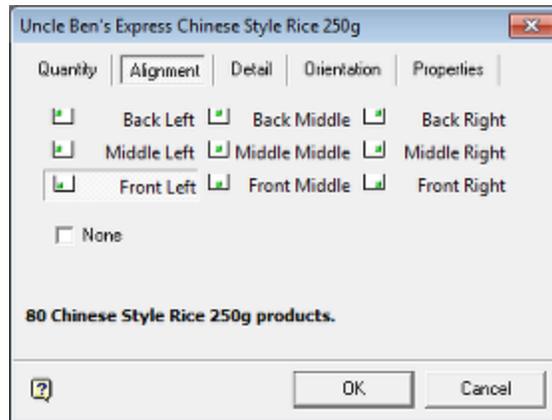
In the example below, the products on the left hand shelf have been placed with a Left Front alignment, and the products on the right hand shelf have been placed with a Back Right alignment.
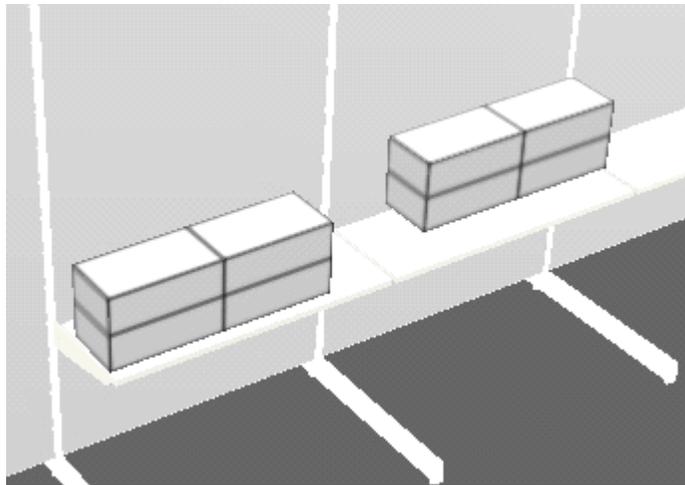
Detail Tab

The **Detail Tab** gives information on dimensions and quantities.
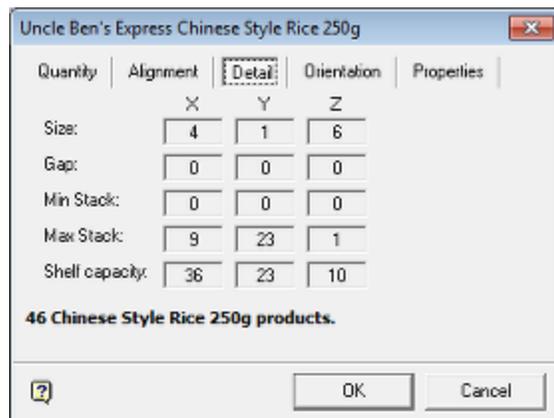
Option	Description
Size	These dimensions are the dimensions of an individual SKU
Gap	This is the gap between instances of the product. The gap can be part of a planogram design. It may be necessary where merchandise like glass or crockery is concerned.
Min Stack	This is the minimum product quantity that can be placed.
Max Stack	This is the calculated maximum quantity that can be placed.
Shelf Capacity	This is the volume available for placement of merchandise.

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.
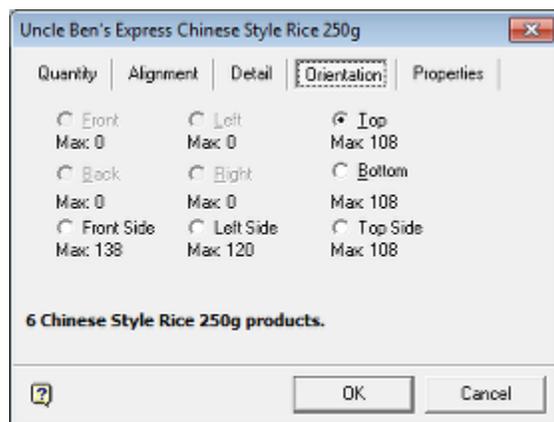
The maximum amount that can be placed for each orientation will be shown, while non available orientations will be grayed out.
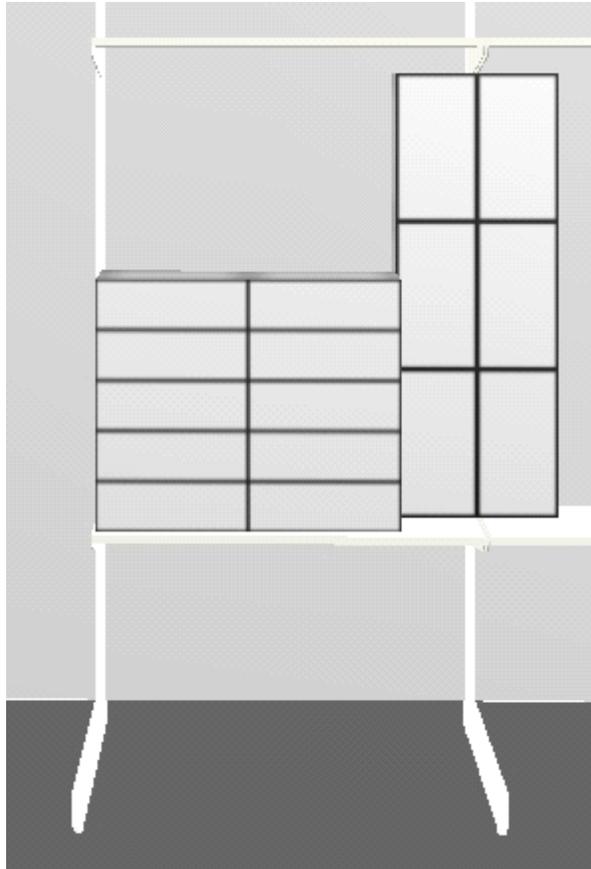
In the above example the product group on the left has been placed with the Front orientation. A second example of the same product group has then been placed to its right in the Top Side orientation.

> **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.

Product Orientations

The nine possible orientations are as follows:
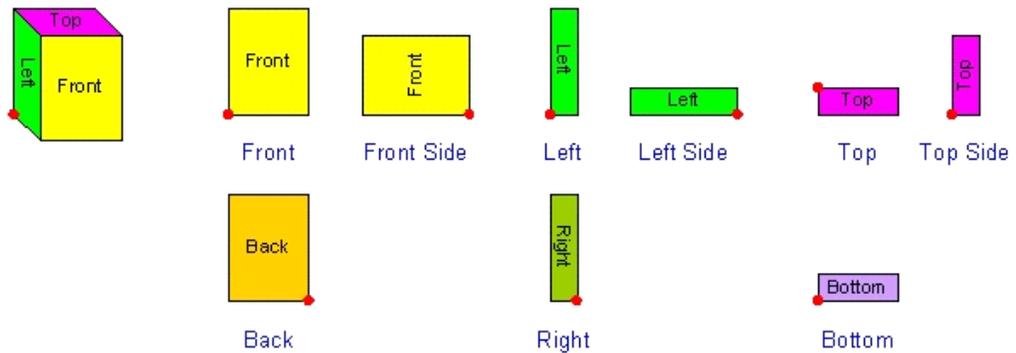
The red dot indicates the insertion point.

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	270º	None
Back	None	None	180º
Left	None	None	90º
Right	None	None	270º
Left side	None	270º	90º
Top	90º	None	None
Top side	90º	270º	None
Bottom	270º	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.

Properties Tab

The **Properties tab** displays a customizable list of properties associated with the products being placed - the exact list of information displayed being dependent on information in the **Custom SQL** table. (This information can only be edited by Administrators with access to the database).
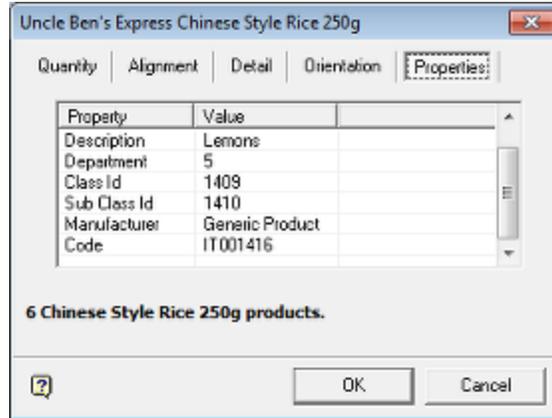
The information is intended to be of use to merchandisers populating the floor plan.

Using the Calculation Option

Overview of the Calculation Option

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.
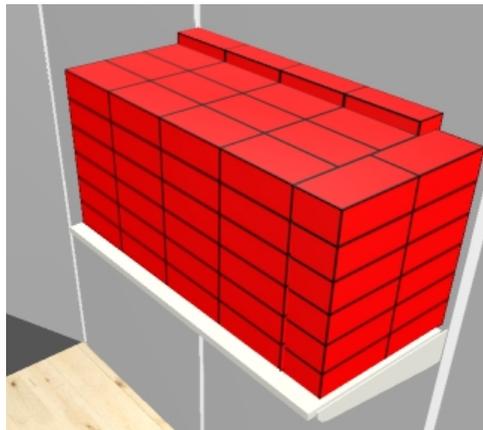
It is possible to achieve this manually by placing the main body of product, then placing the rear end cap and then the size end cap. This may require some time to achieve. It is also possible to achieve this in a single operation using the Calculate option. This can result in considerable savings in 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.
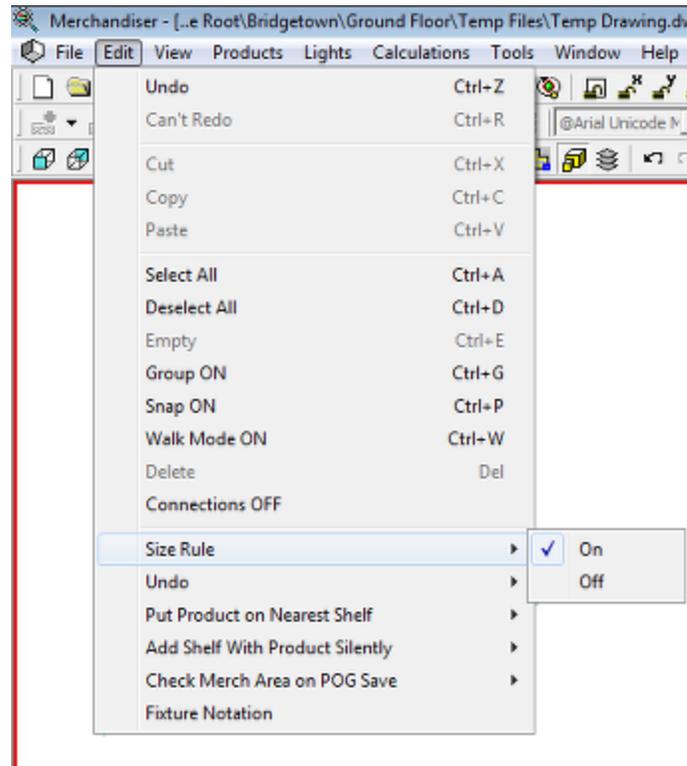
This will restrict the number of products added to those permitted by the confines of the shelf. If this option is not enabled, it is possible that product will overlap shelves to the left, right or above.

Using the Calculation Option

The **Add Products dialogue box** allows the user to control the calculated quantity and orientation of the product being placed. The Add Product dialog box will initially show the maximum number of products that can be achieved in a single, standard orientation.

This can be changed to the maximum number of products using all possible orientations to produce caps by means of the Calculate option.
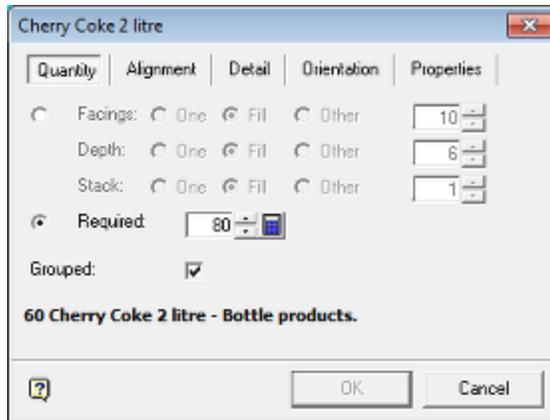
To calculate a maximized quantity for a shelf or fixture:

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.
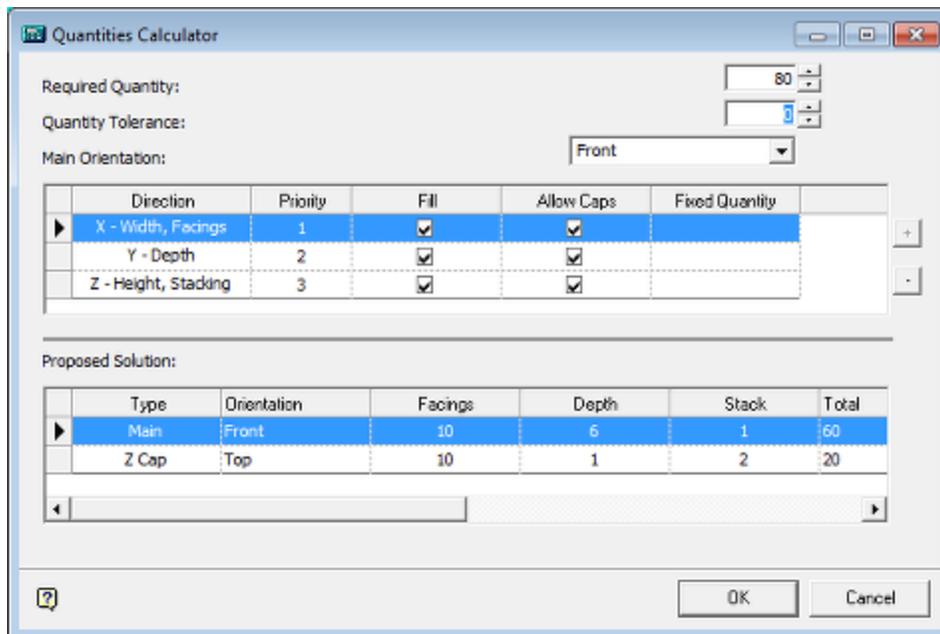
4. The Required Quantity is that set in the preceding Add Products dialogue box. If necessary this can be edited to a different value while in the screen.
5. The Quantity Tolerance allows the user to set the permissible variation in quantity.
   - If set to 0, Macro Space Management will try and calculate 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.
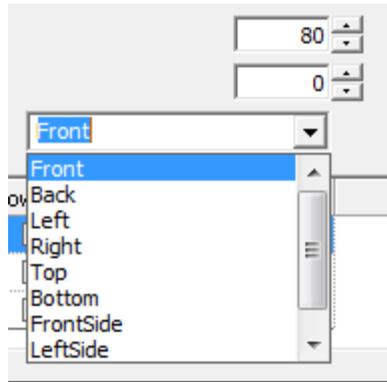
This determines which part of the products' packaging faces the front of the shelf.

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.

8. Macro Space Management will calculate the quantities in the order the axes have been selected. For example, if the X axis has been chosen, the software will stack the maximum number of products along that axis then take the dimensions of those placed products in account when calculating how many products can be placed along the second priority axis.

9. If the Fill check box is selected, then Macro Space Management will place the maximum number of products in that direction. If the Fill checkbox is not selected, then a Fixed Quantity can be entered in the appropriate box. If a Fixed Quantity is entered, this will also disable the Allow Caps option as the fixed quantity only applies to products placed in the Main Orientation. If a quantity greater than the maximum number that will fit is entered then the number will default to the largest value possible.

10. End Caps can be allowed or prevented by selecting or un-selecting the check box as appropriate.

11. The results will show in the Proposed Solution frame. (A warning will appear if the number of products that can be placed is below that in the Required Number setting).

12. If the details are correct, click on the OK button to place the products.

Adding Products using Pegs

Adding Products using Pegs is similar to adding products to a shelf - the product is dragged and dropped onto an existing peg.

> **Note**: if Joints have been set up in the Administration Module, products can be dragged onto a parent fixture (such as a slatwall or pegboard) and the peg will be added at the same time.
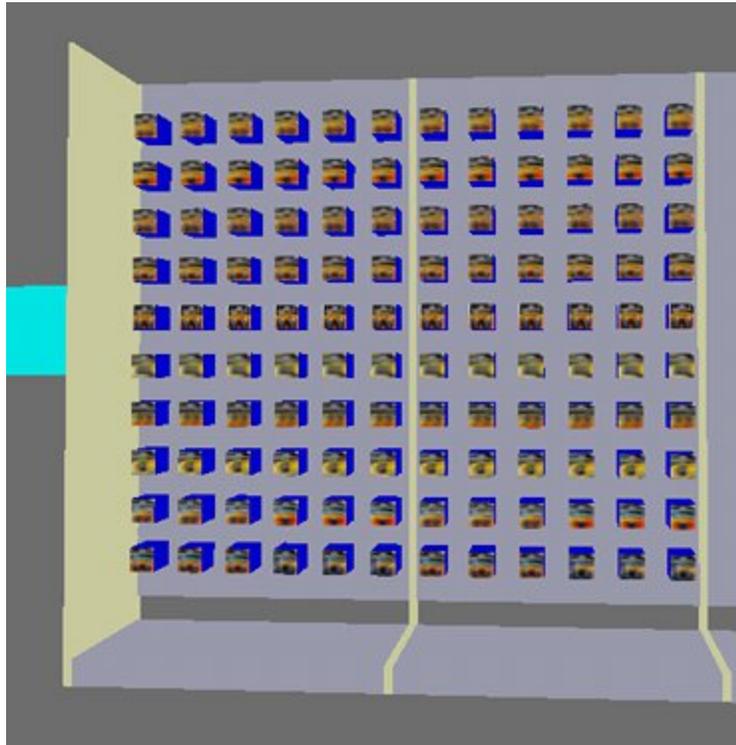
In the example above products have been placed on pegboard using pegs to hang them from.

Additional Ways of Placing Products

There are a number of additional ways of placing products - they reflect ways that might be used in real life within stores. These ways are:

Placing on Product on Top of Another

To place on product on top of another drag the required product from the options in the merchandising tab over to the product on top of which you wish to place it. Ensure the mouse cursor is just inside the object to be placed on top of, and release the mouse key. The desired products will 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.
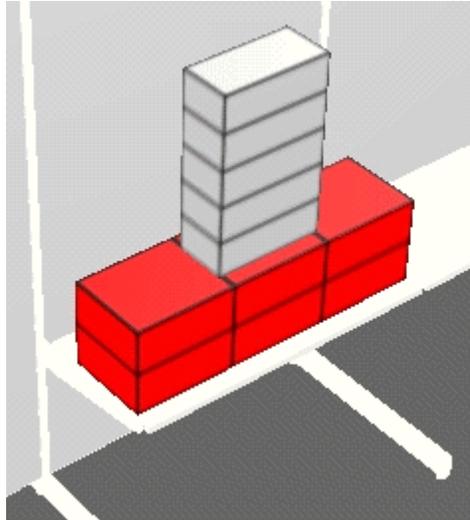
The depth and number of facings of the object being placed on top cannot exceed those determined by the length and depth of the object of which it has been placed on top.

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.
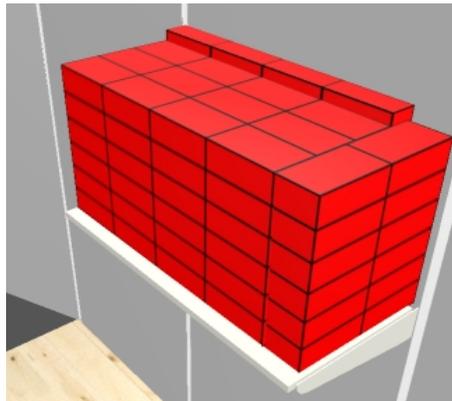
It can also be achieved automatically by making use of the Calculate option on the Add Products dialog box.
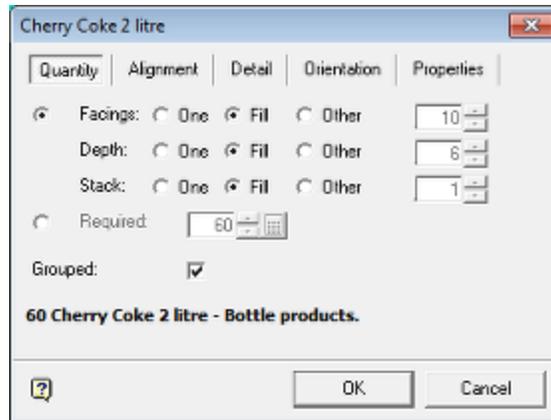
Nesting

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.
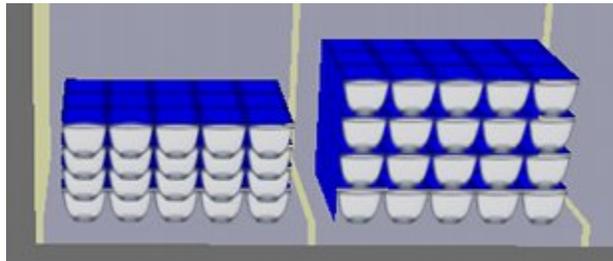
Nesting can be specified in the Size and Shape tab of the Display Style dialog box in Product Studio. This means that products placed on a shelf or fixture will automatically nest when placed. Nesting can only be specified for one axis - for example height as in the above example.

Alternatively, nesting can be manually set in the Merchandiser module. This can be done by taking two separate layers of products one product high and then selecting the Edit Article Nesting option from the right click menu.
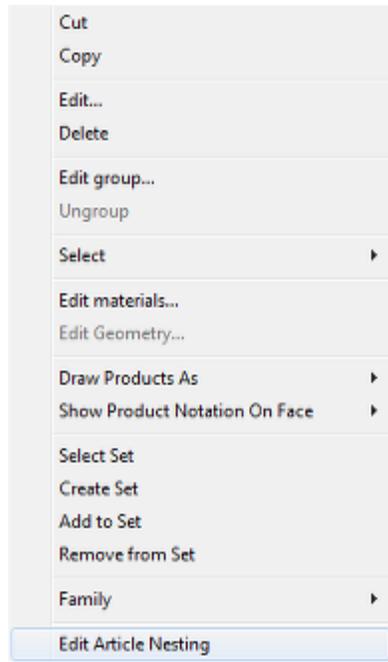
Note: Nesting will not work if a single instance of the product has been placed two items high. The product must be placed as two instances, each a minimum of one layer high.

Adding Planograms

Adding Planograms

This section describes how settings in the planogram module affect planogram placement. It then gives a worked example of placing a planogram.

Planograms and the Configuration Module

The form planograms are added in and the placement warnings that result are controlled on a user by user basis by settings in the Configuration Module. This can be accessed from the **View** menu, pressing F6 or from the **Options** icon on the toolbar in the Merchandising tab of the Object Browser.

This will bring up the Merchandising Tab of the Configuration Module.
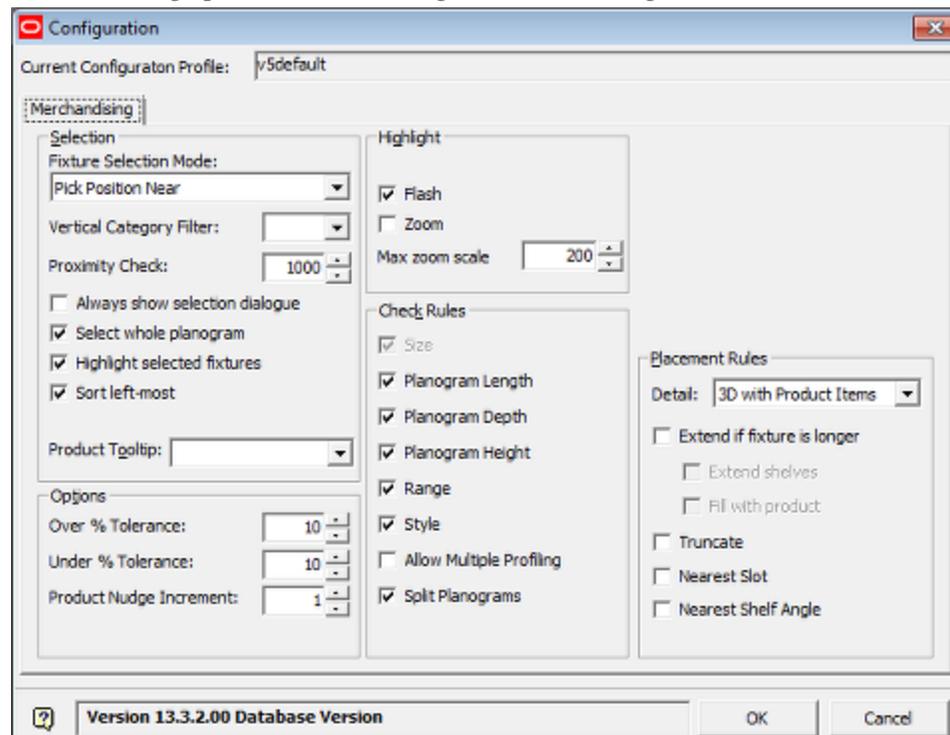
Placement Rules

The Placement Rules drop down list determines the form planograms will be placed in:
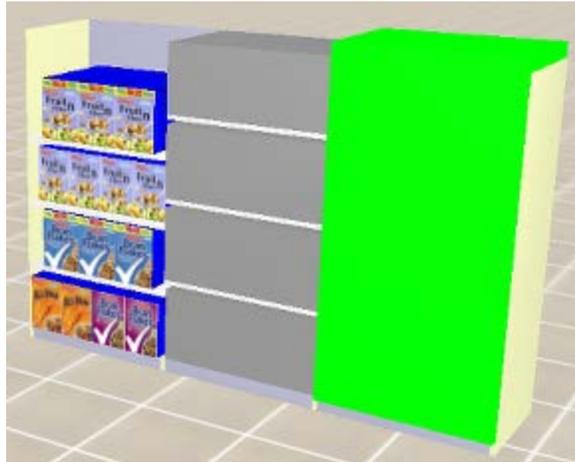
- A 2D planogram (shown on the right of the image above) indicates the presence of the planogram, but gives no information on the shelves or the products.
- A 2.5D planogram (shown in the centre) shows the position of the shelves and represents the products as placeholders.
- A 3D planogram (shown on the left) shows the position of the shelves and full details of the products in display style form.

Planograms can be exploded to 3D form and imploded to 2D form using the Implode and Explode options on the directions and Product Text Toolbar.

If one or more fixtures are selected, the planograms on those fixtures will be imploded or exploded. If no fixtures are selected, all planograms in the floor plan will be imploded or exploded.

Placement Warnings

The placement warnings that come up when planograms are added to fixtures are determined by making selections in the check rules frame. The options are:

- Length: Warn if the total length of the selected fixtures the planogram is to be placed on is different from that the planogram is designed for.
- Depth: Warn if the depths of one or more of the selected fixtures the planogram is to be placed on is different from that the planogram is designed for.
- Height: Warn if the heights of one or more of the selected fixtures the planogram is to be placed on is different from that the planogram is designed for.
- Range: Warn if the temperature ranges of one or more of the selected fixtures the planogram is to be placed on is different from that the planogram is designed for.
- Style: Warn if the styles assigned of one or more of the selected fixtures the planogram is to be placed on are different from those the planogram is designed for.
- Allow Multi-Profiling: Only check this option if the user wants to place multiple planograms on a single fixture without a warning.
- Split Planograms: Warn if the Planogram is to be placed on fixtures that are not adjacent to each other.

Adding Planograms

Planograms are added in Merchandiser as follows:

1. Identify the planogram to be placed. Identify the number and dimensions of the fixtures required. Also determine the styles and ranges required for the fixtures. These can often be determined by selecting the required object and looking at the details in the Properties Window of the Object Browser.

2. Ensure Grouping is turned Off (status bar). Select the required fixtures. In this example, a 2 bay planogram is to be placed.

> **Note**: Placing a planogram adds both the products and the required shelves. Accordingly, the fixtures should be empty before placing the planogram.
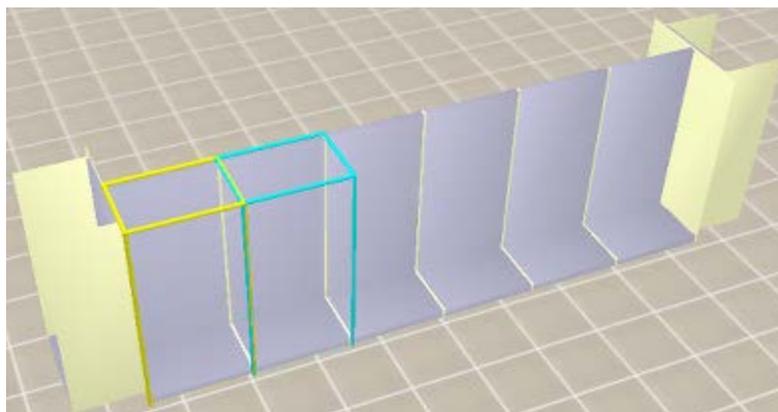
3. Select the required planogram from the Object Browser or Object Grid. In this example, it is to be selected from the Object Browser
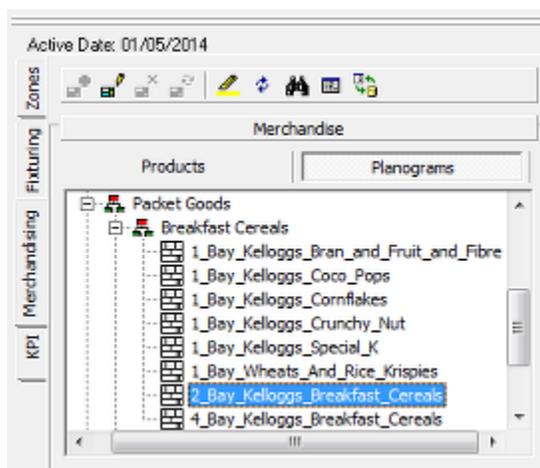
4. Drag and drop the planogram from the Object Browser to one of the selected fixtures. If there are differences between the fixtures selected and those for which the planogram was designed for, a warning will display. Clicking OK will stop the planogram placement. Clicking Ignore will over-ride the warnings and place the planogram.
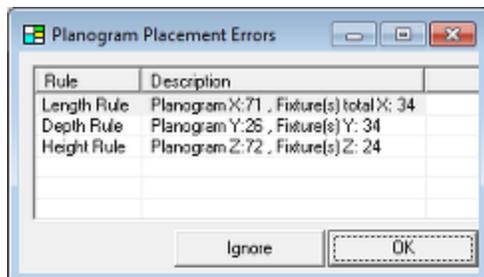
5. The planogram will then be present on the fixtures.
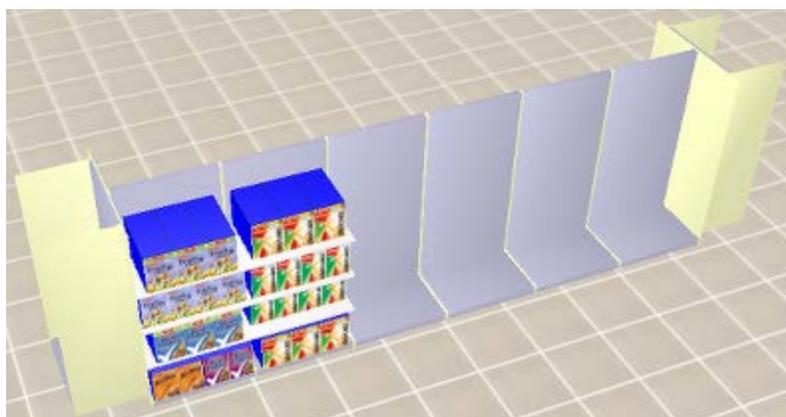
Placing Individual or Master Planograms

There are two options for placing planograms - master planograms and individual planograms.

- **Master Planograms**

  Master Planograms act as placeholders. They can be placed on fixtures and then will remain in place. The intent is to stop churning of floor plans each time individual planograms are updated.

- **Individual Planograms**

  Individual planograms can be placed by themselves. Alternatively, if master planograms are in use, they can be mapped to those master planograms. If master planograms are in use, then when planograms are published the individual planograms mapped to each master planogram in a floor plan will be published.

In the example below (simplified for the purposes of this help file) there are a series of individual planograms. There are three types of planogram: Value, Standard and Premium. And they come in three lengths: 8ft, 12ft and 16ft. There are three master planograms supplied: Value, Standard and Premium.
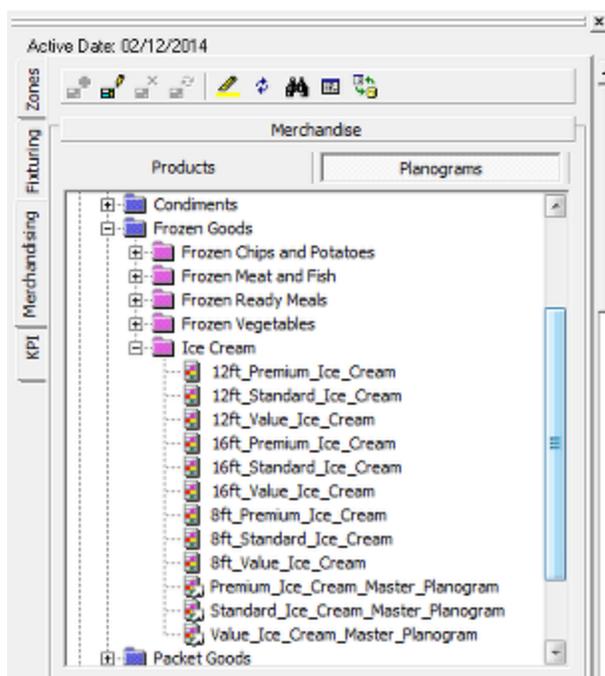
If master planograms are in use, when planograms are published (via the MSP publishing process), the following will happen:

- If the Value Ice Cream master planogram has been placed on two 4ft fixtures, the 8ft Value Ice Cream planogram will be published.

- If the Premium Ice Cream Master Planogram has been placed on four 4ft fixtures, the 16ft Premium Ice Cream planogram will be published.

As individual planograms are progressively updated, providing the mapping remains between master planogram and individual planograms, the updated individual planograms will be published (via the MSP publishing process). This reduces the need to keep continually updating floor plans when planograms are updated.

> **Note**: For more information see the section on Master Planograms

Editing and Deleting Merchandise

Editing Merchandise

This section covers editing products and planograms.

Editing Products

To edit products, highlight a specific product and bring up the right click menu.
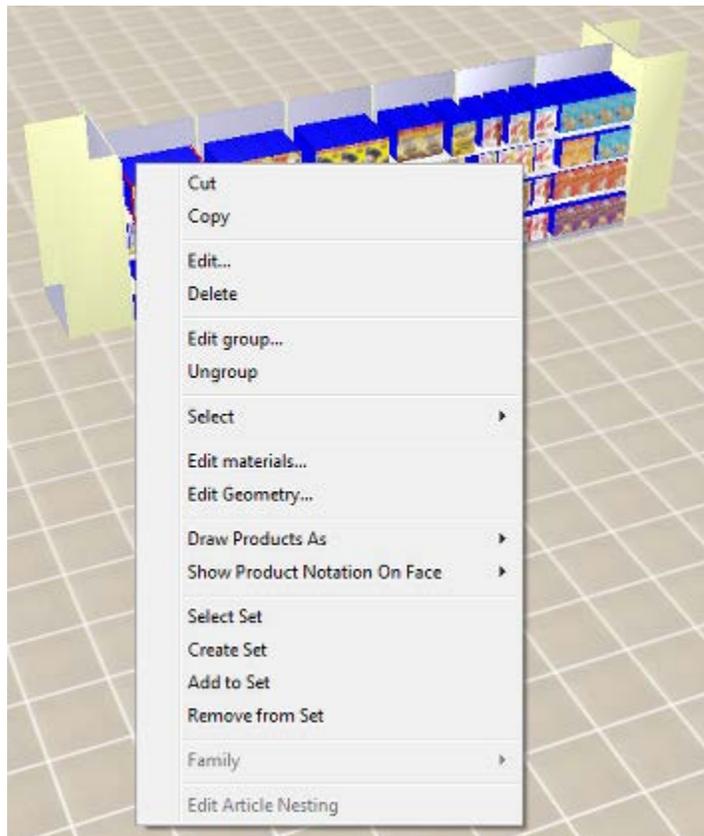
Select **Edit Group** from this menu and the **Add Products** dialog box will come up. This can be used to edit the group of products including number and orientation.
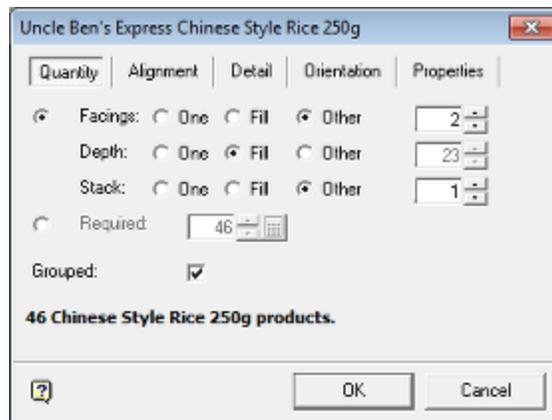
Editing Planograms

Planograms can be edited in place:

- The position of the shelves and other equipment can be altered.
- The quantity and orientation of products can be altered.

However, when this is done, the planogram shown in the store will no longer match the original planogram design. This may cause problems in relating results to the performance of the planogram as designed.

Deleting Merchandise

Both products and planograms can be deleted by similar methods.

Deleting Products

Products can be deleted by selecting the parent fixture and bringing up the right click menu.
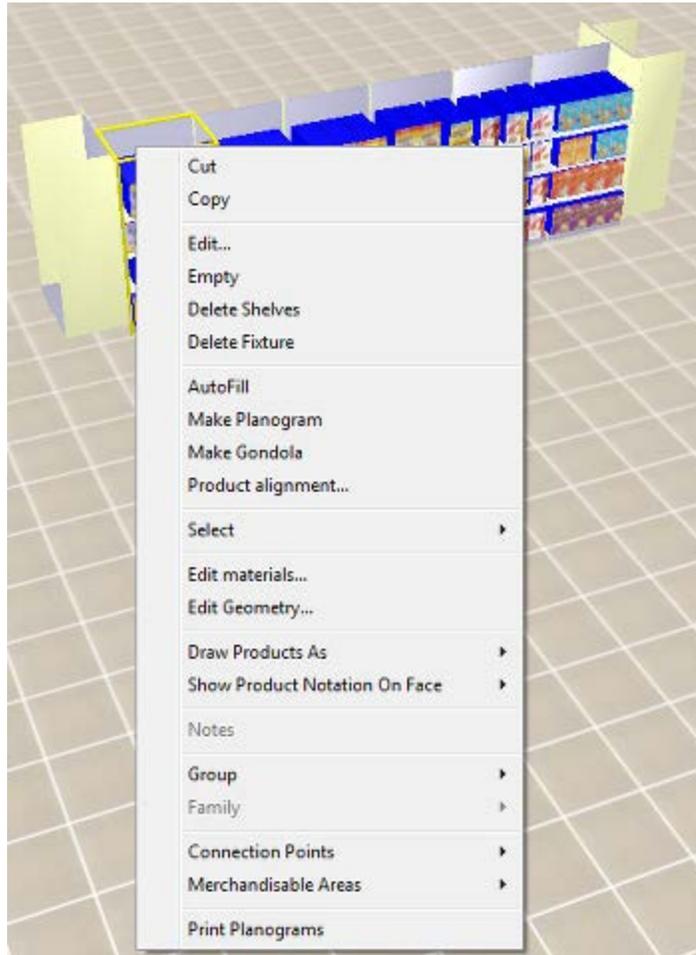
Select **Empty** and the products will be removed.

Deleting Planograms

Deleting a planogram is very similar to deleting products.

1. Select the parent fixture and bring up the right click menu. Select Empty and the products will be removed. This will leave the shelves behind.

Re-select the parent fixture and bring up the right click menu. Select Delete shelves and they will be removed.

Alignment

Aligning and Distributing Products

Products are aligned and distributed by first selecting the required products on a shelf or fixture and then selecting the required option on the Align Products toolbar.

Each alignment only works in one axis at a time - for example along the length of the shelf. Where necessary, alignment or distribution operations can be applied sequentially to get products into the required position.

Clash Detection

Clash Detection should be turned on when carry out aligning or distributing operations otherwise products could occupy overlapping positions on the shelf. Clash detection is toggled On or Off by clicking on the **Clash Detection** icon in the **Views** toolbar
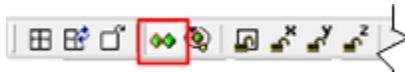
Alignment and Distribution Options

Alignment and distribution options only apply to the selected products. These define the left, right, front and back limits within which redistribution will happen. Buttons for aligning along or across the shelf will only be enabled if at least one product is selected and the floor plan is not read-only. Buttons for distributing across the shelf will be enabled if at least three products are selected and the floor plan is not read-only.

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

Example of Alignment of Selected Products

Alignment moves the selected products as far as possible in the selected direction. In the example below, a shelf contains four products.
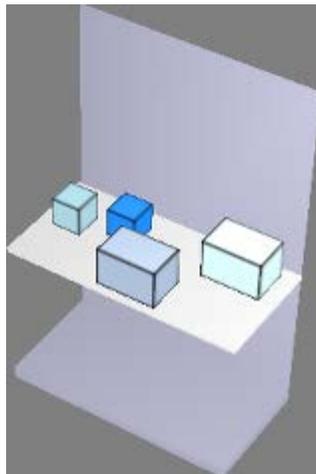
The first stage is to select them for alignment - this can be seen by the colored selection boxes.
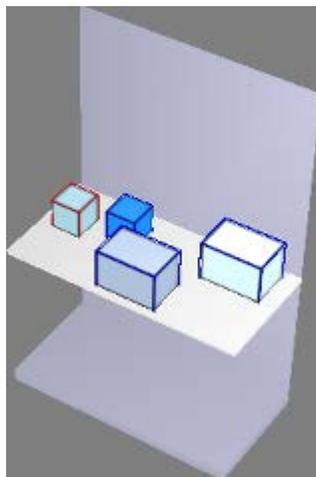
After the Align Left button is selected, the products are moved as far as possible to the left as the left most selected product allows.
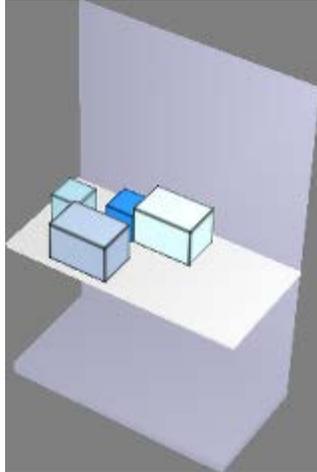
Example of Distribution of Selected Products

Distribution spreads the selected products as evenly as possible in the selected axis. In the example below, a shelf contains four products.
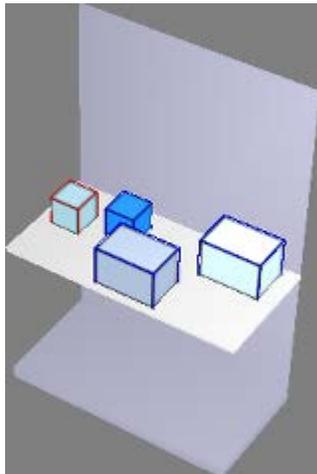
After the Distribute Front to Back (Justify Y) button is selected, the products are distributed as evenly as possible as the forward and rear most selected products allow.
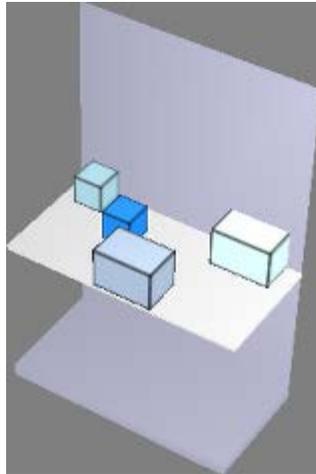
Aligning and Distributing Products on a Shelf

Products are aligned and distributed on a shelf by first selecting the parent shelf or fixture and then selecting the required option on the Align Products toolbar. Alignment or distribution operations may be applied sequentially to get products into the required position.

Alignment and Distribution Options

Alignment and distribution options apply to the extents of the selected parent object. These define the left, right, front and back limits within which redistribution will happen. Buttons for aligning or distributing products on a shelf of fixture will only be enabled if at least one shelf or fixture is selected and the floor plan is not read-only.

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

Example of Alignment of Selected Products on a Shelf

Alignment moves the selected products as far as possible in the selected direction. In the example below, a shelf contains four products.
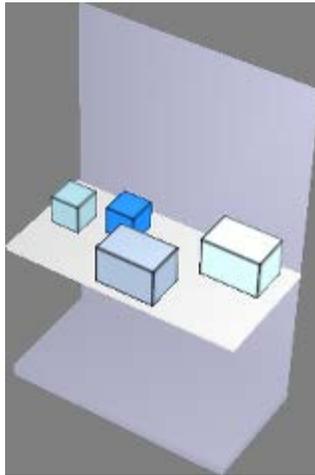
The first stage is to select the parent shelf for alignment - this can be seen by the colored selection box.
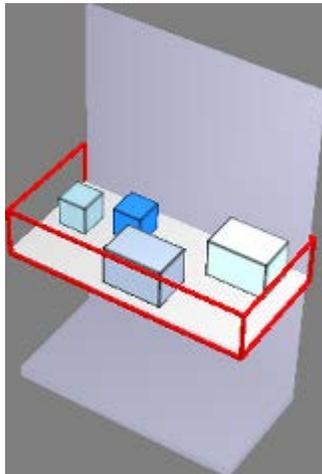
After the Align Left button is selected, the products on the shelf are moved as far as possible to the left of the shelf.
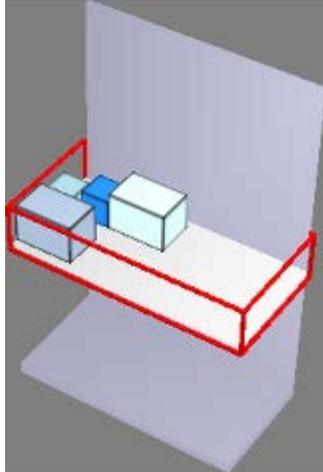
Example of Distribution of Selected Products on a Shelf

Distribution spreads the selected products as evenly as possible in the selected axis. In the example below, a shelf contains four products.
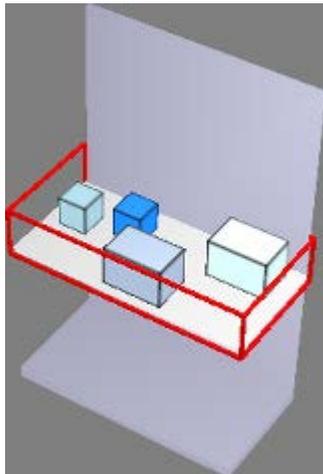
After the Distribute Front to Back (Justify Y) button is selected, the products are distributed as evenly as possible as the forward and rear most selected products allow.
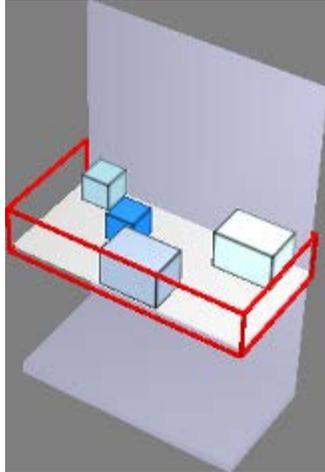
Aligning to Non-Rectangular Objects

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 on configuring non-rectangular areas.

Shelves

Alignment on non-rectangular objects should be carried out using the Shelf alignment options and with clash detection on.
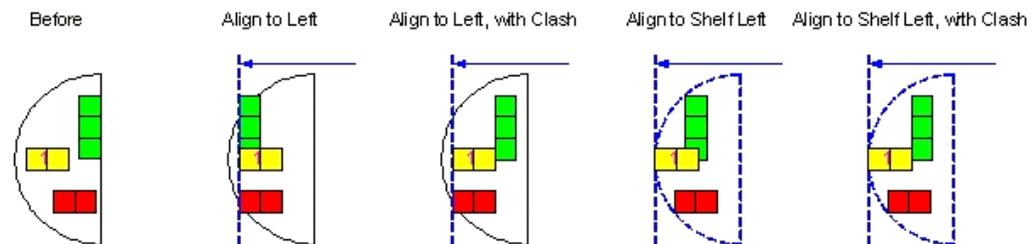
Products

Non-rectangular products will be treated as boxes for alignment purposes.

Other Information on Merchandise

Forms Products can be Drawn

Products at display style level can be drawn in three forms in the floor plan. These are controlled from the **View** menu > **Draw Products As** option

Layers	Ctrl+L	
Product Notation	▶	
Draw Products As	▶	Simple Box
		Textured Box
Reports		Graphical
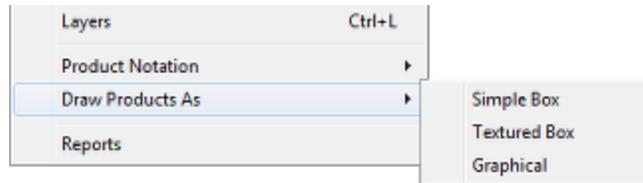
In order to change the product form, select the parent item of equipment. This can be a shelf for specific products or the fixture for all products on it. The form of the product can then be changed.
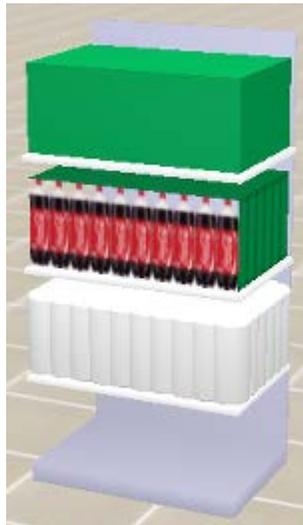
These forms are:

- Simple Box (top shelf): show the product as a simple block occupying the total volume of the product.
- Textured Box (middle shelf): show the product as individual items. If images are present, individual images will be shown. Otherwise the products will be shown as outlined cubes.
- Graphical (bottom shelf): This will only be functional if a product block has been assigned to the display style in Product Studio. Then the product will be displayed showing the shape of that product block. In the above example, this is a simple bottle shape.

Product Notation

It is possible to annotate products. Select the parent item of equipment. This can be a shelf for specific products or the fixture for all products on it. Right click to bring up the right click menu.
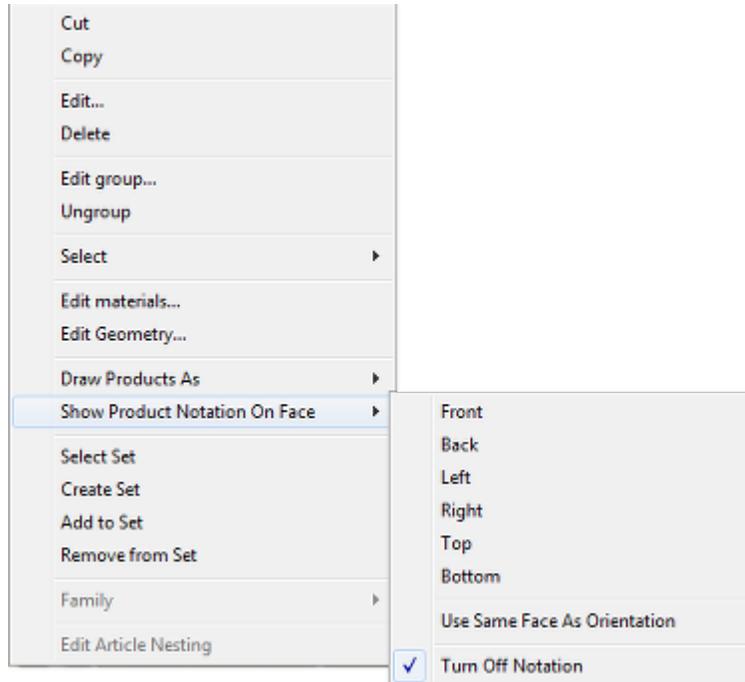
Varying forms of product notation are possible. In the example below, the products have been drawn as Simple Boxes. The top shelf has a product with no annotation. The middle shelf has a product with annotation on the front and the lower shelf has a product with annotation specified for the right side.

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 **Merchandise** window.
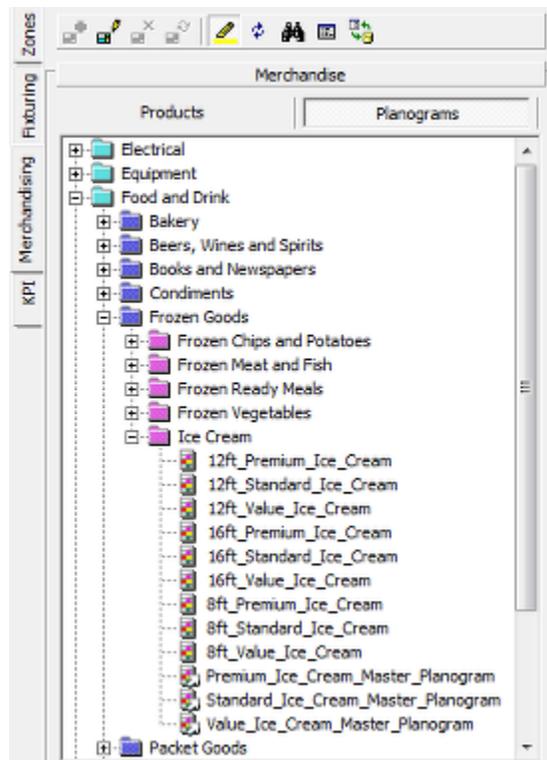
There are three types of object present in the hierarchy.

Icon	Description	Purpose
	Planogram Group	Groups hold collections of planograms. They can be set up in a hierarchical structure - for example **Tinned Beans & Vegetables** is a child of **Tinned Goods**. Planograms can be assigned to groups. Each Group holds a collection of planograms of similar purpose.
	Standard Planogram	A standard planogram is fully detailed with comprehensive information about equipment, merchandise and signage.
	Master Planogram	A master planogram is a placeholder. It links to a collection of standard planograms. When the planograms in a floor plan are published, one of the associated linked standard planograms will be published. This reduced the frequency that floor plans are published and also reduced the number of times planograms have to be manually updated in a floor plan.

Access Rights for Creating Planogram Groups

The ability for users to modify the planogram hierarchy and individual planograms is set in the Administration module. These permissions can be used to:

- Allow users to add, edit or delete Planogram groups in the Planogram Hierarchy
- Allow users to add, edit or delete individual planograms

These permissions are set in the Group Relationships Tab of the Functional Security dialog box accessed from the Security menu of the Administration module.
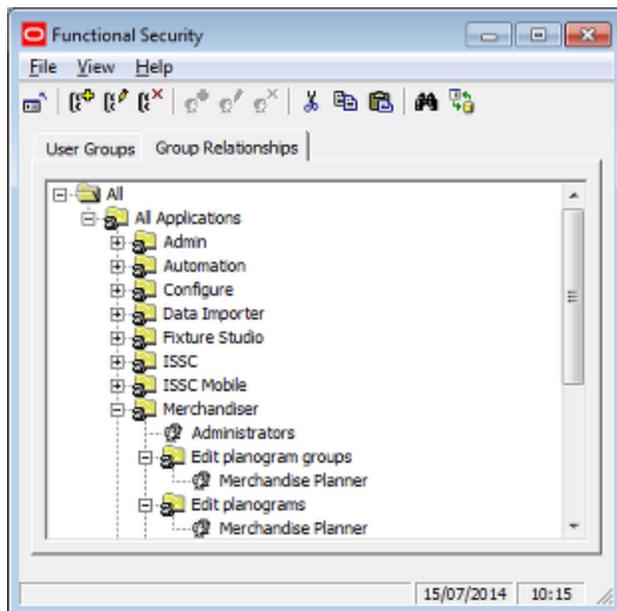
Adding, Editing and Deleting Planogram Groups

Adding, editing, deleting and copying Planogram Groups is done by means of the right click menu. The selected action will act on any highlighted object. The range of available options will also depend on the type of object that has been highlighted.
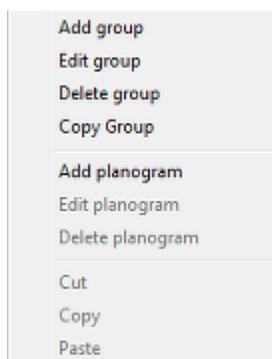
Adding A Planogram Group

To **add a group**, highlight the node in the hierarchy the group is to be a child of. Bring up the right click menu and select **Add Group**. This will bring up the **Add Group dialog box**.
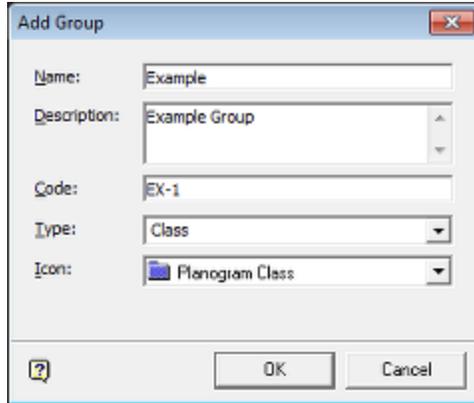
Option	Description
Name	This field holds the name that will be displayed in the planogram hierarchy in the Object Browsers in the Planner and Merchandiser modules and in In-Store Space Collaboration
Description	This field allows the person creating the planogram group to add a longer description of the purpose of the group.
Code	This field allows a code to be assigned to the planogram group. This can be used for reporting or other purposes.
Type	This drop down list allows a type to be assigned to the planogram group. The available levels correspond to the permissible levels in the product hierarchy.
Icon	This drop down list allows an icon to be selected to match the type.

Editing a Planogram Group

To **edit a group**, highlight the group in the hierarchy. Bring up the right click menu and select **Edit Group**. This will bring up the **Edit Group dialog box**.
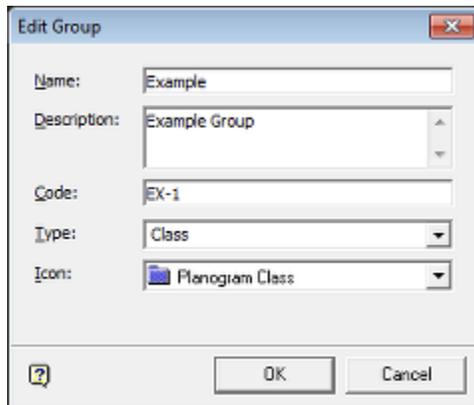
The available options as the same as for the Add Group dialog box.

Deleting a Planogram Group

To delete a group highlight the group in the hierarchy. Bring up the right click menu and select **Delete Group**. This will bring up the confirmation dialog box.
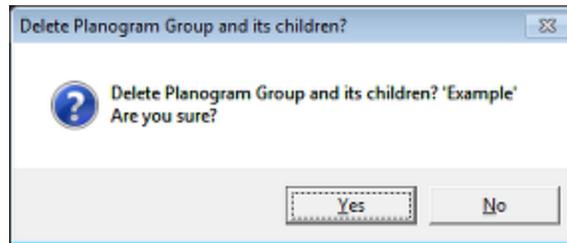
Clicking Yes will delete both the Planogram Group and all associated child groups and planograms. The Planogram Group will be deleted and any associated planograms will marked for deletion. These planograms will disappear from the planogram hierarchy but details will still be held in the database. They can be deleted from the database by using the **Purge** option from the Tools menu in the Administration Module.

> **Note**: see the section on deleting and purging planograms for more information.

Copying a Planogram Group

To copy a planogram group, highlight it in the hierarchy.

Select Copy Group from the right click menu and the planogram group will be duplicated.
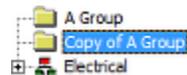
The two differences from the original planogram group are:

- The words Copy of will be added to the name of the group.
- A default code will be added so that the original code is not duplicated.

Other details can be added as required.

Adding, Editing and Deleting Planograms

The general way of adding, editing and deleting planograms is via planogram import - the volume of planograms of often too great for manual configuration using the facilities in Merchandiser. This section gives an overview of manually creating, editing and deleting planograms in Merchandiser. More detail is given in a later section.

Adding Planograms

There are two basic ways of adding a planogram in Merchandiser.

- By selecting an arrangement of equipment, signage and merchandise in a floor plan and using the Make Planogram option from the right click menu related to the highlighted parent fixture.
- By selecting New Planogram from the File menu or Add Planogram from the right click menu associated with the planogram hierarchy.

Creating a Planogram using an Existing Layout of Equipment and Merchandise

Here an existing arrangement of equipment, signage and merchandise in a floor plan can be converted into a planogram. The steps are as follows:

1. Highlight the required Planogram Group in the hierarchy.

2. Select the parent fixture or fixtures containing the equipment, signage and merchandise that it is desired to turn into a planogram.

3. Bring up the right click menu and select Make Planogram.

4. The Planogram Design dialog box will appear. The Design tab will be populated with the selected equipment, merchandise and signage but the majority of information in other tabs will be blank.

5. Add the required information and click OK. The planogram will be saved to the database and it will appear in the planogram hierarchy.

Creating a Planogram from the Planogram Hierarchy

To create a planogram from the planogram hierarchy:

1. Highlight the required Planogram Group in the hierarchy.

2. Bring up the right click menu and select Add Planogram. Note that the available options are different to those available when adding planogram groups.
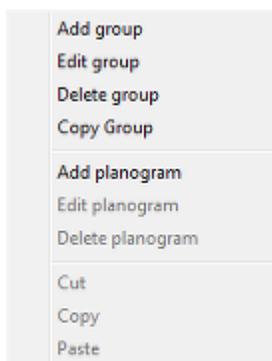
3. The Planogram Design dialog box will appear. The majority of information in the tabs will be blank.

4. Add the required information and click OK. The planogram will be saved to the database and it will appear in the planogram hierarchy.

Editing a Planogram

To edit a planogram:

1. Highlight it in the planogram hierarchy.

2. Select Open Planogram from the file menu or Edit Planogram from the right click menu.

3. The Planogram Design dialog box will appear.
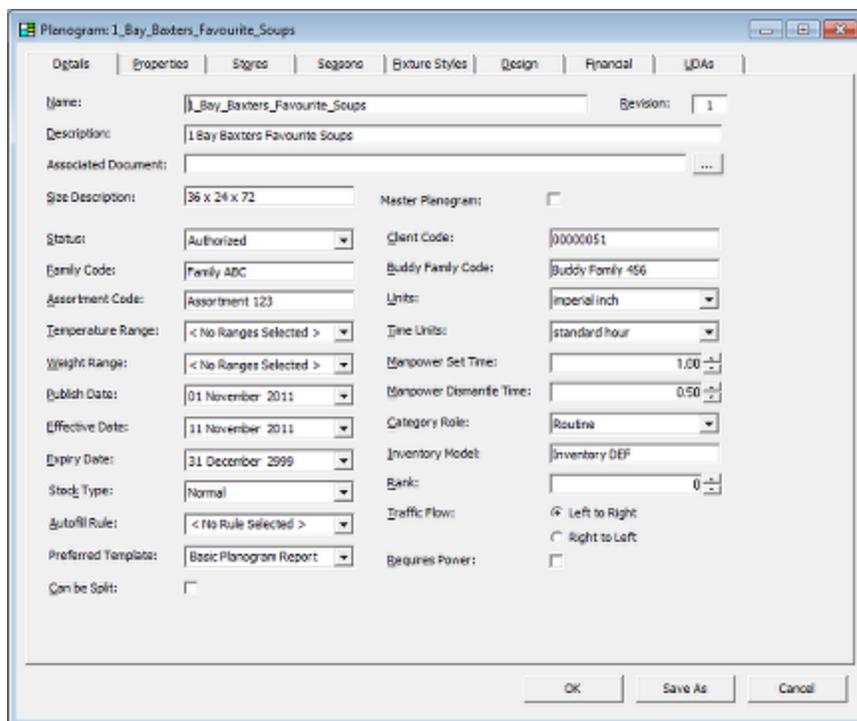
4. To save the planogram in its present form, make the required changes and click OK. The resulting action will depend on the status of the planogram.

   a. If the planogram is at Proposed status, the planogram will save in its present form.

   b. If the planogram is at Authorised status the planogram will save provided the Publish and Effective dates are set to the current date or a date in the future.

   c. If the planogram is at Current status OK will be grayed out and unavailable.

5. To save the planogram in a different form make the required changes and click Save As. This will bring up the Save As dialog box.
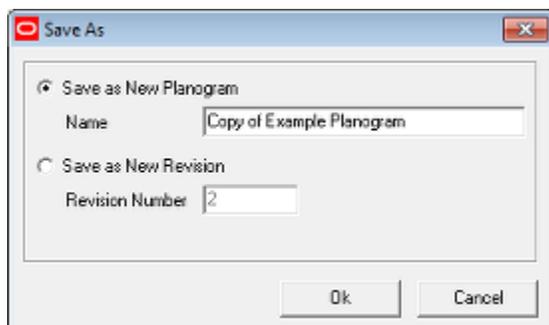
   a. Selecting Save as New Planogram will create a new planogram design copied from but separate from the original planogram design. It will have a separate lineage. This option should be used if substantial changes have been made to the planogram design. An example would be if the number of facings for a significant number of products is changed.

    b. Selecting Save as New Revision will create an updated version of the existing planogram design. The revision number will increment by 1 from the previous value and the planogram design will have the same lineage as the original planogram design. This option should be used if minor changes have been made to the planogram design and it is substantially the same as the previous version. An example might be if the signage and shelf edge labeling change due to a promotion.

Deleting a Planogram

Deleting a planogram is done in two stages:

1. Marking the planogram for deletion.

2. Purging the planogram from the database.

Marking the Planogram for Deletion

The first stage is to mark the planogram for deletion. This is done by selecting the **Delete Planogram** option from the right click menu accessed from the planogram hierarchy.
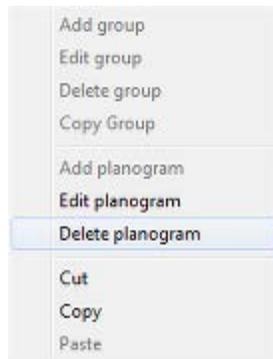
This will delete the planogram from the planogram hierarchy. However, it will still exist in the database.

Purging the Planogram from the Database

Purging the planogram from the database is done in the Administration module and can only be done by users with the appropriate privileges. Selecting the **Purge** option from the Tools menu will bring up the **Purge dialog box**.
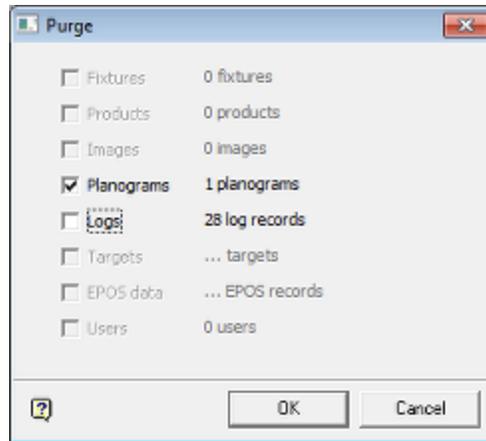
Select the Planogram check box and click **OK**. The **Purge Results dialog box** will appear. This gives information on whether the planogram definitions have been removed from the database.
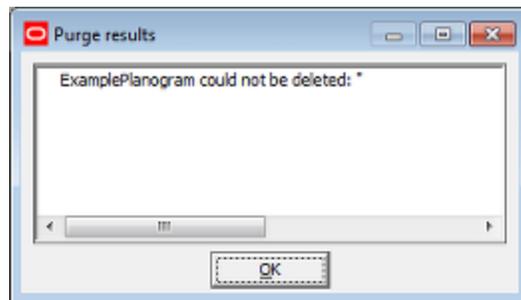
The most common reason for inability to delete planograms is that they are present in one or more floor plans. These planograms cannot be deleted because they give information on the equipment and merchandise in that specific floor plan. In order to delete planograms in those circumstances, the pertinent floor plans must be deleted first.

Overview of Planogram Creation

Overview of Planogram Creation

There are **two basic ways of creating planograms**.

- By designing a planogram in the planogram design dialog box.
- By selecting merchandised fixtures in the store and using them to create a planogram.

> **Note**: Planograms can also be imported from third party planogram software using Oracle Data Integrator (ODI).

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.

```
                    ┌─────────────────┐
                    │     Decide      │
                    │    Planogram    │
                    │ Creation Method │
                    └────────┬────────┘
            ┌────────────────┴────────────────┐
            ▼                                  ▼
   ┌─────────────────┐              ┌─────────────────────┐
   │   Design New    │              │    Create from      │
   │    Planogram    │              │ Existing Fixtures   │
   │                 │              │  and Merchandise    │
   └────────┬────────┘              └──────────┬──────────┘
            ▼                                  ▼
   ┌─────────────────┐              ┌─────────────────────┐
   │  Select New or  │              │   Select Parent     │
   │  Add Planogram  │              │     Fixtures        │
   │   from menus    │              │                     │
   └────────┬────────┘              └──────────┬──────────┘
            ▼                                  ▼
   ┌─────────────────┐              ┌─────────────────────┐
   │     Specify     │              │  Right click and    │
   │    Planogram    │              │   select Make       │
   │     Details     │              │    Planogram        │
   └────────┬────────┘              └──────────┬──────────┘
            ▼                                  ▼
   ┌─────────────────┐              ┌─────────────────────┐
   │  Select Node in │              │     Specify         │
   │    Planogram    │              │    Planogram        │
   │    Hierarchy    │              │     Details         │
   └────────┬────────┘              └──────────┬──────────┘
            ▼                                  ▼
   ┌─────────────────┐              ┌─────────────────────┐
   │ Save Planogram  │              │  Select Node in     │
   │                 │              │    Planogram        │
   └─────────────────┘              │    Hierarchy        │
                                    └──────────┬──────────┘
                                               ▼
                                    ┌─────────────────────┐
                                    │  Save Planogram     │
                                    │                     │
                                    └─────────────────────┘
```

Access Rights to Planogram Design Functionality

The ability for users to modify the planogram hierarchy and individual planograms is set in the Administration module. These permissions can be used to:

- Allow users to add, edit or delete Planogram groups in the Planogram Hierarchy
- Allow users to add, edit or delete individual planograms

These permissions are set in the Group Relationships Tab of the Functional Security dialog box accessed from the Security menu of the Administration module.
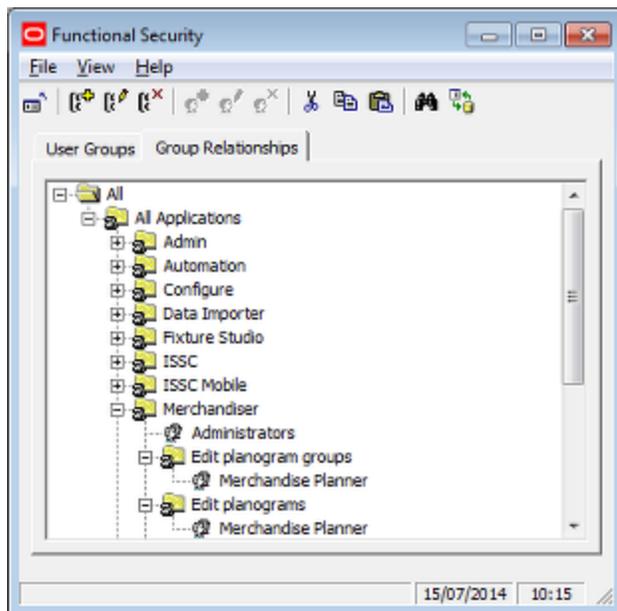
Planogram Terminology

The following terminology is in use for planogram design and use within Macro Space Planning:

Term	Definition
Master Planogram	A placeholder that is used in a floor plan to mark where a specific planogram design will be when the floor plan or planogram is published. During the publishing process, the actual planogram
Planogram Design	An arrangement of equipment, merchandise and signage. The fixtures for which the planogram is intended do not form a part of the planogram design.
Planogram Revision	A small update of the planogram insufficient to warrant calling the planogram a new design
Planogram Lineage	A unique reference to identify all revision for a specific planogram. No revision may have overlapping ranges of dates between effective and expiry dates.
Planogram Version	A variant of the planogram design in different lengths - for example four feet and eight feet.
Reversed Planogram	A variant of a planogram design intended for a different traffic direction to the main planogram design. If the main planogram design is designed for left to right traffic, the reversed version is for right to left.

Term	Definition
Assortment	A term derived from Category Management. It is a specific selection of products associated with a sub-category or segment of a category. The precise selection of the products in the assortment may change at intervals as part of the category management process.
Assortment Code	A unique code to identify a product assortment. Although the individual SKUs in an assortment may change with time due to the category management process, the assortment code remains constant - allowing the assortment to be identified over its entire time line.

These concepts may be visualized in a rough hierarchy.
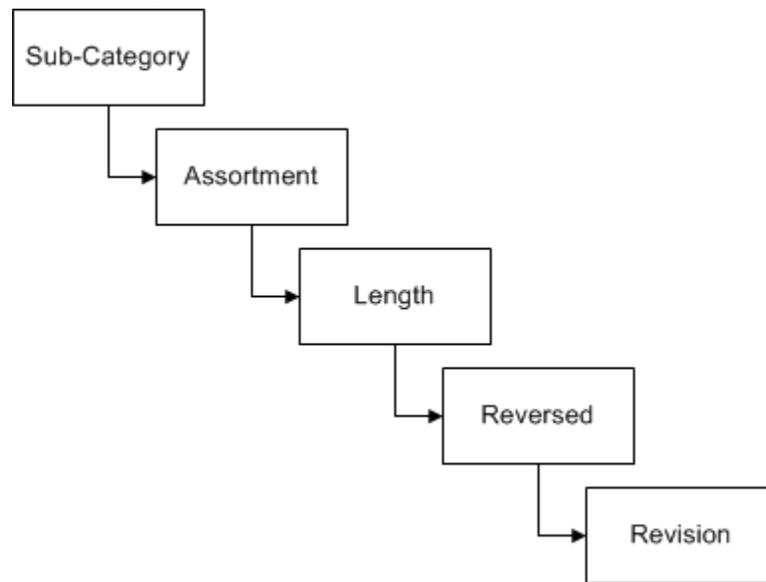
Note: the precise details of this hierarchy may vary from retailer to retailer. For example many retailers sub-divide their subcategories into segments.

Stage	Description
Assortment	Subcategories will have a number of different assortment/assortment codes associated with them. Each assortment will be optimized for a particular clustering of stores - for example convenience or superstores.
Length	Each assortment may well have planograms of different lengths associated with it - for example one meter and two meters.
Reversed	A planogram in a specific length may have two variants: normal and reversed
Revision	Each planogram may have minor design variants over time. For example the signage may change depending on whether one or more products are on sale on not. all revisions of a specific planogram will have the same lineage.

Special Forms of Planograms

There are several forms of planograms that can be used to supplement fully detailed, finished planogram designs. Two examples are given below.

Equipment Planograms

If a store plan is being developed, but planogramming is still at an early stage, it is possible to create equipment planograms. These can be used to add in the shelves and other equipment in the floor plan so that a bill of materials can be generated.
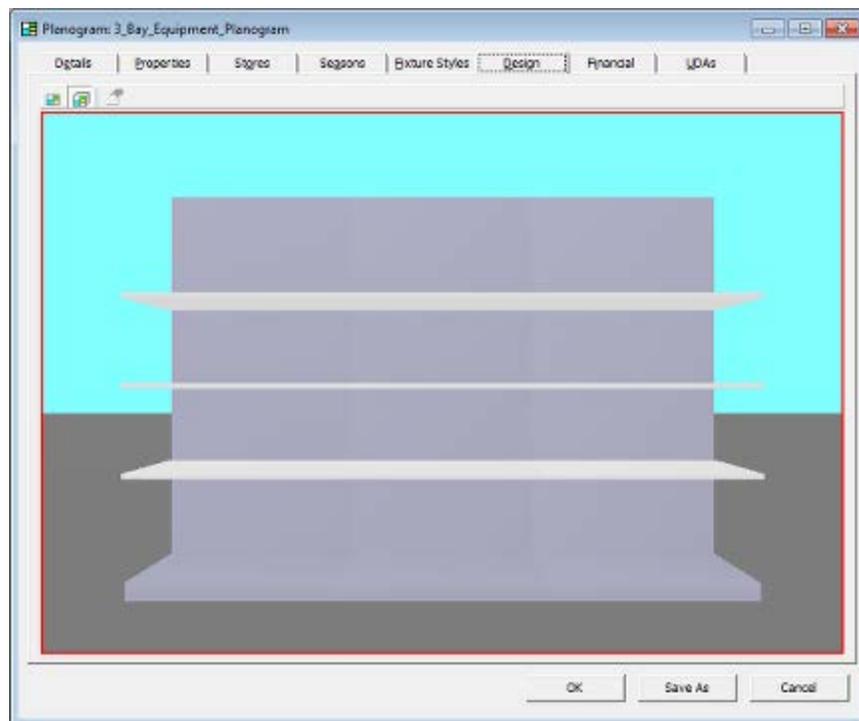
Note: it is also possible to place the shelves, etc, directly in the floor plan without using equipment planograms.

Placeholder Planograms

Planograms can be saved with product placeholders in place of display styles.
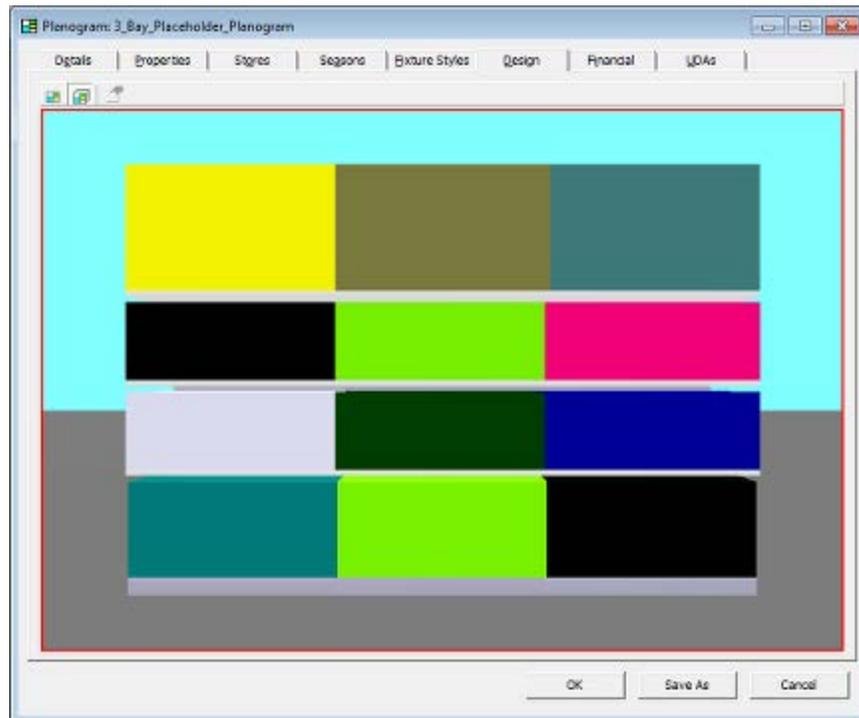
The usual purpose of this sort of planogram is to allow store planning to start before the finalized planogram design. The placeholder planogram is saved as Revision 1. When the design is finalized, it is saved as Revision 2. If Planogram Substitution is carried out in a floor plan containing Revision 1 (placeholder), that planogram will be updated to Revision 2 (full detail).

Placeholder planograms can only be made in the planogram design window. if the Make Planogram command is used from the right click menu in a floor plan an error message will result.
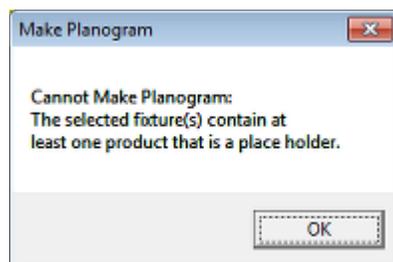
Overview of Planogram Import

Often planograms are imported into Macro space Planning from third party planogram design software. The basic process is shown in the flowchart below. This will normally be done during implementation of the software. The import process will then be run at regular intervals to ensure that the planogram hierarchy contains the latest versions of the planogram designs.
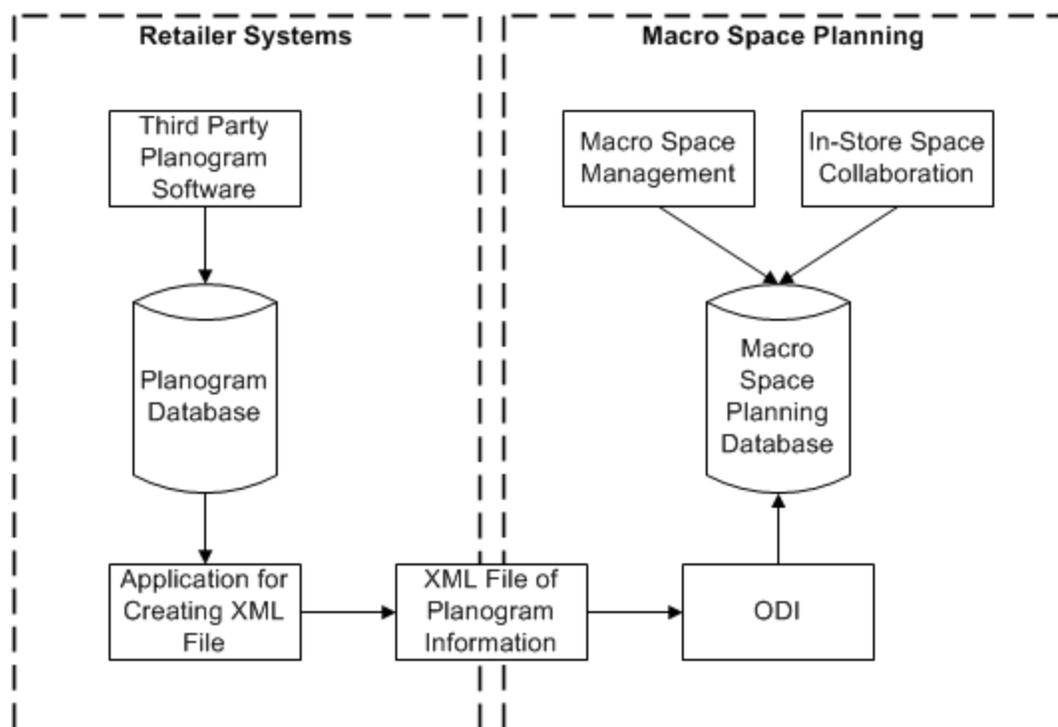
1. Planogram designs are created in third party planogram software. the results are stored in the associated database.

2. A software application is used to create an XML file containing details of new, modified or deleted planograms.

3. This XML file is read by Oracle Data Integrator (an ETL tool) and the results inserted into the Macro Space database.

4. Once inserted into the database, the planograms become available to users of Macro Space Management and In-Store Space Collaboration.

Details of how this is implemented will vary from retailer to retailer - the above description is only intended to provide general principles.

Planogram Business Processes

Although details will vary from retailer to retailer, a basic business process using the Merchandiser planogram design option is as follows:
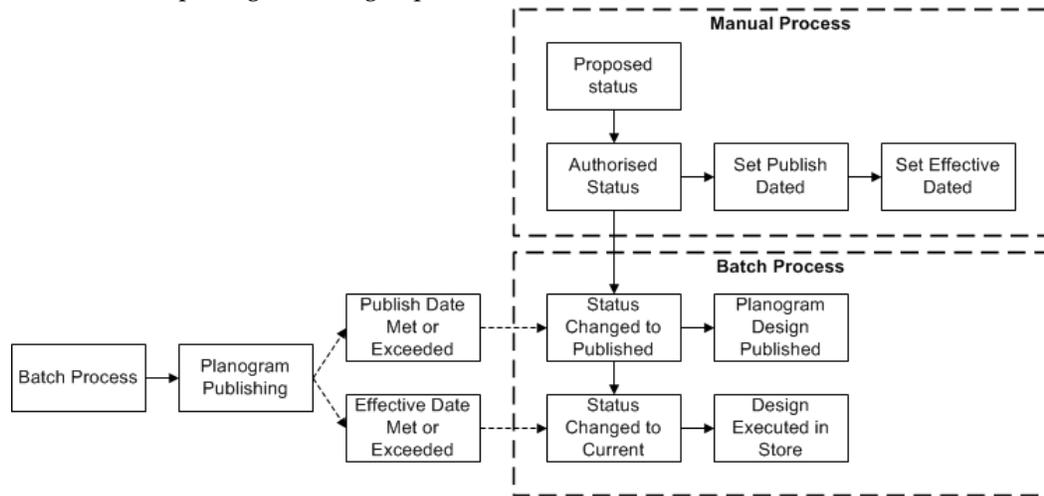
1. **The Planogram is created and is at Proposed Status**

   This is the design stage of the process. While at this stage the equipment, merchandiser, signage and UDAs can be configured as required. At this stage the **Publish Date** and **Effective Date** options will be grayed out and unavailable.

2. **The Planogram is set to Authorised Status**

   When the design is complete, the planogram status will be set to Authorised to signify this. It will also be possible to set Publish and effective dates.

   a. The Publish Date is the date at which the planogram will be Published: information on the planogram design will be sent to the store and to the replenishment system.

   b. The Effective Date is the date at which the planogram will be put into service.

3. A Batch Process runs MSPs planogram publishing process. This checks to see if the Publish Date for a planogram has been met or exceeded. If so the status for the planogram will be set to Published and the appropriate information distributed.

The same Batch Process runs MSPs planogram publishing process at repeated intervals. This checks to see if the Effective Date for a planogram has been met or exceeded. If so, the status will be changed to Current and the store will execute the planogram.

Planogram Design Options

Overview of Planogram Design Options

The Planogram dialogue box allows users to specify full details for the planogram.

Tab	Description
Details Tab	This allows much of the header information on the planogram to be entered.
Properties Tab	This tab displays read only information from the database
Stores Tab	If the planogram is to be a store specific planogram, this tab allows the user to specify the stores it is valid for.
Seasons Tab	If the planogram is to be valid for specific seasons, this tab allows the user to specify the ones it is valid for.
Fixture Styles	This tab allows the user to associate a fixture style with the planogram. In order for the planogram to place, the selected fixtures must have the same style.
Design Tab	This tab allows equipment, signage and merchandise to be added, edited and deleted.

Tab	Description
Financial Tab	This tab allows financial information to be display or edited.
UDA Tab	This tab allows User Designed Attributes to be set for the Planogram.

Details Tab

The **Details Tab** is used for to set up the description of the planogram, together with other parameters concerning its operation.

Top Section

Option	Description
Name	This is the name of the planogram. It will appear in the planogram hierarchy in the Planner and Merchandiser modules and in In-Store Space Collaboration.
Description	This is a description of the planogram. It can be more informative than the name and

Option	Description
	is useful for reporting purposes.
Revision	Revisions are minor changes to planogram designs, not of sufficient import to warrant called the modified planogram a new design. Revision 1 is the original planogram, with the number being incremented for each successive revision. The lineage (visible only in the database) remains constant from revision to revision for a specific planogram.
Associated Document	This field allows users to specify a PDF or Word file giving details of the planogram design. This document is externally produced and provides an alternative to reports from MSP's Report Designer module.
Size Description	This is a text field that can be populated with the designed dimensions of the planogram. It is useful for reporting purposes.
Master Planogram	This check box can be used to designate the planogram as a Master Planogram. A standard planogram design has full information on equipment, merchandise and signage. A Master Planogram is a placeholder and contains header information only.

Left Section

Option	Description
Status	The status indicates where the planogram is in the business life cycle. It is selected from the drop down list. The pre-configured statuses are: ▪ Proposed: A planogram at the design stage. ▪ Authorized: A planogram that has been approved to go into service. This status will have a Publish Date, Effective Date and Expiry Date associated with it. ▪ Published: This status indicates that the planogram design has been distributed to the stores, replenishment system and so on. The distribution system is configured by the retailer. The planogram will generally be automatically changed to this status by a batch process once the Publish Date has been met or exceeded. ▪ Current: This status indicated that the planogram has gone into service in at least one store. The planogram will generally be automatically changed to this status by a batch process once the Effective Date has been met or exceeded. ▪ Superseded: This status indicates that the planogram has been replaced by a more recent design or revision and is no longer in service. Dependent on settings in the **Status dialog box** (General menu) in the Administration module some of the statuses may not be selectable or reversible by the user.
Family Code	This is a retailer specific code to identify which gamily the planogram belongs to. An example of a planogram family would be all planograms belonging to the Value range.
Assortment Code	This is a retailer specific code to identify which product assortment has been used to merchandise the planogram. Product assortments are often associated with a specific cluster of stores. For example the product assortment for a specific type of planogram designed for a store cluster associated with deprived areas will differ from that for an affluent area.
Temperature Range	The list of temperature ranges is configured in the **Ranges dialog box** (Merchandising menu) in the Administration module. A temperature range is then assigned to the planogram from the drop down list. For the planogram to be placed in Merchandiser, this temperature range must match that assigned to the fixtures the planogram is to be placed on. In the Planner module and in In-Store Space Collaboration, if the temperature ranges do not march, a warning message could result. (The warning message depends on the option being selected in the Merchandising tab of the Configuration module).
Weight Range	This functionality is not n use.
Publish Date	This is the date at which the planogram is designed to be published and hence notified to the store and replenishment system as coming into service shortly. Publishing is normally executed via a batch process with the status of the planogram being changed to **Published** and the planogram design being published automatically when the Publish Date is matched or exceeded.
Effective Date	This is the date at which the planogram is scheduled to come into service. The status is normally changed to **Current** by a batch process when the Effective Date is met or exceeded.

Option	Description
Expiry Date	This is the date at which the planogram is scheduled to go out of service. If the planogram is seasonal it may be set to a specific date. Otherwise the date is set to an indefinite one in the future. If a more recent planogram is imported, this date is generally set to the date the planogram will be replaced by the more recent one.
Stock Type	The stock type can be selected from a drop down list and is a flag used for reporting purposes. There are three options: ▪ Normal: A planogram designed for normal placement in a store. ▪ Above: A planogram designed to go above normal products. And example would be flat pack furniture stored above the products accessible to the public in a DIY store. ▪ Warehouse: A planogram designed to hold stock in a warehouse.
AutoFill rule	This functionality was originally designed to auto-populate a planogram design with products. It is no longer in use.
Preferred Template	If reports on planogram design are being generated using MSP's Report designer module, a report can be selected from the drop down list. The reports must previously have been configured in Report designer.
Can be Split	If selected, this check box can be used to indicate the planogram is designed to be placed on fixtures that are not adjacent. The flag can be used for reporting purposes.

Right Section

Option	Description
Client Code	This is a retailer specific code that acts as a unique identifier for a planogram. An example of this would be the primary key from the planogram design software.
Buddy Family Code	This is a Family Code from another family of planograms. Its primary use is for reporting purposes. It allows a retailer to identify if a complementary planogram is in the floor plan. For example, if a printer cartridge planogram has been placed in the computer peripherals aisle, a report can be configured to verify the buddy planogram (printer paper) has also been placed

Option	Description
Units	The units are selected from a drop down list. They specify the units for the planogram dimensions.
Time Units	The time units are selected from a drop down list. They specify the units for the set and dismantle times.
Manpower Set Time	This is the time required to set the planogram. The units are set using the **Time Units** drop down list. The information is useful for reporting purpose.
Manpower Dismantle Time	This is the time required to dismantle the planogram. The units are set using the **Time Units** drop down list. The information is useful for reporting purpose.
Category Role	This is set from drop down list. It is related to the assortment of products used for the planogram - which in turn is derived from the Category Management Process.
Inventory Model	This field is for reporting purposes. It can be used to link to a retailer specific strategy for replenishment.
Rank	This field is mainly of use for reporting and analysis purposes. If there are several planograms that could be potentially selected to populate a floor plan, they can be assigned different ranks, allowing the user to choose between them.
Traffic Flow	This radio button can be used to indicate whether the planogram is designed for the predominant direction of travel for customers to be left to right or right to left.
Requires Power	This flag is for reporting purposes. It can be used to identify planograms that require electrical power. For example, planograms that have working televisions would have this flag set.

The Stores Tab

The **Stores** Tab is used for store specific planograms to select the stores the planogram is valid for. The list of stores available duplicates the store hierarchy from Store Manager.
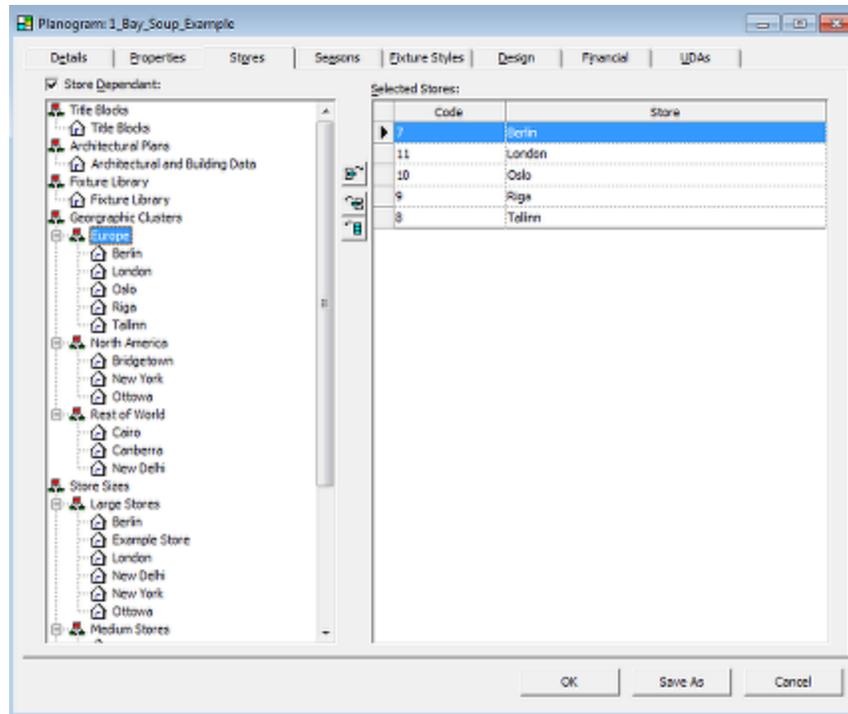
Icon Description

Icon	Description
	Add selected store to list
	Remove selected store from list
	Remove all selected stores from list

To make a planogram store dependent:

1. Select the Store Dependent check box at the top left of the screen. This will enable the functionality.

2. Use the buttons in the centre of the tab to add stores to the lists of stores the planogram is designed for in the right.

   a. If a cluster is selected, all stores that are children of that cluster will be added to the list of stores.

   b. If an individual store is selected, that store will be added to the list of stores.

3. Individual stores can also be removed from the list of selected stores by using the appropriate button. Alternatively, all selected stores can be cleared by means of the remove all button.

Using Store Dependent Planograms

Making a planogram store dependent only sets a series of flags flag for that planogram. In order to make the functionality available in the Planner and Merchandiser some changes need to be made to the standard implementation.

Object Browser

The Object Browser in both the Planner and Merchandiser modules (and in In-Store Space Collaboration cannot make use of store specific functionality. The planogram hierarchy will show all planograms, regardless of whether they have been assigned store specific traits or not.

Object Grid

The Object Grid in both the Planner and Merchandiser modules is populated with data governed by Custom SQL. Although the standard Custom SQL supplied with the application does not take into account store specific planograms, it could be adapted to do so. The Object Grid will then only display two forms of planograms:

- Planograms that are general and not store specific.
- Planograms that are store specific and assigned to the currently active floor plan.

The Seasons Tab

The **Seasons** Tab is used for season specific planograms to select the time intervals the planogram is valid for. The list of seasons is configures in the **Seasons dialog box** (Merchandising menu) in the Administration module. Alternatively, the list of seasons can be imported directly into the database by an administrator.
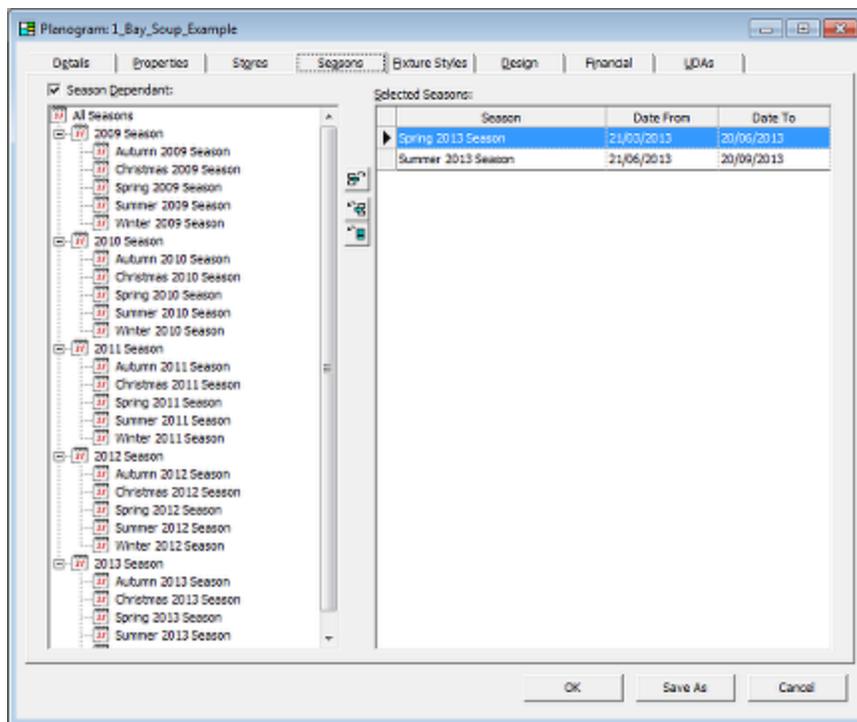
Icon Description

	Add selected season to list
	Remove selected season from list

| | Remove all selected seasons from list |

To make a planogram store dependent:

1. Select the Season Dependent check box at the top left of the screen. This will enable the functionality.

2. Use the buttons in the centre of the tab to add seasons to the lists of seasons the planogram is designed for in the right.

    a. If a node in the season hierarchy is selected, all seasons that are children of that none will be added to the list.

    b. If an individual season is selected, that season will be added to the list of stores.

3. Individual seasons can also be removed from the list of selected seasons by using the appropriate button. Alternatively, all selected seasons can be cleared by means of the remove all button.

Using Season Dependent Planograms

Making a planogram season dependent only sets a series of flags flag for that planogram. In order to make the functionality available in the Planner and Merchandiser some changes need to be made to the standard implementation.

Object Browser

The Object Browser in both the Planner and Merchandiser modules (and in In-Store Space Collaboration cannot make use of season specific functionality. The planogram hierarchy will show all planograms, regardless of whether they have been assigned season specific traits or not.

Object Grid

The Object Grid in both the Planner and Merchandiser modules is populated with data governed by Custom SQL. Although the standard Custom SQL supplied with the application does not take into account season specific planograms, it could be adapted to do so. The Object Grid will then only display two forms of planograms:

- Planograms that are general and not season specific.
- Planograms that are season specific and relate to the Active Date of the currently active floor plan. (The Active Date is set at the top of the Object Browser or in the File Properties dialog box accessed via Store Manager).

The Fixture Styles Tab

The **Fixture Styles** tab allows users to specify one or more fixture styles for the planogram. These will be compared to the fixture styles assigned to the selected fixtures during planogram placement. In the Merchandiser module, the planogram cannot be placed if the fixture styles for both the selected fixtures and the planogram do not match. In the Planner module and in In-Store Space Collaboration a warning message will be generated.
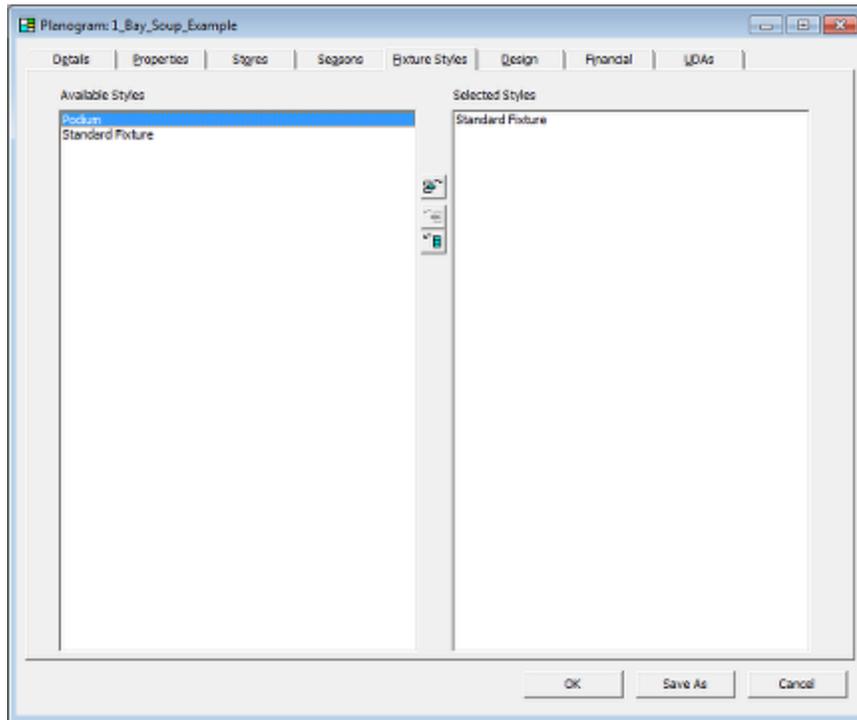
Configuring the List of Styles

The list of available styles is configured in the Styles dialog box (Merchandising menu) in the Administration module.
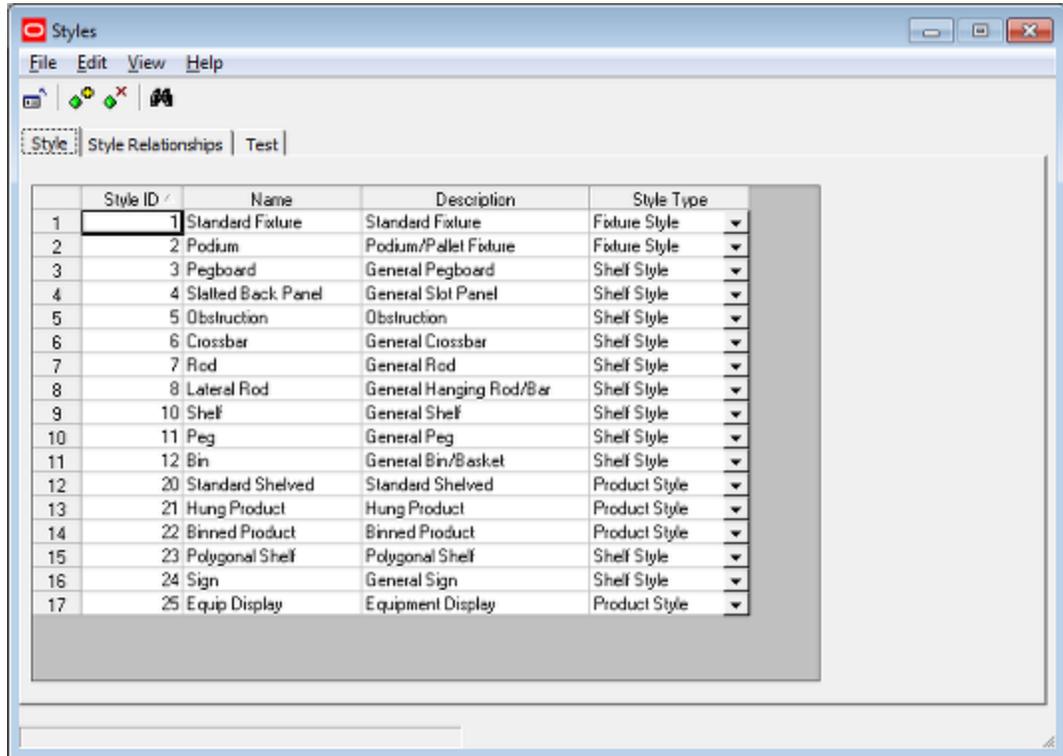
Note: For information on how to configure Styles, see the *Oracle Retail Macro Space Management Administration Module User Guide*.

Selecting Styles

Styles can be assigned to a planogram using the buttons in the centre of the Fixture Styles tab. A planogram must have a minimum of one style assigned. Multiple styles can be assigned at need.

Icon Description

Icon	Description
	Add selected style to list
	Remove selected style from list
	Remove all selected styles from list

The Design Tab - Planogram Design

The **Design Tab** is used to create or modify the design of the planogram. The actual arrangement of equipment and merchandise can be created in one of two ways:

- By selecting an existing arrangement of Equipment and Merchandise in the active floor plan and using Make Planogram from the right click menu associated with the parent fixtures.
- By dragging and dropping equipment and merchandise from the Object Browser. This is exactly the same as dragging and dropping into a floor plan and the controls work in an identical manner.
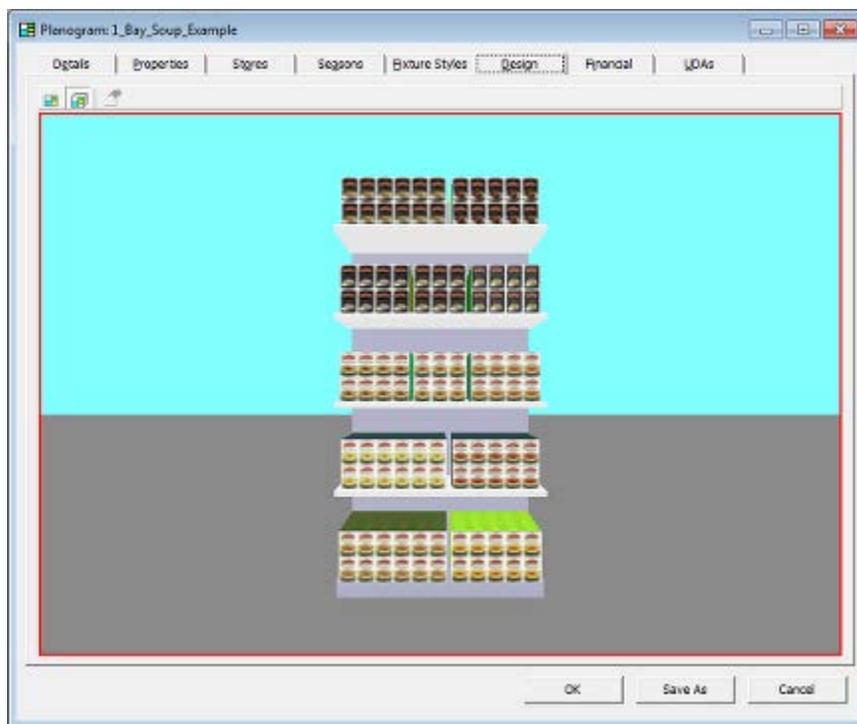
Note: To move the planogram about, the **Walk** option must be selected in the Merchandiser status bar.

Creating a Planogram from a Floor Plan

An existing arrangement of equipment, signage and merchandise in a floor plan can be converted into a planogram. The steps are as follows:

1. Highlight the required Planogram Group in the hierarchy.

2. Select the parent fixture or fixtures containing the equipment, signage and merchandise that it is desired to turn into a planogram.

3. Bring up the right click menu and select Make Planogram.

4. The Planogram Design dialog box will appear. The Design tab will be populated with the selected equipment, merchandise and signage but the majority of information in other tabs will be blank.

5. Add the required information and click OK. The planogram will be saved to the database and it will appear in the planogram hierarchy.

Creating the Planogram Design in the Design Tab

Creating the planogram design in the design tab takes place in several stages. A basic example is given below - details will vary in practice.

1. **Assign Parent Fixtures**

    The first stage is to drag and drop the parent fixtures into the design window. These will automatically align next to each other.
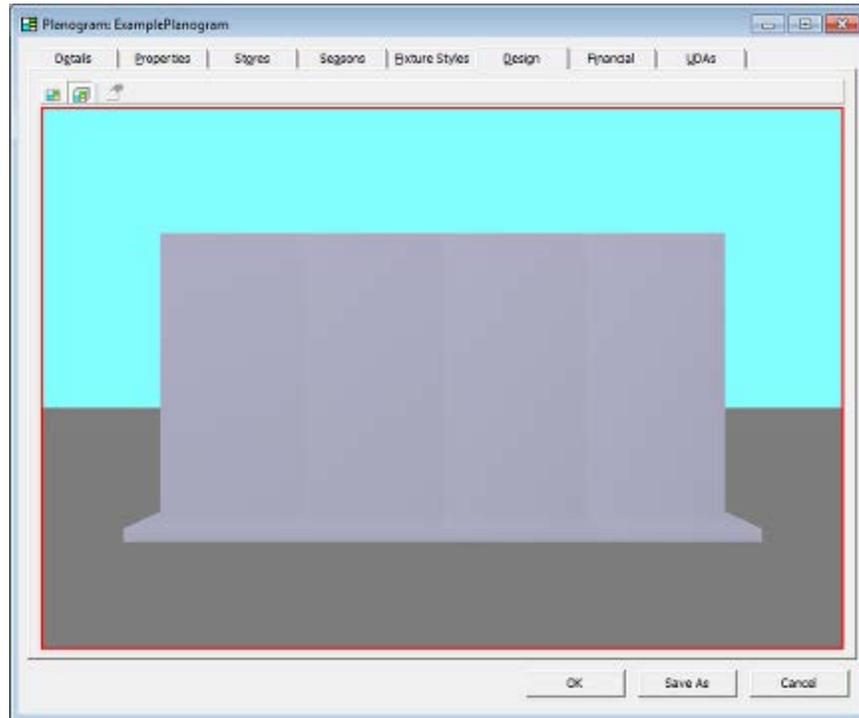
These fixtures will not form part of the planogram, but they will be used to determine the overall size of the planogram, number of bays and so on.

> **Note**: When the first fixture is dropped into the design window, the insertion point will be at 0,0. This may be out of the field of view. Clicking **Front** on the **Directions and Product Text toolbar** will bring the fixture into view.

2. **Assign Shelving**

    The next stage is to add the shelving. This is done using the same method as adding shelving into a floor plan. The shelving will form part of the planogram when placed.
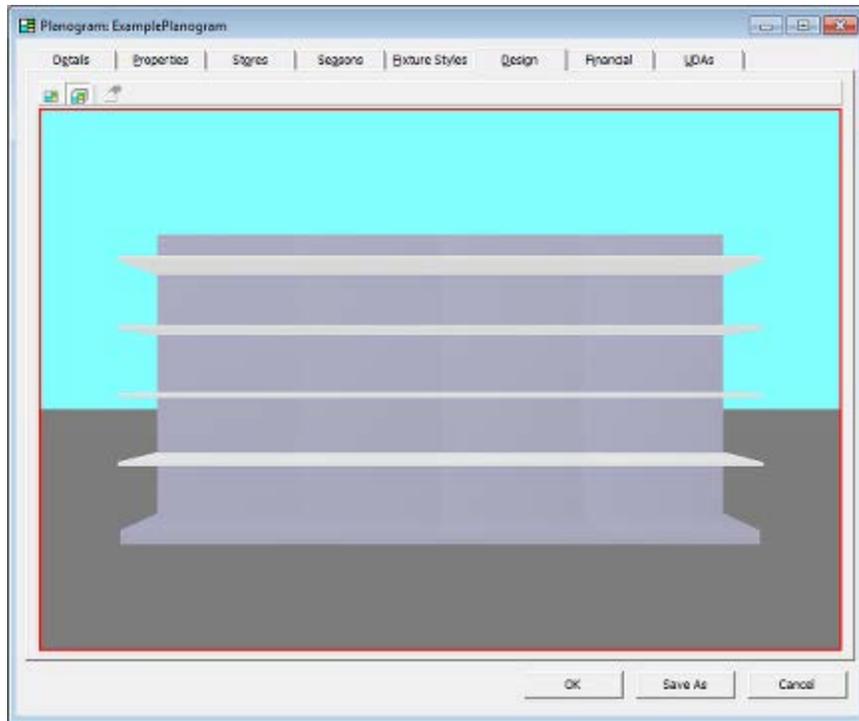
3. Assign Products

The next stage is to assign products. This has to be done with the aid of specialist reports in order to get the products into optimum position.
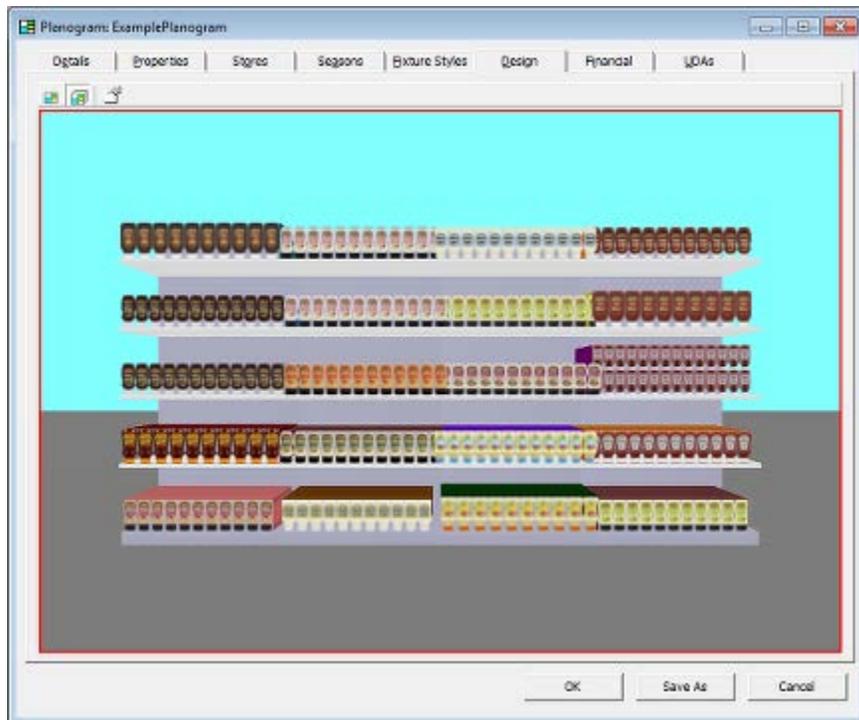
4. **Assign Signage**

    The next stage is to assign signage to the planogram. In this example, the shelf edge labeling has been added.
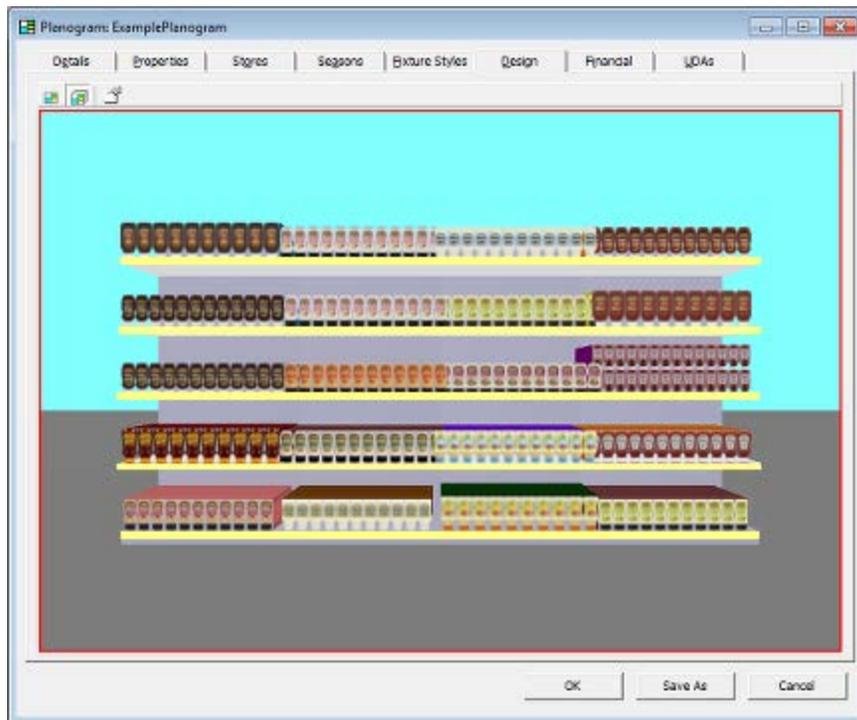
5. **Assign UDAs**

    Another stage is to assign the required UDAs. As well as the overall UDAs in the UDA tab, there are three types of UDA in the Design Tab: Bay, Equipment and Product.
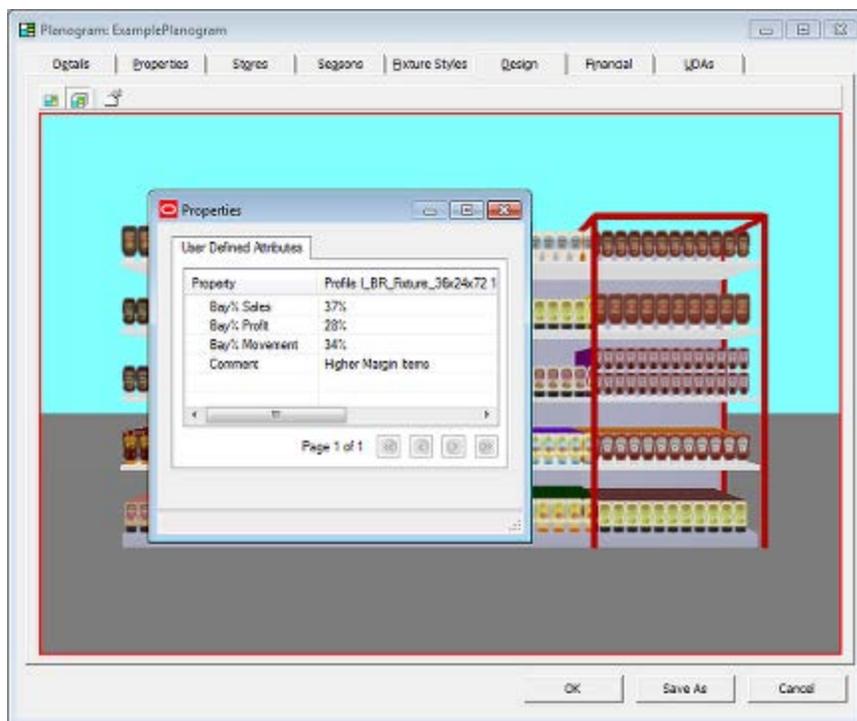
These UDA's can either be assigned manually or added by means of SQL update scripts.

2D and 3D Form

The toolbar at the top of the tab enables users to toggle between 2D and 3D planogram forms.

Icon Description

	Show Planogram in 2D form
	Show Planogram in 3D form

The screenshot below shows the planogram in both forms. The image on the left in the planogram is 2D form. 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 and is not editable. The image on the right is the planogram is 3D form. this is fully editable.
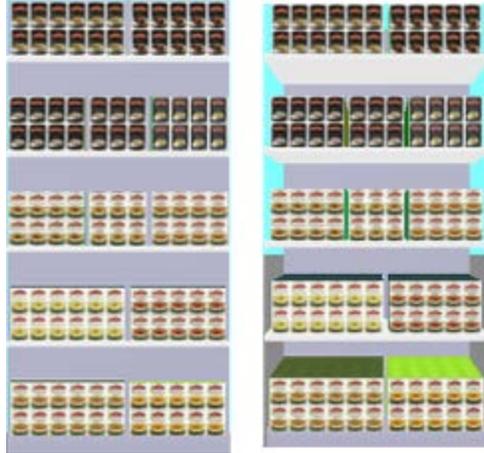
The Design Tab - User Defined Attributes

The Design tab allows users to assign UDA for individual bays, items of equipment and products. This is done by highlighting a pertinent part of the planogram and clicking the UDA icon on the toolbar.

Icon Description

 Show UDAs

This will bring up a dialog box where the UDA values can either be added or viewed.
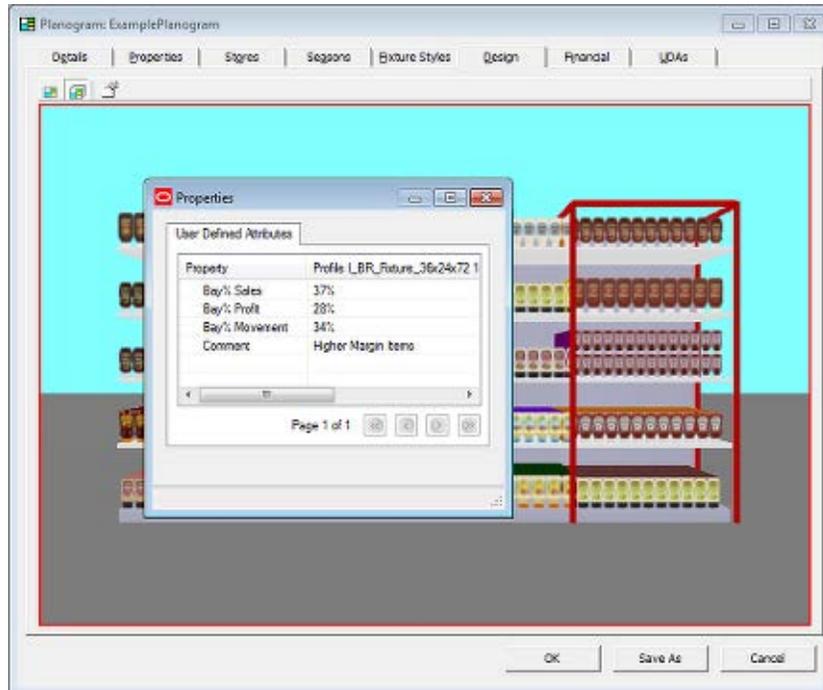
Configuring the fields for the UDAs

The fields for the UDAs are configured in the **User Defined Attributes dialog box** (General menu) in the Administration Module. This example is for the Planogram Profile (bay) UDA.
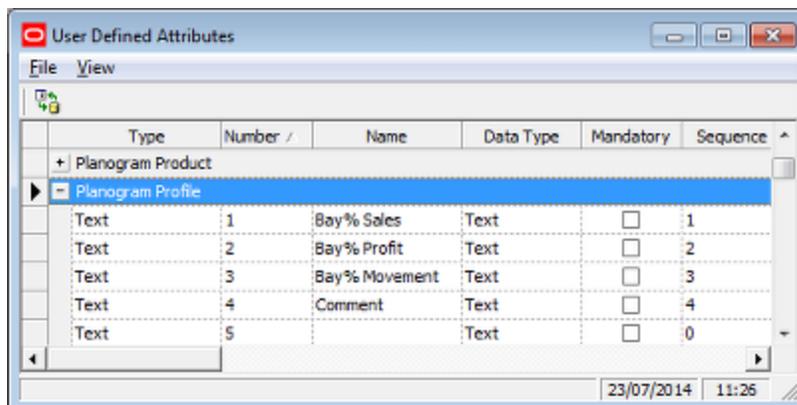
Once configured, these fields will be available in the UDA tab of the Planogram Design dialog box. They can either be populated manually or by planogram import.

> **Note**: For information on how to configure UDAs, see the *Oracle Retail Macro Space Management Administration Module User Guide*.

User Defined Attributes

Planogram Profiles (Bays)

To edit or show any UDAs associated with a bay, highlight the bay and click the **Show UDA** icon on the toolbar. This will bring up the **Properties dialog box**. This contains the fields that have been pre-configured in the Administration module. The associated data can be added, edited or deleted. In order to save the data back to the database, return must be pressed after each change or a different cell clicked in. Once all data has been entered as required the dialog box can be closed by clicking the **Close** button in the upper right corner.
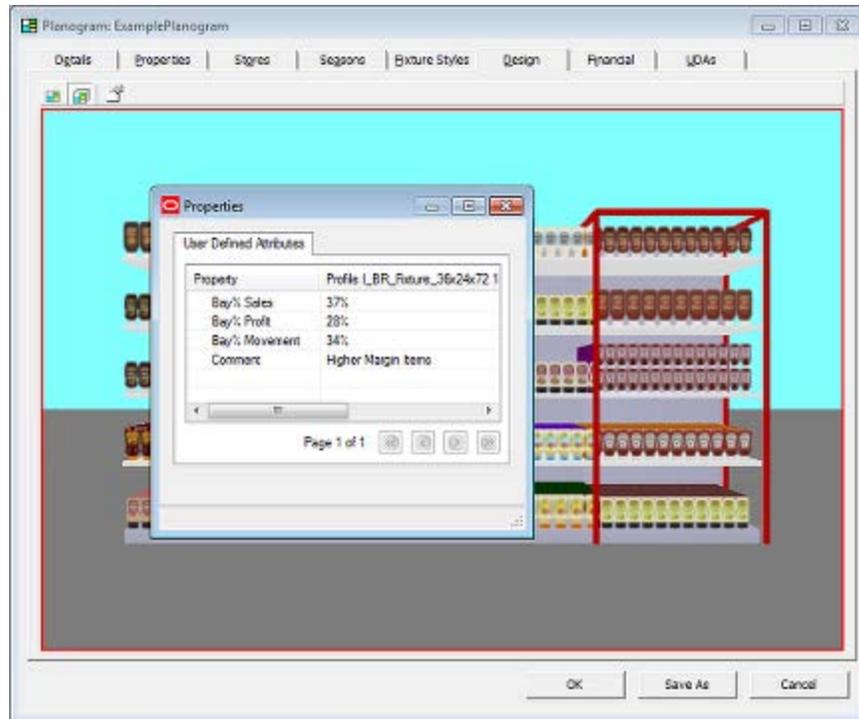
Planogram Equipment

To edit or show any UDAs associated with planogram equipment (typically shelves), highlight the item of equipment and click the Show UDA icon on the toolbar. This will bring up the Properties dialog box which can be used in an identical way to the one used for profiles (bays).
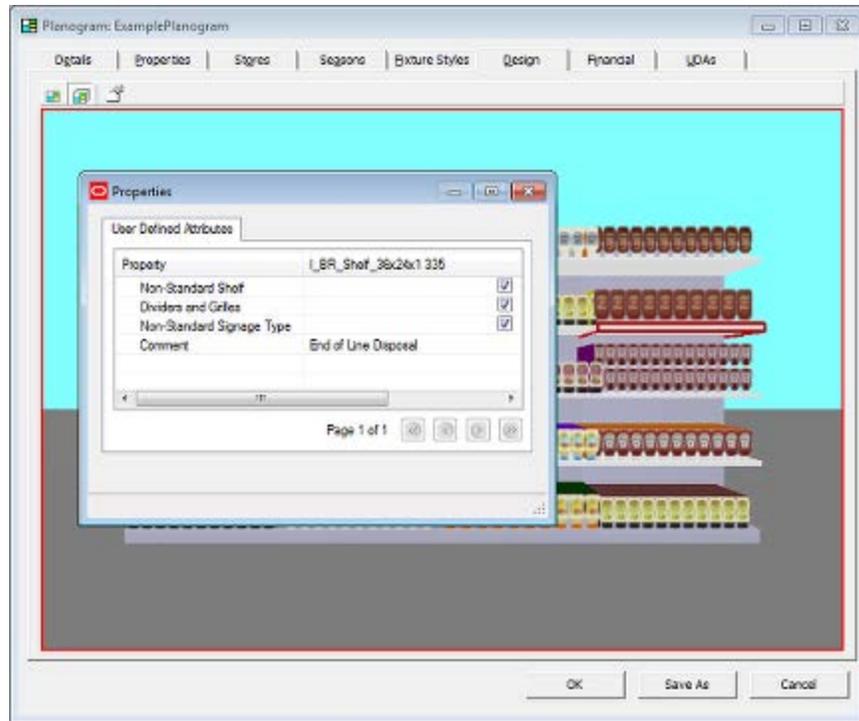
Planogram Products

To edit or show any UDAs associated with planogram products, highlight product and click the Show UDA icon on the toolbar. This will bring up the Properties dialog box.
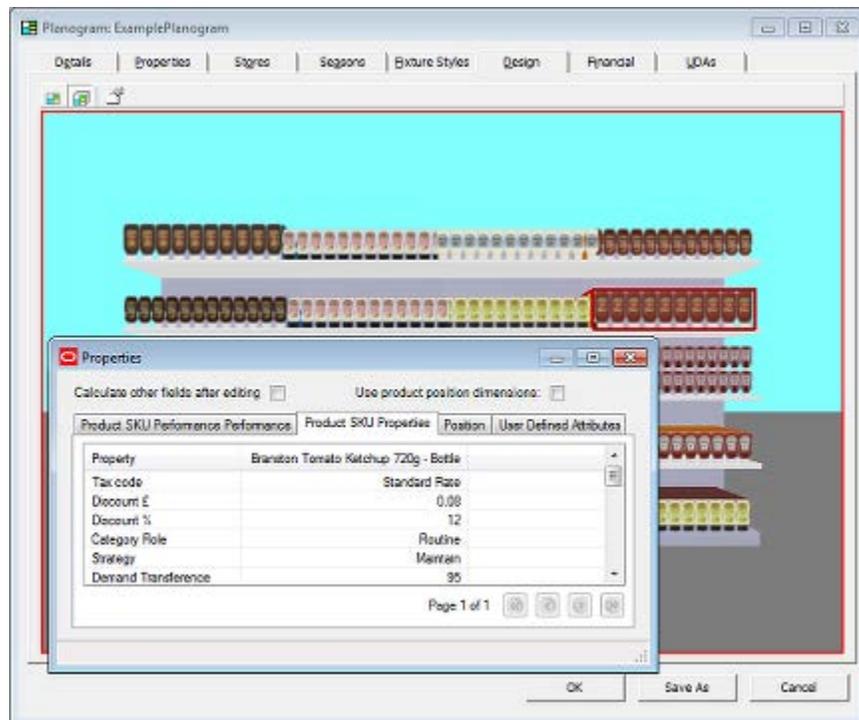
This dialog box has four tabs. The first three (Product SKU Performance, Product SKU Properties and Position) are automatically populated from the planogram information held in the database. The UDA tab can be used in an identical way to the ones used for profiles (bays) and for equipment.

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.

Basic Details

The top section of the dialog box contains basic information.

Item	Description
Currency	These are the units for the financial data. It can be set from the drip down list. The list of currencies is configured in the Units dialog box (General menu) in the Administration module.

Item	Description
Calculate other fields after editing	If this check box is selected, changing data in one field in the dialog box will cause all other associated fields to be recalculated. If this option is not selected, all pertinent data must be reentered.
Use Planogram size for dimensions	If this check box is selected, the tab will populate with the Linear, Square and Cubic data held in the database for planogram size, replacing an imported size. If selected, the Linear, Square and Cubic fields will be grayed out and non-editable.
Linear	This field holds the base linear measurement of the planogram - essentially the length of the planogram. This allows the sales performance of the planogram to be related to the length of aisle it occupies.
Square	This field holds the footprint of the planogram: the base linear multiplied by the depth. This allows the sales performance of the planogram to be related to the floor area it occupies.
Cubic	This field holds the volume of the planogram: the base linear multiplied by the depth multiplied by the height. This allows the sales performance of the planogram to be related to the total volume it occupies.
Linear Units	These are the units for the length. They can be set from the drip down list. The list of available units is configured in the Units dialog box (General menu) in the Administration module.
Square Units	These are the units for the footprint. They can be set from the drip down list. The list of available units is configured in the Units dialog box (General menu) in the Administration module.
Cubic Units	These are the units for the volume. They can be set from the drip down list. The list of available units is configured in the Units dialog box (General menu) in the Administration module.
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 merchandise being in stock on the shelves for the specified percentage of opening hours. 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 calculated from historical data.
Target Number of Facings	This is the calculated ideal number of product facings in the planogram
Return on Inventory Investment	This is the Gross Margin Return on Investment. Different retailers may calculate this is slightly different ways.

Detailed Financial Information

Detailed financial information comes in two forms: actual and forecast. Actual comes from historical data, forecast from financial planning data. The two forms are shown in different sub-tabs but the principles of the calculations are the same.

The figures are in four forms:

Form	Description
Absolute figure	This is the total figure - for example the actual aggregated sales for the planogram.
Linear figure	This is the total figure divided by the base linear (length) for the planogram.
Square figure	This is the total figure divided by the square area (footprint) for the planogram.
Cubic figure	This is the total figure divided by the total volume for the planogram.

Four types of data are presented:

Data Type	Description
Sales	These are the aggregated sales figures - based on the purchase price to the customer.
Profit	This is the calculated profit for the planogram. The method that this is calculated will vary slightly from retailer to retailer.
Gross Margin	This is the difference between purchase price and sales price. The method that this is calculated will vary slightly from retailer to retailer.
Movement	This is the aggregate number of items that have been sold in a specified time frame.

Thus Actual Movement Linear is the number of items that have sold in a specified time period divided by the length of the fixture.

Financial Weighting

Data from the Financial tab of the Planogram Design dialog box can be used in conjunction with the Planogram Financial Weighting dialog box from the Merchandising Menu to create a ranking system for planograms.
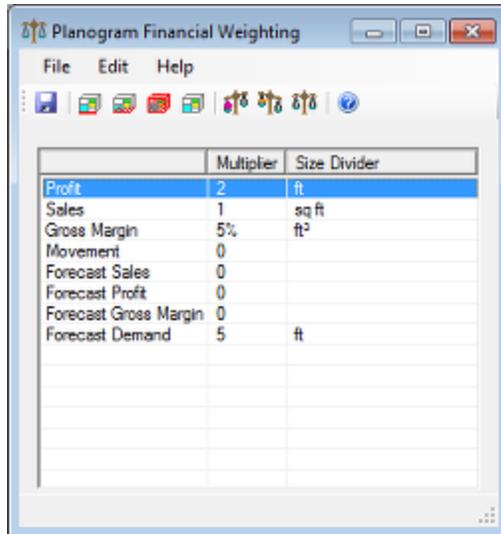
Although a specialist report would have to be created (using a tool such as BI Publisher) it does provide a way for planners to choose between alterative planograms to place.

The UDA Tab

The UDA Tab is used to define User Defined Attributes (UDA's) for the Planogram at the header level. UDA's are implementation specific and can be customized according to customer requirements.
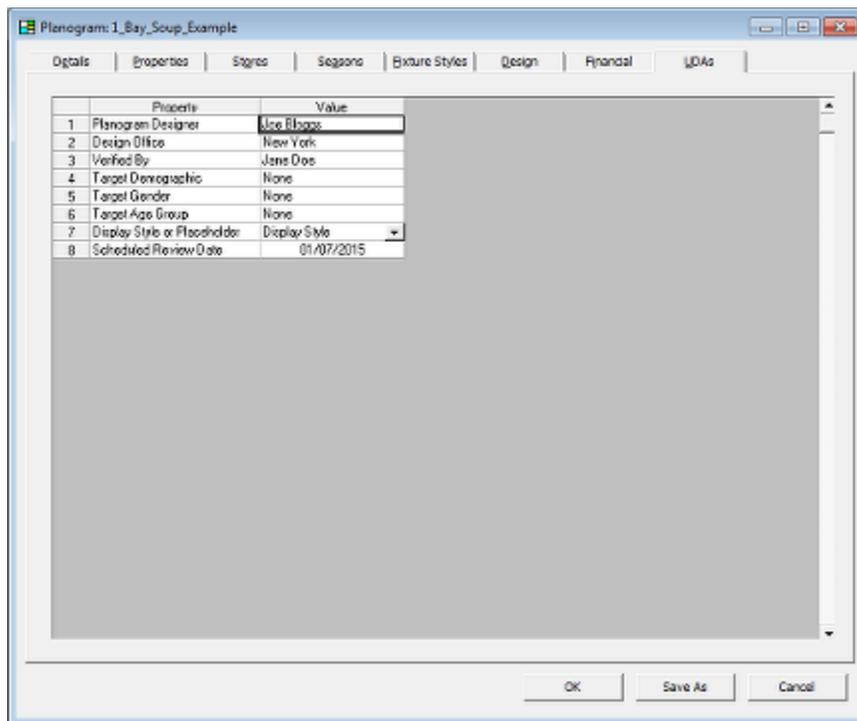
> **Note**: User Designed Attributes can also be seen for the individual bays, equipment and products in the Design tab.

Configuring the fields for the UDAs

The fields for the UDAs are configured in the **User Defined Attributes dialog box** (General menu) in the Administration Module.
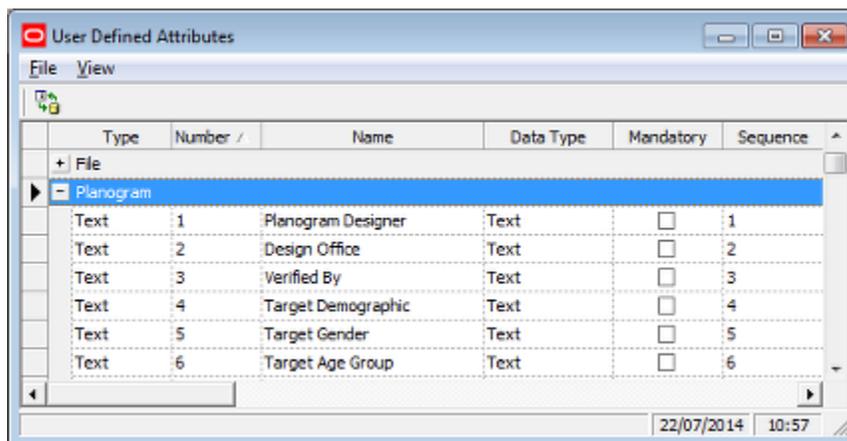
Once configured, these fields will be available in the UDA tab of the Planogram Design dialog box. They can either be populated manually or by planogram import.

> **Note**: For information on how to configure UDAs, see the *Oracle Retail Macro Space Management Administration Module User Guide*.

Adding, Editing or Deleting Information in the UDA Tab

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.

Data must match the correct format to be entered - for example dates are entered via a Calendar dialog box that can be activated by double clicking in a **Date** field.

Saving Planograms

There are two options when saving planograms: **OK** and **Save As**.
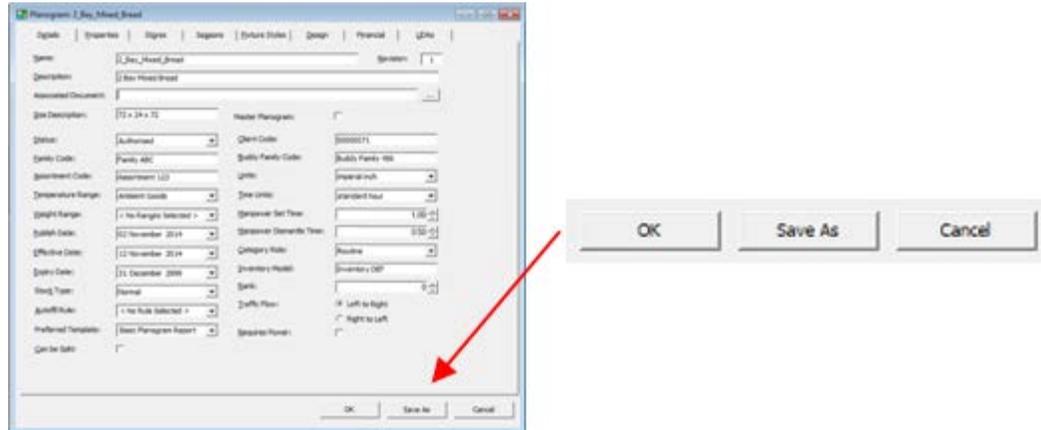
OK Option

The **OK** option saves the planogram in its present form. It will only be active if changes have been made to the existing planogram design. Typically, this will only be possible at Proposed and Authorized status as planograms later in their business life cycle will have been set to read only status. If an attempt is made to save a planogram at Authorised status with either Publish Date or an Effective Date before the current day's date, a warning will result. This is to prevent planograms having the dates at which they should be published or put into service set in the past - this would cause significant problems with store operations of replenishment systems.
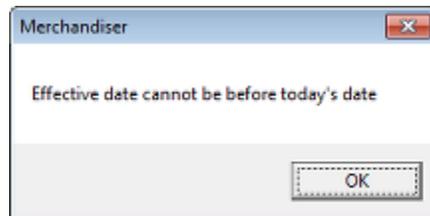
Save As Option

Clicking **Save As** will bring up the **Save As dialog box**. This can be used to save a new copy or new revision of the planogram.
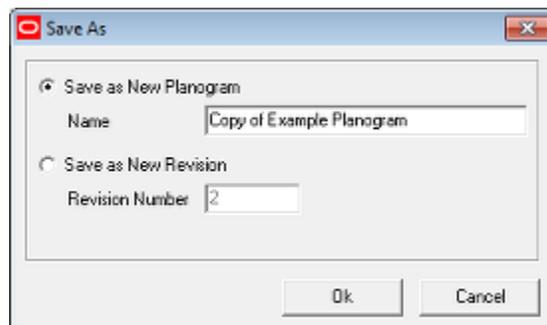
Planograms can be saved as new planograms or new revisions.

Option	Description
Save as New Planogram	This option saves the planogram with both a new planogram identifier and a new lineage. This is an entirely new planogram with no connection to the old planogram. Users would typically save a planogram as a new design when planogram is being totally revamped. In this case some planogram designers may opt to take an existing planogram design as the basis for the new design.
Save as New Revision	This option saves the planogram with a new planogram identifier but the same new lineage. This is a variant of the existing planogram. When planogram substitution is carried out in MSP, the software looks for a planogram of the same lineage, but a later revision and updates the planogram design in the floor plan with the revised version.

About Planogram Lineage

Planogram lineage is a field in the database. It cannot be directly seen in MSP. It is used to identify all planogram revisions that are variants of the original design, Take the following example by using the **Save as New Revision** option:

Planogram Design	Planogram ID	Planogram Lineage
Example Planogram	123	321
New revision	456	321
New revision	789	321

Compare this with what happens using the **Save as New Planogram** option:

Planogram Design	Planogram ID	Planogram Lineage
Example Planogram	234	654
New planogram design	567	765
New planogram design	891	876

Planogram revisions can therefore be linked to earlier planogram version. New planogram designs cannot be linked back to the planogram design they were derived from.

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Master Planograms

Overview of Master Planograms

Master Planograms are a way of reducing the frequency with which floor plans need to be modified and published. They act as placeholders in a floor plan. The floor plan or planogram publishing batch processes are then run at intervals to determine if the floor plan or planograms need publishing. If master planograms are present in the floor plan, they will have a mapping to an individual planogram. The individual planogram is then published in place of the master planogram. As the underlying master planograms remain unchanged, this reduces the frequency with which floor plans need to be updated and published.

Overview of General Process

The basic process for using master planograms is seen below.

Floor Plan with Master Planograms

Determine if floor plan is to be published

Publish floor plan (if required)

Determine if Master Planogram is present

Identify the associated individual planogram

Publish the Individual planogram
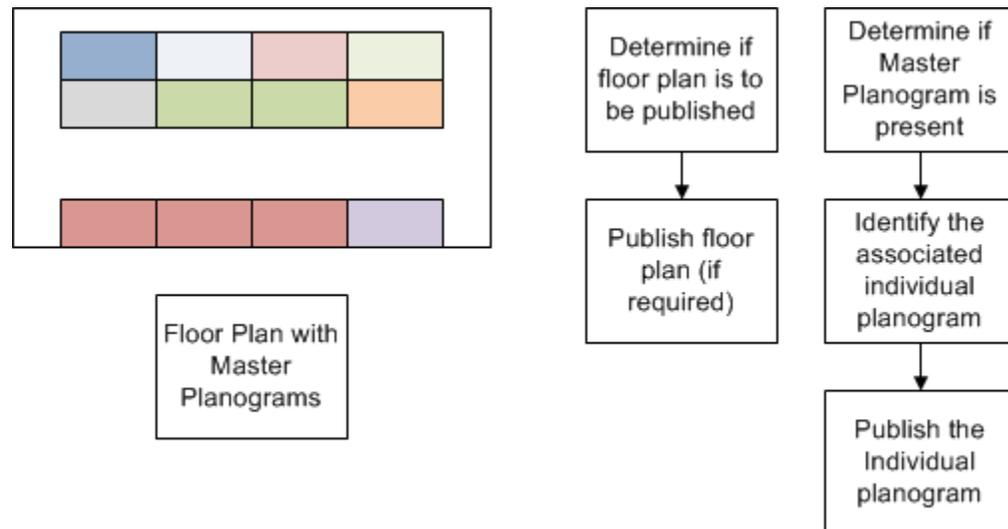
A floor plan has been created with master planograms present. A batch process is run at regular intervals.

- The floor plan publishing batch process determines if the floor plan has been superseded by a more recent design. If so the floor plan would be published (and later made current). If a floor plan contains purely master planograms, the general reason for revising the floor plan would be to change the position of those master planograms. If the position is not changed, there would be no need for a revised floor plan.

- The planogram publishing batch process identifies the individual planograms associated with each master planogram. If it identifies a new or revised planogram that has met or exceeded its publish date, the planogram will be published (and later made effective).

The advantage of master planograms can thus be seen: if individual planograms were used, the floor plan would need to be updated and republished each time a planogram was changed. With this method the floor plan only needs updating when the space allocated to categories/sub-categories is changed. This saves effort in the store planning process.

Configuring Master Planogram Functionality

Master Planograms are placeholders placed in a floor plan. The planogram definition contains a number of fields that can be compared with similar fields in the individual planograms. If the fields in both the master planogram and the specific individual planogram match, the specific individual planogram will be substituted for the master planogram during the Planogram Publishing process. Other fields are used for more aspects of planogram functionality. For example the Publish date is used during the planogram publishing process to determine when it is appropriate to publish a planogram. Similarly, the status shows where the planogram is within its business life cycle.

> **Note**: In order for the Master Planogram functionality to work, considerable configuration has to be carried out during the implementation of the software. If this has not been done, it will not be possible to use Master Planograms. Describing how to configure the functionality is outside the scope of this help file. The information is available in a white paper on My Oracle Support.

The fields which must exist in both the master planogram and the specific individual planogram are:

Information Used in Master Planogram Functionality

Some information associated with a planogram design is associated with the master planogram functionality. This can be seen on the Details and Properties tab of the Planogram Design dialog box accessed in the Merchandiser module.

Details Tab

Information	Significance
Master Planogram	This is a flag indicating whether the planogram design is a mater planogram or an individual planogram.
Client Code	This is a code generally brought in during planogram import. Different revisions of the same planogram will have the same client code, enabling them to be identified. This field is not directly involved with the master planogram functionality, but enables the imported planograms in the MSP database to be related to the original information in the third party planogram design software.
Status	This indicates where the planogram is in its business life cycle. A range of statuses are possible depending on the retailer's business processes.
	If planograms are brought in by import, one option is for the status for an individual planogram to be Authorized. As the Publish Date and Effective Date are met and exceeded for individual planogram, the status will successively change to Published and then Current.
	Planogram designs could also be brought in from the planogram design software already at Current status as an indication the design has been approved for service.
	Finally, it is possible to configure additional planogram statuses in the Administration module. (See *the Oracle Retail Macro Space Planning Administration User Guide* for details). It would be possible to configure an entirely separate status for master planograms.
	Note: it is expected that there will only be one version of a master planogram for a specific category or sub-category in the database. This is because it acts as a placeholder and there is no need to modify the design.
Publish Date	This is the assigned date at which the status of the planogram will change from Authorized to Published. It is generally changed automatically by the planogram publishing batch process.
Effective Date	This is the assigned date at which the status of the planogram will change from Published to Current. There is no standard process for this in Macro Space Planning. It requires an implementer to set a mechanism like a stored procedure execute at intervals by a batch process.
Family Code	This is a code indicating the general family the planogram belongs to. It could indicate (for example) whether the planogram belongs to a Value, Standard or Premium range or products. Alternatively it could indicate that the planogram is designed for a convenience store, Metro store, Supermarket or Super Store. The nature of Planogram Families will vary from retailers to retailer.
Assortment Code	Many retailers create specific assortments for particular demographics, types of retail outlet and so on. This field holds the code identifying that assortment. It relates back to the retailer's category management system.

Properties Tab

Information	Significance
Parent Product	This indicates the node in the product hierarchy that is the parent for all products in the planogram. It will normally be a category or subcategory.
Size	This is the overall size of the planogram.
Number of Bays	This is the number of bays (fixtures) that the planogram is designed to be placed on.

Overview of Selection Method for Individual Planograms

The basic flow for selecting the individual planogram related to a master planogram is shown in the flowchart below. The core of the process is a stored procedure which is referenced by other parts of the application - for example the batch process for publishing planograms. This stored procedure is customizable. Providing the basic parameters are left unchanged it can be modified to meet retail chain specific requirements.

> **Note**: Individual aspects of the process will be discussed in more detail later.

```
                    ┌─────────────────────┐
                    │   Stored Procedure  │
┌───────────┐       │   ┌─────────────┐   │        ┌──────────────────────────────────────────────┐
│  Master   │──────▶│   │ Find Family │   │        │   List of individual planograms in the same family │
│ Planogram │       │   └─────────────┘   │        └──────────────────────────────────────────────┘
└───────────┘       │          │          │
                    │          ▼          │
                    │   ┌─────────────┐   │        ┌──────────────────────────────────────────────────────┐
                    │   │ Find Product│   │        │ List of planograms with the same parent node in Product Hierarchy │
                    │   │  Category   │   │        └──────────────────────────────────────────────────────┘
                    │   └─────────────┘   │
                    │          │          │
                    │          ▼          │
                    │   ┌─────────────┐   │        ┌──────────────────────────────────────────────────┐
                    │   │    Find     │   │        │ Find planogram with assortment designed for store cluster │
                    │   │  Assortment │   │        └──────────────────────────────────────────────────┘
                    │   └─────────────┘   │
                    │          │          │
                    │          ▼          │
                    │   ┌─────────────┐   │        ┌──────────────────────────────────────────────┐
                    │   │    Find     │   │        │      Compare overall dimension of planogram    │
                    │   │ Dimensions  │   │        └──────────────────────────────────────────────┘
                    │   └─────────────┘   │
                    │          │          │
                    │          ▼          │
                    │   ┌─────────────┐   │        ┌──────────────────────────────────────────────┐
                    │   │Match Number │   │        │      Find planogram matching number of bays    │
                    │   │  of Bays    │   │        └──────────────────────────────────────────────┘
                    │   └─────────────┘   │
                    │          │          │
┌───────────┐       │          ▼          │
│ Standard  │──────▶│   ┌─────────────┐   │        ┌──────────────────────────────────────────────┐
│ Planogram │       │   │  Identify   │   │        │    Find planogram design in correct date range │
└───────────┘       │   │  Revision   │   │        └──────────────────────────────────────────────┘
                    │   └─────────────┘   │
                    │          │          │
                    │          ▼          │
                    │   ┌─────────────┐   │        ┌──────────────────────────────────────────────┐
                    │   │  Specific   │   │        │      Information can then be used as appropriate │
                    │   │  Planogram  │   │        └──────────────────────────────────────────────┘
                    │   │  Identified │   │
                    │   └─────────────┘   │
                    └─────────────────────┘
```

Steps in Selection Method

> **Note**: This is a simplified form of the flowchart used to explain the basic concepts. The information used will obviously very from retail chain to retail chain.

1. **Finding Planograms of a Common Family**

   The first stage of finding an individual planogram is to list all planograms that belong to the same family that has been assigned to the Master Planogram. This family is identified in the **Family Code** field of the Details tab of the Planogram Design dialog box.

2. **Find Product Category Master Planogram Belongs To**

   The next stage is to find the subset of individual planograms that belong to both the same Family and Product Category as the Master Planogram. The Product Category is identified in the **Parent Product** field of the Properties tab of the Planogram Design dialog box.

3. **Find Assortment**

   The sub-set of individual planograms can be further reduced in size by looking for planograms with a product assortment that matches the Master Planogram. This information is held in the **Assortment Code** field of the Details tab of the Planogram Design dialog box.

4. **Find Dimensions**

   The Master Planogram will have been placed on one or more fixtures. The dimensions of those fixtures will be summed to find the overall dimensions for the planogram - for example 12 feet. The subset of individual planograms is further reduced to match the cumulative dimensions of the fixtures the master planogram has been placed on. This information is displayed in the **Size** field of the Properties tab of the Planogram Design dialog box.

5. **Find Number of Bays**

   As part of the continuing process of reducing the number in individual planograms in the sub-set matching the data for the master planogram, the number of fixtures the master planogram has been placed on is compared to the number of bays the individual planogram is designed for. this enables the software to differentiate between a 12 foot planogram made up for 3 x 4ft bays and a 12 foot planogram made up for 4 x 3ft bays. The number of bays is displayed in the **Number of Bays** field of the Properties tab of the Planogram Design dialog box.

6. **Identify Revision**

   The final stage in identifying the individual planogram to use relative to the Master Planogram is to look at the **Publish Date** and **Effective Date**. These are used to determine whether an existing planogram should be replaced by a newer one. If the Publish Date has been met or exceeded, running the batch process will result in the planogram being published. If the Effective Date has been met or exceeded, running the batch process will result in the planogram being made current.

   > **Note**: If no specific individual planogram could be identified, this should be identified by a process set up by the retailer. Failure to do so may result in problems with the replenishment system.

Example of Use

The following simplified example shows the Master Planogram functionality in use.
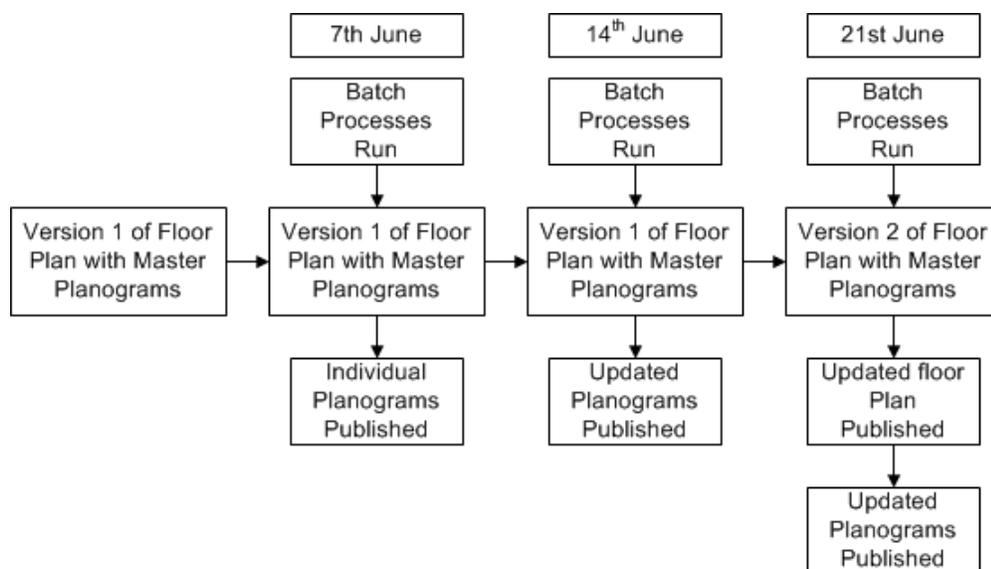
1. **Version 1 of the floor plan is in service.**

   This version of the floor plan has been in service for some time.

2. **Batch Processes Execute on 7th June.**

   The Floor Plan batch processes executes on the 7th June. It does not find a more recent floor plan with a Publish or effective date that has been met or exceeded, so the current version of the floor plan remains in force. The Planogram Publishing batch process also executes. It identifies any individual planograms associated with Master Planograms that have Publish Dates or Effective Dates met or exceeded and with publishes them or makes them current.

3. **Batch Processes Execute on 14th June.**

   The Floor Plan batch processes executes again on the 14th June. It still does not find a more recent floor plan with a Publish or effective date that has been met or exceeded, so the current version of the floor plan remains in force. The Planogram Publishing batch process also executes. It identifies any individual planograms associated with Master Planograms that have Publish Dates or Effective Dates met or exceeded and updates as required.

4. **Batch Processes Execute on 21st June.**

   The Floor Plan batch processes executes again on the 21st June. The floor plan publishing process finds another version of the floor plan with a Publish Date that has been met or exceeded, so the floor plan is published. The Planogram Publishing batch process also executes. It identifies any individual planograms associated with Master Planograms that have Publish Dates or Effective Dates met or exceeded and updates as required.

   On the 7th June and 14th June the floor plan did not require modification and thus the use of master planograms streamlined the store planning process.

Creating an Example Master Planogram

This section gives a basic worked example of how to set up a master planogram and two assorted child planograms. It is based on a worked example with the planograms created in the Merchandiser module. In reality, the family codes, assortment codes and so on will vary from retailer to retailer. The ones in this example are purely for illustrative purposes.

Setting up the Master Planogram

The Master Planogram can be created using the Add Planogram option from the right click menu in the planogram hierarchy in the Object Browser. This will bring up the **Planogram Design dialog box**.

Details Tab

The details tab contains much of the information used to relate individual planograms to a specific master planogram.
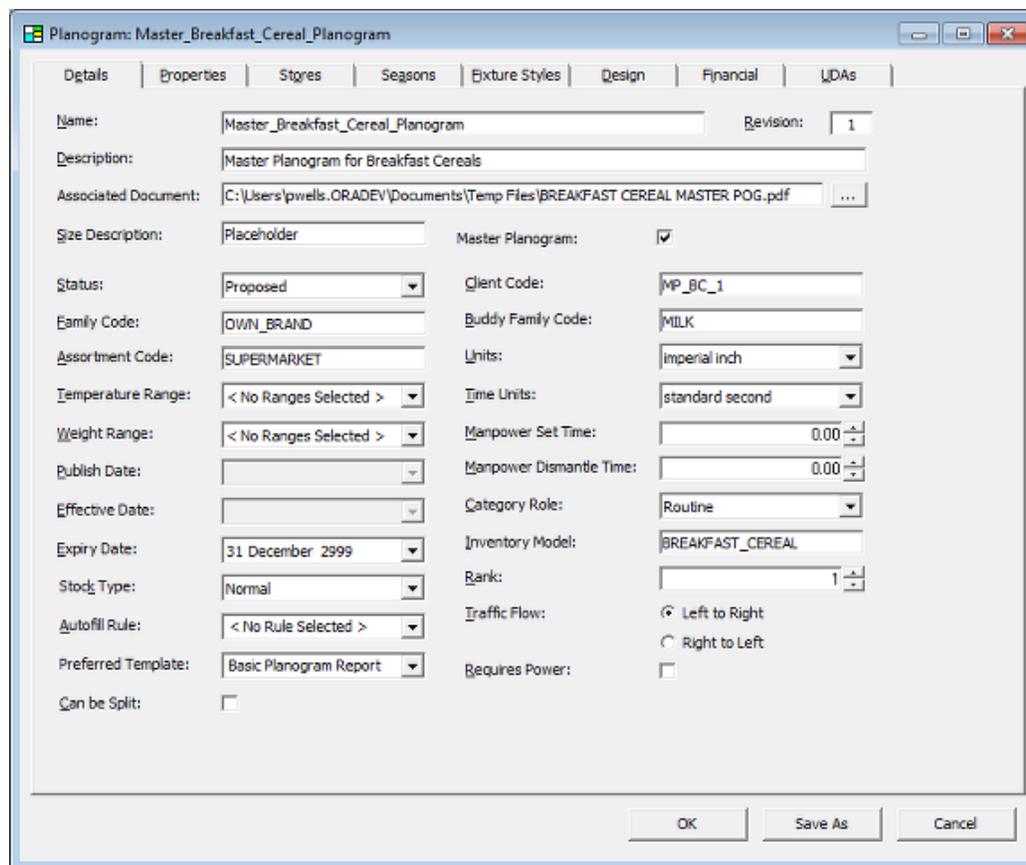
The required settings are as follows:

Information	Significance
Master Planogram	This flag is set to show that the planogram is a master planogram.
Client Code	This code is used to identify planograms that are revisions of the same design. In this example it has been set to MP-BC-1
Status	As a Master Planograms it has been set to a status of Proposed. This is because Master Planograms act as placeholders with no need to change the design.
Publish Date	This is the assigned date at which the status of the planogram will change from Authorised to Published. Because the Master Planogram is at Proposed status, this option is grayed out and cannot be set.
Effective Date	This is the assigned date at which the status of the planogram will change from Published to Current. Because the Master Planogram is at Proposed status, this option is grayed out and cannot be set.
Family Code	This is a code indicating the general family the planogram belongs to. It has been set to OWN_BRAND. Other possibilities would be VALUE, STANDARD or PREMIUM.
Assortment Code	The assortment code has been set to SUPERMARKET

In addition, the correct form of planogram reports must be available. In this worked example, the report will be printed using a simple associated document. Accordingly a PDF naming the planogram has been created and associated with it. When the planogram is printed or published, this will enable the user to identify the correct planogram design has been output.

Design Tab

This requires a very simple planogram design to be added. A fixture has been dragged and dropped into the window to identify the size and type of the fixture the planogram has been designed for. A product placeholder (in this case the Breakfast Cereal node) has been added to the fixture. All individual planograms that will be associated with this master planogram will have products that are children of this node.
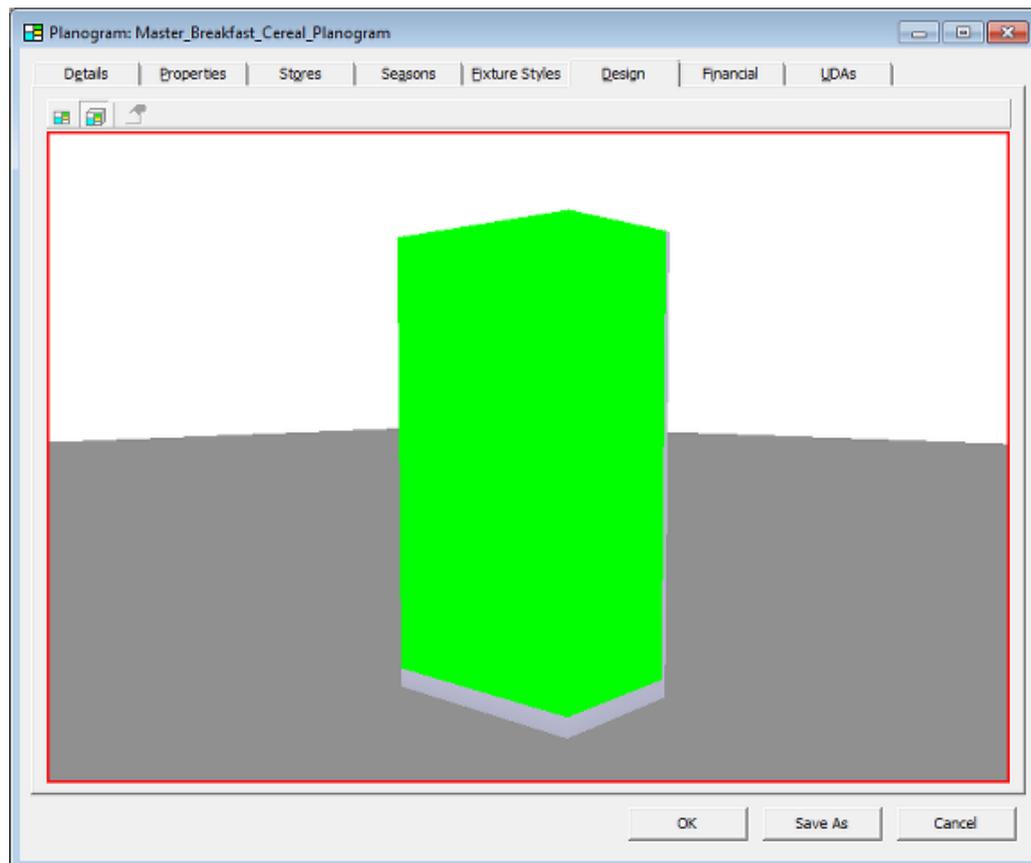
The planogram has been rotated slightly to show the placeholder. Note how the detail associated with display styles is absent; the placeholder merely shows the volume occupied by the merchandise. Adding a planogram design also adds information to the database that enables the Master Planogram to place in a floor plan.

Properties Tab

The properties tab is read only and contains information derived from the Design Tab.
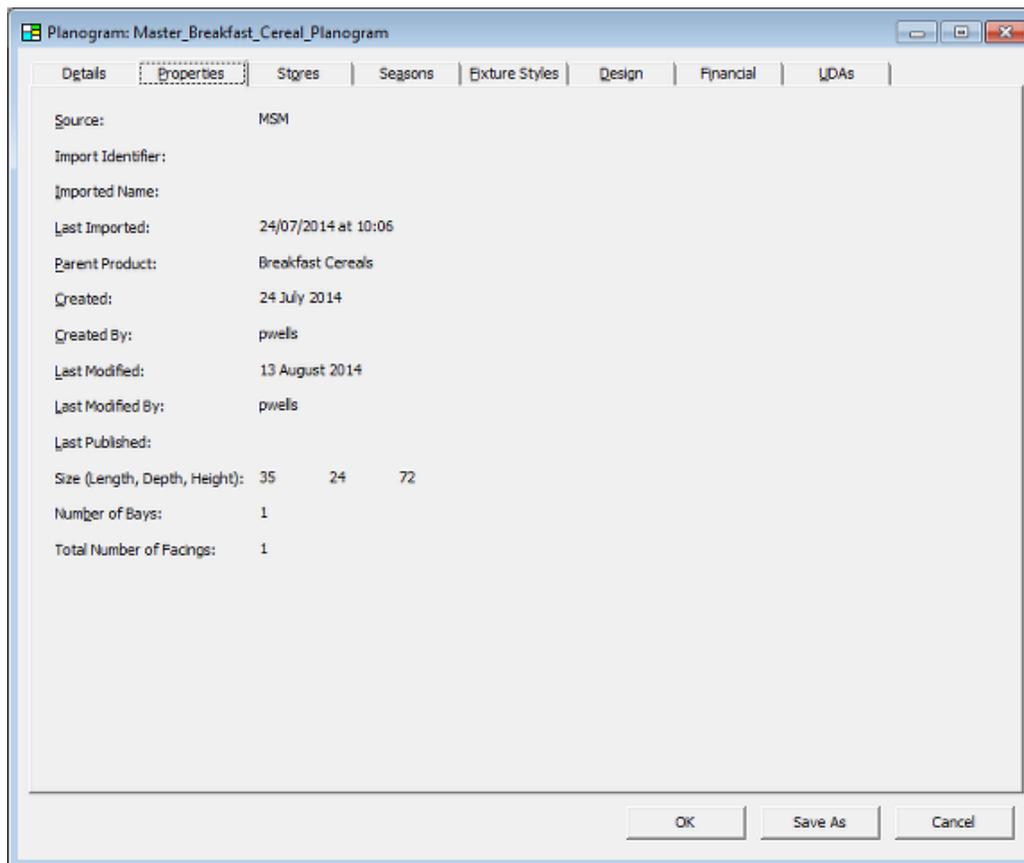
Information	Significance
Parent Product	This indicates the node in the product hierarchy that is the parent for all products in the planogram. As the Breakfast Cereal node was chosen, this is displayed as the parent product.
Size	This is the overall size of the planogram. This information will be ignored when determining which individual planograms are associated with the Master Planogram.
Number of Bays	This is the number of bays (fixtures) that the planogram is designed to be placed on. This information will be ignored when determining which individual planograms are associated with the Master Planogram.

Styles Tab

Although not necessary for the Master Planogram Functionality, the Styles tab has to be assigned a style to enable the master planogram to place in a floor plan. In this example the Standard Fixture style has been assigned.

Setting up a 1 Bay Individual Planogram

This Planogram is an example of the individual planogram that will be substituted for a master planogram when planograms are published. It can be create using the Add Planogram option from the right click menu in the planogram hierarchy in the Object Browser.

Details Tab

The details tab contains much of the information used to relate this planograms to the master planogram that has just been created.

The required settings are as follows:

Information	Significance
Master Planogram	This flag is not set as the planogram is not a master planogram.
Client Code	This code is used to identify planograms that are revisions of the same design. In this example it has been set to 1B_BC.
Status	As this planogram will eventually go into service, the status has been set to Authorised. This will allow the Publish date and effective date to be set. In turn, running the Planogram Publishing batch process will result in the status of the planogram being successively changed to Published and then to Current
Publish Date	This is the assigned date at which the status of the planogram will change from Authorised to Published. This date should be set to today's date for demonstration purposes.
Effective Date	This is the assigned date at which the status of the planogram will change from Published to Current. This date should be set to close to today's date for demonstration purposes.
Family Code	This is a code indicating the general family the planogram belongs to. It has been set to OWN_BRAND to match the master planogram.
Assortment Code	The assortment code has been set to SUPERMARKET to match the master planogram.

As with the master planogram, the correct form of planogram reports must be available. In this worked example, the report will be printed using a simple associated document.

Accordingly a PDF naming the planogram has been created and associated with it. When the planogram is printed or published, this will enable the user to identify the correct planogram design has been output.

Design Tab

This requires a very simple planogram design to be added. A fixture has been dragged and dropped into the window to identify the size and type of the fixture the planogram has been designed for. For the purposes of this example a breakfast cereal display style has been dragged and dropped onto the fixture to populate it with merchandise. The product selected is a child of the Breakfast Cereal placeholder in the product hierarchy.

Properties Tab

The properties tab is read only and contains information derived from the Design Tab.
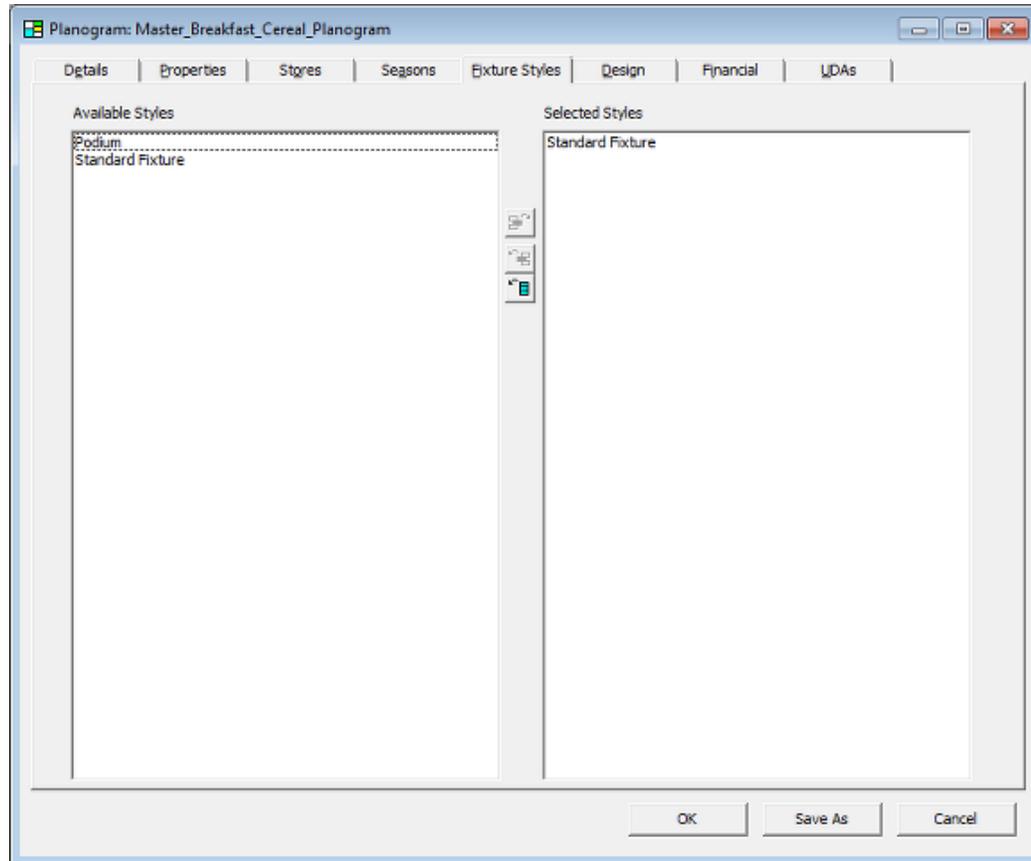

Information	Significance
Parent Product	This indicates the node in the product hierarchy that is the parent for all products in the planogram. As the display style packets of breakfast cereals were children of the Breakfast Cereal node, this is the parent that is shown. This matches the information in the master planogram.
Size	This is the overall size of the planogram. This information will be used when matching up individual planograms with the master planogram.
Number of Bays	This is the number of bays (fixtures) that the planogram is designed to be placed on. This information will be used when matching up individual planograms with the master planogram.

Styles Tab

Although not necessary for the Master Planogram functionality, the Styles tab has to be assigned a style to enable the master planogram to place in a floor plan. In this example the Standard Fixture style has been assigned.

Setting up a 2 Bay Individual Planogram

This Planogram is the second example of the individual planogram that will be substituted for a master planogram when planograms are published. It can be created using the Add Planogram option from the right click menu in the planogram hierarchy in the Object Browser.

Details Tab

The details tab contains much of the information used to relate this planograms to the master planogram that has just been created.

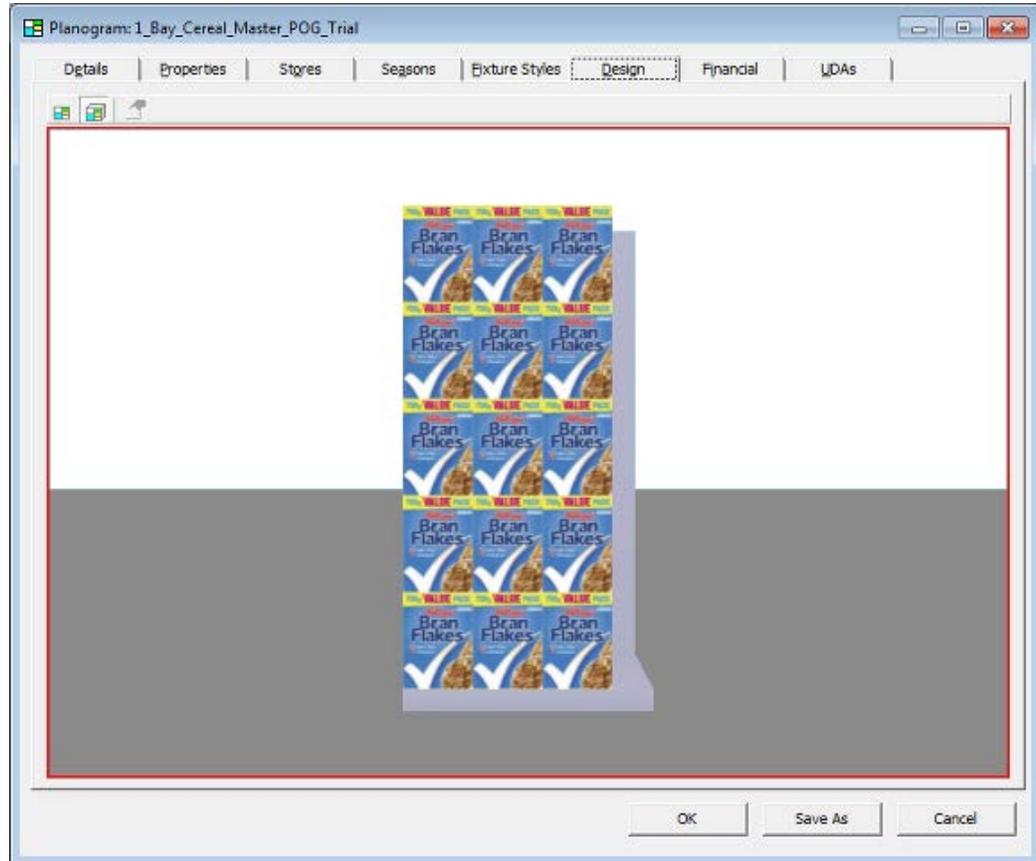The required settings are as follows:

Information	Significance
Master Planogram	This flag is not set as the planogram is not a master planogram.
Client Code	This code is used to identify planograms that are revisions of the same design. In this example it has been set to 2B_BC.
Status	As this planogram will eventually go into service, the status has been set to Authorised. This will allow the Publish Date and Effective Date to be set. In turn, running the Planogram Publishing batch process will result in the status of the planogram being successively changed to Published and then to Current
Publish Date	This is the assigned date at which the status of the planogram will change from Authorised to Published. This date should be set to today's date for demonstration purposes.
Effective Date	This is the assigned date at which the status of the planogram will change from Published to Current. This date should be set to close to today's date for demonstration purposes.
Family Code	This is a code indicating the general family the planogram belongs to. It has been set to OWN_BRAND to match the master planogram.
Assortment Code	The assortment code has been set to SUPERMARKET to match the master planogram.

As with the previous planograms, the correct form of planogram reports must be available. In this worked example, the report will be printed using a simple associated document. Accordingly a PDF naming the planogram has been created and associated with it. When the planogram is printed or published, this will enable the user to identify the correct planogram design has been output.
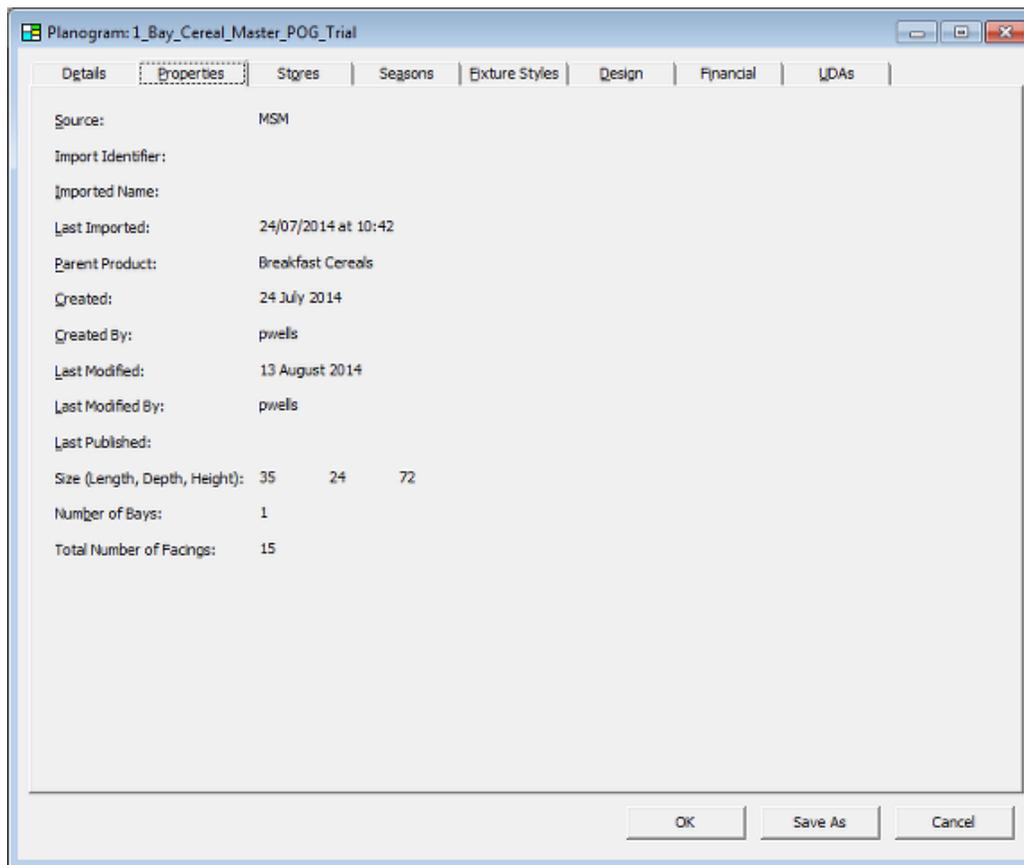
Design Tab

This requires a very simple planogram design to be added. Two fixtures have been dragged and dropped into the window to identify the size and type of the fixtures the planogram has been designed for. For the purposes of this example a breakfast cereal display style has been dragged and dropped onto each fixture to populate it with merchandise. The products selected are children of the Breakfast Cereal placeholder in the product hierarchy.

Properties Tab

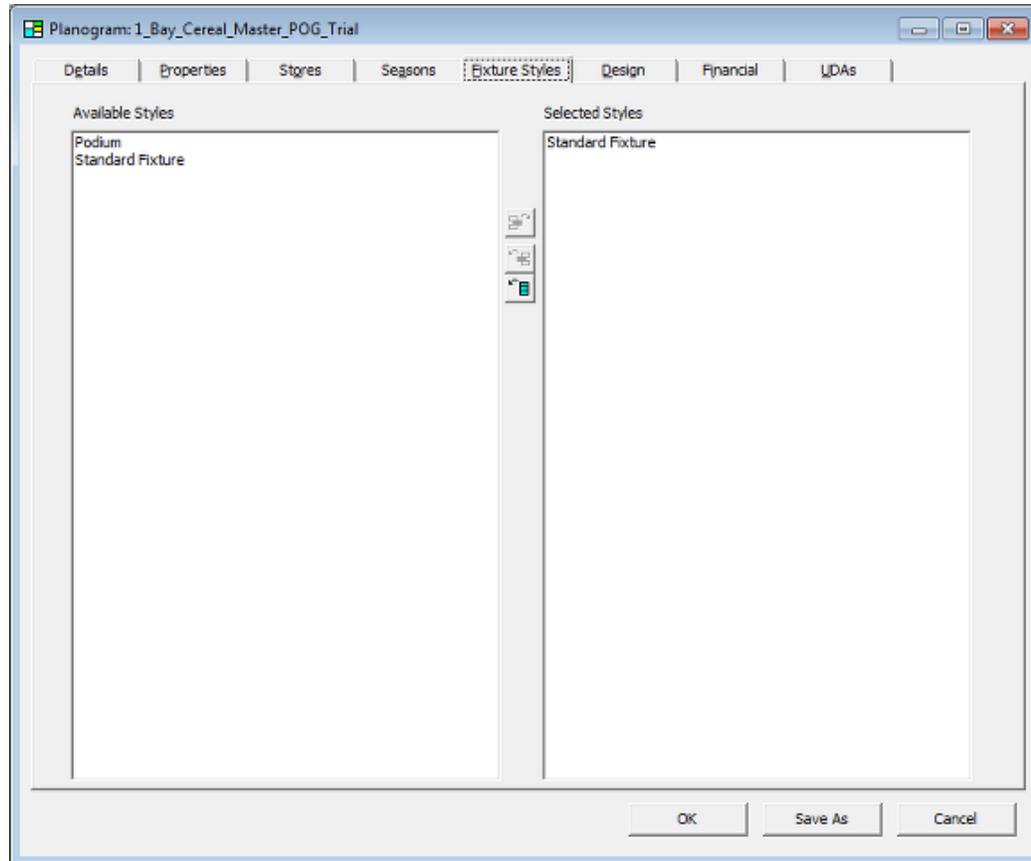The properties tab is read only and contains information derived from the Design Tab.

Information	Significance
Parent Product	This indicates the node in the product hierarchy that is the parent for all products in the planogram. As the display style packets of breakfast cereals were both children of the Breakfast Cereal node, this is the parent that is shown. This matches the information in the master planogram.
Size	This is the overall size of the planogram. This information will be used when matching up individual planograms with the master planogram. Note how it is larger than the one bay planogram.
Number of Bays	This is the number of bays (fixtures) that the planogram is designed to be placed on. This information will be used when matching up individual planograms with the master planogram.

Styles Tab

Although not necessary for the Master Planogram functionality, the Styles tab has to be assigned a style to enable the master planogram to place in a floor plan. In this example the Standard Fixture style has been assigned.
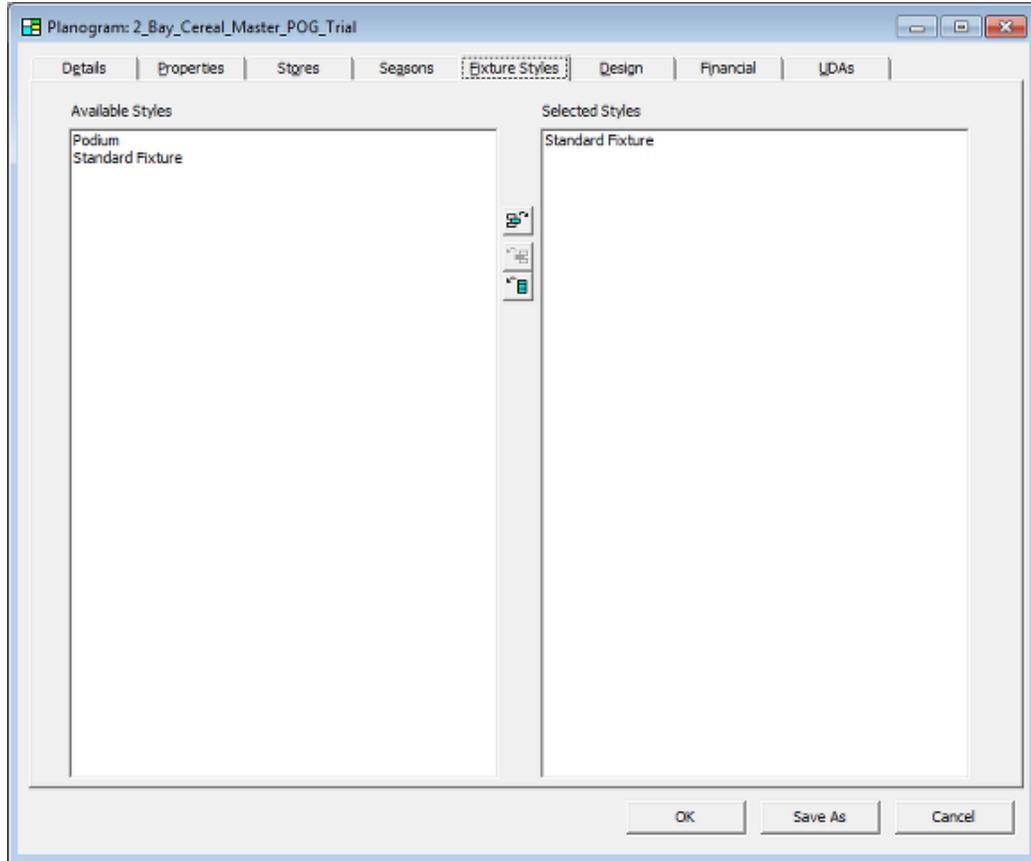
Configuration for using Master Planograms

Configuration in the Database

Class Store Assortment Table

For the master planogram process to work, some configuration needs to be done directly in the database. The table is the **Class Store Assortment** table. This configuration can only be carried out by an administrator with direct access to the database.

> **Note**: See the *Oracle Retail Macro Space Planning Data Model* for full details of the **Class Store Assortment** table.

This requires populating with several pieces of information.

Column	Description
PRD_ID	The identifier for the node in the product hierarchy that is the parent for the products in the master planogram.
STR_ID	The identifier for the store in which the master planogram will be placed.
CSA_ASSORTMENT_CODE	The information held in the Assortment Code field of the master planogram.

Store Specific Implementation Dates

Store specific implementation dates allow the setting of a new planogram to be spread across a range of dates if required. This information is held in the **POG Store Date** table. Store specific dates should not be used if the generic effective and expiry dates for an individual planogram do not cover the entire life cycle of the planogram across all stores. If the generic effective and expiry dates do not cover this life cycle, it is possible to have gaps in the master planogram mapping where a store specific effective date is later than the generic expiry date of the planogram's previous revision. In this event no individual planogram will be mapped by the planogram publishing or printing processes.

> **Note**: See the *Oracle Retail Macro Space Planning Data Model* for full details of the **POG Store Date** table.

Configuration in the Administration Module

Permissions for Planogram Groups

In order for a user to use the master planogram functionality, they must have access rights to the planogram groups containing both the master and individual planograms involved. This is set via the Planogram tab of the Data Security dialog box accessed from the Security menu in the Administration module.
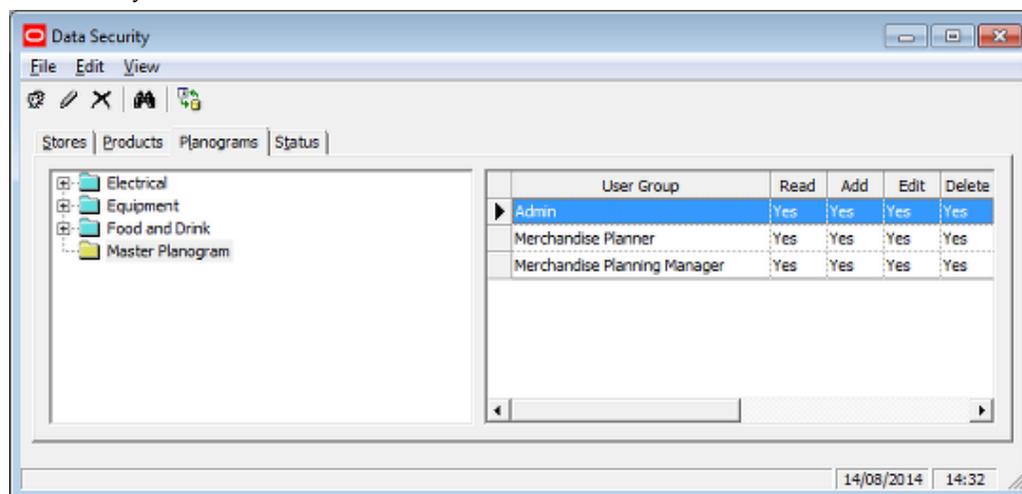
Planogram Publishing

Planogram Publishing needs to be configured as following using the Planogram Publishing Configuration dialog box accessed from the File menu in the Administration module. The changes required are on the Output tab as the Template, Collation and Validation tabs can be configured when the Immediate Planogram Publishing functionality is invoked from the Planner and Merchandiser modules or from In-Store Space Collaboration.

> **Note**: For the Master Planogram functionality to work, the output format must be set to **Organize by Store**.

Configuration Module

The Merchandising tab of the Configuration Module has a series of Check Rules. These govern the warnings given when planograms will be placed. Because the master planogram has to have a set of dimensions and a specific number of bays, if the master planogram (which is only a placeholder) is placed on different number of fixtures or on a fixture of a different dimension to the one is created on, a warning might result. Accordingly, when placing master planograms, it is often best to deselect the Planogram Length, Planogram Depth and Planogram Height warnings.
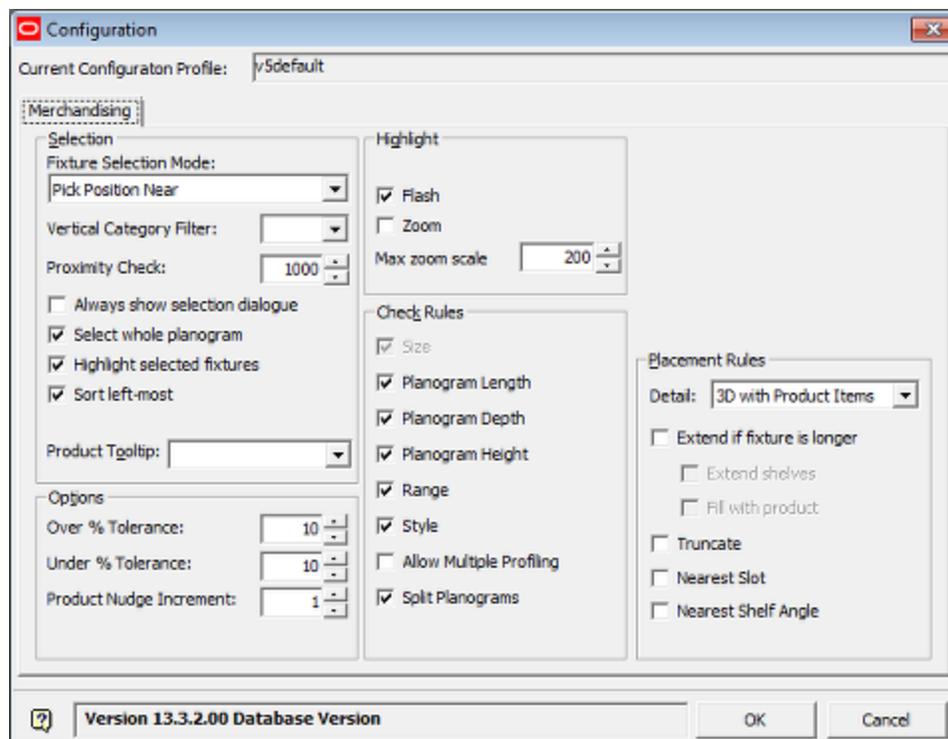
Quick Reports

Because most users will not be able to access the database, it may be necessary to set up quick reports to show the data in specific tables for experimenting with Master Planogram. This example of a Quick Report shows the contents of the **Class Store Assortment** table. This enables someone experimenting in a floor plan to see the information held in the database and confirm it is appropriate for the planograms involved.

> **Note**: For information on the **Custom SQL** table concerned setting up Quick Reports, see the *Oracle Retail Macro Space Management Data Model*.

Manually Running the Master Planogram Functionality

There are two ways of seeing the master planogram functionality in action: using the Immediate Planogram Publish functionality or using the Print Planogram functionality. Both ways are described below, together with some simple trouble shooting suggestions.

Placing the Master Planogram

The first stage is to place the master planogram. This needs to be placed in a floor plan within a store specified in the **Class Store Assortment** table. The master planogram functionality will reference this table, so if the store is not referenced within it, the master planogram functionality will not work. The master planogram can be placed on one bay, in which case the one bay variant of the individual planogram will be published when required. Or it can be placed on two bays - in which case the two bay variant will be published.

Print Planogram

The Print Planogram functionality is accessed from the File menu in the Planner and Merchandiser modules (Print > Print Planograms). This will bring up the Print Planogram dialog box. Ensure that the value in the **Floor Plan Date** field is set beyond the Publish Date of the planogram. The master planogram in the floor plan will have been substituted for by an individual planogram - the functionality having mapped the correct individual planogram to the master planogram. On clicking **Print**, the individual planogram will print to the designated printer, confirming the master planogram has mapped correctly.
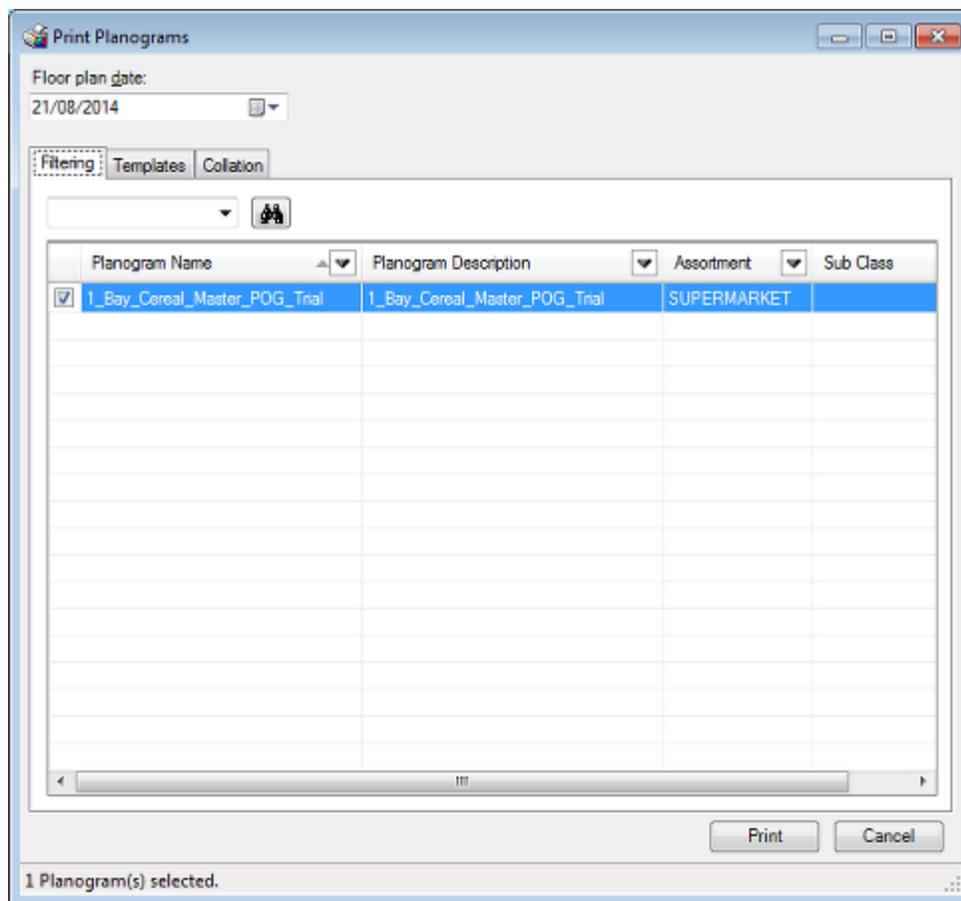
Printing will not change the status of the printed planogram.

Publishing the Planogram

Publishing the planogram will change the status of the planogram from Authorised to Published (if the Publish date is today's date or in the past). The dialog box is called from the **File menu > Publish Planograms**. Again the master planogram will be mapped to an individual planogram. On clicking **OK**, the individual planogram will be published to the Publish Planogram folder (specified in the Directories tab of the Configuration dialog box), confirming the master planogram has mapped correctly.
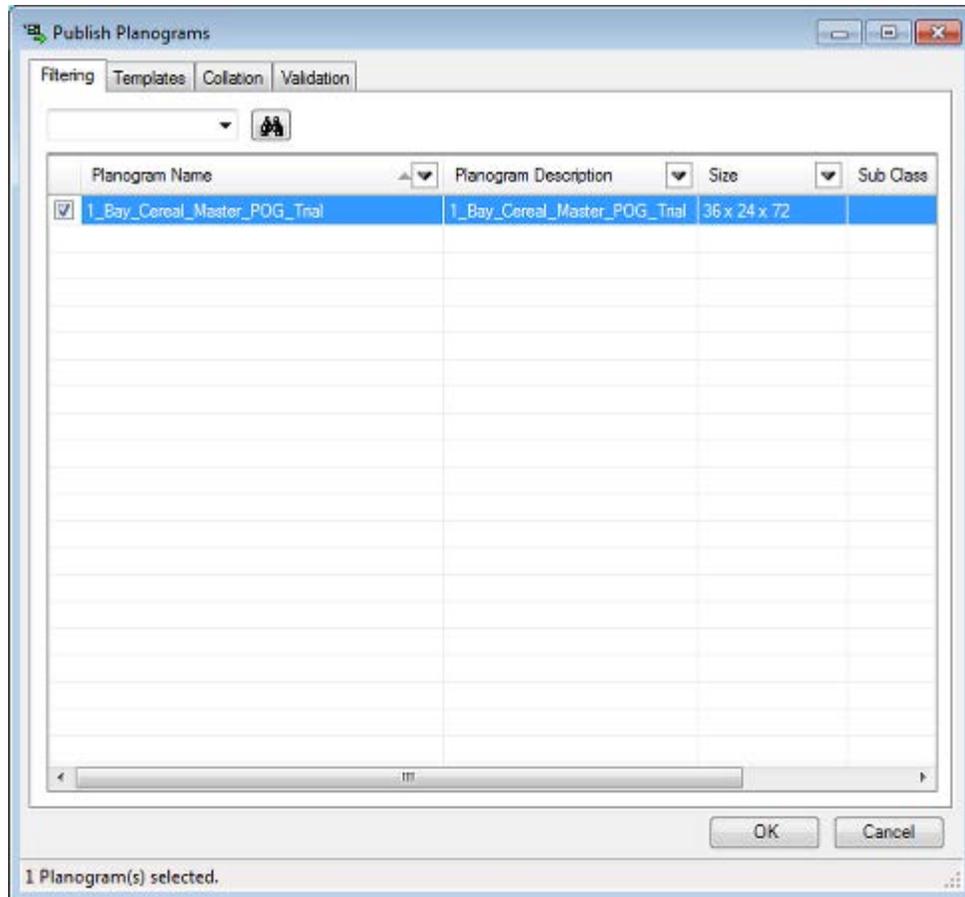
Detailed information on what was published will also be in the **Publish Planogram Log** table in the database. Other information may be found in the **Error** table. (See the *Oracle Retail Macro Space Planning Data Model* for more information.) Users without access to the database will need access to reports showing the contents of those tables.

After Publishing the Planogram

When the planogram is published, that informs the store both of the planogram design and that it is to be implemented in the future. It is also an indication that the required merchandise needs to be ordered through the replenishment system. The date that the planogram is to be put into service is the effective date.

Implementing the Planogram

When the planogram is published, that informs the store both of the planogram design and that it is to be implemented in the future. It is also an indication that the required merchandise needs to be ordered through the replenishment system. The date that the planogram is to be put into service is the effective date. This can be in one of two places in the software: in the **Planogram design dialog box** and in the **Planogram Store Date** table.

Planogram Design Dialog Box

The effective date is shown in the **Effective Date** field. This is the global effective date and if no information pertinent to the planogram is in the **Planogram Store Date** table, the planogram will be put into service simultaneously across the entire retail network.

Planogram Store Date Table

This table can be used to override the global effective date assigned to the planogram. This holds the name of the planogram, the stores it is designed for and the date it is to be implemented. In the simple example below, the planograms are designed to go into service at one week intervals. This table would typically be populated by an import process. It holds a set of store specific effective dates.

Planogram Name	Store Name	Store Specific Effective Date
1 Bay Cereal	Cairo	21-AUG-14 14.06
1 Bay Cereal	Canberra	28-AUG-14 14.09
1 Bay Cereal	Oslo	04-SEP-14 14.10
2 Bay Cereal	Cairo	21-AUG-14 14.07
2 Bay Cereal	Canberra	28-AUG-14 14.09
2 Bay Cereal	Oslo	04-SEP-14 14.10

The planogram publishing functionality references this table during publishing. If there is no **Store Specific Effective Date** for the planogram, the planogram is published when its general **Effective Date** is reached. If there is a Store Specific Effective date, this overrides the general effective date and the planogram is published using the store specific date.

> **Note**: For more information on the **Planogram Store Date**
> table, see the *Oracle Retail Macro Space Management Data
> Model*.

Signaling the Execution Date to the Store

Signaling the planogram implementation date to the store requires a retailer specific
method. This would normally be set up on implementing the software.

Master Planograms and Batch Processes

Master Planograms are intended to be a way of reducing the churn in floor plans. Instead
of continually issuing updated floor plans when individual planogram designs are
changed, the floor plan would have master planograms in it. These master planograms
would not require updating until the space allocated to categories and sub-categories is
changed. Retailers would run a planogram publishing process at intervals; typically
through a batch process. The basic stages are as follows:
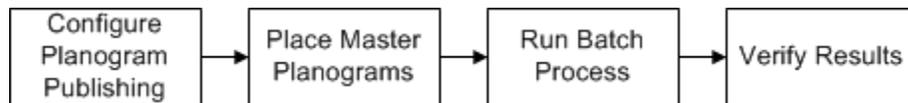
Configure Planogram Publishing

The planogram publishing process is configured in the Administration Module using the
Planogram Publishing Configuration dialog box.
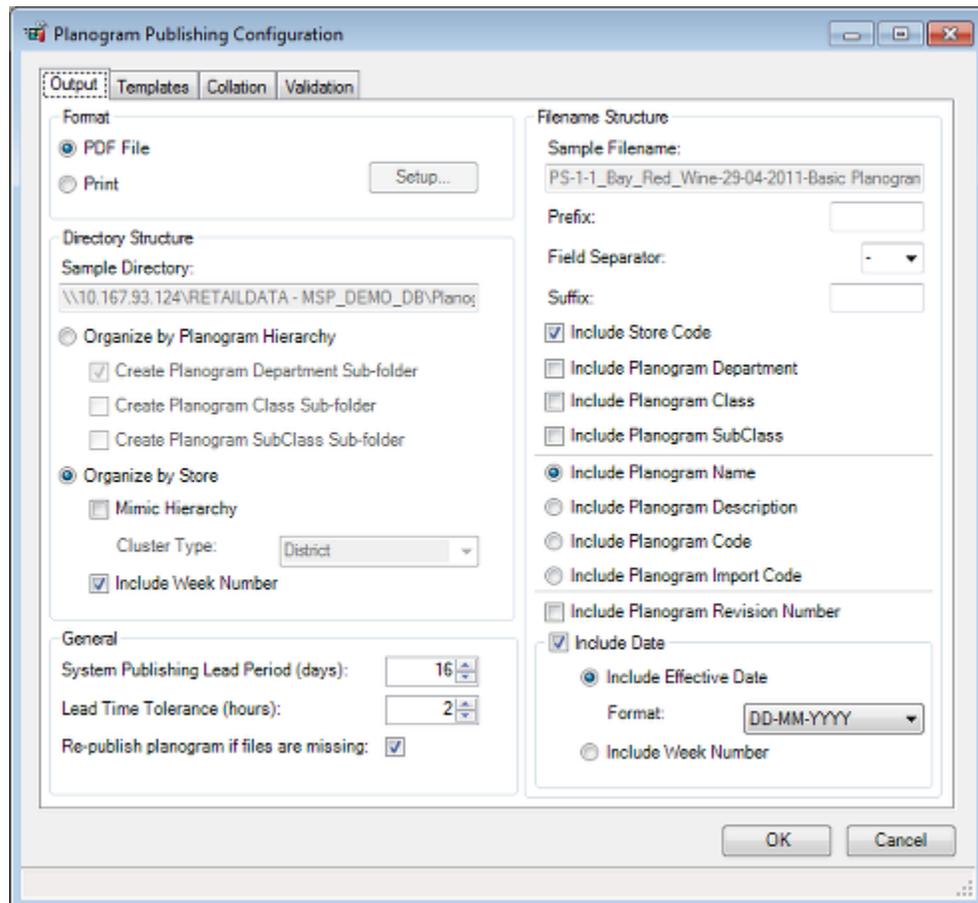
> **Note**: See the *Oracle Retail Macro space Management Administration Module User Guide* for full details of how to configure this dialog box.

This determines the location planograms will be published to and the format they will be published in.

Place Master Planograms

Placing Master Planograms is identical to placing individual planograms. They are placed in the floor plan identically to individual planograms. The key difference is that master planograms are left in place until the location or amount of space allocated to product categories and sub-categories changes. As there is a mapping between master planograms and individual planograms, each time planogram publishing is executed, the specific individual planogram associated with each master planogram is published. If the individual planograms are updated, the updated versions will publish with no need to publish a revised floor plan.

Batch Process

Although planograms can be manually published, the most usual process is to publish using a batch process run at regular intervals. This identifies planograms that require publishing and publishes them in the required form to the required location. Running planogram publishing as a batch process requires and MSP tool called **Batchrunner.exe**. This can be run manually or through a third party scheduling tool. The operation can be customized using command line switches.

> **Note**: See the *Oracle Retail Macro Space Management Administration Module User Guide* for full details of how to use Batchrunner.exe.

Verifying Results

After the planogram has been published via the batch process, the results should be verified to see all planograms have been published successfully. There are two ways of doing this - these should be set up during implementation. The most common are:

Publish Planogram Log

All results from publishing planograms are written to the Publish Planogram Log table. During implementation a report should be configured to report on these results. This should include:

- **Any planograms that have failed to publish**

    For a variety of reasons some planograms may fail to publish. These should be listed in the report and the reasons identified. Failure to publish planograms may mean that they will not be executed at the required time.

- **Any Master Planograms that have Published**

    Each master planogram should have a specific individual planogram associated with it that should publish when the planogram publishing is run. If there is no associated specific individual planogram, or if any associated specific individual planogram does not meet the criteria to be published, the master planogram will be published instead. Any master planograms that have published should be listed and the reason investigated.

Note: For full details of the Publish Planogram Log table, see the *Oracle Retail Macro Space Planning Data Model*.

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Calculations

Overview of Calculations

Macro Space Management has many capabilities. One of these is to understand space. After creating a floor plan, it is then possible to run a number of calculations that give information on how well (or how badly) the floor plan has been laid out. This information can then be used to further optimize the floor plan, enabling a retailer to maximize the sales and profit from the available area. One example is area calculations: this apportions the floor area in a specific floor between the fixtures in that floor. This data then allows the amount of aisle space allocated to a fixture to be taken into account. In the screen shot below, the red areas show points where customers can stand in a floor plan and see a lot of fixtures - including end caps. This enables a retailer to identify prime areas to place high margin merchandise.

Custom Reports and KPIs

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

Example of Use of Calculations

Consider a number of categories associated with snacks and convenience buys.

Users not using Macro Space Management will have information in tabulated form.

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

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

Category	Base Linear (feet)	Profit	Profit per foot Base Linear	Allocated Area (Square Feet)	Profit per Square Foot
Crackers and Savory Biscuits	12	$3,600	$300	720	$5

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

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

10% Over Target

On Target

10% Under Target
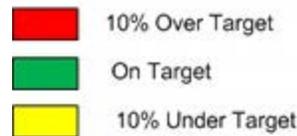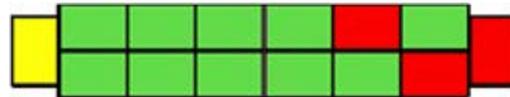
Here a store planner (or store manager) can see at a glance which fixtures contain products that are performing well or badly. In this case it is possible to see an end cap is performing below expectations and further investigation is required to identify the reasons.

Calculations and the Business Process

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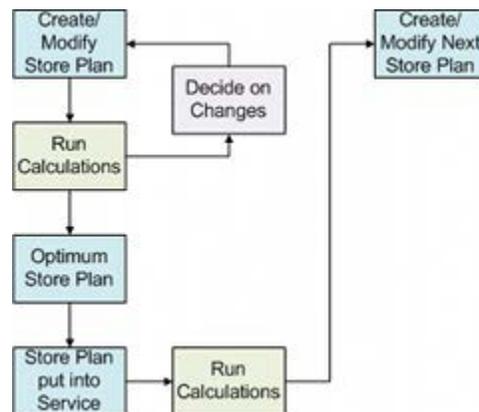
The initial stage would be for a floor plan to be created or modified. Calculations would then be run on that store plan, leading to information on how effectively the space within the store was being used. This information would allow a store planner to keep returning to his floor plan and optimizing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

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

General Technicalities for Calculations

Initiating Calculations

Calculations are initiated from the Calculations menu.
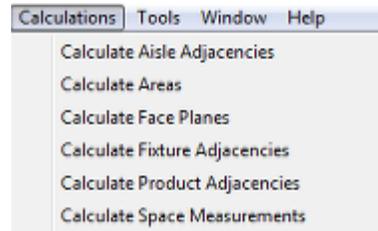
Imploded and Exploded Planograms

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

The example planogram on the left is imploded (2D) and takes the form of a product block occupying the volume of the planogram. There is no information on the shelves and individual products present. The planogram on the right has been exploded to 3D form and contains information on both shelves and individual products. Planograms can be changed between the imploded and exploded form in the Merchandiser module. The Face Plane and Space Measurement calculations will only return meaningful results for planograms in 3D (exploded) form that contain Display Styles.

Information on Database Tables

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

Allocated Areas

Principles of Allocated Areas

The **Allocated Area** calculation is used to apportion areas of floor space to specific fixtures. This allows reports on performance to take into account the way the floor has been laid out.
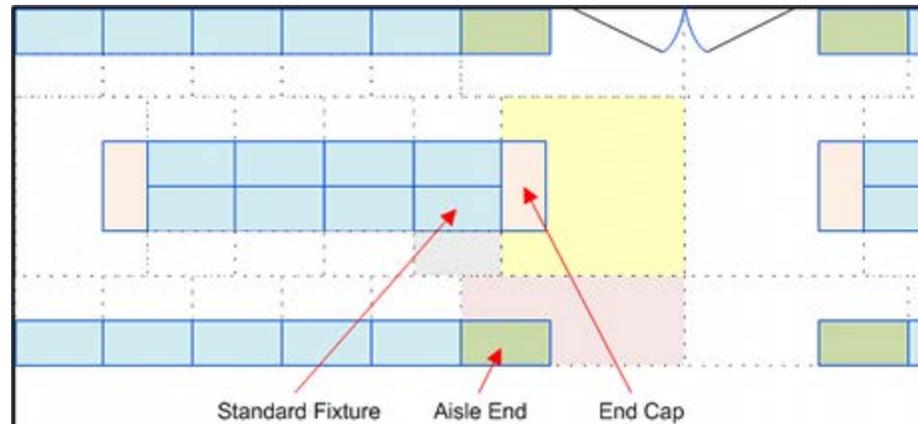
In the above simplified example, fixtures are shown with a solid outline and the resulting allocated area with a dotted outline. It can be seen that an end cap will receive a greater allocated area than a standard fixture, while a fixture at an aisle end could have an allocated area intermediate between the two. The result can be seen in the following table.

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

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

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

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

Space Measurements

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

Allocated Area Calculation Technicalities

System Variables Affecting Allocated Areas

The following system variables affect the allocated areas calculation:

- AREA_LARGE_INCREMENT
- AREA_MEDIUM_INCREMENT
- AREA_SMALL_INCREMENT
- AREA_MAX_DISTANCE
- AREA_UNIT_OF_MEASURE

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

Area Calculation Directions

The directions for which the calculations apply for a specific type of fixture are set in the Block Details dialog box in Fixture Studio.
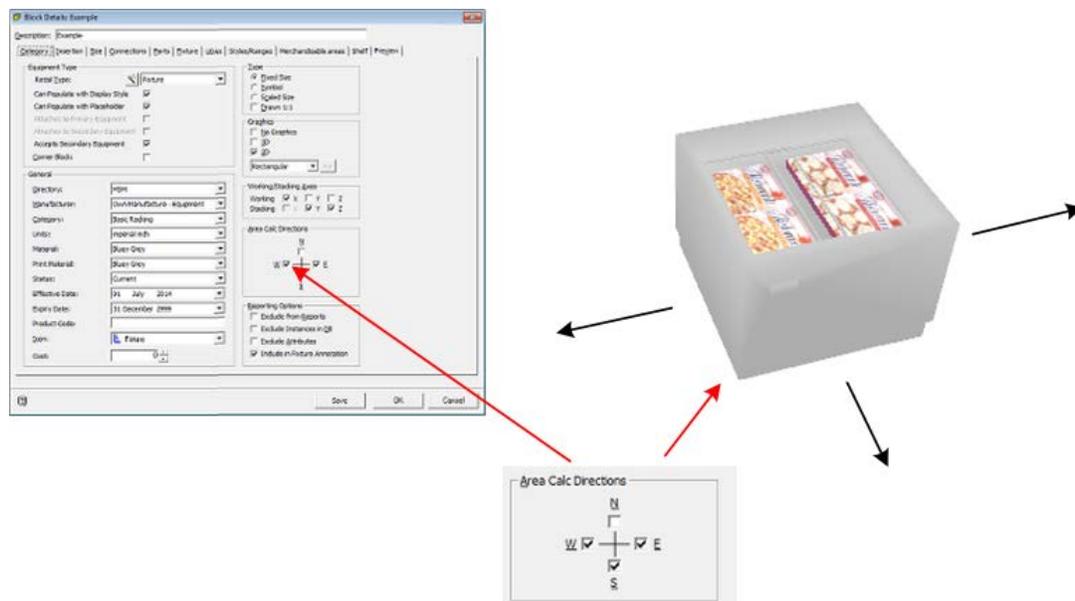
Fixtures such as spinners or bins that can be seen from all directions might have all four area calculation directions set. Conversely, fixtures such as slatwalls will not have the products visible from the back and will have their directions set to left, right and forward. See the *Oracle Retail Macro space Management Fixture Studio User Guide* for more information.

Internal Area Zone and AREA_MAX_DISTANCE_SYSTEM_VARIABLE

Two factors affect the maximum area that can be allocated to a fixture: the Internal Area zone and the AREA_MAX_DISTANCE system variable.
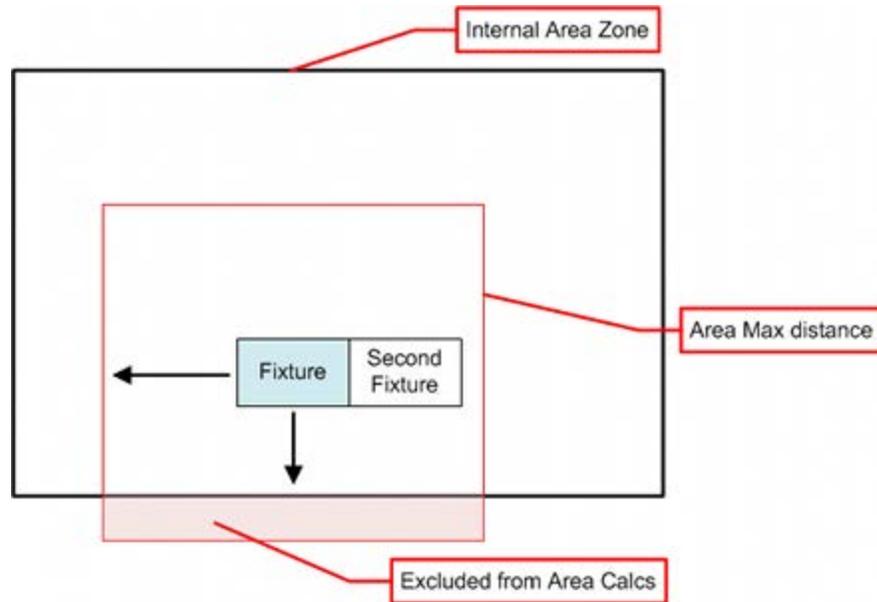
Individual fixtures feel out' in the specified directions until:

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

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

Sharing Areas between Fixtures

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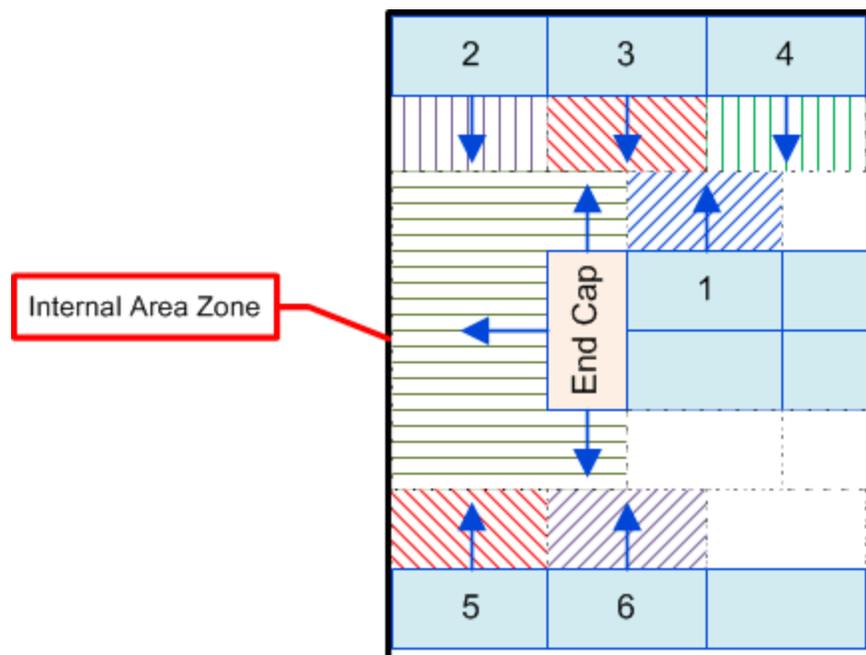
If we take the example of Fixture 1, it will feel out towards Fixtures 3 and 4. Similarly, Fixtures 3 and 4 will feel out towards Fixture 1. The total areas will be subdivided between then, which will approximate to the hatched areas in the diagram above. The end cap is more complex. It will feel out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

Using the Allocated Area Calculation

Running the Allocated Area Calculation

The Allocated Area calculations can be run from the Calculations menu
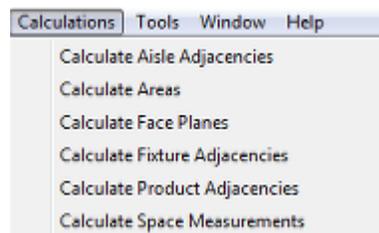
Allocated Area Results

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

> **Note**: For full details of database tables, see the *Oracle Retail Macro Space Planning Data Model.*

Reporting Using Allocated Areas

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

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

Aisle Adjacencies

Principles of Aisle Adjacencies

The Aisle Adjacency Calculation is used to assign fixtures to MSP Aisles. As these aisles have a direction, it is also possible to determine the sequence of the fixtures along that aisle. After products or planograms have been associated with those fixtures, it is then possible to generate reports stating whether those products are well or badly placed along the aisle.
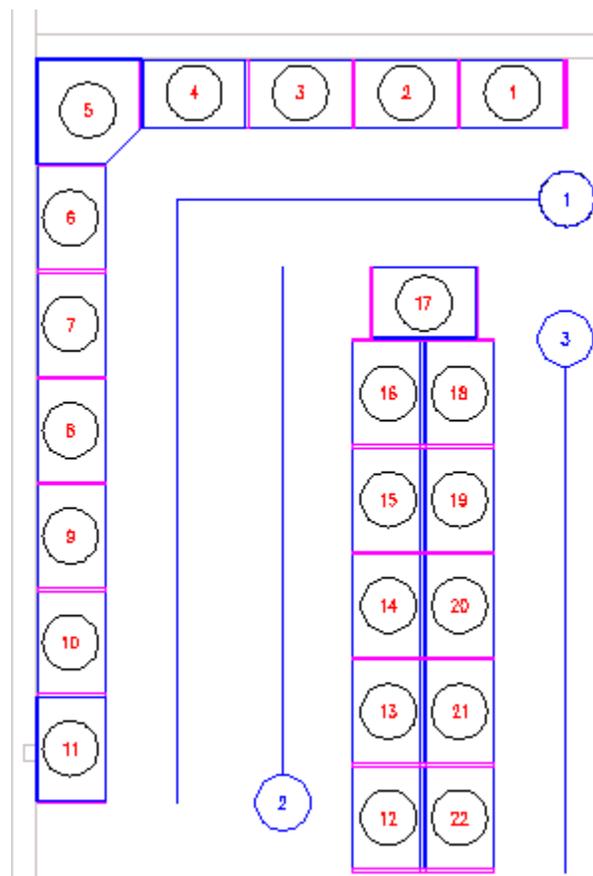
In the above example, Aisle 3 contains fixtures 18 - 22, with Fixture 18 at the start of the aisle and Fixture 22 at the end. It is then possible to use this information in custom reports. For example, once the planograms on the fixtures are known, it would be possible to:

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

Aisle Adjacency Technicalities

System Variables Affecting Aisle Adjacencies

The ADJACENCY_AISLESIZE system variable specifies the maximum distance that a fixture can be from an Aisle and still be associated with it. For example, if the ADJACENCY_AISLESIZE is set to 48 inches (4 feet), no fixture greater than that distance from the aisle will be associated with it. This system variable is set using the **System Variable dialog box** accessed from the General Menu in the Administration module.

Method of Measuring Distances

The **Aisle Adjacency table** contains two distances associated with a specific aisle.

- AIL_DISTANCE_FROM_START

This distance is measured from the start position of the aisle to the centre of the front of the fixture.
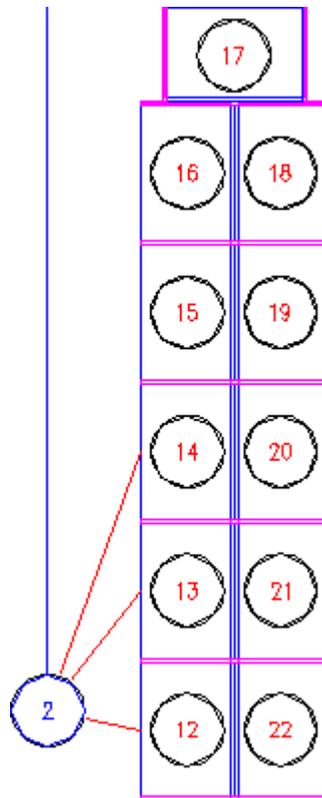
In the above example, the red lines indicate the distances from the start of Aisle 2 to Fixtures 12, 13 and 14. For this reason, it is best not to draw aisles using paths that turn through several right angles.
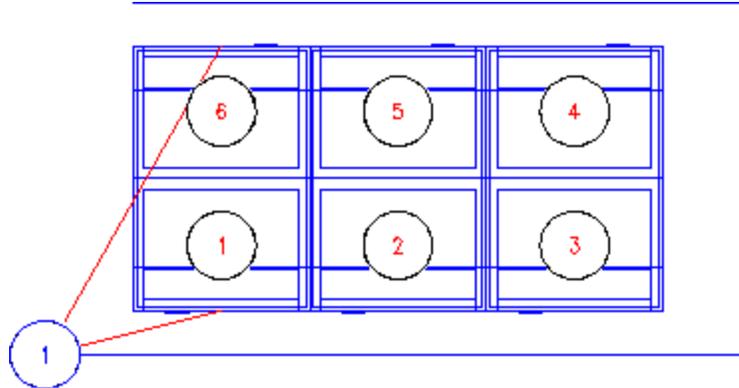
In the above example Fixtures 1 and 6 will be shown as the closest to the start of the aisle; the true sequence along the aisle is 1 - 6.

- AIL_DISTANCE_FROM_AISLE

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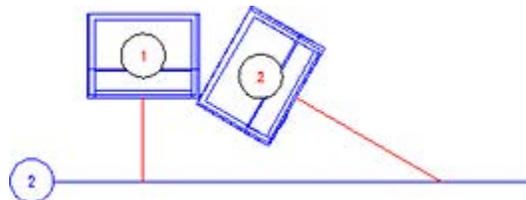
In the above example the centers of the fronts of both fixtures are the same vertical distance from the aisle. However, because the distance to the aisle is measured perpendicular to the front of the fixture, Fixture 1 will be shown as being closer to the aisle than Fixture 2.

> **Note**: For full details of database tables, see the *Oracle Retail Macro Space Planning Data Model.*

Items of Equipment that can be Assigned to Aisles

Only equipment of type **Fixture** can be assigned to aisles in the **Aisle Adjacency** table. (Fixture types are assigned in the Category Tab of the Block Details dialog box in the Fixture Studio module - see the *Oracle Retail Macro Space Management Fixture Studio User Guide* for more information). In addition Fixtures will only be assigned to a single aisle - this will be the nearest aisle within the limits set by the ADJACENCY_AISLESIZE system variable.

Using the Aisle Adjacency Calculations

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

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

- Identifying whether there are undesirable product affinities - for example whether shotgun shells are next to baby food.

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

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

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

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

Fixture Adjacencies

Principles of Fixture Adjacencies

The Fixture Adjacency calculation is used for several purposes:

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

The Fixture Adjacency calculation determines which fixtures are to the left, right, above or behind other fixtures.
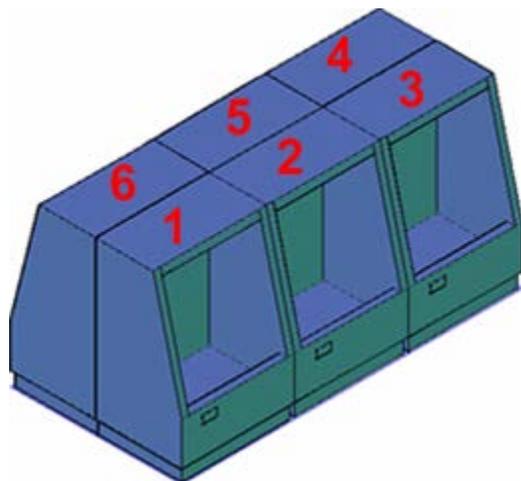
In the above example, Fixture 2 has Fixture 1 to the left, Fixture 4 behind and to the right, etc.

> **Note**: For full details of database tables, see the *Oracle Retail Macro Space Planning Data Model.*

Fixture Adjacency Technicalities

System Variables Affecting Fixture Adjacencies

The following system variables affect the fixture calculation:

- ADJACENCY_FIXTURE_SIZE
- ADJACENCY_LATERALGAP
- ADJACENCY_VERTICALGAP

These system variables are set in the Administration Module - see the *Oracle Retail Macro space Management Administration Module User Guide* for more information.

Bitwise System Variables

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

1 = Adjacent to Right

2 = Adjacent to Left

4 = Adjacent to Back

8 = Aisle Adjacency (Not in Use)

16 = Not in Use

32 = Adjacent Above

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

> **Note**: For full details of database tables, see the *Oracle Retail Macro Space Planning Data Model.*

Using Fixture Adjacencies

Fixture Adjacency Results

Aisle Adjacency results are stored in the **Fixture Adjacency** table. More information pertinent to gondolas is stored in the **Fixture Sequence** table.

> **Note**: For full details of database tables, see the *Oracle Retail Macro Space Planning Data Model.*

Using the Fixture Adjacency Results

1. **Product Adjacencies**

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

2. **Reports Based on Fixture Adjacencies**

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

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Product Adjacencies

Principles of Product Adjacencies

The Product Adjacency Calculation is used to determine the relationship of products on adjacent fixtures to one another. Products may be to the left, right, above or on the same fixture as other products. Results are aggregated up to sub-class (sub-category/sub-segment) level.
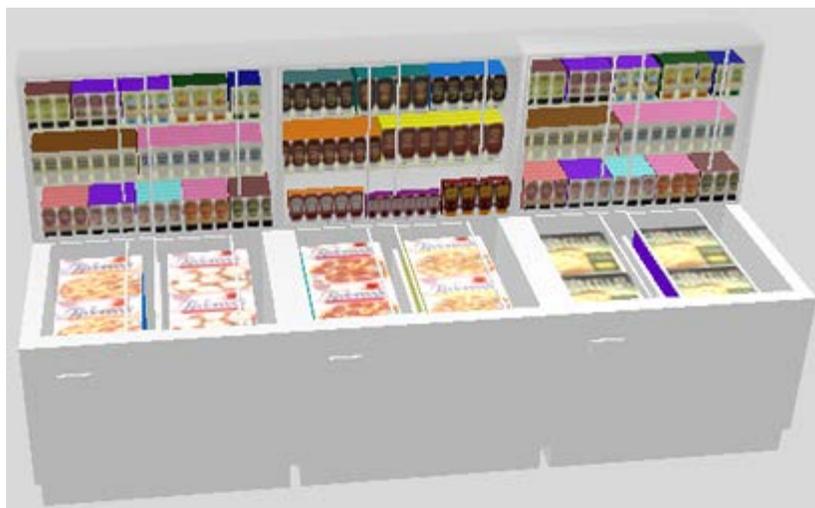
A necessary precursor for running the product adjacency calculations is that the Fixture Adjacency Calculation has been run first. When run, Product Adjacency aggregates the products up to subclass (sub-category/sub-segment) level and then reports which products are to the left/right/above other products. This information can then be used in conjunction with the Adjacency Severity rules to identify products that are well or badly placed.

The Adjacency Severity rules are configured in the Administration module.

The results are stored in the **Adjacency Rule** table.

> **Note**: For full details of database tables, see the *Oracle Retail Macro Space Planning Data Model*.

Using Product Adjacencies

Product Adjacency Results

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

> **Note**: For full details of database tables, see the *Oracle Retail Macro Space Planning Data Model.*

Face Planes

Principles of Face Planes

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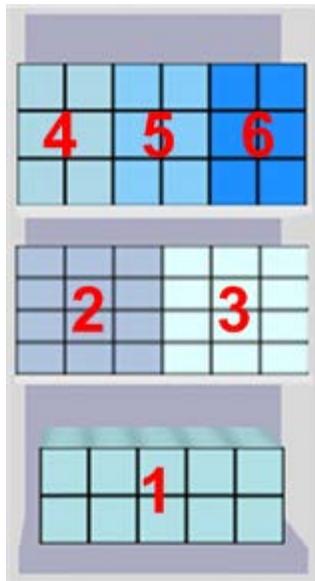
In the above example the base of the fixture contains a single product (1), the first shelf two products (2 & 3) and the top shelf three products (4, 5 & 6). The Face Plan calculation can be used to relate sales information to the frontal area of the products.

Product Number	Sales	Area	Sales ft²
1	$225	4.5 ft²	$50/ft²
2	$135	2.25 ft²	$60/ft²
3	$90	2.25 ft²	$40/ft²
4	$75	1.5 ft²	$50/ft²
5	$45	1.5 ft²	$30/ft²
6	$105	1.5 ft²	$70/ft²

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

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

Face Plane Technicalities

System Variables Affecting Face Plane Calculations

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

Imploded and Exploded Planograms

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

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

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

Display Styles

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

Calculation Method

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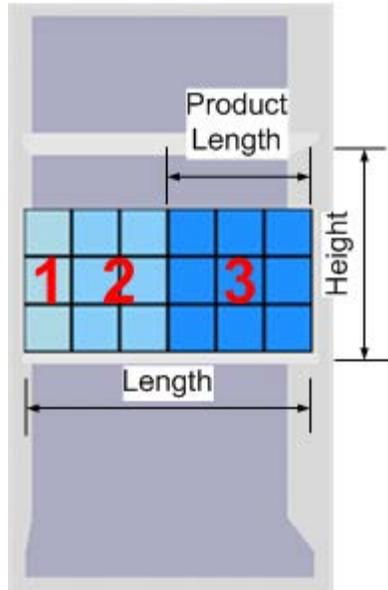
1. The total frontal area is found by multiplying the length of the shelf (or fixture) by the available height.

2. The frontage product occupies on the shelf is determined - for example Product 3 in the above example occupies 50% of the shelf.

3. The total frontal area is proportioned among the products according to the frontage they occupy.

Product	Total Area	Frontage	Face Plane
1	4 ft²	50%	2 ft²
2	4 ft²	35%	1.4 ft²
3	4 ft²	15%	0.06 ft²

Using the Face Plane Calculations

Face Plane results are stored in the **Face Plane** table.

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

Using the Face Plane Results

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

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

> **Note**: For full details of database tables, see the *Oracle Retail Macro Space Planning Data Model.*

Space Measurements

Principles of Space Measurements

Space Measurements are used for calculating linear dimensions and volumes associated with planograms in a floor plan. These can then be combined with EPOS data for reporting purposes. For the full set of information in Space Measurements, the allocated area calculation must first have been run. In addition, the planogram must be in Exploded (3D) form - if not, the shelf linear figure will be inaccurate. Products will be aggregated up to sub-class (sub-category or sub-segment) level. The Space Measurement calculation provides the following information:

Base Linear and Shelf Linear

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

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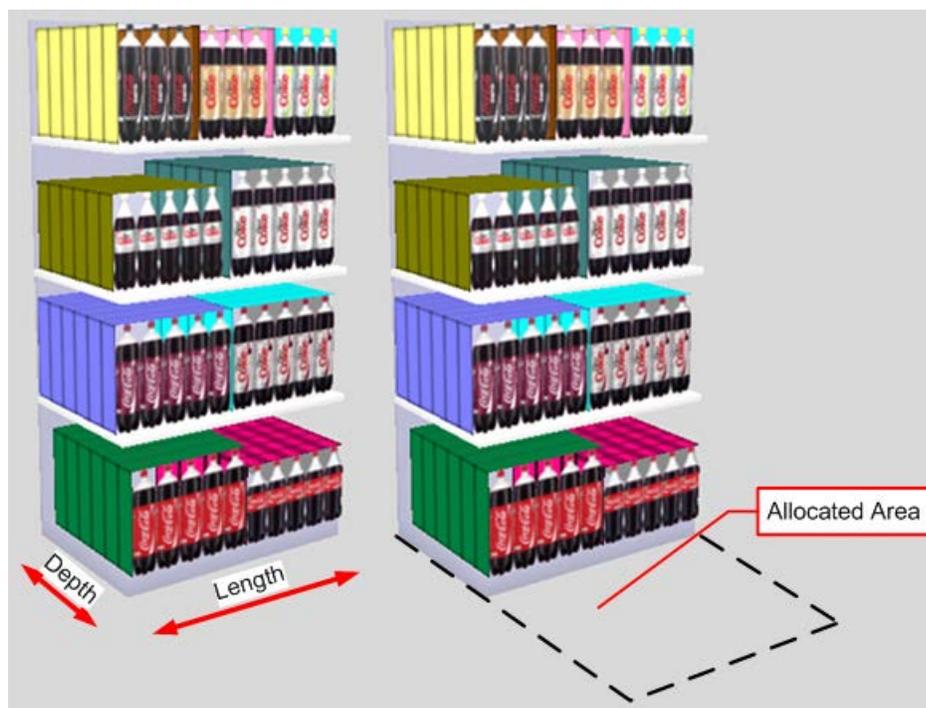
- Footprint is the physical space the fixture occupies on the floor. It is calculated by multiplying the fixture length and depth.
- Allocated Area is the space the fixture occupies on the floor when any associated areas of its aisle have been apportioned to it.

Display Volume, Nominal Volume and Allocated Volume

These provide different volumes for calculation purposes:

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

Space Measurement Technicalities

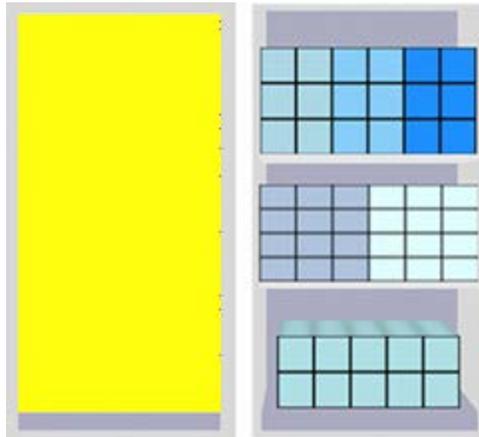## System Variables Affecting Space Measurement

The following system variables affect the Space Measurement calculation:

- CALC_STND_DEPTH
- CAL_STD_HEIGHT

These system variables are set in the Administration Module - see the *Oracle Retail Macro Space Management Administration Module User Guide* for more information.

Imploded and Exploded Planograms

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

The example planogram on the left is imploded (2D) and takes the form of a product block occupying the volume of the planogram. There is no information on the shelves and individual products present. The planogram on the right has been exploded to 3D form and contains information on both shelves and individual products. Planograms can be changed between the imploded and exploded form in the Merchandiser module. The Space Measurement calculation will only return meaningful results for planograms in 3D (exploded) form that contain Display Styles.

Using Space Measurements

Space Measurement results are stored in the **Product Measurement** table.

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

Reporting Using Space Measurements

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

Possible reports include:

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

> **Note**: For full details of database tables, see the *Oracle Retail Macro Space Planning Data Model.*
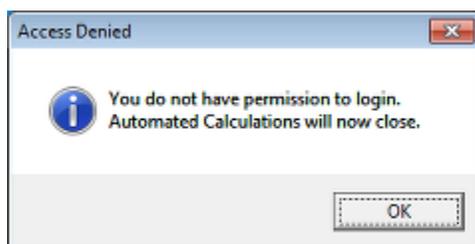
Automated Calculations

Automated Calculations

Automated Calculations are used to ensure the information held in the database has been updated for reporting purposes. It provides an alternative to some of the options in batch floor plan processing or the options in the pre-processing tab of the **Floor Plan Publishing Configuration dialog box** in the Administration module. Because Automated Calculations operates globally, access needs to be assigned to a User group before a member of that User Group can access the functionality.
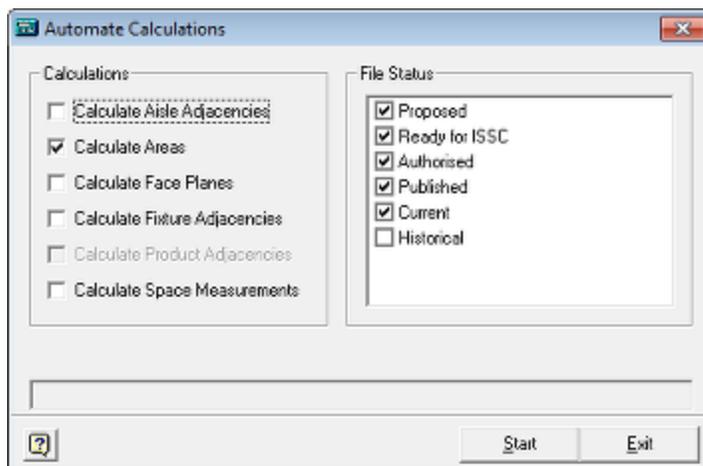
Accessing Adjacency Calculations

Access to the Automated Calculations functionality is assigned in the Functional Security dialog box in the Administration module. Users who have not had those permissions assigned will see a warning dialog box if they attempt to access the functionality.

Running Automated Calculations

Automated Calculations can be run manually from the dialog box accessed from the provided shortcuts or run directly from the *C:\Program Files\Oracle Retail\MSM\Common* folder. They can also be run from the command lobe using the following syntax:

```
Path\AVT5AutomatedCalcs.exe /Silent /Options /Status /Files
```

An example would be:

```
C:\Program Files\Oracle Retail\MSM\Common\AVT5AutomatedCalcs.exe /Silent /Options
25 /Status 23|25|27
```

Command Line Options

Path and File Name

The path is the location where the AVT5AutomatedCalcs.exe file is located.

/Silent

This option is used to suppress confirmatory dialog boxes when automated calculations are being run in batch mode.

/Options

This is a bitwise value specifying the selected options.

Value	Calculation
0	No selection
1	Aisle Adjacency
2	Allocated Areas
4	Face Planes
8	Fixture Adjacencies
16	Product Adjacencies
32	Space Measurements

/Status

The statuses for files to process are specified as pipe delimited STA_ID's from the **Status** table: for example 23|25|27.
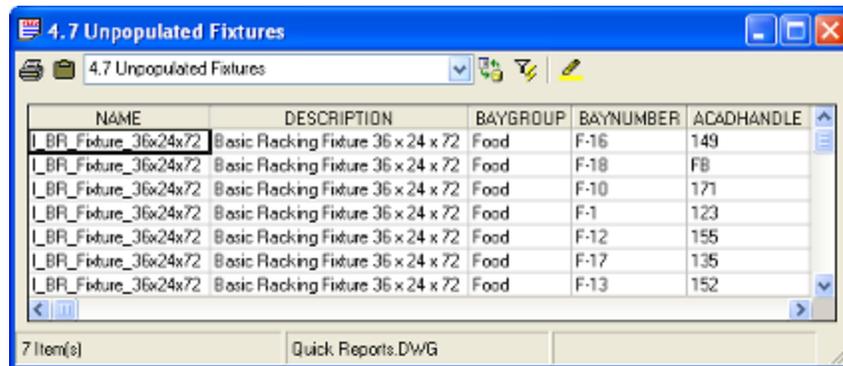
/Files

The ID of specific files to process is specified as a comma separated list of FIL_IDs from the **File** table; for example 235, 483, 679

> **Note**: For full information on these tables see the *Oracle Retail Macro Space Planning Data Model*.

Quick Reports

About Quick Reports

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

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

> **Note**: The above example uses Bay Numbering. Bay Numbers can only be assigned in the Planner module. Once assigned, they can be seen in the planner module - for example in Quick Reports or in Fixture Notation.

Forms of Quick Reports

Quick Reports are of three broad types:

General Reports

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

Floor Plans

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

Planograms

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

Quick Reports and KPI's

Quick Reports and KPIs complement each other. KPIs can be used to visually display the same information that a Quick Report can display in tabular form. The two can therefore be used to supplement each other with the Quick Report providing more detailed information than the color codes in the KPI.

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

Configuring Quick Reports

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

What Quick Reports Can Be Used For

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

Compliance

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

Aisles

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

Equipment

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

Merchandise

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

Zones

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

External Information

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

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

Fixture Attributes

Customizable Fixture Attributes can be assigned to fixtures in a floor plan. This is done using the Fixture Attributes option in the Fixturing toolbar on the Object Browser.
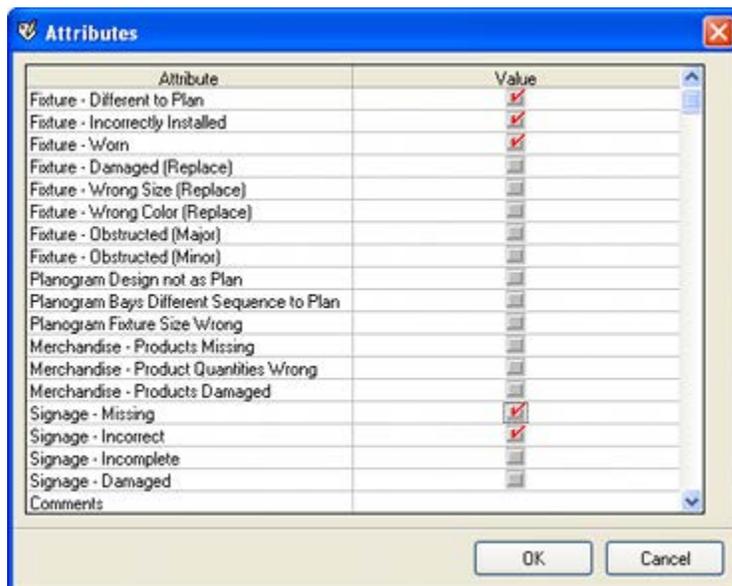
These attributes can then be inspected on a 'fixture by fixture' basis in the floor plan by another store planner. It may be more convenient to create a quick report summarizing the information in the floor plan.

Performance Metrics

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

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

Planogram Substitutions

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

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

Promotional Fixtures

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

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

Using Quick Reports

To open a Quick Report, select the **Report** option from the **View** menu. This will bring up the Quick Reports dialog box. The required report can be selected from the drop down list.

On clicking the selected report, it will open.

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

Dynamically Updating

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

Synchronization

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

Quick Reports Toolbar

The Quick Reports toolbar has the following options:

Icon	Description	Comment
🖨	Print	This option will print the current contents of the quick report to the default printer for the computer MSM is being run on.
📋	Copy to Clipboard	This option will copy the current contents of the report to the Windows clipboard. From there it can be pasted into other applications like Excel.
4.7 Unpopulated Fixtures ⌄	Select report	This option allows a user to select an alternative Quick Report without closing the dialog box.
🔃	Refresh	This option refreshes the quick report with the latest data held in the database. It also clears any filters that have been set.
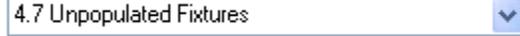
Icon	Description	Comment
![filter icon]	Filter	This filters the data in the report to match the data in the currently highlighted cell. Multiple filters can be used, each refining the data.
![highlight icon]	Highlight in Floor Plan	This option causes the selected object to highlight in the floor plan. For this to work in Planner the Quick report must contain the AutoCAD handle.

Other Options

Using the Lights Option

Users have the option of adding lights to a floor plan. This can often throw equipment and merchandise into relief and make them appear more realistic.

The Lights Dialog Box

The lights in a specific floor plan can be configured by selecting the **Edit** option from the **Lights** menu. This will bring up the Lights dialog box.
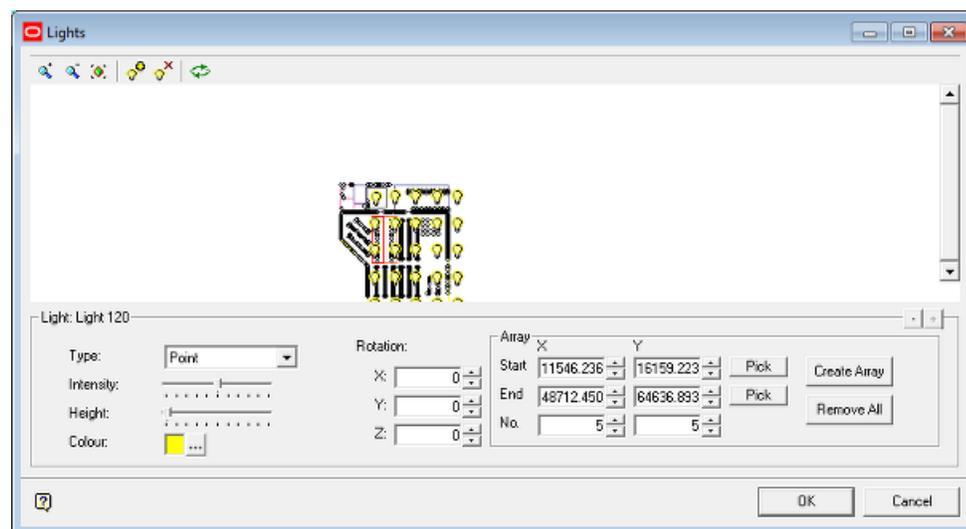
It contains a toolbar, controls for individual lights and for creating a grid of lights and a schematic floor plan that can be used to see where lights are being positioned.

The Lights Toolbar

The Lights Toolbar has the following options.

Icon	Option	Description
	Zoom In	Zoom in on the floor plan overview
	Zoom Out	Zoom out from the floor plan overview
	Zoom Extents	Zoom to the extents of the floor plan overview (show every object)
	Add Light Source	Manually add a light source
	Delete Light Source	Manually delete a light source
	Refresh Light Information	Update the current arrangement of lights with the informational currently held in the database.

Individual Light Options

Once placed in the floor plan, the properties of individual lights can be customized.

- Type can be set to one of three options: Directional, Point or Spot.
- Intensity controls how bright that individual light is.
- Height controls how high the light source is above the floor.
- Color determines what color the light shows as when it reflects off objects in the floor plan.
- Rotation controls the direction the light points if it is a Directional or Spot type.

Adding Lights to a Floor Plan

There are two ways of adding lights to a floor plan; manually and in the form of a grid.

Adding Lights Manually

To add lights manually, use the following steps.

1. Click the Add Light icon on the toolbar - a light will appear in the top left of the dialog box.
2. Drag the light to the required position in the floor plan.
3. Set the Type, Intensity, Height, Color and Rotation as required.

These steps can be repeated until the required number of lights is in the floor plan.

Adding a Grid of Lights

To add a grid of lights, use the following steps.

1. Set the Start coordinates of the grid of lights. This will define the first corner of a rectangle. This may either be done by typing the datum in or my using the Pick button to pick a point in the schematic floor plan.
2. Set the End coordinates of the grid of lights. This will define the diagonally opposite corner of a rectangle. This may either be done by typing the datum in or my using the Pick button to pick a point in the schematic floor plan.
3. Set the required number of lights as X (across the floor plan) and Y (up and down the floor plan) values.
4. Click Create Array.

Editing Placed Lights

Any placed lights can be individually selected. They can then be dragged to a new position. Alternatively properties such **Type**, **Intensity**, **Height**, **Color** and **Rotation** can be edited as required.

Adding the Information to the Database

Information will not be written back to the database (and hence lights will not be used in the floor plan) until the **OK** button is clicked to confirm.

Deleting Lights from a Floor Plan

There are two ways of deleting lights from a floor plan:

- Selecting individual lights and clicking the Delete Light icon on the toolbar.
- Clicking the Remove All button.

The deletions must be confirmed by clicking the **OK** button.

Using Lights in the Main Floor Plan

Once lights have been configured in the Lights dialog box, they have to be activated in the floor plan. They can be toggled on or off by means of the icon in the lights toolbar. If off then only a general, non-specific lighting effect will be used. If turned on, then the floor plan will be illuminated using any placed lights.

The general intensity of lighting can then be adjusted by means of the **Light Intensity** slider on the View toolbar.

Using the Animation Option

The **Animation** options allow a user to take an AVI movie of a specific part of a floor plan. There are two ways of doing this:

- Use the movement controls to create a path to be followed in the store. This can then be replayed for when the AVI starts recording.
- Start recording the AVI and use the movement controls directly.

One use of such AVIs is to distribute then to non-Macro Space Management users so they can review aspects of floor plans. Another is to distribute them to a store so they can see what a proposed reset looks like.

The Animation Toolbar

Controls for creating movies are on the Animation toolbar.

Icon	Option	Description
	Start Recording AVI	Commence recording the AVI, either following a pre-recorded path or following input from the movement controls.
	Stop Recording AVI	Stop Recording the AVI.
	Play Recorded AVI	Play the last recorded AVI. (It is only valid for this session).
	Start Recording Path	Start recording a path for an AVI to follow.
	Stop Recording Path	Stop recording the path.
	Replay Path	Replay the path for review for when recording an AVI.
	Delete Path	Delete a selected path

Icon	Option	Description
`1 ▼`	Available Recorded Paths	This drop down list enables users to select a previously recorded path. The number will increment by one every time a new path is recorded.

# Working with Paths

Recording a Path

Paths can be pre-recorded for movies to follow. This enables the user to get the precise path correct before an AVI movie is recorded. The procedure is as follows

1. Click Start Recording Path.

2. Use to mouse controls to navigate the required path through the floor plan.

3. When the path is complete, click Stop Recording AVI.

4. If necessary, review the path by clicking Replay Path. The recorded path will then replay from start to finish.

5. If the path is unsatisfactory, select the required path from the drop down list and click Delete Path.

Recording an AVI Movie

AVI movies can be recorded in one of two ways: directly by steering through the store with the movement controls or by following a pre-recorded path. This section describes the method for following a pre-recorded path. The method can readily be adapted to create a movie by using the movement controls directly. The procedure is as follows:

1. Ensure the path that the movie will follow is selected in the Available Recorded Paths drop down list.

2. Click Start Recording AVI. This will bring up the Save to File dialog box.
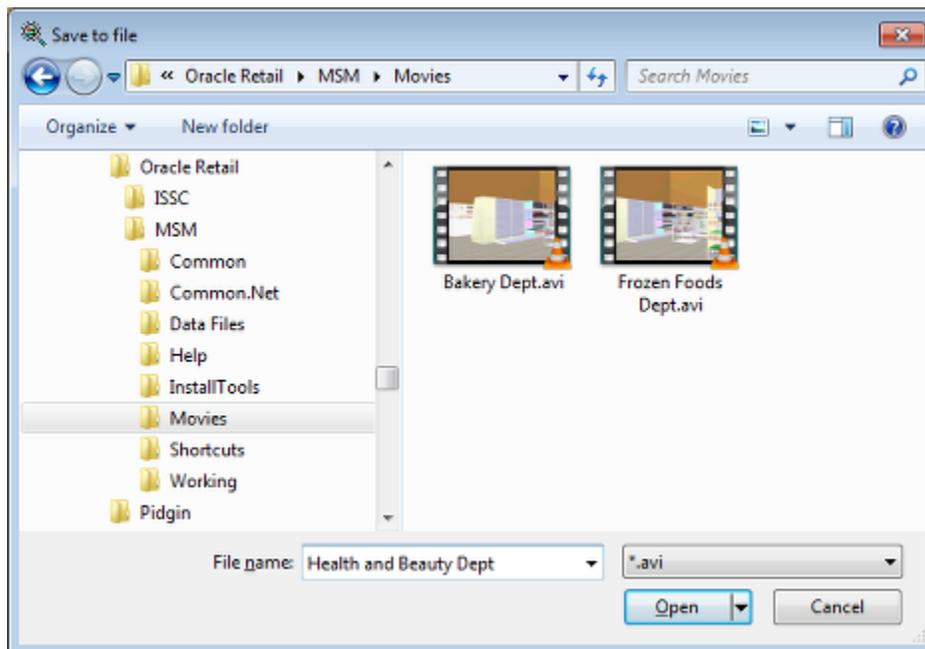
      a.   Navigate to the required folder.

      b.   Enter the name of the AVI.

      c.   Click Open.

3. The Video Compression dialog box will appear. Setting in here will affect the size of the resulting AVI file. Make the required settings and click OK. The AVI recording will now start and the user will be returned to the floor plan.
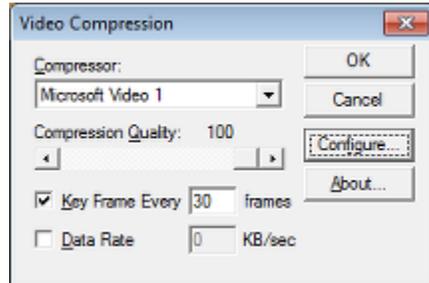

4. Click Replay Path on the toolbar. The movie recording will then start to follow the previously recorded path.

5. When the end of the path has been reached click Stop Recording AVI.

6. Review the recorded AVI by clicking Play Recorded AVI.

7. The recorded AVI can then be manually deleted or distributed by navigating to the folder in which it was stored.

Taking Snapshots

The user has the option of taking a screen shot of the currently active floor plan. This can be done in one of three ways:

- Clicking Snapshot on the View Directions and Product Text toolbar.
- Pressing F12.
- Selecting Take Snapshot Image on the View menu.

The resulting jpg file will be saved to an Images sub-folder of the Export folder specified in the Directories tab of the Configuration Module.
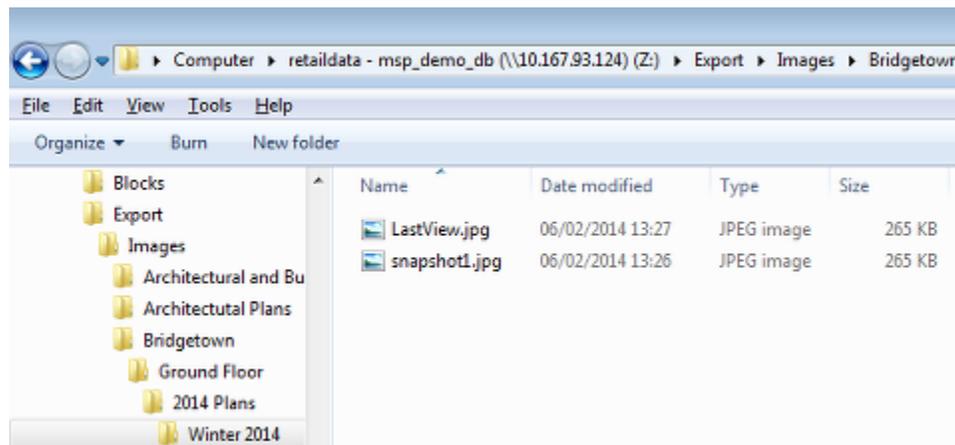

Folders below the image folder are arranged by alphabetical store name. Folders for each store follow the Store Manager hierarchy of Floor/Revision/File.

Key Performance Indicators

Overview of Key Performance Indicators

Overview of KPIs

Key Performance Indicators (KPIs) are used in parallel with Quick Reports and BI Publisher reports to give information on the currently active floor plan. Quick Reports and BI Publisher reports give tabulated information; KPIs are used to color code the floor plan with performance related criteria.
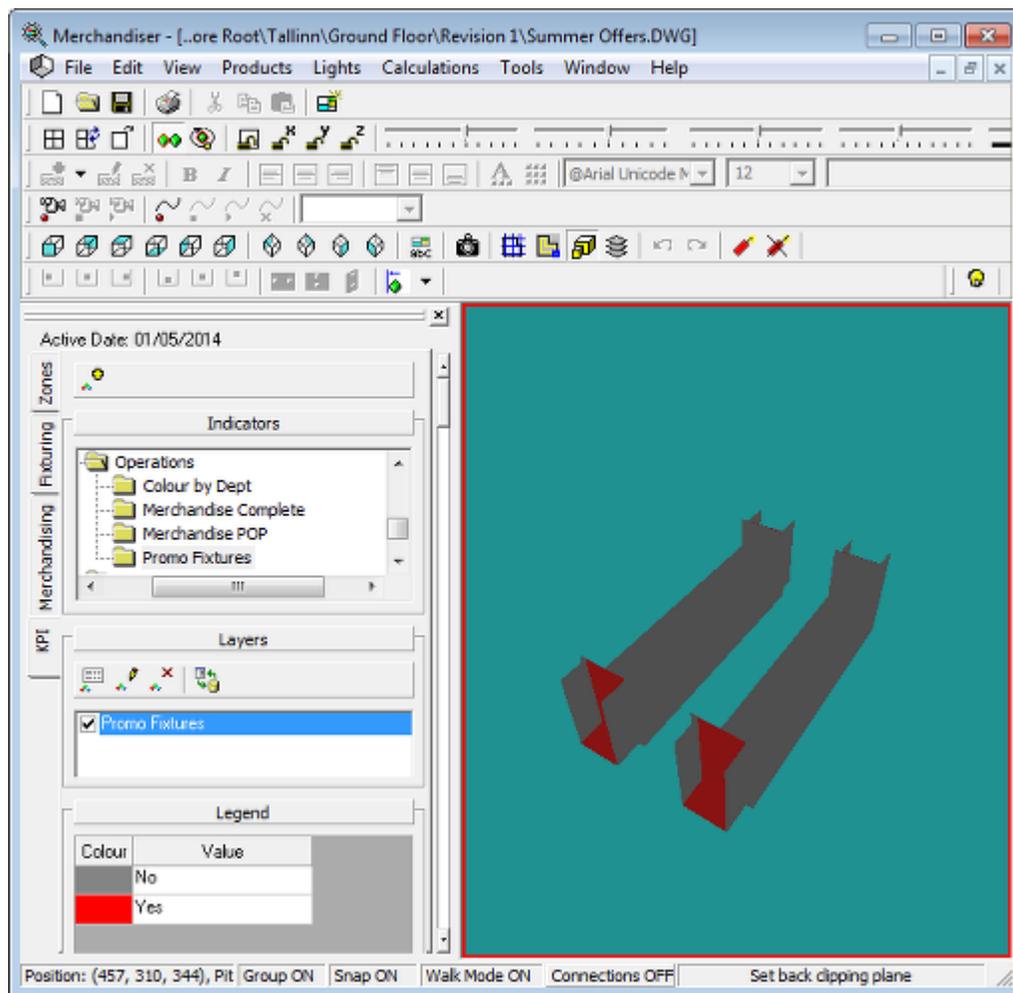
The above example from the Merchandiser module shows fixtures color coded as to whether they are designated as promotional fixtures or not.

Data Sources

The following data sources can be used for KPIs:

SQL Statements

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

Stored Procedures

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

Views

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

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

Overview of Creating KPIs

KPI's can only be created (or edited) in the Administration module. KPI's are created as follows:


Create Data Source

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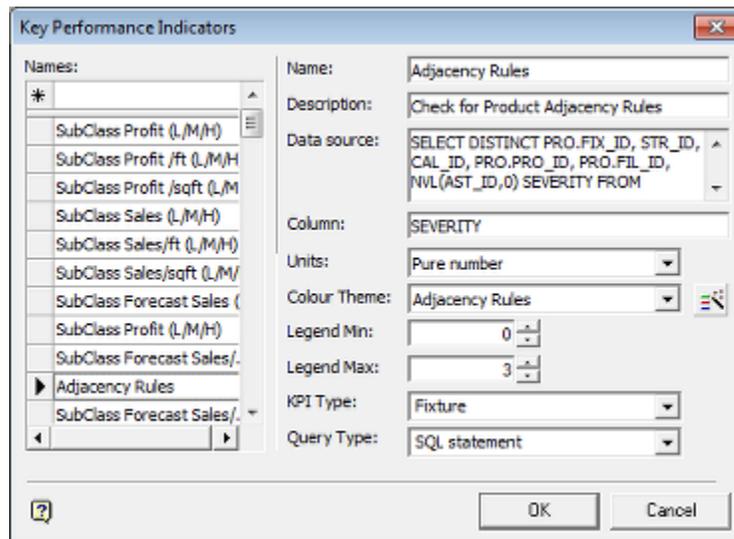
Create Color Theme

The next stage is to create a Color Theme to determine how the objects in the KPI will be colored. The simple example below show how objects can be coded red or gray according to whether a database flag is set or not. Any example of this is color coding fixtures as to whether they have been designated **Promotional Fixtures** or not.
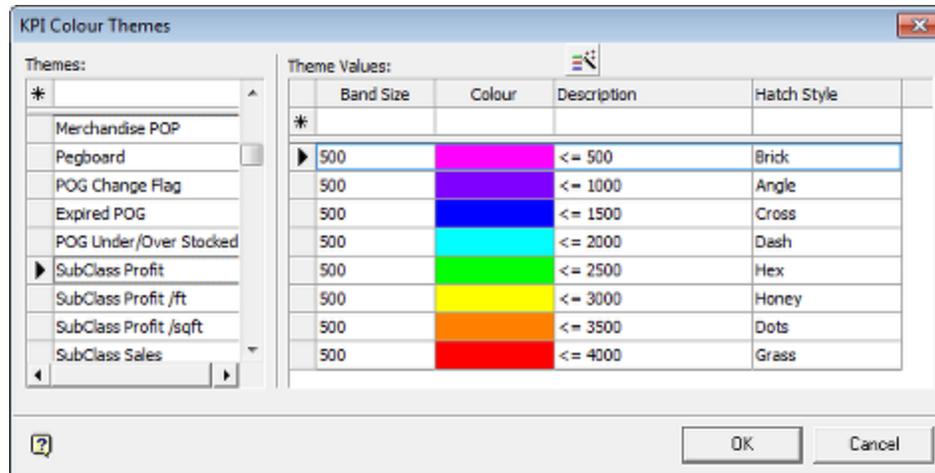
Color Themes can be edited or created using the KPI Color Themes dialog box accessed from the toolbar in the KPI tab of the Object Browser in either the Planner or Merchandiser Modules.

Configure KPI

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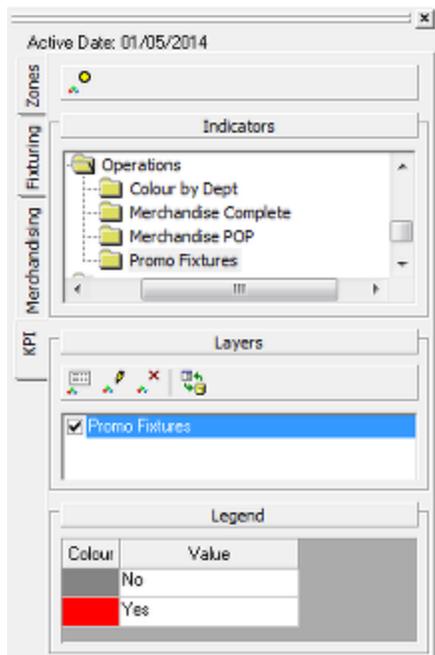

This enables the KPI Name, Data Source, Color Theme and other parameters to be configured.

Test KPI

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

Overview of Running KPI's

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

The upper toolbar give users the option to add a KPI to the currently active floor plan. The lower toolbar allows users to see the data being used for the KPI, edit the KPI parameters, remove the KPI from use in the floor plan and refresh the KPI if the data it references has been updated since the KPI was first run.

Types of KPI

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

- Zones
- Fixtures
- Shelves
- Products

Zones

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

KPIs in the Merchandiser module will display in a semi-transparent form. In the example below, the fixtures have been turned semi-opaque.
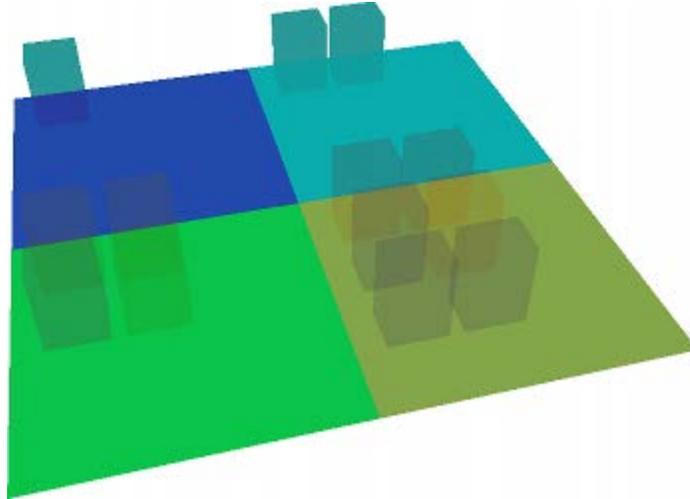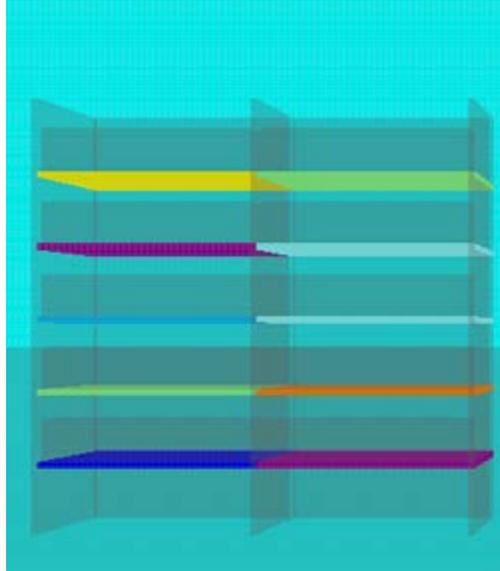
Fixtures

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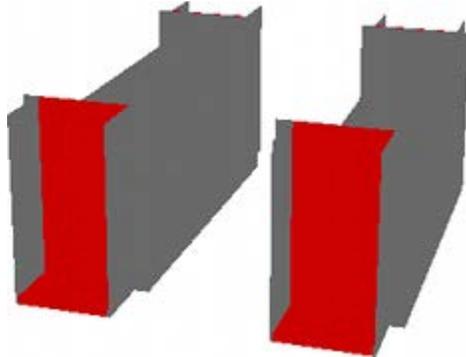

Shelves

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

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

Products

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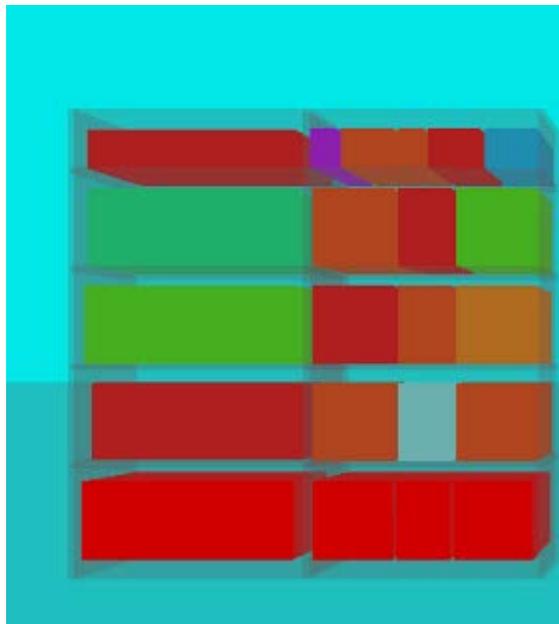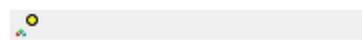
Applying the KPI

This section shows how to run a KPI.

General Information on Using KPIs

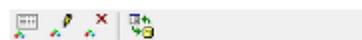KPIs are controlled from the upper and lower Toolbar on the KPI tab of the Object Browser.

Upper Toolbar

Icon	Description
	Add KPI

> **Note:** The Edit Indicator functionality allows the user to specify the data returned for KPIs using SQL statements and stored procedures. The functionality has been disabled by default. Please refer to the Functional Security section in the Administration Module User Guide for information on how to give access to this functionality.

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.

Starting a KPI

To start a KPI, highlight the required KPI in the hierarchy on the Object Browser then click Add KPI on the toolbar. Initiating the KPI will bring up the Key Performance Indicator dialog box. This has three tabs.

> **Note:** For the Planner module, generally only zone and fixture KPIs are appropriate. It is not generally possible to display meaningful KPIs or shelves or products at display style level.

Details Tab

The **Details tab** allows the user to override the default name for the KPI by typing their own variant into the **Name** text box. An additional feature in Merchandiser is the ability to apply the KPI to a specific viewport if multiple viewports are in use.
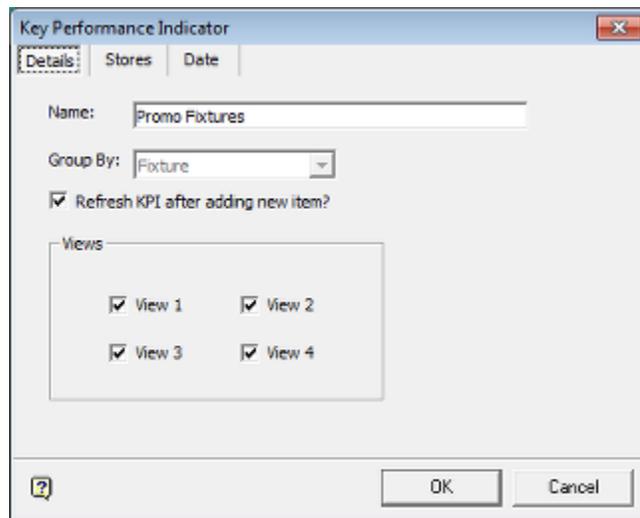
Stores Tab

The **Stores Tab** allows the user to select data from another store and overlay that on the current store. It is activated by deselecting the Current Store check box and highlighting the required store.
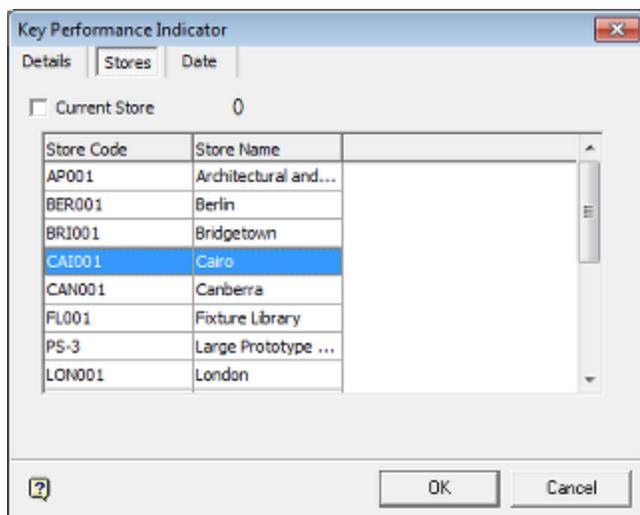
In order to use this functionality, the query that powers the KPI must have been configured accordingly. Typically, data used will be general performance data associated with (for example) planograms. This data can be associated with the planograms physically placed in a new iteration of the floor plan to predict financial performance. This requires the SQL statement or stored procedure associated with the KPI to have been configured to use this planogram performance data. Selecting a store in the Stores tab is therefore only likely to be used for KPIs set up for very specific purposes by individual retail chains.

> **Note**: As an example of the problems associated with suing data from specified stores, KPI's based on Fixture IDs (FIX_ID) will not generally work. This is because fixtures in different drawings will not have comparable fixture IDs. However, planogram performance data can often be used because this can be related to the parent fixtures in the two different floor plans involved.

Date Tab

The **Date Tab** allows the user to select the date range for time sensitive data. The date ranges are linked to those specified in the Calendars option in the Administration module.
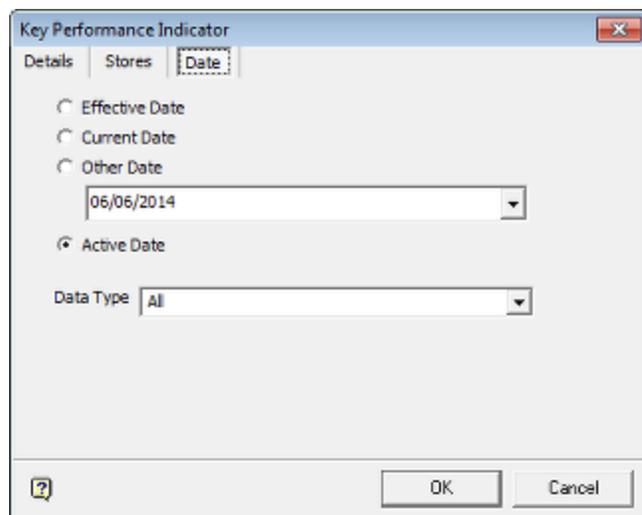
Date Options

- Effective Date sets the date to be used in the query to the Effective Date set for the floor plan (if previously defined). The Effective Date is set in the File Properties dialog box in Store Manager and will be available if the floor plan is at Authorized status or later.
- Current Date sets the date to be used in the query to the date the floor plan was made current. This is applicable if the floor plan is at Current status.
- Other Date enables the user to set a date using the calendar control activated from the drop down list.
- Active Date sets the date to be used in the query to the Active Date set for on the Object Browser (if previously defined).

Data Type

Data type specifies the date range the selected date is applicable to. The options are:

- All dates (no date range specified).
- Year
- Season
- Quarter
- Month
- Week
- Day

Using the Date Options and Data Type

The date options and data type are used in combination to find the data range required or the data. The date is the starting point. This can then be related to a specific calendar period containing that date. If for example, the date type is set to Month and the selected date is 14th March 2014, the query will return a specific Calendar ID (CAL_ID) from the database that can be used to select other data associated with that CAL_ID - for example performance data.

CAL_ID	CAL_PID	CAL_DESC	CAL_START_DATE	CAL_END_DATE	CAT_ID	ICO_ID	CAL_CODE
83	25	2013 Dec	08-DEC-13	05-JAN-14	4	48	2013 Dec
84	26	2014 Jan	12-JAN-14	02-FEB-14	4	48	2014 Jan
85	26	2014 Feb	09-FEB-14	02-MAR-14	4	48	2014 Feb
86	26	2014 Mar	09-MAR-14	30-MAR-14	4	48	2014 Mar

How the date options and data type are used depends on the sophistication of the query used

- Simpler queries (generally SQL statements) can be written for specific time periods - for example months. If the query is given a title such as Financial Performance (Month), the user will know to select Month in the data type drop down list in order for the KPI to work correctly.

- More complex procedures (generally stored procedures) can be written to select the calendar period based on the selection made in the data type drop down list. So (for example) if the user selected Quarter, the query would look for a CAL_ID in the database specifying the Quarter containing the required date. Conversely, if the user selected Month, the query would look for a CAL_ID in the database specifying the required Month

Availability of Date Related Data

KPIs based on dates will only work if the correct data is present in, or has been imported into the database. For example queries on financial performance will only execute correctly if point of sale data aggregated to the correct time periods has first been imported into the appropriate tables referenced by the query.

Starting the KPI

After the appropriate selections have been made in the Key Performance Indicator dialog box, click **OK**. The KPI will start.

Viewing the Data

The Data for the currently active KPI can be viewed by clicking View Data on the lower Object Browser toolbar.

Icon	Description
▦	View Data

This will bring up the **Key Performance Indicator Data** dialog box. This contains the data used to color code the objects in the floor plan.

- The initial column will have an identifier for the object being colored. this will generally be a zone, fixture, shelf or product ID.
- Cost, Price and Movement are not currently enabled.
- Indicator is the value being used to decide the applicable band that a specific object falls into. This may either be a value determined directly from the database or a value calculated from a number of database values.
- Color is the color the object will be color coded relative to the value of the indicator.

Editing, Refreshing and Deleting the KPI

KPIs can be edited, refreshed and deleted.

Editing the KPI

To edit the KPI, click **Edit KPI** on the toolbar of the KPI tab of the Object Browser. This will bring up the **Key Performance Indicator** dialog Box. This enables the user to modify the options selected when the KPI was initiated. (See the section on adding a KPI for more information).

This enables the user to modify the store or date being used to select the data.

Refreshing the KPI

To refresh the values displayed in the KPI, click **Refresh KPI** on the toolbar of the KPI tab of the Object Browser. This will refresh the KPI with the latest values in the database. KPIs would normally be refreshed if dates or other data has been changed when the KPI was edited.

Deleting the KPI

To delete the KPI, click **Delete KPI** on the toolbar of the KPI tab of the Object Browser. The KPI will be removed without further confirmation.
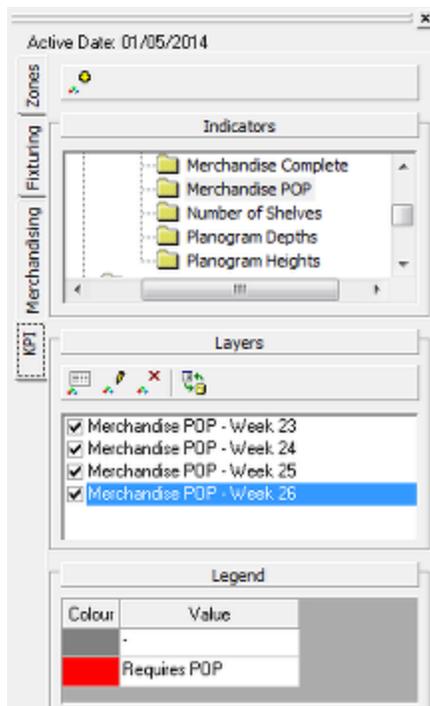
KPI's and using Multiple ViewPorts

It is possible to use ViewPorts to display one or more KPIs simultaneously. This could be a single KPI reporting on data over different date ranges or it could be different KPIs showing different aspects f the performance of the store.

Icon	Description
	Toggle between 1 and 4 ViewPorts
	Synchronize
	Next view

- Either one or four viewports can be in use. Users can Toggle between the two options using the Toggle option in the view toolbar.
- Synchronize results in all four viewports showing the same view in the store. Changing the objects being viewed in one viewport means all viewports will change to show that view.
- Next View makes the next viewport in sequence active.

In the example below, four viewports have been set up. Each shows which Point of Purchase advertising material will change for a specific week.

In the above example the Weekly Sales KPI has been set to show in four different ViewPorts, each showing date for a different week.

Using Multiple Viewports

To use KPIs in multiple viewports:

1. Select the multiple viewport option on the View toolbar.

2. Select the Synchronize option on the View toolbar.

3. Select the active viewport. This will have a red border.

4. Click Add KPI on the Object Browser toolbar.

5. When the Key Performance Indicator dialog box appears, edit the name appropriately. This is because active KPIs must have a unique name.
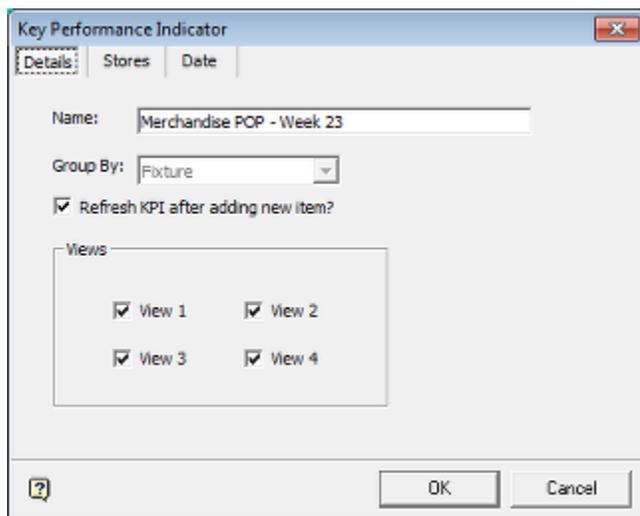
6. Click OK. The KPI will become active.

7. Click in another viewport to make it active.

8. Apply a KPI as above, ensuring the name is unique.

9. Repeat until all required viewports have a KPI assigned.