

**Oracle® Retail Space Management**  
Administration Guide  
Release 5.4.027.1

January 2010

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Are the implementation steps correct and complete?

Did you understand the context of the procedures?

Did you find any errors in the information?

Does the structure of the information help you with your tasks?

Do you need different information or graphics? If so, where, and in what format?

Are the examples correct? Do you need more examples?

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# Preface

This guide enables you to configure the Oracle Retail Macro Space Management, along with the server-side components required for the application.

## Audience

This Configuration Guide is written for the following audiences:

- Database administrators (DBA)
- System analysts and designers
- Integrators and implementation staff

## Related Documents

For more information, see the following documents in the Oracle Retail Macro Space Management Release 5.4.027.1 and In-Store Collaboration Release 5.4.46.1 documentation set:

- Oracle Retail Macro Space Management Configuration Guide*
- Oracle Retail Macro Space Management Release Notes*
- Oracle Retail Macro Space Management User Guide*
- Oracle Retail Macro Space Planning Installation Guide*
- Oracle Retail Macro Space Planning Licensing Information*

For more information on In-Store Space Collaboration see the following documents in the Oracle Retail In-Store Space Collaboration Release 5.4.46.1 documentation set:

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

## Customer Support

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When contacting Customer Support, please provide the following:

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

## Conventions

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

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**Note:** This is a note. It is used to call out information that is important, but not necessarily part of the procedure.

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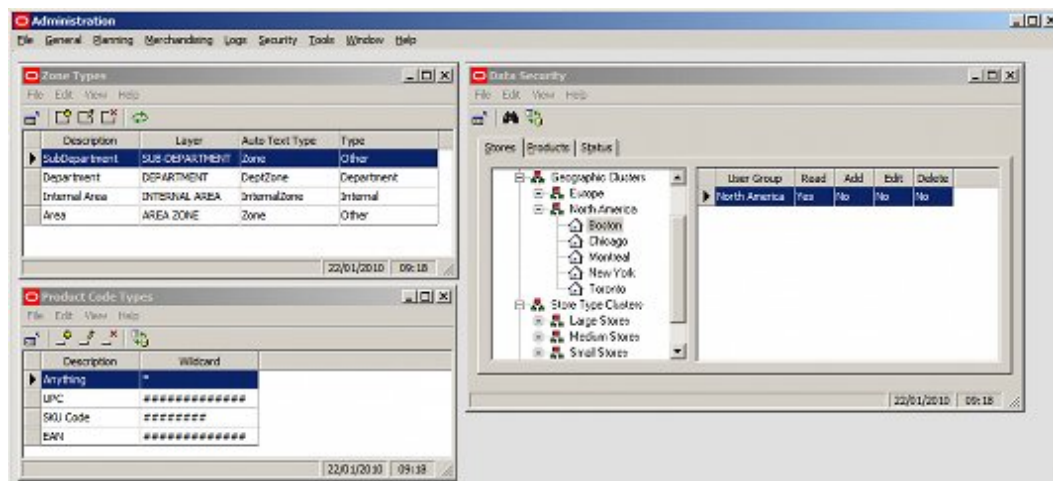
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This is a code sample  
It is used to display examples of code  
A hyperlink appears like this.



# Overview of the Admin Module

The **Administration Module** is used for configuring global settings used with both Macro Space Management and In-Store Space Collaboration.



**Note:** In-Store Space Collaboration is an optional application that can be used in parallel to Macro Space Management. It may not be installed in all implementations of Macro Space Management. All aspects of the Admin Module where settings can be made affecting the operation of In-Store Space Collaboration will be clearly identified.

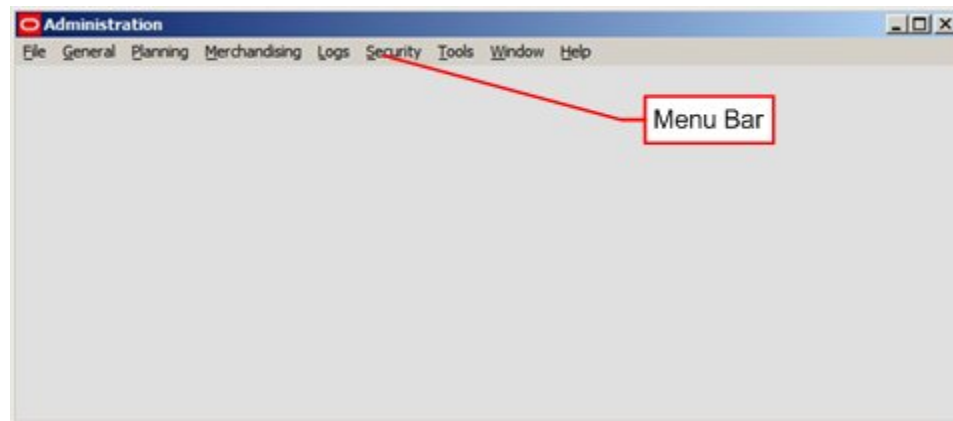
All options in the Administration Module are applicable to Macro Space Management. Options directly applicable to In-Store Space Collaboration are:

1. Data Security
2. Functional Security
3. Statuses
4. System Variables
5. User Defined Attributes

See the individual sections for more information.

## The Admin Module

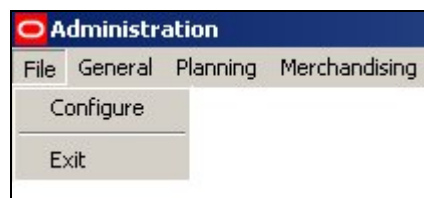
The **Admin Module** contains a menu bar.



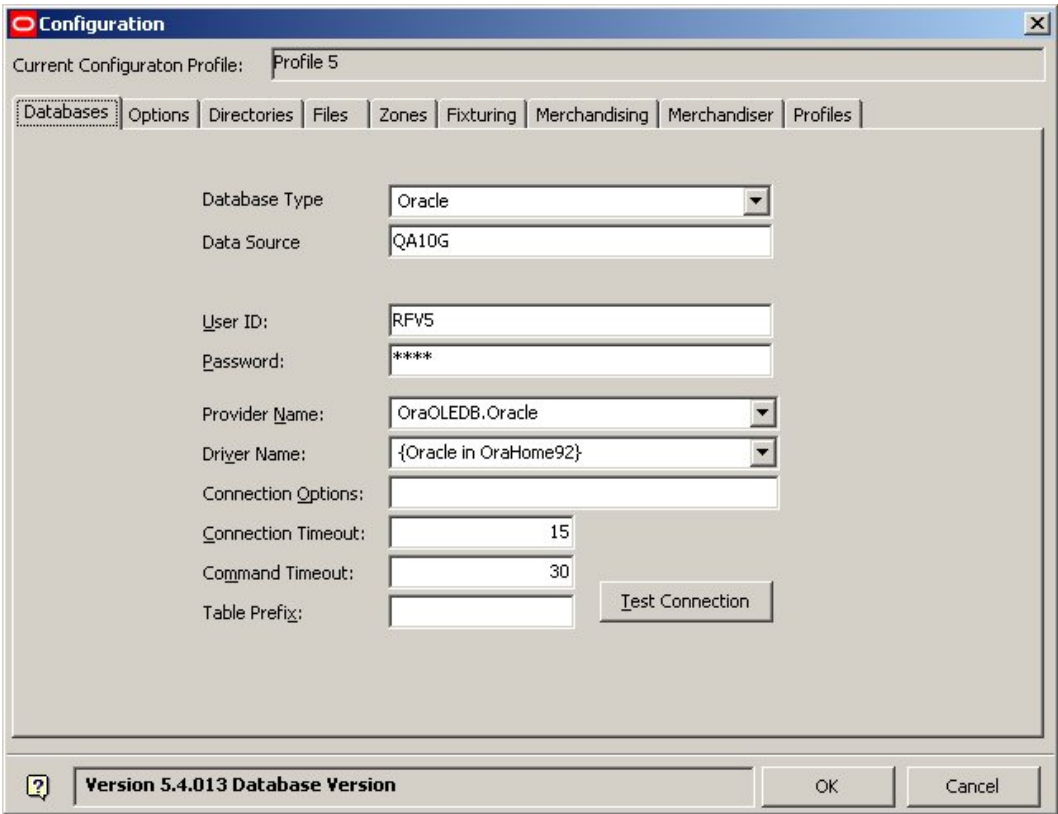
Clicking any of the options discloses a pull down menu giving access to further options.

## The File Pull Down Menu

The **File pull down menu** has two options – configure and exit.



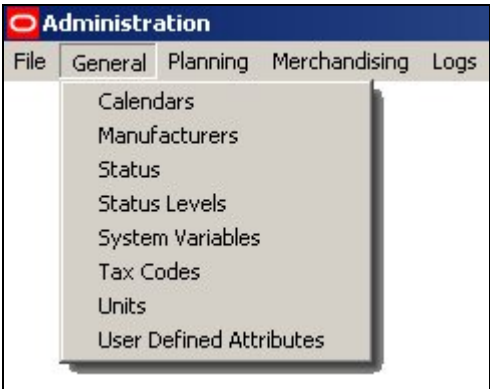
Configure brings up the Configuration Module, where a series of basic settings affecting the operation of Macro Space Management can be changed.



Exit allows the user to close the Admin Module

## The General Pull Down Menu

The **General pull down menu** gives access to options used for overall planning within Macro Space Management.

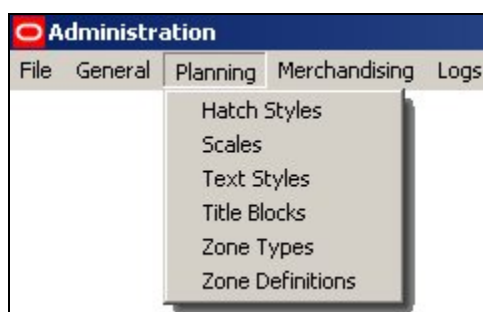


Option	Comment
Calendars	Configure the calendars used for financial planning.
Manufacturers	Configure the list of manufacturers used for fixtures and for merchandise

Option	Comment
Status	Configure the statuses used for Store, Floors, Revisions, Files, Fixtures, Products and Planograms
Status Levels	Configure the sequence statuses will be used in
System Variables	Change the values of the system variables used by Macro Space Management and In-Store Space Collaboration
Tax Codes	Set the values of the tax bands used for merchandise
Units	Set the units used for information
User Defined Attributes	Set the options for information associated with Users, Stores, Files, Fixtures, Products and Planograms.

## The Planning Pull Down Menu

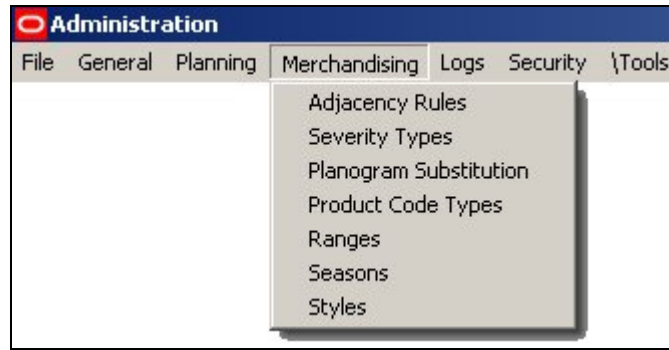
The **Planning pull down menu** gives access to options used for laying out drawings within Macro Space Management.



Option	Comment
Hatch Styles	Hatch styles allow the user to configure the patterns used to color in Zones.
Scales	Scales allows the user to specify the scales used in Paper Space in AutoCAD (Planner Module)
Text Styles	Text Styles are the parameters used for annotation within the drawing
Title Blocks	Title Blocks are used in Paper Space in AutoCAD (Planner Module) to display information about the store plan
Zone Types	Zone Types are the broad classes Zone Definitions fall into
Zone Definitions	Zone Definitions are areas of a store plan used for a specific retailing purpose.

## The Merchandising Pull Down Menu

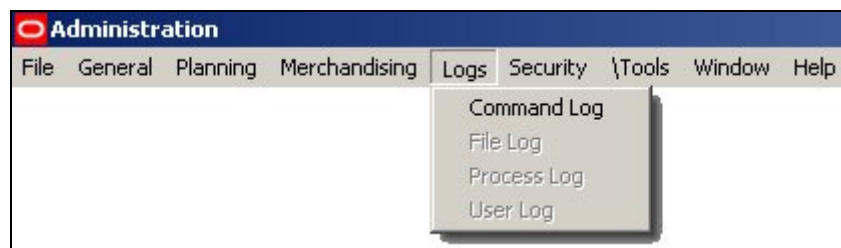
The **Merchandising pull down menu** gives access to options used for Products and Planograms.



Option	Comment
Adjacency Rules	Allows the user to specify rules on which products should or should not be adjacent to each other
Severity Types	Allows the use to specify the comments associated with the adjacency rules
Planogram Substitution	Allows the use to specify which planograms to change in a drawing
Product Code Types	This option allows the user to specify the masks used for Product Codes
Ranges	Specifies temperature or weight options for products
Seasons	Allows the user to specify the seasons specifying whether time sensitive merchandise is valid to place.
Styles	This option allows users to configure Styles and Style Relationships

## The Logs Pull Down menu

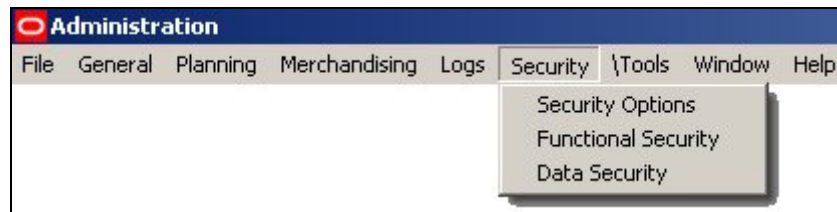
The **Logs pull down menu** gives access the logs used to record user activities.



Options on the Logs pull down menu allow users to call dialogue boxes displaying the varying logs available

## The Security Pull Down Menu

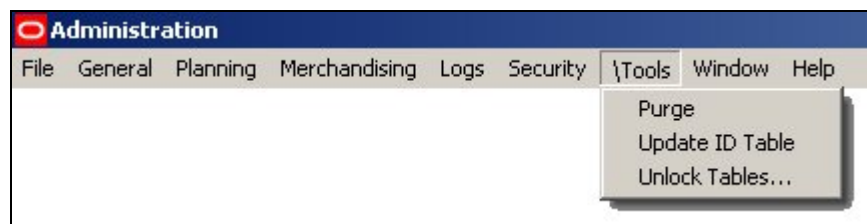
The **Security pull down menu** gives access to options used for assigning access.



Option	Comment
Security Options	Security Options allows the users to specify options about passwords
Functional Security	Functional Security allows Administrators to create users and to define the access allowed to those users
Data Security	Data security allows Administrators to specify access to stores, products and statuses

## The Tools Pull Down Menu

The **Tools pull down menu** gives access to varying administrative options.

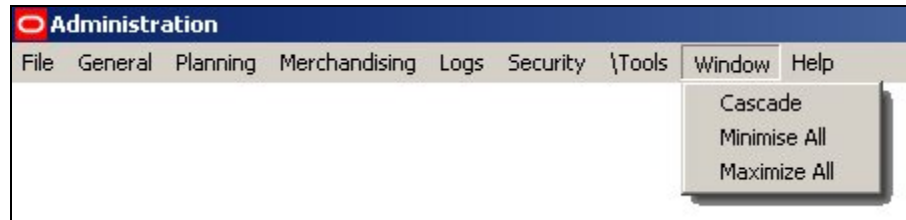


Option	Comment
Purge	Purge allows administrators to permanently delete items marked for deletion
Update ID Table	This option causes the AVTTB_NEXTID table to be manually updated
Unlock Tables	This option allows Administrators to check back in information in tables that might have been checked out for some reason - for example a software failure



## The Window pull down menu

The **Window pull down menu** allows the user to arrange the windows open in the Admin module.



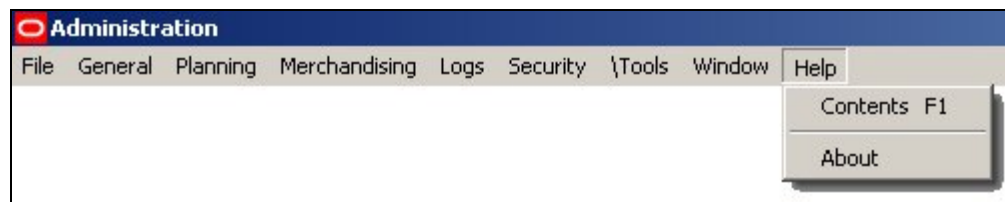
The **Cascade** function arranges open drawing windows so that they overlap.

The **Minimise All** function allows the user to minimise all open dialog interfaces.

The **Maximize All** function allows the user to open for view all minimised dialog interfaces.

## The Help pull down menu

The **Help pull down menu** calls this Help File.

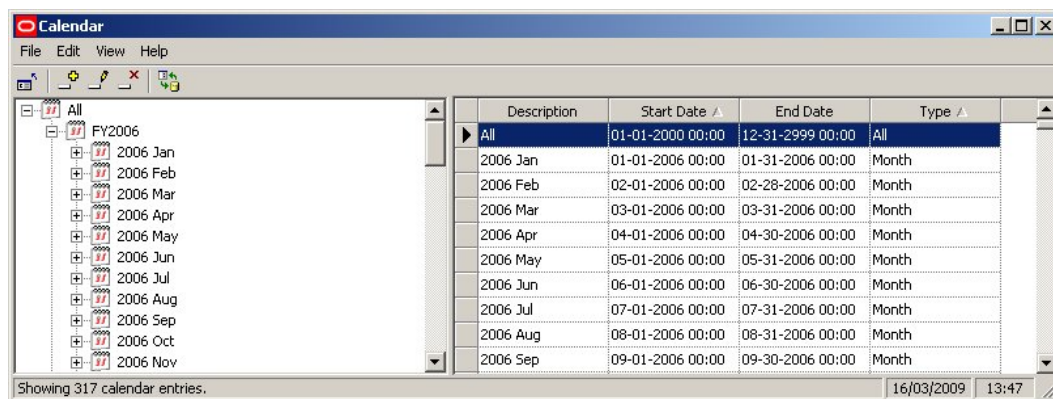


About displays information on the version of Macro Space Management currently in use.

# General Options

## Calendars

The **Calendars Option** allows the user to set up a series of calendars - each Calendar covering a set period of time for retailing activities.



These Calendars can then be used to control information within Macro Space Management including:

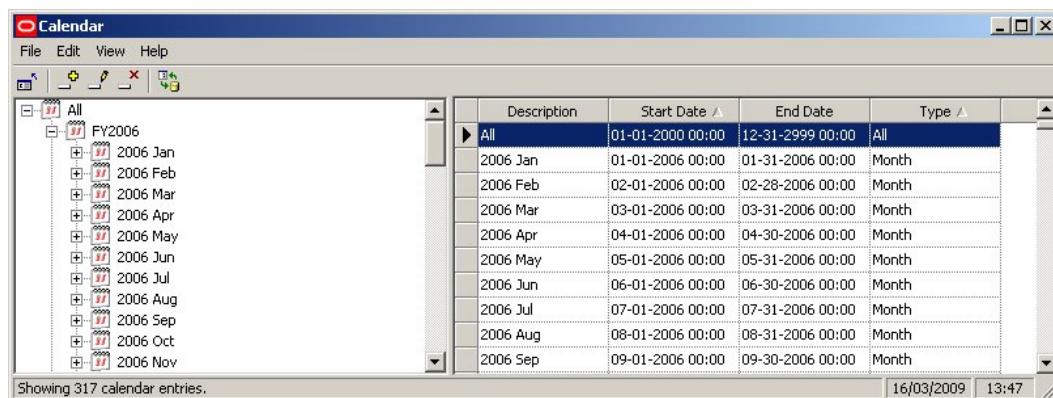
- Financial Reporting
- Importing EPOS data within specific date ranges.
- Displaying KPI's for specific date ranges.
- Roll ups - 4/5 week months

Calendars can be set up within the Admin Module.

It is more usual to import calendars using Data Importer. This means that the time periods used within Macro Space Management will be aligned with the time periods used in other databases - for example those used by accounting software.

## Financial Reporting

**Calendars** are often used for financial reporting.



When data is imported, it is normally associated with one or more Calendar Periods. This allows users to identify the time period that the data is associated with. For example data for a specific SKU might show Purchase Price, Sales Price, Sales Margin and Profit for the past day, week, month, quarter and year.

Associating SKU (PRD\_ID) with a Calendar Period (CAL\_ID) enables KPIs, Reports, etc, to be structured by time intervals.

## Importing EPOS Data Within Specific Date Ranges

EPOS data for a specific product may be associated with many time periods. For example, a product may have data based on:

- Years
- Quarters
- Seasons
- Months
- Weeks
- Days

If there are 50,000 products at SKU level and 'day' data is held for three years, there would be nearly 55 million records in the EPOS table. Accordingly, many customers choose to consolidate data. If an EPOS table was being deleted and re-populated weekly, the data import might bring in:

- Data by years for the last three years
- Data by quarters for the last four quarters
- Data by seasons for the last three seasons
- Data by months for the twelve months
- Data by weeks for the last three months
- Data by days for the last four weeks

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**Note:** EPOS data types are identified by Calendar ID (CAL\_ID).

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This substantially reduces the amount of data held in the EPOS table and increases performance when KPIs, etc, are run.

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**Note:** performance can also be improved by indexing the EPOS table, partitioning the EPOS table, etc.

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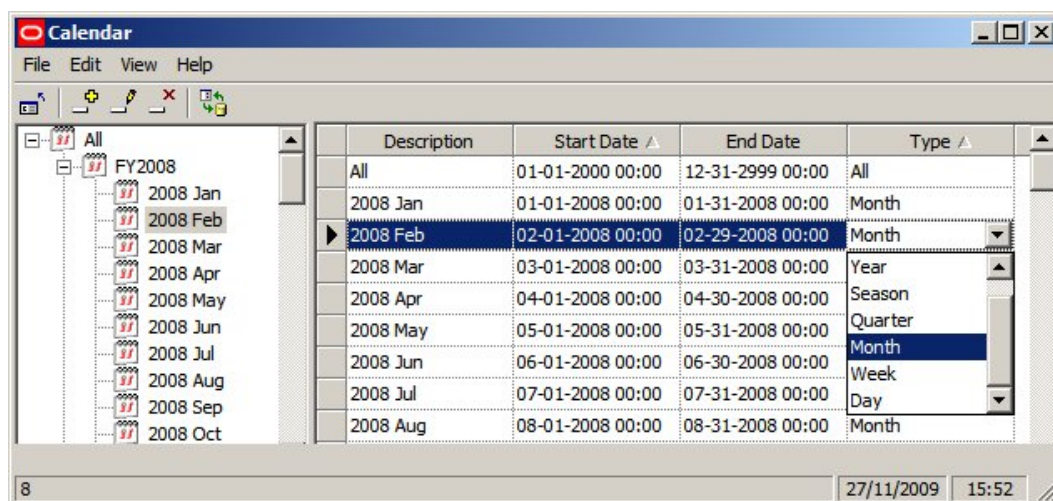
## Using Calendars in KPIs

**Calendars are used in KPIs** to select data by date range. Using calendars is in four stages:

- The calendar is imported or set up
- Data is imported into the table holding EPOS data
- The KPI is configured
- The KPI is selected and used

### Importing or Setting up the Calendar

The calendar is either imported or set up. One option that can be set is the calendar type.



### Data is Imported into the table holding EPOS (Electronic Point Of Sale) Data

The table used to hold the imported EPOS data will differ from implementation to implementation but will require certain mandatory columns.

Column Name	ID	Pk	Null?	Data Type
PRD_ID	1		N	NUMBER (19)
STR_ID	2		N	NUMBER (10)
CAL_ID	3		N	NUMBER (10)
EPS_PRICE	4		Y	NUMBER (8,2)
EPS_COST	5		Y	NUMBER (8,2)
EPS_MOVEMENT	6		Y	FLOAT
EPS_SALES	7		Y	NUMBER (8,2)
EPS_PROFIT	8		Y	NUMBER (8,2)
EPS_MARGIN	9		Y	FLOAT
EPS_FORECAST_SALES	10		Y	NUMBER (8,2)

PRD\_ID (Product ID) identifies the Product

STR\_ID (Store ID) identifies the Store

CAL\_ID (Calendar ID) identifies the time period in the calendar

In addition at least one item of financial data is required.

### The KPI is Configured

The KPI is then configured. It can either be set up as a View or as a Stored Procedure. The KPI will typically take financial information from the EPOS table and combine it with information from other MSM tables. For example the AVTTB\_PRODUCT table contains information on which products are on what fixtures - enabling the KPI to specify financial performance by fixture.

Where it is necessary to filter data by time period, the KPI should also include the CAL\_ID.

### The KPI is Selected and Used

When the KPI is selected for use, the user selects a date and a data type. The options in the data type drop down list match those in the Type drop down list in the Calendar dialog box.

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**Note:** selecting the Data Type is specifying the CAT\_ID in the AVTTB\_CALENDAR table.

---

When a date and the data type has been selected, the software will select data from the AVTTB\_CALENDAR table where the date is within the CAL\_ID or the required Calendar Type (CAT\_ID)

For example, if a customer selects a date of 5/6/09 and a data type of 'Month', the software will identify the calendar period (CAL\_ID) of calendar type (CAT\_ID) = 4 containing the date 5/6/09. The calendar period (CAL\_ID) is then used as a filter to select data.

## Roll-ups

Sometimes, for accounting purposes, it is necessary to know exactly how a calendar period is sub-divided, or how many weeks are in each month (some may contain 4 weeks and some may contain 5). After Calendar Information has been imported, it is possible to use the AVTTB\_CALENDAR table to concatenate information for reporting purposes.

	CAL_ID	CAL_PID	CAL_DESC	CAL_START_DATE	CAL_END_DATE	CAT_ID
	1		All	01/01/2000	31/12/2999	0
	2	1	FY2008	01/01/2008	31/12/2008	1
	3	1	FY2009	01/01/2009	31/12/2009	1
	4	1	FY2010	01/01/2010	31/12/2010	1
	5	1	FY2011	01/01/2011	31/12/2011	1
	6	1	FY2012	01/01/2012	31/12/2012	1
	7	2	2008 Jan	01/01/2008	31/01/2008	4
	8	2	2008 Feb	01/02/2008	29/02/2008	4
	9	2	2008 Mar	01/03/2008	31/03/2008	4

All calendar periods (with the exception of the root) have a Calendar ID (CAL\_ID) and a Calendar Parent ID, (CAL\_PID).

The type of calendar period can be identified from the Calendar Type ID (CAT\_ID). This is a foreign key to the AVTTB\_CALENDAR\_TYPE table. The CAT\_ID's are as follows:

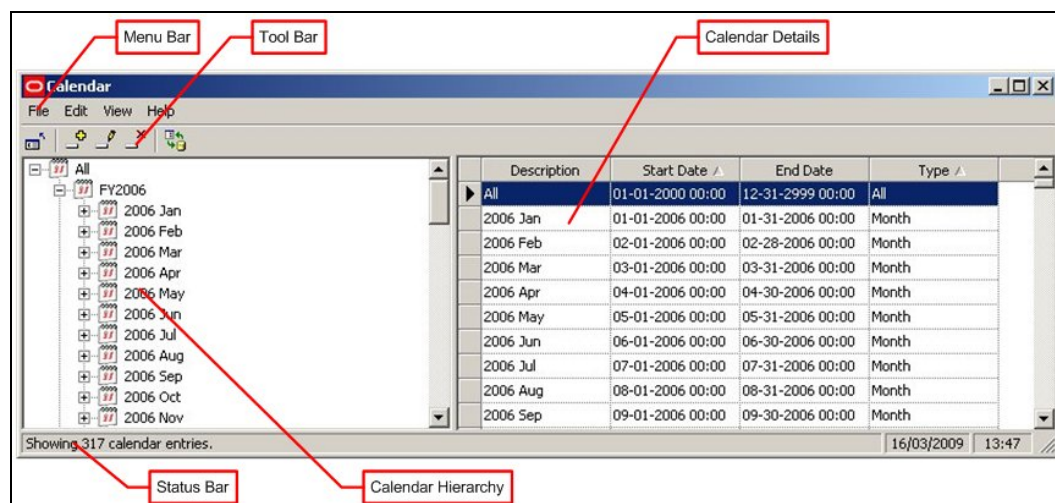
CAT_ID	Description
0	All
1	Year
2	Season
3	Quarter
4	Month
5	Week
6	Day

It is then possible to use SQL to produce very specific reports. For example, all weeks have a CAT\_ID of 5. By looking at the Parent ID's of each week, (CAL\_PID), it is possible to assign each weeks to a specific month, thus allowing Administrators to identify 4 and 5 week months within a report.

## The Calendars Dialogue Box

The **Calendars Dialogue Box** has a number of parts.





The **Menu Bar** gives access to a series of options.

The **Toolbar** also gives access to most of those options.

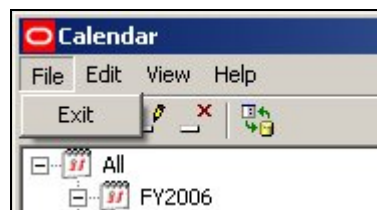
The **Calendar Hierarchy** allows users to see the available calendars.

The **Calendar Details** section gives more information on the selected calendars.

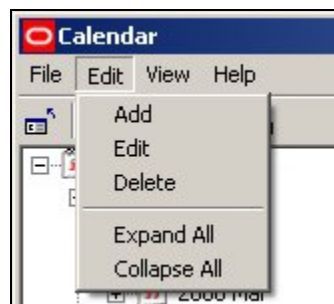
The **Status Bar** gives information on the number of calendars in the selected section.

## Calendars Menu Bar and Toolbar

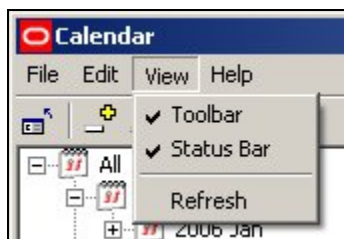
The **File pull down** menu allows users to exit the application.



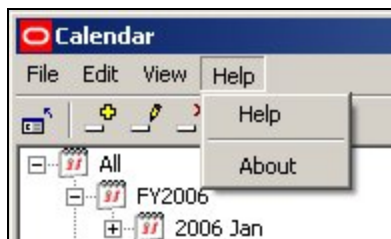
The **Edit pull down** menu allows users to add, edit and delete calendars. It also allows users to expand or collapse sections of the calendar hierarchy.



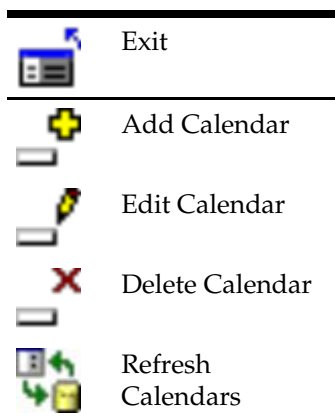
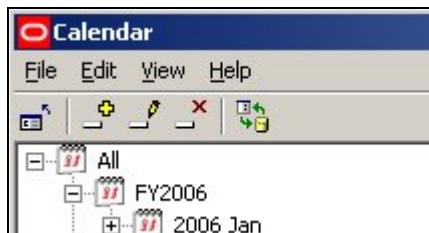
The **View pull down menu** allows users to turn the Toolbar and status bar display on or off. It also enables users to refresh the hierarchy with any changes made by other users.



The **Help pull down menu** allows users to call help and to get information on the version of the software.



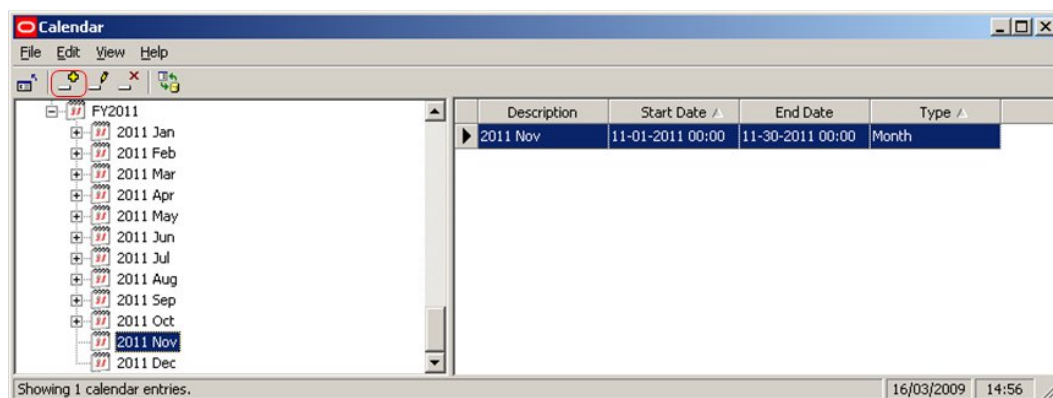
### Toolbar



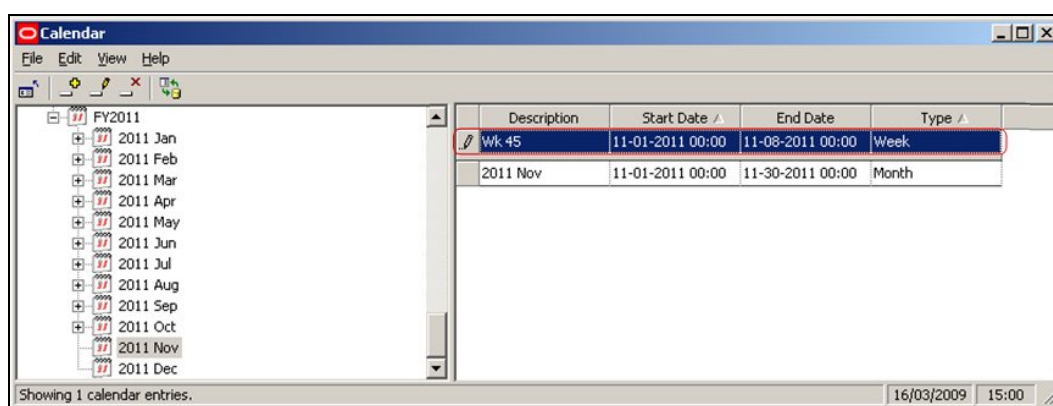
### Adding a Calendar

To **Add a Calendar**, pick the point in the hierarchy to add a calendar and then click on the Add Calendar icon.



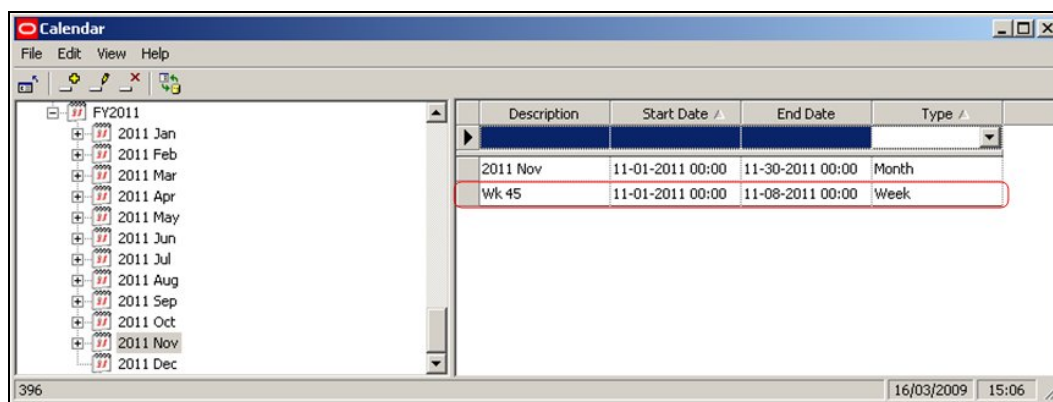


This will open a new line in the Calendar Details section.

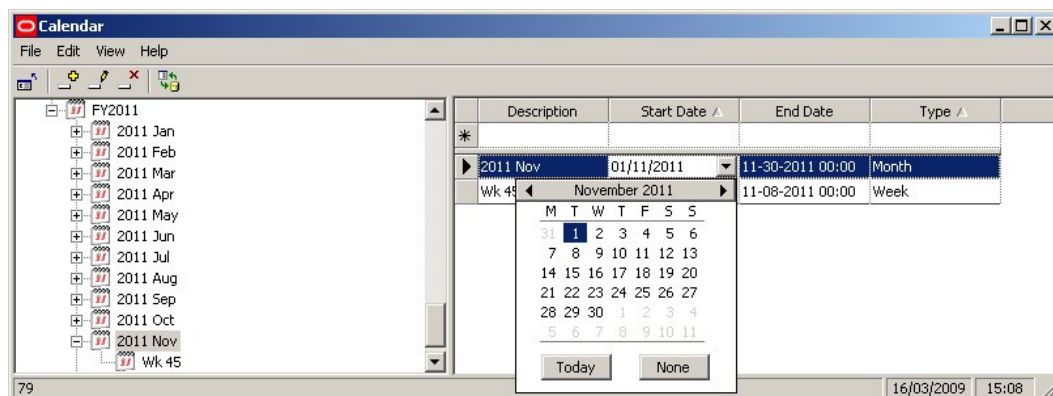


Type in the details and press <Return>. The calendar will be added to the list.

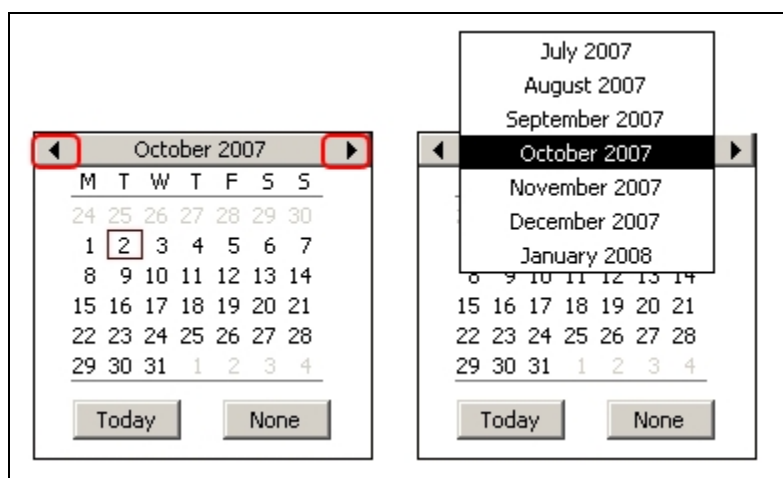
**Note:** If <Return> is not pressed, the data will not be saved to the database.



Calendars are set by means of a drop down calendar option.



There are two ways of selecting the month.



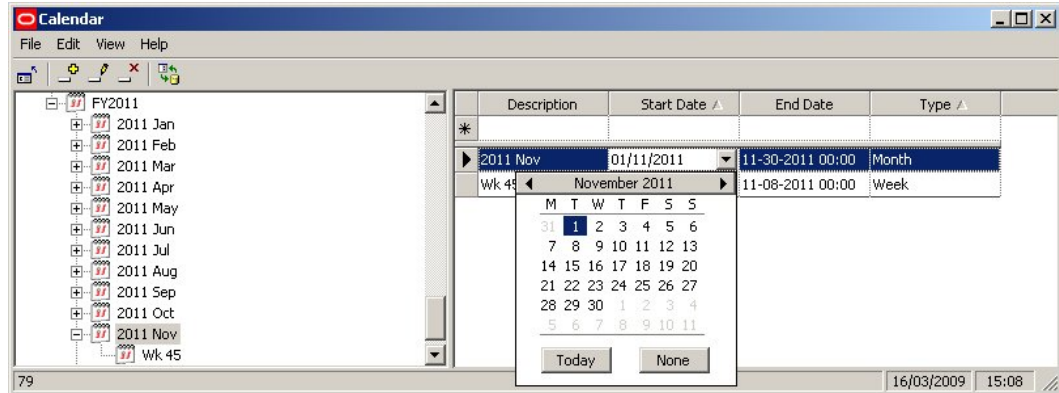
Users can use the left or right arrows (left hand image) to move between months.

Alternatively, position the mouse pointer over the month bar and hold down the left mouse key. This will bring up a scrollable menu of months.

Hold the mouse pointer just above or below it to move through it.

## Editing and Deleting Calendars

**Editing a Calendar** is done by selecting the appropriate entry and changing the selected values.



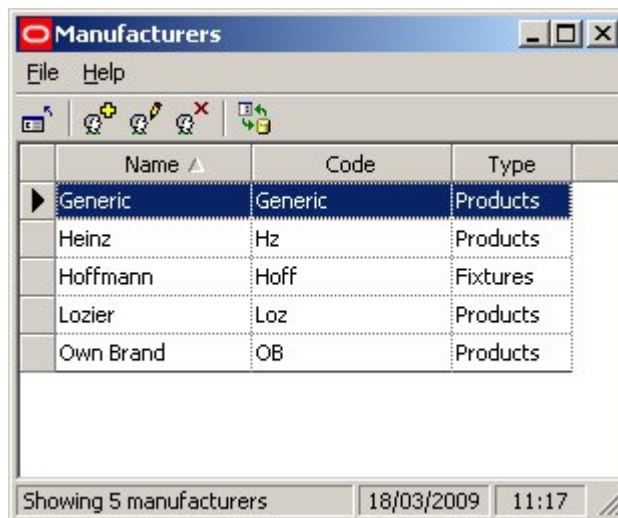
**Note:** Caution should be used in editing calendars in case Import Routines and KPI's reference the calendar.

To **Delete a Calendar** highlight the required calendar and click on the delete icon  
The calendar will be deleted without further warning if not in use. If in use, a delete conformation will be requested.

## Manufacturers

### Overview

The **Manufacturers Option** is used to create a list of manufacturers for use within the Macro Space Management software.



The list of manufacturers is used in two places in the software:

1. It allows Manufacturers to be assigned to Fixtures in Fixture Studio.

**Block Details: Backpanel-600-1400**

Description: Backpanel-600-1400

Category | Insertion | Size | Connections | Parts | Fixture | UDAs | Styles/Ranges | Merchandisable areas | Shelf

**General**

Retail Type: Fixture

Directory: Fixtures - Racking

Manufacturer: Lozier

Material: Generic

Status: Hoffmann

Units: mm

Corner Block: ☐

Icon: Fixture

Code:

**Type**

☒ Fixed Size

☐ Symbol

☐ Scaled Size

☐ Drawn 1:1

**Graphics**

☐ No Graphics

☐ 3D

☒ 2D

Rectangular >>>

**Reporting Options**

☐ Exclude from Reports

☐ Exclude Instances in DB

☐ Exclude Attributes

**Area Calc Directions**

N

W ☒ E ☒

S ☒

**Working/Stacking Axes**

Working ☒ X ☐ Y ☐ Z

Stacking ☐ X ☒ Y ☒ Z

OK Cancel

1. It allows Manufacturers and Suppliers to be assigned to Products at the SKU level in Product Studio.

The screenshot shows a 'Product SKU - Clothing' window with the following fields and values:

Field	Value
Name	Clothing
Description	Clothing Shirts
UPC Type	Anything
Code	999999
UPC	999999
Manufacturer	Generic
Supplier	Example
Status	Heinz
Icon	Product SKU
Brand	
Client Code	
Client Barcode	

The 'Manufacturer' dropdown menu is open, showing a list of manufacturers: Example, Generic, Heinz, Lozier, and Own Brand. The 'Example' option is currently selected.

---

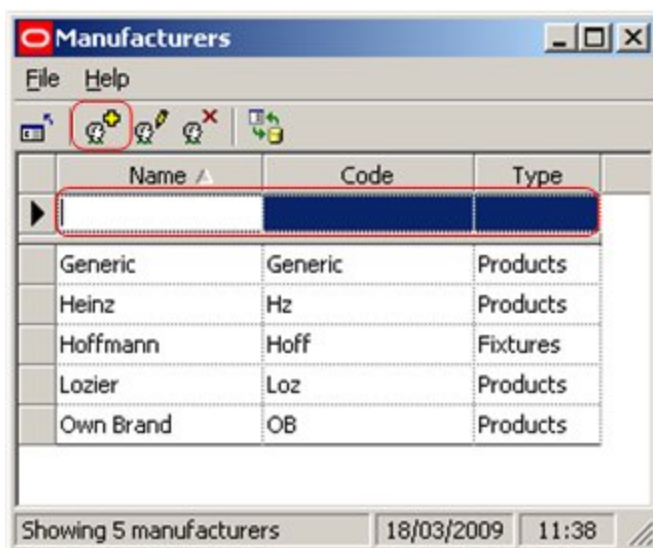
**Note:** A Manufacturer would typically be the company that produces the product, a Supplier the wholesaler that supplies it.

---

The list of manufacturers can either be entered manually in the Admin Module, or imported from a third party database using Macro Space Management's Data Import module. The Manufacturers option in the Admin Module allows this list of manufacturers to be reviewed, then edited.

## Adding A Manufacturer

To Add a Manufacturer click on the Add Manufacturer icon.



(Alternatively, click in the name box if a manufacturer has already been added).

Type in the Manufacturers Name and Code into the pertinent boxes.

Select the Manufacturer's Type from the drop down list.



Manufacturers classed in the Fixtures Category will become available in the Fixture Studio Module. Similarly, manufacturers classed in the Products Category will become available in the Product Studio Module.

Finally, press <Return>. This will store the Manufacturer in the central Macro Space Management database.

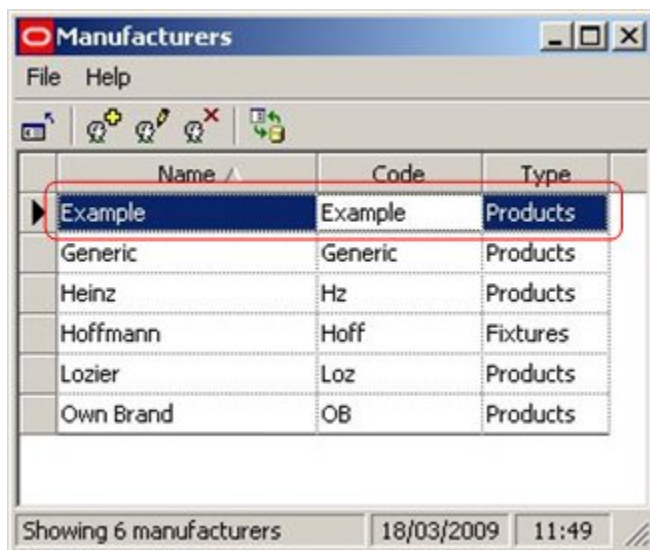
---

**Note:** Ensure <Return> is pressed for every entry. If not, the information will not be stored in the central Macro Space Management database.

---

## Editing a Manufacturer

To **Edit a Manufacturer** click on the entry in the table of manufacturers..



Edit the entries as required.

Finally, press <Return>. This will store the changes to that Manufacturer in the central Macro Space Management database.

---

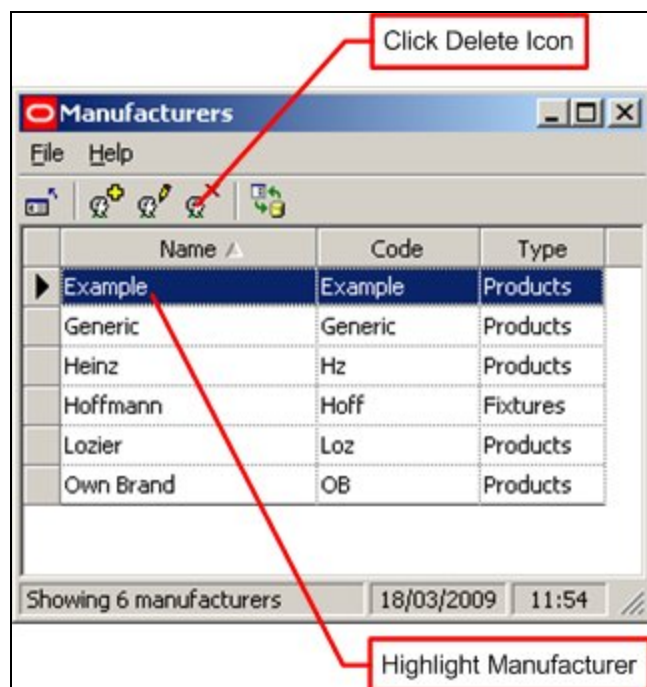
**Note:** Ensure <Return> is pressed for every entry. If not, the information will not be stored in the central Macro Space Management database.

---

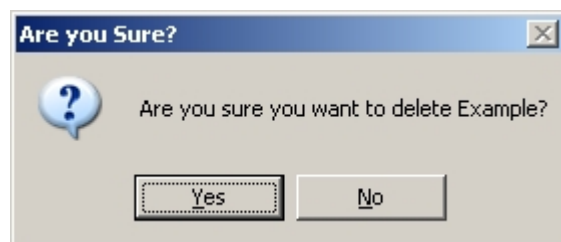
## Deleting a Manufacturer

Deleting a manufacturer is a three stage operation.





First, the required manufacturer is highlighted in the list then the Delete icon is clicked. A confirmatory dialogue will appear.



Clicking on Yes will delete the selected entry.

---

**Note:** at present the software does not validate if the Manufacturer is referenced elsewhere in the software - for example by Fixtures or Products. Before manually deleting a Manufacturer, it is suggested that it is verified that the Manufacturer is not in use. This may require a query in the database.

---

## Refreshing and Exiting

**Refreshing** is of use when multiple people are using the same option in Admin.





Clicking on the Refresh Icon will cause the list of manufacturers to be updated based on current information from the central Macro Space Management database.

This allows users to see changes being made by other users.

Users can exit the Manufacturers dialogue box by clicking on the exit icon.



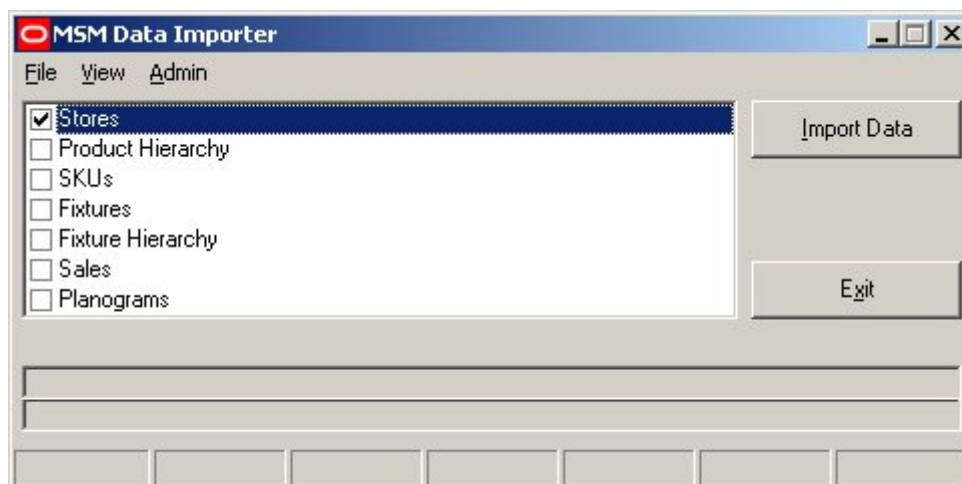

---

**Note:** Ensure <Return> is pressed for the entry before exiting. If not, the information will not be stored in the central Macro Space Management database.

---

## Using Manufacturers in Data Import

Macro Space Management has a **Data Import module**. This can be used to import data from third party software.



Information on Manufacturers is held in the AVTTB\_MANUFACTURER table.

MAN_ID	MAN_NAME	MAN_CODE	MAN_TYPE
0	Generic Product	Gen - Prod	0
1	Heinz	Heinz	0
2	Hoffman	Hoff	1
3	Generic	Gen - Fix	1
4	Lozier	Loz	1

#### Using Manufacturer Information for Products

Data from this table can then be used for Products (MAN\_TYPE = 0) in the AVTTB\_PRODUCT\_DEF Table. The AVTTB\_PRODUCT\_DEF table holds two fields that are foreign keys for the AVTTB\_MANUFACTURER table;

PRD_NAME	MAN_ID	MAN_ID_SUPPLIER
Basic Boys Shirt/S-White	0	0
Basic Boys Shirt/M-White	0	0
Basic Boys Shirt/L-White	0	1

MAN\_ID holds the name of the manufacturer that appears in the Manufacturers Drop down list on the SKU dialog box in Product Studio

MAN\_ID\_SUPPLIER holds the name of the Supplier that appears in the Suppliers Drop down list on the SKU dialog box in Product Studio

#### Using Manufacturer Information for Fixtures

Data from this table can also be used for Fixtures (MAN\_TYPE = 1) in the AVTTB\_BLOCK\_DEFINITION Table. This table holds the MAN\_ID field that acts as a foreign key for the AVTTB\_MANUFACTURER table.

---

**Note:** Before manufacturer related data can be added to Fixtures or Products during imports via the Data Importer module, it is first necessary to make sure that the list of Manufacturers in the database contains all the manufacturers referenced in the data to be imported.

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## Status & Status Levels

### Overview

#### Overview of Statuses

**Statuses** are used within Macro Space Management to indicate where an object is within a business life cycle. They also influence the behavior of In-Store Space Collaboration. Statuses are maintained using the Status dialogue box accessed from the General menu.

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**Note:** Customizing Macro Space Management may be done to customer specific requirements. Because of that customization, there may be small differences between the generic examples in this Help file and a specific implementation of Macro Space Management. For advice on any aspect of customization or terminology, please contact Oracle's Technical Support Team.

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For example a store could have Proposed status, Open status or Closed status depending on whether it was at the planning stage, was in operation, or had been closed for refurbishment. Similarly, a planogram could be at the planning stage (Proposed status), in use (Current status), or superseded by a newer version (Historical status).

---

---

**Note:** Once a status flow has been set up and is in use, it is generally difficult to change it because the software will not allow you to significantly edit or delete statuses that are in use. Accordingly, status flow should be carefully planned during the implementation of the software so that subsequent changes are not required.

---

---

Statuses can be given to:

Object	Comment
Blocks	Blocks are typically fixtures and other AutoCAD objects used in the Planner environment
Files	Files are store plans associated with a floor of a store
Floors	A floor is the layout for a specific level within a store
Planograms	Planograms are arrangements of products designed to go onto specific fixtures
Products	Products can be given statuses at all levels in the hierarchy
Reports	Statuses can be given to Planogram Report Layouts (not to the report themselves).
Revisions	Revisions are folders containing a specific implementation of a store plan
Stores	A store is a specific retail outlet.

Some objects have independent status: for example Stores and Floors can have their status changed without affecting the status of any objects below them in the hierarchical tree.

Other objects have their behavior determined by their status. For example, it is not possible to place a product of Historical status in a drawing.

Some status changes are reversible. For example a file may generally be swapped between Proposed and Authorised status. Other changes are irreversible. For example, once a file's status has been changed from Current to Historical it cannot normally be changed back.

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

### Status Levels

Each status must be assigned to a unique status level. The Status Level determines the sequence the Status is used in. Status Levels are maintained using the Status Level dialogue box accessed from the General menu.

### Factors Affecting Statuses

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**Note:** these system variables only affect the behavior of statuses in Macro Space Management. They have no influence on In-Store Space Collaboration.

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### System Variables

Some System Variables have an influence on Statuses.

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**Note:** System Variables can be changed using the System Variable option on the General Menu.

---

### ENABLE\_FILE\_TRIGGER\_DATES

ENABLE\_FILE\_TRIGGER\_DATES can be set to one of three values:

Value	Result	Other Actions
0 or 1	UpdateStatus.exe is disabled and has no effect on File or Revision statuses. Publish and Effective dates are disabled and cannot be set.	Publish and Current statuses need to be selectable so that files can manually be taken through the software cycle.
2	Effective date is enabled. UpdateStatus.exe will change file status if the Effective date is exceeded.	Publish needs to be manually selectable.
3	Publish and Effective dates are enabled.	Publish and Current status should not be selectable by the user so that update status is the required method to change them.

---

**Note:** If ENABLE\_FILE\_TRIGGER\_DATES is set to 0, running UpdateStatus.exe will still change the status of a store from Proposed to Open or from Open to Closed if the Birth or Death dates are exceeded.

---

---

**Note:** this system variable should not be changed with the Planner or Merchandiser modules open or unpredictable results may occur.

---

**MERCH\_TREE\_EFFECTIVE\_DATE**

This system variable can be set to On (1) or Off (0). If set to On, it affects whether fixtures, products and planograms can be selected from the hierarchy in the object browser.

**Effective Date Set**

If an Effective date has been set for the drawing, fixtures, products and planograms cannot be placed if:

1. Their Effective date is after the Effective date of the drawing
2. Their Expiry date is before the Effective date of the drawing

If an Active date has been set for the drawing, this overrides the Effective date for the drawing. then, fixtures, products and planograms cannot be placed if:

1. Their Effective date is after the Active date of the drawing
2. Their Expiry date is before the Active date of the drawing

---

**Note:** MERCH\_TREE\_EFFECTIVE\_DATE does not affect the Object Grid

---

**Custom SQL**

Custom SQL can be used in conjunction with statuses to control what displays in the hierarchies in the object grid. With the right custom SQL it is possible to:

1. Restrict the display of fixtures to those of Current status
2. Restrict the display of products to those of Current status
3. Restrict the display of planograms to those of Current status

At present the default is to display fixtures, products and planograms of all statuses. Modifying the SQL to restrict the display of objects in the Object Browser can only be done by administrators with access to the database.

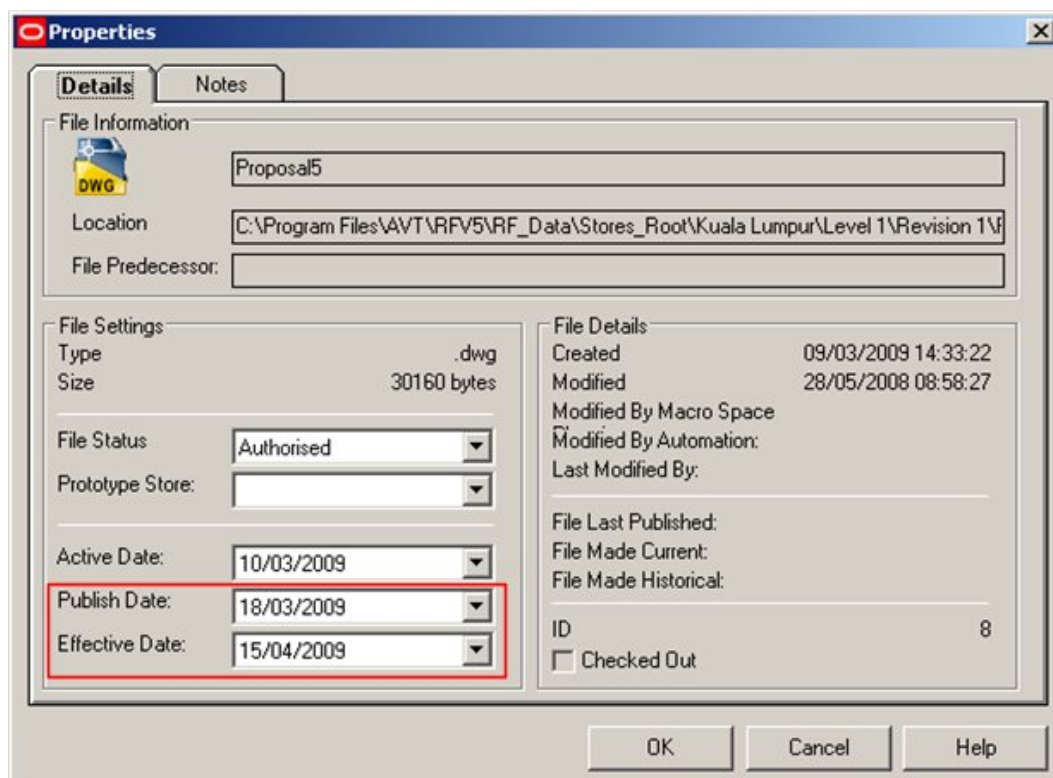
**Data Importer**

If data is imported using Data Importer, it is possible to set the status for imported objects to some default value - for example 'Proposal'.

**Statuses and UpdateStatus.exe**

**UpdateStatus.exe** is found in the C:\Program Files\Oracle Retail\MSM\APPS. When run, it will:

1. Change the status of a file from Authorised to Published if the Publish Date has been exceeded
2. Change the status of a file from Published to Current if the Effective Date has been exceeded
3. Change the status of a file from Current to Historical if another file in that floor has had its status changed to Current



**Note:** If Files (Store Plans) at Authorised, Published or Current have been set to be visible in In-Store Space Collaboration (Data Security) then running UpdateStatus.exe might change them to a status they are not visible at.

4. Change the status of a Store from Proposed to Open if the Opened Date has been exceeded
5. Change the status of a store from Open to Closed if the Closed date has been exceeded

**Edit Store**

General Units Address Attributes

Store ID: 6

Store Code: P3

Store Name: Large Prototype

Directory Name: Large Prototype\

Latitude: 0

Longitude: 0

Status: Open

Opened Date: 09/03/2009

Closed Date: 31/12/2999

Store Prototype:

Set as Prototype: ☒

OK Cancel Help

For UpdateStatus.exe to work correctly, the generic statuses associated with ID's in the Status Levels dialogue box in the Administration module should not be changed. For example, when UpdateStatus.exe changes statuses from Authorised to Current, it changes the ID in the database from 4 to 2.

**Status Levels**

File Edit View

ID ▲	Description
1	Proposed
2	Current
3	Historic
4	Authorised
5	Published

Making (for example) Current Status anything other than ID 2 will cause problems with UpdateStatus.exe (and other Macro Space Management functionality).

### Where Statuses are Set in Macro Space Management

Statuses can be manually set in the software.

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**Note:** Customizing Macro Space Management may be done to customer specific requirements. Because of that customization, there may be small differences between the generic examples in this Help file and a specific implementation of Macro Space Management. For advice on any aspect of customization or terminology, please contact Oracle's Technical Support Team.

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### Clusters

Clusters (and sub clusters) do not have statuses.

### Stores

Store status is set in the Store Manager Module from the Add or Edit Store dialogue boxes.

The screenshot shows the 'Edit Store' dialog box with the 'General' tab active. The fields are as follows:

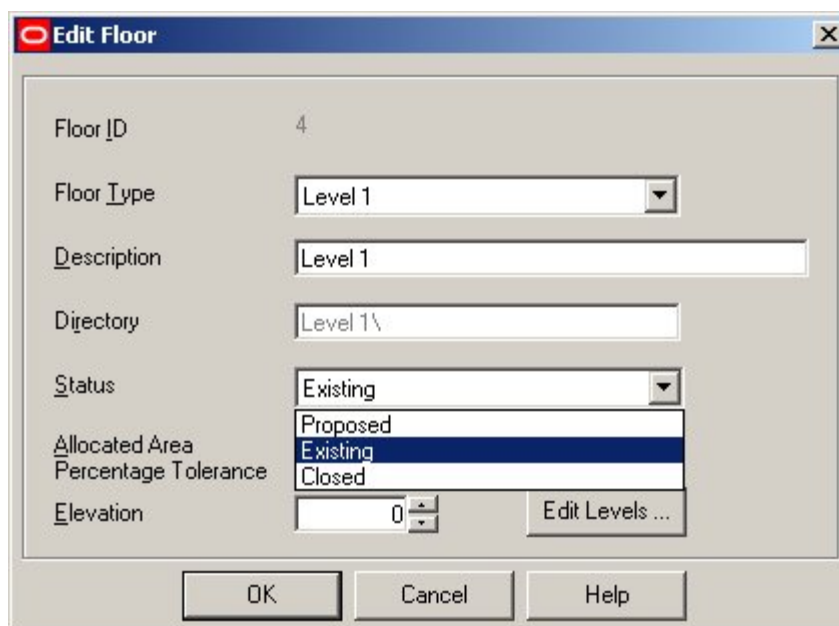
Field	Value
Store ID	6
Store Code	P3
Store Name	Large Prototype
Directory Name	Large Prototype\
Latitude	0
Longitude	0
Status	Open
Opened Date	Proposed
Closed Date	31/12/2000
Store Prototype	
Set as Prototype	<input checked="" type="checkbox"/>

Buttons: OK, Cancel, Help

### Floors

Floor status is set in the Store Manager Module from the Add or Edit Floor dialogue boxes.



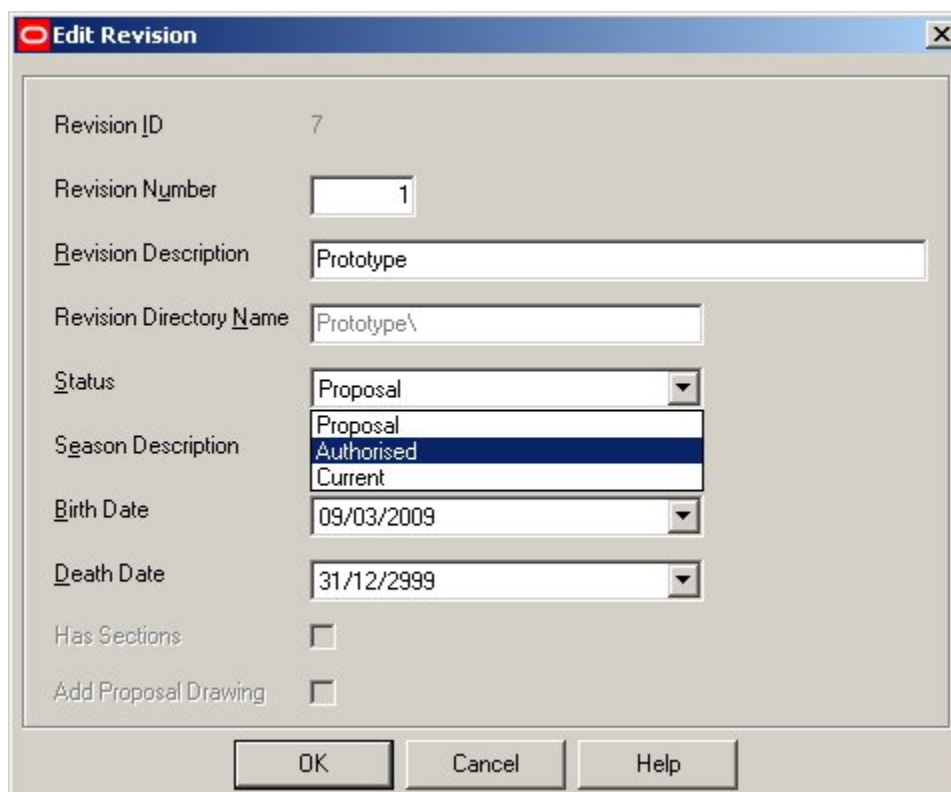


The **Edit Floor** dialog box contains the following fields and controls:

- Floor ID:** 4
- Floor Type:** Level 1 (dropdown menu)
- Description:** Level 1 (text field)
- Directory:** Level 1\ (text field)
- Status:** Existing (dropdown menu with options: Existing, Proposed, Existing, Closed)
- Allocated Area:** (text field)
- Percentage Tolerance:** (text field)
- Elevation:** 0 (spin box)
- Edit Levels ...** (button)
- OK**, **Cancel**, and **Help** buttons at the bottom.

### Revisions

Revision status is set in the Store Manager Module from the Add or Edit Revision dialogue boxes.

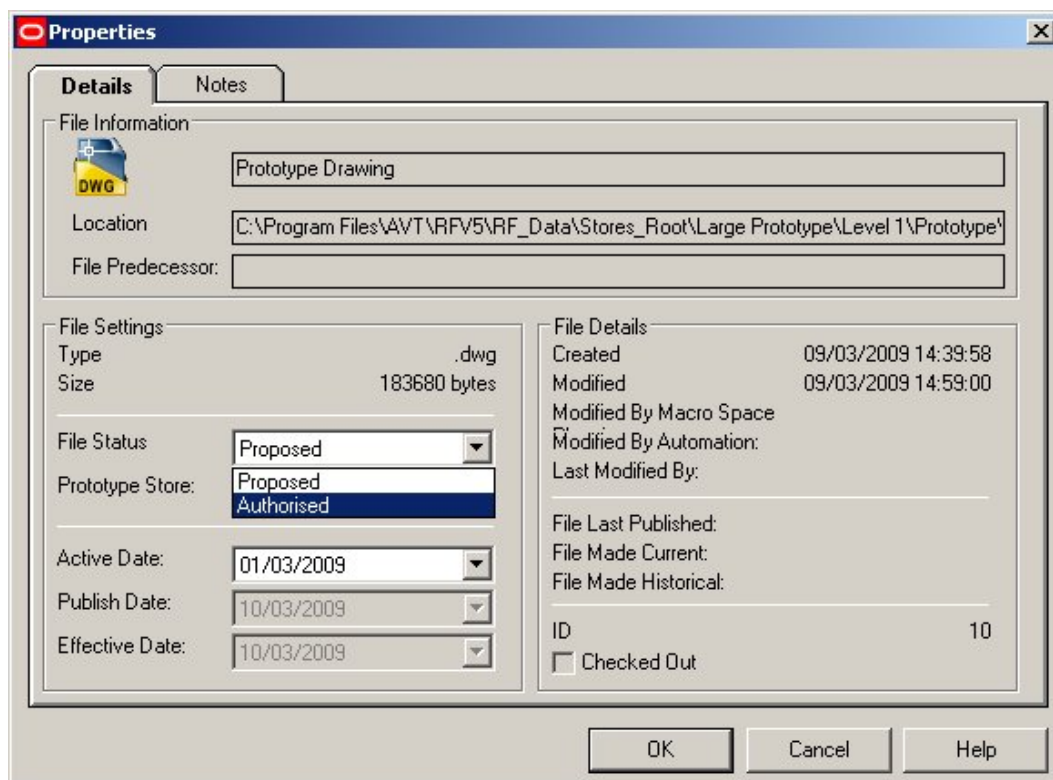


The **Edit Revision** dialog box contains the following fields and controls:

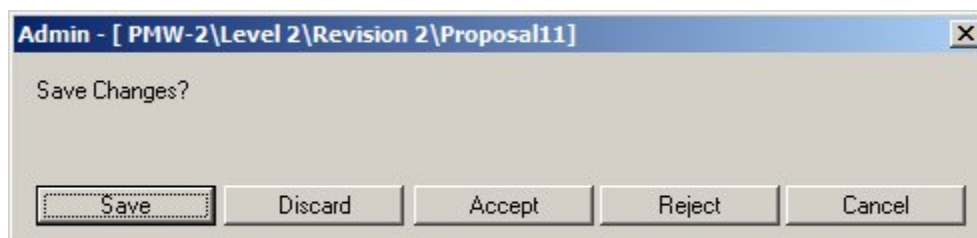
- Revision ID:** 7
- Revision Number:** 1 (text field)
- Revision Description:** Prototype (text field)
- Revision Directory Name:** Prototype\ (text field)
- Status:** Proposal (dropdown menu with options: Proposal, Authorised, Current)
- Season Description:** (text field)
- Birth Date:** 09/03/2009 (date field)
- Death Date:** 31/12/2999 (date field)
- Has Sections:** ☐
- Add Proposal Drawing:** ☐
- OK**, **Cancel**, and **Help** buttons at the bottom.

### Files (Store Plans)

File status is set in the Store Manager Module from the Properties dialogue box.



The status of a file can also be changed by clicking the Accept or Reject buttons on exiting a changed store plan in In-Store Space Collaboration.



### Blocks (Fixtures)

Block (fixture) status is set in the Fixture Studio Module from the Block Details dialogue box.

**Block Details: Slatwall\_24x98**

Description: 3D

Category | Insertion | Size | Connections | Parts | Fixture | UDAs | Styles/Ranges | Merchandisable areas | Shelf | Preview

**Equipment Type**

Retail Type:

Can Populate with Display Style ☐

Can Populate with Placeholder ☐

Attaches to Primary Equipment ☒

Attaches to Secondary Equipment ☒

Accepts Secondary Equipment ☒

Corner Block: ☐

**Type**

☒ Fixed Size

☐ Symbol

☐ Scaled Size

☐ Drawn 1:1

**Graphics**

☐ No Graphics

☒ 3D

☐ 2D

Rectangular >>

**General**

Directory:

Manufacturer:

Category:

Units:

Material:

Print Material:

Status:

Effective Date:

Expiry Date:

Product Code:

Icon:

Cost:

**Working/Stacking Axes**

Working ☒ X ☐ Y ☐ Z

Stacking ☐ X ☒ Y ☒ Z

**Area Calc Directions**

N ☐

W ☒ E ☒

S ☒

**Reporting Options**

☐ Exclude from Reports

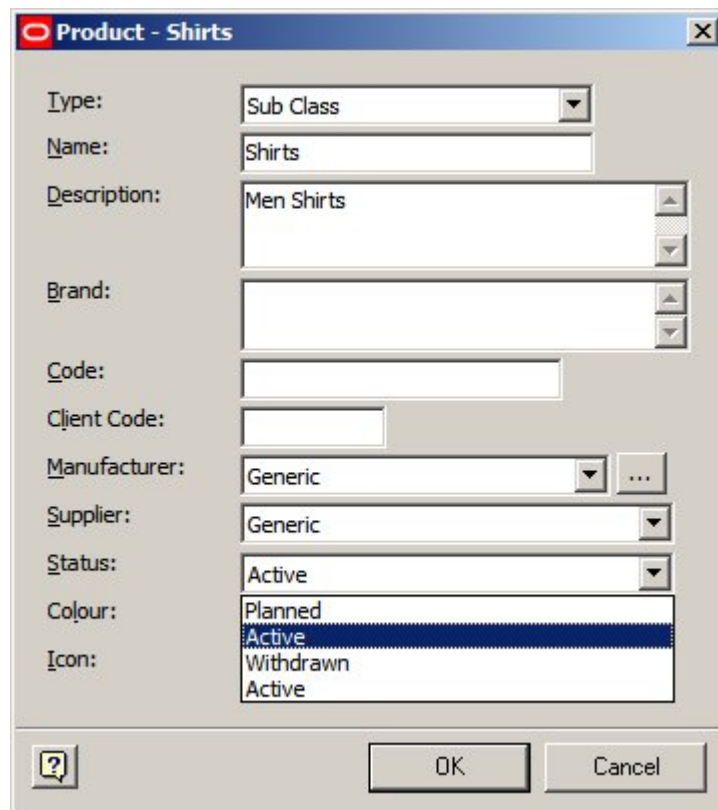
☐ Exclude Instances in DB

☐ Exclude Attributes

☐ Include in Fixture Annotation

**Products**

Product status is set in the Product Studio module. they can be set at all levels in the hierarchy except for display styles. For levels in the hierarchy between Company to Item, the status is set in dialogue boxes similar to that below.



The screenshot shows a dialog box titled "Product - Shirts". It contains the following fields and values:

- Type: Sub Class
- Name: Shirts
- Description: Men Shirts
- Brand:
- Code:
- Client Code:
- Manufacturer: Generic
- Supplier: Generic
- Status: Active
- Colour: Planned
- Icon: Active

The "Status" field is set to "Active" and is highlighted in the list. The "Icon" field is also set to "Active". The dialog box has "OK" and "Cancel" buttons at the bottom right.

For items at SKU level, the status is set in the Product SKU dialogue box.

The screenshot shows a software window titled "Product SKU - Apple White". It has four tabs: "Details", "Physical", "Financial", and "Custom". The "Details" tab is selected. The form contains the following fields and controls:

- Name:** Text box containing "Apple White".
- Description:** Text box containing "Brand AA 1 litre Apple White" with scroll bars.
- UPC Type:** Dropdown menu with "Anything" selected.
- Code:** Text box containing "123456".
- UPC:** Empty text box.
- Manufacturer:** Dropdown menu with "Generic" selected.
- Supplier:** Dropdown menu with "Generic" selected.
- Status:** Dropdown menu with "Active" selected.
- Icon:** Dropdown menu with a list showing "Active", "Planned", and "Withdrawn". "Active" is currently selected.
- Brand:** Empty text box.
- Client Code:** Empty text box.
- Client Barcode:** Empty text box.

At the bottom of the window, there is a help icon (question mark in a square), an "OK" button, and a "Cancel" button.

### Planograms

Planogram status is set in the Merchandiser module from the Details tab of the Planogram Design dialogue box.

The image shows a software window titled "Planogram: BoxedSocks" with a tabbed interface. The "Details" tab is selected. The form contains the following fields and values:

Field	Value
Name	BoxedSocks
Revision	1
Description	Boxed Presentation Sock Gifts
Status	Proposed (dropdown menu is open showing: Proposed, Current, Superseded)
Effective Date	
Type	Standard
Stock Type	Normal
Autofill Rule	< No Rule Selected >
Units	imperial inch
Can be Split	<input type="checkbox"/>
Number of Bays	2
Size	96 20 98
Source	Planogram Studio
Imported Name	
Last Imported	25/06/2009 at 14:14
Parent Product	Emulsion Paint
Temp Range	< No Ranges Selected >
Created	06 May 2009
Created By	pw
Last Modified	11 Jun 2009
Last Modified By	pw
Last Published	25 Jun 2009

Buttons at the bottom: OK, Save As, Cancel.

## Reports

Report Status is set in Report Designer in the Report Properties dialogue box (accessed from the File menu when a report is open).

The image shows a software window titled "Report Properties". The form contains the following fields and values:

Field	Value
Name	Merchandising - Front - Multi-Landscape
Status	Active (dropdown menu is open showing: Active, Old)
Display Units	Active
Paper Units	Millimetres
Display One Section per Page	<input checked="" type="radio"/>
Display All Sections on One Page	<input type="radio"/>

Buttons at the bottom: OK, Cancel.

## Statuses and In-Store Space Collaboration

---

**Note:** In-Store Space Collaboration is an optional application that can be used in parallel to Macro Space Management. It may not be installed in all implementations of Macro Space Management.

---

### Overview

Although statuses cannot be directly configured in In-Store Space collaboration:

1. The status of a store plan determines whether it can be seen in In-Store Space Collaboration or not.
2. Clicking on Save Submit, Accept or Reject when closing a drawing in In-Store Space Collaboration changes the status of the drawing. This will affect whether the drawing is still visible in In-Store Space Collaboration and the status it is at in Macro Space Management.

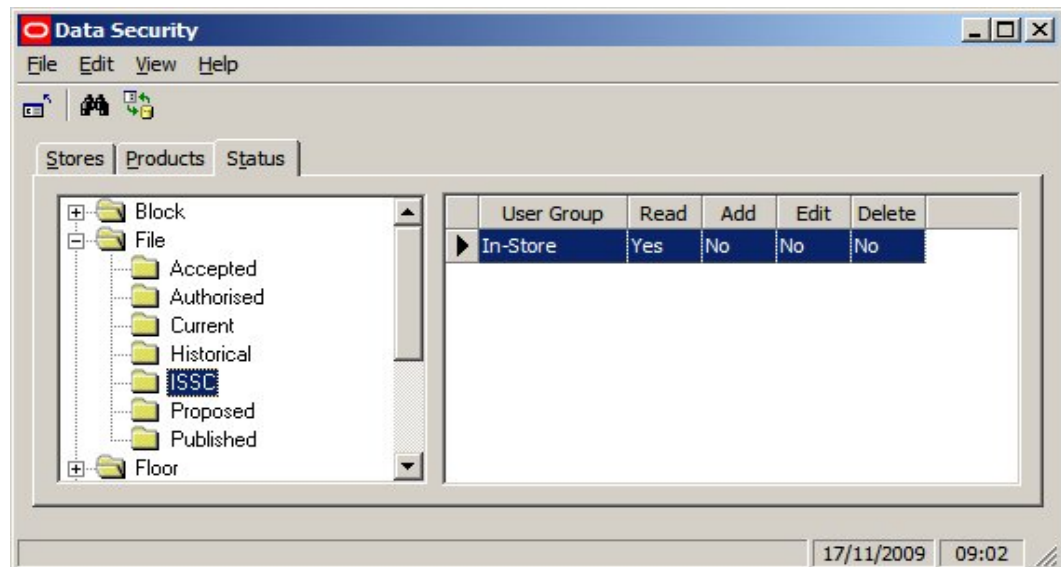
---

**Note:** the users can see when closing store plans in In-Store Space Collaboration will depend in settings in the database. Some users will only have a Save button and cannot affect the status of the drawing; some users will have a Save Submit button and can advance the status of a drawing and some users will have Accept and Reject buttons and can either advance the status of the drawing, or set it to a prior status.

---

### Status of Store Plan

Store Plans can only be seen at specific statuses. This is configured using the Data Security option in the Admin Module. User Groups can be assigned to Statuses. Members of those User Groups will be able to see Store Plans (Files) belonging to those statuses in In-Store Space Collaboration.



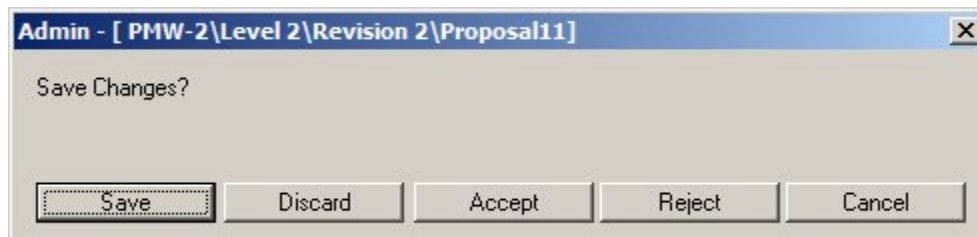
In the above example, users in the In-Store user group will be able to see files that have been set to ISSC status in Macro Space Managements' Store Manager module.

### Effect of Accept or Reject in In-Store Space Collaboration



When a drawing is closed in In-Store Space Collaboration (after making changes) a Save dialogue box comes up. Depending on settings in the database a specific user may see:

1. Save, Discard and Cancel buttons only
2. An additional Save Submit button
3. Additional Accept and Reject buttons.



Clicking Save Submit or Accept will change the current status of the drawing to one further on in the status flow for the drawing; clicking Reject will change the status of the drawing back to a prior status.

Although the status itself can be set up using the Status Level and Status dialogue boxes, the statuses ISSC changes the status too to on clicking 'Save Submit', 'Accept' or 'Reject' can only be set up directly in the database.

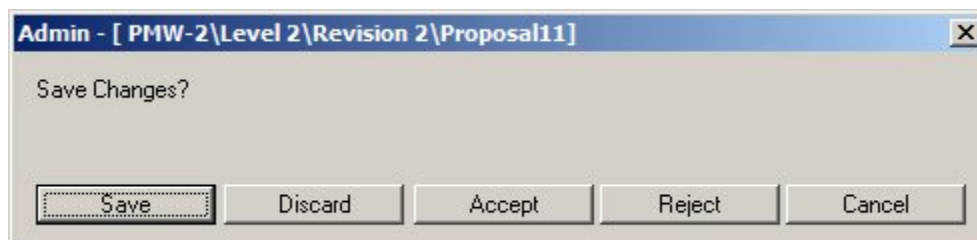
### Setting up Statuses in the Database

Setting up statuses for MSM can be done fully via the Status Levels and Status dialogue boxes in the administration module, however, some aspects of configuring statuses for use in In-Store Space Collaboration can only be done in the database. These aspects are:

1. Setting the statuses that will be set on clicking the Accept or Reject buttons in the Save dialogue box in ISSC
2. Setting the statuses that will appear for Manager Approval
3. Setting the type of Save dialogue box that will appear in ISSC

#### Setting the statuses that will be set on clicking the 'Save Submit', 'Accept' or 'Reject' buttons in the Save dialogue box in ISSC

When you save a (changed) drawing on exiting In-Store Space Collaboration the Save dialogue box appears. Clicking on 'Save Submit', 'Accept' or 'Reject' will change the status of the store plan.



**Note:** There are slightly different forms of the Save dialogue box. The above example shows one form. Which form appears depends on settings in the AVTTB\_PROCESS\_FLOW table - see below.

The AVTTB\_STATUS table contains two columns called STA\_ID\_REJECT and STA\_ID\_ACCEPT. For any specific status, these are the statuses that it will be changed to on clicking Accept or Reject in ISSC.



Column Name	ID	Pk	Null?	Data Type
STA_ID	1	1	N	NUMBER (5)
STL_ID	2		N	NUMBER (5)
STT_ID	3		N	NUMBER (5)
STA_DESC	4		N	NVARCHAR2 (160)
STA_ORDER	5		N	FLOAT
STA_REVERSIBLE	6		N	NUMBER (1)
STA_READONLY	7		N	NUMBER (1)
STA_SELECTABLE	8		N	NUMBER (1)
ICO_ID	9		N	NUMBER (10)
STA_DEFAULT	10		N	NUMBER (1)
STA_DISPLAY	11		N	NUMBER (1)
STA_CODE	12		Y	NVARCHAR2 (20)
STA_ID_REJECT	13		Y	NUMBER (5)
STA_ID_ACCEPT	14		Y	NUMBER (5)
STA_APPROVAL	15		N	NUMBER (1)

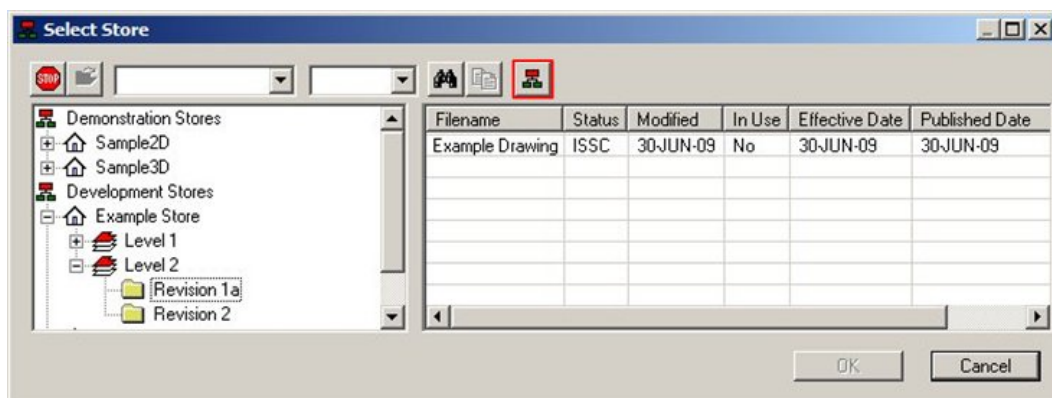
The extract below from the AVTTB\_STATUS table shows a simple example.

STA_ID	STA_ORDER	STA_DESC	STA_ID_ACCEPT	STA_ID_REJECT
23	1	Proposed		
25	2	Authorised		
33	3	ISSC	29	25
29	4	Published		
14	5	Current		
24	6	Historical		

1. If the user clicks the 'Save Submit' or 'Accept' button in In-Store Space Collaboration, the ISSC status will be changed to Published (STA\_ID 29) when exiting the drawing.
2. If the user clicks the 'Reject' button in In-Store Space Collaboration, the ISSC status will be changed to Authorised (STA\_ID 25) when exiting the drawing.

#### Setting the statuses that will appear for Manager Approval

There is a button in the ISSC Select Store dialogue box that allows users belonging to appropriate user groups to select all drawings of specific statuses that require approval.



The statuses that will appear when the icon is clicked are set in the AVTTB\_STATUS table - they are set to 1 in the STA\_APPROVAL column.

	STA_ID	STA_DESC	STA_ORDER	STA_APPROVAL
	23	Proposed	1	0
	25	Accepted	2	0
	33	ISSC	3	1
	35	Authorised	4	0
	29	Published	5	0
	14	Current	6	0
	24	Historical	7	0

#### Setting the type of Save dialogue box that will appear in ISSC

The type of dialogue box that will appear in In-Store Space Collaboration is listed in the AVTTB\_PROCESS\_FLOW\_OPTION table.

	MSF_ID	PFO_ID	PFO_DESC	PFO_FOCUS_ID
	3	1	Save & Discard	1
	3	2	Save & Discard & Submit	1
	3	3	Accept & Reject	1
	338	1	Auto Store Compare Selection	1
	338	2	Manual Store Compare Selection	1

1. The MSF\_ID details the type of dialogue box that will appear - the Save dialogue box is MSF\_ID.
2. The PFO\_ID details the options that will appear in the Save dialogue box.
  - a. A PFO\_ID of 1 will only give Save and Discard buttons in the dialogue box
  - b. A PFO\_ID of 2 will give Save, Discard and Submit buttons. On clicking Submit, the status will change to that specified in the STA\_ID\_ACCEPT column of the AVTTB\_STATUS table.
  - c. A PFO\_ID of 3 will give Save, Discard and Accept and Reject buttons. On clicking Accept, the status will change to that specified in the STA\_ID\_ACCEPT column of the AVTTB\_STATUS table. On clicking Reject, the status will change to that specified in the STA\_ID\_REJECT column of the AVTTB\_STATUS table.

How it is used is specified in the AVTTB\_PROCESS\_FLOW table.

MSF_ID	PFL_ID	STA_ID	USG_ID	PFO_ID
3	1	33	1	3
3	1	33	4	1

1. The MSF\_ID is the ID for the form. It is determined from the AVTTB\_PROCESS\_FLOW\_OPTION table. In this instance the appropriate form ID is 3.
2. The PFL\_ID (Process Flow Level ID) is not in use. It can be set to 1.
3. The STA\_ID is the ID for the Status the form is appropriate for. It is determined from the AVTTB\_STATUS table.
4. The USG\_ID is the ID of the User Group the form is appropriate for. It is determined from the AVTTB\_USER\_GROUP table.
5. The PFO\_ID (Process Flow Operation ID) determines the options that will appear on the Save dialogue box. They are determined from the AVTTB\_PROCESS\_FLOW\_OPTION table.

In the simple example above, there are two options for STA\_ID 33:

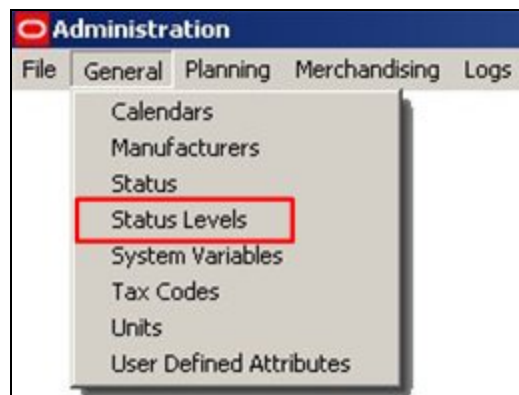
1. Users belonging to the Admin User Group (USG\_ID = 1) will get Save, Discard, Accept and Reject buttons.
2. Users belonging to the ISSC User Group (USG\_ID = 4) will only get Save and Discard buttons.

It is also possible to specify actions for more than one status.

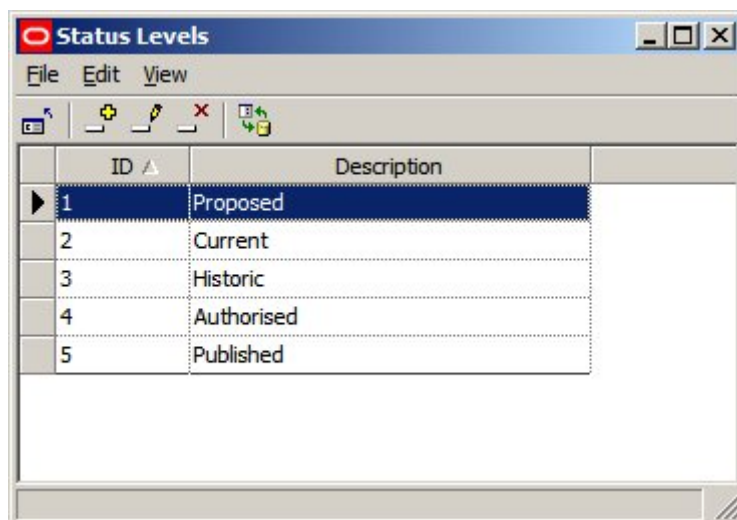
## Configuring Statuses in Admin

### Overview of Status Levels

**Status Levels** are the generic stages where actions related to statuses can be triggered in the software. Status levels are called from the General menu.



This will bring up the Status Levels dialogue box



### Generic Status Levels

On installation, the software contains a series of generic statuses, each associated with a status ID. The software (particularly for Stores, Files and Revisions) will carry out specific actions associated with the Status Level ID (not the Status Level Description).

In some circumstances, manually changing the status of a Revision will change the status of the files within it.

In some circumstances, the status of files and revisions can be changed automatically by UpdateStatus.exe.

In some circumstances, the status of stores can be changed automatically by UpdateStatus.exe.

These generic statuses should not be edited or deleted or there may be problems with software functionality. The generic statuses are that should not be changed are::

Authorised

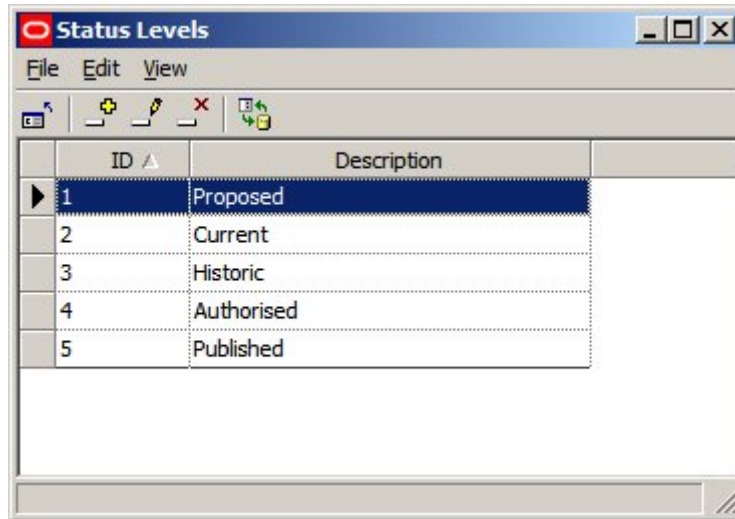
Published

Current

Historical

### Custom Status Levels

It is possible to add custom status levels to the default status levels. This is because each status must be associated with a unique status level. If a status work flow has ten statuses in it, there must be ten status levels configured in the Status Levels dialogue box.

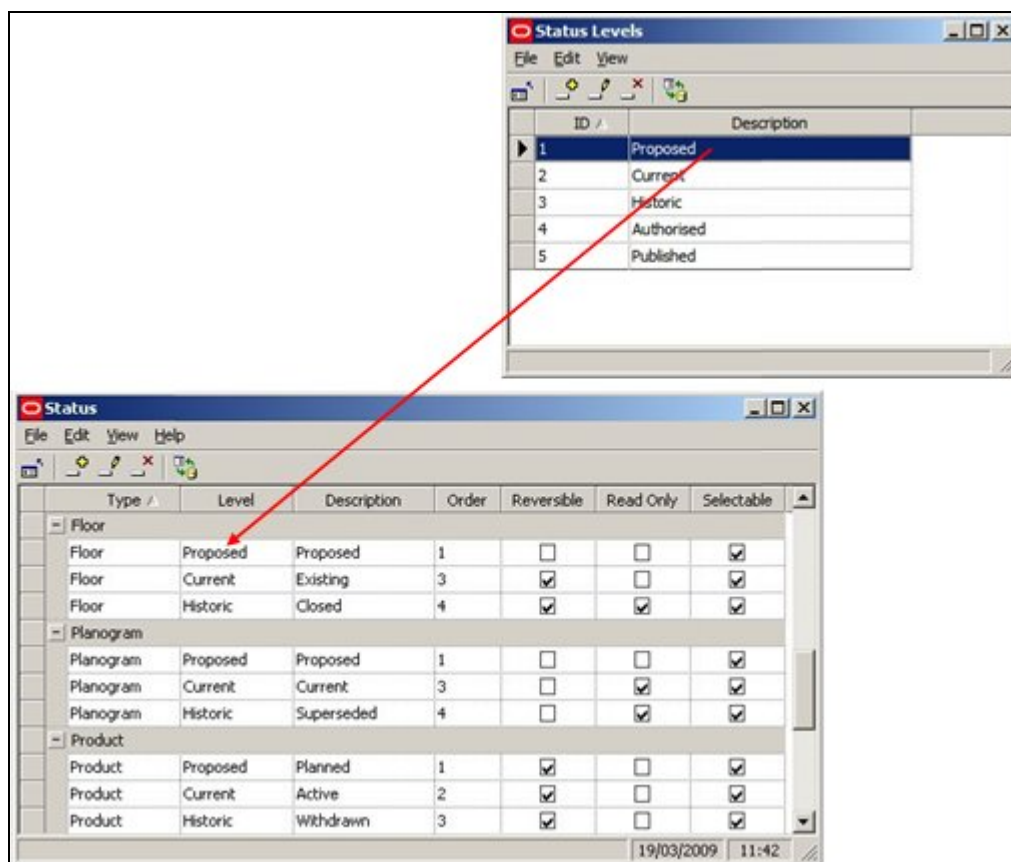


Accordingly, the generic description can be slightly modified - for example changing 'Proposed' to 'Proposal' - but the generic description associated with a particular Status Level ID should not be changed. For example associating 'Historic' status with Status Level ID 4 (rather than 3) will cause problems with the operation of the software.

Custom Status Levels should therefore be added to the generic Status Levels, and not substituted for them.

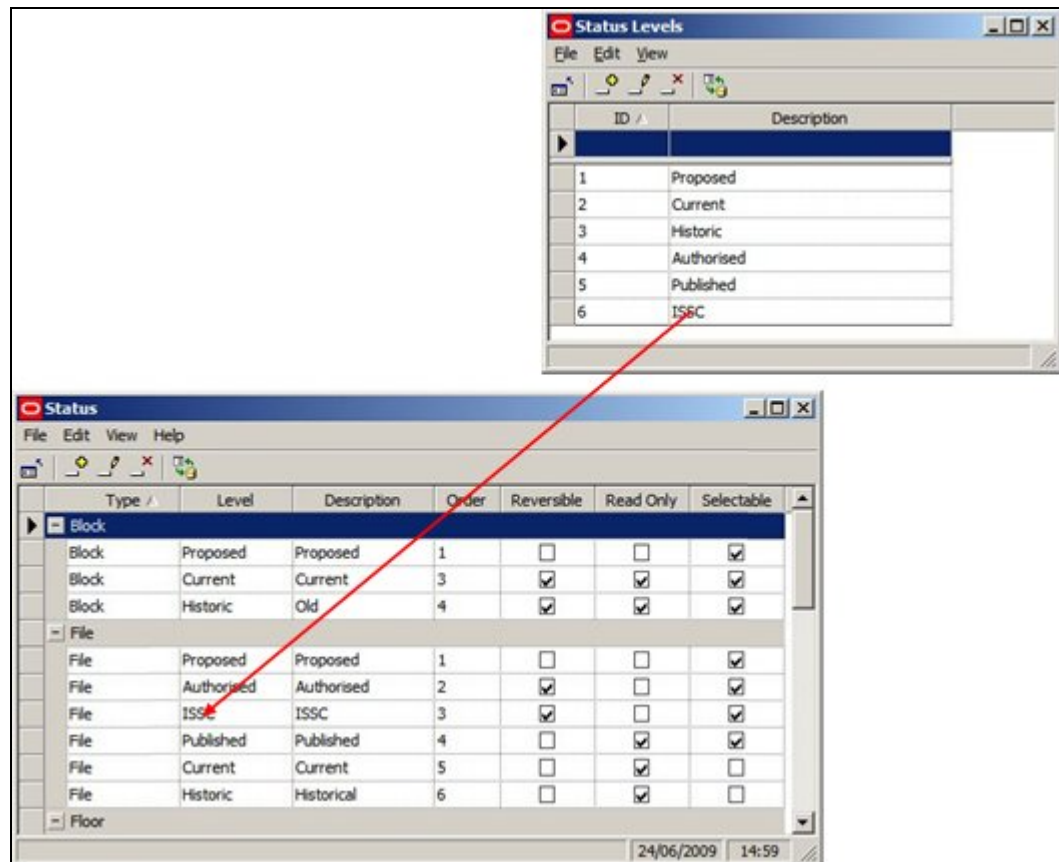
### Using Status Levels

The **Descriptions in the Status Level dialogue box** appear within the Status dialogue box as the Level for a specific status. Each status must be associated with a specific and unique status level.

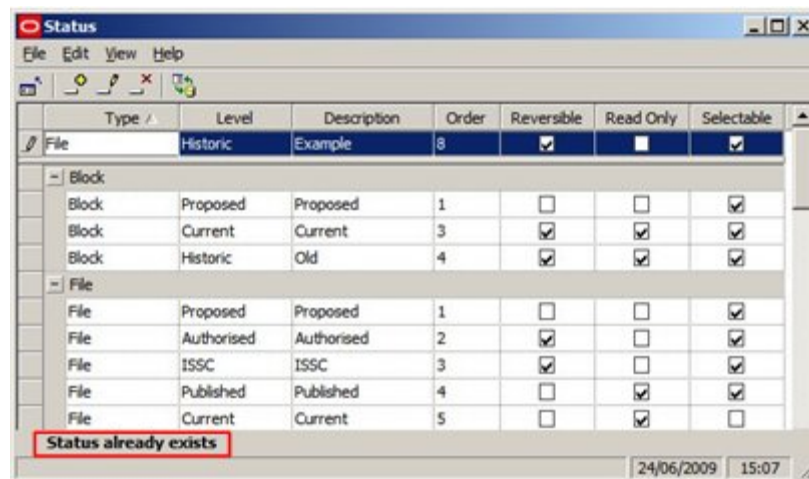


In the example below it has been decided to add an ISSC status to the statuses to denote store plans (files) available to users in In-Store space collaboration. In order to add the Status in the Status dialogue box, it is first necessary to add an ISSC status level to the Status Levels dialogue box.





If you attempt to create a new status and associate it with a status level that is not unique to that status, a warning will result.



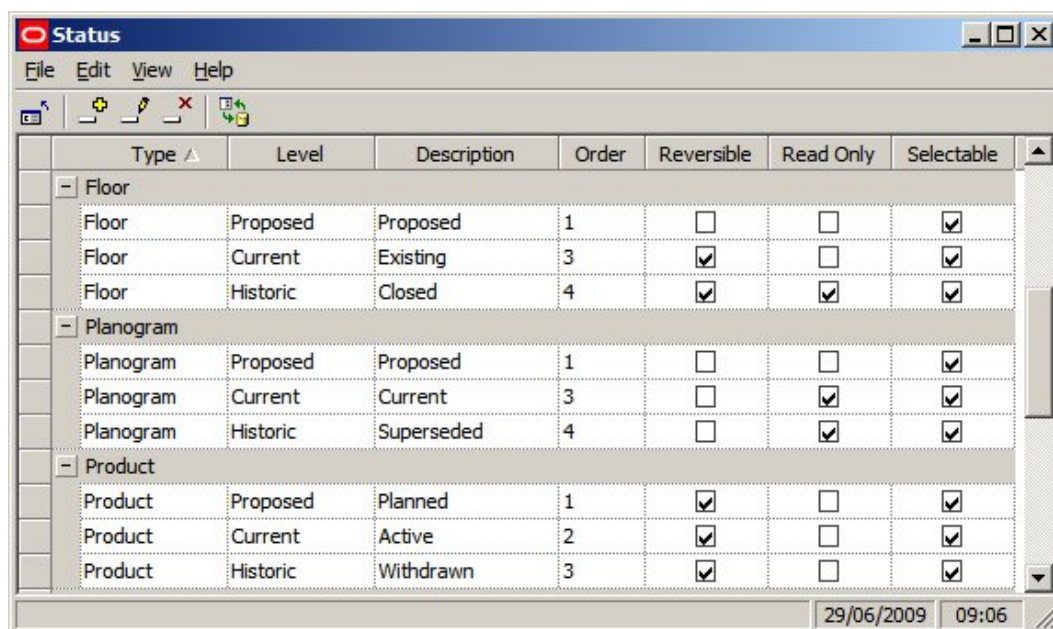
### About Status Options

The **Status** dialogue box is used to configure the varying Statuses used to control business flows within Macro Space Management. It can also be used to partially configure the behavior of statuses within In-Store Space Collaboration, although the rest of this configuration has to be done directly in the database.

---

**Note:** When Macro Space Management is implemented, the statuses and status levels may be set up to customer specific requirements. Accordingly, there may be small differences between the generic examples in this Help file and a specific implementation of Macro Space Management. For advice on any aspect of customization or terminology, please contact Oracle's Technical Support Team.

---



Statuses may be added, edited or deleted by selecting the appropriate options from the menu bar or toolbar.

It is recommended each status type contain a minimum of three status levels. These would normally include Proposed, Current and Historic.

---

**Note:** As changes to the configuration of statuses may have wide effects within Macro Space Management, it is suggested that modifications are only made after consulting Oracle's Technical Support Team.

---

### Type

Type defines the type of object the status will be assigned to. It is selected from a drop down list that is not user configurable.

### Level

Level indicates where in the flow for that object that status comes. Each level must correspond to a unique status level defined in the Status Levels dialogue box.

---

**Note:** Status Levels are assigned a Status ID in the database. These Status ID's are not visible to or configurable by the user. Certain Macro Space Management actions are tied to those Status ID's. For example archiving is carried out on files with a Status ID of 4. If superseded (Historical) files are given a Status with an ID of anything other than 4, archiving will not work.

---



**Description**

This is a user configurable field that allows users to customize the description of associated with the level. this description then appears in the varying dialogue boxes that use status. For example, it would be possible to assign the description 'Superseded' to the Historical level.

**Order**

This is the order that the statuses will be used (and the order they will appear in any dialogue boxes).

**Reversible**

If a status is set to reversible, it can be changed back to a status lower in the order by the user. If a status is not reversible, then the user cannot revert to an earlier status. It would not be normal (for example) for the change between Authorised and Current Status to be reversible.

---

---

**Note:** at present only file statuses are non-reversible.

---

---

**Read Only**

If a Status is set to read only status, all associated objects and files will be able to be viewed, but not altered. Objects with Statuses that are not set to read only status may be freely edited. As example of an object set to read only status would be a fixture that has been set to historic status - as the fixture is no longer in service, there would be no need to edit it.

---

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**Note:** at present only files are set to read only status. This can be directly as a result of the file having its status changed, or indirectly as a result of the parent store, floor or revision having its status changes to one with read only attributes. For example, changing a floor to closed status will generally result in the files associated with that floor becoming 'read only'.

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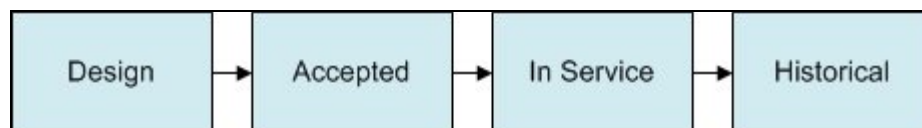
---

**Selectable**

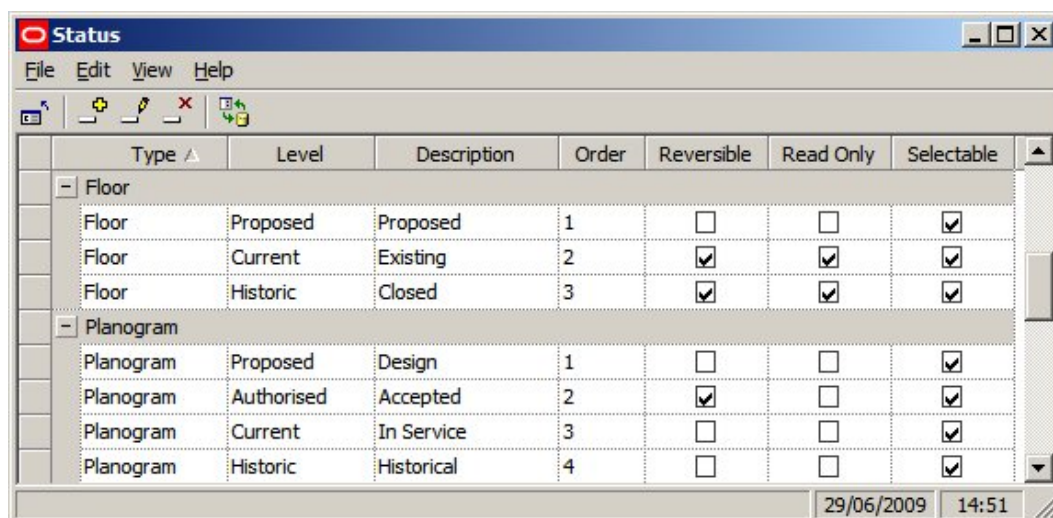
If a status is selectable it can be set by the user. If it is not selectable, then the status can only be changed by the software.

**Basic Example of Configuring Statuses**

A **basic example** for configuring statuses is the flowchart below for planograms designed within the Merchandiser module.



This allows planograms to be started at the design stage, be accepted by a manager, go into service and be retired (historical). This is set up in the Status dialogue box as follows:



Type	Level	Description	Order	Reversible	Read Only	Selectable
<b>Floor</b>						
Floor	Proposed	Proposed	1	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Floor	Current	Existing	2	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Floor	Historic	Closed	3	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
<b>Planogram</b>						
Planogram	Proposed	Design	1	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Planogram	Authorised	Accepted	2	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Planogram	Current	In Service	3	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Planogram	Historic	Historical	4	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

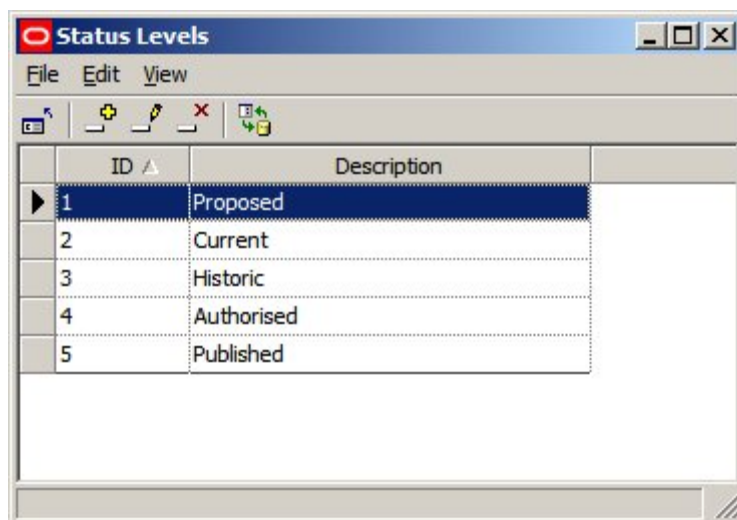
29/06/2009 14:51

### Type

This is obviously set to planogram.

### Levels and Descriptions

These are selected from the Status Levels dialogue box, ensuring that the description we will use later matches up to the appropriate level.



ID	Description
1	Proposed
2	Current
3	Historic
4	Authorised
5	Published

In this instance the Proposed Status Level is matched to the Design description, the Authorised Status Level is matched to the Accepted Description, the Current Status Level to the In Service description and the Historic Status Level to the Historical description.

### Order

The order is set to the sequence the statuses will be used in: 1 for Design, 2 for Accepted, 3 for in Service and 4 for Historical.

### Reversible

Only Authorised status needs to be reversible - giving the option of revering back to Design status. Current and Historical statuses should not be reversible as planogram in service or having been retired (historical) should not be capable of being edited.

### Read Only

Typically statuses would be set to read only when the planogram design has been fixed - for example at 'In Service' or 'Historical' status.

---

**Note:** at present setting planograms to Read Only status has no effect.

---

### Selectable

Statuses have been marked as selectable to be visible in the Planogram design dialogue box. In this case, we need all statuses to be selectable, so all have been checked. They will then be available in the Planogram Design dialogue box.

The screenshot shows the 'Planogram: BoxedSocks' dialog box with the 'Design' tab selected. The dialog contains the following fields and values:

Field	Value
Name	BoxedSocks
Revision	1
Description	Boxed Presentation Sock Gifts
Status	Design (dropdown menu open showing Design, Accepted, In Service, Historical)
Effective Date	
Type	
Stock Type	Normal
Autofill Rule	< No Rule Selected >
Units	imperial inch
Can be Split	<input type="checkbox"/>
Number of Bays	2
Size	96 20 98
Source	Planogram Studio
Imported Name	
Last Imported	29/06/2009 at 15:07
Parent Product	Emulsion Paint
Temp Range	< No Ranges Selected >
Created	06 May 2009
Created By	pw
Last Modified	11 Jun 2009
Last Modified By	pw
Last Published	29 Jun 2009

Buttons at the bottom: OK, Save As, Cancel.

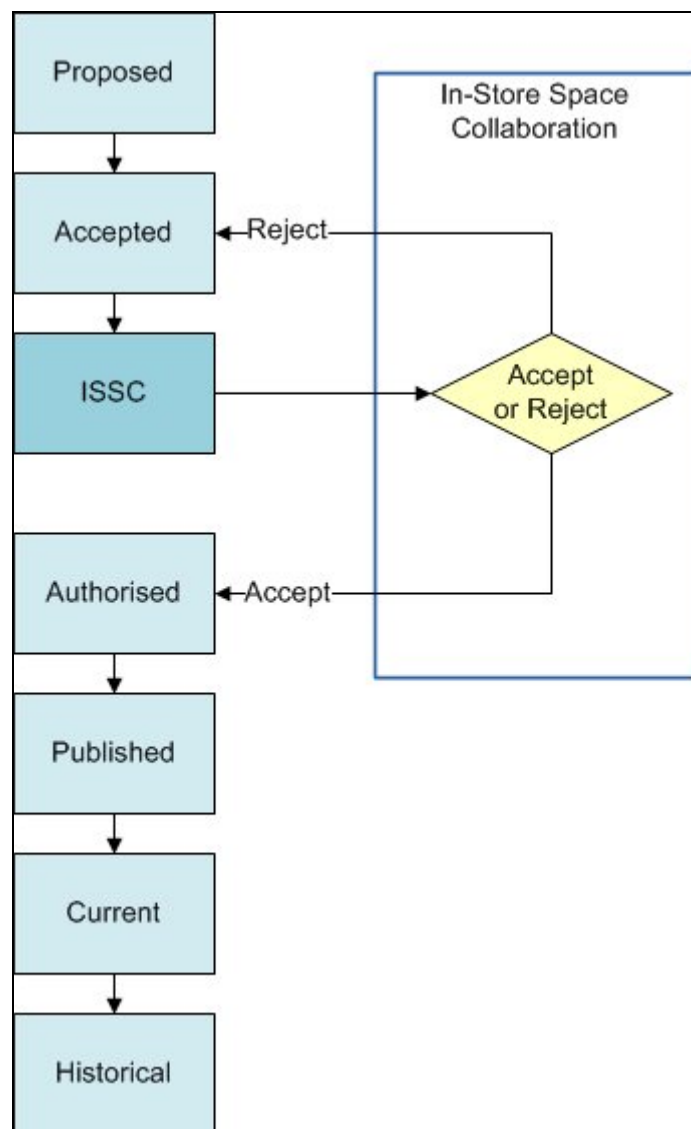
### Advanced Example of Configuring Statuses

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**Note:** In-Store Space Collaboration is an optional application that can be used in parallel to Macro Space Management. It may not be installed in all implementations of Macro Space Management.

---

An **advanced example** of configuring file statuses can be seen in the flowchart below.

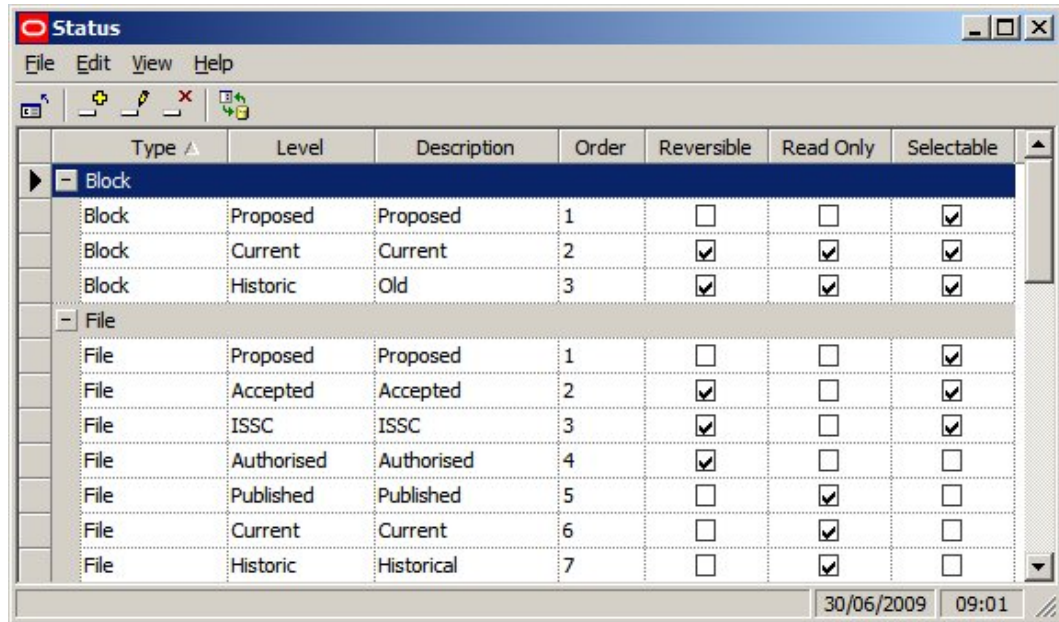


Here the file has three statuses that are set in Macro Space Management's Store Manager Module. The third of these statuses (ISSC) is also set to be visible in In-Store Space Collaboration (using Data Security), where users can click the Accept or Reject buttons on exiting the drawing.

Clicking the Accept button in In-Store Space Collaboration will change the status to authorised, clicking the Reject button in In-Store Space Collaboration will change the status back to Accepted.

When the drawing reaches Authorised status (and Publish and Effective dates have been set), the UpdateStatus.exe tool will result in the file successively changing to Published, Current and Historical status.

This is set up in the Status dialogue box as follows:

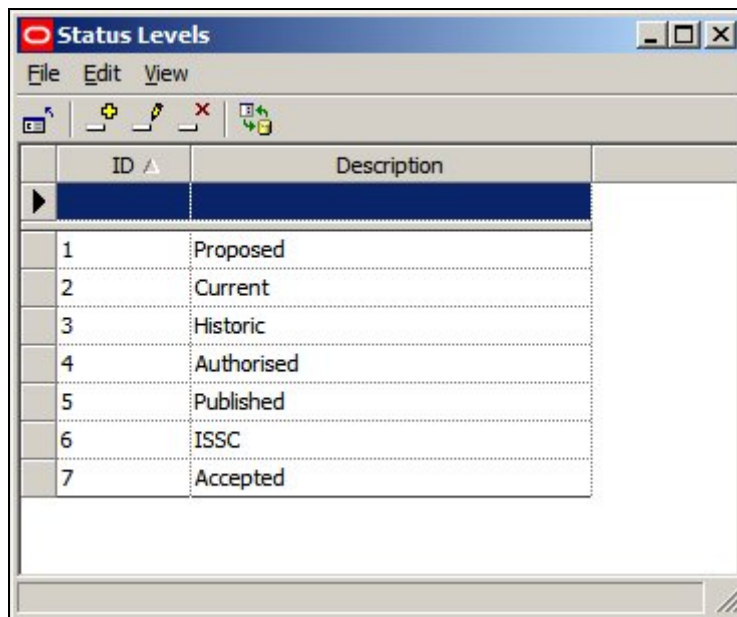


The Status dialog box displays a table with the following columns: Type, Level, Description, Order, Reversible, Read Only, and Selectable. The data is organized into two main sections: Block and File.

Type	Level	Description	Order	Reversible	Read Only	Selectable
<b>Block</b>						
Block	Proposed	Proposed	1	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Block	Current	Current	2	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Block	Historic	Old	3	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
<b>File</b>						
File	Proposed	Proposed	1	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
File	Accepted	Accepted	2	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
File	ISSC	ISSC	3	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
File	Authorised	Authorised	4	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
File	Published	Published	5	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
File	Current	Current	6	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
File	Historic	Historical	7	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

The status bar at the bottom shows the date 30/06/2009 and time 09:01.

In order to add two additional statuses (Accepted and ISSC) to the existing statuses, two additional levels must first be added to the Status Levels dialogue box.



The Status Levels dialog box displays a table with the following columns: ID and Description. The data is as follows:

ID	Description
1	Proposed
2	Current
3	Historic
4	Authorised
5	Published
6	ISSC
7	Accepted

The additional statuses can then be added to the Status dialogue box.

### Type

This is obviously set to planogram.

### Levels and Descriptions

These are selected from the Status Levels dialogue box, ensuring that the description we will use later matches up to the appropriate level.

In this instance the Proposed Status Level is matched to the Proposed description, the Accepted Status Level is matched to the Accepted Description, etc.

Note: care was taken to map the Authorised, Published, Current and Historical descriptions to their respective levels in the status levels dialogue box. This is because the software will carry out specific actions associated with these statuses.

**Order**

The order is set to the sequence the statuses will be used in: 1 for Proposed, 2 for Accepted, etc.

**Reversible**

Several statuses have been made reversible (Authorised, ISSC and Accepted). This allows users to change the status back to an prior one if the store plan is not regarded as acceptable.

**Read Only**

Statuses have been set to Read Only at Published, Current and Historical status. This is because once a drawing has been Published (sent to a store for implementation) it should be 'locked' to prevent further changes in it.

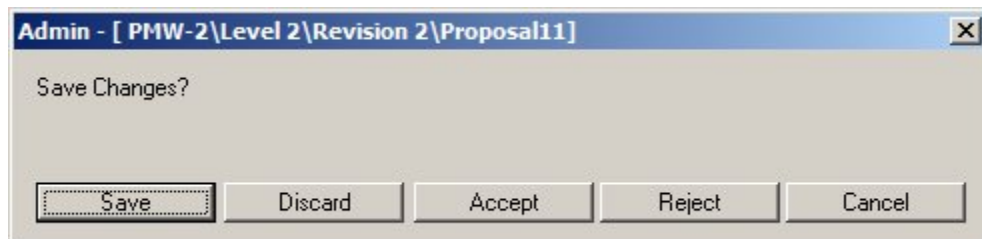
**Selectable**

Statuses have been marked as selectable to be visible in the Properties dialogue box. In this case, we need the Proposed, Accepted and ISSC statuses to be selectable, so they have been checked.

Authorised status has not been made selectable. This means that the status can only be reached by clicking the Accept button in In-Store Space Collaboration. This is an example of how statuses can be used to ensure business processes are followed.

**In-Store Space Collaboration**

The Save dialogue box in In-Store Space Collaboration contains Accept and Reject buttons.



Setting up these buttons to change status within MSM has to be done directly within the database - consult Oracle technical support for more information. (More Info)

## System Variables

### Overview of System Variables

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**Note:** In-Store Space Collaboration is an optional application that can be used in parallel to Macro Space Management. It may not be installed in all implementations of Macro Space Management. Some of the System Variables control settings within the In-Store Space Collaboration application. These System Variables have no influence over the operation of Macro Space Management.

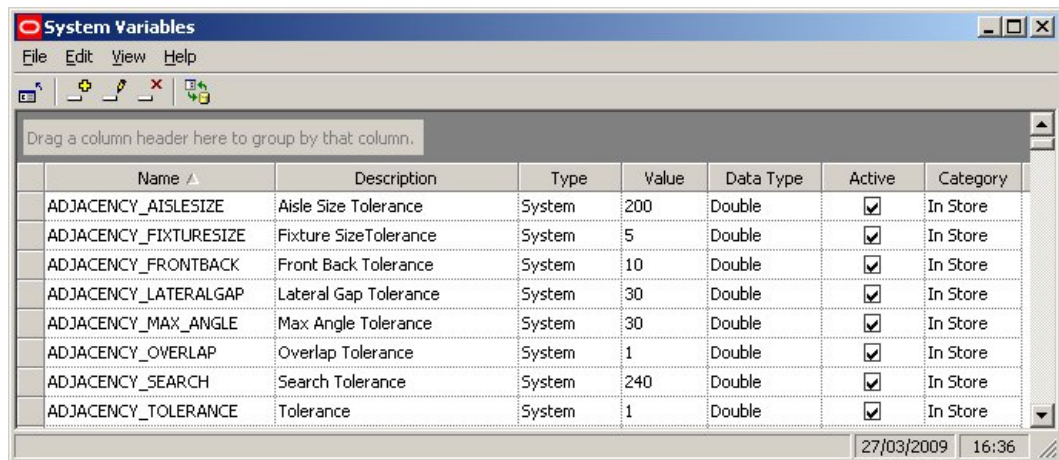
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A **System Variable** is a parameter within the Macro Space Management database that specifies how one aspect of the software operates. System variables are often used as switches to toggle features on and off, hold dimensions and positions of dialogue boxes, etc.

**The following principles should be followed when working with system variables:**

1. **System Variables should not be added or deleted.**
2. **The only information that should be edited for a System Variable is the Description and the Value.**



The screenshot shows a window titled 'System Variables' with a menu bar (File, Edit, View, Help) and a toolbar. Below the toolbar is a text area with the instruction 'Drag a column header here to group by that column.' Below this is a table with the following data:

Name	Description	Type	Value	Data Type	Active	Category
ADJACENCY_AISLESIZE	Aisle Size Tolerance	System	200	Double	<input checked="" type="checkbox"/>	In Store
ADJACENCY_FIXTURESIZE	Fixture SizeTolerance	System	5	Double	<input checked="" type="checkbox"/>	In Store
ADJACENCY_FRONTBACK	Front Back Tolerance	System	10	Double	<input checked="" type="checkbox"/>	In Store
ADJACENCY_LATERALGAP	Lateral Gap Tolerance	System	30	Double	<input checked="" type="checkbox"/>	In Store
ADJACENCY_MAX_ANGLE	Max Angle Tolerance	System	30	Double	<input checked="" type="checkbox"/>	In Store
ADJACENCY_OVERLAP	Overlap Tolerance	System	1	Double	<input checked="" type="checkbox"/>	In Store
ADJACENCY_SEARCH	Search Tolerance	System	240	Double	<input checked="" type="checkbox"/>	In Store
ADJACENCY_TOLERANCE	Tolerance	System	1	Double	<input checked="" type="checkbox"/>	In Store

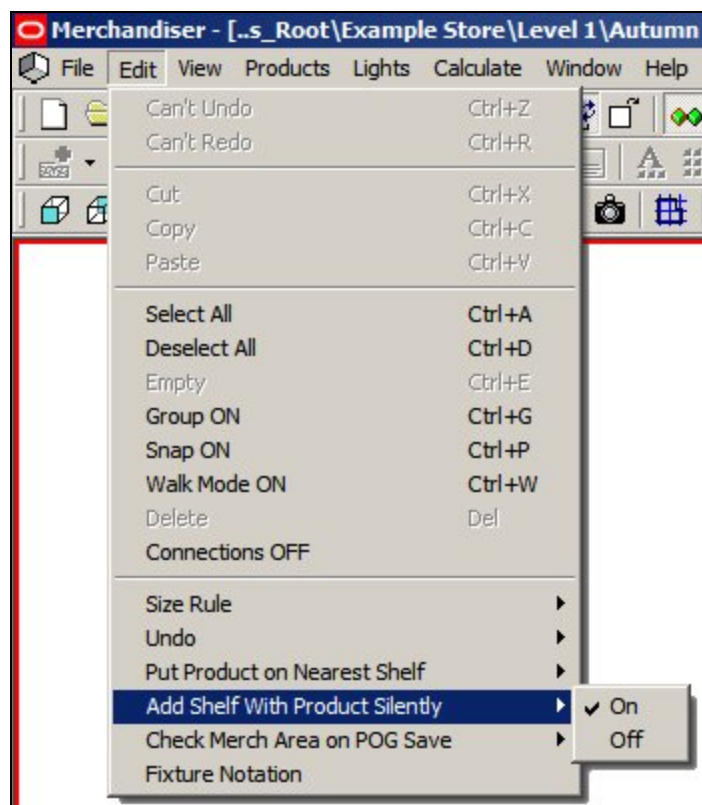
The status bar at the bottom right shows the date '27/03/2009' and time '16:36'.

**System Variables** can be changed in several ways.

1. Through dialogue boxes in the software
2. Through the Configuration Module
3. Through the Administration Module

#### Through the Software

System variables can be changed through the software. This may be explicit, as when the user deliberately selects a value in a dialogue box. It may also be implicit, as some system variables are used to hold the values of (for example) the positions and sizes of dialogue boxes.

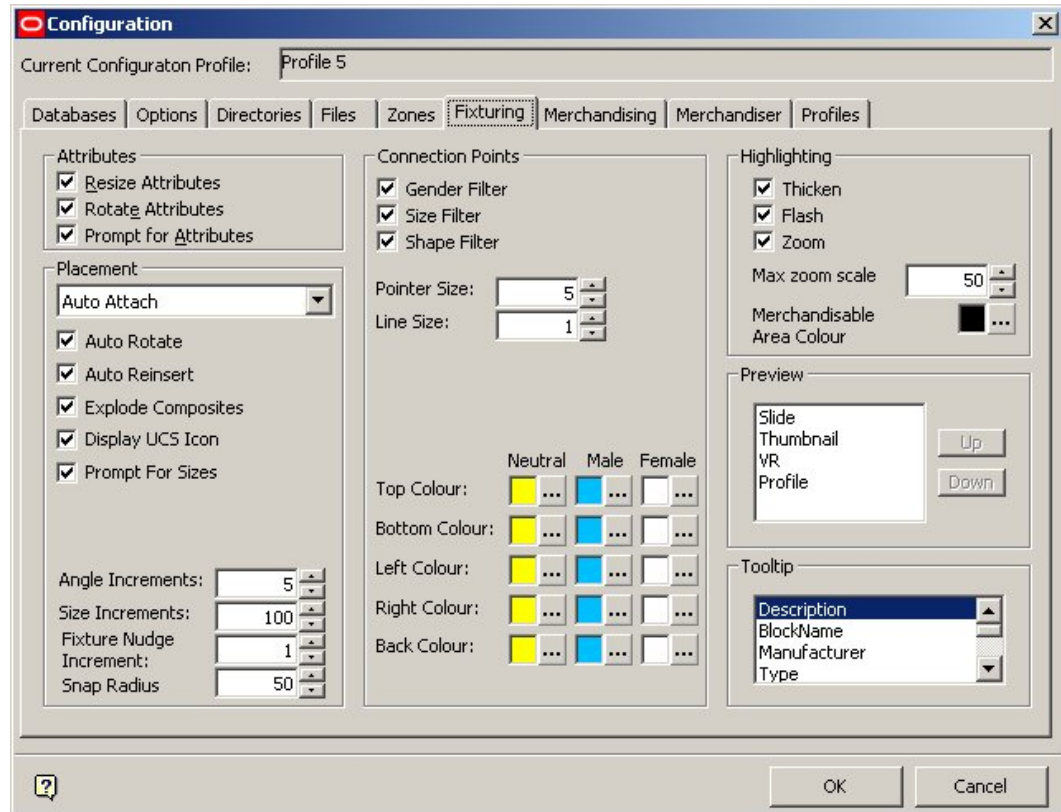


For example, the Merchandiser Module allows the 'Add Shelf with Product Silently' option to be toggled on or off. The value of this setting is stored in the `ADD_PRODUCT_WITH_SHELF` system variable.

#### Through the Configuration Module

The Configuration Module allows a series of settings to be customized by the user. Some are saved as system variables.





For example, the colors for the connection points set in the Fixturing tab are stored in a series of system variables called MALE\_BACK\_COLOUR, MALE\_BOTTOM\_COLOUR, etc

### Through the Administration Module

This option allows system variables to be directly changed instead of doing it via the software. This is done using the System Variable option from the General Menu.

Name	Description	Type	Value	Data Type	Active	Category
ADJACENCY_AISLESIZE	Aisle Size Tolerance	System	200	Double	<input checked="" type="checkbox"/>	In Store
ADJACENCY_FIXTURESIZE	Fixture SizeTolerance	System	5	Double	<input checked="" type="checkbox"/>	In Store
ADJACENCY_FRONTBACK	Front Back Tolerance	System	10	Double	<input checked="" type="checkbox"/>	In Store
ADJACENCY_LATERALGAP	Lateral Gap Tolerance	System	30	Double	<input checked="" type="checkbox"/>	In Store
ADJACENCY_MAX_ANGLE	Max Angle Tolerance	System	30	Double	<input checked="" type="checkbox"/>	In Store
ADJACENCY_OVERLAP	Overlap Tolerance	System	1	Double	<input checked="" type="checkbox"/>	In Store
ADJACENCY_SEARCH	Search Tolerance	System	240	Double	<input checked="" type="checkbox"/>	In Store
ADJACENCY_TOLERANCE	Tolerance	System	1	Double	<input checked="" type="checkbox"/>	In Store

This allows a user with Administrator's privileges to change the value of a system variable.

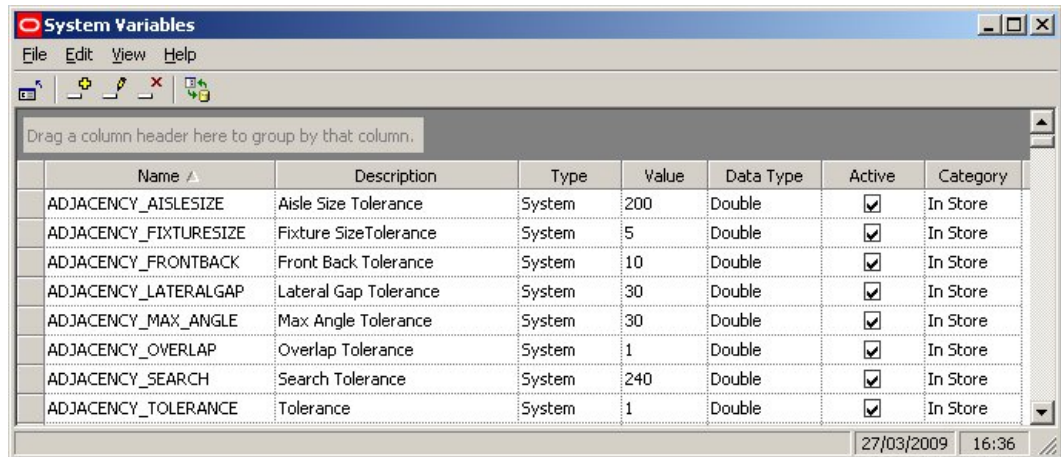
Changing system variables can have wide ranging effects on the way Macro Space Management. Before making a change it is recommended users should:

1. Ensure they understand the effect of changing the system variable
2. If necessary seek advice from Oracle's Technical Support team

## System Variables

### Overview of System Variables

A **System Variable** is a parameter within the Macro Space Management database that specifies how one aspect of the software operates. System variables are often used as switches to toggle features on and off, hold dimensions and positions of dialogue boxes, etc.



The screenshot shows a window titled 'System Variables' with a menu bar (File, Edit, View, Help) and a toolbar. Below the toolbar is a text area with the instruction 'Drag a column header here to group by that column.' Below this is a table with the following data:

Name	Description	Type	Value	Data Type	Active	Category
ADJACENCY_AISLESIZE	Aisle Size Tolerance	System	200	Double	<input checked="" type="checkbox"/>	In Store
ADJACENCY_FIXTURESIZE	Fixture SizeTolerance	System	5	Double	<input checked="" type="checkbox"/>	In Store
ADJACENCY_FRONTBACK	Front Back Tolerance	System	10	Double	<input checked="" type="checkbox"/>	In Store
ADJACENCY_LATERALGAP	Lateral Gap Tolerance	System	30	Double	<input checked="" type="checkbox"/>	In Store
ADJACENCY_MAX_ANGLE	Max Angle Tolerance	System	30	Double	<input checked="" type="checkbox"/>	In Store
ADJACENCY_OVERLAP	Overlap Tolerance	System	1	Double	<input checked="" type="checkbox"/>	In Store
ADJACENCY_SEARCH	Search Tolerance	System	240	Double	<input checked="" type="checkbox"/>	In Store
ADJACENCY_TOLERANCE	Tolerance	System	1	Double	<input checked="" type="checkbox"/>	In Store

The status bar at the bottom right shows the date '27/03/2009' and time '16:36'.

**System Variables** can be changed in several ways.

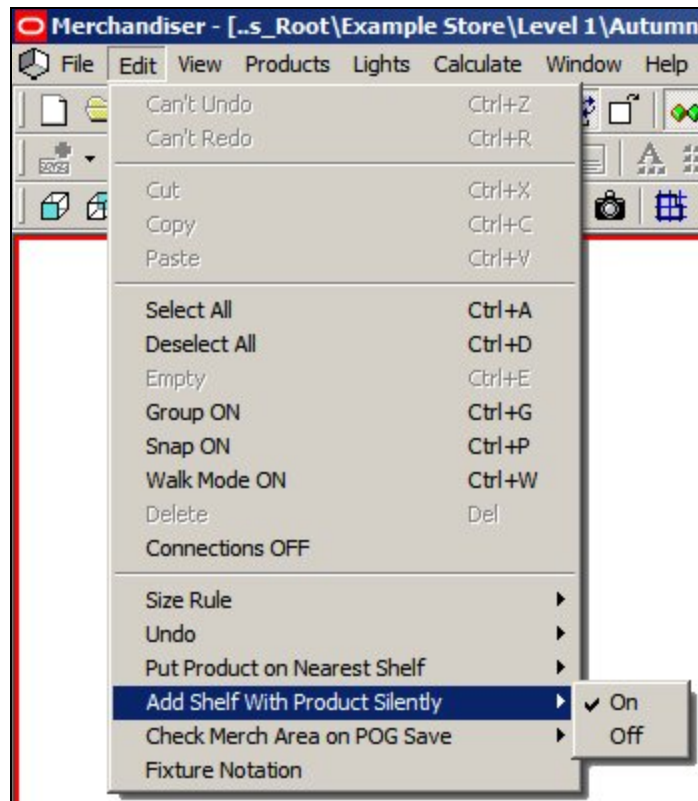
- Through dialogue boxes in the software

- Through the Configuration Module

- Through the Administration Module

### Through the Software

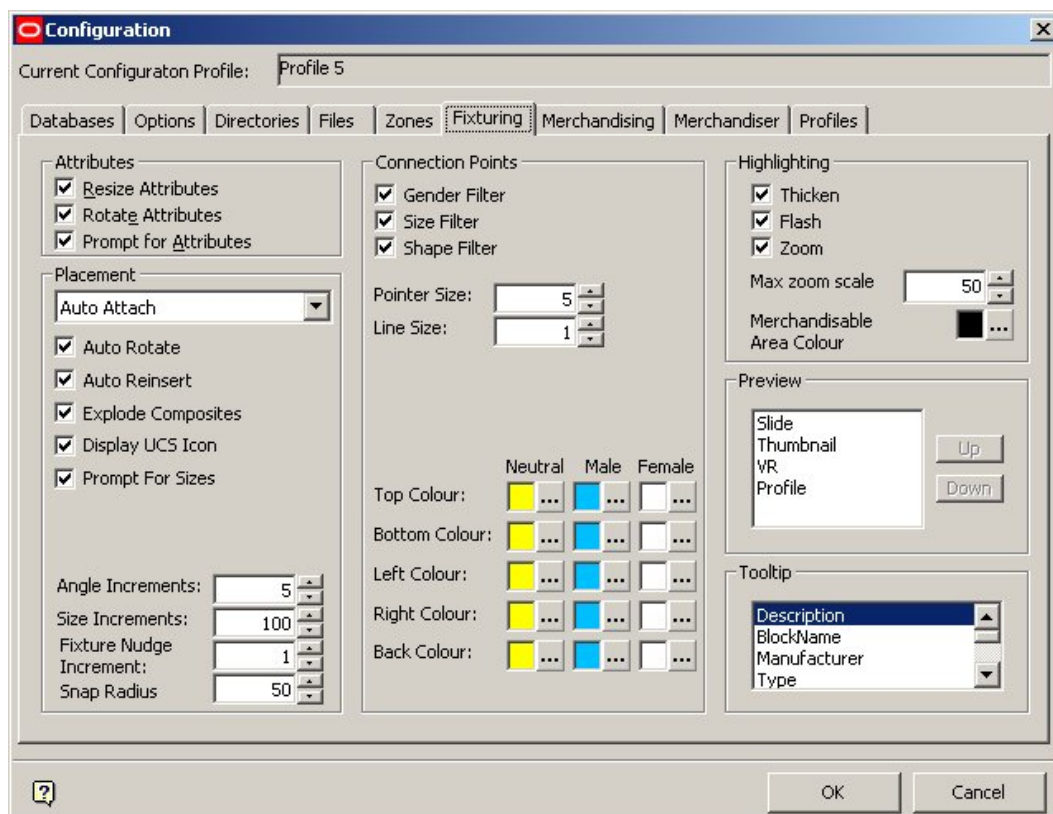
System variables can be changed through the software. This may be explicit, as when the user deliberately selects a value in a dialogue box. It may also be implicit, as some system variables are used to hold the values of (for example) the positions and sizes of dialogue boxes.



For example, the Merchandiser Module allows the 'Add Shelf with Product Silently' option to be toggled on or off. The value of this setting is stored in the `ADD_PRODUCT_WITH_SHELF` system variable.

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The Configuration Module allows a series of settings to be customized by the user. Some are saved as system variables.



For example, the colors for the connection points set in the Fixturing tab are stored in a series of system variables called MALE\_BACK\_COLOUR, MALE\_BOTTOM\_COLOUR, etc

### Through the Administration Module

This option allows system variables to be directly changed instead of doing it via the software. This is done using the System Variable option from the General Menu.

The System Variables dialog box displays the following table:

Name	Description	Type	Value	Data Type	Active	Category
ADJACENCY_AISLESIZE	Aisle Size Tolerance	System	200	Double	<input checked="" type="checkbox"/>	In Store
ADJACENCY_FIXTURESIZE	Fixture Size Tolerance	System	5	Double	<input checked="" type="checkbox"/>	In Store
ADJACENCY_FRONTBACK	Front Back Tolerance	System	10	Double	<input checked="" type="checkbox"/>	In Store
ADJACENCY_LATERALGAP	Lateral Gap Tolerance	System	30	Double	<input checked="" type="checkbox"/>	In Store
ADJACENCY_MAX_ANGLE	Max Angle Tolerance	System	30	Double	<input checked="" type="checkbox"/>	In Store
ADJACENCY_OVERLAP	Overlap Tolerance	System	1	Double	<input checked="" type="checkbox"/>	In Store
ADJACENCY_SEARCH	Search Tolerance	System	240	Double	<input checked="" type="checkbox"/>	In Store
ADJACENCY_TOLERANCE	Tolerance	System	1	Double	<input checked="" type="checkbox"/>	In Store

This allows a user with Administrator's privileges to change the value of a system variable.

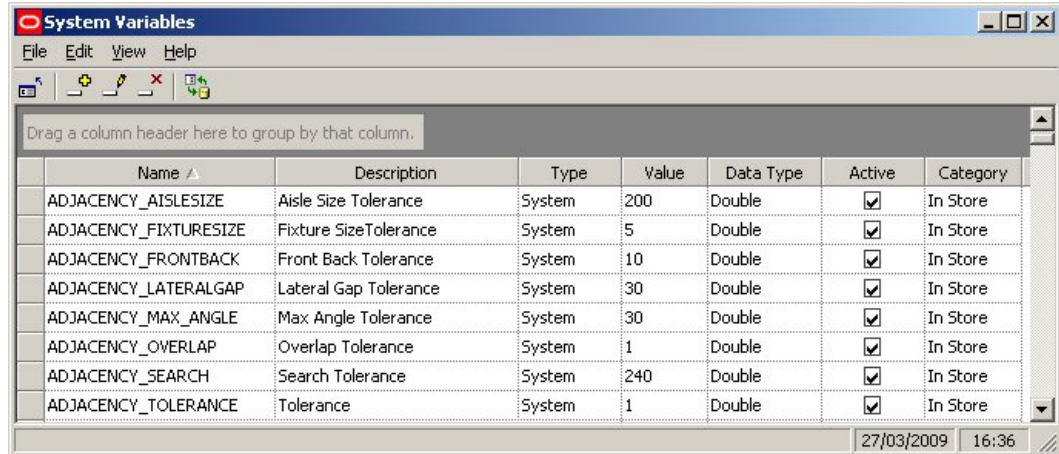
Changing system variables can have wide ranging effects on the way Macro Space Management. Before making a change it is recommended users should:

Ensure they understand the effect of changing the system variable

If necessary seek advice from Oracle's Technical Support team

## System Variable Options

Each **System Variable** has a series of options associated with it.



The screenshot shows a window titled 'System Variables' with a menu bar (File, Edit, View, Help) and a toolbar. Below the toolbar is a text area with the instruction 'Drag a column header here to group by that column.' Below this is a table with the following data:

Name	Description	Type	Value	Data Type	Active	Category
ADJACENCY_AISLESIZE	Aisle Size Tolerance	System	200	Double	<input checked="" type="checkbox"/>	In Store
ADJACENCY_FIXTURESIZE	Fixture Size Tolerance	System	5	Double	<input checked="" type="checkbox"/>	In Store
ADJACENCY_FRONTBACK	Front Back Tolerance	System	10	Double	<input checked="" type="checkbox"/>	In Store
ADJACENCY_LATERALGAP	Lateral Gap Tolerance	System	30	Double	<input checked="" type="checkbox"/>	In Store
ADJACENCY_MAX_ANGLE	Max Angle Tolerance	System	30	Double	<input checked="" type="checkbox"/>	In Store
ADJACENCY_OVERLAP	Overlap Tolerance	System	1	Double	<input checked="" type="checkbox"/>	In Store
ADJACENCY_SEARCH	Search Tolerance	System	240	Double	<input checked="" type="checkbox"/>	In Store
ADJACENCY_TOLERANCE	Tolerance	System	1	Double	<input checked="" type="checkbox"/>	In Store

The status bar at the bottom right shows the date '27/03/2009' and time '16:36'.

### Name

This is the name of the system variable. The name should not be changed as the software references these names - changing a name will result in the software failing to find data in the database.

### Description

This describes what the system variable does. It can be edited to suit customer needs.

### Type

This specifies whether the system variable is System (global), User (specific to an individual) or File (associates properties with a file). System Variable Types are determined by the software code and changing the type from the Type dropdown list has no influence on where the system variable value is stored. The Type should not be changed from the value it was set to on implementation. More Information

### Value

This is the current value held for the system variable. The value must be consistent with the data type.

---

**Note:** System variables of the form 100 | 100 | 100 | 100 are known as pipe-delineated system variables. They hold the multiple values required for that system variable.

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For example, a system variable holding the position of a dialogue box might be of the form 100 | 300 | 600 | 600 where the data specifies the left bottom and top right co-ordinates of the dialogue box. When editing a pipe-delineated system variable, all pertinent values must be entered or the system will error.

### Data Type

This is the type of data. It must be consistent with the value to be stored for the system variable. Types can selected from a drop down list, but should not be changed from those set on implementation. They are of the following types:

Data Type	Example
String	Any alphanumeric input (ABC123)
Integer	Any Integer (1,2,3) in the range -2 billion to +2 billion
Long	Any Integer (1,2,3) in the range -9 x 1018 to 9 x 1018.
Single	Any number (1.23, 2.2345) in the range -3 x 1038 to 3 x 1038.
Double	Any number (1.23, 2.2345) in the range -2 x 10308 to 2 x 10308.
Date	Date (10/10/07 12.15:00:00)
Boolean	True or False values (0,1)
Image	Bit Maps, GIF and JPG images
Currency	Financial data (£1234.00)

**Active**

This specifies whether the system variable is in use or not. Settings should not be changed from those set on implementation.

**Category**

This specifies which module the system variable affects. Settings should not be changed from those set on implementation as the software uses this setting to see which system variables should be read when opening a module.

**System Variable Types**

The **System Variable Type** determines the purpose of the system variable. There are three system variable types:

System

User

File

**System**

System Variables of type 'System' are global system variables. Changing the value of this type of system variable will affect all users of the system. The values of this type of system variable are written to the AVTTB\_SYSTEM\_VARIABLE table in the database.

**User**

System Variables of type 'User' are specific to one user. They are typically used to hold that users' preferences. The values of this type of system variable are written to the AVTTB\_USER\_VARIABLE table in the database.

When a user first uses functionality on becoming a Macro Space Management, they start with the defaults from the AVTTB\_SYSTEM\_VARIABLE table, thereafter, their preferences are stored in the AVTTB\_USER\_VARIABLE table.


**File**

System Variables of type 'File' are used to assign properties to files on creation. Users can then overwrite the default with their own value. The values of this type of system variable are written to the AVTTB\_SYSTEM\_VARIABLE table in the database. The default value is then also written to the appropriate table for a file when that file is created.



### AVTTB\_SYSTEM\_VARIABLE and AVTTB\_SYSTEM\_VARIABLE\_TYPE Tables

There is some information on the AVTTB\_SYSTEM\_VARIABLE and AVTTB\_SYSTEM\_VARIABLE\_TYPE Tables that may be useful to Database Administrators.

 SVR_ID	SVR_NAME	SVR_TYPE	SVR_IS_USERDEF	SVR_ISFILEPREF
▶ 455	FILE_ACTIVE_DATE	2	0	1
65	FIND_HISTORY	11	1	0
253	OBJECT_BROWSER_SIZES	10	0	0
67	OPTIONS_ZOOMFACTOR	11	1	0
250	TEXT_PROFILE_TEXTSIZE	3	0	0

The SVR\_TYPE field in the AVTTB\_SYSTEM\_VARIABLE table does not hold information on the Type field in the System Variables dialogue box. Information is determined from the SVR\_IS\_USER\_DEF and SVR\_ISFILE\_PREF fields. If both these fields are set to false (0) the system variable will be of type 'System'. If either of the fields are true (1), the system variable type will be set to 'User' or 'File'. (The fields cannot both be set to true simultaneously).

The SVR\_TYPE field corresponds to the category for the system variable. It references the AVTTB\_SYSTEM\_VARIABLE\_TYPE table - which contains a list of the different parts of the application the system variable could apply to.

 SVT_ID	SVT_NAME
▶ 0	AutoCAD
1	Store Manager
2	Merchandising
3	Fixturing
4	Zoning
5	Security
6	Admin
7	Report Studio
8	Fixture Studio
9	Product Studio
10	Planogram Studio
11	In Store
12	RFConfig
13	Report Designer

### Adding, Editing and Deleting System Variables

Adding, Editing, or Deleting system variables is via the options on the Toolbar or Menu Bar.

#### Adding System Variables

There is no purpose in adding system variables. These will only have an effect if they are referenced the code in the software.

#### Editing System Variables

System variables can be edited via the Admin Module as an alternative to changing them via the software. This should be done with caution.

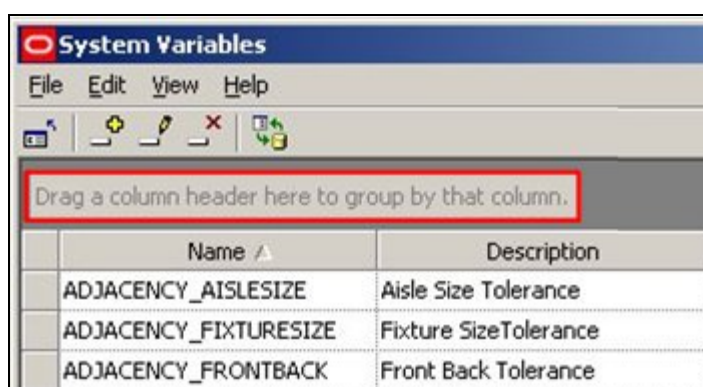
### Deleting System Variables

System Variables should only be deleted after consulting the Oracle Support team. Deleting a system variable in use with the software can cause significant problems.

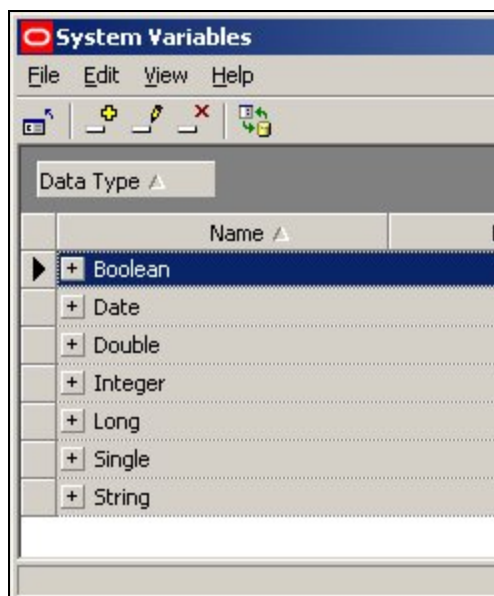
**Note:** Deleting keys system variables referenced by the software may cause the system to suffer a critical failure.

### Grouping by Columns

The user has the option of **grouping** system variables together by column header types. To do this drag a column header into the indicated space at the head of the dialogue box.

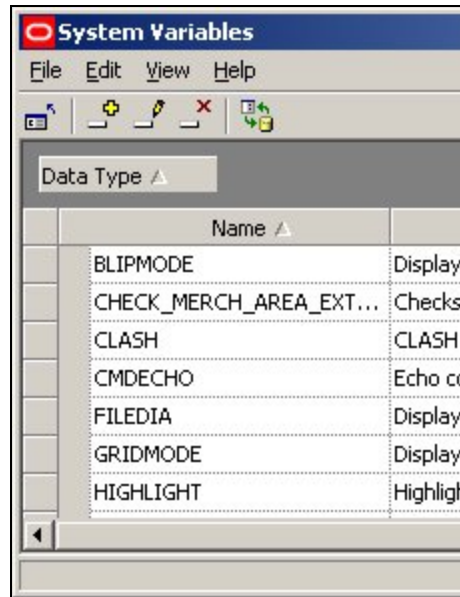


This will group all the system variables by the selected criteria - for example Type.



Clicking on the '+' sign will expand the list and allow users to see all system variables in that group.





To return to the default display, just drag the selected column header out of the space at the head of the dialogue box.

## System Variable Descriptions

### In-Store Space Collaboration

#### General Options

##### CLIENT\_VERSION

The **CLIENT\_VERSION** system variable is set automatically on installation of In-Store Space Collaboration. It will be updated automatically if upgrade scripts, etc, are run. There is no need to manually change the value.

##### SERVER\_VERSION

The **SERVER\_VERSION** system variable is set automatically on installation of In-Store Space Collaboration. It will be updated automatically if upgrade scripts, etc, are run. There is no need to manually change the value.

##### IN-STORE\_SMTPSERVER

The **IN-STORE\_SMTPSERVER** system variable is used to identify the email server that will be used to send messages when authentication for In-Store Space Collaboration is done via LDAP (Lightweight Directory Access Protocol). The value stored for the system variable must be a valid address for the STMP server.

The emails are triggered when the status of the drawing is changed; either through the 'Save and Submit' button or via the Accept and Reject buttons.

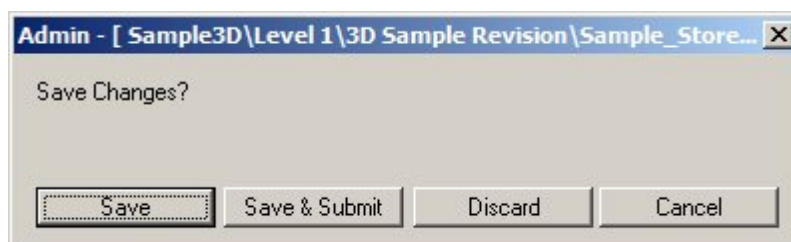
---

**Note:** Which a form of the dialogue box a user can see is determined by settings in the AVTTB\_PROCESS table in the database.

---

### Save and Submit Button

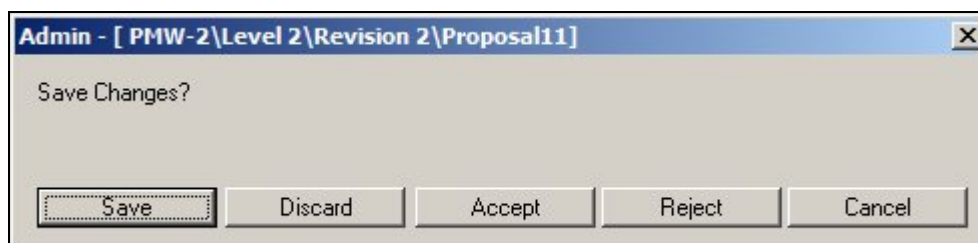
(This dialogue box is typically assigned to a Store Planner).



If the Save and Submit button is clicked, the status of the drawing will be changed and an email sent to the manager defined as the user's manager in the LDAP system.

### Accept and Reject

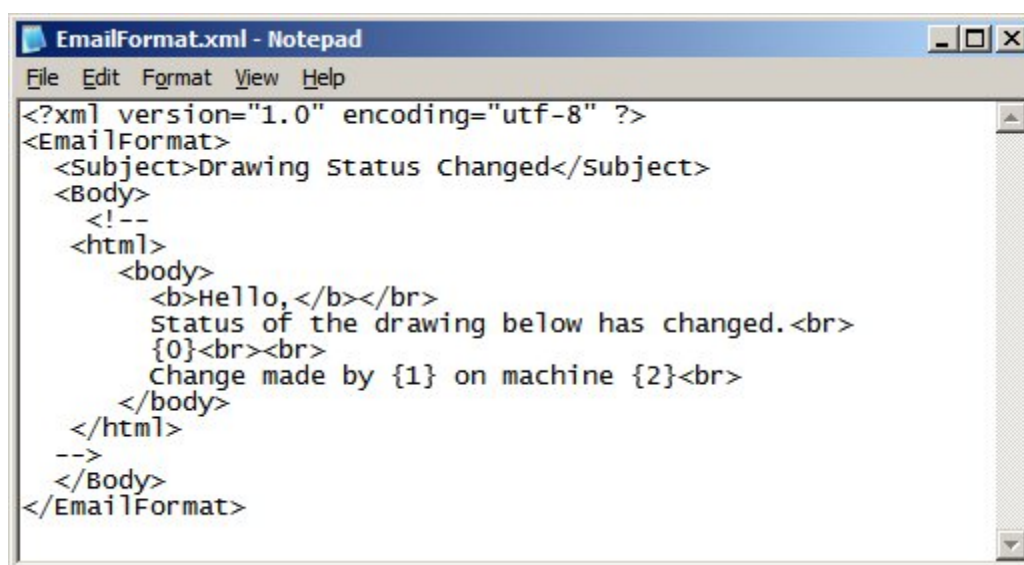
(This dialogue box is typically assigned to a Store Planner's Manager).



If the Accept or Reject buttons are clicked, the status of the drawing will be changed and an email sent to the last person to work on the drawing before the manager accepted or rejected the drawing.

### Email Template

The template for the email message that will be sent is located in the C:\Program Files\Oracle Retail\ISSC\ISSC Server Service folder. It is the EmailFormat.xml file.



## IN-STORE\_HELPLOCATION

The **IN-STORE\_HELPLOCATION** system variable contains the URL (Uniform Resource Location) for the help files for In-Store-Space Collaboration. It should detail both the path to the directory and the name of the file used to open the help.

---

**Note:** In-Store Space Collaboration Help is in Webhelp format. This differs from the CHM files used for Macro Space Management.

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## IN-STORE\_TIMEOUT

The **IN-STORE\_TIMEOUT** system variable sets the time in seconds that the In-Store Space Collaboration Client will wait for a response from the database before it detects a time out has occurred.



Once the time out time has been exceeded, a warning dialogue will appear. The time the dialogue box displays is controlled by the **IN-STORE\_TIMEOUT\_MESSAGE** system variable.

## IN\_STORE\_TIMEOUT\_MESSAGE

The **IN-STORE\_TIMEOUT\_MESSAGE** system variable determines the amount of time the warning message will display after a time out has occurred. After the time set in the **IN-STORE\_TIMEOUT\_MESSAGE** has expired, In-Store Space Collaboration will automatically shut down (unless the wait button is clicked).



---

**Note:** The time before a time out is triggered is determined by the **IN-STORE\_TIMEOUT** system variable.

---

## IN-STORE\_MERGE\_PLANOGRAMS

The **IN-STORE\_MERGE\_PLANOGRAMS** system variable allows the user to specify whether planograms are merged or not. There are two possible values:

0 - do not Merge Planograms












1 - Merge Planograms

If Merge Planograms is on, the software looks for instances of the same planogram placed on multiple adjacent fixtures and converts them to a single, multiple bay planogram in the database.

**Note:** This feature is not yet fully implemented..

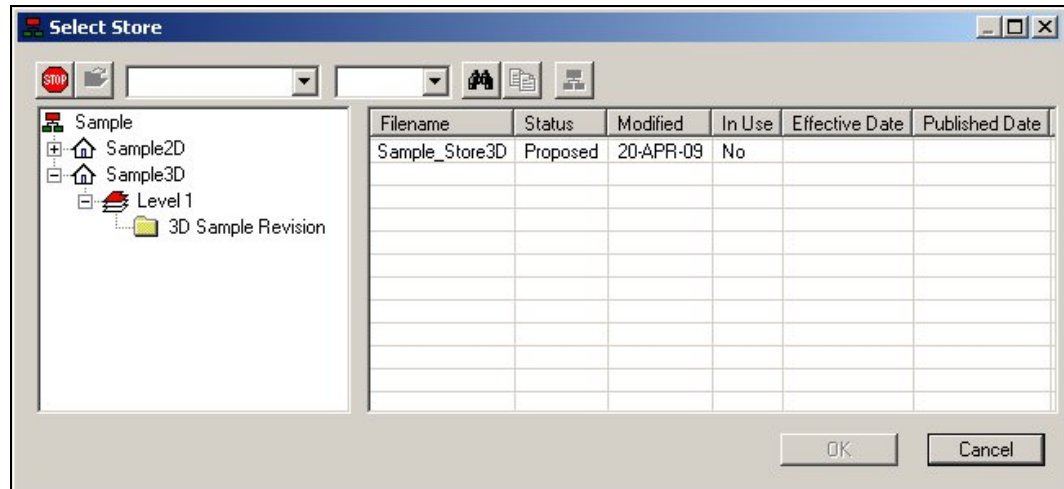
## MODULE\_BLK\_ID

The **MODULE\_BLOCK\_ID** system variable is used to identify the block used when moving products temporarily into a aisle. This functionality is used in In-Store Space Collaboration, but not in Macro Space Management. The value should correspond to the ID of a suitable block in the table of Block Details in Fixture Studio.

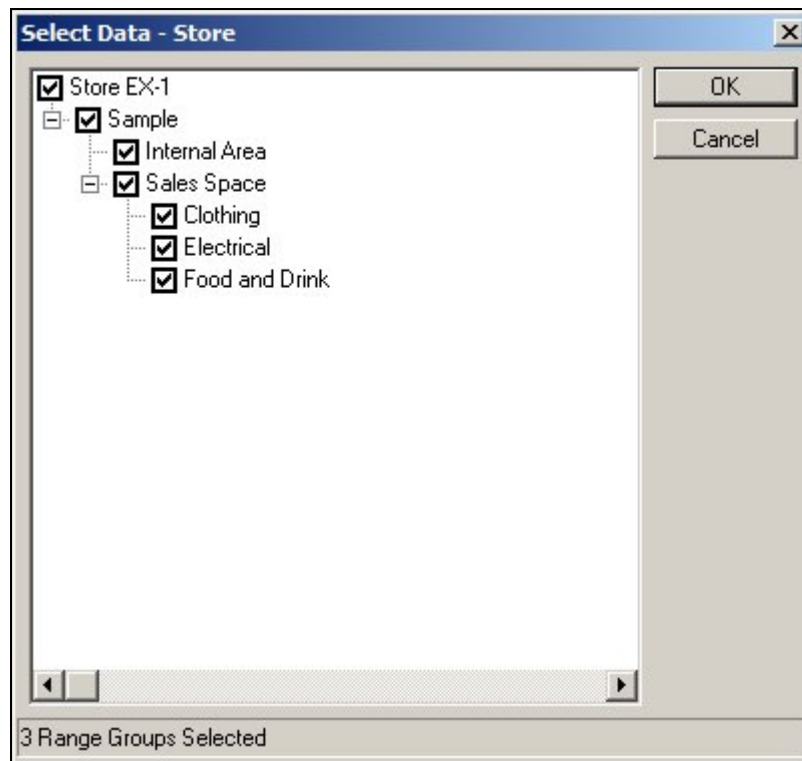
	ID	Name ▲	Description	Type	Directory
	17	I_40x20x2_Shelf	3D	Shelf	Shelves
	26	I_40x24x2_Base	3D	Fixture	Fixtures
	16	I_40x24x2_Shelf	3D	Shelf	Shelves
	29	I_40x2x98_Panel	3D	Fixture	Fixtures
	48	I_48x13x34_Checkout_Fixture	3D	Fixture	Fixture
	63	I_48x13x60_Composite	2D	Composite	Composites
	39	I_48x13x60_Fitting	2D	Fitting	Fittings
	49	I_48x13x60_Fixture	2D	Fixture	Fixture
	64	I_48x13x78_Composite	2D	Composite	Composites
	40	I_48x13x78_Fitting	2D	Fitting	Fittings
	50	I_48x13x78_Fixture	2D	Fixture	Fixture

## SKIP\_ZONE\_SELECT

The **SKIP\_ZONE\_SELECT** system variable affects whether the Select Data dialogue box is shown during the process of selecting a store plan to work on in In-Store Space Collaboration. All users see the Select Store dialogue box.



When a store has been selected, an optional Select Data dialogue box allows users to select which of the zones they wish to display.



SKIP\_ZONE\_SELECT determines where the Select Data dialogue box displays or not;

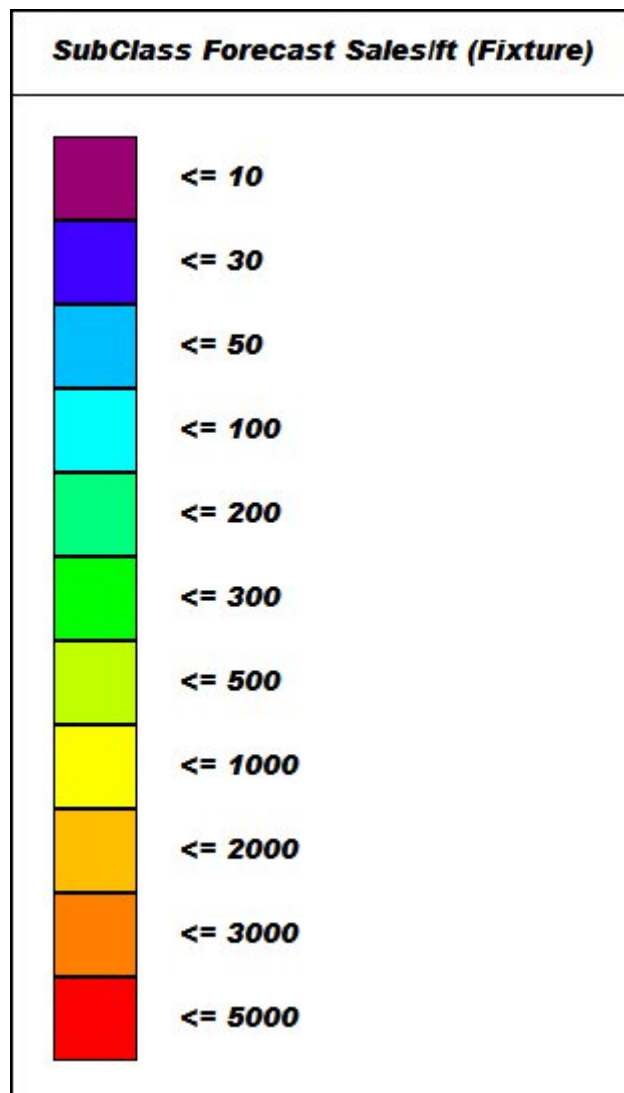
If set to 0, the dialogue box will display and users will be able to select zones before opening the store plan

If set to 1, the dialogue will not appear and the store plan will open displaying all zones

### Controlling Text

OPTIONS\_LEGEND\_FONT

The **OPTIONS\_LEGEND\_FONT** system variable is used to specify the font used for the legend displayed on screen and in printed output for KPI's.



Users may choose any font in the Windows Collection.

---

Note: it is suggested a common, easily read font is selected. Such fonts include Arial, Times New Roman, Tahoma or Verdana.

---

If a font name is misspelled, or the font is not available, In-Store Space Collaboration will default to a suitable font.

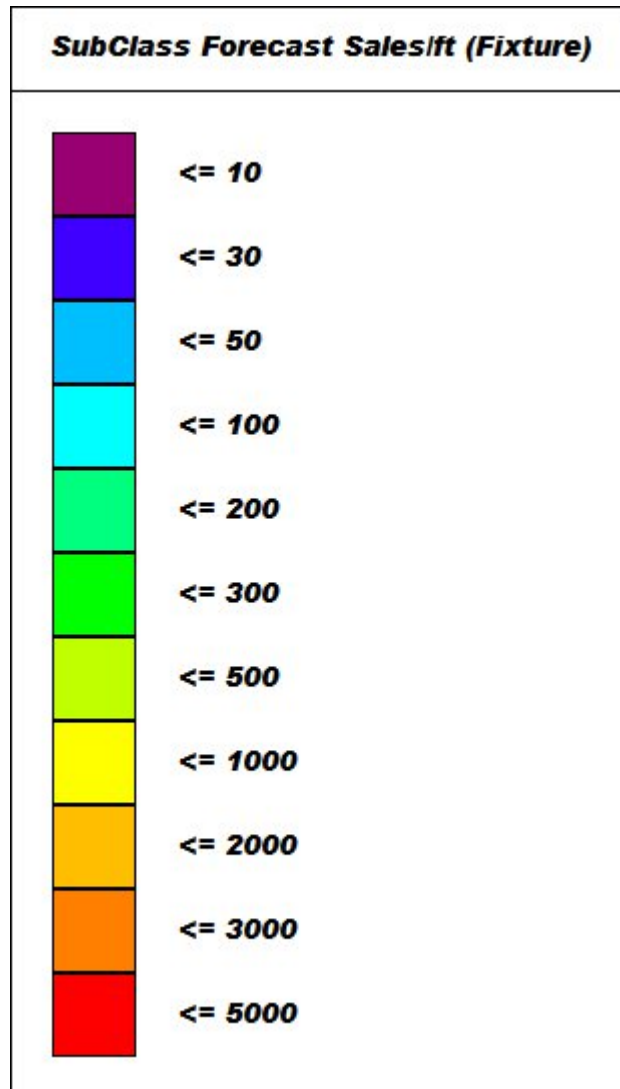
---

**Note:** This functionality is not yet fully implemented..

---

#### OPTIONS\_LEGEND\_FONT\_SIZE

The **OPTIONS\_LEGEND\_FONT\_SIZE** system variable is used to specify the font size used for the legend displayed on screen and in printed output for KPI's.



---

**Note:** This functionality is not yet fully implemented.

---

#### OPTIONS\_FOOTER\_FONT

The **OPTIONS\_FOOTER\_FONT** sets the font used for the footer in all printed reports.

The diagram illustrates a report layout with a header section and a footer section. A red box labeled "Header Font and Size" points to the header text. Another red box labeled "Footer Font and Size" points to the footer text. The report content includes a table with two columns: "Attribute" and "Figure 150". The "Attribute" column contains the text "Merchandise" and "Electronics 3 Microwave 836794 Shelf Display". The "Figure 150" column contains a large empty space. The footer section contains the text "14 July 2009", "Action", and "Page 1 of 1".

Attribute	Figure 150
Merchandise	
Electronics 3 Microwave 836794 Shelf Display	

14 July 2009 Action Page 1 of 1

Users may choose any font in the Windows Collection.

**Note:** it is suggested a common, easily read font is selected. Such fonts include Arial, Times New Roman, Tahoma or Verdana.

If a font name is misspelled, or the font is not available, In-Store Space Collaboration will default to a suitable font.

### OPTIONS\_FOOTER\_FONT\_SIZE

The **OPTIONS\_FOOTER\_FONT\_SIZE** sets the size used for the font in the footer in all printed reports.



Header Font and Size

Sample3CNLevel 150 Sample RevisionSample_Store3D					
Attribute	Figure 150				
Merchandise	Electronics 3 Microwave 836794 Shelf Display				

Footer Font and Size

14 July 2009 Action Page 1 of 1

## OPTIONS\_HEADER\_FONT

The **OPTIONS\_HEADER\_FONT** sets the font used for the header in all printed reports.

The diagram illustrates a report layout with a header section and a footer section. A red box labeled "Header Font and Size" points to the header text. Another red box labeled "Footer Font and Size" points to the footer text.

Attribute	Figure 150				
Merchandise	Electronics 3 Microwave 836794 Shelf Display				

14 July 2009 Action Page 1 of 1

Users may choose any font in the Windows Collection.

**Note:** it is suggested a common, easily read font is selected. Such fonts include Arial, Times New Roman, Tahoma or Verdana.

If a font name is misspelled, or the font is not available, In-Store Space Collaboration will default to a suitable font.

## OPTIONS\_HEADER\_FONT\_SIZE

The **OPTIONS\_HEADER\_FONT\_SIZE** sets the size used for the font in the header in all printed reports.

The diagram illustrates a report layout with two callouts:

- Header Font and Size:** Points to the top header area containing the text "SampleStoreLevel 150 Sample RevisionSample\_Store3D".
- Footer Font and Size:** Points to the bottom footer area containing the text "14 July 2009 Action Page 1 of 1".

Attribute	Figure 150				
Merchandise	Electronics 3 Microwave 836794 Shelf Display				

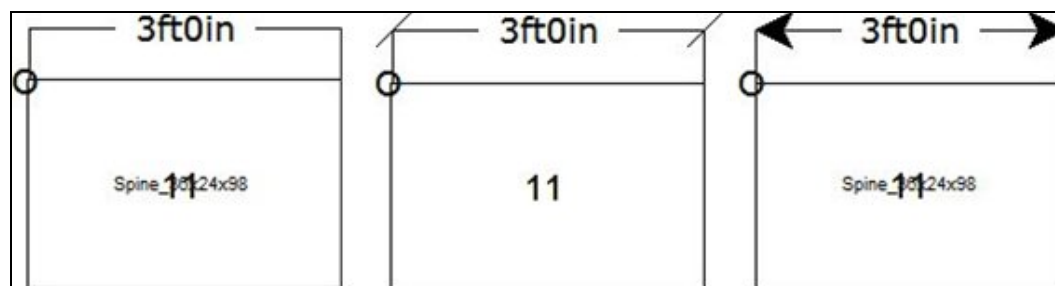
### Dimensions, Mark-ups and Notes

#### IN-STORE\_DIMENSION\_ARROW

The IN-STORE\_DIMENSION\_ARROW system variable currently has no effect.

#### IN-STORE\_DIMENSION\_STYLE

The IN-STORE\_DIMENSION\_STYLE system variable controls the way dimensions display.



There are three options for the system variable:

0 will display the dimension without ticks or arrows (left hand image)

1 will display the dimension using ticks (centre image)

2 will display the dimension using arrow heads (right hand image).

### IN-STORE\_MARKUP\_LINEWIDTHMAX

The **IN-STORE\_MARKUP\_LINEWIDTHMAX** System Variable is used in In-Store space collaboration. User can select the Mark Up option from the toolbar then draw a freehand mark round part of the drawing. The **IN-STORE\_MARKUP\_LINEWIDTHMAX** system variable controls the weight of the heavy line produced when the user holds down the right mouse button while drawing the Mark Up.



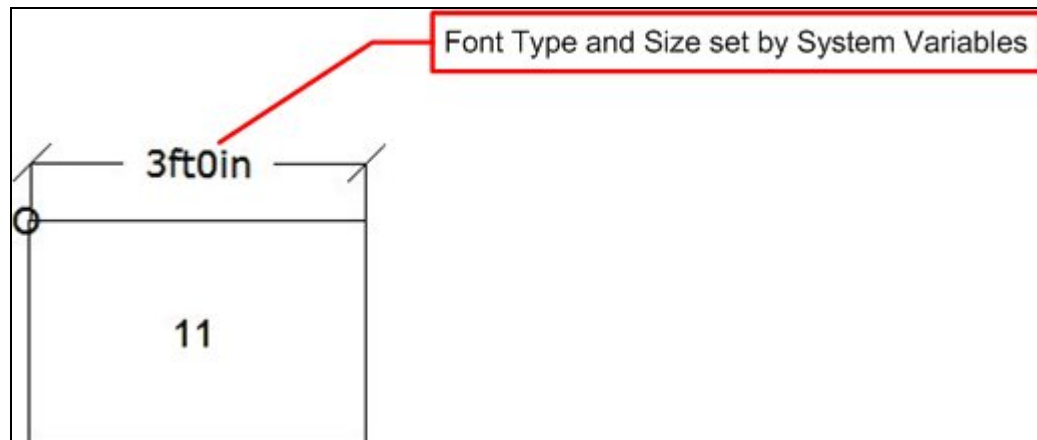
### IN-STORE\_MARKUP\_LINEWIDTHMIN

The **IN-STORE\_MARKUP\_LINEWIDTHMIN** System Variable is used in In-Store Space Collaboration. User can select the Mark Up option from the toolbar then draw a freehand mark round part of the drawing. The **IN-STORE\_MARKUP\_LINEWIDTHMIN** system variable controls the weight of the thin line produced when the user holds down the left mouse button while drawing the Mark Up.



### IN-STORE\_MARKUP\_TEXT\_SIZE

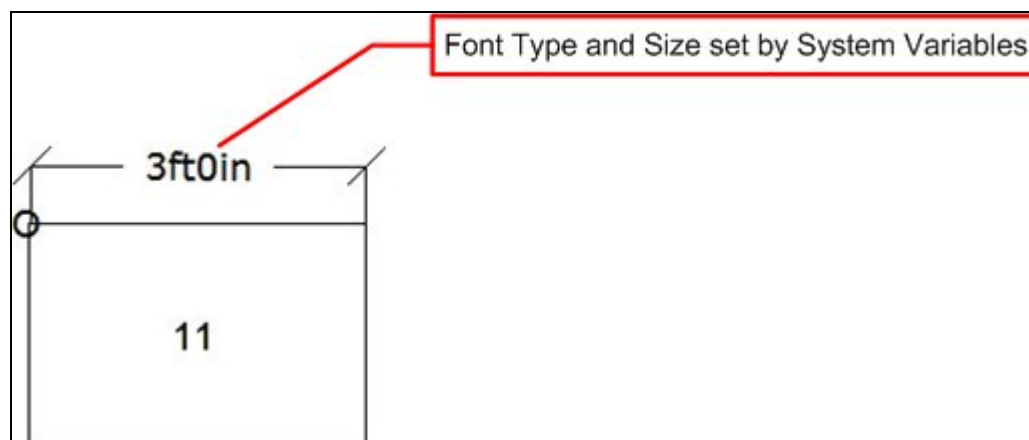
The **IN-STORE\_MARKUP\_TEXT\_SIZE** System Variable allows users to select the Font Size used for annotating dimensions.



The font size is in arbitrary units and users may need to experiment before finding a suitable setting.

### IN-STORE\_MARKUP\_TEXT\_FACE

The **IN-STORE\_MARKUP\_TEXT\_FACE** System Variable allows users to select the Font Type used for annotating dimensions.



Users may choose any font in the Windows Collection.

---

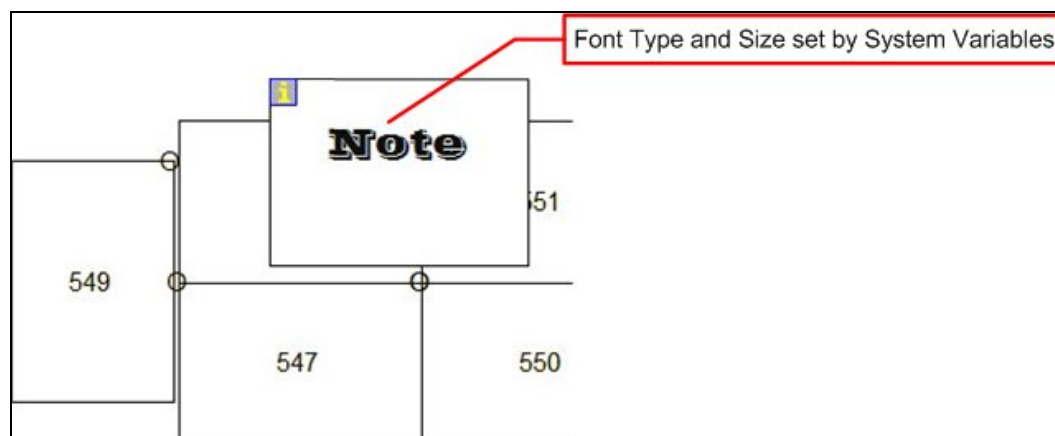
**Note:** it is suggested a common, easily read font is selected. Such fonts include Arial, Times New Roman, Tahoma or Verdana.

---

If a font name is misspelled, or the font is not available, In-Store Space Collaboration will default to a suitable font.

## NOTE\_FONT

The **NOTE\_FONT** system variable determines the font used for Notes (initiated from the toolbar) within In-Store Space Collaboration.



Users may choose any font in the Windows Collection.

---

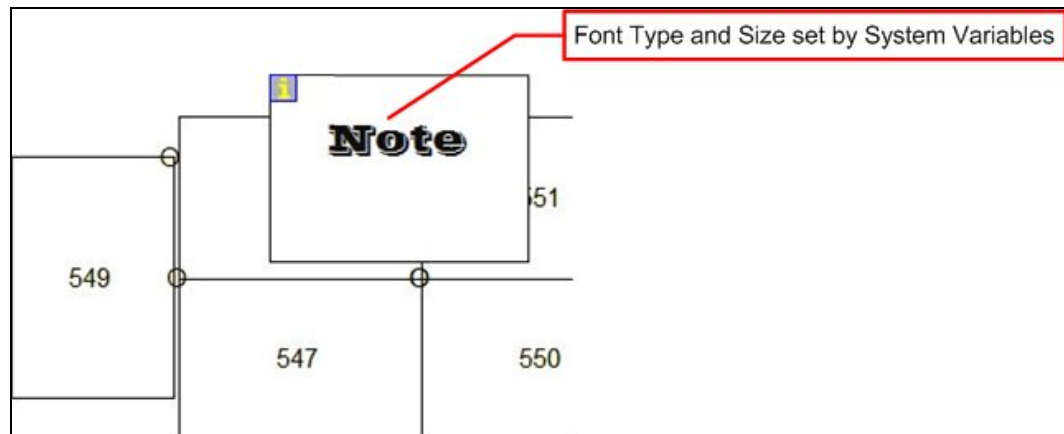
**Note:** it is suggested a common, easily read font is selected. Such fonts include Arial, Times New Roman, Tahoma or Verdana.

---

If a font name is misspelled, or the font is not available, In-Store Space Collaboration will default to a suitable font.

## NOTE\_FONT\_SIZE

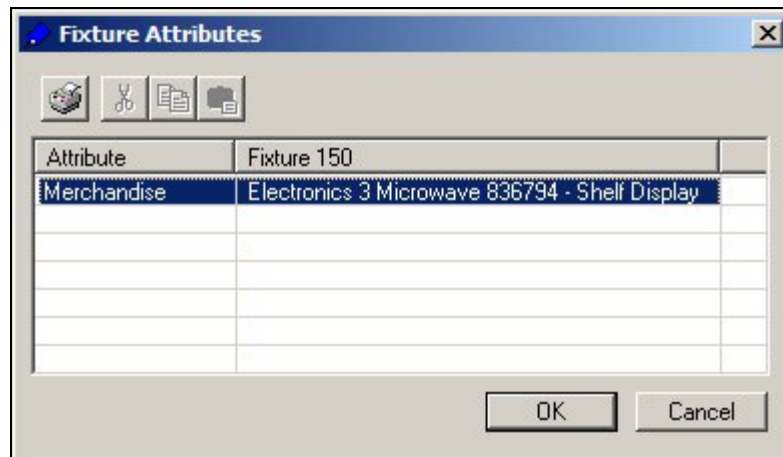
The **NOTE\_FONT\_SIZE** system variable determines the size of the font used for Notes (initiated from the toolbar) within In-Store Space Collaboration.



### Fixture Attributes

#### IN-STORE\_FIX\_ATTRIBUTES\_VERSION

The **IN-STORE\_FIX\_ATTRIBUTES\_VERSION** system variable allows users to control the type of Attributes dialogue box that appears when the Fixture Attributes option is selected from the toolbar.



There are two options:

A setting of 1 will show a basic dialogue box.

A setting of 2 will show a more complex dialogue box.

**Note:** At present only the 'complex' dialogue box is available - changing the system variable has no effect.

#### IN-STORE\_FIX\_ATTRIB\_VER

The **IN-STORE\_FIXTURE\_ATTRIB\_VER** system variable is not current used.

**IN-STORE\_FIX\_ATTRIBUTES\_PRINT\_FONT**

The IN-STORE\_FIX\_ATTRIBUTES\_PRINT\_FONT system variable changes the font used for the information in the Fixture Attributes report.

Sample3D\Level 1\3D Sample Revision\Sample\_Store3D

Attribute	Fixture 692	Fixture 691		
Merchandise	AA Batteries 8 Pack - Hanging Display	AA Batteries 2 Pack - Hanging Display		

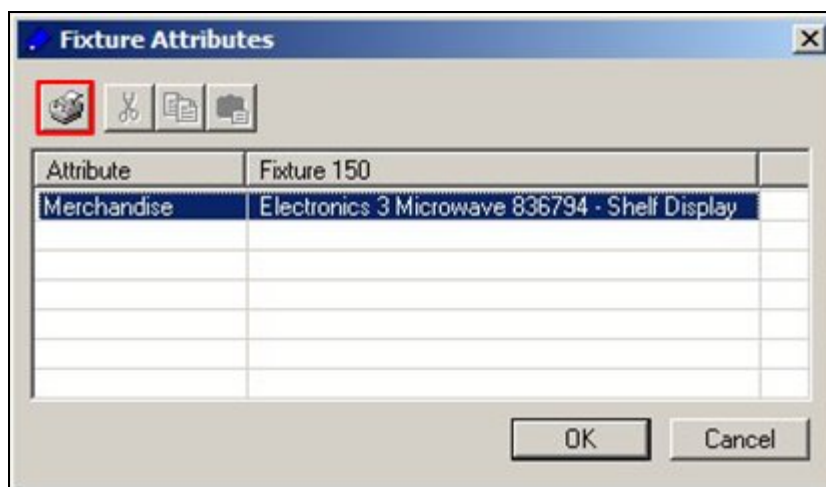
Attributes Print HeadingFont and Size
Attributes Print Font and Size

Users may choose any font in the Windows Collection.

**Note:** it is suggested a common, easily read font is selected. Such fonts include Arial, Times New Roman, Tahoma or Verdana.

If a font name is misspelled, or the font is not available, In-Store Space Collaboration will default to a suitable font.

The Fixture Attributes Report is called by clicking the Print button in the Fixture Attributes dialogue box called from the Fixture Attributes icon on the toolbar.

**IN-STORE\_FIX\_ATTRIBUTES\_PRINT\_FONT\_SIZE**

The IN-STORE\_FIX\_ATTRIBUTES\_PRINT\_FONT\_SIZE system variable is used to set the size of the font used in the for the information in the Fixture Attributes report.

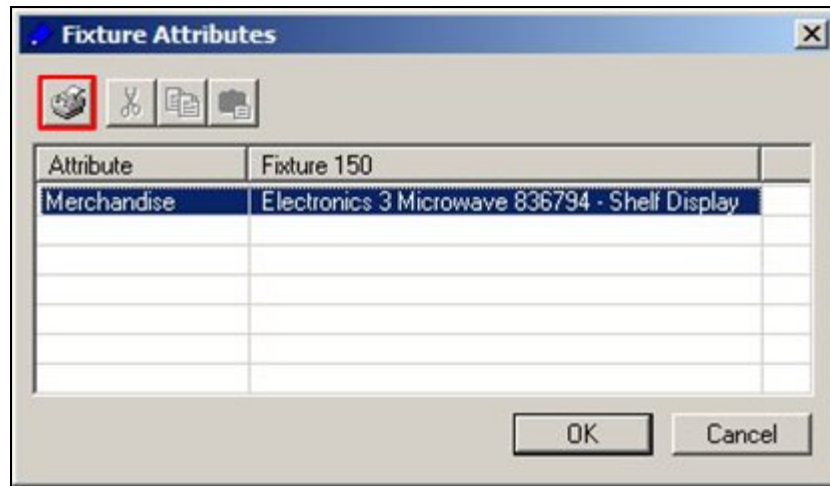


Sample3D\Level 1\3D Sample Revision\Sample Store3D

Attribute	Fixture 692	Fixture 691		
Merchandise	AA Batteries 8 Pack - Hanging Display	AA Batteries 2 Pack - Hanging Display		

Attributes Print HeadingFont and Size      Attributes Print Font and Size

The Fixture Attributes Report is called by clicking the Print button in the Fixture Attributes dialog box called from the Fixture Attributes icon on the toolbar.



#### IN-STORE\_FIX\_ATTRIBUTES\_PRINT\_HEADING\_FONT

The IN-STORE\_FIX\_ATTRIBUTES\_PRINT\_HEADING\_FONT system variable changes the font used for the Heading in the Fixture Attributes report.

Sample3D\Level 1\3D Sample Revision\Sample Store3D

Attribute	Fixture 692	Fixture 691		
Merchandise	AA Batteries 8 Pack - Hanging Display	AA Batteries 2 Pack - Hanging Display		

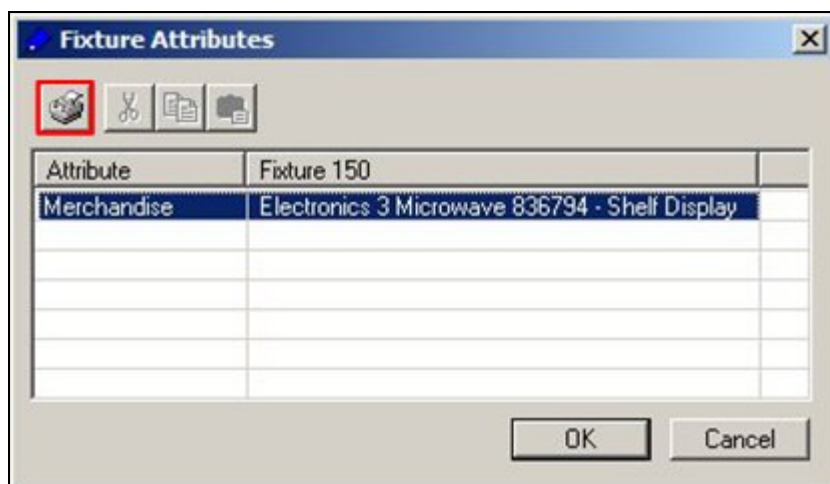
Attributes Print HeadingFont and Size      Attributes Print Font and Size

Users may choose any font in the Windows Collection.

**Note:** it is suggested a common, easily read font is selected. Such fonts include Arial, Times New Roman, Tahoma or Verdana.

If a font name is misspelled, or the font is not available, In-Store Space Collaboration will default to a suitable font.

The Fixture Attributes Report is called by clicking the Print button in the Fixture Attributes dialog box called from the Fixture Attributes icon on the toolbar.



### IN-STORE\_FIX\_ATTRIBUTES\_PRINT\_HEADING\_FONT\_SIZE

The IN-STORE\_FIX\_ATTRIBUTES\_PRINT\_FONT\_SIZE system variable is used to set the size of the font used in the for the Heading in the Fixture Attributes report.

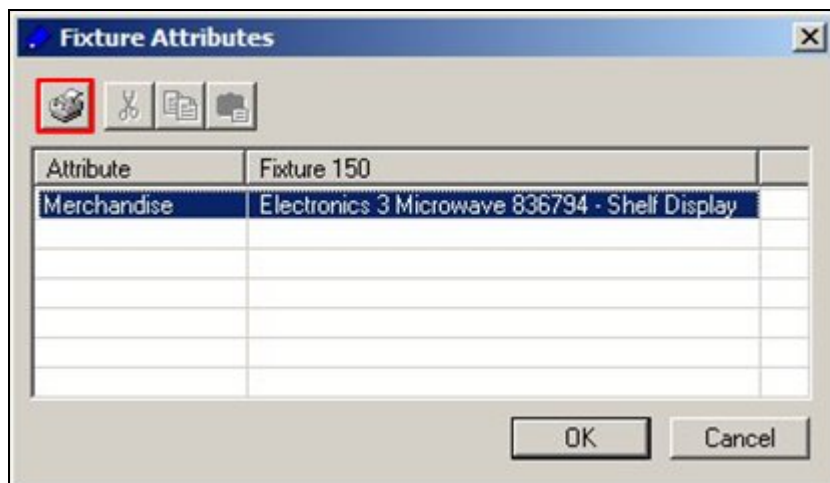
Sample3D\Level 1\3D Sample Revision\Sample\_Store3D

Attribute	Fixture 692	Fixture 691	
Merchandise	AA Batteries 8 Pack - Hanging Display	AA Batteries 2 Pack - Hanging Display	

Attributes Print HeadingFont and Size

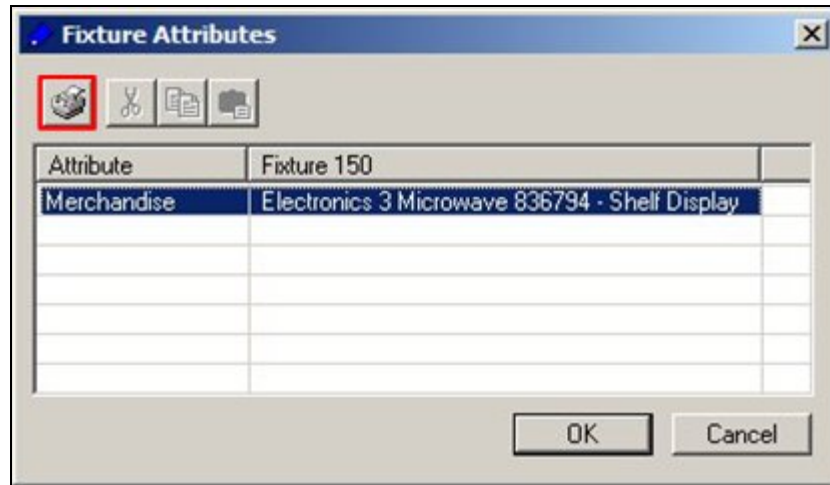
Attributes Print Font and Size

The Fixture Attributes Report is called by clicking the Print button in the Fixture Attributes dialogue box called from the Fixture Attributes icon on the toolbar.



### IN-STORE\_FIX\_ATTRIBUTES\_PRINT\_HIGHLIGHTS

The IN-STORE\_FIX\_ATTRIBUTES\_PRINT\_HIGHLIGHTS system variable allows users to select whether the report output when the print button is clicked on the Fixture attributes dialogue box will have highlighted information in it.



**Note:** this functionality is not currently operating.

#### ISSC System Variables not in Use

##### IN-STORE\_GRIP\_COLOUR

The IN-STORE\_GRIP\_COLOUR system variable is for future functionality and has not yet been implemented.

##### IN-STORE\_GRIP\_HOTCOLOUR

The IN-STORE\_GRIP\_HOTCOLOUR system variable is for future functionality and has not yet been implemented.

##### IN\_STORE\_GRIP\_SIZE

The IN-STORE\_GRIP\_SIZE system variable is for future functionality and has not yet been implemented.

##### IN\_STORE\_PROMOTION\_USER\_GROUP

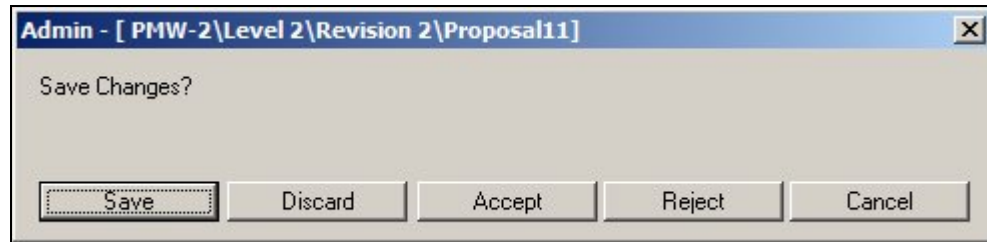
The IN\_STORE\_PROMOTION\_USER\_GROUP system variable is not presently in use.

##### IN-STORE\_STORE\_SELECTION\_LEVEL

The IN-STORE\_STORE\_SELECTION\_LEVEL system variable is not currently in use.

##### IN-STORE\_SUBMIT\_STATUS

The **IN-STORE\_SUBMIT\_STATUS** system variable used to determines what happened when the Accept button in the Save dialogue box is clicked.



---

**Note:** there are three versions of this dialogue box. Which a user can see is determined by settings in the AVTTB\_PROCESS table in the database.

---

This has now been superseded by entering the required information into the AVTTB\_STATUS table in the STA\_ACCEPT and STA\_REJECT columns. This system variable is therefore no longer used.

### MAX\_FIXTURE\_SELECTION

The **MAX\_FIXTURE\_SELECTION** system variable was used in In-Store Space Collaboration to set the maximum number of fixtures that could be included in a selection set.

It is no longer used and has no effect on the software.

### OPTIONS\_FONT

The **OPTIONS\_FONT** system variable is not in use. It relates to an older version of In-Store Space Collaboration.

### OPTIONS\_FONTSIZE

The **OPTIONS\_FONTSIZE** system variable is not in use. It relates to an older version of In-Store Space Collaboration.

### OPTIONS\_PREPOPULATEDPRODUCTS

The **OPTIONS\_PREPOPULATEDPRODUCTS** system variable is no longer in use.

## Macro Space Management

### Adjacency Calculations

#### Overview

**Adjacency Calculations** are used to establish the relationship of objects to one another. There are three forms of Adjacency Calculations:

1. Fixture Adjacency is the relationship of one fixture to another.
2. Product Adjacency is the relationship of one product to another.

3. Aisle Adjacency identifies which products share an aisle.

Fixture Adjacency calculations can be initiated from the Planner and Merchandiser modules in Macro Space Management and from In-Store Space Collaboration. Product and Aisle Adjacency calculations are initiated from the Planner module in Macro Space Management

### **Fixture Adjacency**

There are a series of System Variables that affect how the Fixture Adjacency calculations work. These are:

ADJACENCY\_FIXTURESIZE  
ADJACENCY\_FRONTBACK  
ADJACENCY\_LATERALGAP  
ADJACENCY\_MAX\_ANGLE  
ADJACENCY\_OVERLAP  
ADJACENCY\_SEARCH  
ADJACENCY\_TOLERANCE  
ADJACENCY\_VERTICALGAP

---

**Note:** some of these system variables are not currently in use.

---

### **Product Adjacency**

Product Adjacency relies on the relationship of fixtures to one another - determined by the Fixture Adjacency calculation. This relationship can then be used to determine what products are on the fixtures, and hence which products are adjacent to one another.

There are no system variables associated with Product Adjacency.

### **Aisle Adjacency**

Aisle Adjacency is used to establish which fixtures are adjacent to an aisle (defined as a line in a Planner store plan). This relationship can then be used to determine what products are on the fixtures, and hence which products share the aisle.

There is a single system variable affecting Aisle Adjacency: ADJACENCY\_AISLESIZE.

## **Fixture Adjacency Calculations**

**Fixture Adjacency** is the relationship of one fixture to another. It is called from three places within the software:

From the Calculations menu or toolbar in the Planner module  
From the Calculate menu in the Merchandiser Module  
From the toolbar in In-Store Space Collaboration

In each instance, the same functionality is called and the results written back to a common table in the database.

---

**Note:** Fixture Adjacency only applies to fixtures. Fittings, shelves, etc are excluded from the calculations

---

For Fixture Adjacency calculations, fixtures may be:

To the right of another fixture  
To the left of another fixture

Behind another fixture  
In front of another fixture  
Sharing an aisle with a fixture  
Above another fixture

A specific adjacency for a fixture may be a combination of these options.

6	5	4
1	2	3

In the example above:

Fixture 1 is adjacent to the left of fixture 2.

Fixture 3 is adjacent to the right of fixture 2.

Fixture 6 is adjacent to the left and behind fixture 2.

Fixture 5 is adjacent behind fixture 2.

Fixture 4 is adjacent to the right and behind fixture 2.

Fixture Adjacency is subsequently used in Product Adjacency calculations, where the relationship of one fixture to another can be used to establish the relationship between the products they have been merchandised with.

### ADJACENCY\_FIXTURESIZE

The **ADJACENCY\_FIXTURESIZE** System Variable is used to filter out fixtures below a certain size for the purpose of Fixture Adjacency calculations.



In the above example, the central fixture is narrow. If its length (width) is above the value of the **ADJACENCY\_FIXTURESIZE** System Variable, the central fixture will be included in the fixtures used for Fixture Adjacency calculations. If its length (width) is below the value of the **ADJACENCY\_FIXTURESIZE** System Variable, the central fixture will be excluded from the Fixture Adjacency calculations.

### ADJACENCY\_FRONTBACK

The **ADJACENCY\_FRONTBACK** System Variable is used to specify the maximum distance between fixtures that are back to back that allows them to be regarded as adjacent behind a specific fixture.

6	5	4
1	2	3

In the example above, fixture 2 is separated by a gap from fixture 5. If this gap is below the value specified in `ADJACENCY_FRONTBACK`, fixture 5 will be regarded as adjacent (behind) fixture 2. If the gap is above the value specified in `ADJACENCY_FRONTBACK`, fixture 3 will not be regarded as adjacent.

---

**Note:** At present the Front/Back distance used for fixture adjacency calculations is taken from the `ADJACENCY_LATERALGAP` System variable.

---

### ADJACENCY\_LATERALGAP

The `ADJACENCY_LATERALGAP` System Variable is used to specify the maximum lateral distance between fixtures that allows them to be regarded as adjacent to left and right of a specific fixture.

1	2		3
---	---	--	---

In the example above, fixture 3 is separated from fixture 2 by a gap. If this gap is below the value specified in `ADJACENCY_LATERALGAP`, fixture 3 will be regarded as adjacent (to the right) to fixture 2, if the gap is above the value specified in `ADJACENCY_LATERALGAP`, fixture 3 will not be regarded as adjacent.

It is possible to set `ADJACENCY_LATERALGAP` to a value such as 24 inches (610 mm) so that fixtures that are either side of a pillar are regarded as adjacent.

### ADJACENCY\_MAX\_ANGLE

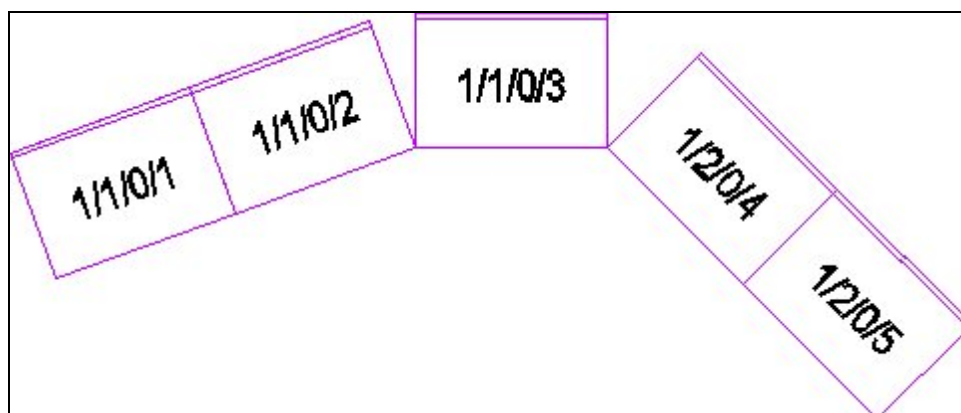
The `ADJACENCY_MAX_ANGLE` System Variable is used for gondolas.

If the angle between adjacent fixtures is less than the `ADJACENCY_MAX_ANGLE` System Variable, the fixtures will be regarded as belonging to the same side. If the angle between adjacent fixtures is greater than the `ADJACENCY_MAX_ANGLE` System Variable, the fixtures will be regarded as belonging to the different sides.

In the double sided gondola with endcaps below, the `ADJACENCY_MAX_ANGLE` System Variable was set to 30 degrees. Each time the angle between two successive adjacent fixtures have an angle exceeding thirty degrees, a new side is created. The fixtures making up the example gondola have been numbered according to the gondola numbering convention: Gondola Number/Side/Level/Fixture Number. The gondola thus has four sides.

1/1/0/1	1/4/0/8	1/4/0/7	1/4/0/6	1/3/0/5
	1/2/0/2	1/2/0/3	1/2/0/4	

In the snake gondola below, the angle between the second and third fixtures is below that specified in the `ADJACENCY_MAX_ANGLE` System Variable, so the first three fixtures are treated as belonging to a single gondola side. The angle between the third and fourth fixtures is above that specified in the `ADJACENCY_MAX_ANGLE` System Variable, so the last two fixtures are treated as belonging to another gondola side.



#### `ADJACENCY_OVERLAP`

The `ADJACENCY_OVERLAP` system variable is not presently in use.

#### `ADJACENCY_SEARCH`

The `ADJACENCY_SEARCH` system variable is not presently in use.

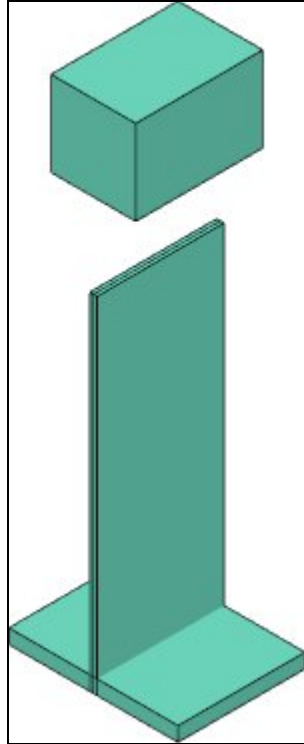
#### `ADJACENCY_TOLERANCE`

The `ADJACENCY_TOLERANCE` system variable is not presently in use.

#### `ADJACENCY_VERTICALGAP`

The `ADJACENCY_VERTICALGAP` System Variable is used to specify the maximum distance between fixtures that are stacked vertically that allows them to be regarded as adjacent above a specific fixture.





In the example above, one fixture is above another. If the vertical gap between the fixtures is less than the ADJACENCY\_VERTICALGAP System Variable, the top fixture will be regarded as adjacent above the lower fixture. If the vertical gap between the fixtures is more than the ADJACENCY\_VERTICALGAP System Variable, the top fixture will be regarded as adjacent above the lower fixture.

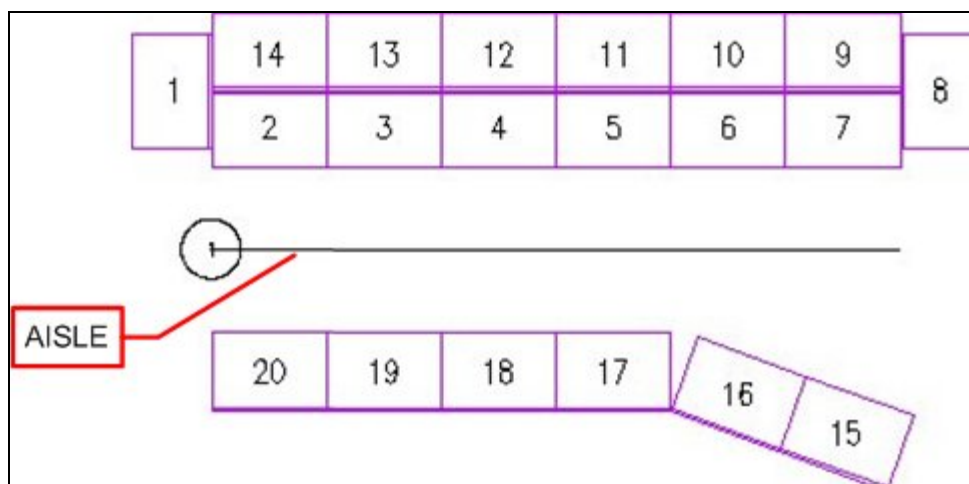
---

**Note:** the ADJACENCY\_VERTICALGAP System Variable is not taken into account by the software at present, so any fixture above another is regarded as 'adjacent above'.

---

### ADJACENCY\_AISLESIZE

The ADJACENCY\_AISLESIZE system variable is used to establish a distance tolerance from an Aisle. Fixtures within this distance from an aisle are regarded as adjacent to it, fixtures outside this distance are not.



Depending on the setting of the ADJACENCY\_AISLESIZE system variable, Fixtures 15 and 16 may or may not be regarded as adjacent to the Aisle. It is then possible to determine which products are on the fixtures adjacent to the aisle, and hence which products share the aisle.

---

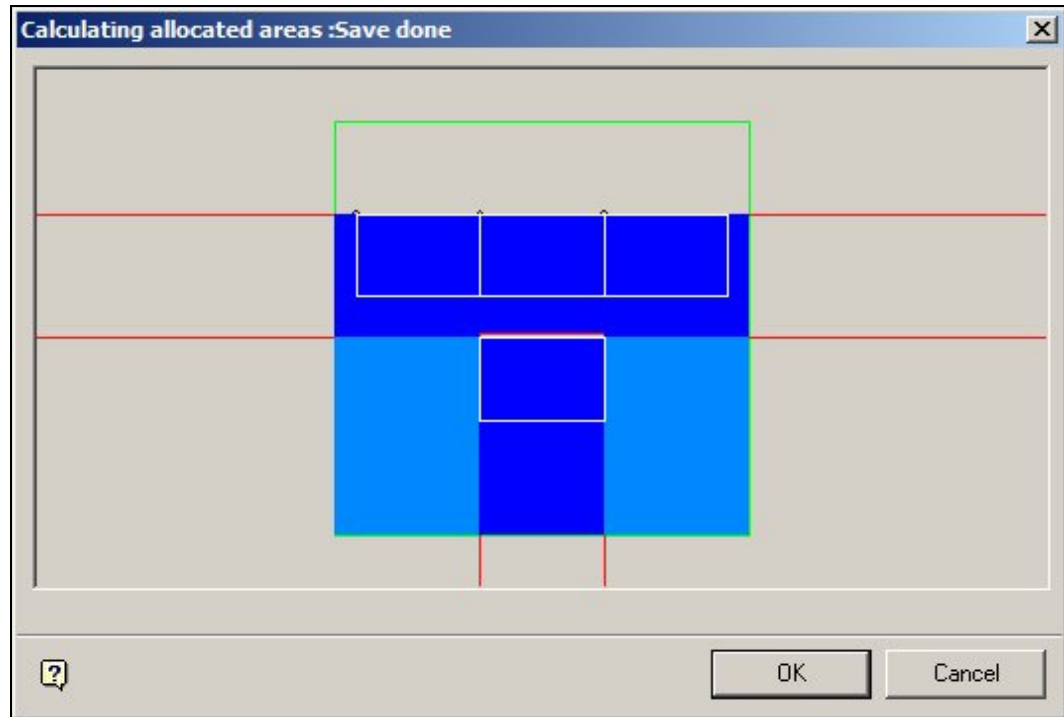
**Note:** Aisle adjacencies are calculated relative to the front direction of the fixture. Fixtures 1,8 and 9 - 14 will not be shown as adjacent to the drawn aisle because a line drawn out perpendicular from the front face of the fixtures will not intersect the aisle.

---

## Area Calculations

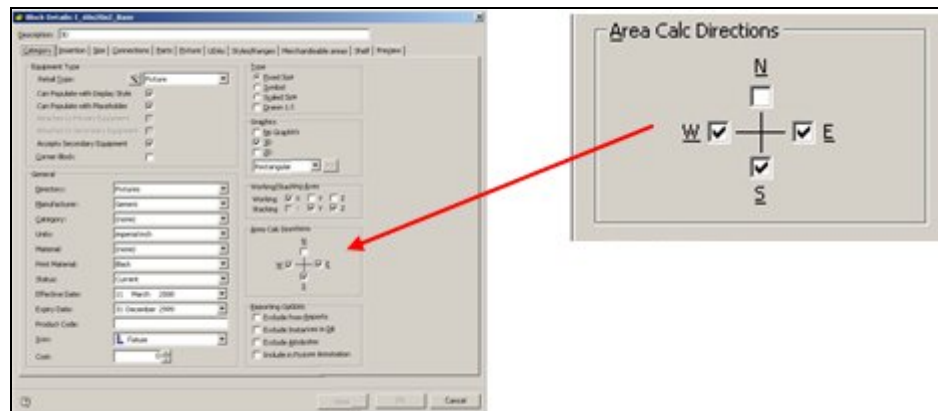
### Overview of Area Calculations

**Area Calculations** are used to establish the amount of floor area apportioned to individual fixtures. The function can only be called in the Planner Module from the Calculations menu or the Calculations toolbar. this will bring up the Area Calculation dialogue box.

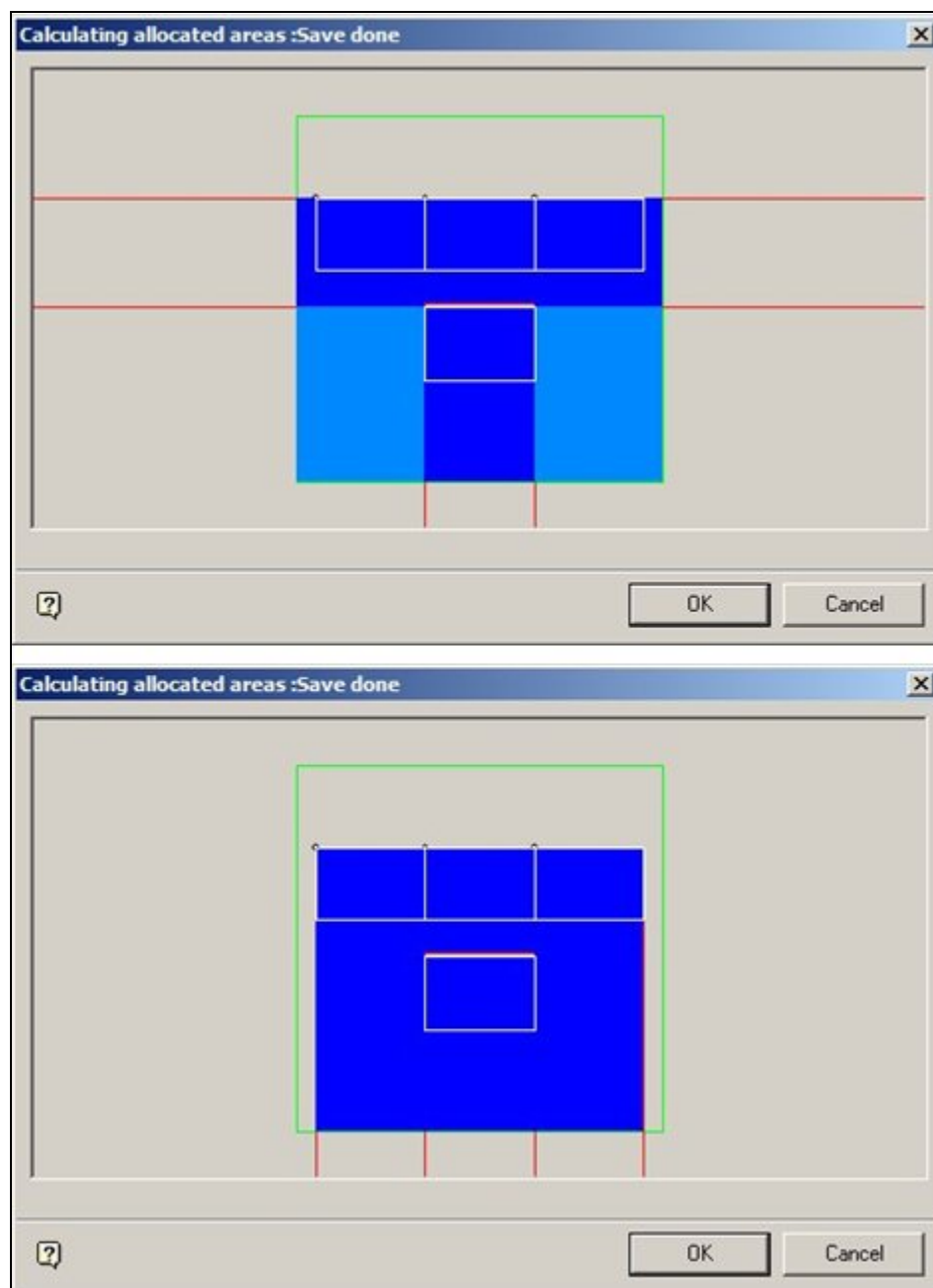


This shows the area allocated to specific fixtures - lighter shades of blue indicating that areas shared by two or more fixtures.

The settings in the Area Calculation Directions frame in the Category tab of the Block Details dialogue box affect the nature of area calculations - areas will only be calculated in the ticked directions.



This can be seen by comparing the two examples of area calculations below. The top image shows an area calculation based on fixtures set for West East and South Directions. The bottom image shows an area calculation based on South Direction only.



**Note:** the results of the Area Calculations are subsequently used in Space Calculations.

### Theory of Area Calculations

**Area Calculations** are used to apportion areas to all fixtures that are within the Internal area zone.

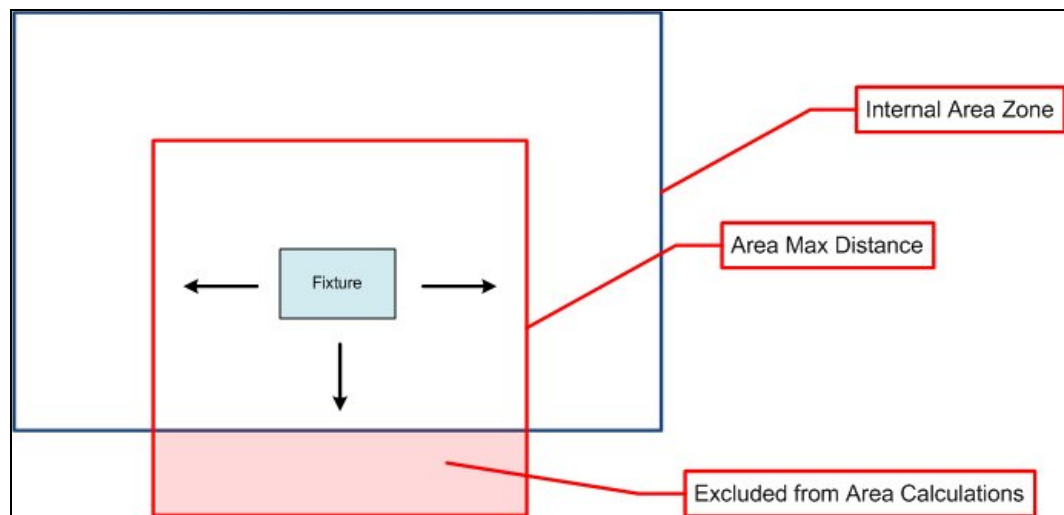
The first factor affecting area calculations is the Area Calculation Directions specified in the Category Tab of the Block Details dialogue box in Fixture Studio.



The maximum area available for Area Calculations is based on the Internal Area Zone and the AREA\_BOUNDARY\_DISTANCE System variable.

If an Internal Area zone is present, no fixture can be allocated any area that is outside of the zone boundary.

The maximum distance a fixture can be allocated area within is determined by the AREA\_BOUNDARY\_DISTANCE System variable.



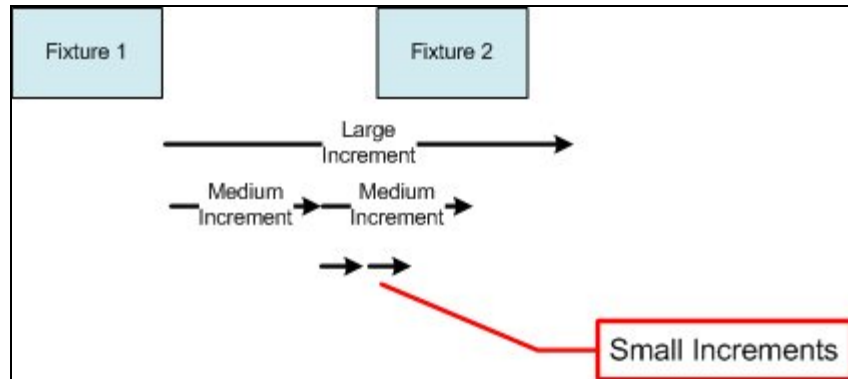
In the above example, the maximum distance the fixture can be allocated area within is determined by the AREA\_BOUNDARY\_DISTANCE System variable (red box). The fixture can therefore only be allocated part of the area within the Internal Area Zone (blue box). However, at one point the Internal Area Zone boundary is closer than the distance set by the AREA\_BOUNDARY\_DISTANCE System variable, so part of the potential area available to the fixture is excluded from the area calculations because it lays outside of the boundary of the Internal Area Zone.

Each fixture then establishes the distance of other fixtures from it using the AREA\_LARGE\_INCREMENT, AREA\_MEDIUM\_INCREMENT and AREA\_SMALL\_INCREMENT System Variables.

The fixture starts out using the Large Increment. It feels out one 'large increment' distance from the fixture. If it does not detect anything, it feels out another large increment distance from the fixture until it detects something, or reaches an Internal Area Zone Boundary or the Area Boundary distance.

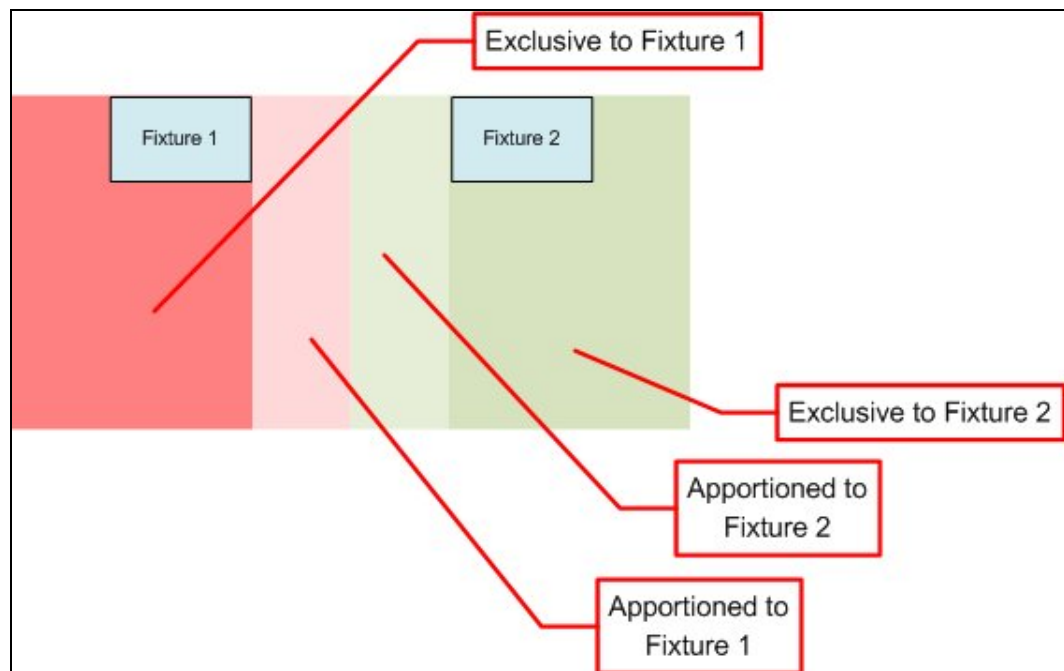
Once another fixture had been detected using large increment, the software starts using the Medium Increment distance to get a more precise 'range'. It keeps feeling out using 'medium increment' using as a starting point the last 'large increment' distance that did not find a fixture in that direction. It feels out one 'medium increment' distance. If it does not detect anything, it feels out another medium increment distance until it detects something, or reaches an Internal Area Zone Boundary or the Area Boundary distance.

Once a fixture has been identified by feeling out a 'medium increment distance, the same process starts with the 'small increment' distance using as the last 'medium increment' as a starting point.



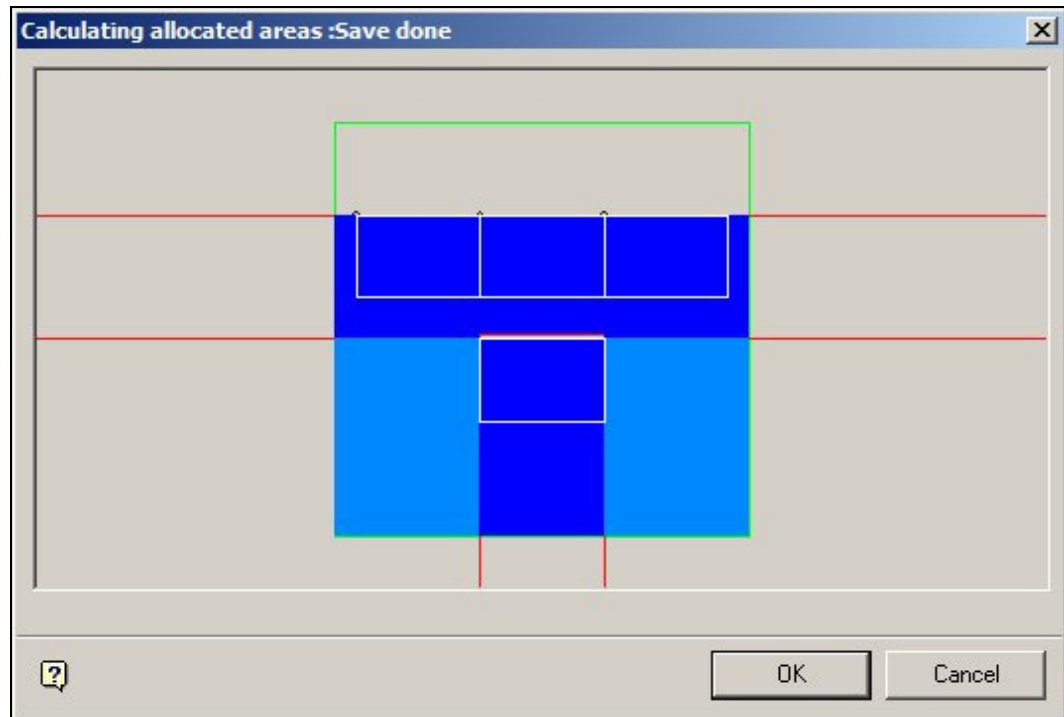
The process can be seen in the above example. Fixture 1 starts feeling out with large 'increment' (500 inches) and detects that there is a fixture within that distance. It then starts feeling out with 'medium increment' (50 inches). It detects there is no fixture within 50 inches, but there is one within 100 inches. Finally, it starts feeling out using 'small increment' (5 inches) using the 50 inch medium increment datum as a starting point. It does not detect a fixture within the first small increment distance, but does within the second. Fixture 1 has therefore detected another fixture (Fixture 2) within  $50 + 5 = 55$  inches of its position.

Finally, the software takes into account the Area Calculation Directions, the limits within which the area calculation will be carried out (Internal Area Zone, etc) and the position of the fixtures. It then apportions areas to each fixture. If an area is 'shared' by multiple fixtures, the shared area is subdivided up between the fixtures.



In the example above, both Fixture 1 and Fixture 2 have areas exclusive to them. There is a shared area between them. The software will detect this and allocate part of this shared area to Fixture 1 and part to Fixture 2.

This can be seen in the Allocated Areas dialogue box (below) where the dark areas blue areas represent areas that have been exclusively allocated to specific fixtures and the lighter blue areas represent areas that will be apportioned pro rata to different fixtures.



### AREA\_BOUNDARY\_CLIPPING\_LEVEL

The **AREA\_BOUNDARY\_CLIPPING\_LEVEL** System Variable allows users to specify whether the area calculations for a fixture should be relative to the Internal Area Zone or the Department Zone that it is in.

This functionality has not yet been implemented and area calculations can only be done relative to the Internal Area Zone

### AREA\_BOUNDARY\_DISTANCE

The **AREA\_BOUNDARY\_DISTANCE** System Variable is not presently in use.

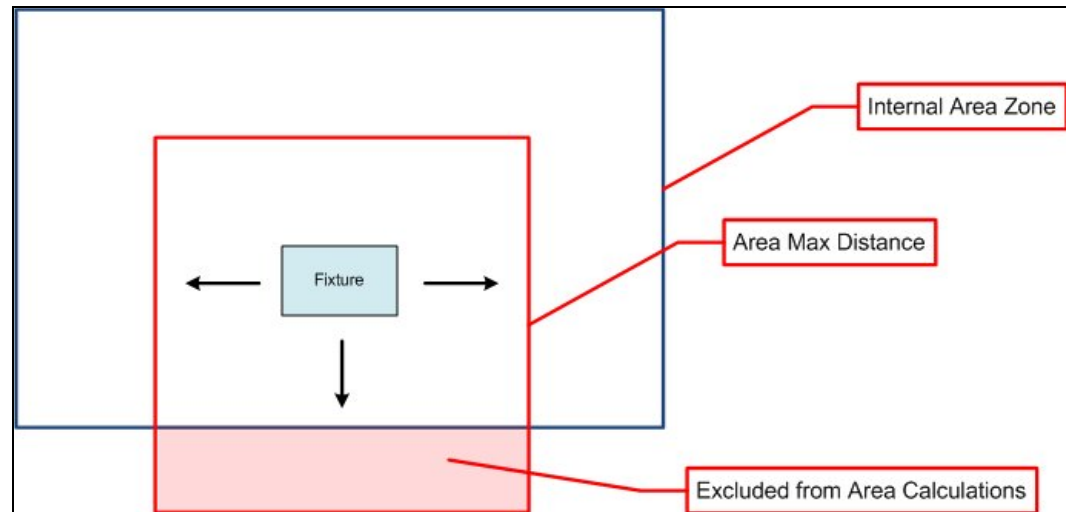
### AREA\_LARGE\_INCREMENT

**AREA\_LARGE\_INCREMENT** is one of three system variables affecting the logic of how the Area calculation is carried out, the other two being **AREA\_MEDIUM\_INCREMENT** and **AREA\_SMALL\_INCREMENT**.

The three work in conjunction, the software 'feeling out' from the fixture using **AREA\_LARGE\_INCREMENT** setting until a fixture is encountered. The software successively then uses **AREA\_MEDIUM\_INCREMENT** and **AREA\_SMALL\_INCREMENT** to establish a progressively more accurate distance between fixtures.

## AREA\_MAX\_DISTANCE

The **AREA\_MAX\_DISTANCE** System Variable specifies the maximum distance from a fixture the software will take into account when allocating areas. This distance will apply unless the Area Max distance exceeds crosses the boundary of the internal Area Zone. If this is the case, any part of the AREA\_MAX\_DISTANCE outside of the boundary will be excluded for calculation purposes.



## AREA\_MEDIUM\_INCREMENT

**AREA\_MEDIUM\_INCREMENT** is one of three system variables affecting the logic of how the Area calculation is carried out, the other two being **AREA\_LARGE\_INCREMENT** and **AREA\_SMALL\_INCREMENT**.

The three work in conjunction, the software 'feeling out' from the fixture using **AREA\_LARGE\_INCREMENT** setting until a fixture is encountered. The software successively then uses **AREA\_MEDIUM\_INCREMENT** and **AREA\_SMALL\_INCREMENT** to establish a progressively more accurate distance between fixtures.

## AREA\_SMALL\_INCREMENT

**AREA\_SMALL\_INCREMENT** is one of three system variables affecting the logic of how the Area calculation is carried out, the other two being **AREA\_LARGE\_INCREMENT** and **AREA\_MEDIUM\_INCREMENT**.

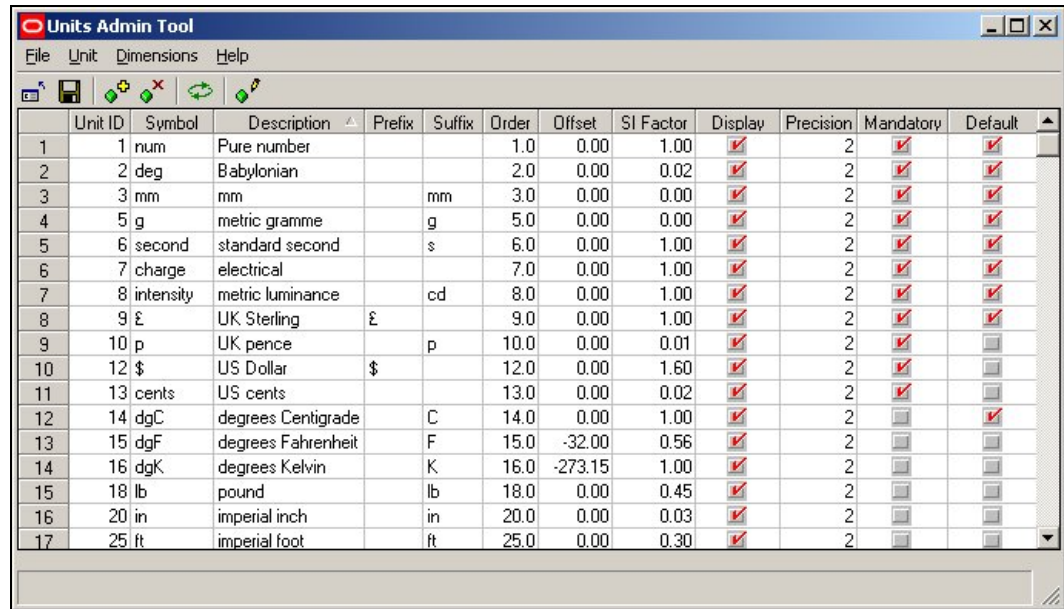
The three work in conjunction, the software 'feeling out' from the fixture using **AREA\_LARGE\_INCREMENT** setting until a fixture is encountered. The software successively then uses **AREA\_MEDIUM\_INCREMENT** and **AREA\_SMALL\_INCREMENT** to establish a progressively more accurate distance between fixtures.

The setting for **AREA\_SMALL\_INCREMENT** will affect the accuracy of the calculation. If set to a high value, the Area Calculation exercise will complete quickly, but with a lower degree of accuracy. If set to a small value, the result will be more accurate but the processing time will be significantly longer.



## AREA\_UNIT\_OF\_MEASURE

The **AREA\_UNIT\_OF\_MEASURE** system variable is used to set the type of unit used for the results of Area Calculations. The value of the AREA\_UNITS OF\_MEASURE System Variable refers to the Unit ID in the Units dialogue box.



	Unit ID	Symbol	Description	Prefix	Suffix	Order	Offset	SI Factor	Display	Precision	Mandatory	Default
1	1	num	Pure number			1.0	0.00	1.00	<input checked="" type="checkbox"/>	2	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
2	2	deg	Babylonian			2.0	0.00	0.02	<input checked="" type="checkbox"/>	2	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
3	3	mm	mm		mm	3.0	0.00	0.00	<input checked="" type="checkbox"/>	2	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
4	5	g	metric gramme		g	5.0	0.00	0.00	<input checked="" type="checkbox"/>	2	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
5	6	second	standard second		s	6.0	0.00	1.00	<input checked="" type="checkbox"/>	2	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
6	7	charge	electrical			7.0	0.00	1.00	<input checked="" type="checkbox"/>	2	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
7	8	intensity	metric luminance		cd	8.0	0.00	1.00	<input checked="" type="checkbox"/>	2	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
8	9	£	UK Sterling	£		9.0	0.00	1.00	<input checked="" type="checkbox"/>	2	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
9	10	p	UK pence		p	10.0	0.00	0.01	<input checked="" type="checkbox"/>	2	<input checked="" type="checkbox"/>	<input type="checkbox"/>
10	12	\$	US Dollar	\$		12.0	0.00	1.60	<input checked="" type="checkbox"/>	2	<input checked="" type="checkbox"/>	<input type="checkbox"/>
11	13	cents	US cents			13.0	0.00	0.02	<input checked="" type="checkbox"/>	2	<input checked="" type="checkbox"/>	<input type="checkbox"/>
12	14	dgC	degrees Centigrade		C	14.0	0.00	1.00	<input checked="" type="checkbox"/>	2	<input type="checkbox"/>	<input checked="" type="checkbox"/>
13	15	dgF	degrees Fahrenheit		F	15.0	-32.00	0.56	<input checked="" type="checkbox"/>	2	<input type="checkbox"/>	<input type="checkbox"/>
14	16	dgK	degrees Kelvin		K	16.0	-273.15	1.00	<input checked="" type="checkbox"/>	2	<input type="checkbox"/>	<input type="checkbox"/>
15	18	lb	pound		lb	18.0	0.00	0.45	<input checked="" type="checkbox"/>	2	<input type="checkbox"/>	<input type="checkbox"/>
16	20	in	imperial inch		in	20.0	0.00	0.03	<input checked="" type="checkbox"/>	2	<input type="checkbox"/>	<input type="checkbox"/>
17	25	ft	imperial foot		ft	25.0	0.00	0.30	<input checked="" type="checkbox"/>	2	<input type="checkbox"/>	<input type="checkbox"/>

For example, if the results are wanted in Square Feet, Unit ID 31 would be selected, if the results were wanted in Square Metres, Unit ID 32 would be selected.

**Note:** This functionality is not yet fully implemented.

## LDAP

### Overview

The **Lightweight Directory Access Protocol (LDAP)** [and its associated information directories] provide a simple, organization wide method of storing information that is often read but only infrequently updated. For example, it might hold information on personnel employed by an organization. The information held might include:

- Name
- Position
- Address
- Telephone Number
- User ID
- Password
- Application 1 privileges
- Application 2 privileges
- Macro Space Management privileges

The information can then be used for multiple purposes; for example Human Resources can access details of address and telephone number, while the assigned User ID and Password can be used to log into multiple applications, including Macro Space Management.

LDAP is an entirely separate application to Macro Space Management, but Macro Space Management has the ability to link to it and exchange information. It does this by means of:

- Code within the software allowing it to link to LDAP and access data.

- System Variables holding parameters used to connect to LDAP

The configuration and use of LDAP is outside of the scope of this help file and will not be discussed further.

## LDAP and Macro Space Management

The **Lightweight Directory Access Protocol** (LDAP) provides an alternative method of password authentication to that provided by Macro Space Management.

If the AUTHENTICATION system variable is set to 0, Macro Space Management (and In-Store Space Collaboration) uses the Functional Security option in the Administration Module to determine if a user is a valid user, what user groups the user belongs to and what privileges have been assigned.

If the AUTHENTICATION system variable is set to 1, when a user logs in to Macro Space Management (or In-Store Space Collaboration), the User Group they belong to (and the privileges they have) are determined using LDAP. This information is passed back to Macro Space Management, allowing three activities to be carried out:

- Authentication - validating the user's ID and password
- Authorization - determining which Macro Space Management privileges have been assigned
- Notification - in some circumstances, email messages will be sent reporting changes to statuses of objects

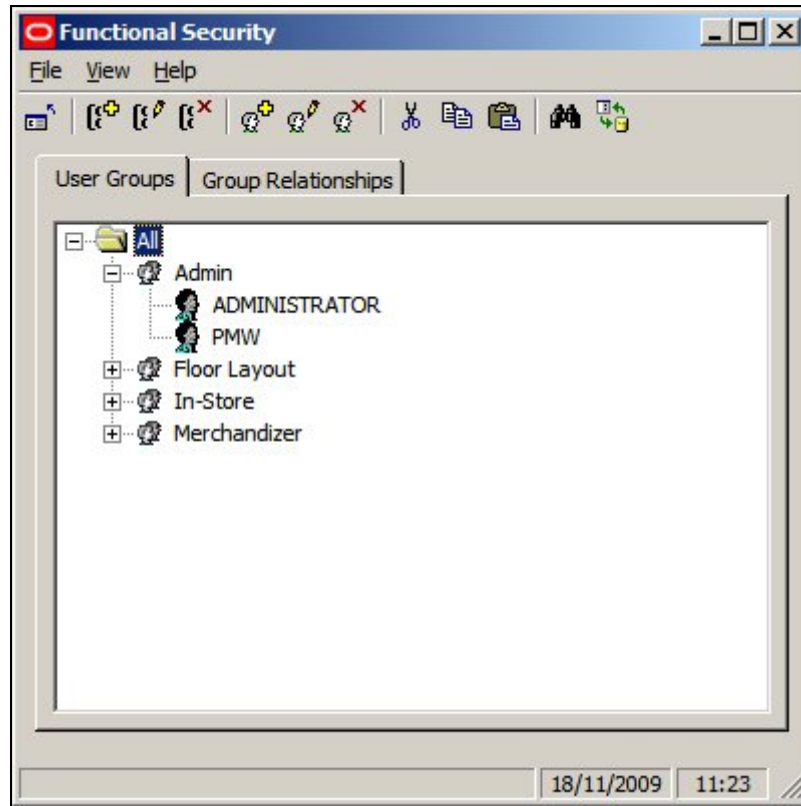
---

**Note:** LDAP is an external application to Macro Space Management. Configuring LDAP is beyond the scope of this help file.

---

## Authentication using Functional Security in Macro Space Management

The Administration Module contains a Functional Security option.



User Groups can be created - each user group specifying a particular set of privileges.

Users can then be assigned to the User Group and will be able to use the MSM privileges associated with that user group.

Users and User Groups can either be manually created, or can be imported using Data Importer.

When the user logs in to Macro Space Management, the user name and password they use are compared to entries in the database to ensure they are a valid user and to determine what privileges they have.

### **Authentication using LDAP**

When authentication is done using LDAP, a different procedure is followed:

#### **1. Authentication**

When a user logs into Macro Space Management (or In-Store Space Collaboration), they are queried against information held in the LDAP directory. If the user has the correct access rights, they will be able to log into the application. If the user has not previously accessed MSM or ISSC, an entry for that user will be created in the MSM database.

#### **2. Authorization**

Once an individual has been authenticated as a valid Macro Space Management or In-Store Space Collaboration user, their privileges are assigned according to which user groups they belong to.

1. The required User Groups and their associated privileges must previously have been created/assigned in the Functional Security module. This cannot be done by LDAP.

2. If the user has not previously accessed MSM or ISSC, links will automatically be created in the database between that user and the pre-configured User Groups. (If a user has previously accessed MSM or ISSC, the links will already exist).
3. The software uses the User Groups to which an individual belongs to determine what privileges they have in the software.

### 3. Notification

If LDAP contains email addresses for individuals and Macro Space Management/In-Store Space Collaboration have been appropriately configured, email notifications can be sent when specific objects within MSM/ISSC change their status.

## LDAP, User Groups and User Group Types

Information on User Groups is stored in the AVTTB\_USER\_GROUP table in the Macro Space Management database.

USG_ID	USG_PID	USG_NAME	USG_DESC	USG_MANDATORY	ICO_ID	USG_LIC	USG_CODE	UGT_ID
1		Admin	Administrators	1	45		Admin	1
2		Floor Layout	Floor Layout and Fixture Planners	0	45		Floor Layout	2
3		Merchandizer	Merchandise/Planogram Planners	0	45		Merchandizer	2
4		In-Store	In-Store Collaboration Users	0	45		In-Store	7

There are two fields that are of interest to the user; USG\_CODE and UGT\_ID

### USG\_CODE

The USG\_CODE (User Group Code) has to be manually added to the AVTTB\_USER\_GROUP by a data base administrator. It provides a field that can be mapped to a field in the LDAP directory. Accordingly, it should be unique to a specific user group.

**Note:** The field has been provided to make it easier for LDAP administrators. It is easier to map 'Admin' to an item in the LDAP directory that it is to map the USG\_ID (for example '1').

### UGT\_ID

The UGT\_ID (User Group Type) in the AVTTB\_USER\_GROUP table is a foreign key for the AVTTB\_USER\_GROUP\_TYPE table. This read only table specifies the type (and hence access) a user group has.

UGT_ID	UGT_NAME	UGT_ORDER	UGT_LIC
0	Store	0	
1	Admin User	1	1
2	Designer User	2	2
3	Merchandiser User	3	4
4	Automation User	4	8
5	Surveyor User	5	16
6	District Manager	6	32
7	Meds Manager	7	64
8	Store User	8	128
9	Validation User	9	256

Macro Space Manager will only allow access to User Group Types 1 (Admin User) and 2 (Designer User).

In-Store Space Collaboration will allow access to User Group types 1 (Admin User), 2 (Designer User), 6 (District Manager), 7 (MEDS Manager) and 9 (Validation User).

---

**Note:** If a user group is set to type 6 (District Manager), 7 (MEDS Manager) or 9 (Validation User), the members of the user group will only be able to access ISSC and not MSM.

---

The User Group Type also determines the type of access:

If set to 1 (Admin User), 2 (Designer User) or 9 (Validation User) access to stores, etc is set manually, through MSM's Data Security options in the Admin Module.

If set to 6 (District Manager) or 7 (MEDS Manager) access to stores is dynamically determined by permissions set in LDAP. This allows additional permissions to be set using LDAP including emails and dynamic store access.

---

**Note:** care should be taken not to mix the two sorts of permissions. If one ISSC User Group has manually determined permissions (Functional Security in MSM) and another ISSC User Group has dynamically determined permissions (LDAP), then confusion could result from differences between the permissions set in MSM Functional Security and the LDAP permissions.

---

Because of the complexity of this topic, further information can be obtained from Oracle's Technical Support Department.

## AUTHENTICATION

The **AUTHENTICATION** system variable is used to control what form of password authentication is used.

0 = Use Macro Space Management's password authentication system.

1 = Use LDAP to authenticate passwords.

---

**Note:** LDAP is an external application that can be used for password authentication (and other tasks). Configuring LDAP is beyond the scope of this help file.

---

## LDAP\_APPBASEDN

The **LDAP\_APPBASEDN** system variable holds the base Distinguished Name (DN) value for the application within the LDAP directory structure. This is used to uniquely identify Macro Space Management and In-Store Space Collaboration.

The value of the Distinguished Name must be obtained from the LDAP administrator and is made up of a series of Relative Distinguished Names separated by commas. This information can be entered as a text string.

## LDAP\_APP\_PROPERTY

The **LDAP\_APP\_PROPERTY** system variable specifies the custom property that holds authentication information.

## LDAP\_APPID

The **LDAP\_APPID** system variable references a dummy user in the Macro Space Management database that serves as a portal into LDAP. This dummy user must map to a parallel valid entry in the LDAP directory.

When a real user attempts to log into Macro Space Management (or In-Store Space Collaboration), MSM uses the dummy user referenced by the **LDAP\_APPID** system variable to connect to LDAP. Once connected to LDAP, MSM can then read the required information from LDAP, and (if necessary) create entries in the MSM database.

The **LDAP\_APPID** system variable must reference the **USR\_ID** for the entry in the **AVTTB\_USER** table.

	USR_ID	USR_LOGIN_ID	USR_FIRSTNAME	USR_LASTNAME	USR_PASSWORD
	8	Example	Example	Example	MFAGCSsGAQQBgjdYA6B

As the User Log-in and associated password are not used manually, it does not matter that they will eventually 'expire' when the Change Password Period in Security Options is exceeded after the user is created.

---

**Note:** Manually logging in to this dummy entry after the password has been 'expired' will clock out all access to LDAP.

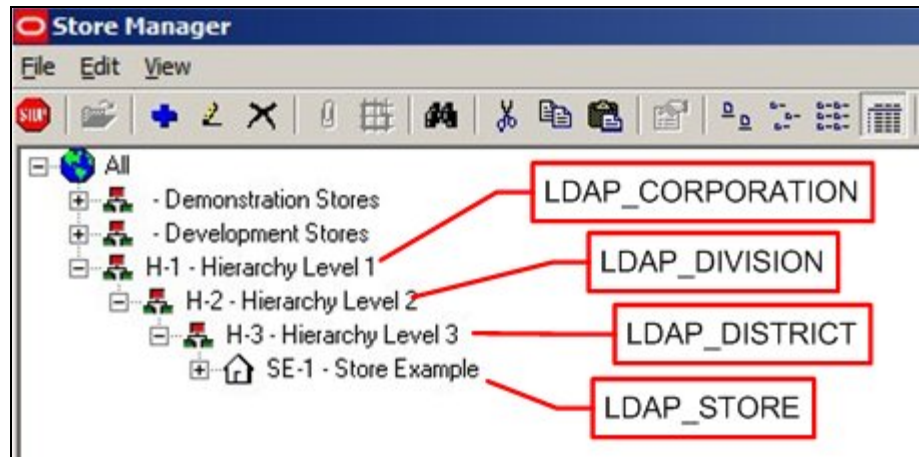
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## LDAP\_CORPORATION

The **LDAP\_COROPRATION** system variable is of four system variables than can be used to control dynamic access (i.e. access controlled through LDAP rather than Macro

Space Management's Functional Security Module). The other three system variables are LDAP\_DIVISION, LDAP\_DISTRICT and LDAP\_STORE.

Each system variable maps to a level in the hierarchy; the first three to clusters and sub-clusters, and LDAP\_STORE to stores.



The values that the system variables reference are the Cluster or Store Codes. In the example below, the Cluster has a Cluster Code of H-2.

The 'Edit Cluster' dialog box displays the following information:

- Cluster ID: 5
- Cluster Name: Hierarchy Level 2
- Cluster Type: Regional
- Cluster Code: H-2

Buttons at the bottom: OK, Cancel, Help.

These cluster or store codes can then be used within LDAP to specify which specific parts of the hierarchy an individual has permissions to modify.

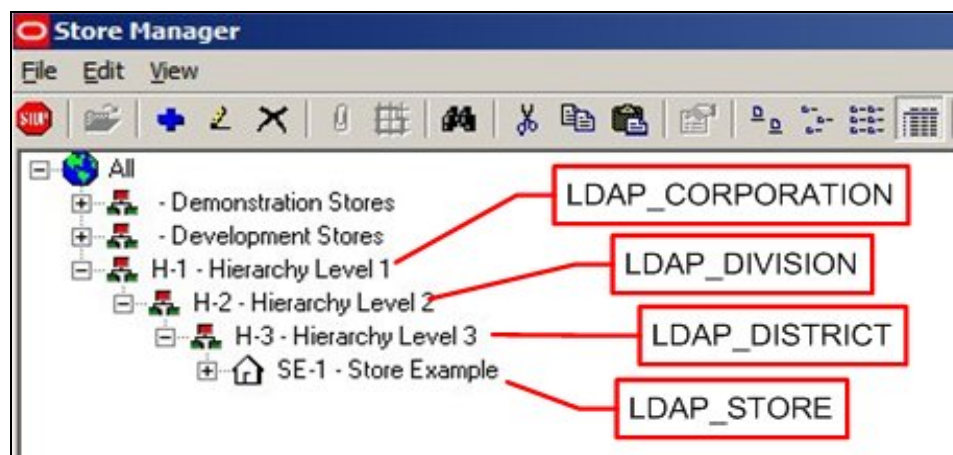
For these dynamic permissions to work, the information held in LDAP and the hierarchy in store manager must be in sync. Modifications to the hierarchy must first be made in LDAP, and then the hierarchy in Store Manager changed to match.

## LDAP\_DIVISION

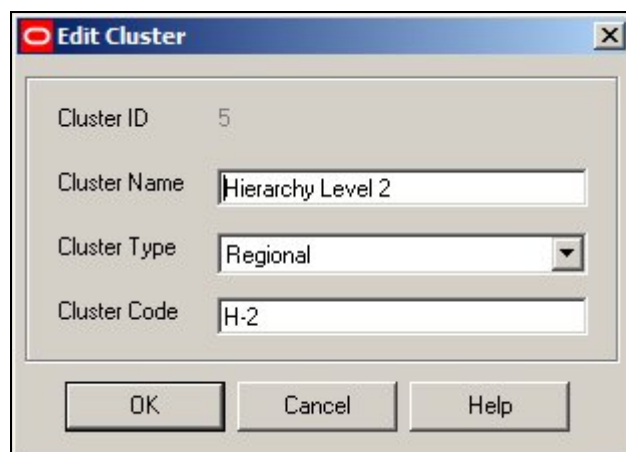
The **LDAP\_DIVISION** system variable is one of four system variables that can be used to control dynamic access (i.e. access controlled through LDAP rather than Macro Space Management's Functional Security Module). (The other three system variables are LDAP\_CORPORATION, LDAP\_DISTRICT and LDAP\_STORE).

Each system variable maps to a level in the hierarchy; the first three to clusters and sub-clusters, and LDAP\_STORE to stores.





The value that the system variables reference are the Cluster or Store Codes. In the example below, the Cluster has a Cluster Code of H-2.



These cluster or store codes can then be used within LDAP to specify which specific parts of the hierarchy an individual has permissions to modify.

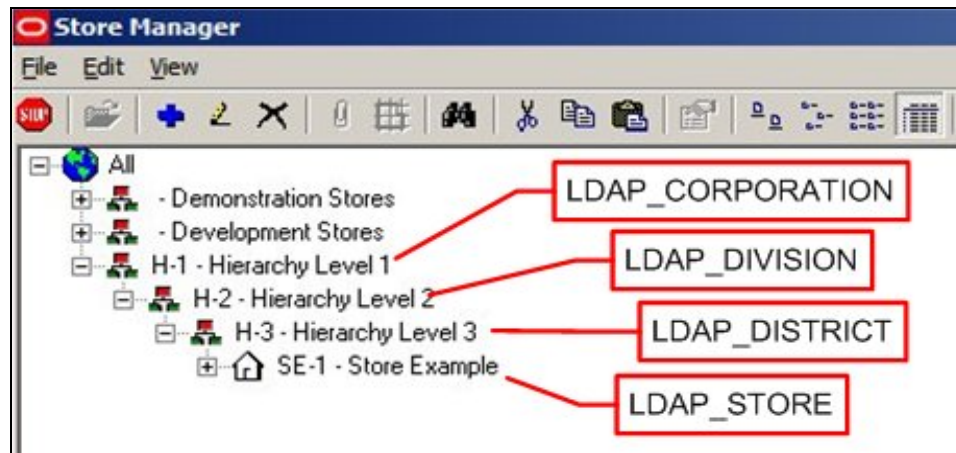
For these dynamic permissions to work, the information help in LDAP and the hierarchy in store manager must be in sync. Modifications to the hierarchy must first be made in LDAP, and then the hierarchy in Store Manager changed to match.

### LDAP\_DISTRICT

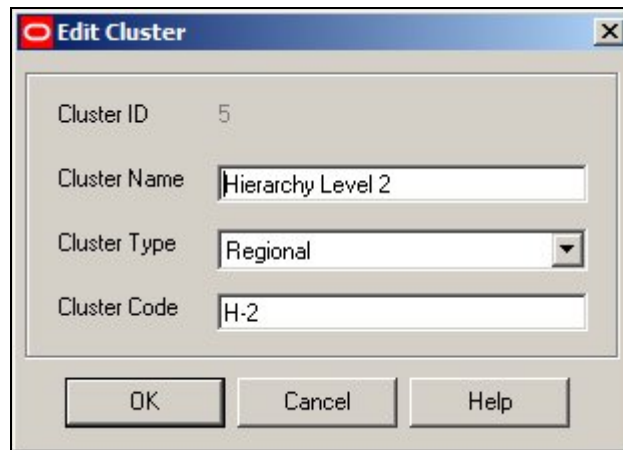
The **LDAP\_DISTRICT** system variable is of four system variables that can be used to control dynamic access (i.e. access controlled through LDAP rather than Macro Space Management's Functional Security Module). The other three system variables are LDAP\_CORPORATION, LDAP\_DIVISION and LDAP\_STORE.

Each system variable maps to a level in the hierarchy; the first three to clusters and sub-clusters, and LDAP\_STORE to stores.





The value that the system variables reference are the Cluster or Store Codes. In the example below, the Cluster has a Cluster Code of H-2.



These cluster or store codes can then be used within LDAP to specify which specific parts of the hierarchy an individual has permissions to modify.

For these dynamic permissions to work, the information help in LDAP and the hierarchy in store manager must be in sync. Modifications to the hierarchy must first be made in LDAP, and then the hierarchy in Store Manager changed to match.

## LDAP\_MAIL

The **LDAP\_MAIL** system variable is used to specify the name of the property in the LDAP database used to hold details of email addresses. This enables Macro Space Management to initiate sending notification emails to specific individuals.

## LDAP\_SERVER

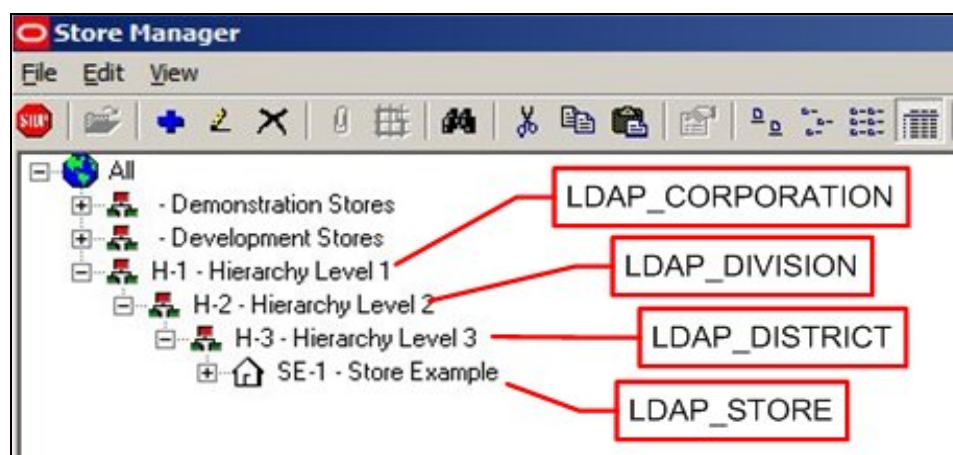
The **LDAP\_SERVER** system variable hold details of the server that hosts the LDAP system. The information should be of the form:

\\Server.CompanyName.com:PortNumber

## LDAP\_STORE

The **LDAP\_STORE** system variable is of four system variables than can be used to control dynamic access (i.e. access controlled through LDAP rather than Macro Space Management's Functional Security Module). (The other three system variables are **LDAP\_CORPORATION**, **LDAP\_DIVISION** and **LDAP\_DISTRICT**).

Each system variable maps to a level in the hierarchy; the first three to clusters and sub-clusters, and **LDAP\_STORE** to stores.



The value that the system variables reference are the Cluster or Store Codes. In the example below, the Store has a Store Code of SE-1

The 'Edit Store' dialog box is shown with the 'General' tab selected. The 'Store Code' field is set to 'SE-1'. Other fields include:

- Store ID: 4
- Store Name: Store Example
- Directory Name: Store Example\
- Latitude: 0
- Longitude: 0
- Status: Open
- Opened Date: 20/07/2009
- Closed Date: 31/12/2999
- Store Prototype: (empty dropdown)
- Set as Prototype: ☐

Buttons at the bottom: OK, Cancel, Help.

These cluster or store codes can then be used within LDAP to specify which specific parts of the hierarchy an individual has permissions to modify.

For these dynamic permissions to work, the information help in LDAP and the hierarchy in store manager must be in sync. Modifications to the hierarchy must first be made in LDAP, and then the hierarchy in Store Manager changed to match.

### **LDAP\_USERBASEDN**

The **LDAP\_USERBASEDN** system variable holds the base Distinguished Name (DN) value for the users within the LDAP directory structure. This is used to uniquely identify Macro Space Management and In-Store Space Collaboration.

The value of the Distinguished Name must be obtained from the LDAP administrator and is made up of a series of Relative Distinguished Names separated by commas. This information can be entered as a text string.

### **LDAP\_USER\_PREFIX**

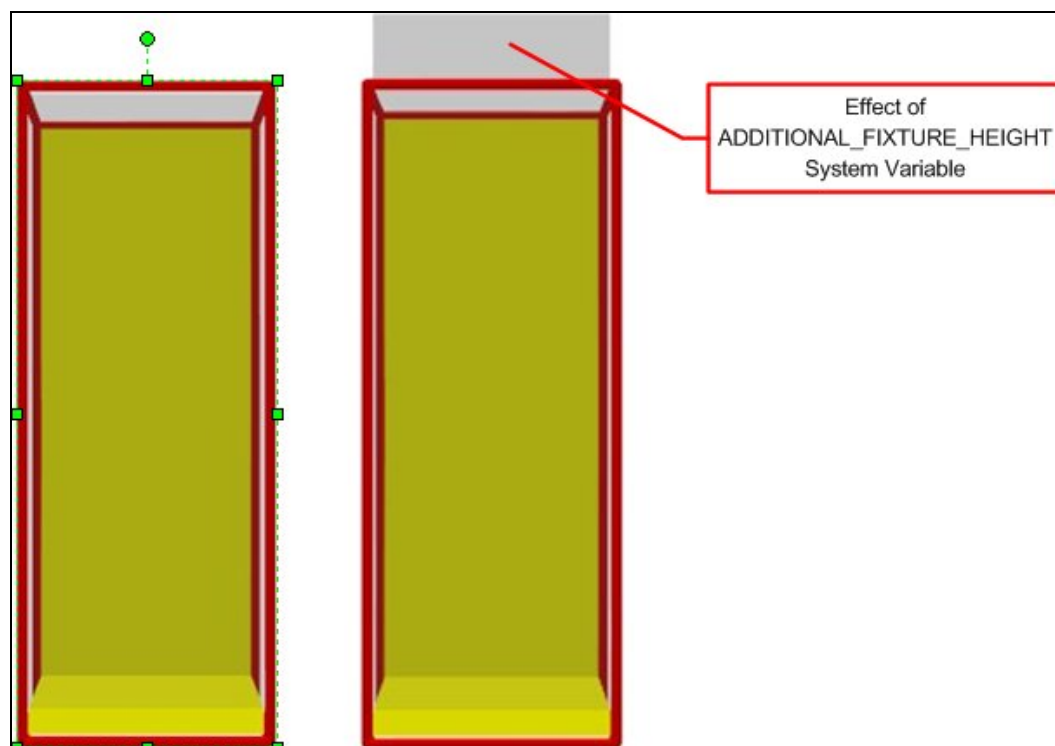
The **LDAP\_USER\_PREFIX** system variable allows an LDAP prefix to be 'stripped off' if a user name is imported into Macro Space Management.

For example, if the LDAP name is of the form Company\_Name\_User\_Name, the **LDAP\_USER\_PREFIX** system variable can be used to remove the Company\_Name\_ part of the user name before it is inserted into the MSM database.

## **Merchandiser**

### **ADDITIONAL\_FIXTURE\_HEIGHT**

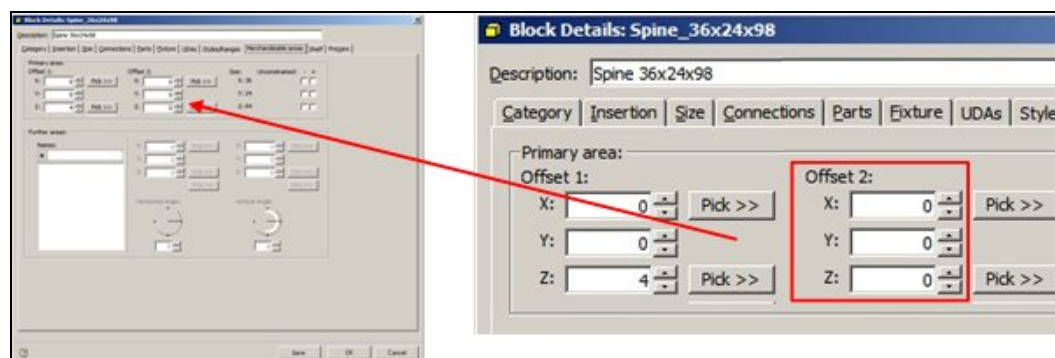
The **ADDITIONAL\_FIXTURE\_HEIGHT** system variable is used to increase the height of the merchandisable area for all fixtures in the Merchandiser module beyond that set in the Merchandisable Areas Tab of the Block Details dialogue box in Fixture Studio.



It has the following effects:

#### Fixture Studio

It is added onto the setting for the upper part of the Merchandisable area. For example, if the Z value for offset is set to 0, the merchandisable area will finish at the top of the fixture (left hand image above). If the ADDITIONAL\_FIXTURE\_HEIGHT system variable is set to 12 inches, the merchandisable area will extend above the top of the fixture despite the offset being set to 0 (right hand image above).



#### Merchandise Module

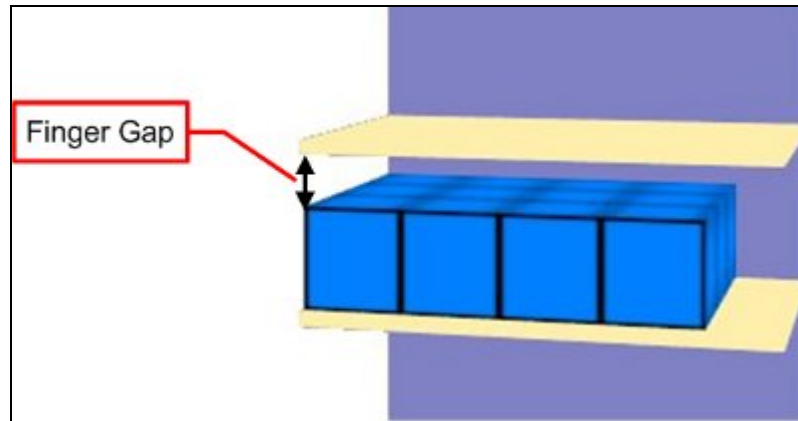
There will be two effects in the Merchandise module.

The AutoFill command (Standard toolbar) will fill to a volume that includes the ADDITIONAL\_FIXTURE\_HEIGHT setting.

All fixtures and shelves will fill to a volume that includes the ADDITIONAL\_FIXTURE\_HEIGHT setting.

#### FINGER\_GAP

The **FINGER\_GAP** system variable is used in the Merchandiser module. It specifies the minimum gap between the top of a group of products and the shelf above it.



The purpose of the system variable is to ensure that there is always sufficient space for a customer to reach in and lift products off of a shelf.

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**Note:** The 'Vertical Gap' setting on the Size and Shape tab of the Display styles dialogue box may also influence the gap between the topmost item of merchandise and the shelf above.

---

## Planogram Importer

### Overview

**Planogram Importer** is a standalone Macro Space Management tool that can be used to import planograms from third party planogramming tools like Apollo, Galleria and ProSpace.

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**Note:** The Planogram Importer tool can be found in the C:\Program Files\Oracle Retail\MSM\APPS directory.

---

When planograms are imported, they need to be matched to suitable fixtures and shelves in the Macro Space Management database. (This is done by using the planogram dimensions and data in the AVTTB\_STYLE\_IMPORTMAP table. If no suitable fixtures are found, then defaults can be assigned using three system variables:












DEFAULT\_IMPORT\_FIXEL\_BLK\_ID specifies a default shelf.

DEFAULT\_IMPORT\_FIXTURE\_BLK\_ID specifies a default fixture

DEFAULT\_IMPORT\_BLOCK\_ID specifies a default product block.

### DEFAULT\_IMPORT\_FIXEL\_BLK\_ID












The **DEFAULT\_IMPORT\_FIXEL\_BLK\_ID** system variable is used for Planogram import. The value should correspond to the ID of a suitable default shelf in the table of Block Details. This default shelf will be associated with the imported planogram if no more suitable match exists in the Macro Space Management database.

	ID	Name ▲	Description	Type	Directory
	17	I_40x20x2_Shelf	3D	Shelf	Shelves
	26	I_40x24x2_Base	3D	Fixture	Fixtures
	16	I_40x24x2_Shelf	3D	Shelf	Shelves
	29	I_40x2x98_Panel	3D	Fixture	Fixtures
	48	I_48x13x34_Checkout_Fixture	3D	Fixture	Fixture
	63	I_48x13x60_Composite	2D	Composite	Composites
	39	I_48x13x60_Fitting	2D	Fitting	Fittings
	49	I_48x13x60_Fixture	2D	Fixture	Fixture
	64	I_48x13x78_Composite	2D	Composite	Composites
	40	I_48x13x78_Fitting	2D	Fitting	Fittings
	50	I_48x13x78_Fixture	2D	Fixture	Fixture

**Note:** it would be usual for the default shelf to be 'stretchable', allowing it to suit any size of planogram.

#### DEFAULT\_IMPORT\_FIXTURE\_BLK\_ID

The **DEFAULT\_IMPORT\_FIXTURE\_BLK\_ID** system variable is used for Planogram import. The value should correspond to the ID of a suitable default fixture in the table of Block Details. This default shelf will be associated with the imported planogram if no more suitable match exists in the Macro Space Management database.












	ID	Name ▲	Description	Type	Directory
	17	I_40x20x2_Shelf	3D	Shelf	Shelves
	26	I_40x24x2_Base	3D	Fixture	Fixtures
	16	I_40x24x2_Shelf	3D	Shelf	Shelves
	29	I_40x2x98_Panel	3D	Fixture	Fixtures
	48	I_48x13x34_Checkout_Fixture	3D	Fixture	Fixture
	63	I_48x13x60_Composite	2D	Composite	Composites
	39	I_48x13x60_Fitting	2D	Fitting	Fittings
	49	I_48x13x60_Fixture	2D	Fixture	Fixture
	64	I_48x13x78_Composite	2D	Composite	Composites
	40	I_48x13x78_Fitting	2D	Fitting	Fittings
	50	I_48x13x78_Fixture	2D	Fixture	Fixture

**Note:** it would be usual for the default fixture to be 'stretchable', allowing it to suit any size of planogram.

#### DEFAULT\_IMPORT\_BLOCK\_ID

The **DEFAULT\_IMPORT\_BLOCK\_ID** system variable is used for Planogram import. The value should correspond to the ID of a suitable default product block in the table of Block Details. This default product block will be associated with the imported planogram if no more suitable match exists in the Macro Space Management database.

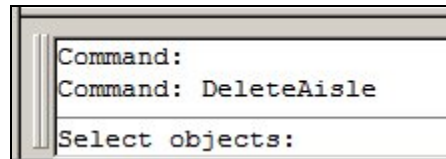


	ID	Name ▲	Description	Type	Directory
	17	I_40x20x2_Shelf	3D	Shelf	Shelves
	26	I_40x24x2_Base	3D	Fixture	Fixtures
	16	I_40x24x2_Shelf	3D	Shelf	Shelves
	29	I_40x2x98_Panel	3D	Fixture	Fixtures
	48	I_48x13x34_Checkout_Fixture	3D	Fixture	Fixture
	63	I_48x13x60_Composite	2D	Composite	Composites
	39	I_48x13x60_Fitting	2D	Fitting	Fittings
	49	I_48x13x60_Fixture	2D	Fixture	Fixture
	64	I_48x13x78_Composite	2D	Composite	Composites
	40	I_48x13x78_Fitting	2D	Fitting	Fittings
	50	I_48x13x78_Fixture	2D	Fixture	Fixture

## Planner

### CMDECHO

The **CMDECHO** system variable can be used to turn on or off echoing commands to the AutoCAD command line in the Planner Module.



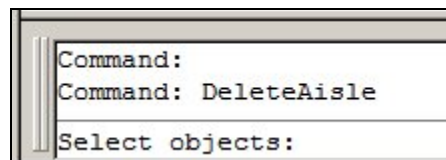
0 = suppress showing some AutoCAD commands in the command line

1 = show all AutoCAD commands in the command line.

**Note:** Setting CMDECHO to 1 increases the number of prompts that appear in the command line - this may be useful to new users of the software.

### MENUECHO

The **MENUECHO** system variable can be used to turn on or off echoing which toolbar or menu items were selected to the AutoCAD command line in the Planner Module.



0 = suppress showing menu items selected.

1 = show menu items or toolbar items selected in the command line.

### LAYER\_STANDARD

The **LAYER\_STANDARD** system variable is used to specify the AutoCAD Layer Standard used in the Planner module. The value of the system variable refers LAS\_ID in the AVTTB\_LAYER\_STANDARD table.

	LAS_ID	LAS_DESC
▶	1	Retail Focus
	2	BS1192/ISO13567

There are two default standards:

Retail Focus (Macro Space Management) which contains information on layers specific for Retail Focus

BS1192/ISO13567 which contains information on the ISO13567 International standard

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**Note:** It is possible to add additional standards to the database, but this should be done in conjunction with Oracle's Technical Support department as additions need to be made to a number of different tables.

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## Report Designer

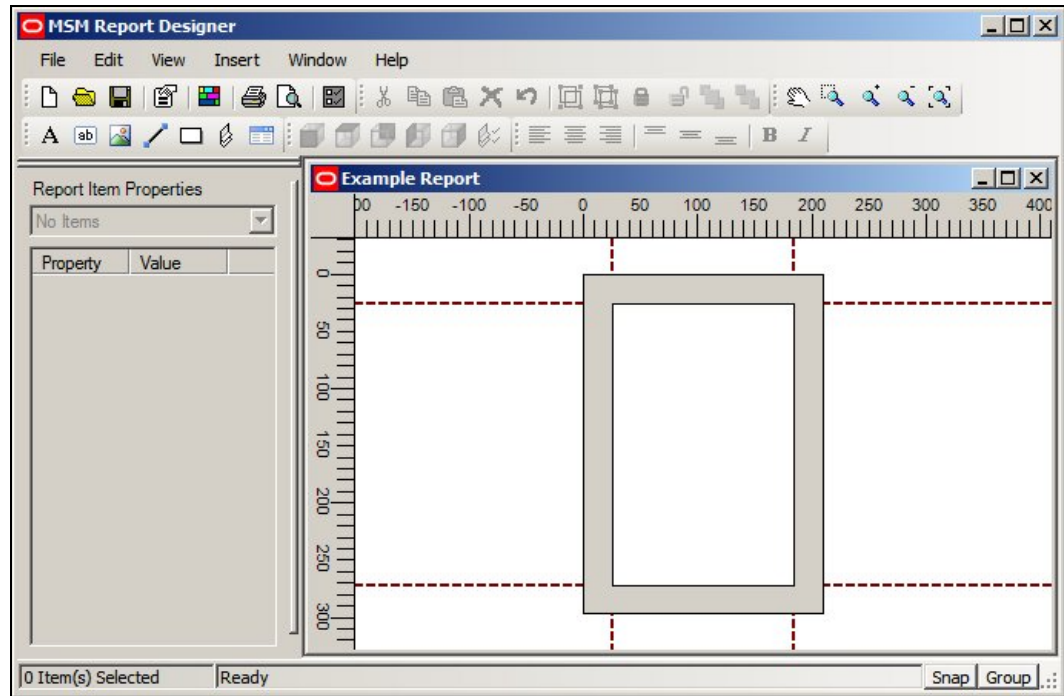
### About Report Designer

**Report Designer** is a module within Macro Space Management. It allows customized reports to be produced for planograms. Report Designer can be invoked in one of two ways:

From the File > Print > Planogram menu. This allows printing of planogram reports, but does not allow editing

From the C:\Program Files\Oracle Retail\MSM\APPS\AVT5PogReporter directory. This allows both editing of the report layout and printing of planogram reports.





### RPTDSG\_HELPFILE

The RPTDEG\_HELPFILE system variable contains the URL (Uniform Resource Location) for the help files for Report Designer. It should detail both the path to the directory and the name of the file used to open the help.

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**Note:** Report Designer Help is in Webhelp format. This differs from the CHM files used for Macro Space Management.

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### RPTDSG\_TESTPOGID

The **RPTDSG\_TSTPOGID** system variable specifies the planogram that will be displayed for testing the Planogram Report. The planogram is identified by its POG\_ID in the AVTTB\_PLANO table.

POG_ID	POG_NAME	POG_DESC
5	TVs - Special Offer	TVs - End of Range Discount
8	Socks - Standard	Standard Boxed Socks
9	Socks - Luxury	Luxury Boxed Socks
12	PaintPlanogram	Paint Planogram
13	Emulsion - Dulux	Emulsion Paint - Dulux
14	Emulsion - Crown	Emulsion Paint - Crown

### Space Calculations

## Overview

**Space Calculations** are used to calculate a set of parameters for fixtures and the products occupying them. These parameters can then be used in reports specifying the efficiency with which a store has been merchandised. These Space Calculations are:

### Base Linear

Base Linear is the greater value of:

- The merchandisable length of the fixture as defined in the Merchandisable Areas tab of the Block Details dialogue box.

- The nominal length of the fixture as defined in the Sizes tab of the Block Details dialogue box.

### Shelf Linear

Shelf Linear is the total merchandisable length of the shelves on a fixture. Shelf Linear may also include the length of the fixture itself, if that fixture is populatable.

### Footprint

Footprint is the greater value of:

- The merchandisable area of the fixture as defined in the Merchandisable Areas tab of the Block Details dialogue box.

- The nominal area of the fixture as defined in the Sizes tab of the Block Details dialogue box.

### Allocated Area

Allocated Area is calculated using the Calculate Areas option on the Calculate Menu and toolbar in Planner. It will not be discussed further here.

### Display Volume

The display volume is the actual volume occupied by a specific product and is calculated from the length, depth and height assigned to it, multiplied by the number of instances placed on a specific fixture.

### Nominal Volume

The nominal volume is the base linear of a fixture multiplied by the depth specified in the CALC\_STND\_DEPTH system variable and the height defined in the CALC\_STND\_HEIGHT system variable.

### Allocated Volume

The allocated volume is the Allocated Area multiplied by the height defined in the CALC\_STND\_HEIGHT system variable.

## CALC\_STND\_DEPTH

The **CALC\_STND\_HEIGHT** system variable is used by Space Calculations in the Planner Module. It is used in conjunction with the CALC\_STND\_DEPTH system variable and the Base Liner of a fixture to calculate the nominal volume.

## CALC\_STND\_HEIGHT

The **CALC\_STANDARD\_HEIGHT** system variable is used by Space Calculations in the Planner Module. It has two purposes:

- It is used in the calculation of Nominal Volume

- It is used in the calculation of Allocated Volume.

### Nominal Volume

The nominal volume is the base linear of a fixture multiplied by the depth specified in the CALC\_STND\_DEPTH system variable and the height defined in the CALC\_STND\_HEIGHT system variable.

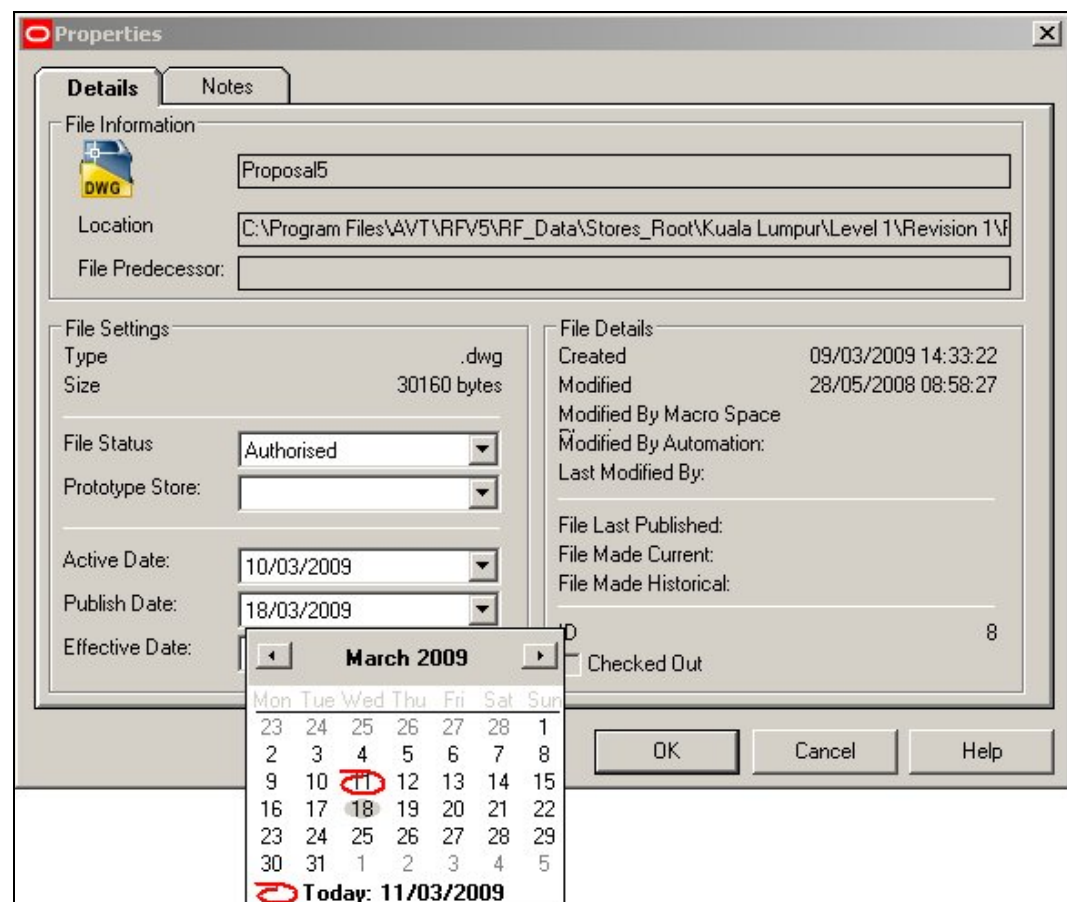
### Allocated Volume

The allocated volume is the Allocated Area multiplied by the height defined in the CALC\_STND\_HEIGHT system variable.

## Store Manager

### PUBLISH\_DATE\_LEAD\_PERIOD

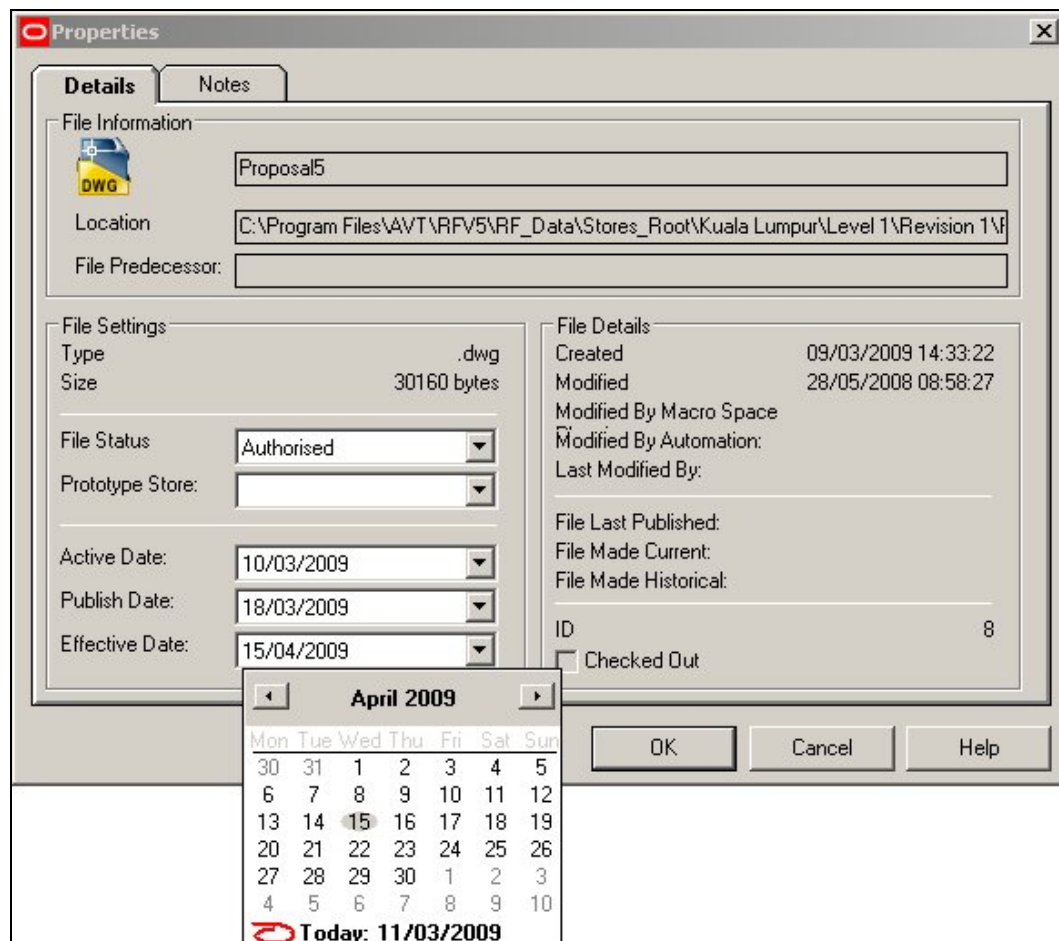
The **PUBLISH\_DATE\_LEAD\_PERIOD** system variable is used in Store Manager. It affects the file Properties dialogue box



When a user sets a file to Authorised status, the previously grayed out Publish and Effective dates become active. The value of the PUBLISH\_DATE\_LEAD\_PERIOD system variable is added onto the current date to set a default Publish Date - for example if the current date is the 7th January and the PUBLISH\_DATE\_LEAD\_PERIOD system variable is set to 7, then the default Publish Date will be set to 14th January.

### EFFECTIVE\_DATE\_LEAD\_PERIOD

The **EFFECTIVE\_DATE\_LEAD\_PERIOD** system variable is used in Store Manager. It affects the file Properties dialogue box



When a user sets a file to Authorised status, the previously grayed out Publish and Effective dates become active. The value of both the **PUBLISH\_DATE\_LEAD\_PERIOD** and **EFFECTIVE\_DATE\_LEAD\_PERIOD** system variables are added onto the current date to set a default publish date - for example if the current date is the 7th January, the **PUBLISH\_DATE\_LEAD\_PERIOD** system variable is set to 7 and the **EFFECTIVE\_DATE\_LEAD\_PERIOD** system variable is set also to 7, then the default publish date will be set to 21st January.

### ENABLE\_FILE\_TRIGGER\_DATE

The **ENABLE\_FILE\_TRIGGER\_DATE** system variable determines the behavior of both the File Properties dialogue box and UpdateStatus.exe.

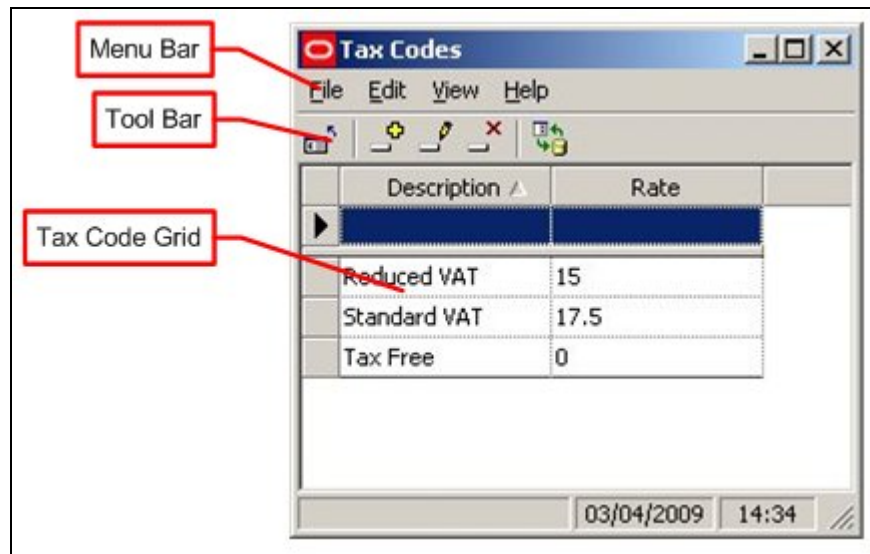
Value	Result	Other Actions
0 or 1	UpdateStatus.exe is disabled and has no effect on File or Revision statuses. Publish and Effective dates are disabled and cannot be set.	Publish and Current statuses need to be selectable so that files can manually be taken through the software cycle.
2	Effective date is enabled. UpdateStatus.exe will change file status if the Effective date is exceeded.	Publish needs to be manually selectable.
3	Publish and Effective dates are enabled.	Publish and Current status should not be selectable by the user so that update status is the required method to change them.

## Tax Codes

### About Tax Codes

The **Tax Codes Option** in the Admin Module allows users to enter rates for varying types of tax. These rates can then be assigned to products at SKU Level in Product Studio.

The **Tax Code Window** has three main parts.



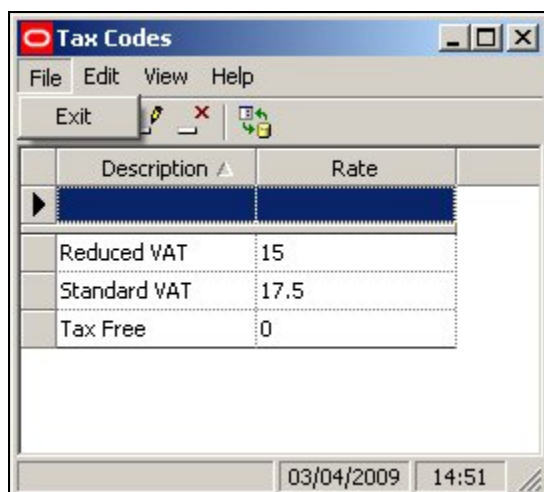
**Pull down menus** give access to various Tax Code options.

The **Toolbar** gives access to other Tax Code options.

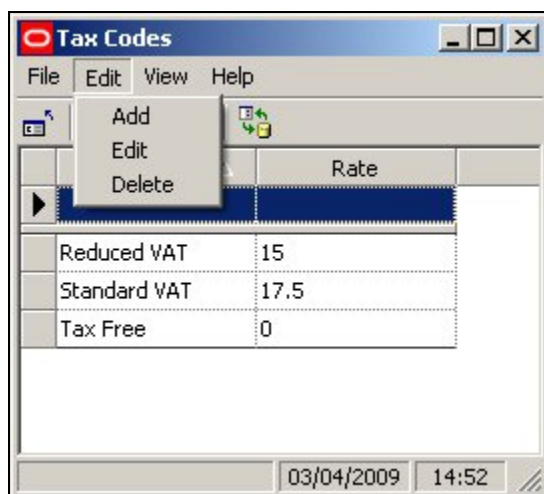
The Tax Codes are displayed in the **Tax Code Grid**.

### Menus and Toolbars

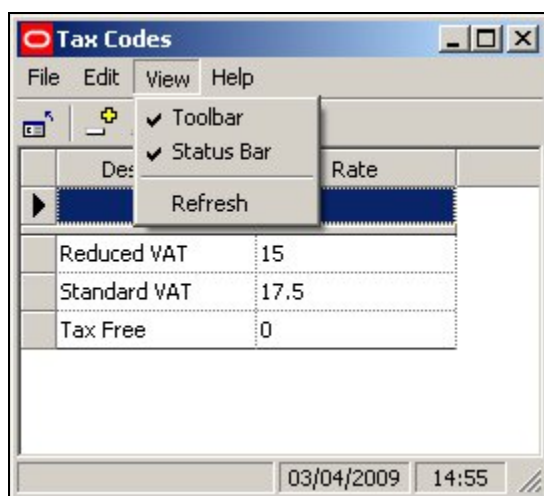
The **File Menu** allows users to exit the option.



The **Edit Menu** allows users to Add, Edit or Delete Tax Codes

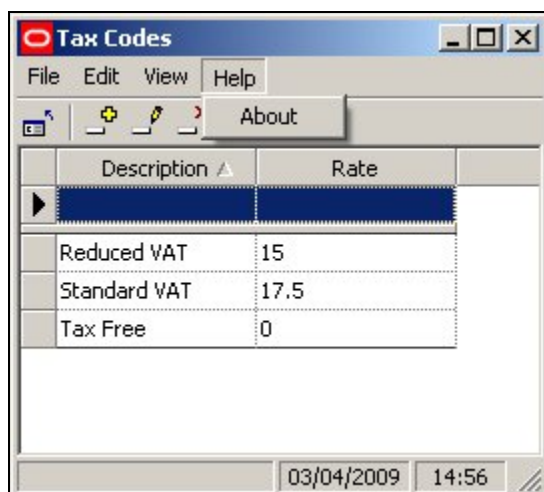


The **View Menu** allows users to switch On and Off display of the Toolbar and Status Bars. It also allows them to Refresh the Tax Code grid.

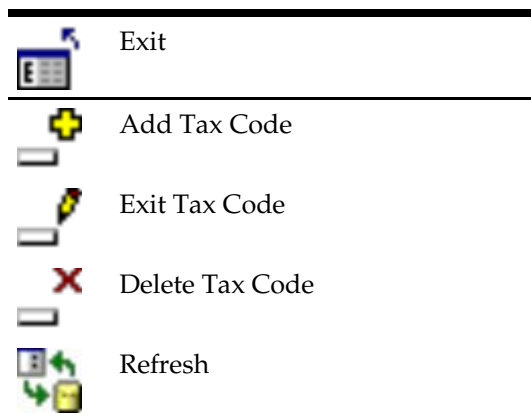
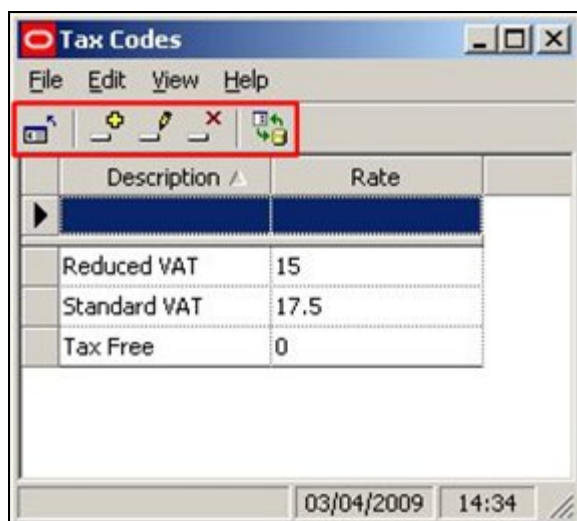


[More Info on Refreshing](#)

**The Help Pull Down Menu**



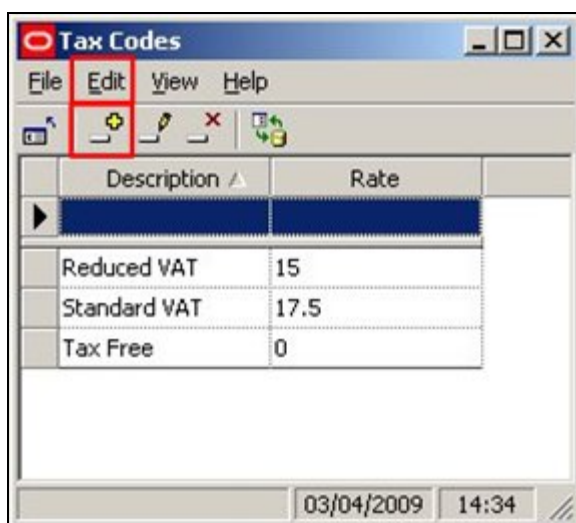
Clicking on About displays the current version number of the software.  
The **Toolbar** gives access to varying Tax Code options





## Adding, Editing, and deleting Tax Codes

To **Add a Tax Code** click on the Add Tax Code icon or select Add from the edit pull down Menu.



Type a description into the Description text box then click in the Rate text box and enter the required Tax Rate.

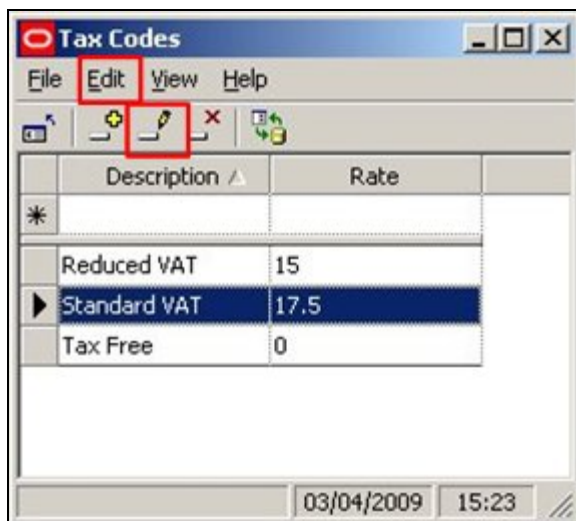
Press <Return> to send the values to the central Macro Space Management database.

---

**Note:** The values will not be stored in the central database until return has been pressed.

---

**Editing the Tax Codes** can be done by clicking in the relevant box in the Tax Code grid, then typing in the amended values. Alternatively, highlight the relevant tax code and use the edit options in the edit menu or in the toolbar.



Press <Return> to store the changed values in the central Macro Space Management database.

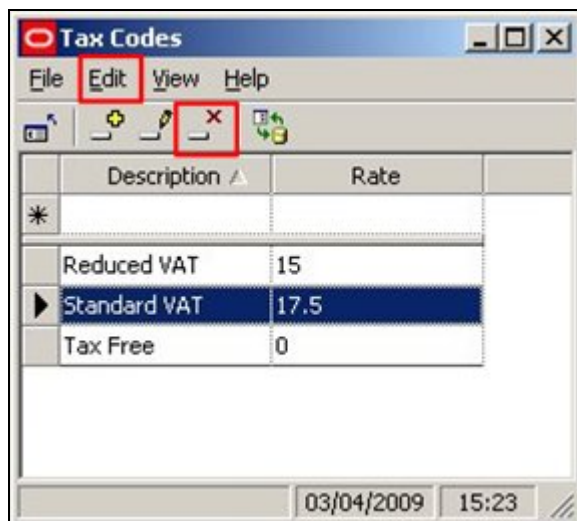
---

**Note:** The values will not be stored in the central database until return has been pressed.

---



To **Delete a Tax Code** highlight the required Tax Code then click on the Delete icon or select the Delete option from the Edit pull down menu.



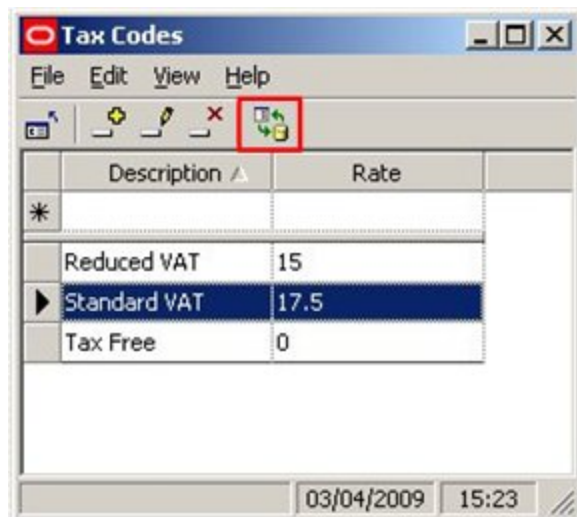

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**Note:** The tax code will be deleted without confirmation being requested.

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## Refreshing and Exiting

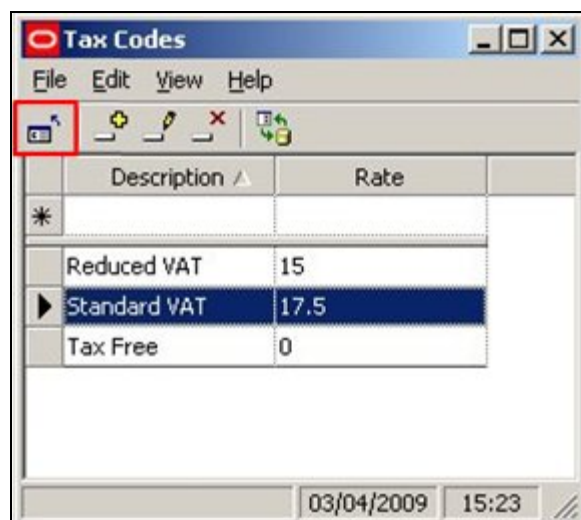
**Refreshing** is of use when multiple people are using the same option in Admin.



Clicking on the Refresh Icon will cause the list of Tax Codes to be updated based on current information from the central Macro Space Management database.

This allows users to see changes being made by other users.

The **Exit option** will cause users to exit this part of the Admin Module.



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**Note:** If data has been entered in the Tax Code Grid, ensure that <Return> has been pressed before exiting or data will be lost.

---

## Assigning Tax Codes

Tax Codes are assigned in the SKU dialogue box in Product Studio

Product SKU - Own Brd Basic Desk Top

Details Physical Financial Custom

Price: 350.00

Cost: 175.00

Lead Time: 1 Week

Days of Supply: 5

Item Movement: 50

Cost Basis: Item

Tax Code: None  
None  
Standard VAT  
Reduced VAT

OK Cancel

## Importing Tax Codes

Tax Codes are stored in the AVTTB\_SEASON table in the database.

TAX_ID	TAX_DESC	TAX_RATE
0	None	1
1	Standard VAT	1.175
2	Reduced VAT	1.15

This table can be populated by using the Data Importer module as an alternative to entering data manually via the Admin Module.

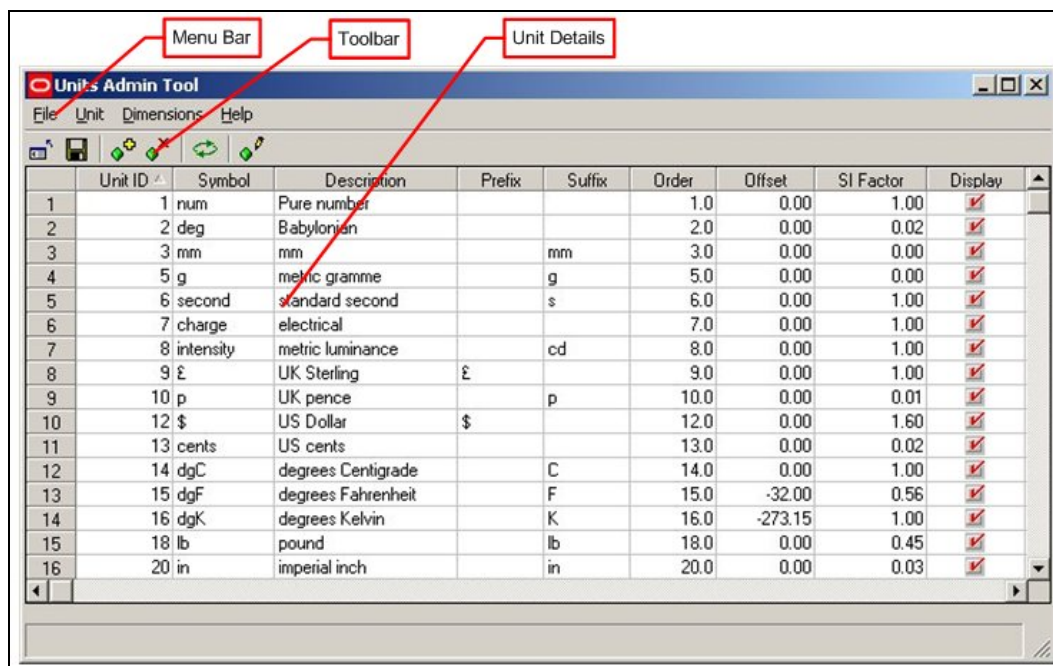
The AVTTB\_TAX\_CODES table must be populated before Tax Codes can be assigned to Products (AVTTB\_PRODUCT\_ITEM table)

## Units

### Overview

The **Units Option** within the Admin Module allows the user to specify the units that will be available within Macro Space Management. They are specified relative to fundamental SI units and can be specified according to the users needs.

The **Units Window** contains three main parts.



The Menus and the Toolbar allow the user to access varying options concerning units.

The Unit Details section allows the user to see the values assigned to specific units.

### About SI Units

The **International System** of Units (abbreviated SI from the French le Système International d'unités) is the modern form of the metric system.

It contains seven basic units;

Name	Symbol	Measurement
Metre (Meter)	m	Length
Kilogram	Kg	Weight
Second	s	Time
Ampere	A	Electric current
Kelvin	K	Temperature
Mole	mol	Quantity of matter
Candela	cd	Light intensity

All units used in Macro Space Management are relative to these basic units.  
For example grammes are 1/1000<sup>th</sup> of a kilogram.

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**Note:** For convenience Macro Space Management uses the degree Centigrade rather than degrees Kelvin as the measurement of temperature.

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## About Scientific Notation

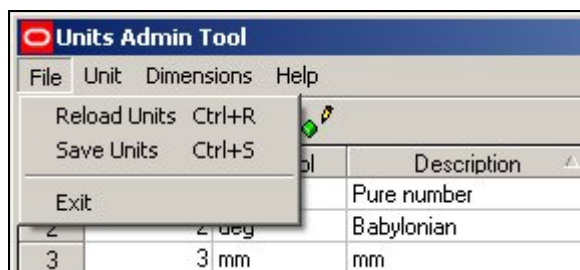
**Scientific Notation** is just a shorthand for writing large or small numbers.

It is sometimes used in Macro Space Management. Some examples of scientific notation are:

Scientific Notation	Decimal Equivalent
$1 \times 10^6$	1,000,000
$1 \times 10^3$	1,000
$1 \times 10^2$	100
$1 \times 10^1$	10
$1 \times 10^{-1}$	0.1
$2 \times 10^{-2}$	0.01
$2 \times 10^{-3}$	0.001

## The File Pull Down Menu

The **File pull down menu** allows users three options.



### Reload Units

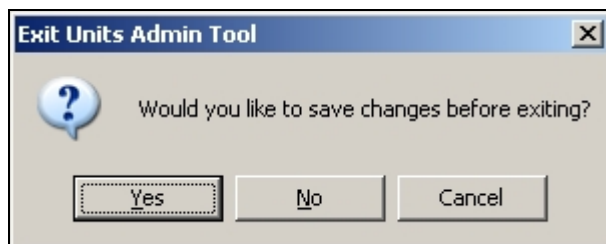
This option allows users to reload the display grid with the values for the units when they were last saved. This will overwrite any alterations made to the values of the units but not saved.

### Save Units

This option allows users to save any changes made to the values for units.

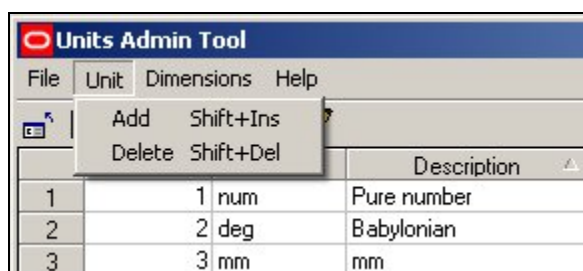
### Exit

This allows users to exit the unit option. If changes have not been saved, then a warning dialogue will appear.



## The Units Pull Down Menu

The **Units pull down menu** allows users to Add a new unit or Delete an exiting one.



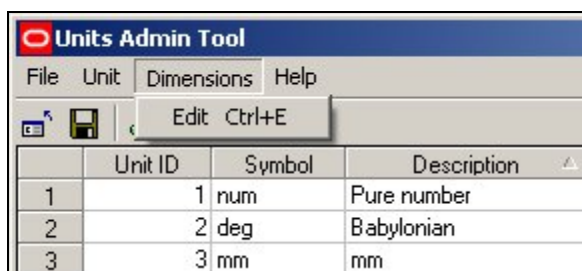
To Add a Unit click on the Add option. This will add a new line in the table of units.

To Delete a Unit highlight a line and click on the Delete option. The Unit will then be deleted from the table of units.

Additions or deletions will not be permanent until the Save option has been used in the File pull down menu. More Info

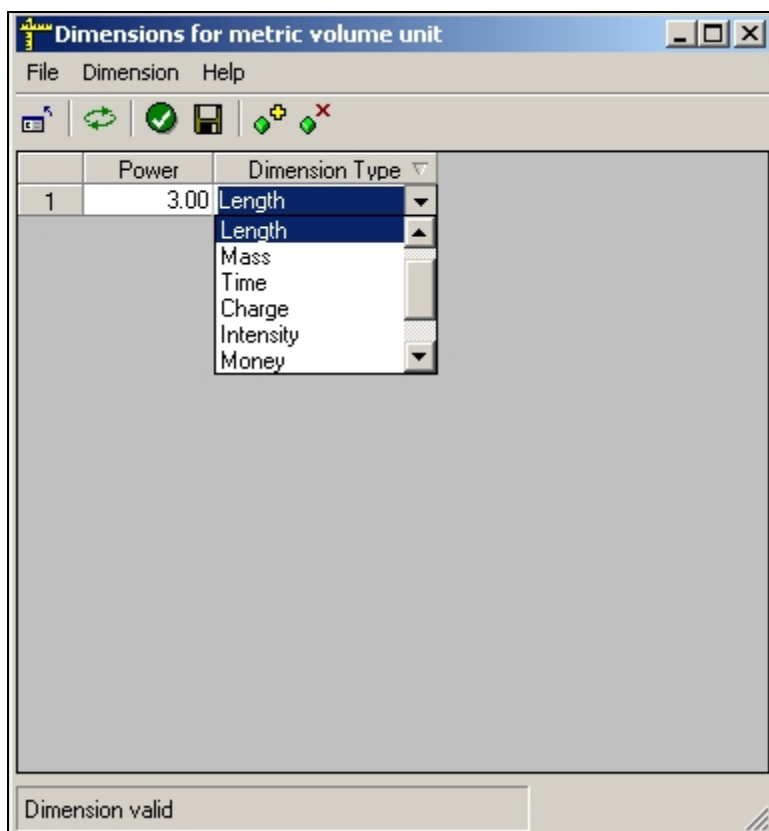
## The Dimensions Pull Down Menu

The **Dimensions pull down menu** allows users to bring up the Dimensions dialogue box.



The screenshot shows the 'Units Admin Tool' window. It has a menu bar with 'File', 'Unit', 'Dimensions', and 'Help'. Below the menu is a toolbar with icons for opening, saving, and editing. A table lists units with columns for Unit ID, Symbol, and Description.

	Unit ID	Symbol	Description
1	1	num	Pure number
2	2	deg	Babylonian
3	3	mm	mm



The screenshot shows the 'Dimensions for metric volume unit' dialog box. It has a menu bar with 'File', 'Dimension', and 'Help'. Below the menu is a toolbar with icons for opening, saving, and editing. A table lists dimensions with columns for Power and Dimension Type. A dropdown menu is open for the 'Dimension Type' column, showing options: Length, Length, Mass, Time, Charge, Intensity, and Money. The 'Length' option is selected. A status bar at the bottom says 'Dimension valid'.

	Power	Dimension Type
1	3.00	Length

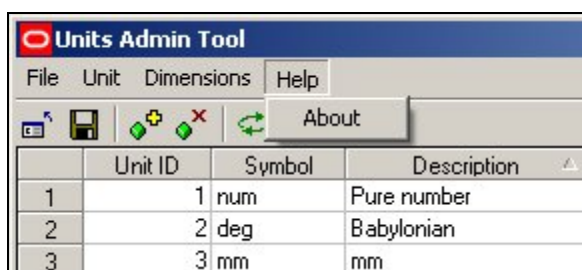
When entering a new dimension, it has to be related to the basic dimensions of Number, Length, Mass, time, Charge, Intensity, Money, or Angle.

The power is that which the original basic dimension has to be changed to describe the new one. This will normally only affect the length basic dimension.

Basic Dimension	Power	Result
Length	1	Length
	2	Area
	3	Volume

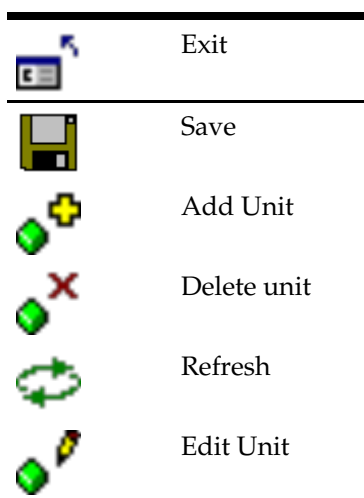
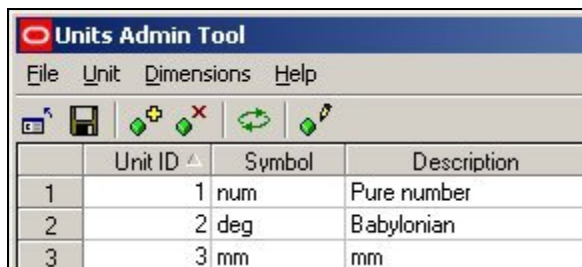
## The Help Pull Down Menu

The **Help pull down menu** allows users to call this Help File. Clicking on About will bring up a small dialogue box showing the current version of the software.



## The Toolbar

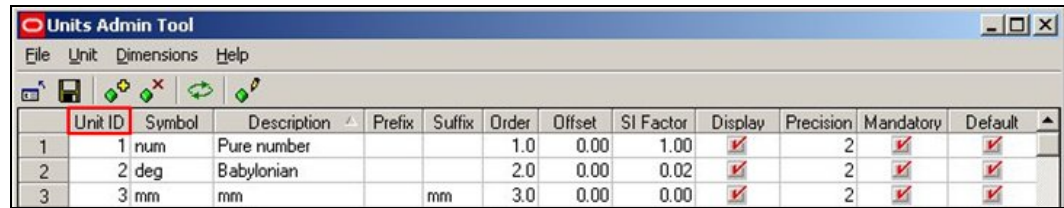
The **Toolbar** allows users to access varying options affecting the addition, editing, deletion and saving of units.



## Unit Details

The **Unit ID** is used internally within the central Macro Space Management database.

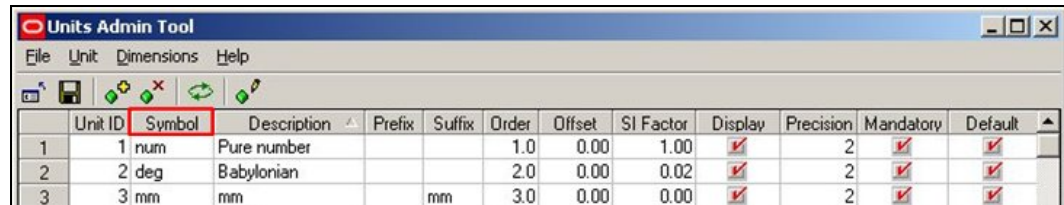




	Unit ID	Symbol	Description	Prefix	Suffix	Order	Offset	SI Factor	Display	Precision	Mandatory	Default
1	1	num	Pure number			1.0	0.00	1.00	<input checked="" type="checkbox"/>	2	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
2	2	deg	Babylonian			2.0	0.00	0.02	<input checked="" type="checkbox"/>	2	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
3	3	mm	mm		mm	3.0	0.00	0.00	<input checked="" type="checkbox"/>	2	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>

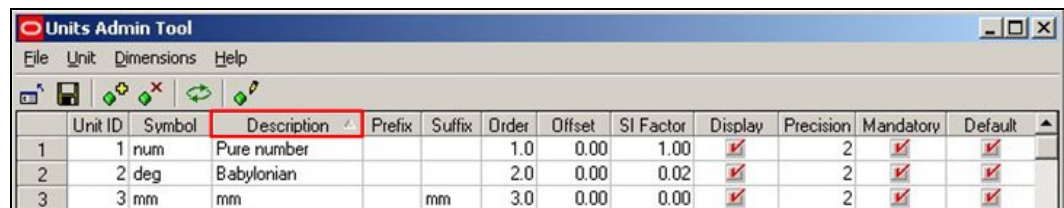
It is not editable by the user.

The **Symbol** is used in Reports, etc.



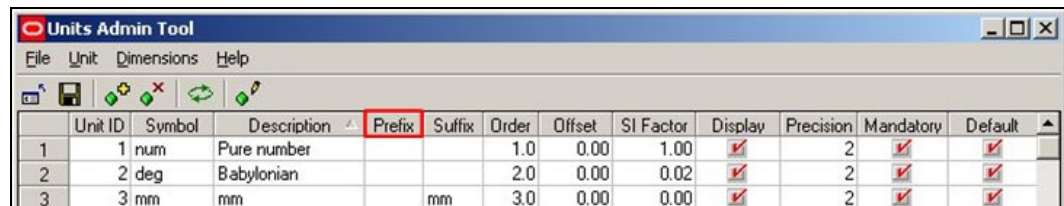
	Unit ID	Symbol	Description	Prefix	Suffix	Order	Offset	SI Factor	Display	Precision	Mandatory	Default
1	1	num	Pure number			1.0	0.00	1.00	<input checked="" type="checkbox"/>	2	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
2	2	deg	Babylonian			2.0	0.00	0.02	<input checked="" type="checkbox"/>	2	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
3	3	mm	mm		mm	3.0	0.00	0.00	<input checked="" type="checkbox"/>	2	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>

The **Description** is used to prompt users as to the purpose of the dimension.



	Unit ID	Symbol	Description	Prefix	Suffix	Order	Offset	SI Factor	Display	Precision	Mandatory	Default
1	1	num	Pure number			1.0	0.00	1.00	<input checked="" type="checkbox"/>	2	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
2	2	deg	Babylonian			2.0	0.00	0.02	<input checked="" type="checkbox"/>	2	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
3	3	mm	mm		mm	3.0	0.00	0.00	<input checked="" type="checkbox"/>	2	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>

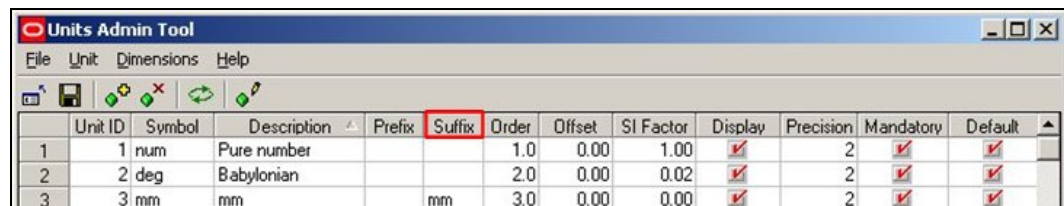
**Prefixes** are used before units.



	Unit ID	Symbol	Description	Prefix	Suffix	Order	Offset	SI Factor	Display	Precision	Mandatory	Default
1	1	num	Pure number			1.0	0.00	1.00	<input checked="" type="checkbox"/>	2	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
2	2	deg	Babylonian			2.0	0.00	0.02	<input checked="" type="checkbox"/>	2	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
3	3	mm	mm		mm	3.0	0.00	0.00	<input checked="" type="checkbox"/>	2	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>

An example would be where a £ or \$ sign was wanted before a monetary value.

The **Suffix** is the symbol that will be displayed after the unit if it appears in a drawing etc.



	Unit ID	Symbol	Description	Prefix	Suffix	Order	Offset	SI Factor	Display	Precision	Mandatory	Default
1	1	num	Pure number			1.0	0.00	1.00	<input checked="" type="checkbox"/>	2	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
2	2	deg	Babylonian			2.0	0.00	0.02	<input checked="" type="checkbox"/>	2	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
3	3	mm	mm		mm	3.0	0.00	0.00	<input checked="" type="checkbox"/>	2	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>

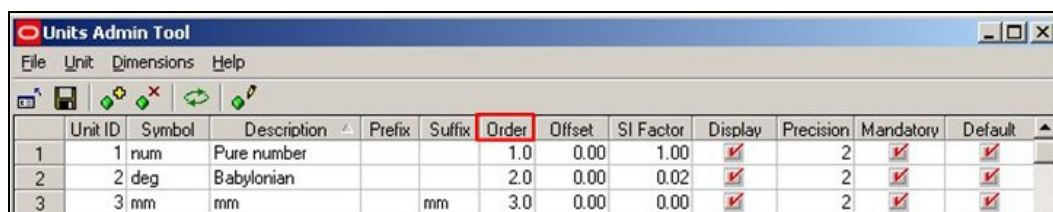
The suffix for Kilograms is Kg so weights will be displayed as follows:

5 Kg, 10.7 Kg, 0.3 Kg

Similarly the suffix for meters is m so lengths will be displayed as follows:

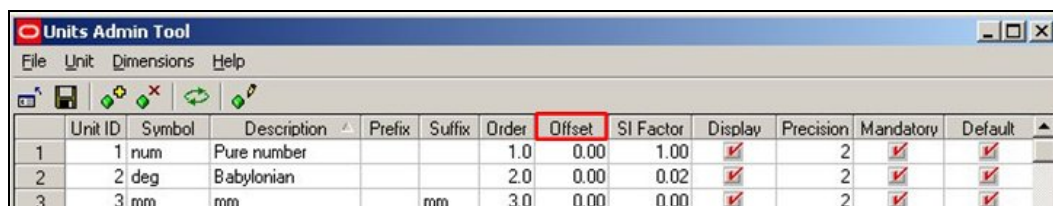
5 m, 10.7m, 0.3 m

The **Order** is used to specify the order units appear in a drop down list.



	Unit ID	Symbol	Description	Prefix	Suffix	Order	Offset	SI Factor	Display	Precision	Mandatory	Default
1	1	num	Pure number			1.0	0.00	1.00	<input checked="" type="checkbox"/>	2	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
2	2	deg	Babylonian			2.0	0.00	0.02	<input checked="" type="checkbox"/>	2	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
3	3	mm	mm		mm	3.0	0.00	0.00	<input checked="" type="checkbox"/>	2	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>

The **Offset** Option is used where the unit is related to a base dimension by a  $y = mx + c$  relationship. It represents the constant  $c$  in the equation.

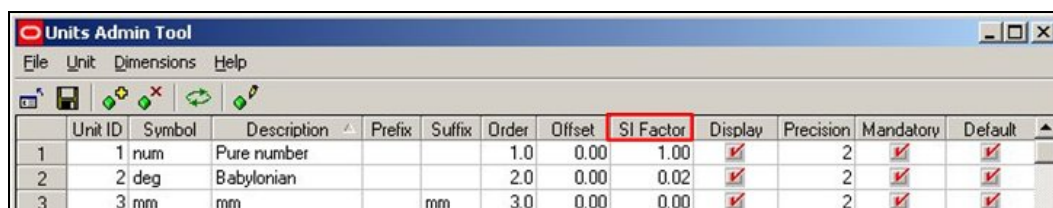


	Unit ID	Symbol	Description	Prefix	Suffix	Order	Offset	SI Factor	Display	Precision	Mandatory	Default
1	1	num	Pure number			1.0	0.00	1.00	<input checked="" type="checkbox"/>	2	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
2	2	deg	Babylonian			2.0	0.00	0.02	<input checked="" type="checkbox"/>	2	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
3	3	mm	mm		mm	3.0	0.00	0.00	<input checked="" type="checkbox"/>	2	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>

For example the offset for degrees Kelvin is -273.16. The relationship between degrees Centigrade and Kelvin is Degrees Kelvin = Degrees Centigrade - 273.13.

Offsets are sometimes used in conjunction with SI Factors. For example the offset between degrees Centigrade and Fahrenheit is -32 and the SI Offset is 0.555. Degrees Fahrenheit = (Degrees Centigrade  $\times$  0.555) - 32

The **SI Factor** is used where the unit is related to a base dimension by a  $y = mx + c$  relationship. It represents the co-efficient  $m$  in the equation.

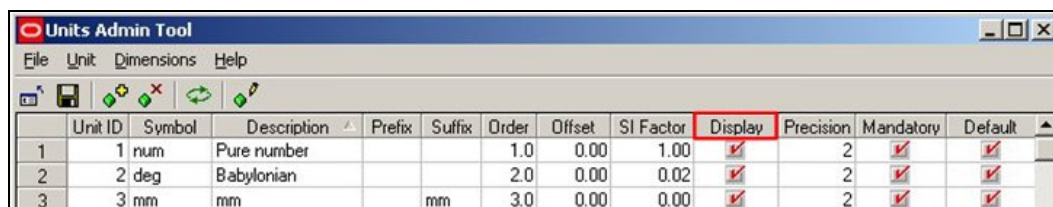


	Unit ID	Symbol	Description	Prefix	Suffix	Order	Offset	SI Factor	Display	Precision	Mandatory	Default
1	1	num	Pure number			1.0	0.00	1.00	<input checked="" type="checkbox"/>	2	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
2	2	deg	Babylonian			2.0	0.00	0.02	<input checked="" type="checkbox"/>	2	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
3	3	mm	mm		mm	3.0	0.00	0.00	<input checked="" type="checkbox"/>	2	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>

The SI factor is the factor by which the basic dimension has to be scaled by to give the correct value for the unit. For example there are 2.204 pounds to the kilogram, so the SI Factor is 0.454: 1 lb = 0.454 Kg

As another example, there are 39.37 inches to the meter, so the SI factor is 0.0254: 1 in = 0.0254 meters.

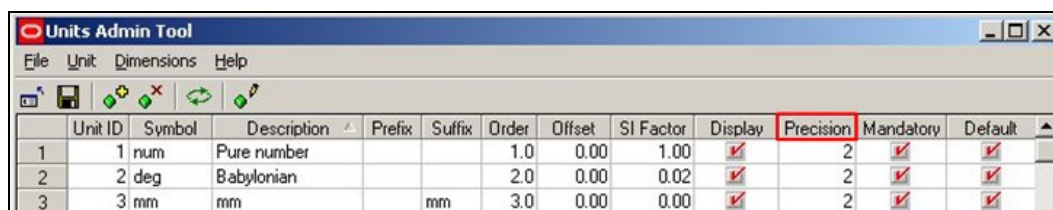
The **Display Option** allows the user to select whether a unit will be displayed in the appropriate drop list when used in Macro Space Management.



	Unit ID	Symbol	Description	Prefix	Suffix	Order	Offset	SI Factor	Display	Precision	Mandatory	Default
1	1	num	Pure number			1.0	0.00	1.00	<input checked="" type="checkbox"/>	2	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
2	2	deg	Babylonian			2.0	0.00	0.02	<input checked="" type="checkbox"/>	2	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
3	3	mm	mm		mm	3.0	0.00	0.00	<input checked="" type="checkbox"/>	2	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>

Units with a tick will be displayed. Units without a tick will not.

**Precision** determines the number of decimal places that will display when the value of a unit is shown.

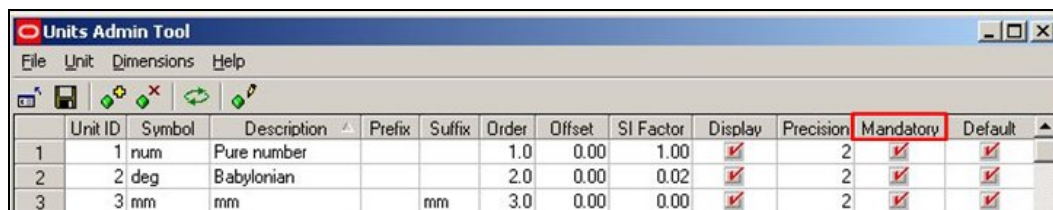


	Unit ID	Symbol	Description	Prefix	Suffix	Order	Offset	SI Factor	Display	Precision	Mandatory	Default
1	1	num	Pure number			1.0	0.00	1.00	<input checked="" type="checkbox"/>	2	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
2	2	deg	Babylonian			2.0	0.00	0.02	<input checked="" type="checkbox"/>	2	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
3	3	mm	mm		mm	3.0	0.00	0.00	<input checked="" type="checkbox"/>	2	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>

Number of decimal places	Result
0	10
1	10.1
2	10.25
3	10.375

**Note:** This functionality is being implemented, and not all variables may display to the set number of decimal places.

**Mandatory Units** are units that cannot be deleted.

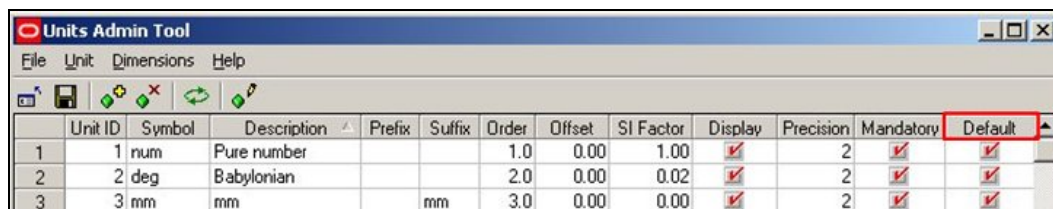


	Unit ID	Symbol	Description	Prefix	Suffix	Order	Offset	SI Factor	Display	Precision	Mandatory	Default
1	1	num	Pure number			1.0	0.00	1.00	<input checked="" type="checkbox"/>	2	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
2	2	deg	Babylonian			2.0	0.00	0.02	<input checked="" type="checkbox"/>	2	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
3	3	mm	mm		mm	3.0	0.00	0.00	<input checked="" type="checkbox"/>	2	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>

These are units that are fundamental to Macro Space Management and correspond to the fundamental SI units, plus the Number, Money and Angle options. More on SI Units.

**Note:** In current releases of Macro Space Management it is possible that the Mandatory and Default column headings have been swapped.

**Default Units** are the units that will be preferentially displayed when the selected measurement system is in use.



	Unit ID	Symbol	Description	Prefix	Suffix	Order	Offset	SI Factor	Display	Precision	Mandatory	Default
1	1	num	Pure number			1.0	0.00	1.00	<input checked="" type="checkbox"/>	2	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
2	2	deg	Babylonian			2.0	0.00	0.02	<input checked="" type="checkbox"/>	2	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
3	3	mm	mm		mm	3.0	0.00	0.00	<input checked="" type="checkbox"/>	2	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>

For example, if the imperial system is used, the default units might be selected as inches, pounds and degrees Fahrenheit. For the metric system, the default units selected might be centimetres, kilograms and degrees centigrade.

**Note:** In current releases of Macro Space Management it is possible that the Mandatory and Default column headings have been swapped.

## User Defined Attributes

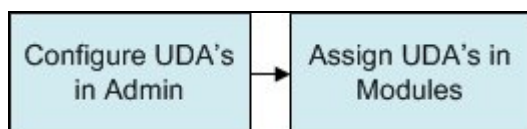
### Overview of User Defined Attributes

**Note:** In-Store Space Collaboration is an optional application that can be used in parallel to Macro Space Management. It may not be installed in all implementations of Macro Space Management.

**User Defined Attributes (UDA's)** allow a Macro Space Management Administrator to designate customizable fields for Users, Stores, Files, Fixtures, Products and Planograms. Each object with UDA's designated can then have object specific data assigned to them. Once assigned, the attributes can be used in two main ways:

1. All MSM users can see customized, organization specific information for those objects with UDA data assigned.
2. Reports can be produced based on the information in the User Defined Attributes.

User Defined Attributes require two stages:



#### 1. Configuring UDA's in Admin

The required UDA's are configured in the Admin Module.

	Type	Number	Name	Data Type	Mandatory	Sequence	Default	Lookups
+	Product							
-	Store							
	Store	1	Store Type	String	<input type="checkbox"/>	1		
	Store	2	Building Orientation	String	<input checked="" type="checkbox"/>	2	Regular	Regular Flipped
	Store	3	Regional Manager	String	<input type="checkbox"/>	3		
	Store	4	District Manager	String	<input type="checkbox"/>	4		
	Store	5	Ethnicity	String	<input type="checkbox"/>	5	Mixed	African Asian Caucasian Hispanic Mixed
	Store	6	Climate	String	<input type="checkbox"/>	6	Warm	Cold Warm Hot
	Store	7	Location	String	<input type="checkbox"/>	7	Suburban	City Suburban Rural
	Store	8	Size	String	<input checked="" type="checkbox"/>	8	Large	Small Medium Large
	Store	9		String	<input type="checkbox"/>	0	0	
	Store	10		String	<input type="checkbox"/>	0	0	
+	User							

Individual UDA's can be assigned specific names, date types, default values, etc. In the above example, UDA fields have been designated for stores.

User Designed Attributes are used in:

UDA	Where Used	Module
Block	Fixture (Block) definitions	Block (Fixture) Definition/Fixture Studio

UDA	Where Used	Module
File	File Properties Information	File Properties dialogue box/Store Manager
Planogram	Planogram Definitions	Planogram Definition/Merchandiser
Product	Product Definitions	Product Dialogue/Product Studio
Store	Store Definition	Store Dialogue/Store Manager
User	User Definition	Functional Security/Admin Module

## 2. Assigning UDA's in Modules

Once UDA's have been configured in the Admin Module, individual values can be assigned to instances of Blocks, Files, Planograms, Products, Stores and Users. In the example below, UDA's are being assigned to a store - each field being populated having previously been designated in the Administration Module.

	Property	Value
1	Store Type	
2	Building Orientation	Regular
3	Regional Manager	
4	District Manager	
5	Ethnicity	Mixed
6	Climate	Warm
7	Location	
8	Size	Large

Values can be entered or selected from drop down lists (depending on how the UDA has been configured in the Admin Module).

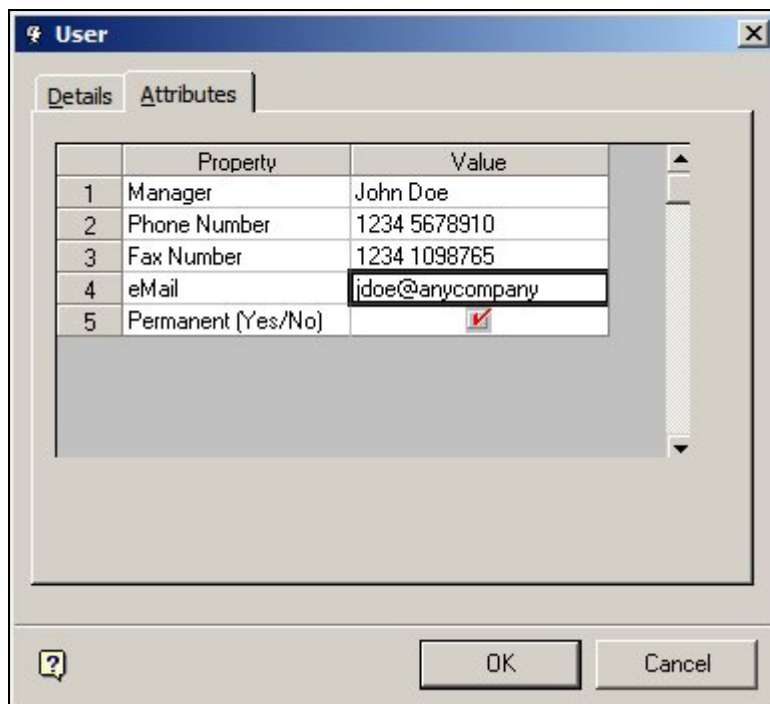
## Dialogue Boxes where UDA's are Set

UDA's can be assigned to specific Users, Stores, Files, Fixtures, Products and Planograms. The dialogue boxes where this can be done are as follows:

### Users



UDA's for Users are set in the Attributes tab of the User dialogue box accessible from the Functional Security Option in the Administration Module.



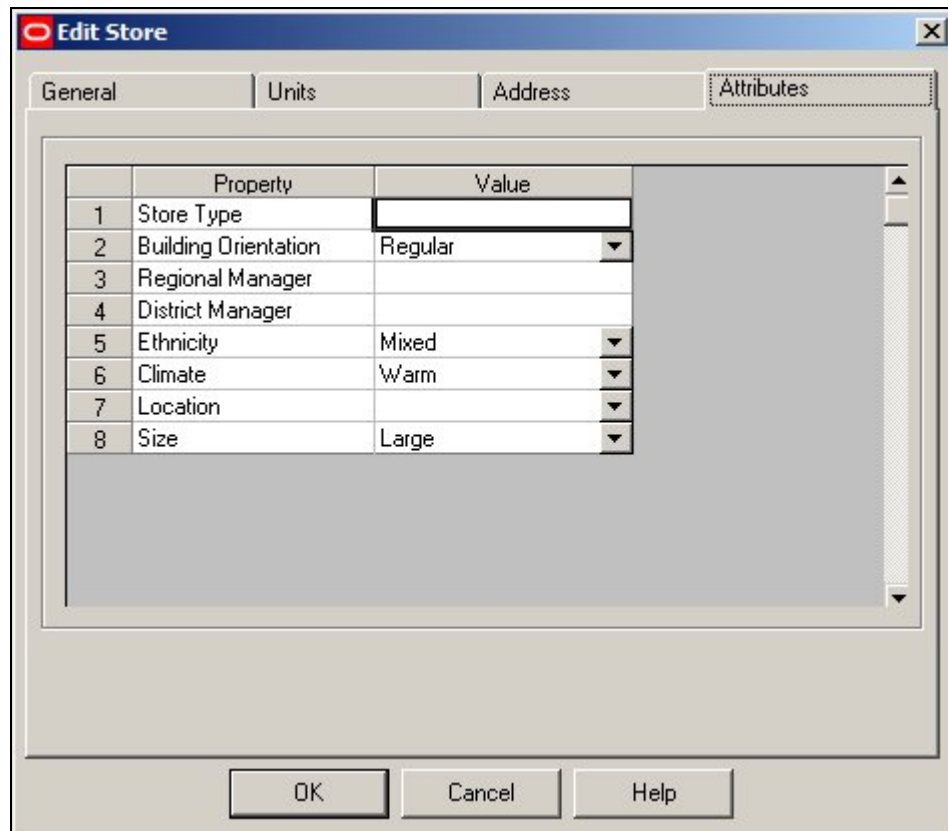
The screenshot shows a 'User' dialog box with two tabs: 'Details' and 'Attributes'. The 'Attributes' tab is selected, displaying a table with 5 rows of user attributes. The 'eMail' attribute is highlighted with a black border.

	Property	Value
1	Manager	John Doe
2	Phone Number	1234 5678910
3	Fax Number	1234 1098765
4	eMail	ldoe@anycompany
5	Permanent (Yes/No)	<input checked="" type="checkbox"/>

At the bottom of the dialog box, there are 'OK' and 'Cancel' buttons, and a help icon (?) on the left.

### Stores

UDA's for Stores are set in the Attributes tab of the Add or Edit Store dialogue box in Store Manager.

**Files**

UDA's will be visible for files in the File Properties dialogue box in Store Manager. This, as yet, does not contain an Attributes tab.

**Fixtures**

Fixture UDA's are visible in the Block Details dialogue box.

**Block Details: Base\_36x24**

Description: Base\_36x24

Category | Insertion | Size | Connections | Parts | Fixture | **UDAs** | Styles/Ranges | Merchandisable areas | Shelf | Preview

**Fixed Attributes**

	Property	Value
1	End of Life	31/12/2010
2	Part Code	1234567
3	Cost	345.00
4	Weight	10.0000

**Variable Attributes**

Attribute 1  
Attribute 2

Attribute 1

>  
<

Save OK Cancel

There are two forms of attributes in this dialogue box; Fixed Attributes and Variable Attributes.

1. Fixed Attributes are set in the User Defined Attributes section of the Administration module. These attributes are common to all fixtures of that type.
2. Variable Attributes are configured using the Edit Menu > Edit Attribute Definitions option in Fixture Studio. They can then be set for individual instances of fixtures in Planner, Merchandiser and In-Store Space Collaboration by selecting a fixture in the drawing and clicking the Attributes option in the respective toolbars.

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**Note:** Variable Attributes can be assigned to each instance of a fixture when an instance of that fixture is placed in a Planner. Those attributes can also be edited by selecting the fixture in In-Store Space Collaboration and selecting the Fixture Attributes option from the Fixtures toolbar.

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## Products

UDA's for Products are set at SKU level in Product Studio using the Custom Tab of the SKU dialogue box.



The image shows a software window titled "Product SKU - Clothing". It has four tabs: "Details", "Physical", "Financial", and "Custom". The "Custom" tab is selected. Inside the "Custom" tab, there is a table with two columns: "Property" and "Value". The table contains two rows: Row 1 has "Target Age" as the property and "20 - 30" as the value; Row 2 has "Gender" as the property and "Unisex" as the value. Below the table is a large, empty gray rectangular area. At the bottom of the window, there is a help icon (a question mark in a square), an "OK" button, and a "Cancel" button.

	Property	Value
1	Target Age	20 - 30
2	Gender	Unisex

### Planograms

UDA's for Planograms are set in the UDA tab of the Planogram Design dialogue box in the Merchandiser module.

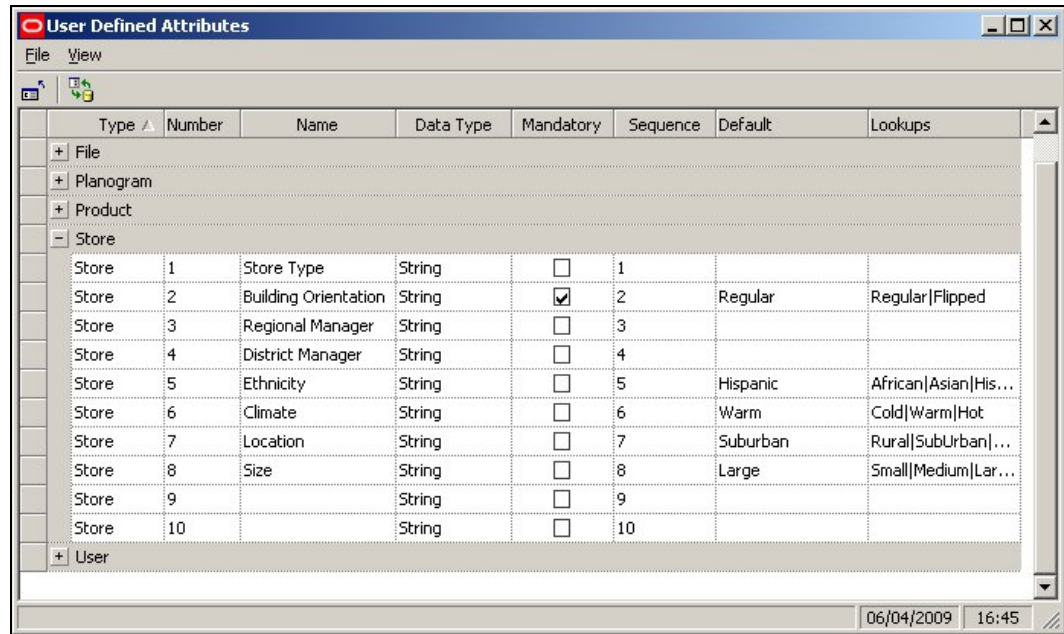
The image shows a software window titled "Planogram: Emulsion - Crown". It has a tabbed interface with tabs for "Details", "Stores", "Seasons", "Fixture Styles", "Design", and "UDAs". The "UDAs" tab is selected. Inside the tab, there is a table with two columns: "Property" and "Value". The table contains three rows of data:

	Property	Value
1	Planogram Designer	Jane Doe
2	Store Type	Medium
3	Planogram Type	General

Below the table, there are three buttons: "OK", "Save As", and "Cancel".

## Overview of Configuring User Defined Attributes

**Configuring User Defined Attributes** is done using the User Defined Attribute Option from the General menu of the Administration Module. This will bring up the User Defined Attributes dialogue box.



### Close Option

The close option (available from the toolbar or File pull down menu) closes the User Defined Attributes dialogue.

### Refresh Option

The refresh option refreshes the UDA dialogue box with the latest information from the database. This is useful when other users are simultaneously working on UDA's as it allows the effects of their changes to be seen.

### UDA Options

Users can see the varying UDA options as gray bars. They can be expanded or contracted by using the '+' or '-' signs. There are a fixed number of options for each UDA type. These are:

UDA	Number of Fields
Block	10
Planogram	25
Product	15
File	10
Store	10
User	10

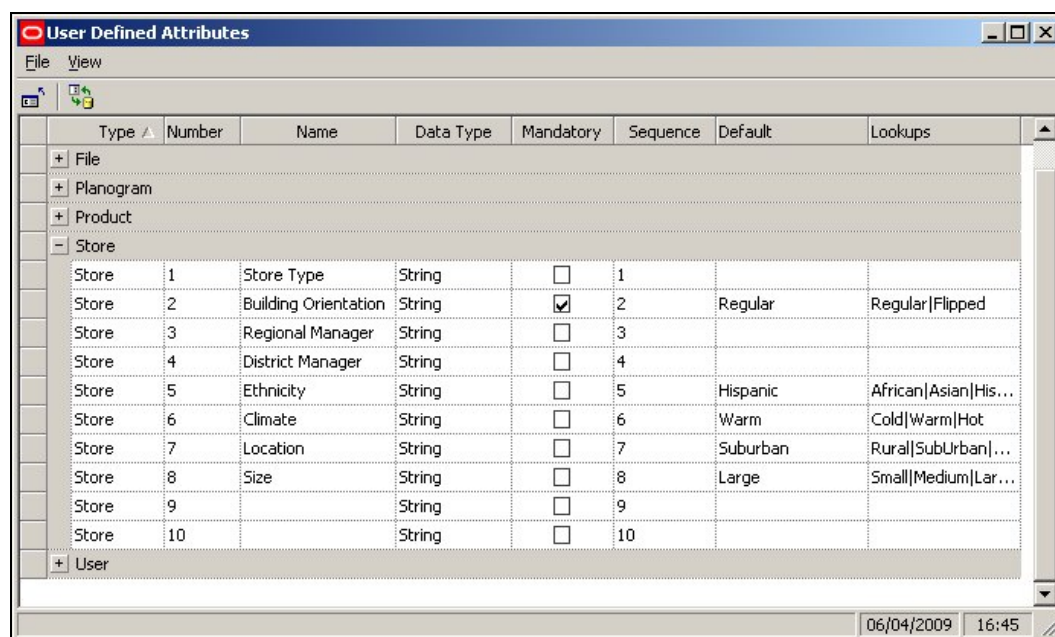
For each UDA, the user can configure the following options:

Option	Description
Name	The name describing the UDA
Data Type	The type of data for the UDA (set from a drop down list)

Option	Description
Mandatory	Whether the UDA is mandatory to complete
Sequence	The order the UDA will appear in the list of UDA's seen by the user.
Default	The default value for the UDA
Lookups	Values for a drop down list that users can select from

## Configuring User Defined Attributes

**Configuring User Defined Attributes** is done by setting the Name, Data Type, Mandatory, Sequence, Default and Lookup options.



**Note:** when entering data, it will not be added to the database until <Return> has been pressed.

### Type

There are currently six options as to where the UDA will be configured.

UDA Type	Where Used	Dialogue Box and Module
Block	Fixture (Block) definitions	Block (Fixture) Definition/Fixture Studio
Planogram	Planogram Definitions	Planogram Definition/RF Merchandiser
Product	Product Definitions	Product SKU Dialogue/Product Studio
File	file Properties	File Properties/Store Manager
Store	Store Definition	Store Dialogue/Store Manager
User	User Definition	Functional Security / Admin Module



### Name

Name is entered by the user. It is the description that will appear in the dialogue box that uses that particular UDA. The description can be a maximum of 50 characters.

### Data Type

This is selected from a drop down list. Data will be validated against the data type selected.

Data Type	Example
String	Any alphanumeric input (ABC123)
Integer	Any Integer (1,2,3) in the range -2 billion to +2 billion
Long	Any Integer (1,2,3) in the range $-9 \times 10^{18}$ to $9 \times 10^{18}$ .
Single	Any number (1.23, 2.2345) in the range $-3 \times 10^{38}$ to $3 \times 10^{38}$ .
Double	Any number (1.23, 2.2345) in the range $-2 \times 10^{308}$ to $2 \times 10^{308}$ .
Date	Date (01/01/2009)
Boolean	True or False values (0,1). Boolean fields will appear as a check box for users.
Image	Bit Maps, GIF and JPG images
Currency	Financial data (£1234.00)

1. Data type date will accept dates in any format. Note that format may vary from country to country - the US displays dates in a different format (MM/DD/YYYY) to the UK (DD/MM/YYYY).
2. If data type Boolean is selected, the only permissible values for the default are 0 and 1. No look up values should be entered. In the example below, a user can be designated as a permanent employee by clicking the checkbox.

The screenshot shows a 'User' dialog box with two tabs: 'Details' and 'Attributes'. The 'Attributes' tab is active, displaying a table with the following data:

	Property	Value
1	Manager	John Doe
2	Phone Number	1234 5678910
3	Fax Number	1234 1098765
4	eMail	jdoe@anycompany
5	Permanent (Yes/No)	<input checked="" type="checkbox"/>

At the bottom of the dialog, there are buttons for '?', 'OK', and 'Cancel'.

3. Data type Image is currently not enabled and has no effect.

**Mandatory**

This specifies whether the data is mandatory (must be entered) or not. If this check box is ticked, the user will not be allowed to close the associated dialogue box (for example the Planogram Definition) until the data has been entered.

**Sequence**

This is the sequence the UDA's will be display in the dialogue box they are associated with. For example, assigning a UDA the sequence number of 3 means it will display 3rd in the list of UDA's.

**Default**

This specifies the default value that will appear when the dialogue box is first opened to enter UDA's. This can be left blank if no default is required.

**Lookups**

This field specifies values that may be selected from a drip down list. Values must be entered using a pipe (vertical bar) to separate them. An example would be A | B | C.

If a look up is entered in this column, users can only select values from the look ups. If no value is entered, the user will have to manually enter data. In the example below Building Orientation, Ethnicity, Climate and Size are selected from look ups via drop down lists.

	Property	Value
1	Store Type	
2	Building Orientation	Regular
3	Regional Manager	
4	District Manager	
5	Ethnicity	Mixed
6	Climate	Warm
7	Location	
8	Size	Large

Buttons: OK, Cancel, Help

**Modifying User Defined Attributes**

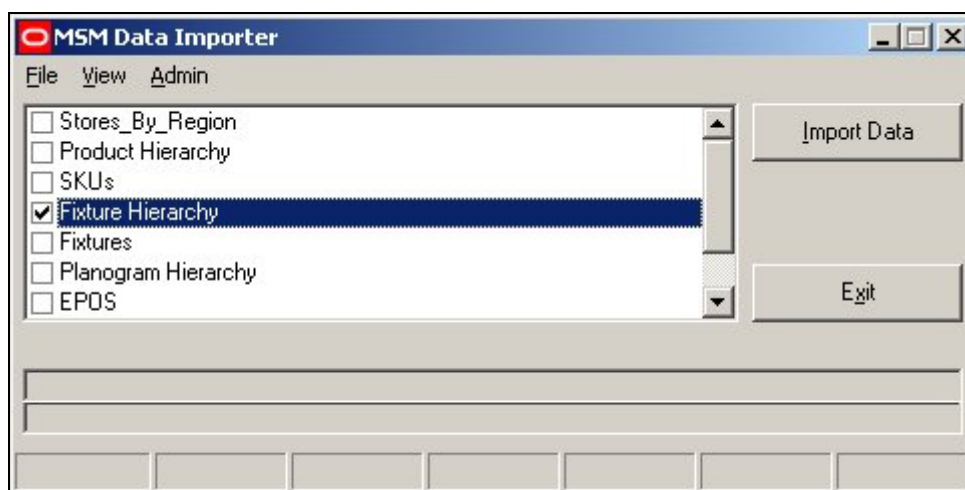
**Modifying UDA's in the Administration Module should be done with caution.** They are normally configured on implementation and subsequent changes may cause problems.

1. Additional UDA's may be added in the Admin Module. Items in the database before the UDA was added will not have information associated with that UDA.
2. If UDA's are edited or deleted this may cause problems within the database. Accordingly, UDA's should not be edited or deleted without advice as to the consequences. If it is necessary to edit or delete a UDA, it may be necessary to modify the database with SQL upgrade scripts.
3. Modifying UDA's may also require changes to the Import Definitions in Data Importer.

## Data Importer

Once UDA's have been set up in the Administration module, it is possible to populate them in one of two ways:

1. Manually
2. Via Data Importer. (See the Data Importer help file for more information).



If it is decided to populate UDA's via Data Importer, it will be necessary to create a new import routine as UDA's are not included within the Standard Import. Each UDA has its own table within the database. These are:

UDA	Table	Primary Key
File	AVTTB_FILE_UDA	FIL_ID
Fixture	AVTTB_BLOCK_UDA	BLK_ID
Product	AVTTB_PRODUCT_UDA	PRD_ID
Planogram	AVTTB_PLANO_UDA	POG_ID
Store	AVTTB_STORE_UDA	STR_ID
User	AVTTB_USER_UDA	USR_ID



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## Admin Planning

### Hatch Styles

#### About Hatch styles

The **Hatch Styles** Option allows users to set up Hatch Styles to indicate the dimensions of Zones, etc.

These hatch styles can be customized in the Admin Module and are used in both the MSM Merchandiser Module and In-Store Space Collaboration.

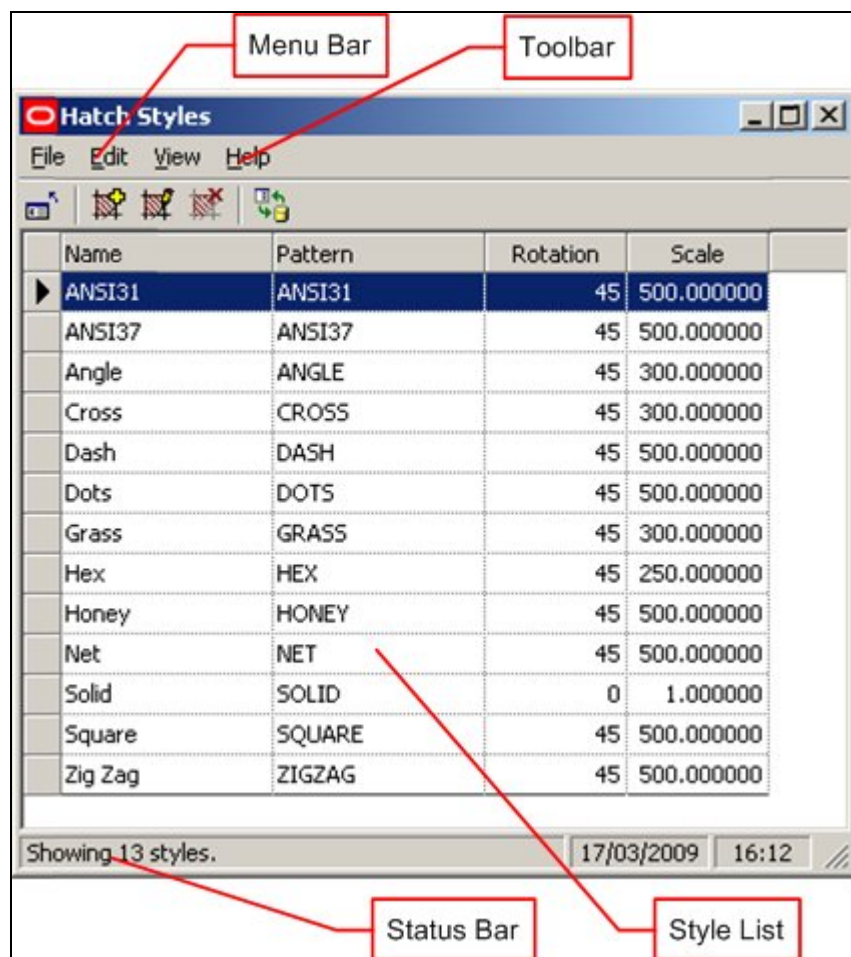
In Macro Space Management the hatch styles are predefined for the Planner Module, only the rotation and scale being variable.

Hatch Styles can be defined for use in In-Store Space Collaboration - and can only be configured for that application using the Macro Space Management Admin module.

**Hatch Styles in the Planner Module** are based on the pre-configured hatch styles in AutoCAD. Changing Hatch Styles in Admin thus has no effect on this module.

#### Hatch Styles Dialogue Box

The **Hatch Styles dialogue box** gives brief details of the available styles.



The **Menu Bar** gives access to the drop down menus.

The **Toolbar** gives access to many of the options available from the menus.

The **Style List** lists the styles that have been defined.

The **Status Bar** gives the total number of styles.

Selecting the Add or Edit option from the toolbar will bring up the Add/Edit Hatch Style dialogue box.

**Edit Hatch Style**

MSM CAD

Name: Dash

Pattern: DASH

Rotation: 45

Scale: 500

Merchandiser / In Store Representation

	Angle	X Origin	Y Origin	X Delta	Y Delta	Dash 1	Gap 1	Dash 2	Gap 2	Dash 3	Gap 3
1	0	0	0	2	2	1	1				

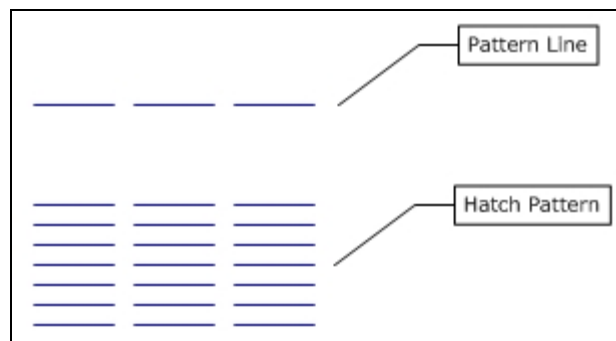
OK Cancel

This allows users to specify the pattern details to be used in Merchandiser and In-Store Space Collaboration.

## Overview of Configuring Hatch Styles for Merchandiser/In-Store Space Collaboration

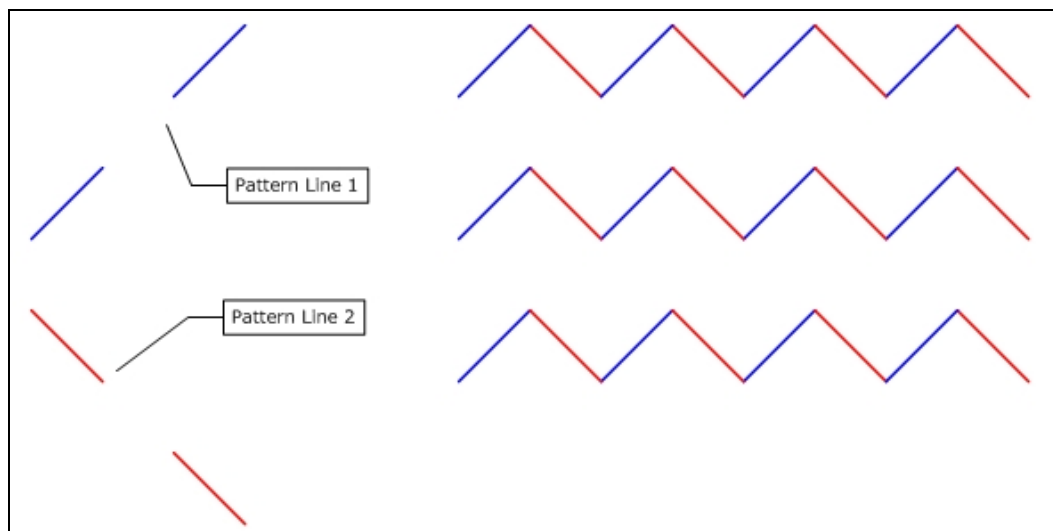
The data structure for a hatch pattern is very similar to an AutoCAD hatch pattern file (\*.PAT):

The hatch pattern is made up of one or more pattern lines. These pattern lines are repeated until they fill the area defined for hatching.



Pattern lines can be specified to have a specific start point, length, gap between segments, and angle.

Hatch patterns can be made up of multiple pattern lines. In the example below (coded red and blue for ease of understanding) two separate pattern lines have been combined to make a zigzag pattern.



## Configuring Hatch Styles for Merchandiser and In-Store Space Collaboration

To Add or Edit a Hatch style for Merchandiser, respectively click on the Add Hatch Style icon [outlined in red/left] , or highlight a hatch style and click on the Edit hatch style icon [outlined in red/right].



This will bring up the Add (or Edit) Hatch Styles dialogue box. The settings to be configured are in the Merchandiser/In-Store Space Collaboration Representation frame.

**Edit Hatch Style**

MSM CAD

Name: Dash

Pattern: DASH

Rotation: 45

Scale: 500

Merchandise / In Store Representation

	Angle	X Origin	Y Origin	X Delta	Y Delta	Dash 1	Gap 1	Dash 2	Gap 2	Dash 3	Gap 3
1	0	0	0	2	2	1	1				

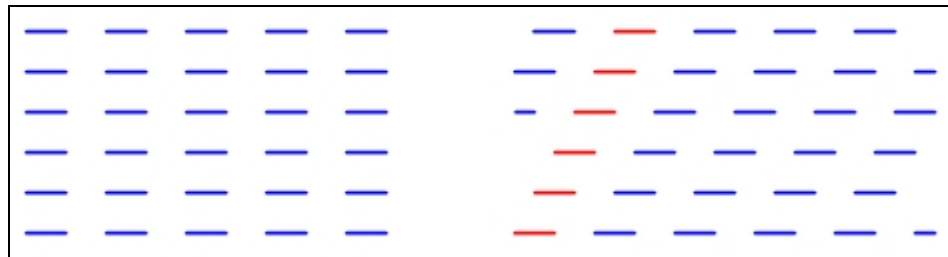
OK Cancel

Angle should be a numeric value between 0 and 360°.

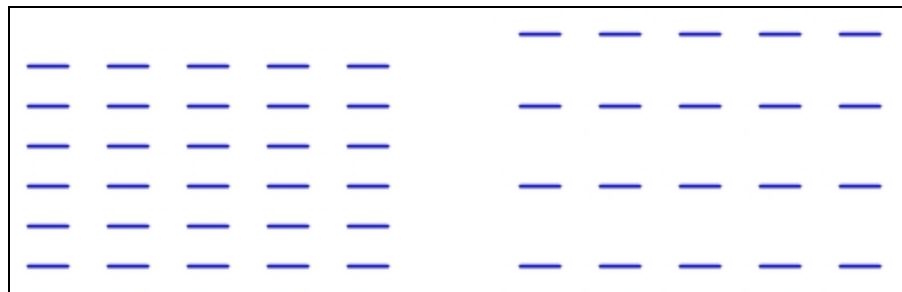
X Origin and Y Origin values can be positive or negative decimal numbers. They specify the offset relative to the 0,0 datum the Zone is drawn from.

X Delta and Y Delta specify the spacings between the lines in the X and Y planes. Delta spacings are specified in the drawing units (normally inches or mm).

X Delta is only meaningful for dashed lines and gives the offset for each successive line. In the example below, the left hand example has X Delta offset = 0, while the right hand example has X Delta offset = 1. (One line in each family of dashes has been highlighted in red to show the effect).

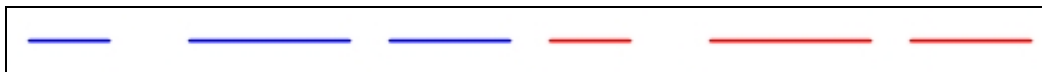


Y Delta effects the vertical gap between the lines. The example on the left has a Y Delta offset = 1, while the example on the right has Y Delta offset = 2.



Dash and Gap determine the length of each dash in a line, and the gap between them. Up to three dash lengths and gaps can be specified for each line.

In the example below the first unit has been coloured in blue, and the second in red.



The dash and gap lengths are as follows:

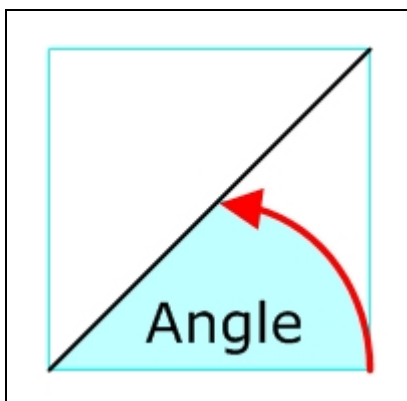
Dash 1	Gap 1	Dash 2	Gap 2	Dash 3	Gap 3
1	1	2	0.5	1.5	0.5

If the first dash and gap are not defined, then a continuous line will be drawn.

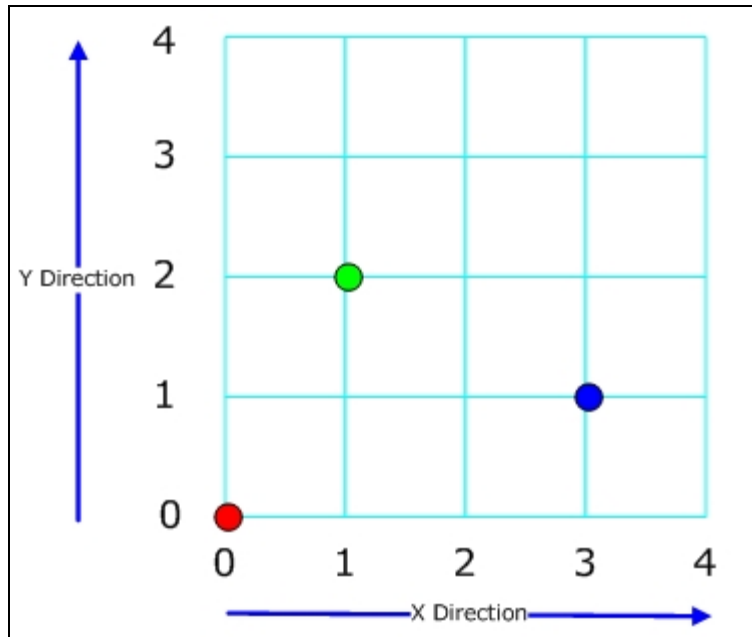
Dash 2 and Gap 2 cannot be defined until Dash 1 and Gap 1 have been entered.

Dash 3 and Gap 3 cannot be defined until Dash 2 and Gap 2 have been entered.

### Hatch Style Parameters for Merchandiser/In-Store Space Collaboration

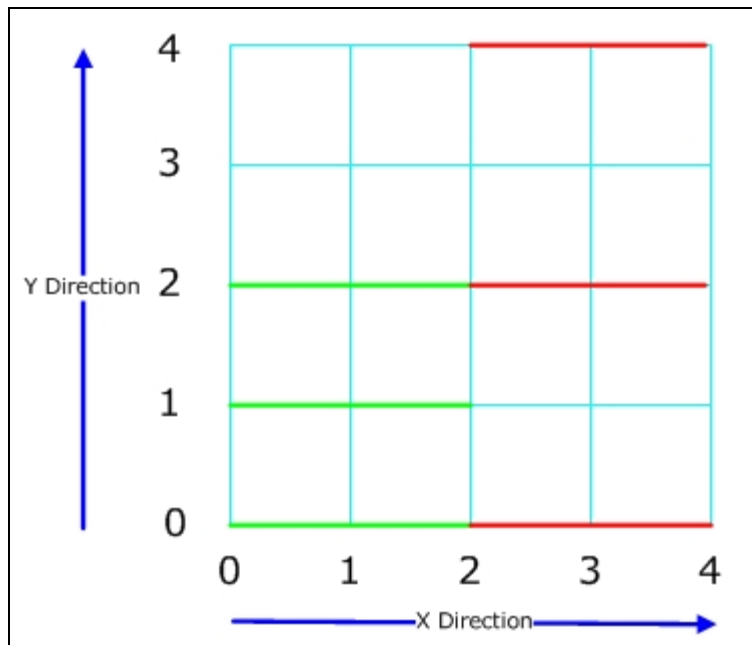


The Angle of the line is the angle measured anticlockwise from horizontal. Angles can take up any value between 0 and 360 degrees.



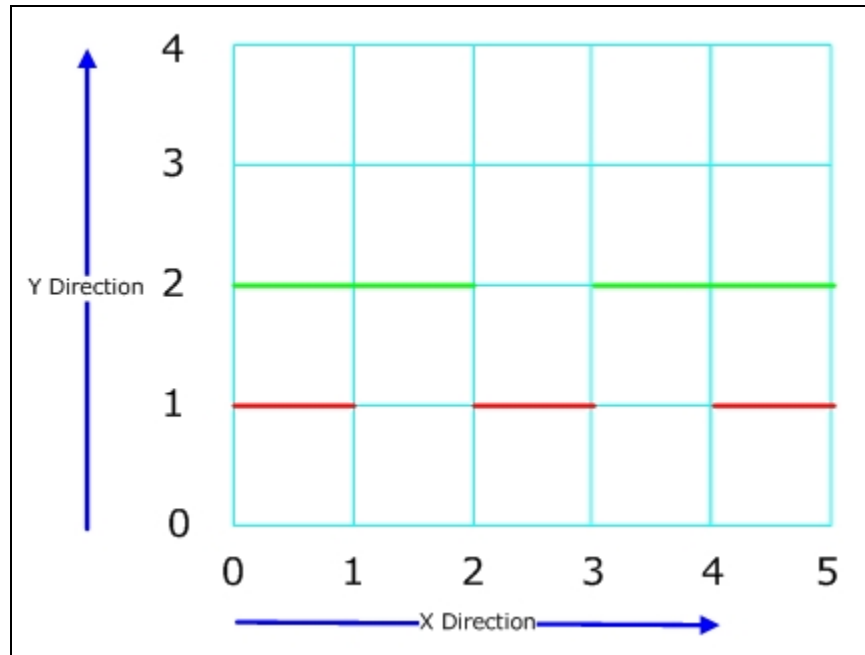
The X and Y origins are specified in terms of Cartesian coordinates.

1. The Red dot has an X origin of 0 and a Y origin of 0.
2. The Green dot has an X origin of 1 and a Y origin of 2.
3. The Blue dot has an X origin of 3 and a Y origin of 1.



The X and Y offsets are the distances between lines.

1. The Green lines have a Y offset of 1.
2. The Red lines have a Y offset of 2.



The Dash and Gap give respectively the length of a section of the line and the gap between the next part of the line.

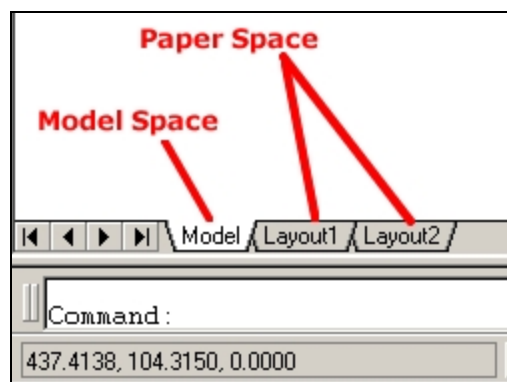
1. The Green Line has a Dash of 2 and a gap of 1.
2. The Red Line has a Dash of 1 and a Gap of 1.

## Scales

### Overview of MSM Scales

**Scales** potentially affect Text Styles and Symbols as they are inserted into a drawing in the Planner Module.

There are two drawing environments in the Planner Module, Model Space and Paper Space. Users can toggle between the two using tabs at the bottom of the drawing.



#### Model Space

Model Space is where an object is designed in Planner. Objects can be drawn in 3 dimensions in model space, and can be viewed at any degree of magnification.



Objects drawn in model space are always drawn at a 1:1 ratio; 1 unit in model space = 1 unit of the chosen setting. For example, if the units in model space are inches, 1 unit = 1 inch. Similarly, if the units in model space are centimeters, 1 unit = 1 cm. Users can zoom in or out to see the drawing at any scale.

### **Paper Space**

Paper Space is where the drawing produced in model space is prepared for printing. Because a drawing in model space is always drawn at a 1:1 ratio, it will generally have to be scaled to get it to print within the limits of A2, A3 or A4 paper. For example 1 inch may represent 8 feet (1:96) in the printed output. This enables an 11" x 7" section of paper to represent an 88 ft x 56 foot section of floor - adequate to represent an entire department. Using a yet smaller scale would enable an entire store to be represented.

### **Scales**

Because of the scaling applied to get an object to print in paper space, some objects that may have been easily readable at a 1:1 ratio in model space may become very difficult to see when the drawing has been scaled for printing purposes in paper space. The Scales functionality allows users to automatically scale up the size of specific items when inserted into model space, so that when they are scaled back in paper space, they remain readable.

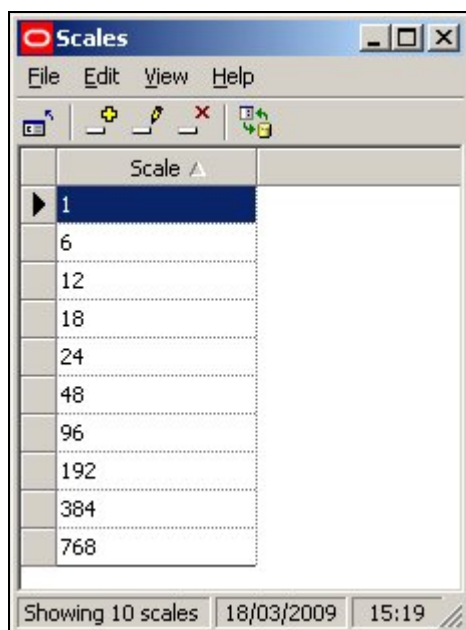
For example, if it is known that the drawing will be plotted at 1" = 8ft (1:96) scale in paper space, it is possible to set the drawing scale to 1" = 8ft in model space. Text Styles (if the Scale option has been selected in the text style rules) and Symbols will then be scaled up by this factor. This means they will appear very large in model space. When scaled in paper space, they will effectively be drawn at a 1:1 size because the scaling up in model space will exactly counteract the scaling down in paper space.

### **Overview of MSM Scales**

Scales are used for setting the scales used for annotative objects (Text styles, etc), so that they are readable when set up in viewports in Paper Space in Planner for printing out.

## **Configuring Scales in Admin**

**Scales** can be configured using the Scales option on the Planning menu in the Administration module. this brings up the Scales dialogue box.



Scales can be added, edited or deleted using the option on the menu bar or toolbar. Refresh will update the Scales dialogue box with the latest information from the database:

### Imperial Units

For imperial units the scales will depend on the base units of the drawing in Model Space. In the table below, the results are based on inches.

Units	Scale	Result in Model Space
Inches	48	1 inch is scaled to 4 feet.
Inches	120	1 inch is scaled to 10 feet
Inches	240	1 inch is scaled to 20 feet.

### Metric Units

Similarly, for metric units the scales will depend on the base units of the drawing in Model Space. In the table below, the results are based on millimeters

Units	Scale	Result in Model Space
mm	100	1 mm is scaled to 10 cm.
mm	500	1 mm is scaled to 50 cm
mm	1000	1 mm is scaled to 1 meter

## Configuring Objects to be Scaled

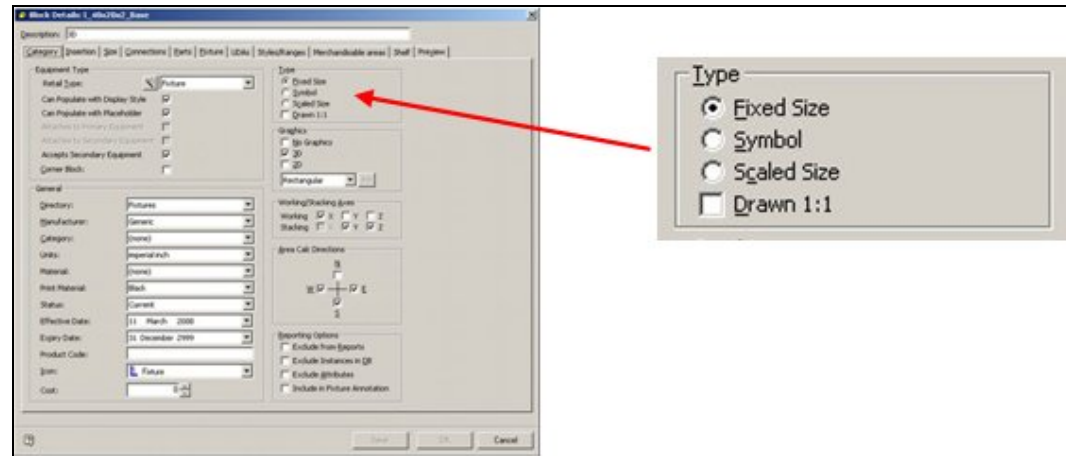
Scaling is applied to two types of objects:

1. Symbols
2. Text Styles

In order for them to be scaled in the Planner environment, they must first be configured accordingly.

### Symbols

Symbols are shapes like arrows, etc, that are used to indicate points of interest in a store plan.



In order to designate an AutoCAD block as a symbol, the Symbol radio button must be selected in the Categories Tab of the Block Details dialogue box in Fixture Studio. Once an object has been designated as a Symbol, the Drawn 1:1 checkbox also has an effect:

1. If left unchecked, the symbol will be drawn at 1:50 scale
2. If checked, the symbol will be drawn at 1:1 scale - i.e. at the nominal size of the block.

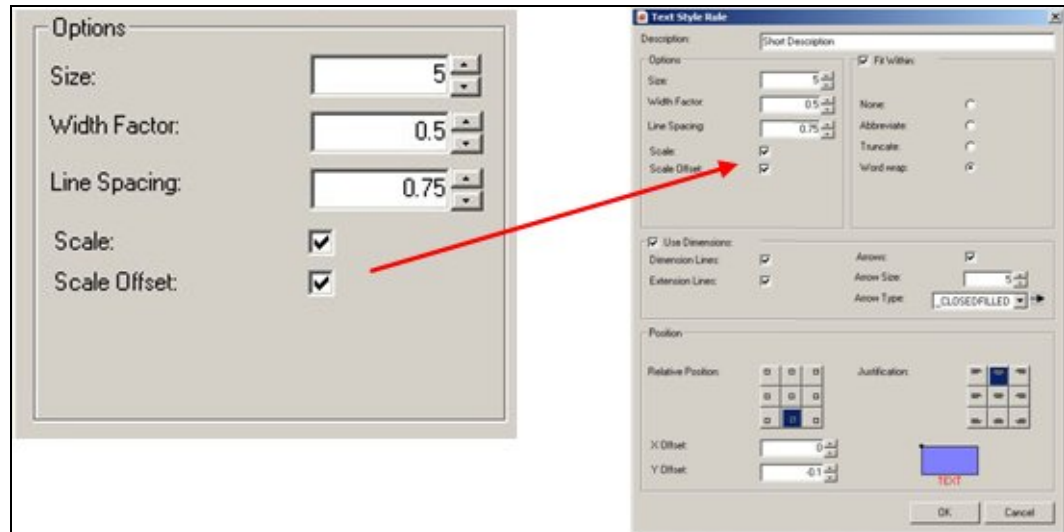
---

**Note:** Symbols are currently not scaling properly in the Planner module.

---

### Text Styles

In order for a text style to scale when added into a Planner store plan, the Scale options must be checked in the Text Style rules dialogue box of Text Styles in the Admin Module.



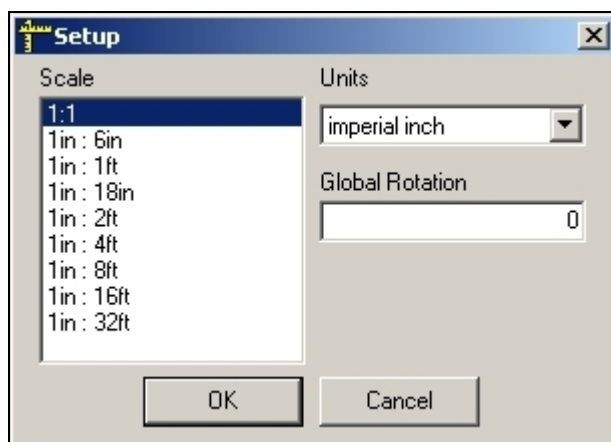
1. If Scale (and Scale Offset) are left unchecked, the Text Style will be drawn at a 1:1 scale
2. If Scale (and Scale Offset) are checked, the Text Style will be drawn at the scale set in the Set Up dialogue box in the Planner module. [More Information](#)

## Using Scales in the Planner Module

The **Scales** setting in the Admin Module is picked up in Planner via the Drawing Setup option in the Format pull down menu.



This calls the Setup dialogue which allows the user to set the required scale for the drawing. The required scale must correspond to the scale it is intended to use in paper space. For example, if it is decided to plot at 1 in: 16 feet in paper space, the same scale should be selected in set up.



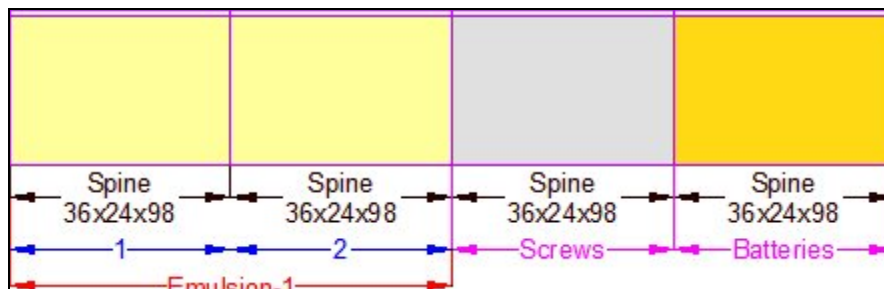
Symbols and specified Text Styles will then be scaled up by a factor of 192:1 when placed in model space, and scaled down by 1:192 when plotted at 1 in: 16ft in paper space. This enables the specified objects to be visible in the printed store plan.

## Text Styles

### Overview of Text Styles

#### Overview

**Text Styles** are used to annotate objects in the Planner environment. Different Text Styles can be defined and assigned to the varying classes of objects.



In the above example, text styles have been defined so fixtures are annotated in black, planograms in red with the profiles (bays) numbered in blue. Products have been annotated in purple. The annotation has been defined so it does not overwrite itself.

Text Styles can be assigned to all three types of Zone:

- Department Zone
- Internal Zone
- Zone

Text styles can also be assigned to:

- Fixtures
- Products
- Planograms

Both products and planograms can have different types of annotation associated with them. Products are often configured with one form of annotation for placeholders and

another form of annotation for products at SKU level. Multi bay planograms are often configured with both planogram details and the numbers of the profiles (bays).

Text styles can be set to draw automatically when an object is placed in the drawing. Alternatively, text styles can be set so that they will only annotate specific objects in the drawing that have been selected by a user.

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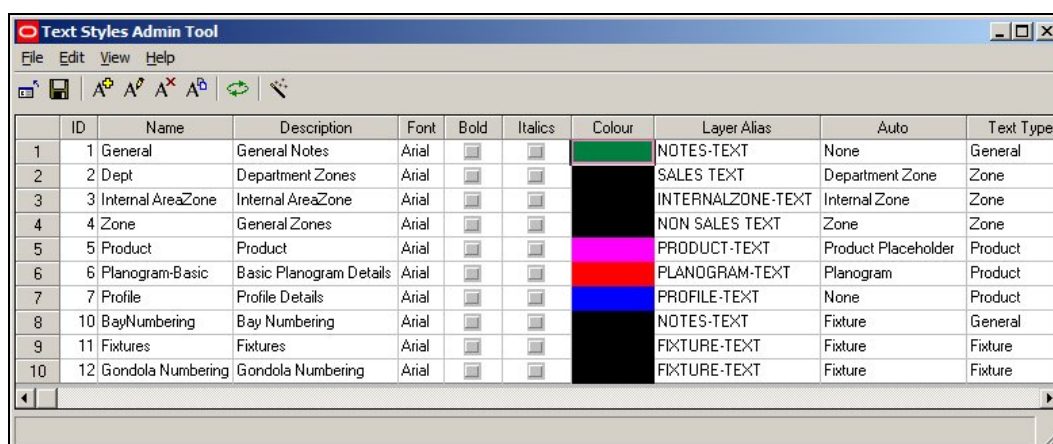
**Note:** Manual annotation is controlled using the 'Annotate' option on the Retail toolbar in Planner.

---

It is also possible to make text styles conditional so that they only apply in specific cases. This is done through changes in the custom SQL used to extract information used in the text styles.

## The Text Styles Admin Tool

The **Text Styles Admin Tool** is used to display details of all available text styles.



The screenshot shows the 'Text Styles Admin Tool' window with a menu bar (File, Edit, View, Help) and a toolbar. Below the toolbar is a table with 11 columns: ID, Name, Description, Font, Bold, Italics, Colour, Layer Alias, Auto, and Text Type. The table contains 12 rows of data.

	ID	Name	Description	Font	Bold	Italics	Colour	Layer Alias	Auto	Text Type
1	1	General	General Notes	Arial	<input type="checkbox"/>	<input type="checkbox"/>	Green	NOTES-TEXT	None	General
2	2	Dept	Department Zones	Arial	<input type="checkbox"/>	<input type="checkbox"/>	Black	SALES TEXT	Department Zone	Zone
3	3	Internal AreaZone	Internal AreaZone	Arial	<input type="checkbox"/>	<input type="checkbox"/>	Black	INTERNALZONE-TEXT	Internal Zone	Zone
4	4	Zone	General Zones	Arial	<input type="checkbox"/>	<input type="checkbox"/>	Black	NON SALES TEXT	Zone	Zone
5	5	Product	Product	Arial	<input type="checkbox"/>	<input type="checkbox"/>	Magenta	PRODUCT-TEXT	Product Placeholder	Product
6	6	Planogram-Basic	Basic Planogram Details	Arial	<input type="checkbox"/>	<input type="checkbox"/>	Red	PLANOGRAM-TEXT	Planogram	Product
7	7	Profile	Profile Details	Arial	<input type="checkbox"/>	<input type="checkbox"/>	Blue	PROFILE-TEXT	None	Product
8	10	BayNumbering	Bay Numbering	Arial	<input type="checkbox"/>	<input type="checkbox"/>	Black	NOTES-TEXT	Fixture	General
9	11	Fixtures	Fixtures	Arial	<input type="checkbox"/>	<input type="checkbox"/>	Black	FIXTURE-TEXT	Fixture	Fixture
10	12	Gondola Numbering	Gondola Numbering	Arial	<input type="checkbox"/>	<input type="checkbox"/>	Black	FIXTURE-TEXT	Fixture	Fixture

Options can be selected from the menu bar or from the toolbar. These include:

### Exiting from the Text Styles Admin Tool dialogue box

Exiting from the Text Styles Admin Tool will not save any changes made since the last time the Save option was used.

### Saving changes to Text Styles back to the Database

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**Note:** changes to text styles will not be saved back to the database until the Save option has been used (toolbar icon or from the File menu).

---

If there are no outstanding changes to be saved back to the database, the save icon will be grayed out.

### Adding a new Text Style

Text styles can be added by selecting the 'Add Text Style' option from either the Edit menu or the toolbar. This will bring up the Text Styles dialogue box.

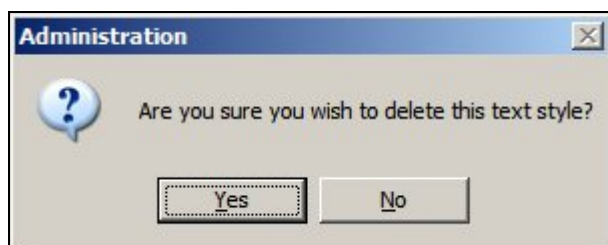
### Editing an Existing Text Style

Existing text styles can be edited by highlighting the required style in the list of available styles and selecting the 'Edit Text Style' option from either the Edit menu or the toolbar. This will bring up the Text Styles dialogue box.

### Deleting an Existing Text Style

Text styles can be deleted by selecting the delete Text Style' option from either the Edit menu or the toolbar. System text styles cannot be deleted. (The 'System' attribute can only be set within the database).

Before the text style can be deleted, confirmation will be required.



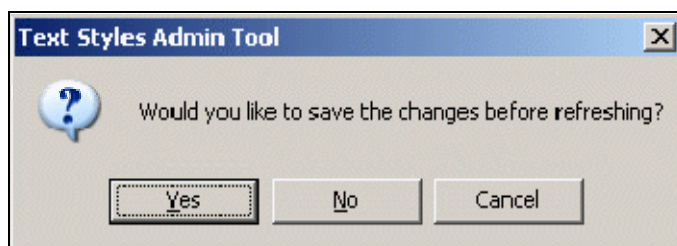
### Copying a Text Style

Existing text styles can be copied by highlighting the required style in the list of available styles and selecting the 'Copy Text Style' option from either the Edit menu or the toolbar. This will bring up a Text Styles dialogue box containing a duplicate of the selected style. This duplicate can then be edited to produce a text style that is slightly different from the original.

### Refreshing from the Database

The Refresh option (available from the toolbar or from the View Menu) updates the Text Styles Admin Tools dialogue box (and its associated dialogue boxes) with the information currently held in the database. Using the Refresh option will overwrite any changes made in Text Styles that have not yet been saved back to the database.

If changes have been made to the Text Styles a warning message will be displayed.

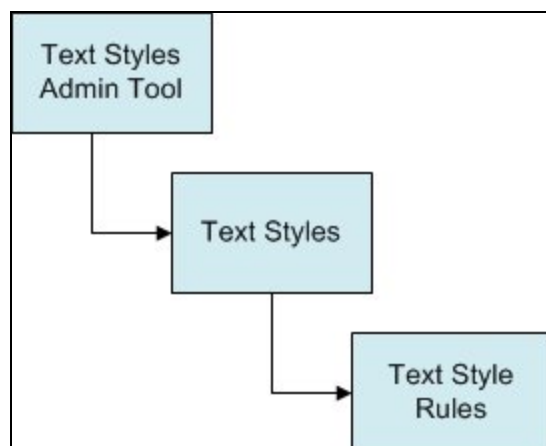


### Text Style Wizard

The Text Style Wizard provides an alternative to manually configuring a text style. Four screens take users through creating a text style and automatically create the SQL required to extract information from the database.

## Overview of Configuring Text Styles

**Text Styles** are specific to Planner and are integrated with AutoCAD functionality. (A different form of annotation is used in the Merchandiser Module).



The **Text Styles Admin Tool** contains a list of the available text styles. Some of these text styles will be in use, others may be temporarily inactive.

	ID	Name	Description	Font	Bold	Italics	Colour	Layer Alias	Auto	Text Type
1	1	General	General Notes	Arial	<input type="checkbox"/>	<input type="checkbox"/>		NOTES-TEXT	None	General
2	2	Dept	Department Zones	Arial	<input type="checkbox"/>	<input type="checkbox"/>		SALES TEXT	Department Zone	Zone
3	3	Internal AreaZone	Internal AreaZone	Arial	<input type="checkbox"/>	<input type="checkbox"/>		INTERNALZONE-TEXT	Internal Zone	Zone
4	4	Zone	General Zones	Arial	<input type="checkbox"/>	<input type="checkbox"/>		NON SALES TEXT	Zone	Zone
5	5	Product	Product	Arial	<input type="checkbox"/>	<input type="checkbox"/>		PRODUCT-TEXT	Product Placeholder	Product
6	6	Planogram-Basic	Basic Planogram Details	Arial	<input type="checkbox"/>	<input type="checkbox"/>		PLANOGRAM-TEXT	Planogram	Product
7	7	Profile	Profile Details	Arial	<input type="checkbox"/>	<input type="checkbox"/>		PROFILE-TEXT	None	Product
8	10	BayNumbering	Bay Numbering	Arial	<input type="checkbox"/>	<input type="checkbox"/>		NOTES-TEXT	Fixture	General
9	11	Fixtures	Fixtures	Arial	<input type="checkbox"/>	<input type="checkbox"/>		FIXTURE-TEXT	Fixture	Fixture
10	12	Gondola Numbering	Gondola Numbering	Arial	<input type="checkbox"/>	<input type="checkbox"/>		FIXTURE-TEXT	Fixture	Fixture

The list of text styles can be added to, selected for editing or deleted. In addition, a Text Style Wizard can be used to simplify creating text styles.

The **Text Styles** dialog box allows the broad details of a text style to be configured.

**Text Style**

Style Name: Fixtures

Style Description: Fixtures

Layer Alias: FIXTURE-TEXT

Auto Placement: Fixture

Multi-Profile Offset: 0

Scale Offset: ☐

Font: Arial

Colour: 0

Dimension Colour: 0

Bold: ☐

Italics: ☐

Bring Text to Front: ☒

Keep Parallel: ☒

Use Separate Text: ☐

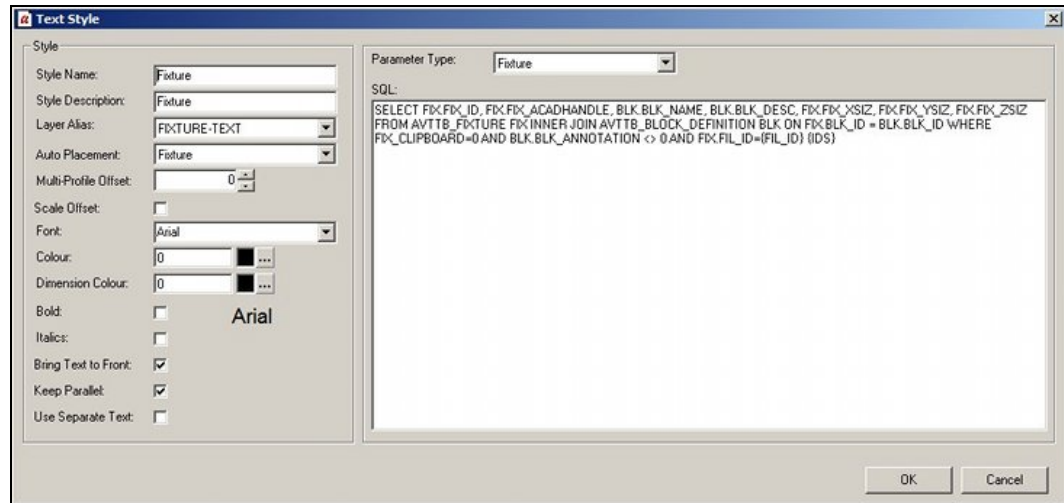
**Text Style Rules**

ID	Description	Size	X Offset	Y Offset	Line	Justification	Position
1	11	Generic	5	0	-4	1.5	Top Centre Bottom Centr

OK Cancel

This includes the font type and color, AutoCAD layer, type of object the text is to be associated with, etc. Using Ctrl + A toggles the Text Styles dialog box to show the custom SQL that extracts the information from the database used for the annotation.





The **Text Style Rules** dialogue box is used to configure the details of a text style.

**Text Style Rule**

Description: Short Description

Options

Size: 5

Width Factor: 0.5

Line Spacing: 0.75

Scale: ☒

Scale Offset: ☒

☒ Fit Within:

None: ☐

Abbreviate: ☐

Truncate: ☐

Word wrap: ☒

☒ Use Dimensions:

Dimension Lines: ☒

Extension Lines: ☒

Arrows: ☒

Arrow Size: 5

Arrow Type: \_CLOSEDFILLED

Position

Relative Position:

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Justification:

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

X Offset: 0

Y Offset: -0.1

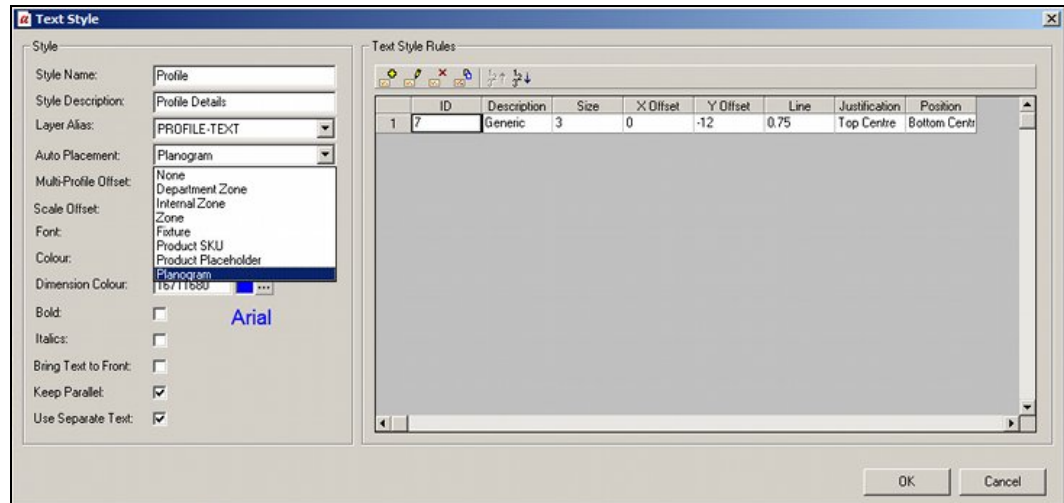
TEXT

OK Cancel

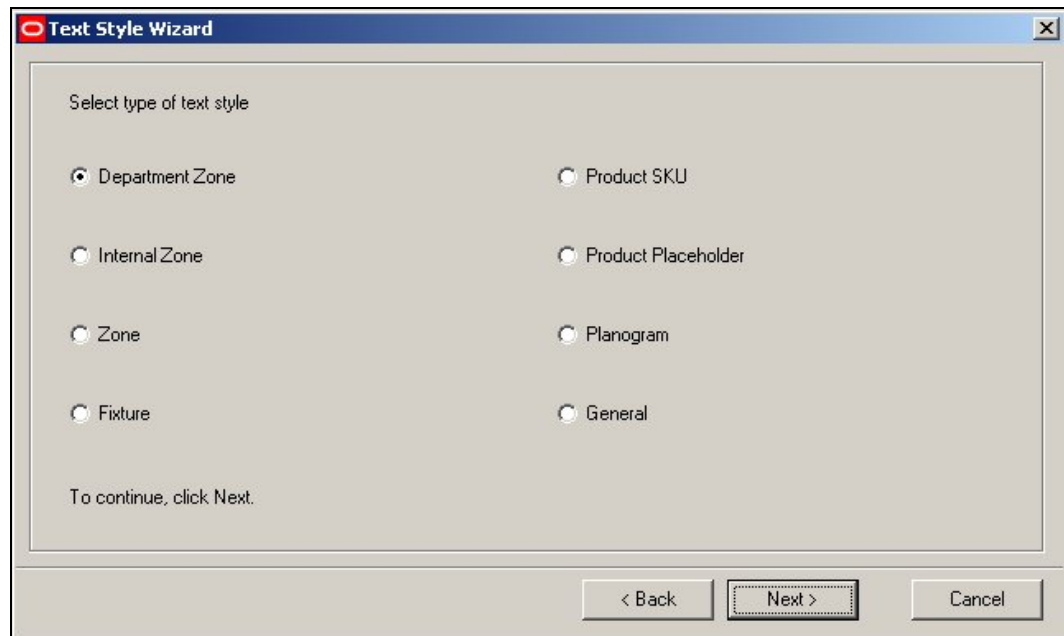
It is possible to have multiple text style rules for a specific text style. When the annotation is drawn, each text style is 'tested' in sequence. The first text style that meets the requirements is used. For example text styles might be configured with text sizes of 6 inches, 4 inches and 3 inches. Each text style will be tested in turn, until the largest text size that will allow all the text to be displayed is identified.

### Types of Text Styles

It is possible to set up a variety of generic types of text styles. They can be selected from the Auto Placement options in the text styles dialogue box,



Alternatively, they can be selected from the third page of the Text Style wizard.



### Department Zone

The Department Zone is one form of zone: specifically the Zone - Fixture Links ensure that Fixtures in the AVTTB\_FIXTURE Table are only associated with a single department

### Internal Zone

The Internal Zone is one of three types of zones. It denotes the maximum area of the store used for sales purposes.

### Zone

The 'Zone' zone is a third type of Zone that gives an alternative to zones of type 'Internal Area' or 'Department'.

### Fixture

This text style is used for fixtures.

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**Note:** for fixtures to annotate, the 'Include Fixture Annotation' option must be checked in the Categories Tab of the Block Definitions dialogue box in Fixture studio. More Information

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**Product SKU**

This text style is used for products that have been placed at SKU (Stock Keeping Unit) level from the product hierarchy

**Product Placeholder**

This text style is used for products that have been placed at Placeholder level (i.e. above SKU level) from the product hierarchy

**Planogram**

This text style is used to annotate planograms. Planogram information can sometimes include profile annotation - information on specific bays within a multi-bay planogram.

**General**

This text style is not yet implemented.

**Turning on Fixture Annotation**

Whether **Fixture Annotation** for a specific fixture (or fitting) displays in Planner depends on settings in Fixture Studio.

The screenshot shows the 'Block Details: Base\_36x24x2' dialog box. The 'Description' field contains 'Base\_36x24x2'. The 'Category' tab is selected. The 'Equipment Type' section shows 'Retail Type' set to 'Fixture'. The 'General' section contains various fields: 'Directory' (Fixtures), 'Manufacturer' (Generic), 'Category' ((none)), 'Units' (imperial inch), 'Material' (Black), 'Print Material' (Black), 'Status' (Current), 'Effective Date' (11 March 2008), 'Expiry Date' (31 December 2999), 'Product Code' (empty), 'Icon' (Default), and 'Cost' (0). The 'Type' section has 'Fixed Size' selected. The 'Graphics' section has '2D' selected. The 'Working/Stacking Axes' section has 'Working' (X, Y, Z) and 'Stacking' (X, Y, Z) all checked. The 'Area Calc Directions' section shows a cross with 'N', 'S', 'E', and 'W' labels. The 'Reporting Options' section has 'Include in Fixture Annotation' checked and highlighted with a red rectangle. The 'Save', 'OK', and 'Cancel' buttons are at the bottom right.

For a specific fixture to annotate in Planner, the Include in Fixture Annotation option must be checked.

This allows flexibility in what gets annotated. One option is to specify all fixtures will annotate, but that fitting will not. This simplifies the annotation for gondola runs contain a mixture of fixtures and fittings.

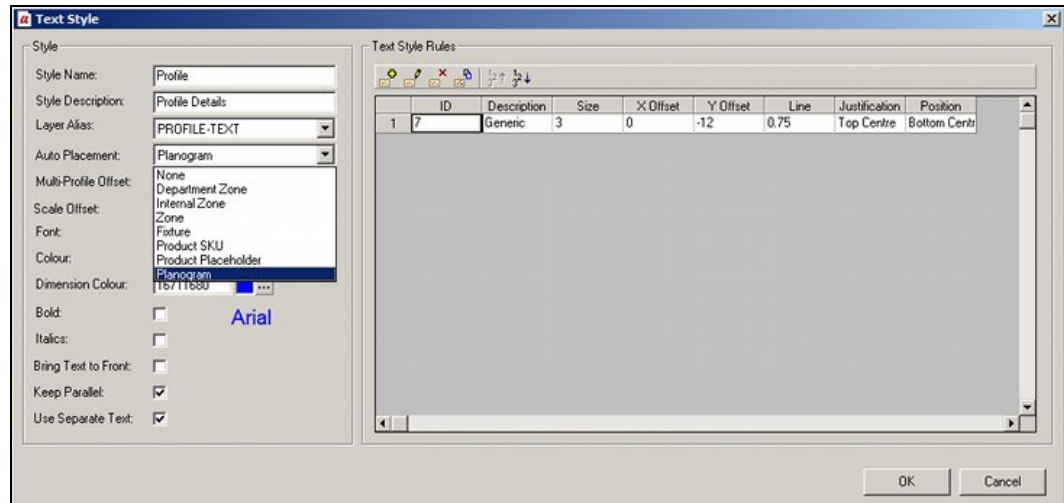
---

**Note:** the Auto Placement option (set in the Text Styles dialogue box) determines whether fixture annotation for fixtures that have had the 'Include in Fixture Annotation' check box ticked is placed automatically, or has to be drawn as a result of a command from a user.

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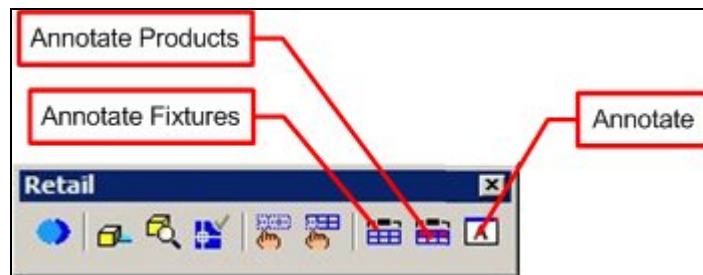
## Annotation in Planner

**Annotation in Planner** is first determined by the Auto Placement settings in the Text Styles dialogue box in the Admin Module.



1. If a Text Style has an Auto Placement option selected, (for example Planogram), then when that type of object is placed, the annotation will automatically be added.
2. If a Text Style has Auto Placement option set to 'None', then when that type of object is placed, no annotation will automatically be added. (It can subsequently be manually added by a user).

The **Retail Toolbar within Planner** is used gives three options to annotate objects in the drawing



1. Annotate Fixtures will cause fixture annotation to be drawn according to the text style rules currently active in Planner
2. Annotate Products will cause product and planogram annotation to be drawn according to the text style rules currently active in Planner
3. Annotate allows the text style rules currently active in Planner to be updated from the database. It also allows objects to be manually annotated when Auto Placement has been set to None in Text styles in the Admin Module.

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**Note:** the text style rules active in planner are those present when the application was opened, or when text style rules were last refreshed using the Annotate dialogue box.

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#### Annotate Fixtures

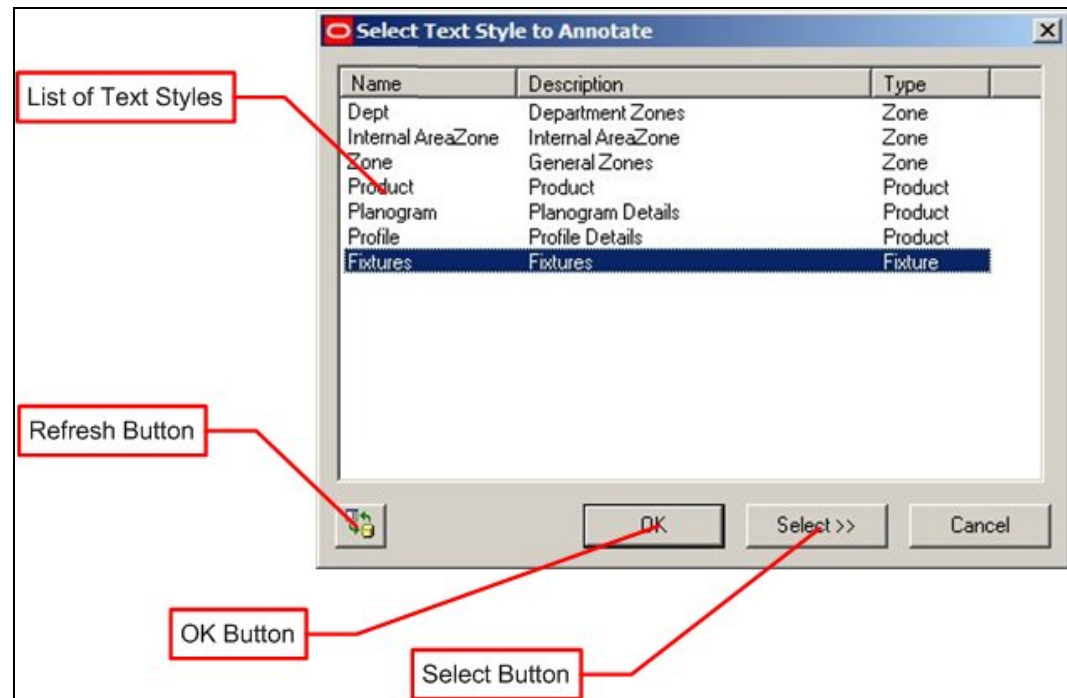
If the Auto Placement option is set to 'Fixtures', fixtures will be re-annotated with the currently active text style(s).

#### Annotate Products

If the Auto Placement options are set to 'Products' or 'Planograms', merchandise will be re-annotated with the currently active text style(s).

#### Annotate

The Annotation dialogue box gives more control over what annotation is displayed in the drawing.



The Refresh Button will update all text styles currently held in Planner with the latest version held in the database.

---

**Note:** this would be applicable if an Administrator is updating text styles in the Administration Module and simultaneously testing the effects of the changes in the Planner Module.

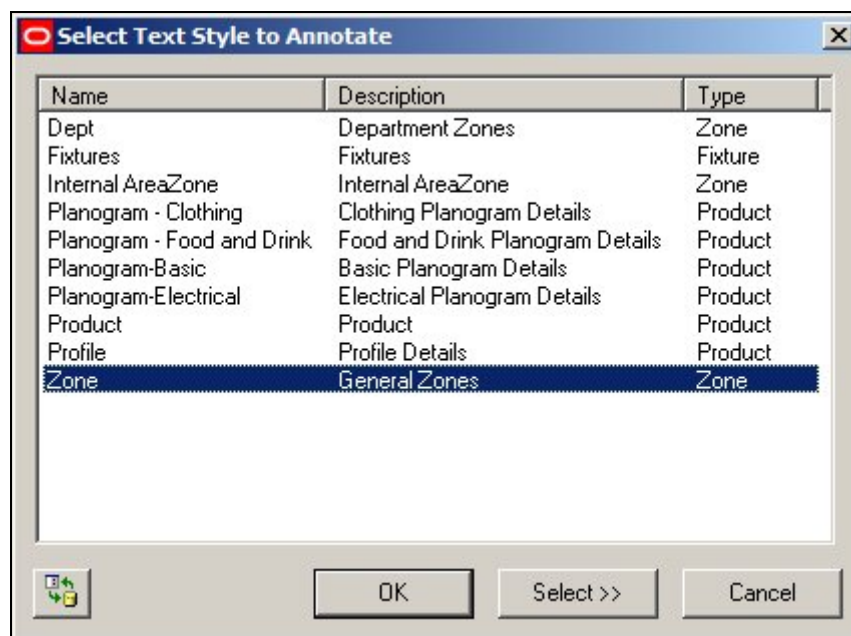
---

The Annotation dialogue box contains a list of text styles. Any individual text style can be selected by highlighting it.

1. If the OK button is clicked, all instances of annotation associated with that text style in the drawing will be updated.
2. If the Select button is clicked, the user will be taken to the drawing. Objects can then be selected using standard AutoCAD selection methods. On completing the selection sequence with a tight click, all selected objects will have their annotation updated.

#### Using Multiple Text Styles for a Specific Object

It is possible to use multiple text styles to annotate a specific type of object.



In the above example of the Annotation dialogue box there are four text styles for planograms:

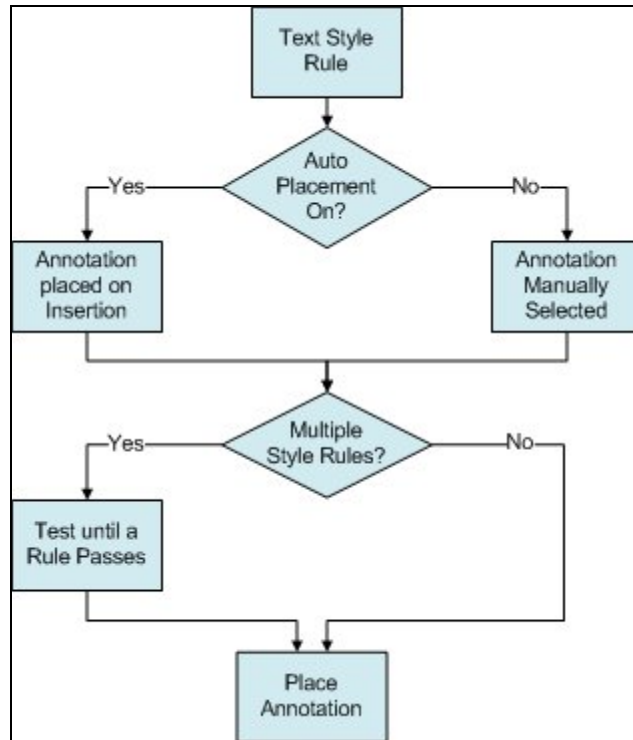
1. Basic Planogram Details
2. Clothing Planogram Details
3. Electrical Planogram Details
4. Food and Drink Planogram Details

If the Auto Placement option in the Text Styles dialogue box is set to 'None', then planograms will not be annotated on insertion. It is then possible to highlight a text rule and select the planograms to be annotated. Working in this way, it is possible to annotate Food and drink planograms in a completely different style to clothing planograms.

### Text Style Placement Logic

The **Logic of Text Style placement** is as follows:

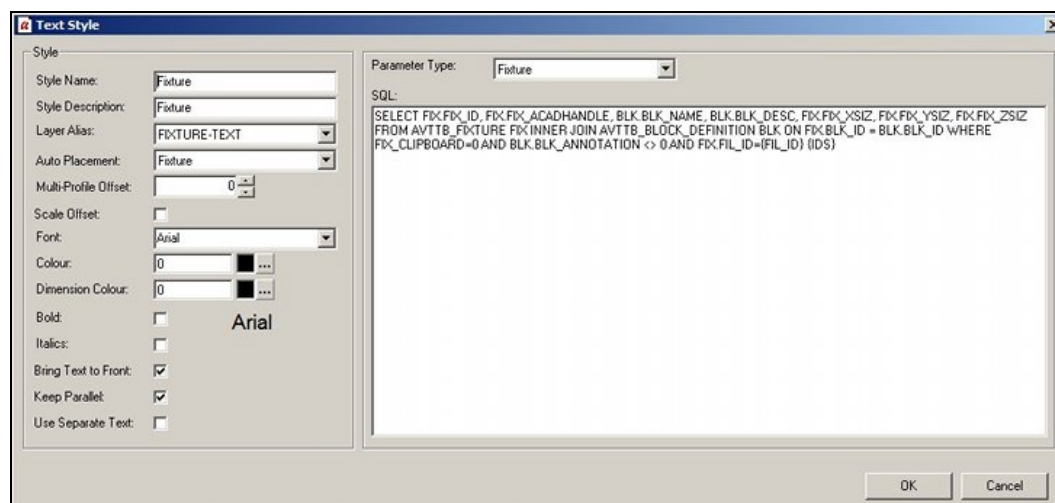




1. When a text style is placed, the software checks to see whether Auto Placement is on.
2. If Auto Placement is On, the annotation will be added when the object is inserted.
3. If Auto Placement is set to 'None', the object will be placed in the drawing but annotation will not be drawn during insertion.
4. Annotation can be added or updated manually by the user by means of the Annotation option in the Retail toolbar in Planner.
5. When annotation is added, the software checks to see if there are multiple text style rules.
6. If there is only a single text style rule the annotation is placed immediately.
7. If there are multiple text styles rules, the text styles rules are tested in sequence. As soon as a text style rule passes, the annotation is placed.

### Text Styles and Custom SQL

**The Text Style Wizard** can be used to generate the Custom SQL statement used to retrieve the information used in annotation. This Custom SQL can then be seen in the Text Style dialogue box. (Use Ctrl + A to reveal it).



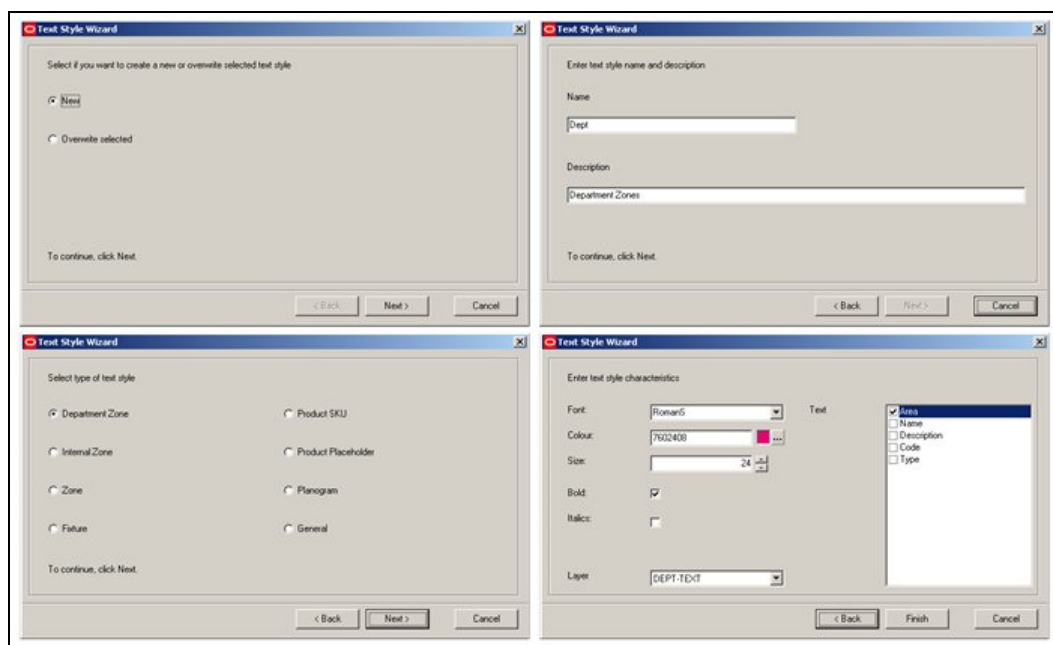
It is possible to modify this Custom SQL statement to customize the annotation for each type of object being annotated. For example fixtures that are children of the 'Racking' node in the Fixture Hierarchy could have different annotation from fixtures that are children of the 'Fittings' node in the Fixture Hierarchy.

When fixtures are annotated, all text styles of type 'Fixture' will be applied, but specific fixtures will only be annotated if they meet the conditions set out in the Custom SQL - one type of annotation will be applied if the item of equipment is determined to be 'Racking' and another if it is determined to be a 'Fitting'.

## The Text Style Wizard

### Overview

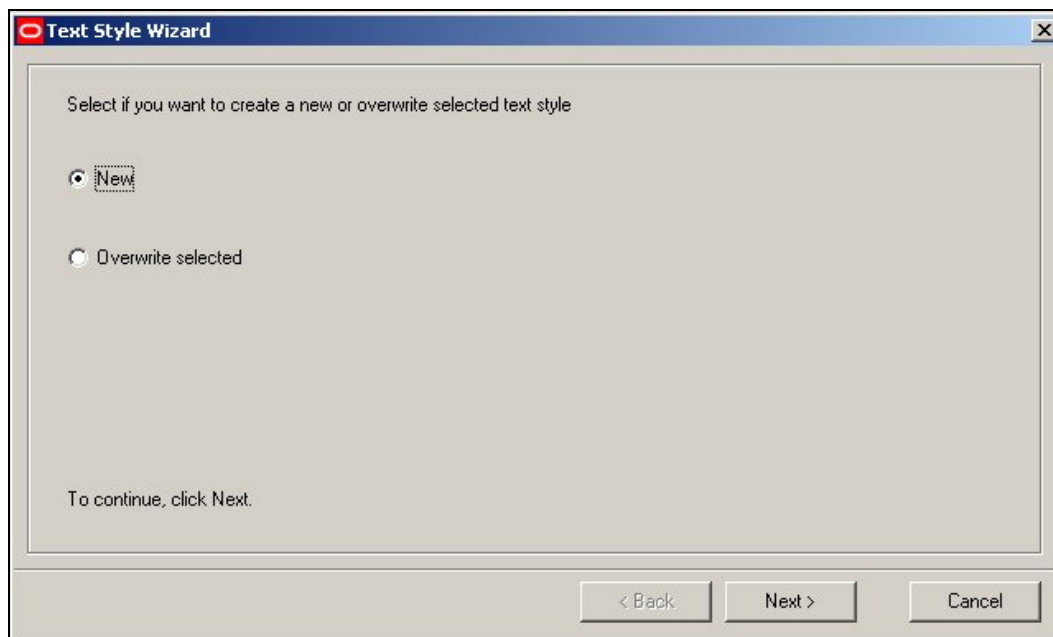
The **Text Style Wizard** provides an alternative way to manually configuring a text style. It consists of a series of four screens that the user moves through in sequence.



Once the screens have been completed, a Text Style will have been configured.

### Text Style Wizard - First Page

The **First Page** of the Text Style Wizard is used to select whether the user wished to create a new Text Style or overwrite (edit) an existing one.

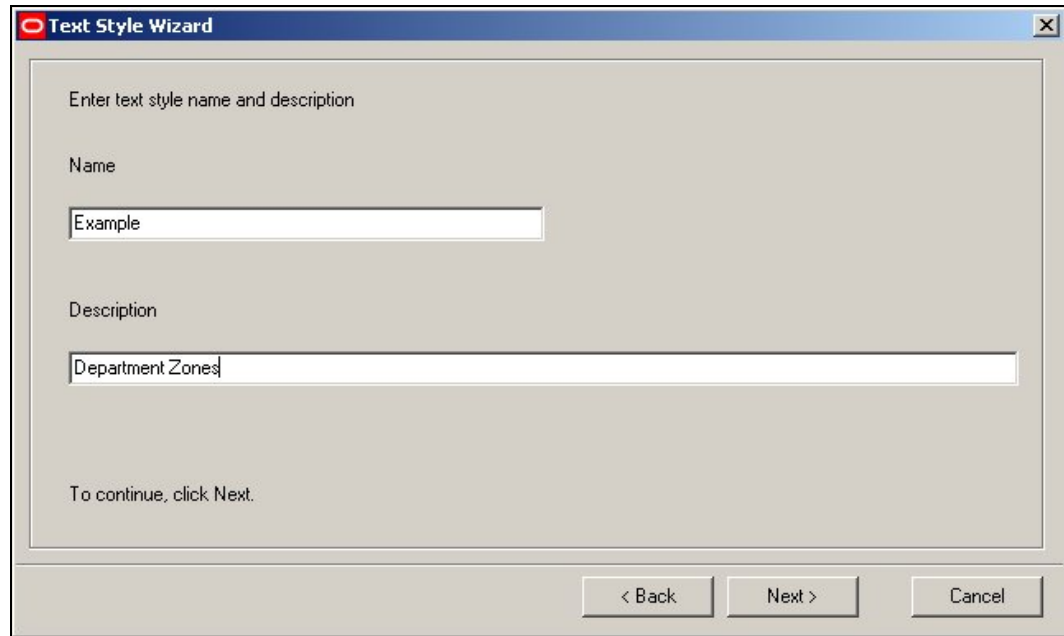


To overwrite an existing rule it must be highlighted in the main Text Styles Admin Tool Window before the Wizard is invoked.

Click on Next > to move to the next stage.

### Text Style Wizard - Second Page

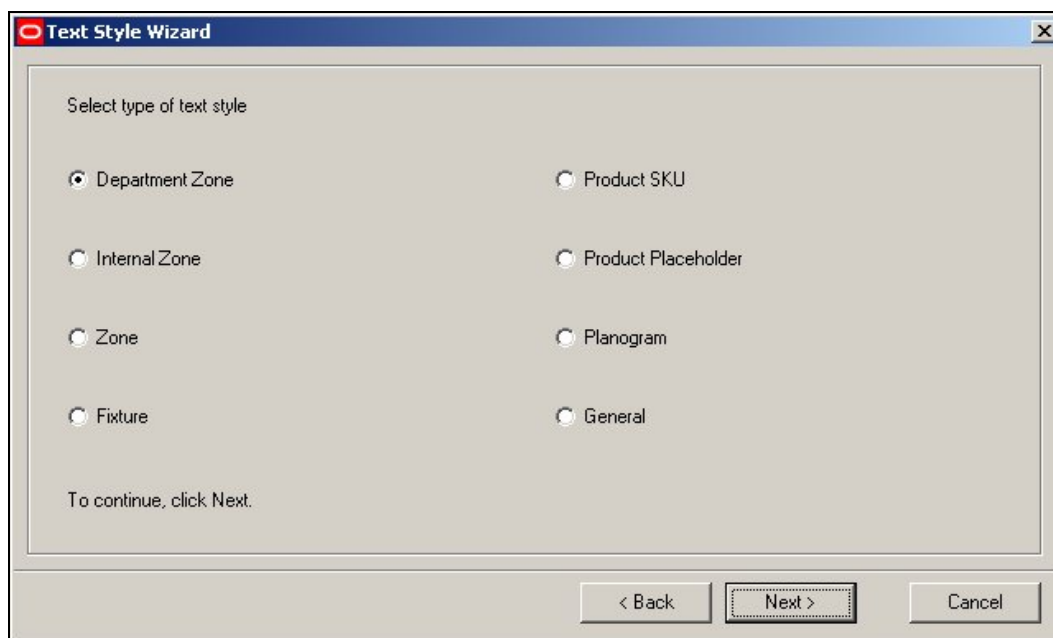
The **Second Page** of the Text Style Wizard is used to input the name and description (type) of the Text Style.

The image shows a screenshot of the 'Text Style Wizard' dialog box, specifically the second page. The window has a title bar with the text 'Text Style Wizard' and a close button. Inside the window, there is a label 'Enter text style name and description'. Below this, there are two input fields. The first is labeled 'Name' and contains the text 'Example'. The second is labeled 'Description' and contains the text 'Department Zones'. At the bottom of the dialog, there is a message 'To continue, click Next.' and three buttons: '< Back', 'Next >', and 'Cancel'.

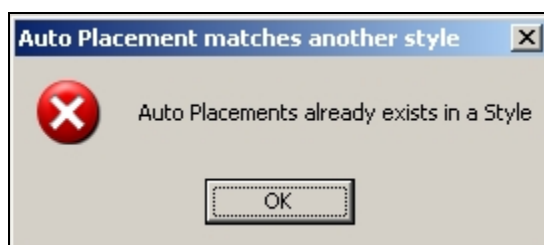
Enter the Text Style Name and Description as required.  
Click on Next > to move to the next stage.

### Text Style Wizard - Third Page

The **Third Page** of the Text Style Wizard is used to specify the type of Macro Space Management feature the Text Style is to be associated with.



Select the required type of Text style. This is done by means of a radio button, so only one type of Text Style can be selected at one time. If a Text Style already exists a warning dialogue will appear.

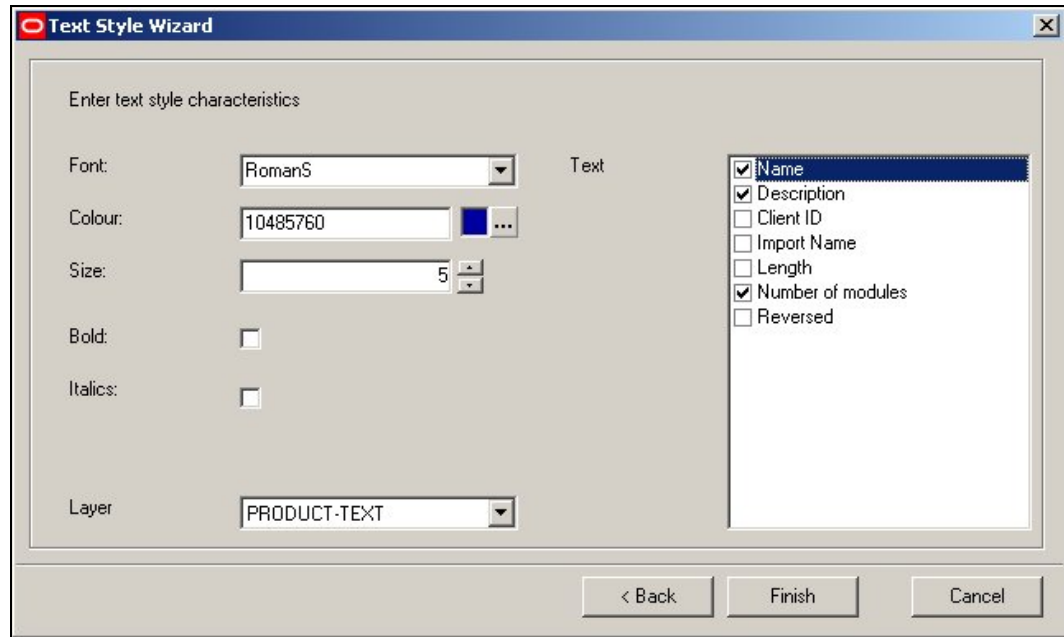


It is not possible to have a second version of the same Text Style, so if it is desired to change this Text style it must be edited.

Click on Next > to move to the next stage.

### Text Style Wizard - Final Page

The **Fourth (and last) Page** of the Text Style Wizard is used to set the characteristics of the Text style.



The **Font** can be set from a drop down list of available fonts.

The **Font Color** can be set by clicking on the color button and selecting the required color from the pallet.

The **Font Size** can be set using the spin controls.

**Bold** or **Italic** fonts can be selected by ticking the relevant check boxes.

The **Layer** determines what AutoCAD layer the annotation is to be placed on.

The **Text** that will be displayed can be selected by ticking the appropriate check boxes.

The items of text that can be displayed will vary with the type of text style selected in the previous screen. For example, the Zone Text Style will have a different set of options to the Planogram Text style.

---

**Note:** Checking the list of items in the Text Box causes a custom SQL statement to be generated. This extracts information from the central **Macro Space Management** database and annotates Zones, Fixtures or Merchandise accordingly.

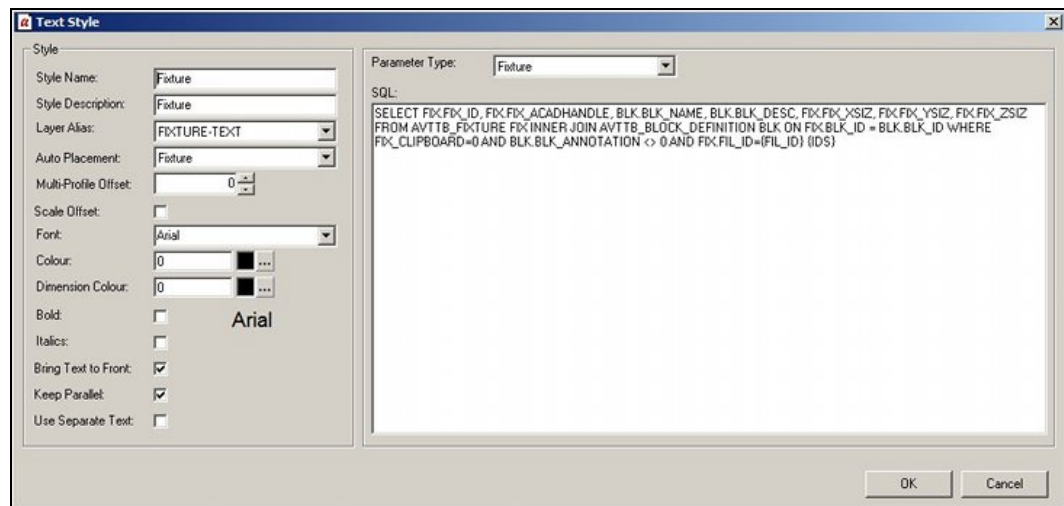
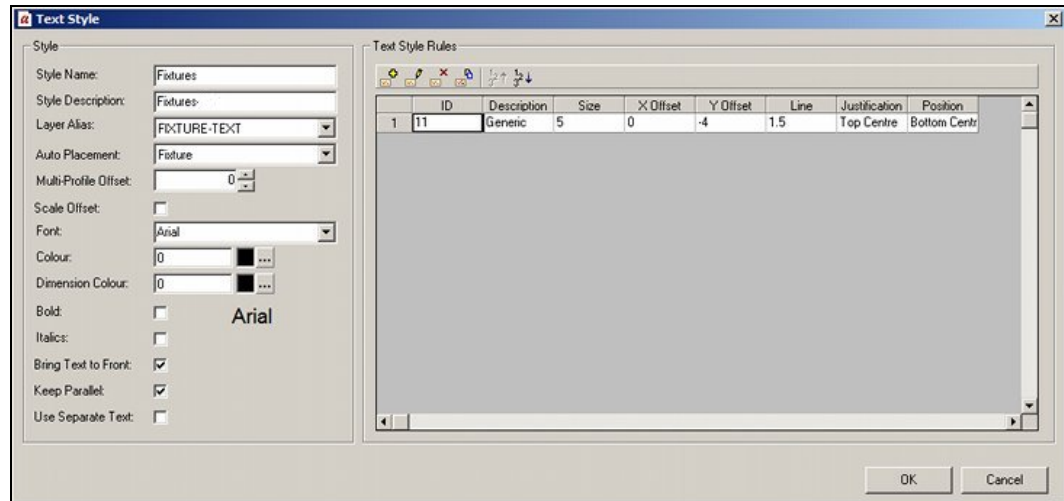
---

Click on Finish to add the Text style to those available.

## The Text Styles Dialogue Box

### Overview

The **Text Styles** dialogue box allows the basic rules of Text Styles to be configured. Using Ctrl + A toggles between two different views in the right hand pane. One view gives a list of the available Text Style rules for that Text Style. The other view shows the custom SQL used to extract information from the database to be used in the text styles.



## The Style Options Frame

The Style Options frame allows

**Text Style**

Style

Style Name:

Style Description:

Layer Alias:

Auto Placement:

Multi-Profile Offset:

Scale Offset: ☐

Font:

Colour:

Dimension Colour:

Bold: ☐

Italics: ☐

Bring Text to Front: ☒

Keep Parallel: ☒

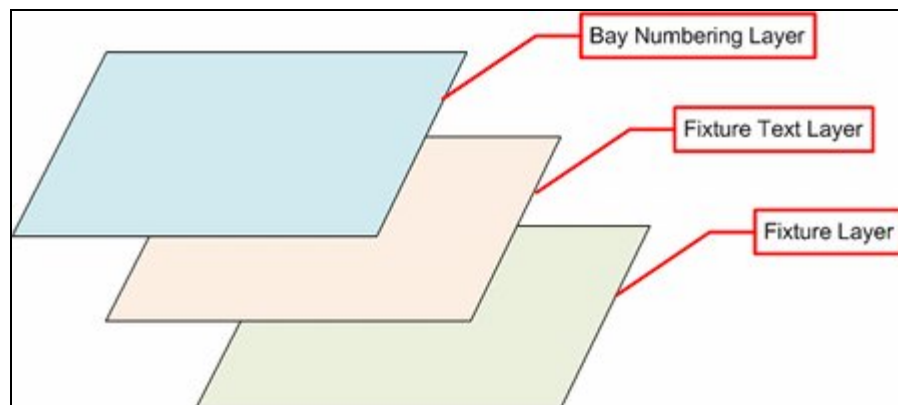
Use Separate Text: ☐

**Arial**

**Style Name** is the name assigned to a text style.

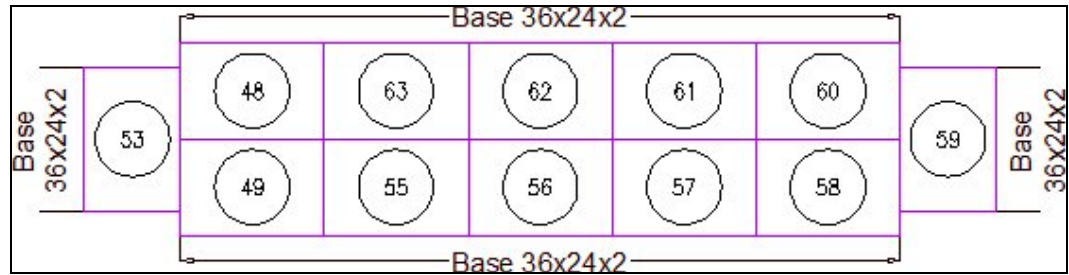
**Style Description** allows a longer, more comprehensive description to be associated with the Style Name

**Layer Alias** specifies which AutoCAD layer the annotation is placed on. It is selected from a drop down list of the layers that make up the AutoCAD store plan on the Planner module. (The store plan can be regarded as being made up of all the objects on all the layers in the drawing. AutoCAD provides ways to control objects on the individual layers, for example by turning their visibility on or off).



In the above example, when fixtures are placed, they would be placed on the Fixtures layer. If the fixtures are annotated, the text would go on the Fixture Text Layer - similarly, if bay numbering is added, it would go on the Bay Numbering layer.



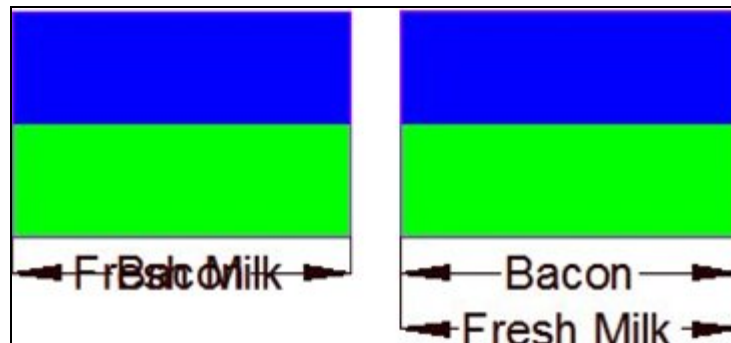


So, although the above example looks like a single entity, it is made up of three separate layers.

**Auto Placement** allows the user to specify whether annotation will be added automatically on inserting an object into the Planner environment, or whether the user will have to manually initiate annotation. There are a series of options:

Option	Description
None	Setting a text style to 'None' disables automatic annotation of objects when they are added in the planner environment. Annotation can be added manually via the Annotation dialogue box at user discretion. More Information
Department Zone	Associates the text style with zones of type 'Department Zone' - see Zone Types option from Planning menu.
Internal Zone	Associates the text style with zones of type 'Internal Area' - see Zone Types option from Planning menu.
Zone	Associates the text style with zones of type 'Zone' - see Zone Types option from Planning menu.
Fixture	Associates the text style with fixtures
Product SKU	Associates the text style with products placed as SKU level
Produce Placeholder	Associates the text style with products placed as placeholders (above SKU level)
Planogram	Associates the text style with planograms

**Multi-Profile Offset** is used when two or more instances of the same annotation are associated with an object. An example would be if two products were placed onto a fixture. Each product would have separate annotation.



In the above example, bacon and fresh milk have been placed on a fixture. In the left hand image, no offset has been used and the text has overwritten itself. In the right hand

image, an multi profile offset has been applied and the text appears without overwriting itself.

---

**Note:** this will not work if Word Wrap has been selected in the Fit Within frame of the Text Style Rules dialogue box. Because the word wrap fixture puts text onto multiple lines, the second line of the first product to be placed will be overwritten by the first line of the second line to be placed.

---

### Scale Offset

The Scale Offset checkbox is used in conjunction with Multi Profile Offsets. It is applicable when a scale has been applied to the drawing (Format > Drawing set up in the Planner module).

**Font** can be selected from a drop down list.

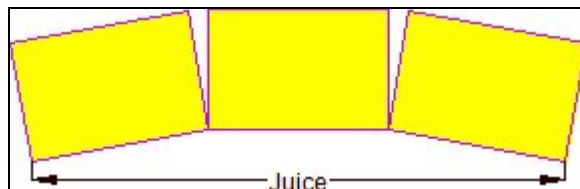
**Color** refers to the color of any text. It can be selected from a standard color pallet.

**Dimension Color** refers to the color of any dimension and extension lines. These can be set to be different from the text. Dimension color can be selected from a standard color pallet.

The **Bold** and **Italic** check boxes result in the text font being changed to bold or italic as required.

**Bring Text to Front** results in the text overwriting any objects that are present in the drawing. For example, if there is a fixture present where the text is to be written, the annotation will be placed on top of the fixture. (If Bring Text to Font is not selected, the text might be obscured by the fixture).

**Keep Parallel** is used when fixtures are not in a straight line. It will only apply if the Keep Separate Text check box is not checked. It will draw the annotation parallel to the average direction of the fixtures.

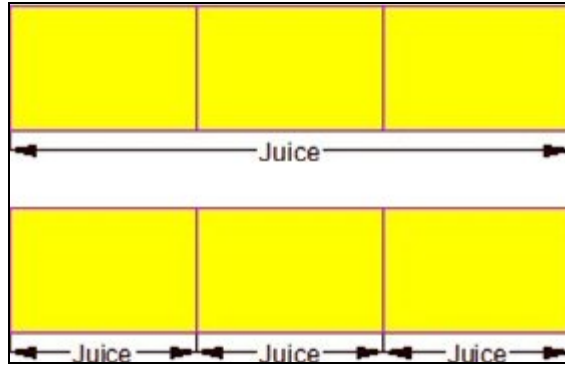


---

**Note:** this functionality is not fully implemented.

---

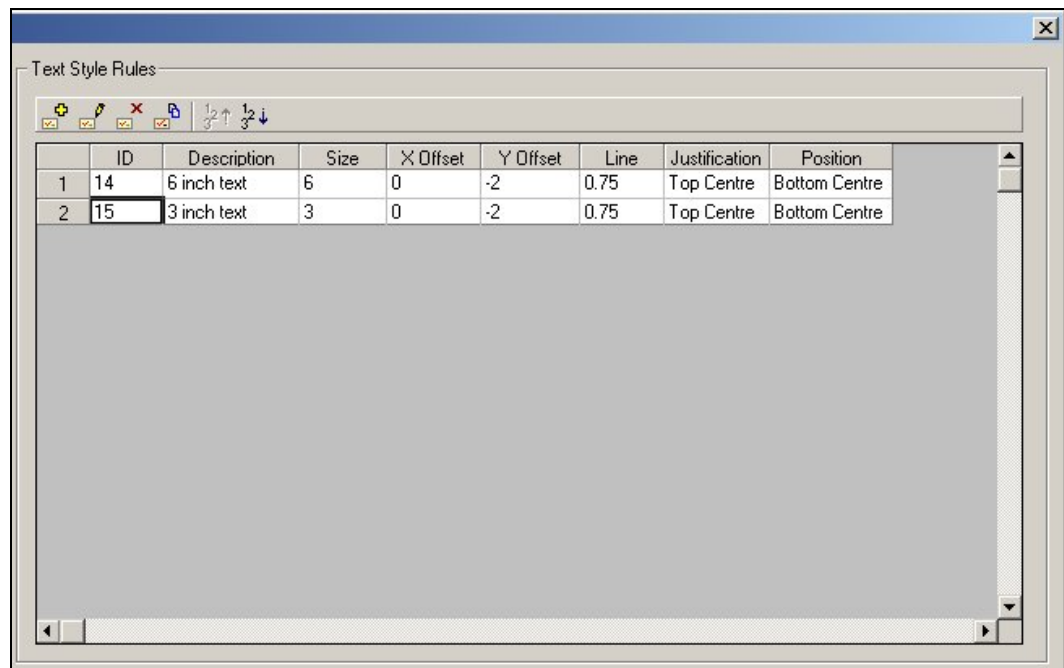
**Keep Separate Text** is used when a run of adjacent objects are similar. An example would be if three adjacent fixtures contain identical products.



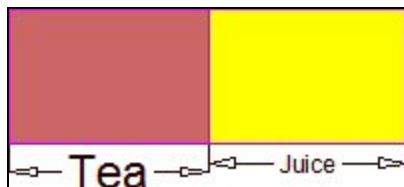
In the above examples, if Keep Separate Text is not checked, objects that are similar and adjacent will be annotated as a single item. If Keep Separate Text is checked, then each item will be annotated separately, even if they are adjacent.

### The Text Style Rules Frame

The **Text Style Rules** frame allows users to configure a number of text style rules for a given text style. When adding annotation based on that text style, each rule will be tested in turn and the first rule that complies will be applied. (Using Ctrl + A will toggle to the SQL frame).



In the example above, the two test style rules are based on text size. The annotation first tries to use text of 6 inch size. If that will not fit into the existing space, the text size is reduced to three inches.



In the above example, the annotation for the product placed on the left (Tea) will fit into the available space using 6" high letters. The annotation for the product placed on the right (Juice) is too long to fit into the available space using 6" high letters, so the software applies the next rule - which is to apply 3" letters.

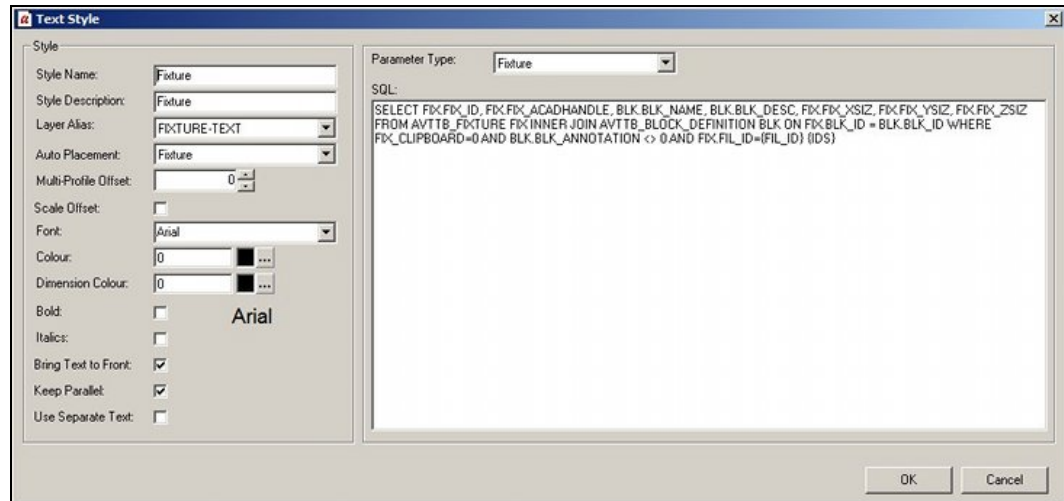
(For information on how to configure Text style rules, see the section on the Text Style Rules dialogue box).

The toolbar options are as follows:

Option	Description
	Add Text Style Rule
	Edit Text style Rule
	Delete Text Style Rule
	Copy Text Style Rule
	Move selected item up in list
	Move selected item down in list

### The SQL Frame

The **SQL frame** is toggled into view by means of Ctrl + A.



The SQL can be derived from one of two sources:

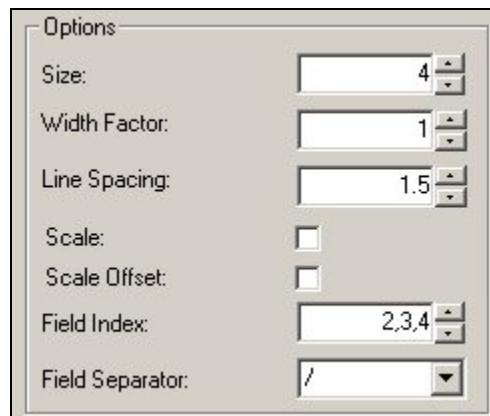
1. It can be produced using the Wizard.
2. It can be input directly.

---

**Note:** Direct Input of SQL is not recommended unless the user has good SQL skills and is familiar with the Macro Space Management database. also note that the SQL contains custom additions such as {FIL\_ID} and {IDS}. (More Info)

---

The SQL is used to select information from the database. Which information is displayed in the annotation is determined by settings in the Options frame of the Text Style Rules dialogue box. (The required options have to be toggled into view using Ctrl + A).



The **Field Index** specifies the items of data required.

The **Field Separator** determines the character use to separate items of data.

---

**Note:** the Fix ID and AutoCAD are used to identify specific objects. The selectable items of data start after these items. In the above example, the first item that can be selected is BLK\_NAME (Block Name).

---

## The Text Style Rules Dialogue Box

### Overview

The **Text Style Rules** dialogue box is used to configure the details of specific Text Style rules.

**Text Style Rule**

Description:

**Options**

Size:

Width Factor:

Line Spacing:

Scale: ☒

Scale Offset: ☒

☒ **Fit Within:**

None: ☐

Abbreviate: ☐

Truncate: ☐

Word wrap: ☒

☒ **Use Dimensions:**

Dimension Lines: ☒

Extension Lines: ☒

Arrows: ☒

Arrow Size:

Arrow Type:

**Position**

Relative Position:

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Justification:

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

X Offset:

Y Offset:

OK Cancel

The **Options** frame allows users to specify the appearance of the text that appears.

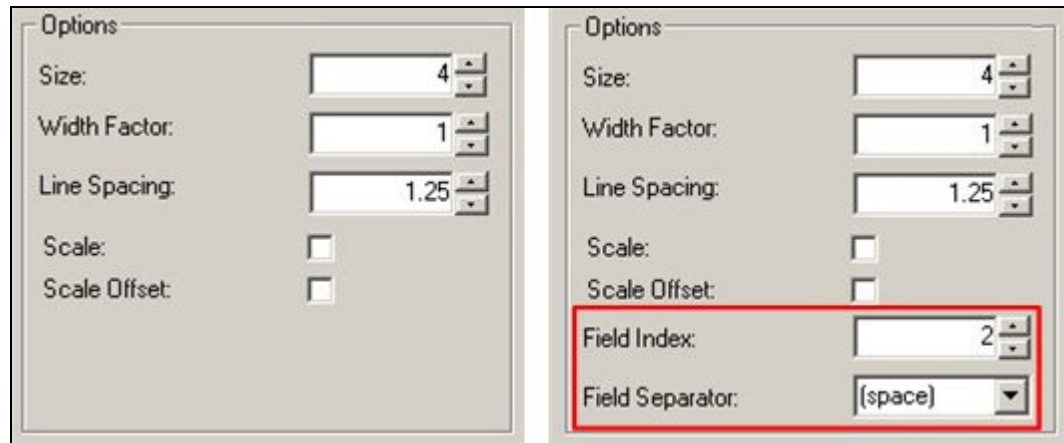
The **Fit Within** frame allows users to specify what happens if the text is too long relative to the length of the fixture.

The **Use Dimensions** frame allows users to specify whether dimension and extension lines are used when annotating the object.

The **Position** frame details with how text is justified.

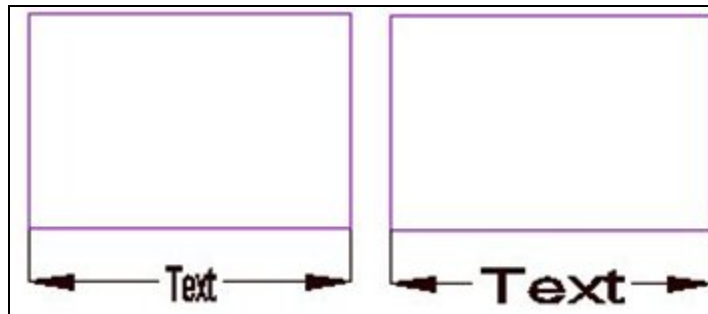
## The Options Frame

The Options frame



**Size** is the size used for the text that annotates objects. If an imperial size, the value is in inches, if a metric size, the value is in millimeters.

**Width Factor** determines the ratio of width to height of the text. Values of less than 1 result in the width being reduced relative to the height. Values of greater than one result in the width being increased relative to the height. Width Factors may be set within a range of 0.5 - 1.5.



In the example on the left, the width factor has been set to 0.5. In the example on the right, the width factor has been set to 1.5.

**Line Spacing** determines the spacing between successive lines of text if word wrap (Fit Within options) is on.

**Scale** and **Scale Offset** are used when an AutoCAD drawing has been given a scale via the Format > Drawing Set Up option in the Planner module.

If Scale and Scale Offset are selected and the drawing has been assigned a scale, the text and dimension arrows will be scaled up relative to the scale of the drawing, so they stay at a standard size. For example, if the drawing is at a 1:100 scale, text will be scaled up 100 times, so it draws at an absolute size.

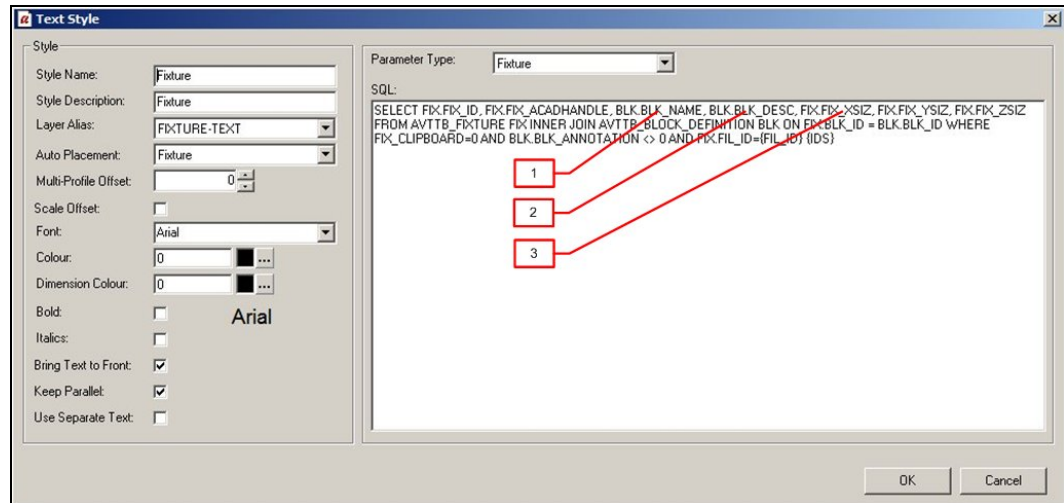
If Scale and Scale Offset are not selected, the text and dimension arrows will draw at the scale of the drawing. For example, if the drawing is at a 1:100 scale, text will be drawn at a hundredth of its absolute size.

---

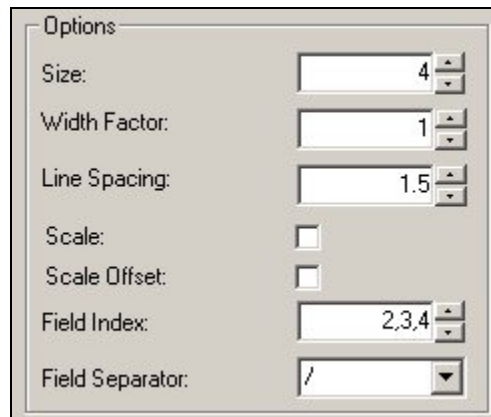
**Note:** scaling does not fully work at present.

---

**Field Index** can be accessed by means of Ctrl + A. It allows the user to select the items that will be displayed from the SQL statement for a specific text style in the Text Style GUI.



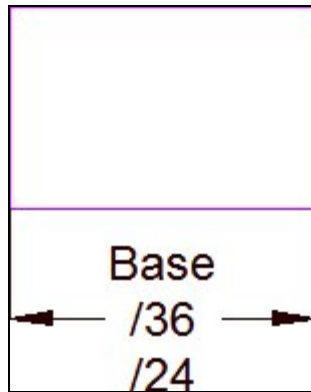
The SQL is revealed by highlighting a text style, and selecting CTRL + A. The SQL statement is in the form of a 'Select' statement that identifies specific items of data from the database. The first two items in the statement are the ID of the object in the MSM database and the AutoCAD handle (ID). Any further items can be selected by entering a number giving its position in the SQL statement (after the Block and AutoCAD ID's). Successive values can be separated by a comma. In the example below, the description, length and with have been selected.



The **Field Separator** is also accessed by means of Ctrl + A. It can be selected by means of a drop down list.

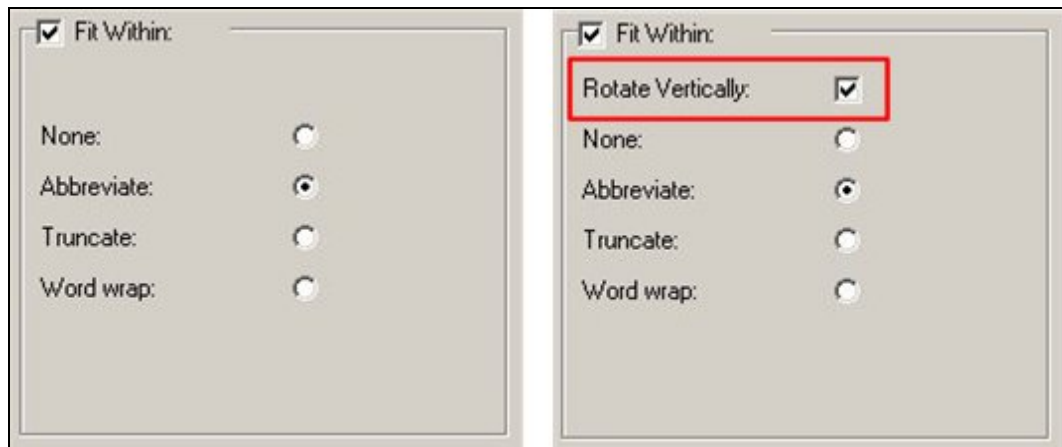
In the example below, the block description, length and depth have been selected and a separated by a '/ '.





### The Fit Within Frame

The **Fit Within** options control how text appears if the selected text is too long to fit on a single line. Rotate Vertically (accessed by Ctrl + A) can be selected by means of a check box, the other four options are selected by means of a radio button.



**Rotate Vertically** is normally hidden, but can be accessed by use of Ctrl + A. If text is too long to be written horizontally relative to the fixture, it will be rotated through 90° so that it can be written vertically relative to the fixture.

---

Note: Rotate Vertically is not functioning correctly at present.

---

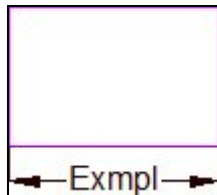
Selecting **None** results in no text being displayed if the text is too long for the available space.

---

Note: None is not functioning correctly at present.

---

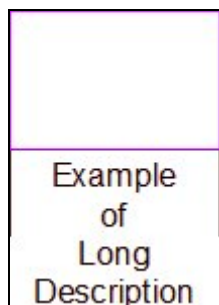
Selecting **Abbreviate** results in a shortened version of the text string being displayed.



Selecting **Truncate** results in the text string being truncated to fit



Selecting **Word Wrap** results in the description being wrapped onto several lines.



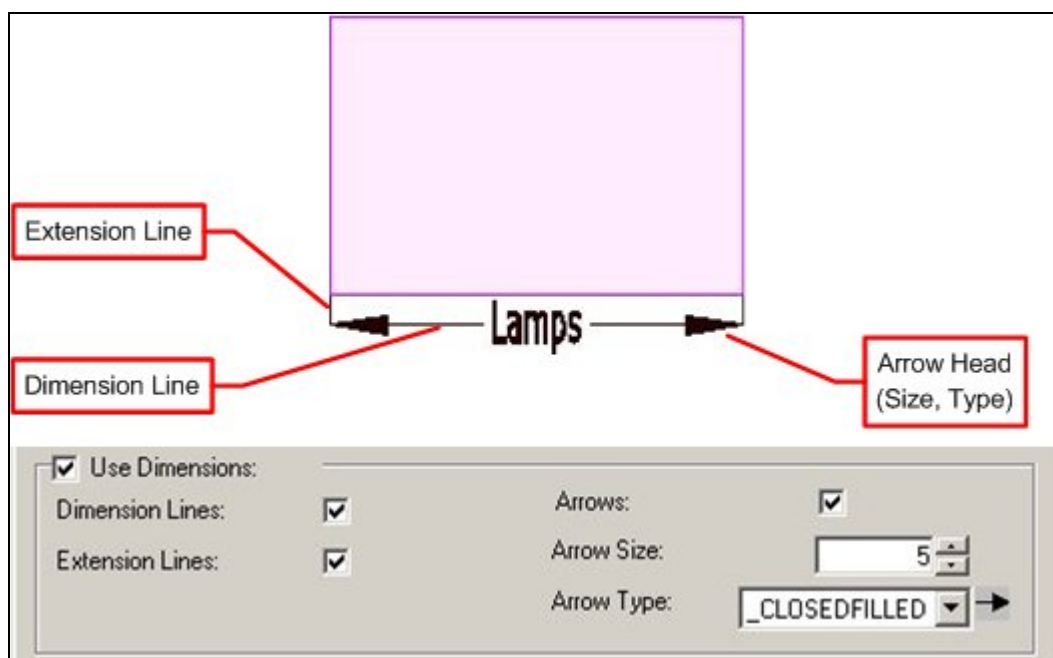
### The Dimensions Frame

The **Dimensions** frame is used to specify how dimension and extension lines appear.

---

**Note:** Dimension and extension lines are not available for all three types of zone annotation.

---



The **Use Dimensions** check box can be used to toggle dimension lines On or Off in their entirety.

The **Dimension Lines** checkbox will toggle dimension lines on or off.

The **Extension Lines** checkbox will toggle extension lines on or off.

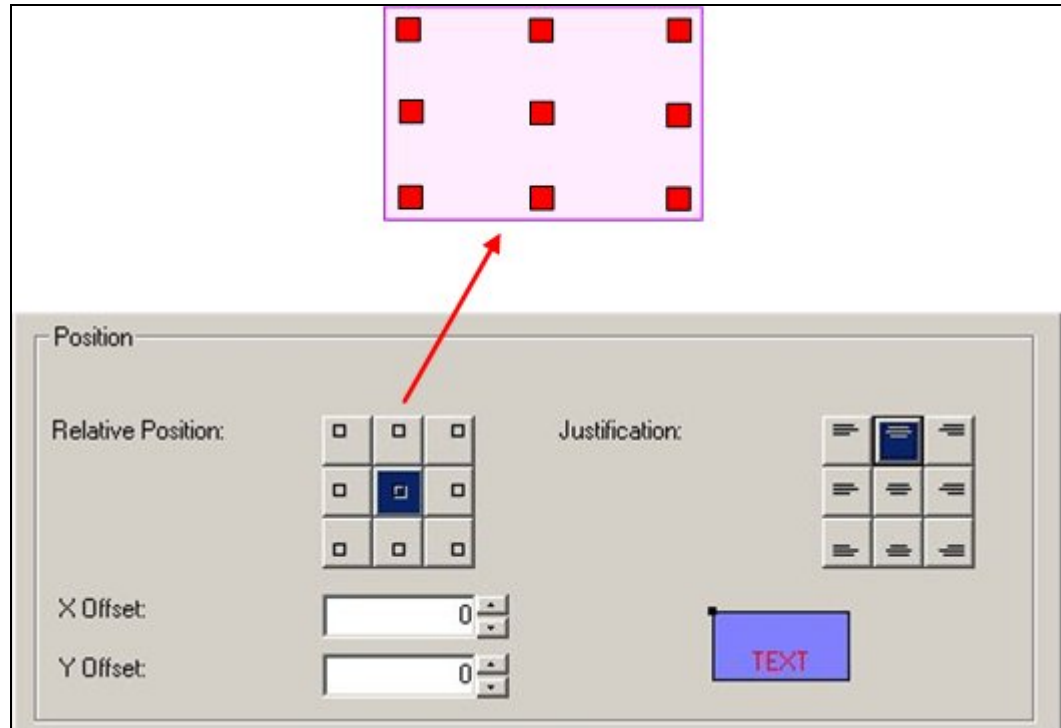
The **Arrows** checkbox will toggle the arrow head display on or off.

The **Arrow Size** can be set by means of the spin control.  
 The **Arrow Type** can be selected from the drop down list.

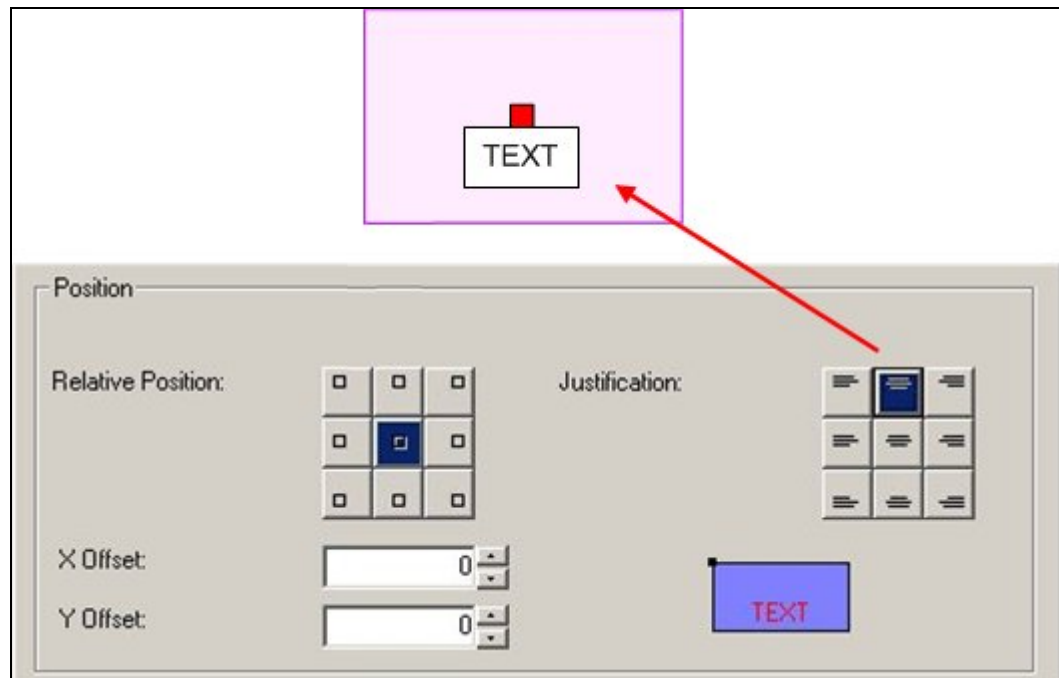
### The Position Frame

**Relative Position**, **Justification** and **Offsets** determine how text places relative to the fixture.

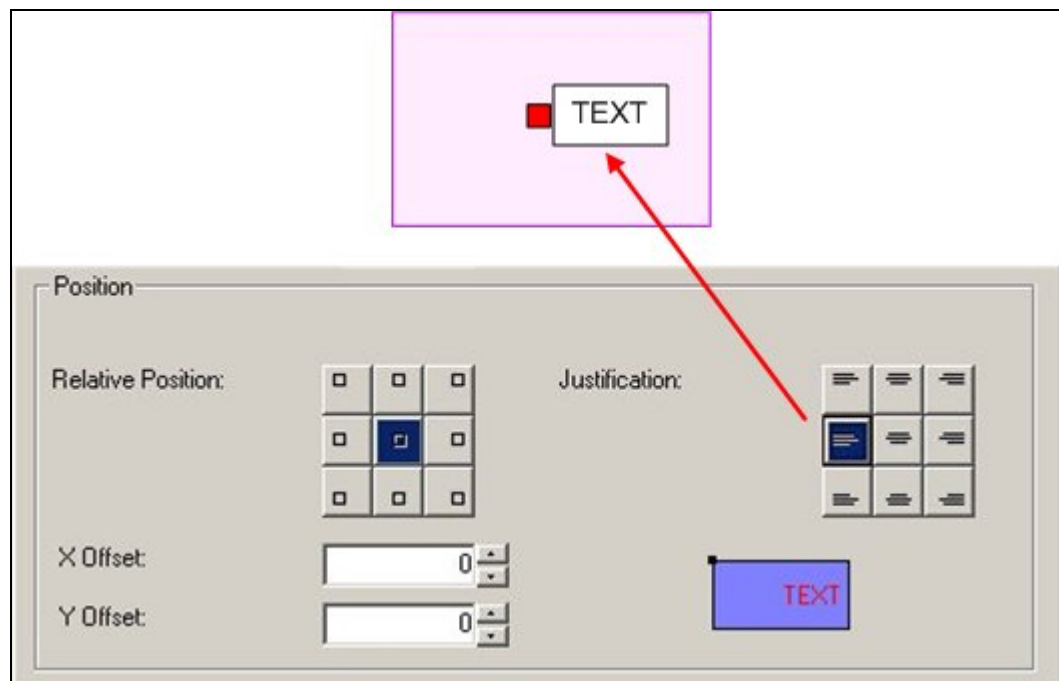
**Relative Position** determines where the text starts within the fixture - each button in the position frame corresponds to a specific point within a fixture.



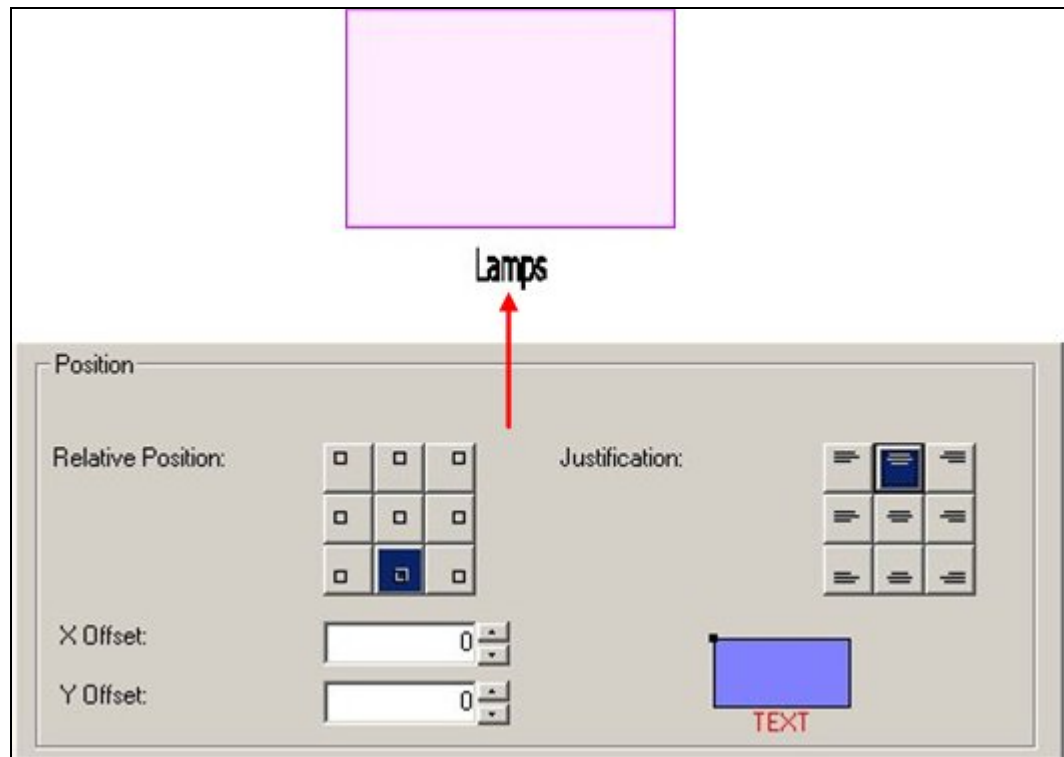
**Justification** determines how the text positions in relation to the Relative Position. It is designed to operate in a similar way to the equivalent AutoCAD functionality. In the example below, the text is top justified in relation to the Relative Position.



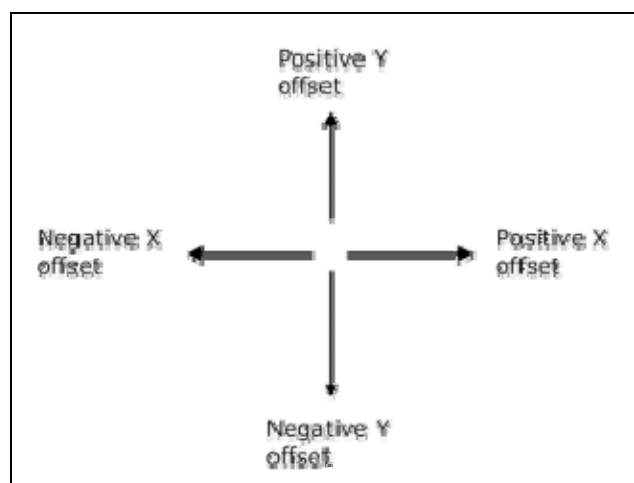
In the example below, the text is left justified in relation to the Relative Position.



The advantage of this means of operation is that it is possible to position text outside of the parent object.



Finally, it is possible to use the X Offset and Y Offset to fine tune the position of the text.

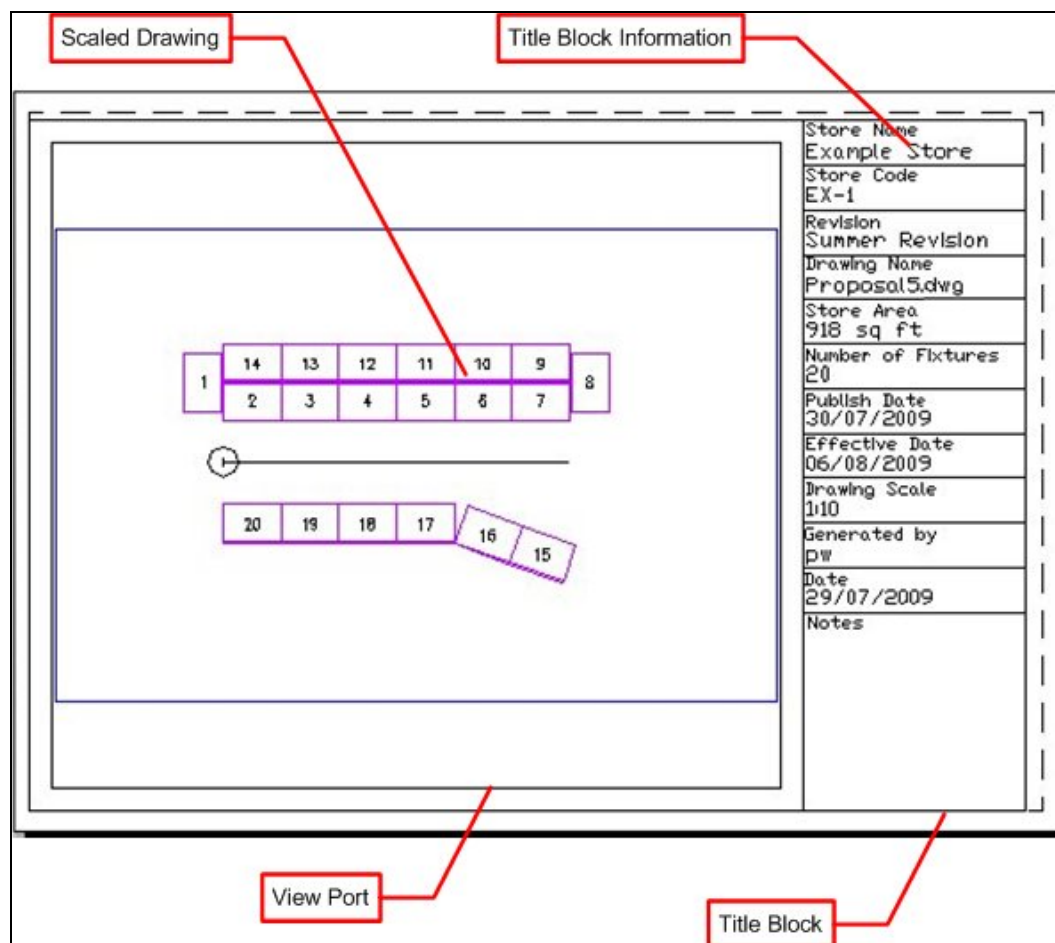


For example if different offsets are specified for fixture and product information, it will be possible to avoid these two types of annotation overwriting each other.

## Title Blocks

### Overview

**Title Blocks** are used to put a frame round a drawing in preparation for printing it. Title Blocks can also contain information on the drawing.



The **Title Block** is an AutoCAD DWG file that overlays the store plan on model space. It contains information on the drawing and one or more viewports to display the drawing.

The **Viewport** is a specified area within the Title block where the drawing appears. Viewports can be set to precise scales.

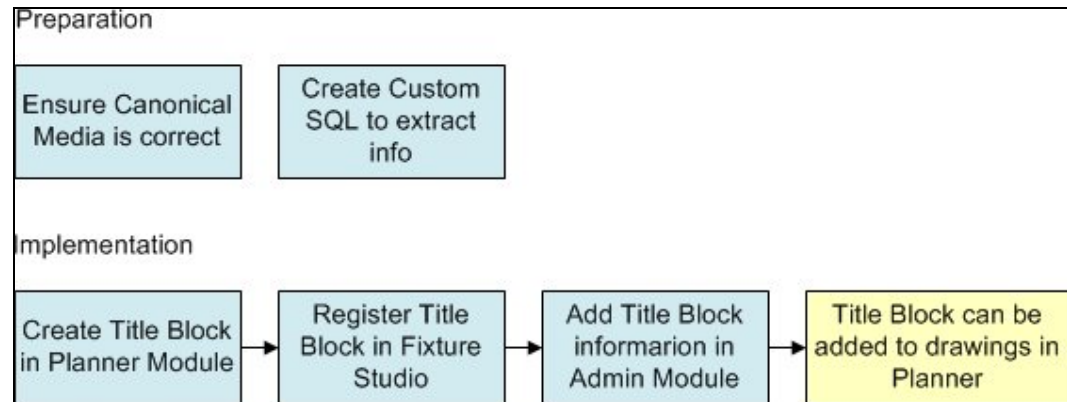
The **Title Block Information** is a specific part of the Title Block. It contains fields that populate with data about the drawing. In the above example the fields include the store name and store code. The data to populate these fields is read from two sources:

1. From information imbedded into the drawing by the software
2. From the database by using custom SQL

Each Title Block is designed for a specific size of paper, so if drawings are to be printed off in a range of sizes, title blocks should be created for each size. A metric implementation of Macro Space Management may contain title blocks for A0, A1, A2, A3 and A4 size paper, while an imperial one may contain title blocks for ANSI A, ANSI B, ANSI C, ANSI D and ANSI E size paper.

## Overview of Creating Title Blocks

Title Blocks are created using the following sequence of actions.



### Preparation

There are two actions required to prepare for the use of Title Blocks:

#### 1. Ensure Canonical Media is Correct

Canonical Media are the range of paper sizes recognized by AutoCAD for printing purposes. They typically need to be installed once immediately after installing the software.

#### 2. Create Custom SQL to Extract Information

It is possible to populate the fields in the title block with information extracted from the database. The information must be extracted from the database with a Custom SQL statement that is stored in the AVTTB\_CUSTOM\_SQL database.

### Implementation

#### 1. Creating Title Block in Planner Module

The initial stage to creating a Title Block is to draw it in the Planner Module. All information that will automatically added must have an Attribute Definition assigned. When the Title Block has been drawn, it is turned into a block with the 'block' command, and then written to an appropriate directory in the MSM directory structure with the 'WBlock' command.

#### 2. Registering the Title Block in Fixture Studio

Once a Title block has been created in the Planner Module, the next stage is to create the appropriate entry (registering) in Fixture Studio. This ensures that the title block will be available for the functionality that references it, be drawn on the right layer, be drawn at the correct size, etc.

#### 3. Adding Title Block Information in the Admin Module

Once the Title Block has been registered in Fixture studio, the final stage is to enter details of the title block in the Admin Module. This enables users to specify the description of the Title Block, size of view ports, etc.

### Use

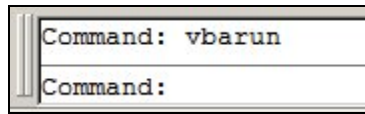
Once the Title block has been implemented, it can be used in the Planner Module by the Add Title Block command on the Insert Menu. It can be updated using the Insert Title Block command on the Insert Menu.

## Canonical Media

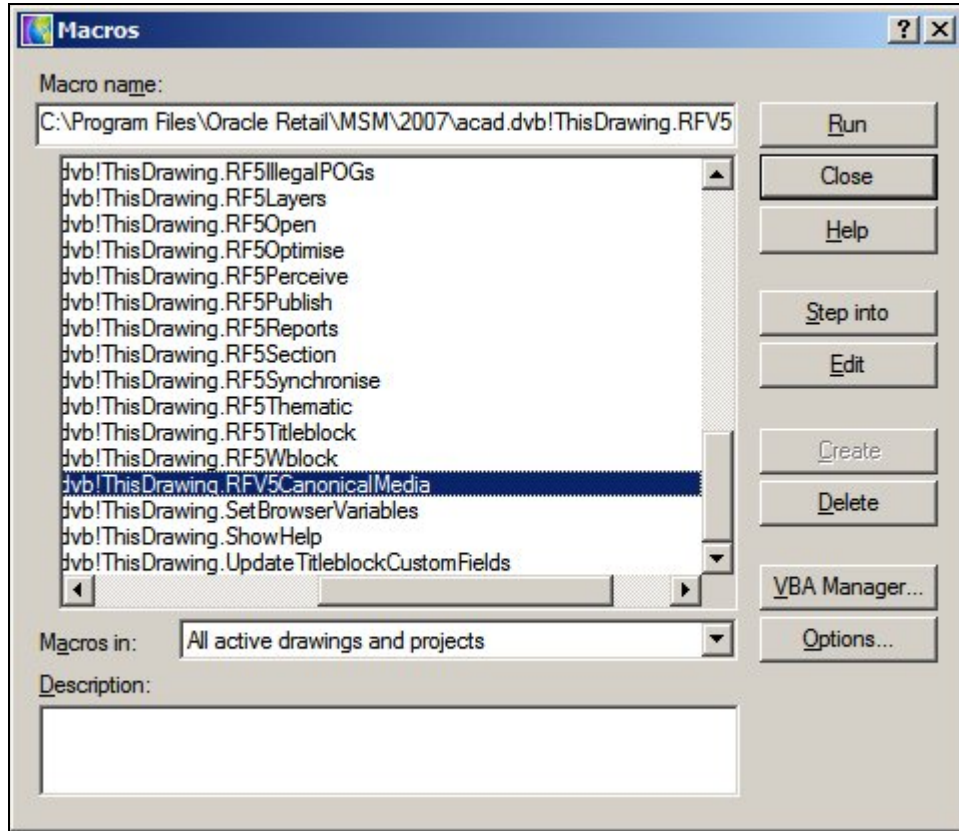
**Canonical Media** are the range of paper sizes recognized by AutoCAD for printing purposes. They typically need to be installed once immediately after installing the



software. To add (or update) the list, open the Planner module and type vbarun into the command line.



This will bring up the Macros dialogue box.



Select C:\Program Files\Oracle Retail\MSM\2007\acad.dvb!ThisDrawing.RFV5CanonicalMedia and click Run. The software will detect all printers the user's computer is connected to (including network printers) and generate a list of all paper sizes recognized by those printers.

This command only needs to be run once, and then the user's computer will be set up to print drawings and their associated title blocks on those printers.

## Custom SQL

**Custom SQL** is used to populate anything other than the default Attribute Names. The Custom SQL for Title Blocks is stored in the AVTTB\_CUSTOM\_SQL table with a CSQ\_ID of 69. Only one set of Custom SQL can be used for title blocks. There are three points of interest in the simple example below:

1. Qualifying the Select Statement
2. Use of Column Alias
3. Marker



### Qualifying the Select Statement

Sometime the select statement has to be qualified to get the data to display in the most appropriate format. Here, the Truncate command has been used to remove the hours and minutes from the date before it is displayed.

### Use of Column Alias

The Column Alias matches the Attribute Definition it is wished to populate in the Title Block. In the above example, the Publish Date for the file will be displayed using the attribute definition PUB\_DATE. The Column Alias has been set to be the same. When the Title block is Added or Updated the code will match up the Attribute Definition and the Column Alias and populate the Title Block with the specified information.

---

**Note:** the Attribute Definition and the Column Alias must be an exact match. Misspelling of one or the other will result in the Title Block not populating.

---

### Markers

Markers are column names from MSM database tables enclosed in curly brackets: {FIL\_ID}. This part of the Custom SQL is specific to Macro Space Management. In a normal SQL statement the 'where' clause might be something like FIL\_ID = 1234. Here, the Title Block is going to populate with information relative to the active drawing in Planner. The FIL\_ID (File ID) is one of the items of information 'stamped' into the active drawing. The where FIL\_ID = {FIL\_ID} clause allows the code to identify the FIL\_ID of the currently active drawing and filter the information derived from the SQL statement accordingly.

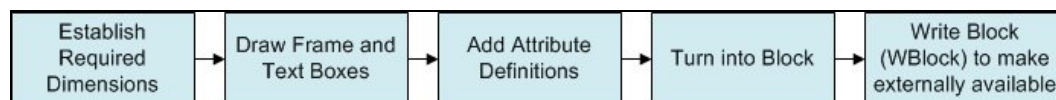
---

**Note:** without using the Marker {FIL\_ID} as a filter, the SQL statement would have returned all Publish Dates for all files recorded in the AVTTB\_FILE directory.

---

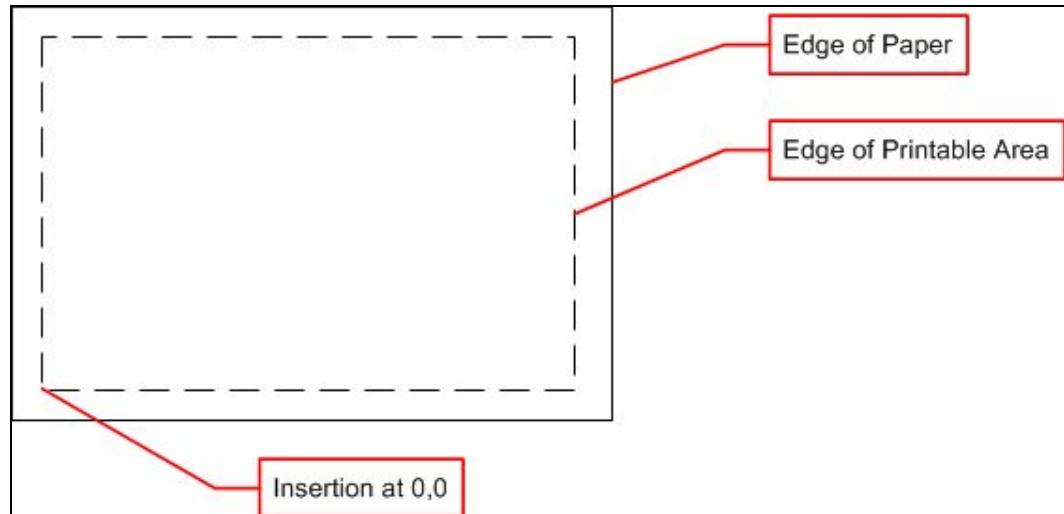
## Creating the Title Block in Planner

Creating the Title Block in the Planner Module requires a series of actions to be carried out.



### 1. Establishing Required Dimensions

Title Block Size has to take into account the printable area on the selected paper size. For example, A3 paper is 297 x 420 mm. However, printers (and plotters) cannot make use of all that area and a border (called the non-printable area) that cannot contain any lines or text exists around the edges of the paper.

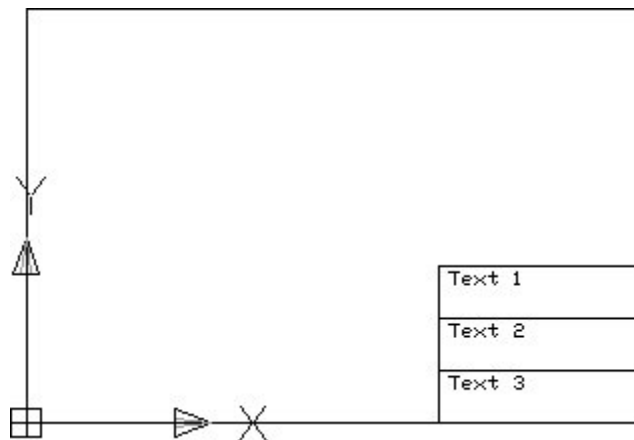


The size of the title block needs to take into account the non-printable area. For example, if A3 paper is used, and the non-printable area is 6 mm wide, then the title block needs to be drawn at 285 x 408 mm to fit exactly into the printable area of the paper. The insertion point of the title block is normally set at 0,0 as 0,0 in the paper space layout is defined as the lower left corner of the printable area.

**Note:** the size of the printable area is printer/plotter specific.  
It is helpful to allow a small margin for these differences.

## 2. Draw Frame and Text Boxes

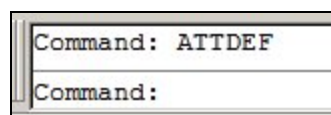
After the size has been established a frame can be drawn in planner, and text boxes added.



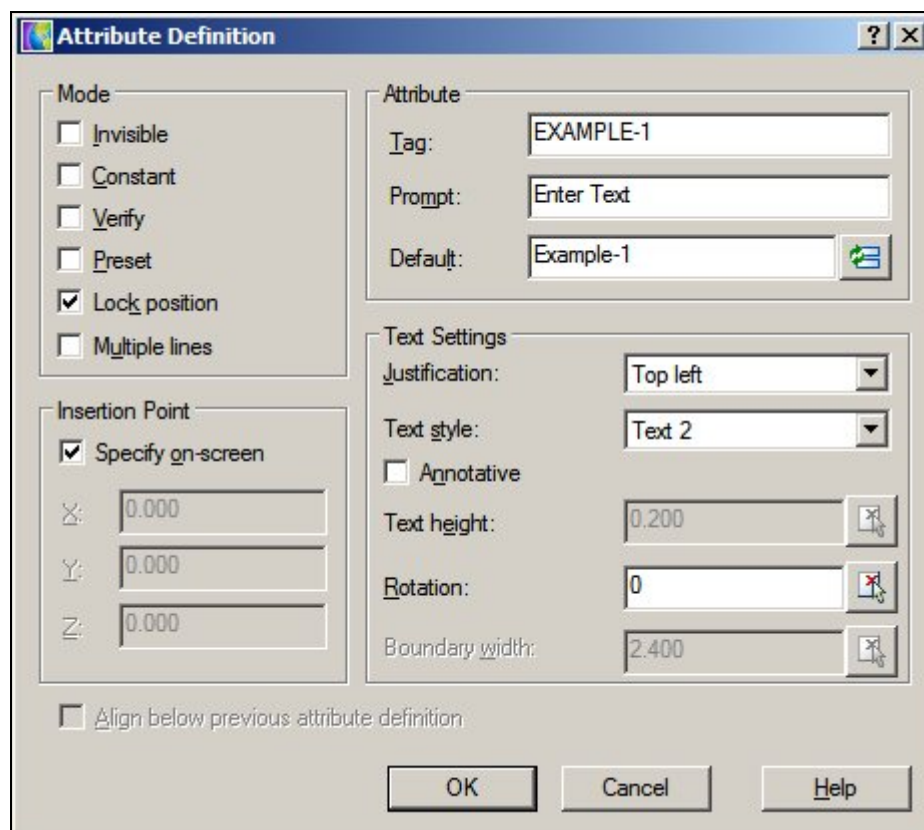
The Title block is usually drawn with the origin at 0,0.

## 3. Add Attribute Definitions

Attribute Definitions are used to set up the 'template' Attributes for the text boxes. They are invoked by typing the ATTDEF command into the AutoCAD command line in Planner.



This will bring up the Attribute Definition dialogue box.

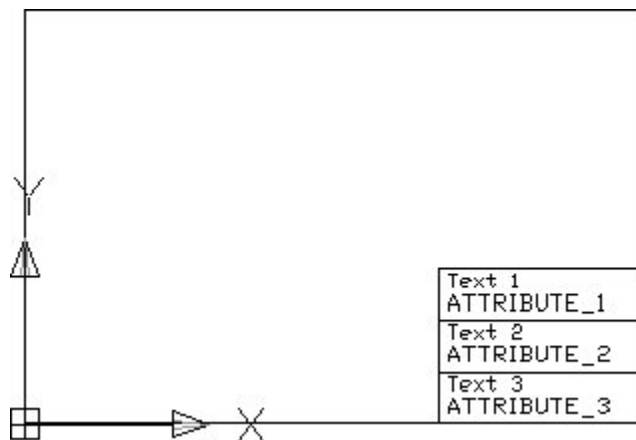


The 'Attribute Definition' dialog box is shown with the following settings:

- Mode:**
  - ☐ Invisible
  - ☐ Constant
  - ☐ Verify
  - ☐ Preset
  - ☒ Lock position
  - ☐ Multiple lines
- Insertion Point:**
  - ☒ Specify on-screen
  - X: 0.000
  - Y: 0.000
  - Z: 0.000
- Attribute:**
  - Tag: EXAMPLE-1
  - Prompt: Enter Text
  - Default: Example-1
- Text Settings:**
  - Justification: Top left
  - Text style: Text 2
  - ☐ Annotative
  - Text height: 0.200
  - Rotation: 0
  - Boundary width: 2.400
- ☐ Align below previous attribute definition

Buttons: OK, Cancel, Help

The Attribute Definitions can then be put into the drawing.

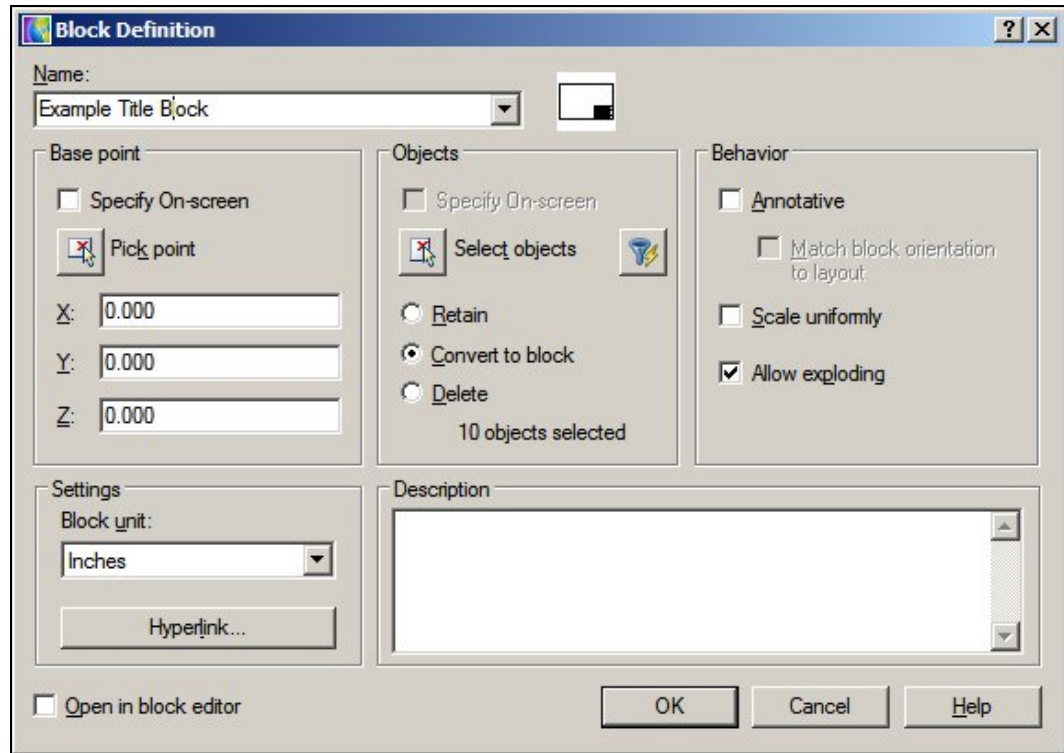


Attribute Tags should always be continuous text. If necessary, join two words with an underscore: WORD1\_WORD2.

The Attribute Tags should either match the names of the data 'stamped' into the drawing (More Info) or the Column Aliases in the Custom SQL (More Info).

#### 4. Turn into Block

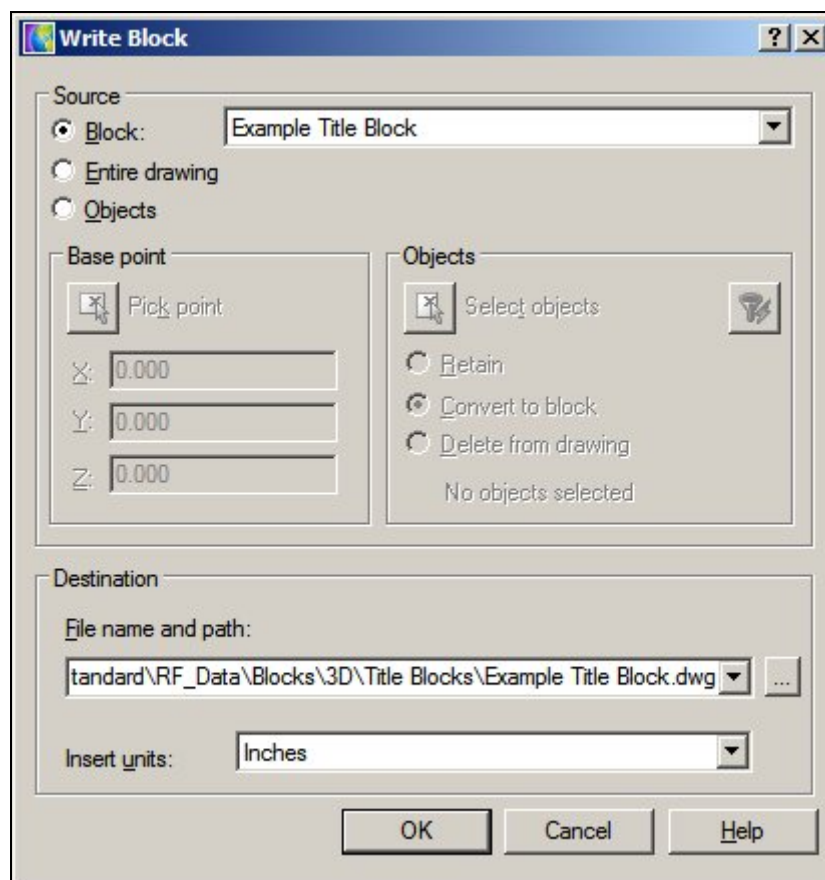
The Title Block can then be turned into a block with the 'block' command. This can either be initiated from the Draw toolbar, or from the command line.



The individual components of the Title Block will then be combined to make a single object. This block definition is stored in the current drawing and is not yet globally available.

##### 5. Write Block (Wblock) to Make Externally Available

The Write Block (WBlock) command is used to write the block definition to an external directory where it can be used in any Macro Space Management drawing. The command is invoked by typing WBLOCK into the command line.



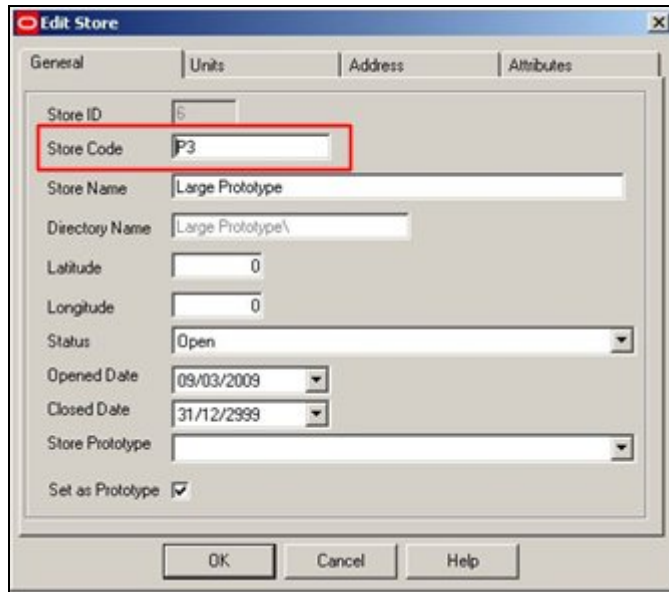
The destination should be a directory specified in the Directories Tab of the Configuration Module.

## Data Taken From The Drawing

**Data is imbedded into a drawing** when a drawing is created. This data is used for a number of purposes by Macro Space Management. One of these purposes is to populate the Attribute Definitions in Title Blocks. The data 'stamped' into a drawing has specific names assigned. If these match the name of an Attribute Definition in a Title Block, the information will be written into the Title Block on insertion into the drawing.

### STORECODE

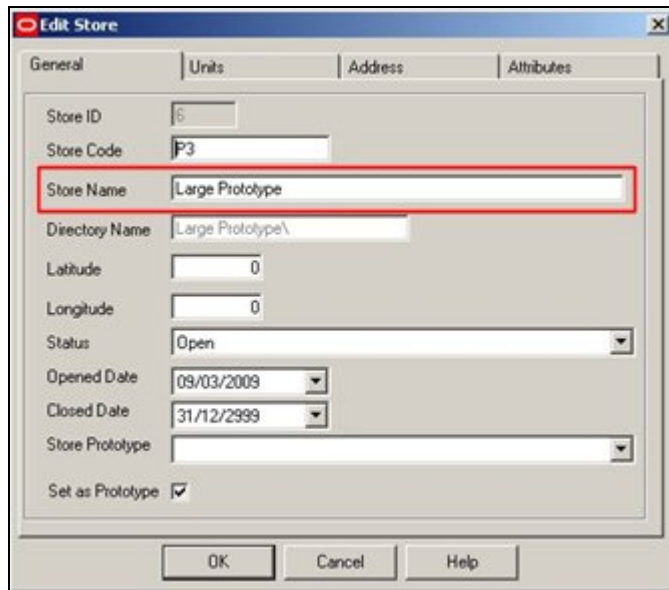
Store Code brings in the Store Code specified in the Add/Edit Store dialogue box in Store Manager.



The 'Edit Store' dialog box is shown with the 'General' tab selected. The 'Store Code' field, containing 'P3', is highlighted with a red rectangle. Other fields include 'Store ID' (5), 'Store Name' (Large Prototype), 'Directory Name' (Large Prototype\), 'Latitude' (0), 'Longitude' (0), 'Status' (Open), 'Opened Date' (09/03/2009), 'Closed Date' (31/12/2999), and 'Store Prototype' (empty). The 'Set as Prototype' checkbox is checked. Buttons at the bottom are 'OK', 'Cancel', and 'Help'.

### STORE

Store brings in the Store Name specified in the Add/Edit Store dialogue box in Store Manager.

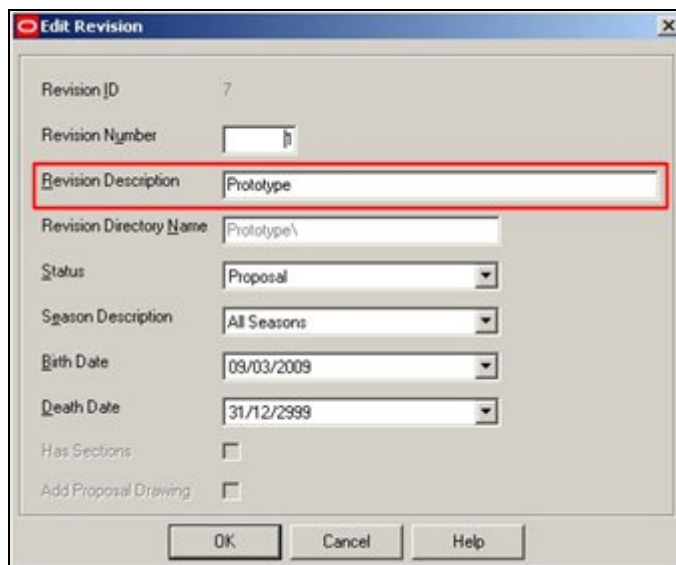


The 'Edit Store' dialog box is shown with the 'General' tab selected. The 'Store Name' field, containing 'Large Prototype', is highlighted with a red rectangle. Other fields include 'Store ID' (5), 'Store Code' (P3), 'Directory Name' (Large Prototype\), 'Latitude' (0), 'Longitude' (0), 'Status' (Open), 'Opened Date' (09/03/2009), 'Closed Date' (31/12/2999), and 'Store Prototype' (empty). The 'Set as Prototype' checkbox is checked. Buttons at the bottom are 'OK', 'Cancel', and 'Help'.

### REVISION

Revision brings in the Revision Description specified in the Add/Edit Revision dialogue box in Store Manager.





### FLOORCODE

Floor Code brings in the FLT\_NAME (a numerical value) from the AVTTB\_FLOORTYPE table that is associated with the corresponding Floor Type specified in the Add/Edit Floor dialogue box in Store Manager.



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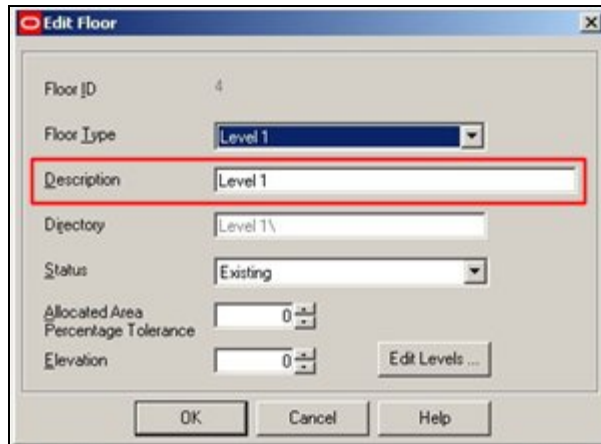
**Note:** FLOORCODE is currently not working correctly. If it is desired to add this information to a Title Block, it should be done using custom SQL and a slightly modified attribute name.

---

### FLOOR

Floor brings in the Revision Description specified in the Add/Edit Floor dialogue box in Store Manager.





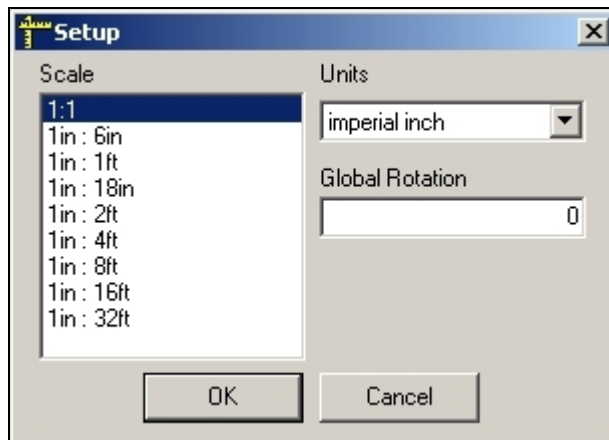

---

**Note:** FLOOR is currently not working correctly. If it is desired to add this information to a Title Block, it should be done using custom SQL and a slightly modified attribute name.

---

### SCALE

Scale brings in the scale set in the Drawing Setup option of the Format menu in Planner.

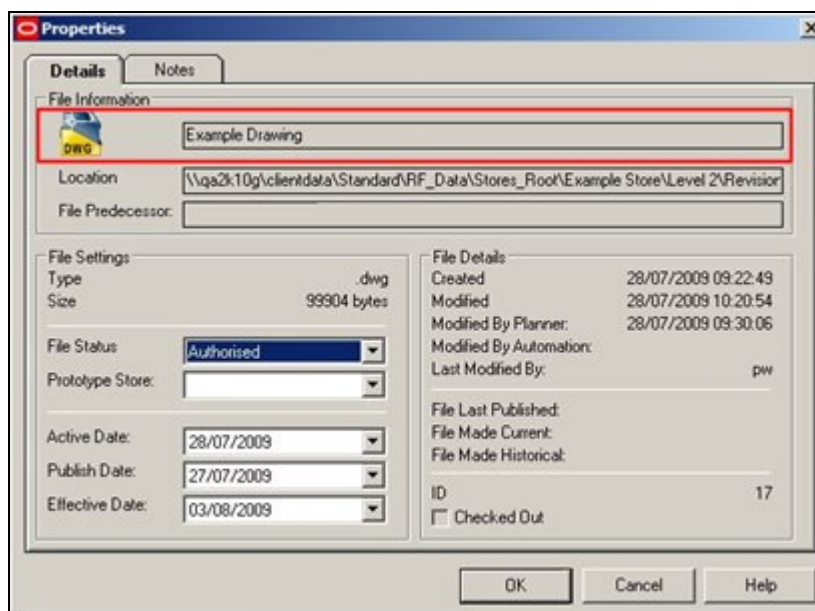


### DATE

Date brings in the date that the title block was generated or updated on.

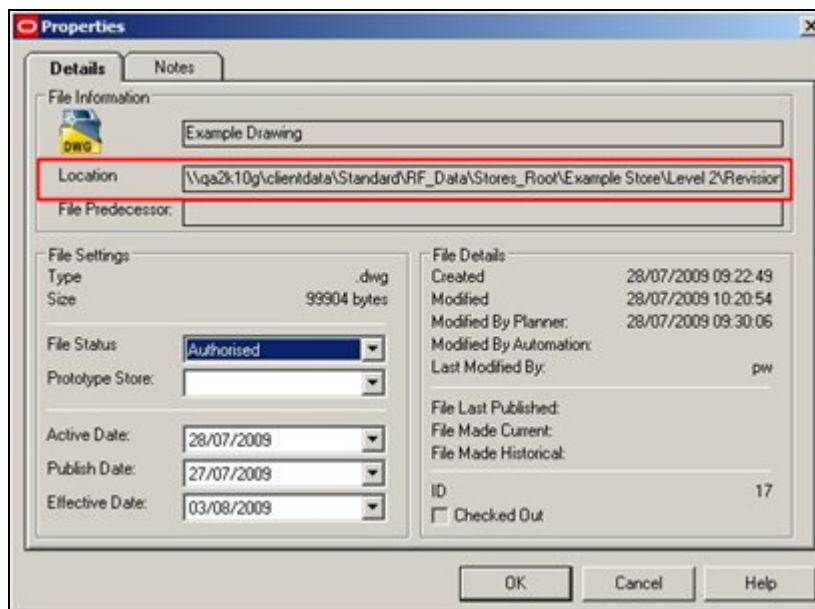
### DWGNAME

Drawing name brings in the name of the AutoCAD DWG file as specified on the Details Tab of the File Properties dialogue box in Store Manager.



### FULLFILENAME

File Full Name brings in the name and path to the file specified in the Location text box of the Details Tab of the File Properties dialogue box in Store Manager.



The full file name can be long; for example:

\\qa2k10g\clientdata\Standard\RF\_Data\Stores\_Root\Example Store\Level 2\Revision 1\Example Drawing.dwg

If the FULLFILENAME attribute definition is used, this length should be taken into account when defining the attribute.

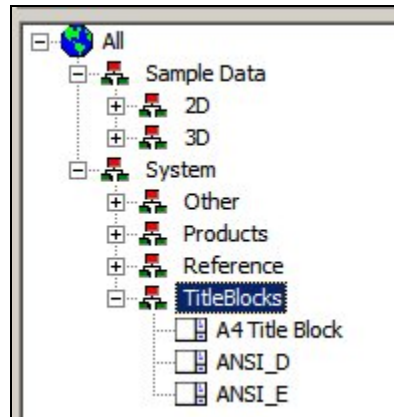
## Registering the Title Block in Fixture Studio

Registering the Title Block in Fixture Studio requires the following steps.



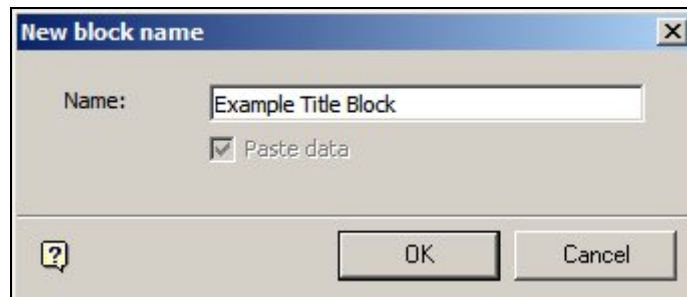
### 1. Selecting the Parent Fixture Group

All blocks within Fixture Studio are arranged within a hierarchy. The default hierarchy contains a Fixture Group called Title Blocks. This is the usual location for title blocks.



### 2. Create a Block and Enter the Block Name

Create a block by invoking the Add Block option from the Edit menu or the toolbar. This will bring up the New block name dialogue box.



Ensure that the block name entered exactly matches the block name specified in the WBlock command used in planner. On clicking OK, the Block Details dialogue box will appear for editing.

### 3. Enter Settings in the Block Details Dialogue Box

The Block Details dialogue box allows custom properties to be assigned to the title block.

Full details of how to use this dialogue box can be found in the Fixture Studio help file. The principal settings pertinent to title blocks are:

#### Category Tab

1. Set the Retail Type to Title Block.
2. Set the Directory to match that specified in the WBlock command when the block was saved in Planner.
3. Set the Units as appropriate.
4. Set the Icon to Title Block.

#### Insertion Tab

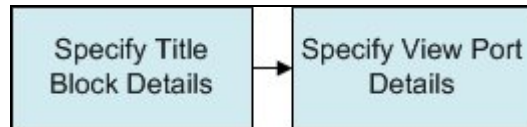
1. Set the Layer to Other > TITLEBLOCK.
2. Level can be left as 'Undefined'.

#### Size Tab

1. The Sizes should be set as appropriate.
2. Height can be left as 0.00001 - this nominal value is to avoid 'divide by zero' errors in the code.

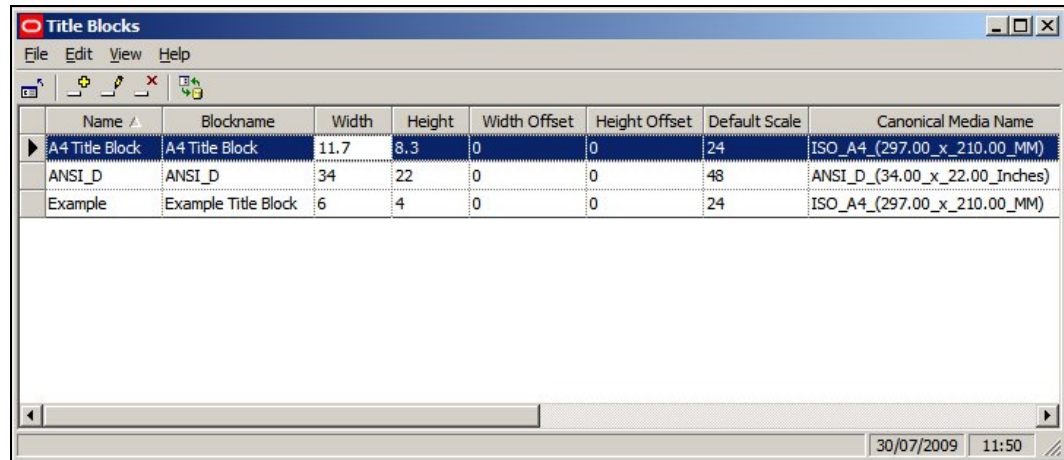
## Adding Title Block Information in the Admin Module

Adding Title Block Information in the Admin Module is in two stages:



## 1. Specifying Title Block Details

Title Blocks are Added, Edited or Deleted using the Title Blocks option from the Planning menu. This will bring up the Title Blocks dialogue box.



**Name** is the nominal name of the title block.

**Blockname** is the name of the block for the title. It can be selected from a drop down list. this list contains the name of all blocks of type 'Title Block' is Fixture Studio.

**Width** is the nominal width of the paper the title block is designed for. It is for display purposes only

**Height** is the nominal height of the paper the title block is designed for. It is for display purposes only.

**Width Offset** is the offset of the insertion point of the title block in the 'X' plane relative to the lower left corner of the printable area on the paper the title block is designed for.

**Height Offset** is the offset of the insertion point of the title block in the 'Y' plane relative to the lower left corner of the printable area on the paper the title block is designed for.

**Default Scale** is the default scale that will be applied to the viewports when they are first defined in the Title Block dialogue box.

Note: this option is currently not setting the default in the Title Block dialogue box.

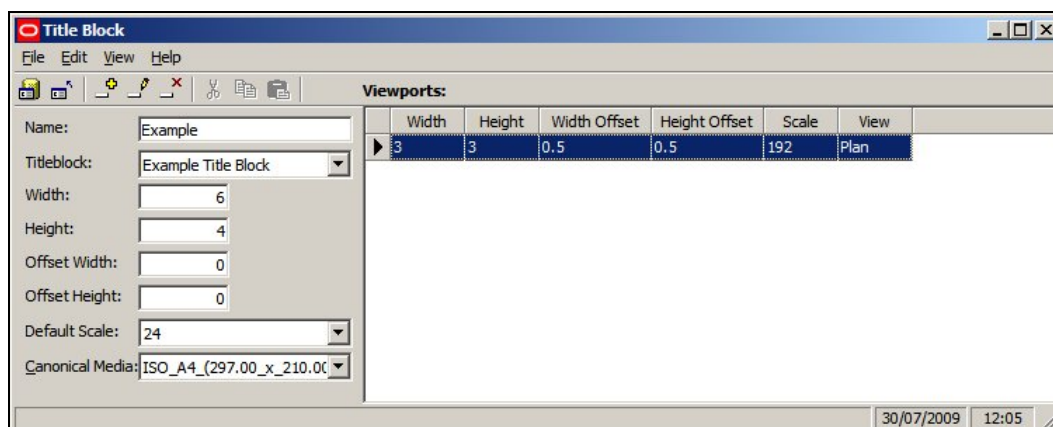
**Canonical Media** is selected from a drop down list. It should be set to the size of paper the title block is designed for.

**Note:** Any entries will only be added when the [Return] key is pressed.

Title Blocks can be added or deleted using the appropriate options on the Edit menu or the toolbar. Selecting the edit option on the edit menu or the toolbar will bring up the Title Block dialogue box.

## 2. Specifying Viewport Details

The Title Block dialogue box is used to specify the details of the viewports in the Title Block. It is invoked by the edit option in the Title Blocks dialogue box.



The information to the left of the dialogue box mirrors that of the Title Blocks dialogue box. The information on the right of the dialogue box is used to set up viewports. Title blocks may have multiple viewports.

**Width** is the dimension of the viewport in the 'X' plane.

**Height** is the dimension of the viewport in the 'Y' plane.

**Width Offset** is the offset of the viewport in the 'X' plane relative to the insertion point of the title block.

**Height Offset** is the offset of the viewport in the 'Y' plane relative to the insertion point of the title block.

**Scale** is the scaling factor applied to the viewport.

---

**Note:** Scaling is not working correctly at present.

---

**View** is the direction the drawing will be presented in the viewport. Options include Plan and a number of isometric projection directions.

---

**Note:** View is not working correctly at present.

---

**Note:** Any entries will only be added when the [Return] key is pressed.

---

## Deleting Title Blocks from Macro Space Management

Deleting Title Blocks from Macro Space Management takes place in three stages:



### 1. Delete Title Block Definition from Admin Module

To delete the Title Block definition from the Admin Module:

- a. Select the Title Block in the Title Blocks dialogue box.
- b. Highlight the required Title Block and select Edit. This will open the Title Block dialogue box.
- c. Delete any viewports associated with the Title Block.
- d. Close the Title Block dialogue box.
- e. Delete the Title block from the Title Blocks dialogue box.

## 2. Delete Title Block from Fixture Studio

To mark the Title Block for deletion from Fixture Studio:

- a. Highlight the Title Block in the Fixture Hierarchy.
- b. Select Delete Block from the right click menu - the block name will change from black text to grey.
- c. Save the changes (Save Option) so that the 'delete' flag is set in the database.

---

**Note:** the Title Block has not been deleted at this stage - it has merely been marked for deletion.

---

## 3. Purge Title Block in the Admin Module

To permanently delete the Title block from the MSM database:

Select the Purge option from the Tools menu.

Select the Fixtures checkbox and click OK.

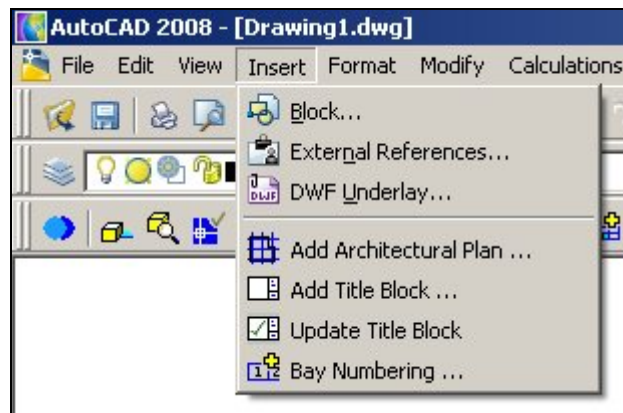
---

**Note:** this will delete the information from the database. However, the block will not be deleted from the directory it is stored in. This is because the block might be referenced by other software.

---

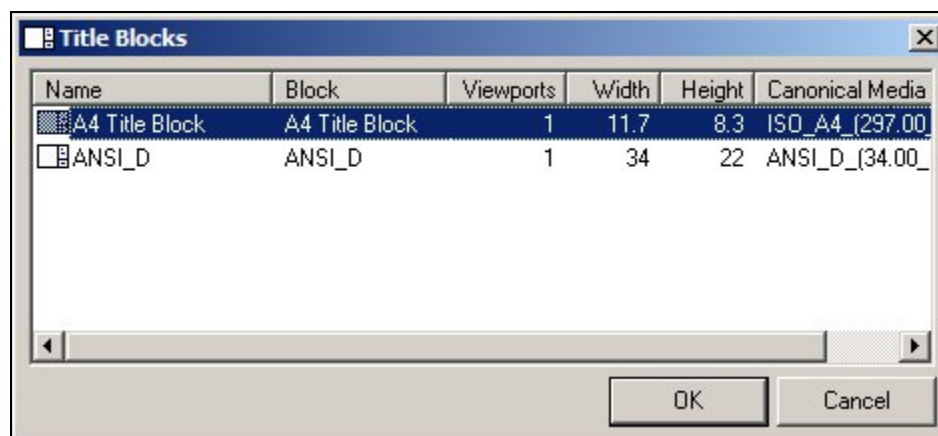
## Placing Title Blocks in Planner

To place Title Blocks in Planner, select the Add Title Blocks option from the Insert menu.



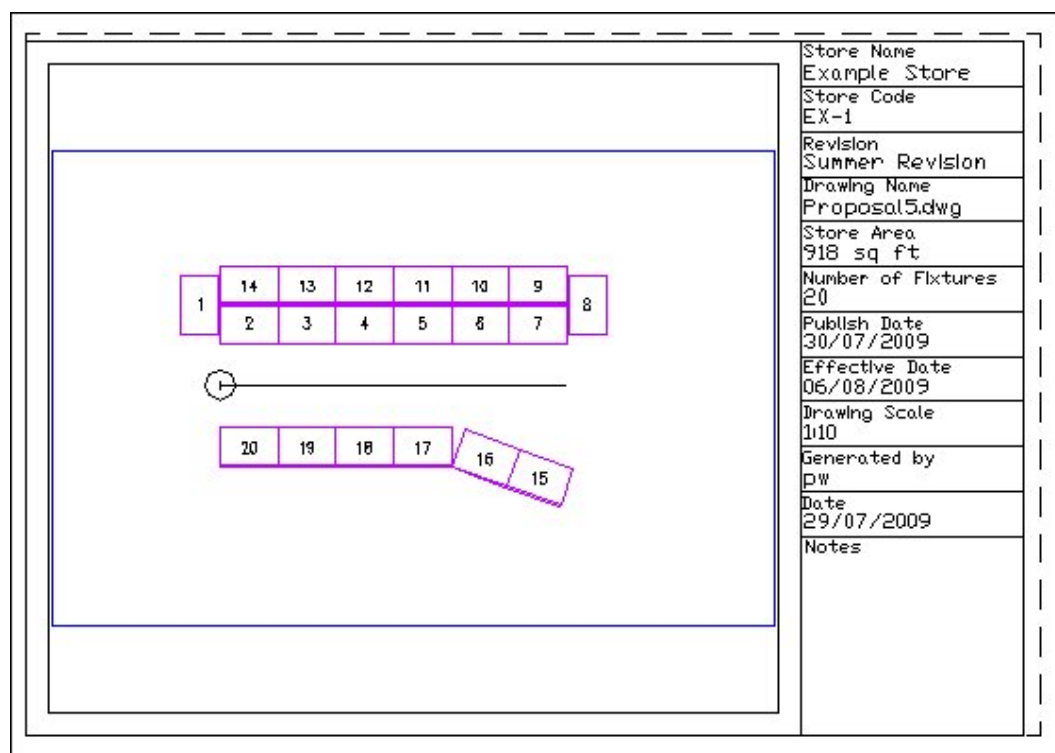
This will bring up the Title Blocks dialogue box.





The list of available Title Blocks is that specified in the Administration Module.

To place a Title Block, highlight it in the list then click OK.



## Modifying Title Blocks in Planner

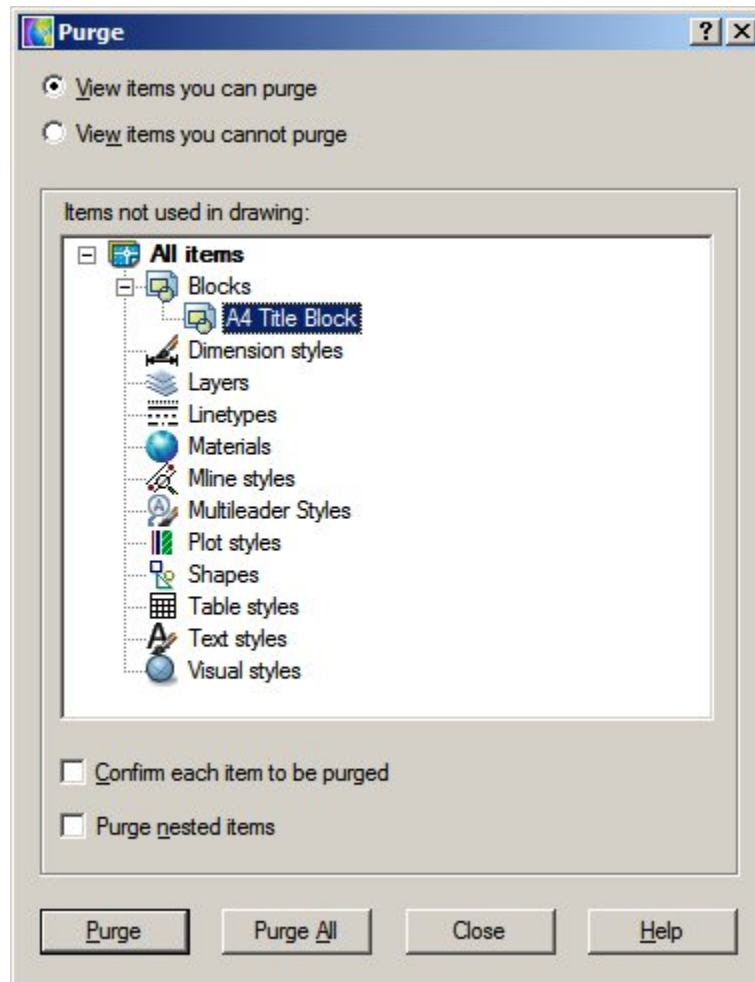
When **designing a Title Block**, it is sometimes necessary to place the Title Block in a Planner drawing and subsequently modify it so correct minor flaws in the design. Once the modified Title Block DWG file has been saved, actions are necessary in Planner to ensure that the modified Title Block displays - and not the original version. The two options are:

1. Removing Title Blocks, Purging and Reinserting Title Blocks
2. Restructuring the Drawing and Updating the Title Blocks
1. **Removing Title Blocks, Purging and Reinserting Title Blocks**



Where there are only a few instances of a title block present in a drawing, it is possible to manually delete them, purge instances from the drawing and reinsert the updated title block.

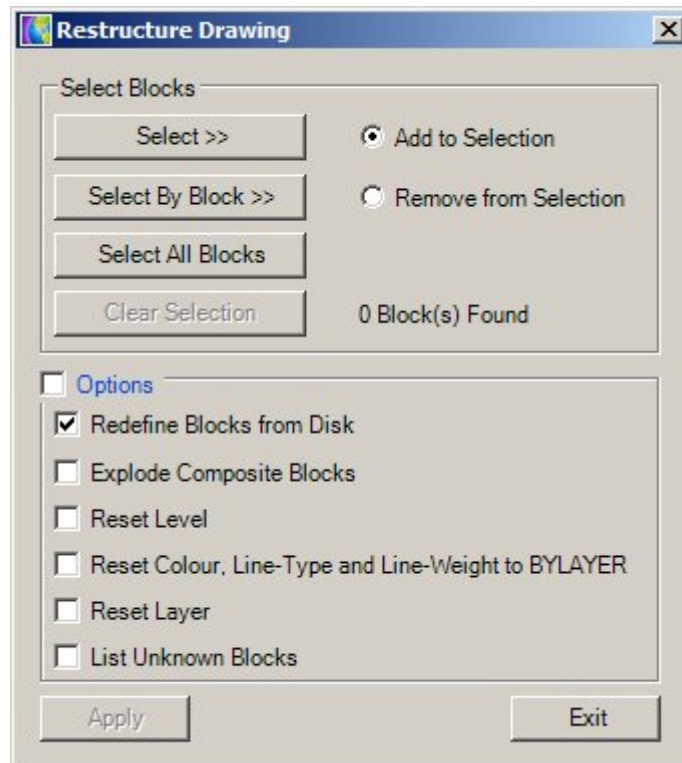
Purging is necessary if a title block that has previously been used in a specific drawing in the Planner Module. AutoCAD stores a copy of the block definition in the drawing when the block definition is first used. All subsequent insertions of that block will be copies of the stored block definition. In order for the modified Title block to take effect, the old definition must first be removed from the drawing. This can be done by using the Purge option from the File > Drawing Utilities menu. Alternatively, it can be invoked by typing PURGE into the command line.



If all active instances of the Title Block has been removed from the drawing, it will be possible to select the definition and purge it. The modified title block can then be added as required using the Add Title Block option from the Insert menu in Planner.

## 2. Restructuring the Drawing and Updating the Title Blocks

Restructuring the Drawing updates blocks in the drawing with any later versions held in the database. Restructure Drawing is invoked from the Restructure > Blocks menu in Planner.



Selecting Redefine blocks from Disc will result in the DWG file specifying the title block being update (providing it has first been selected). Using the Select by Block option and selecting the title block will ensure that only the title block is updated.

Once the Title block has been redefined, the attributes it contains should be updated by the Update Title Block option on the Insert Menu in Planner.

## Editing Attributes

Editing Attributes once the title block has been placed in a drawing can be achieved by double clicking on the frame of the Title Block. This will bring up the Enhanced Attribute Editor.

Block: A4 Title Block  
Tag: REVISION

Select block

Attribute | Text Options | Properties

Tag	Prompt	Value
NOTES	Notes	
DATE	Date Generated	30/07/2009
USER	User ID	User ID
SCALE	MSM Drawing Scale	1:24
EFF_DATE	Effective Date	Effective Date
PUB_DATE	Publish Date	Publish Date
STORE_AREA	Area of Store	Area of Store
FIX_NO	Number of Fixtures	Number of Fixtures
DWGNAME	Drawing Name	Proposal15.DWG
<b>REVISION</b>	<b>Revision Name</b>	<b>Summer Revision</b>
STORECODE	Store Code	EX-1
STORE	Store Name	Example Store

Value: Summer Revision

Apply OK Cancel Help

This allows any of the Attribute values to be edited.

## Zone Types & Definitions

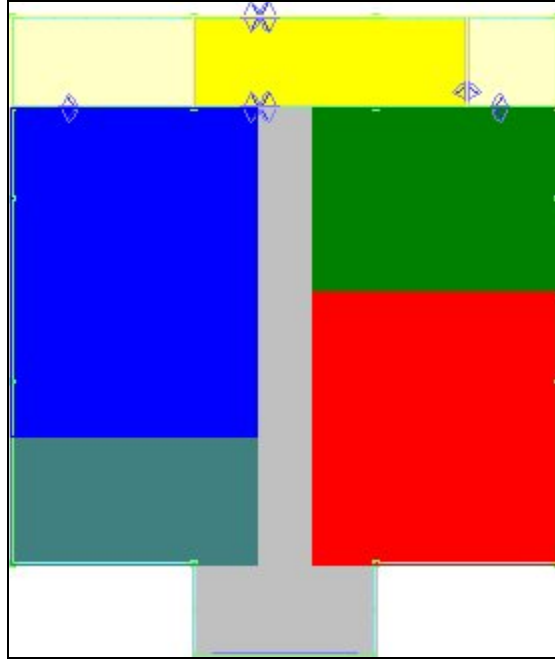
### Purposes of Zones

Zones are ways of dividing up a store into areas of specific purpose.

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**Note:** Zones are sometimes called Departments. This should not be confused with Zone Types of Type 'Department' which have a specific purpose in MSM.

---



Once placed, Zones can be used for measuring, reporting and filtering purposes.

#### **Measuring Area**

Once placed, the area of the zone can be calculated. This can be:

1. Gross Area - the area of the zone without taking into account any obstructions
2. Net Area - The area of the zone after obstructions (such as pillars and staircases) are taken into account

These areas can subsequently be used for calculation purposes - for example determining the profit per square foot or meter.

#### **Reporting**

Once fixtures and merchandise are placed in a store plan, Zones can be used to get reports on the performance of specific parts of the store. For example, it is possible to find the sales turnover, sales margins, profitability, etc, for any zone.

If there is a hierarchy of zones present in the store, it is possible to get reports of differing levels of detail. For example, it would be possible to get reports on the Clothing department or just one of its sub-departments - say Children's Clothing.

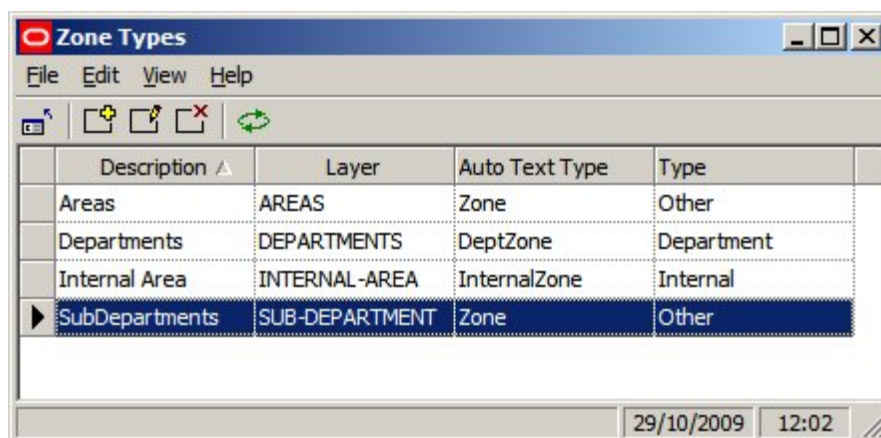
#### **Filtering**

Zones can be used for filtering purposes - primarily in the Object Grid. It is possible to associate either products or planograms with specific zones - when a zone is selected in the Object Browser these products or planograms will appear in the Object Grid. These are called Zone - Product or Zone - Planogram links and are controlled by means of Custom SQL.

## **Overview of Zone Types and Zone Definitions**

Zones have both a Zone Type and a Zone Definition.

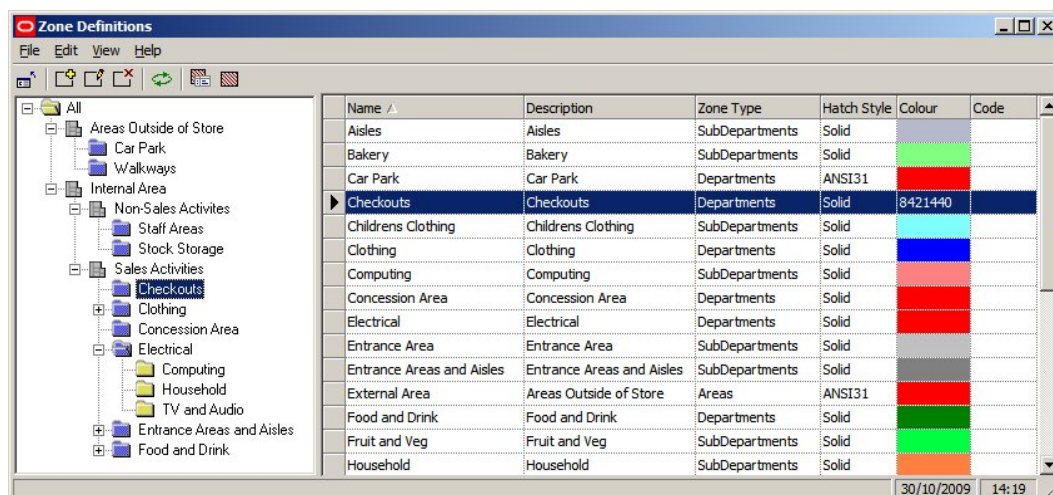
### **Zone Types**



Zone Types is used to set broad properties that can be assigned to a specific Zone Description.

1. Description is the name given to the group of properties
2. Layer is the AutoCAD layer the zone will be drawn on
3. Auto Text Type describes the Text Style to use (Planning Menu in the Admin Module)
4. Type describes the category the Zone Type will be assigned to - either Internal Area, Department Zone or Other Zone

### Zone Definitions



Zone Definitions is used to create the Zone Hierarchy. This zone hierarchy will also appear in the Zone Tab of the Object Browser in the Planner and Merchandiser Modules.

1. Name is the Name of the Zone
2. Description expands on the Name of the Zone
3. Zone Type puts the Zone into one of the classes described in the Zone Type dialog box
4. Hatch Style selects a hatch style from those defined in the Hatch Styles option on the Planning menu in the Administration Module
5. Color is the color the boundary of the zone (and any hatching) will be in the Planner and Merchandiser Modules
6. Code is any code that a customer might assign to a Zone Definition

### Object Browser

Details of the Zone Definition will appear in the Properties Window of the Object Browser in the both the Planner and Merchandiser Modules.

Properties	
Name	Value
Name	Computing
Description	Computing
Type	SubDepartments
Hatch Style	Solid
Colour	8421631

### Criteria for Arranging Zone Types and Descriptions

Some broad criteria have to be obeyed when designing a zone hierarchy

#### Internal Area Zone

There should be an Internal Area zone in a store plan. This determines the maximum area used for retailing purposes and is used in Area Calculations and assigning specific parts of the floor to specific fixtures.

#### Zones Types of Type Department

Zones Type of Type Department have particular properties.

Zone Types				
File Edit View Help				
Description	Layer	Auto Text Type	Type	
Areas	AREAS	Zone	Other	
Departments	DEPARTMENTS	DeptZone	Department	
Internal Area	INTERNAL-AREA	InternalZone	Internal	
SubDepartments	SUB-DEPARTMENT	Zone	Other	

Zone Types 'Type' column

1. Fixtures are allocated to Zones of Type Department for calculation and reporting purposes when placed in a store plan.
2. Because products are associated with specific fixtures, products are indirectly associated with Zones Types of Type Department for reporting purposes when placed in a store plan
3. Synchronize automatically maps fixtures to Zones of Zone Type 'Type' Department as part of the synchronization process

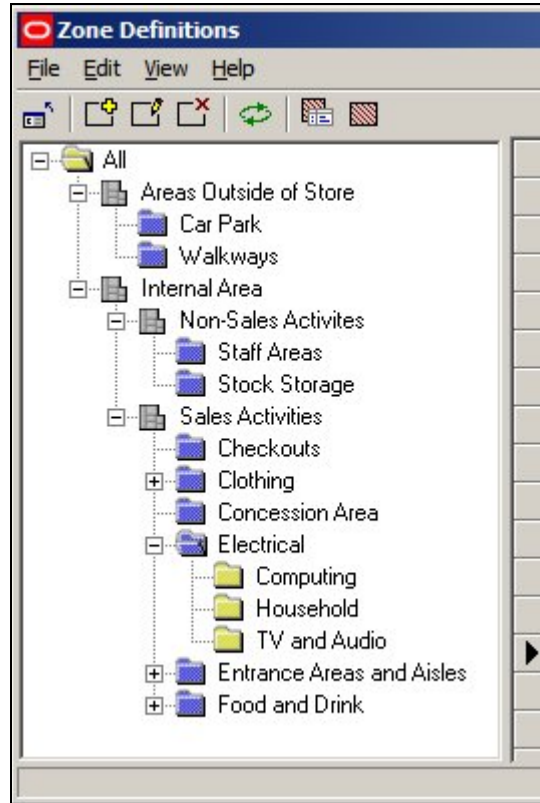
This imposes a restriction when designing a zone hierarchy: Zones of Zone Types 'Type' cannot overlap each other as this would cause problems with the underlying business logic of the software.

#### 'Department' Type Zone Types



The minimum requirement for laying out a store plan with zones is Zone Descriptions of Zone Type 'Type' department.

1. This is necessary for reporting purposes, for example associating Fixtures with zones
2. In-Store Space Collaboration requires Zones of Zone Type 'Type' department to be present before a store plan can be opened.



In the above example, the user might place 'Staff Area' and 'Stock Storage' Department Zones for the 'Back of Store' areas and 'Checkouts', 'Clothing', 'Concession Areas', 'Electrical', 'Entrance Areas and Aisles' and 'Food and Drink' for the retail areas.

Zones at other levels in the hierarchy can be placed to increase reporting flexibility, but are not essential. For example, 'Computing', 'Household' and 'TV and Audio' child zones (which are not of Zone Type 'Type' Department) could be placed as children of the 'Electrical' zone.

### Planner (AutoCAD) Layers

Zones are drawn onto specified AutoCAD Layers in the Planner module. Different levels in the zone hierarchy can be drawn onto different AutoCAD layers. Zones that are on a specific AutoCAD layer can be detected as overlapping (clashing), whereas zones on different levels are not detected as clashing.

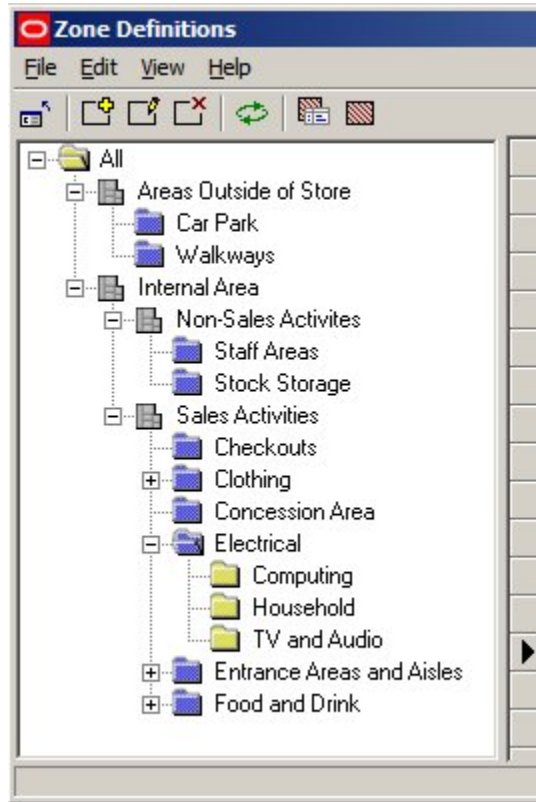
Zones must be assigned to AutoCAD layers in such a way that zones that should not clash are on the same layer. Similarly, where zones have children, they must be drawn on different layers so that the child zones do not clash with the parent. For example the 'Clothing' zone should be drawn on one AutoCAD layer and its children (Children's Clothing, Men's Clothing and Women's Clothing) drawn on another. This allows the 'Child' zones to be superimposed on the parent.

## Strategies for Zone Types and Descriptions

There are two broad strategies for creating a zone hierarchy.

1. Have only one level in the hierarchy of Zone Types 'Type' department
2. Have multiple levels in the hierarchy of Zone Types 'Type' department and only place a Zone Description from one level in the hierarchy

**Have only one level in the hierarchy of Zone Types 'Type' department**



Here, the 'Department' type zones are represented by the blue folders ('Staff Areas' and 'Food and Drink'). These, (together with the Internal Area zone) are placed as a minimum in the hierarchy, with other Zone Descriptions (of Zone Types Type 'Other') added to give more options for reporting purposes.

For example, 'Computing', 'Household' and 'TV and Audio' child zones (which are not of Zone Type 'Type' Department) could be placed as children of the 'Electrical' zone (which is of Zone Type 'Type' Department).

This allows reports to be produced for either the 'Electrical' zone as a whole or the 'Computing', 'Household' and 'TV and Audio' child zones if a finer level of granularity is required in the reporting.

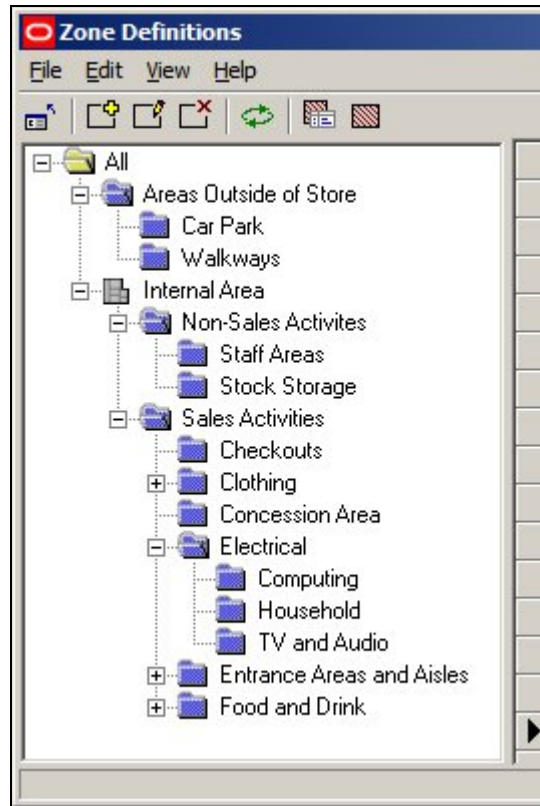
---

**Note:** it is important to ensure that all zones of Zone Type 'Type' Department share the same AutoCAD layer. Clash Detection can then be used to detect if zones are clashing (overlapping). (More Info)

---

**Have multiple levels in the hierarchy of Zone Types 'Type' department and only place a Zone Description from one level in the hierarchy**





In this form most of the hierarchy is of Zone Types 'Type' department and the user opts to place from one level of every branch in the hierarchy. For example, the user would either place a 'Electrical' zone or the 'Computing', 'Household' and 'TV and Audio' child zones. They could not place both the 'Electrical' zone and the 'Computing', 'Household' and 'TV and Audio' child zones.

Here, reporting is by aggregating zones. The 'Computing', 'Household' and 'TV and Audio' child zones can be reported on as individual zones. To get a result for the 'Electrical', the results from the 'Computing', 'Household' and 'TV and Audio' zones are consolidated into a single report.

---

**Note:** it is important to ensure that all zones of Zone Type 'Type' Department share the same AutoCAD layer. Clash Detection can then be used to detect if zones are clashing (overlapping). (More Info)

---

## Overview of Clash Detection

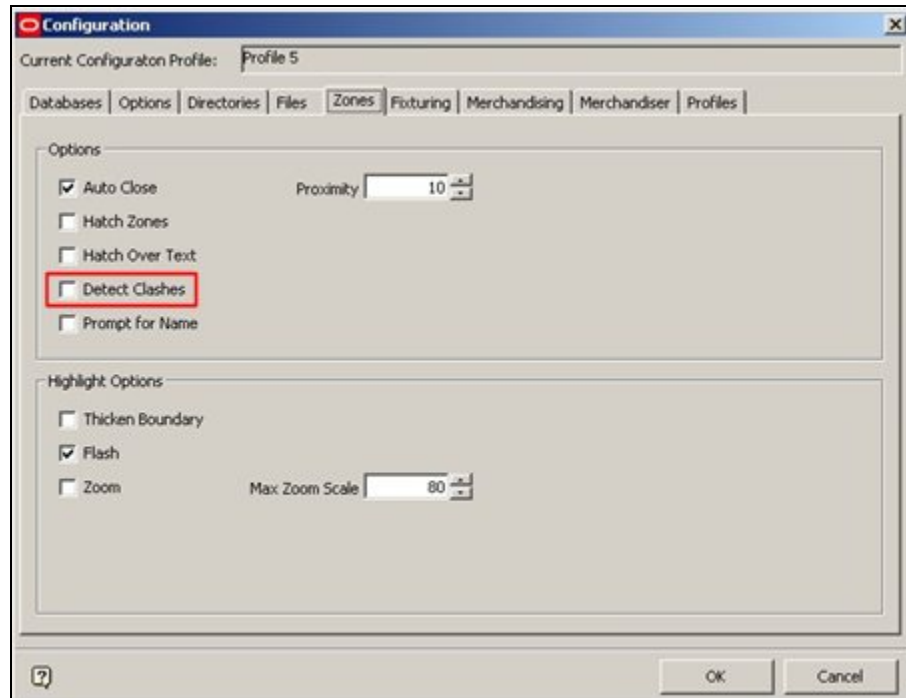
**Clash Detection** is used to identify where zones sharing the same AutoCAD layer are overlapping. It can be invoked in one of two ways:

1. From the Configuration Module
2. From the Object Browser Toolbar

If zones overlap (clash) this may affect MSM functionality - particularly if they are Zone Descriptions of Zone Types 'Type' Department.

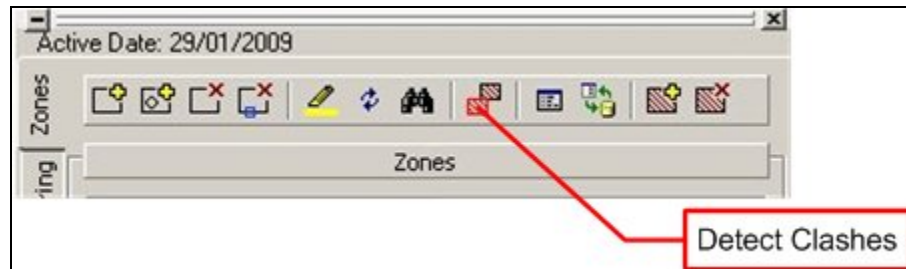
### From the Configuration Module

If the Detect Clashes option is checked, warnings will automatically be given when a zone being placed overlaps a zone sharing the same AutoCAD layer.



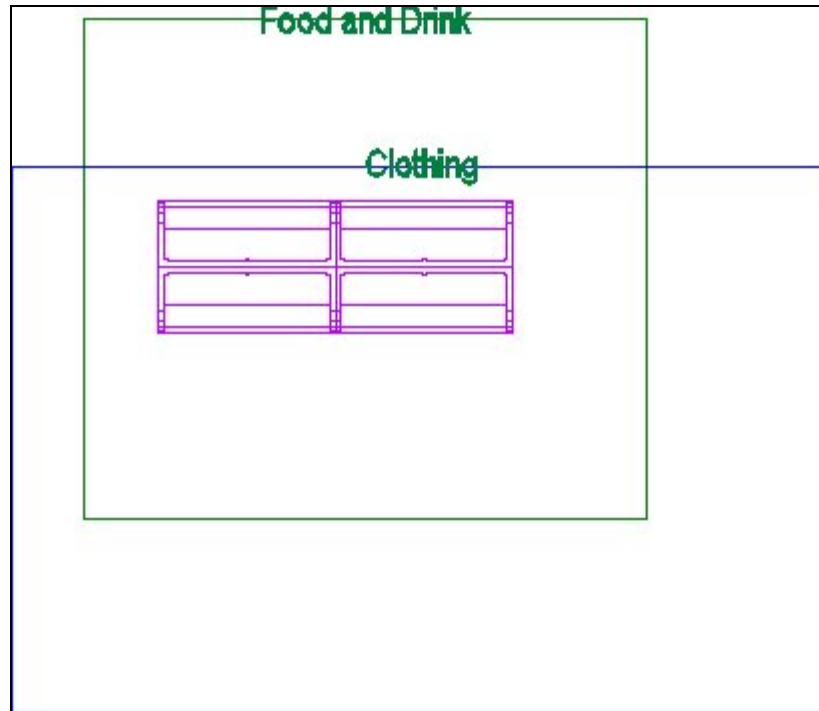
#### From the Object Browser Toolbar

If the Detect Clashes button is clicked, this will cause the currently active store plan to be checked for any overlapping (clashing) zones sharing the same AutoCAD layer.

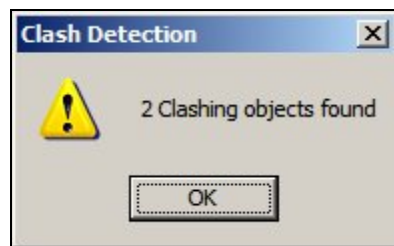


#### Why Clash Detection is Needed

Fixtures are assigned to zones when they are placed in the drawing. This Zone - Fixture link is used for calculation purposes. If a fixture is placed in two Zone Definitions of the same Zone Type, MSM's internal functionality may not work correctly. In additions, there will be errors in reporting.

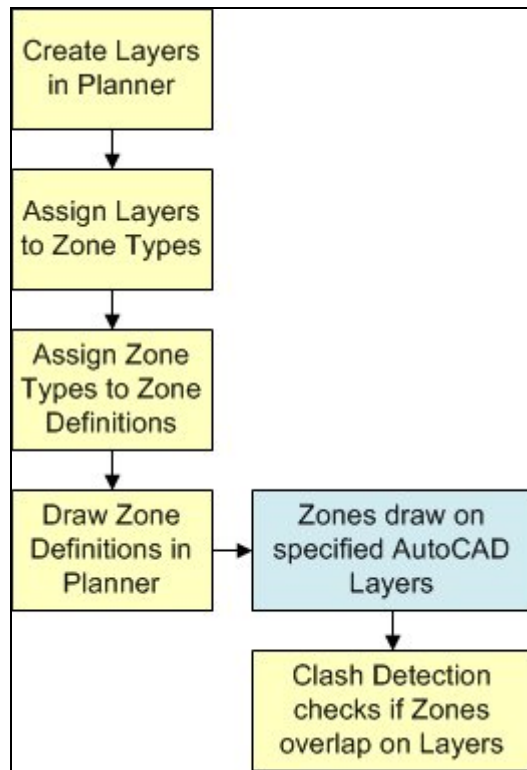


In the above example, fixtures have been paced in two overlapping Department Type Zones. This means the fixtures may be allocated to the wrong zone for reporting purposes. For example, it may have been intended to put the fixtures in the Food and Drink zone, but they may have been assigned to the clothing zone. If Clash Detection is On, then a warning dialog will appear, enabling the user to correct the clashing (overlapping) zones.



## How Clash Detection Works

Clash detection works as follows



#### 1. Create Layers in Planner

Zone Descriptions are drawn on specific layers in the AutoCAD drawing in the Planner Module. Where necessary, these layers have to be created using the Layer Aliases option from the Format menu in Planner.

#### 2. Assign Layers to Zone Types

When Zone Types are being defined in the Admin Module, each Zone Type is mapped to a specific layer created in Planner. For example 'Department' Type zones are mapped to the 'Department' Layer, 'Sub-Department' Type zones are mapped to the 'Sub-Department' Layer, etc.

#### 3. Assign Zone Types to Zone Definitions

When each Zone Definition is created, it must be assigned to a Zone Type. Each Zone Definition will therefore be mapped (indirectly) to a specific layer in Planner.

#### 4. Draw Zone Definitions in Planner

When the Zone Definitions are drawn in Planner, they will be drawn on specified layers. The locations of the edges of the Zone Definition will be accurately known.

#### 5. Clash Detection

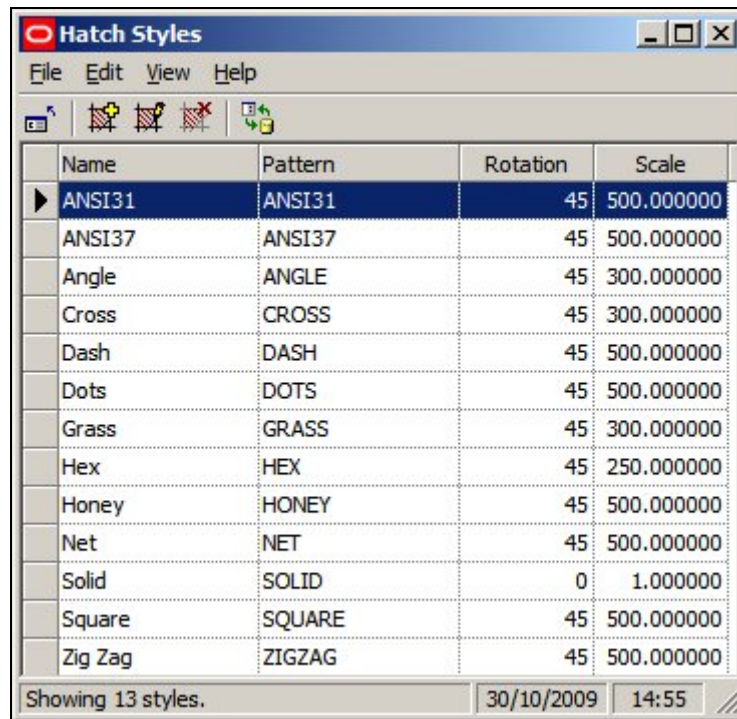
After the Zone Definition is drawn, when Clash Detection is selected, the software will examine all Zone Definitions drawn on the same Planner Layer. If the boundaries of any Zone Definitions are shown to be overlapping (clashing) a warning will be generated.

#### 6. Consequences of Clashing

Because Zone Descriptions that overlap (clash) can cause problems with the operation of the software (and with reporting accuracy) any clashes should be corrected.

## Zones and Hatch Styles

**Zones Definitions can be assigned Hatch Styles.** The Hatch Styles are specified in the Hatch Styles option on the Planning Menu of the Administration Module.



Name	Pattern	Rotation	Scale
ANSI31	ANSI31	45	500.000000
ANSI37	ANSI37	45	500.000000
Angle	ANGLE	45	300.000000
Cross	CROSS	45	300.000000
Dash	DASH	45	500.000000
Dots	DOTS	45	500.000000
Grass	GRASS	45	300.000000
Hex	HEX	45	250.000000
Honey	HONEY	45	500.000000
Net	NET	45	500.000000
Solid	SOLID	0	1.000000
Square	SQUARE	45	500.000000
Zig Zag	ZIGZAG	45	500.000000

Showing 13 styles. 30/10/2009 14:55

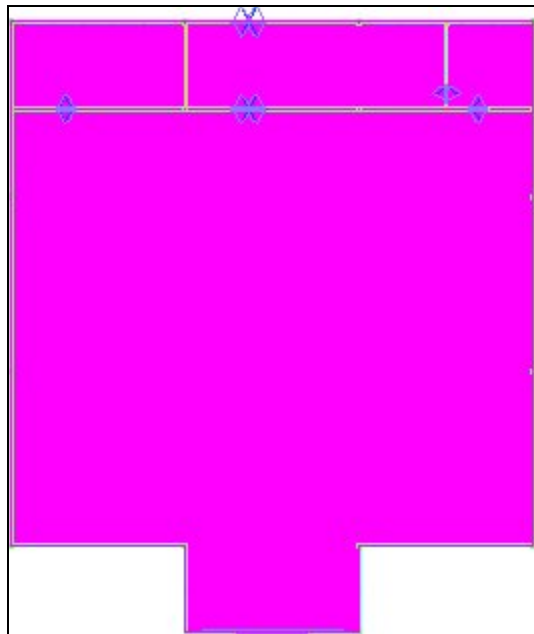
These Hatch Styles are pre-loaded into AutoCAD, but have to be defined for the Merchandiser Module.

## Zone Technicalities

### Building Up Zones

#### Internal Area Zone

The Internal Area zone is used to specify the maximum area available for retail purposes.

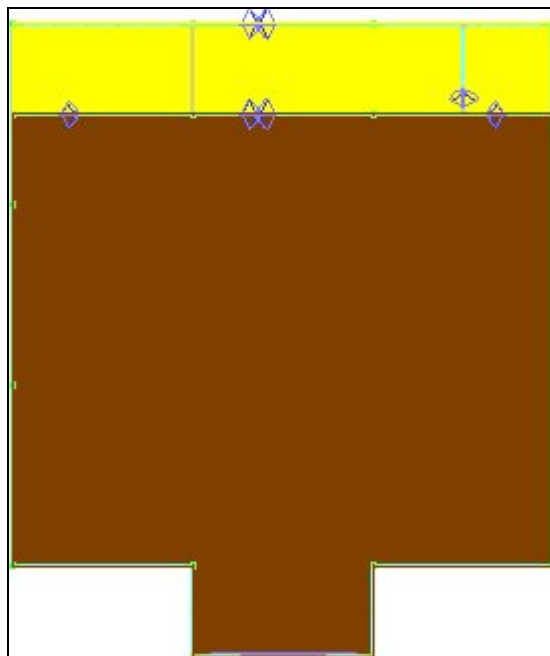


In the example above, it is confined to the boundaries of the store. Equally, it could be confined to the area accessible to customers, or include areas outside of the store - for example those used to display and sell garden plants.

The Internal Area Zone is also used to set the boundary for Area Calculations.

#### **Sales Area and Non Sales Area Zones**

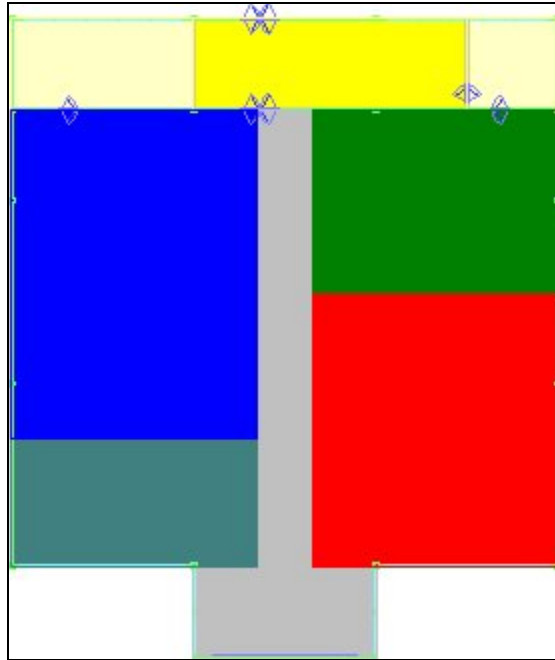
Sales Area and Non Sales Area Zones can be used to divide the store into areas used for sales activities (i.e. accessible to the public) and areas used for support functions - offices, stockrooms, etc.



In the example above the stockrooms and staff areas can be differentiated from the parts of the store used for selling to customers.

#### **Departments**

Departments are used to divide the store into areas of more closely defined purpose.



In the above example the store has now been divided into areas of specific use. For example, the area to be used for sale of clothing is designated by the red rectangle.

#### **Sub-Departments**

It is possible to continue dividing the store into ever finer divisions, for example the Clothing department could have Children's Clothing, Women's Clothing and Men's Clothing Sub departments.

---

**Note:** if Zone Definitions are 'layered' on top of each other like this, each 'layer' must be of a different Zone Type (and hence drawn on a different AutoCAD Layer). (More Info)

---

#### **Fixtures and Zone - Fixture Links**


**Fixtures can be linked to Zones** using Zone - Fixture Links. Zone - Fixture links are stored in two places within the database.

1. AVTTB\_FIXTURE Table
2. AVTTB\_ZONE\_FIXTURE\_LINK Table


Each of these tables is used for a different purpose.

##### **AVTTB\_FIXTURE Table**

The AVTTB\_FIXTURE table contains a ZON\_ID (Zone ID) field. This holds the foreign key for the Department level zone that the fixture has been placed in. Each fixture can only be associated with a single Department level zone - which is why care must be taken that Department level zones do not clash (overlap).

 FIL_ID	FIX_ID	BLK_ID	ZON_ID	FIX_ACADHANDLE
82	1547	1380	21	B65
82	1548	1369	21	B66
82	1549	1369	21	B67
82	1550	1400	21	B68
82	1551	1400	21	B69
82	1552	1384	21	B6A

It is important to note that the ZON\_ID is read from the AVTTB\_ZONE table.

 FIL_ID	ZON_ID	ZND_ID	ZON_DESC
73	21	22	Household
81	2	2	Support Activites
81	3	1	Sales Activities
83	1	3	Internal Area
82	1	3	Internal Area
83	2	2	Support Activites

**Note:** The Zone Description may vary from that held in the AVTTB\_ZONE\_DEFINITION table as it is editable by the user when placing the zone.

Where a Fixture straddles a Department zone boundary, it will be allocated to the zone in which the majority of the fixture is.



In the above example, the insertion point of the fixture is in the left hand zone, but the bulk of the fixture is in the right hand zone. It will be allocated to the right hand zone.

The information in the AVTTB\_FIXTURE table is most accurate for reporting purposes as each fixture should only be associated with a single 'Department' type zone. This ensures that:


1. Equipment take-offs do not show fixtures in multiple zones, resulting in inaccurate orders for equipment when building or refurbishing stores
2. Merchandise is not reported in multiple zones, avoiding inaccurate orders for products when stocking stores

#### AVTTB\_ZONE\_FIXTURE\_LINK Table


The AVTTB\_ZONE\_FIXTURE\_LINK Table can associate fixtures with multiple zones. It contains ZON\_ID's (Zone ID) fields - there are also read from the AVTTB\_ZONE Table. These are the foreign keys for each zone that the fixture has been placed in. An example



of this would be if the "Clothing" department level zone contained a sub-department called "Children's Clothing". A fixture would then be associated with both the Clothing and Children's Clothing zones.

	FIL_ID	ZON_ID	FIX_ID	ZFL_CROSSING
	89	3	3	-1
	89	3	4	-1
	89	3	5	0
	89	3	6	-1
	89	3	7	-1
	89	3	8	0

It is important to note that the ZON\_ID is read from the AVTTB\_ZONE table.


	FIL_ID	ZON_ID	ZND_ID	ZON_DESC
	73	21	22	Household
	81	2	2	Support Activites
	81	3	1	Sales Activities
	83	1	3	Internal Area
	82	1	3	Internal Area
	83	2	2	Support Activites

**Note:** The Zone Description may vary from that held in the AVTTB\_ZONE\_DEFINITION table as it is editable by the user when placing the zone.

The ZFL\_CROSSING field in the AVTTB\_ZONE\_FIXTURE\_LINK table should be noted. A value of -1 indicates that a fixture crosses zone boundaries.



This can mean that the same fixture (FIX\_ID) is shown in multiple zones.

	FIL_ID	ZON_ID	FIX_ID	ZFL_CROSSING
▶	88	2	11	-1
	88	1	11	-1

Care needs to be taken during reporting to ensure the fixture is not duplicated in reports.

#### Zone - Fixture Links and Custom SQL

The exact nature of the reports generated from Zone - Fixture Links will depend on the Custom SQL used to generate the reports. Macro Space Management comes with some

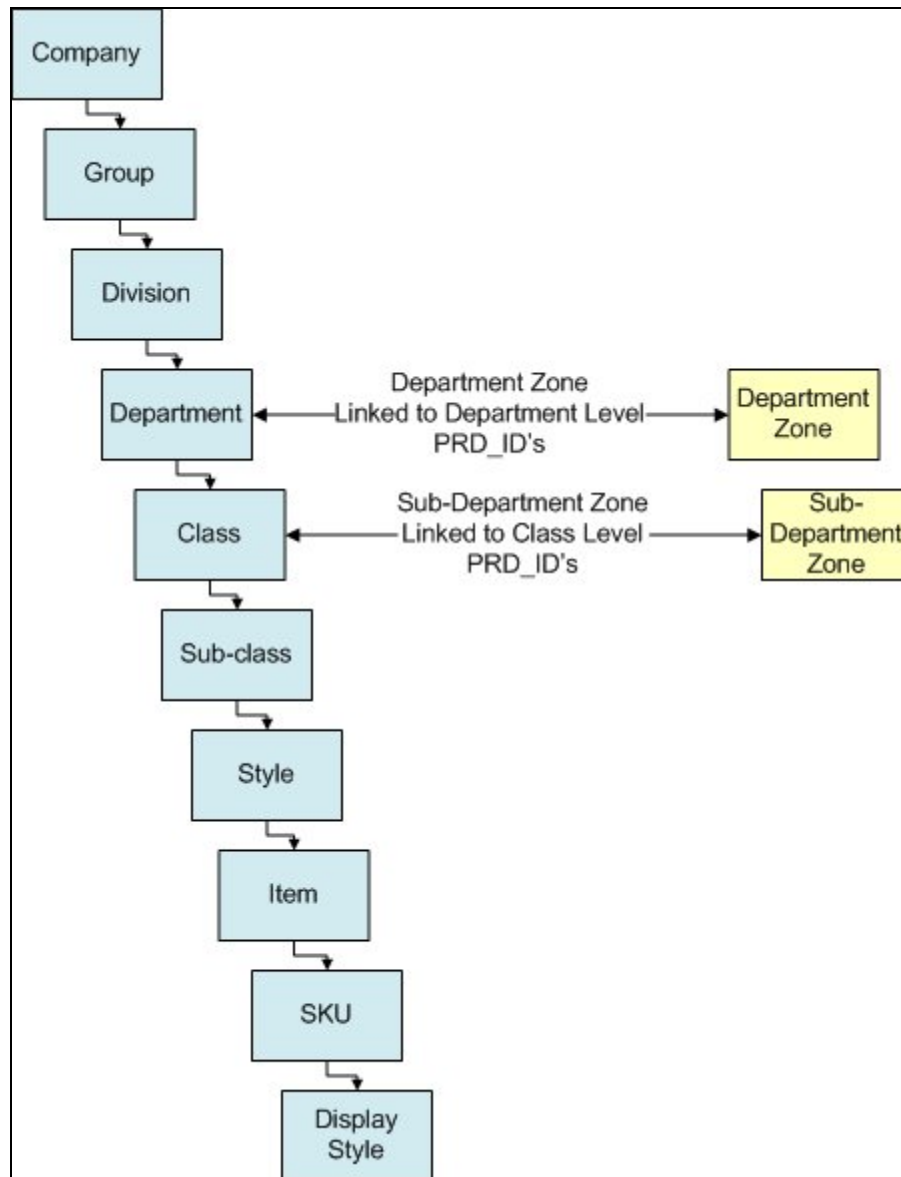
standard reports. Anyone with a good knowledge of SQL can produce their own customized reports - often in conjunction with other Oracle software such as BI Publisher.

### **Overview of Zone - Product and Zone - Planogram Links**

**Zone - Product Links and Zone - Planogram Links** provide a way of filtering products or planograms by the Zone they are associated with. For a given implementation of Macro Space Management either zone - Product Links or Zone - Planogram Links can be used: it is not possible to operate both.

#### **Zone - Product Links**

Zone - Product links operate by linking nodes in the Product Hierarchy to specific Zones. Clicking on that zone in the Zones tab of the Object Browser will cause all products that are children of the linked node in the Product Hierarchy to display in the Object Browser. Products are arranged in a Product Hierarchy. (This can be viewed and modified in Product Studio). It is possible to link specific zones to nodes in the product hierarchy. This is done by inserting a foreign key (PRD\_ID) into the AVTTB\_ZONE\_DEFINITION table. This foreign key then links the Zone Definition (AVTTB\_ZONE\_DEFINITION) and Product Definition (AVTTB\_PRODUCT\_DEF) tables. This link enables products to be filtered by zone.



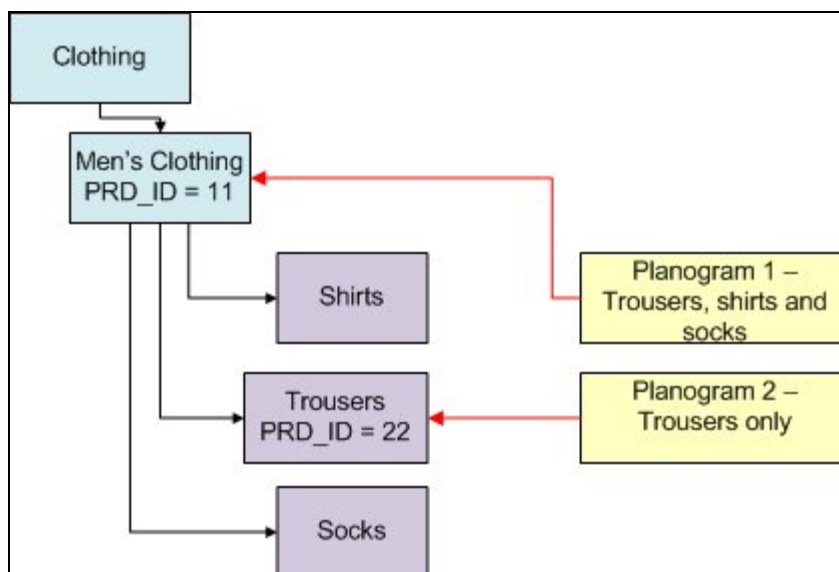
In the above example, Department level zones have been linked to the equivalent nodes in the products hierarchy and similarly Sub-department zones have been linked to nodes at Department level.

This means that (for example) if the Children's Clothing zone is selected in the Object Browser, the Zone - Product link will result in products displaying in the Object Grid that are associated with (or children of) the Children's Clothing node in the product hierarchy.

#### Zone - Planogram Links

All planograms are arranged in a Planogram Hierarchy. Planograms are also linked to a specific node in the Product hierarchy. This node is the node in the product hierarchy that is the lowest common link between all the products in the planogram. Specific nodes in the Product Hierarchy are then linked to specific Zones. Clicking on that zone in the Zones tab of the Object Browser will cause all Planograms that contain products that are children of the node in the Product Hierarchy to display in the Object Browser.

Planograms are linked to the product hierarchy by means of the Product ID's (PRD\_ID's) of the products in the planogram. The planogram will automatically be linked to the node in the product hierarchy that is the lowest common link between all the products in the planogram.

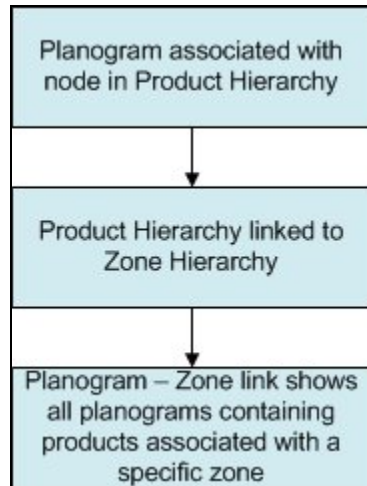


For example, Planogram 1 contains trousers, shorts and socks. The lowest common link between these products is the node above them in the product hierarchy - "Men's Clothing". Planogram 1 will therefore be assigned the Product ID of that node (PRD\_ID = 11 in this example). Planogram 2 only contains trousers, so can be linked to a node further down in the hierarchy: the "Trousers" node (PRD\_ID = 22 in this example).

In the extract from the AVTTB\_PLANO table below, each planogram has automatically been assigned a Product\_ID (PRD\_ID) that corresponds to the node in the product hierarchy that is the lowest common link between all the products in the planogram.

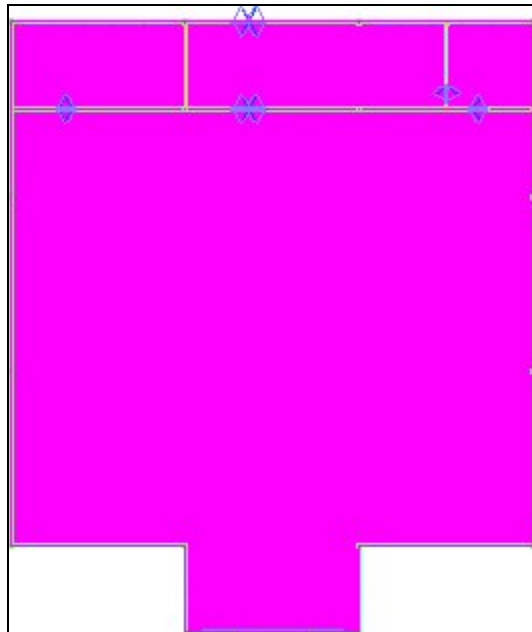
POG_ID	POG_NAME	POG_DESC	PRD_ID
1	1BayRice	1 Bay Rice Plangram: Fixture 36 x 24 x 72	5761
2	1BayTinnedVegetables	1 Bay Tinned Vegetables: Fixture 36 x 24 x 72	5760
3	1BayWhiteWine	1 Bay White Wine Planogram: Fixture 36 x 24 x 72	5762
4	1BayRedWine	1 Bay Red Wine Planogram: Fixture 36 x 24 x 72	5762
5	1BayBasicSpirits	1 Bay Basic Spirits: Fixture 36 x 24 x 72	5763
6	4BayBreakfastCereal	4 Bay Breakfast Cereal: Fixture 36 x 24 x 72	5852
7	SingleChillerRawMeat	Raw Meat Planogram: Single Chiller Unit 96 x 36 x 84	5757
8	SingleChillerFishShellfish	Fish and Shellfish Planogram: Single Chiller 96 x 36 x 84	5751
9	BasicHouseholdGoods	Basic Household Goods: Fixture 48 x 24 x 72	5837

By using this Product\_ID (PRD\_ID) in the AVTTB\_PLANO table, it is possible to find all planograms containing products associated with a specific zone. This is done by inserting a foreign key (PRD\_ID) into the AVTTB\_ZONE\_DEFINITION table. This foreign key then links the Zone Definition (AVTTB\_ZONE\_DEFINITION) and Product Definition (AVTTB\_PRODUCT\_DEF) tables. This link enables planograms (containing specific products) to be filtered by zone.

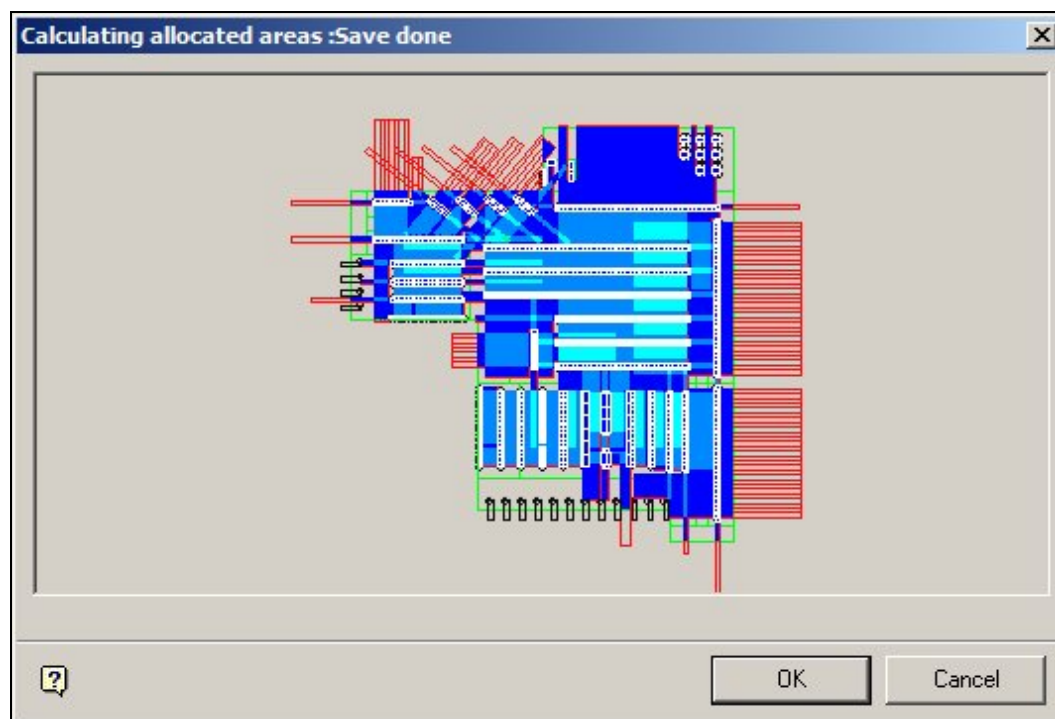


### The Internal Area Zone

The **Internal Area Zone** is used to define the maximum area used for retail purposes. It may be confined to the bounds of the store walls (as in the example below), or it may encompass areas outside - for example a space used for selling plants for the garden.



Once the Internal Area Zone has been placed, it is then used to set maximum limits for area calculations.



Individual retail organizations decide what to encompass in the Internal Area zone: some include non sales areas (like stock rooms and staff canteens, some do not. The area encompassed within the Internal Area will impact on reporting: an internal area that did not include non-sales areas would show a different 'profit per square meter' value than one that did.

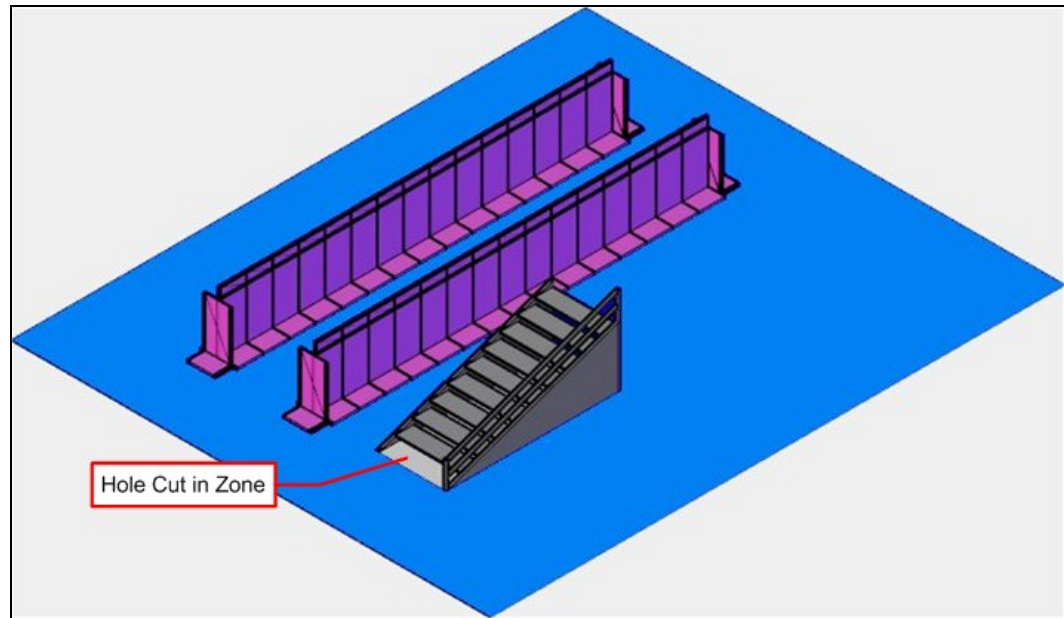
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**Note:** if a hole is cut in the internal area zone, the space within the hole will not be included in area calculations, but area calculations will resume the other side of the hole.

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### Cutting Holes in Zones

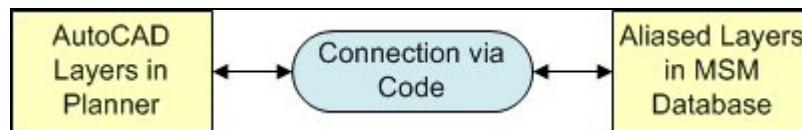
**Cutting Holes in Zones** is used to allow for the effects of obstructions, etc. In the simple example below, a zone contains some gondola runs and a staircase. The staircase reduces the area available in the zone for retailing purchases. The 'Cut Holes' option allows the user to remove the area used for the staircase from the total area of the zone for calculation purposes.



The zone might therefore have a gross area of 3,600 square feet and a net area of 3,200 square feet. Using the net area of the zone (i.e. taking into account the area enclosed by the hole) allows profit per square meter to be calculated more realistically.

### Aliased Layers

**Aliased Layers** are a way for the functionality in the Planner Module of Macro Space Management to communicate with that in AutoCAD.

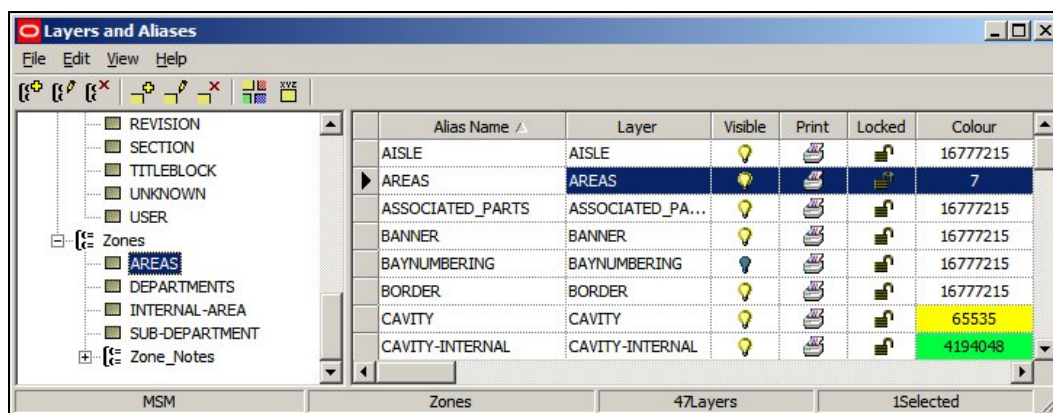


AutoCAD Layers are information held within AutoCAD drawings. This cannot be directly written to the database, so an Alias for the Layer is provided within the database. This enables users to assign (Aliased) Layers to objects within MSM. For example a Fixture might be assigned to the 'Fixtures' Layer within Fixture Studio.

When the time comes to insert a copy of that fixture into the drawing, the software identifies which Aliased Layer the Fixture has been assigned to, identified which AutoCAD Layer that has been mapped to and (via a connection in the code) causes the object to be drawn on the correct AutoCAD layer. If the AutoCAD layers does not yet exist in the drawing (for example, if it is the first time a fixture has been added to the drawing) then the software will automatically create the required AutoCAD layer at the same time as it inserts the Fixture into the drawing.

Mapping between Layers and Layer Aliases is done in the Planner Module using the Layers and Aliases dialog box (called from the Format menu).



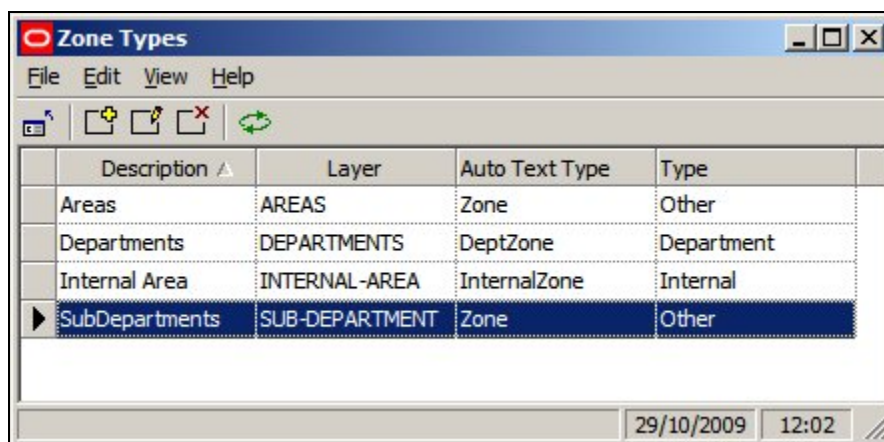


The Alias Name is the name of the Layer held in the MSM database and the Layer is the name of the layer in the AutoCAD (Planner) drawing.

## Zone Types

### Overview

**Zone Types** are a way of assigning broad properties to specific Zone Descriptions.



Zone Types is used to set broad properties that can be assigned to a specific Zone Description.

Description is the name given to the group of properties

Layer is the AutoCAD layer the zone will be drawn on

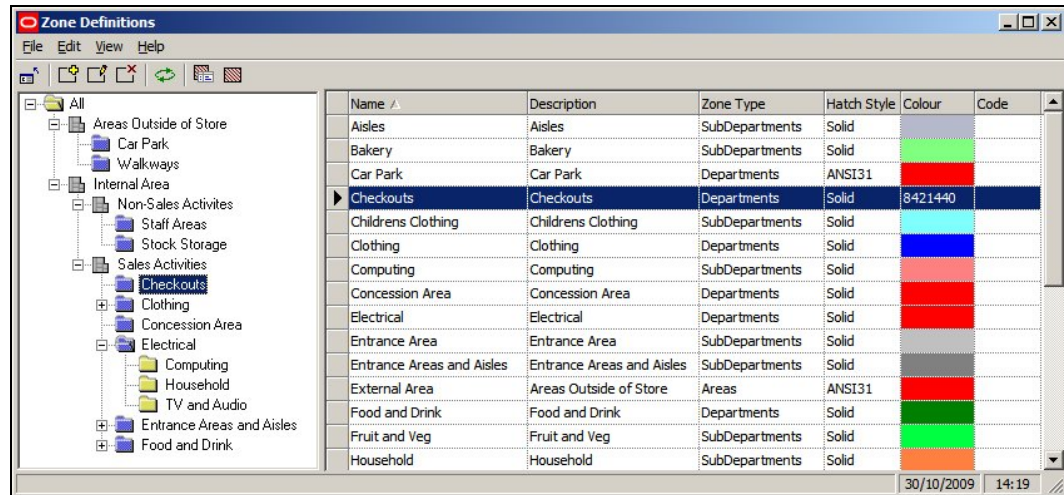
Auto Text Type is not currently in use

Type describes the category the Zone Type will be assigned to - either Internal Area, Department Zone or Other Zone

### Description

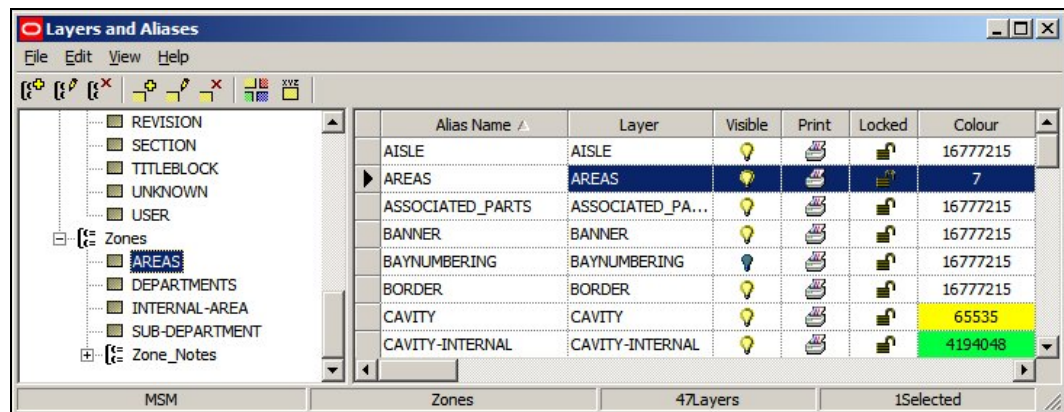
The Description will appear in the Zone Type option for the Zone Definition.





### Layer

The Layer is the AutoCAD layer the Zone Type will be drawn on. These are configured using the Layers and Aliases dialog box accessible from the Format menu in the Planner Module.



Only Zone Descriptions drawn on the same layer will be detected as clashing. So, all Zone Descriptions of Zone Type Department should be drawn on the Departments Layer so any overlaps (clashes) for that Zone Type can be detected. Similarly, all Zone Descriptions of Zone Type Sub-Department should be drawn on the Sub-Departments Layer so any overlaps (clashes) for that Zone Type can be detected.

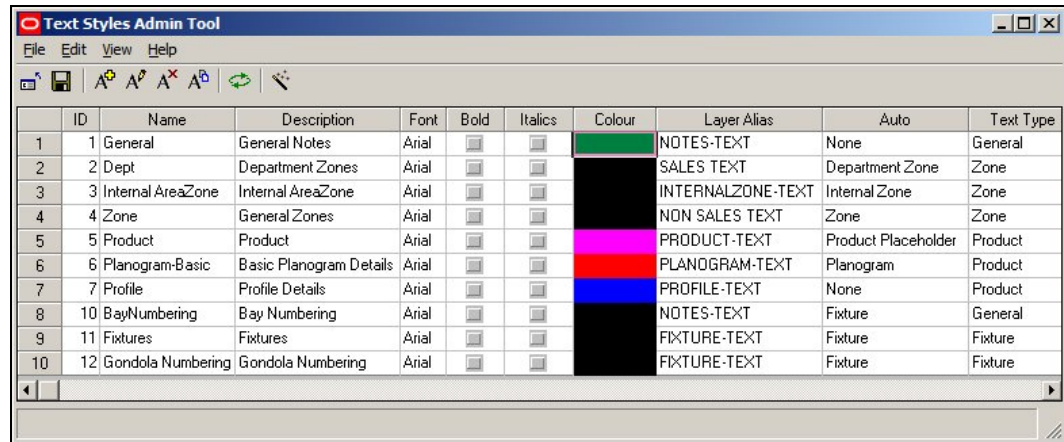
However, if a Zone Description of Type Sub-Department is drawn overlapping a Zone Description of Type Department, it will be drawn on a different layer and will not be shown as clashing.

This ability to detect clashes between Zone Descriptions of the same Zone Type but not between Zone Descriptions of a different Zone Type is important when setting up a Zone Hierarchy. For example, the Internal Area encompasses the entire area used for retail purposes. The majority of other zones will probably be drawn within the Internal Area Zone, so it is important that they are not shown as clashing - arranged by ensuring the Internal Area Zone occupies it's own specific layer.

### Auto Text Type

The Auto Text Type option in the Zone Types dialog box currently has no effect.

However, the text that annotates a Zone will depend on the Custom SQL associated with Zones in the Text Styles option on the Planning Menu in the Administration Module.



	ID	Name	Description	Font	Bold	Italics	Colour	Layer Alias	Auto	Text Type
1	1	General	General Notes	Arial	<input type="checkbox"/>	<input type="checkbox"/>		NOTES-TEXT	None	General
2	2	Dept	Department Zones	Arial	<input type="checkbox"/>	<input type="checkbox"/>		SALES TEXT	Department Zone	Zone
3	3	Internal AreaZone	Internal AreaZone	Arial	<input type="checkbox"/>	<input type="checkbox"/>		INTERNALZONE-TEXT	Internal Zone	Zone
4	4	Zone	General Zones	Arial	<input type="checkbox"/>	<input type="checkbox"/>		NON SALES TEXT	Zone	Zone
5	5	Product	Product	Arial	<input type="checkbox"/>	<input type="checkbox"/>		PRODUCT-TEXT	Product Placeholder	Product
6	6	Planogram-Basic	Basic Planogram Details	Arial	<input type="checkbox"/>	<input type="checkbox"/>		PLANOGRAM-TEXT	Planogram	Product
7	7	Profile	Profile Details	Arial	<input type="checkbox"/>	<input type="checkbox"/>		PROFILE-TEXT	None	Product
8	10	BayNumbering	Bay Numbering	Arial	<input type="checkbox"/>	<input type="checkbox"/>		NOTES-TEXT	Fixture	General
9	11	Fixtures	Fixtures	Arial	<input type="checkbox"/>	<input type="checkbox"/>		FIXTURE-TEXT	Fixture	Fixture
10	12	Gondola Numbering	Gondola Numbering	Arial	<input type="checkbox"/>	<input type="checkbox"/>		FIXTURE-TEXT	Fixture	Fixture

The Text Style invoked will depend on the setting in the Auto Field (Internal Area, Department Zone or Other Zone), and any filters that might be present in the Custom SQL statement associated with the Text Style.

### Type

There are three categories the Zone Type can be assigned to - Internal Area, Department Zone or Other Zone.

1. Internal Area is used to for the single zone that defines an area used for retail purposes. The Internal Area zone is used for Area Calculation purposes
2. Department Zones can be used for reporting purposes - they give the most accurate reports
3. Other zones are assigned to all Zones Types not 'Internal Area' or 'Department'

These types are hard coded into the software and cannot be changed

### Changes made to Zone Types and Zone Definitions

Changes made to Zone Types in the Administration Module do not take immediate effect as far as Zone Descriptions are concerned.

They are only read when the Admin Module is restarted - this must be allowed for when configuring Zone Descriptions.

## Planning Zone Types

Before creating a zone hierarchy, it is necessary to plan the Zone Types.

1. Decide on the Strategy for the Zone Hierarchy
2. Decide on the Number of Levels in the Zone Hierarchy
3. Decide on the Layer Aliases required
4. Decide on the Text Styles Required
5. Decide on the Zone Descriptions required and how they will map to Zone Type 'Types'

### Decide on the Strategy for the Zone Hierarchy

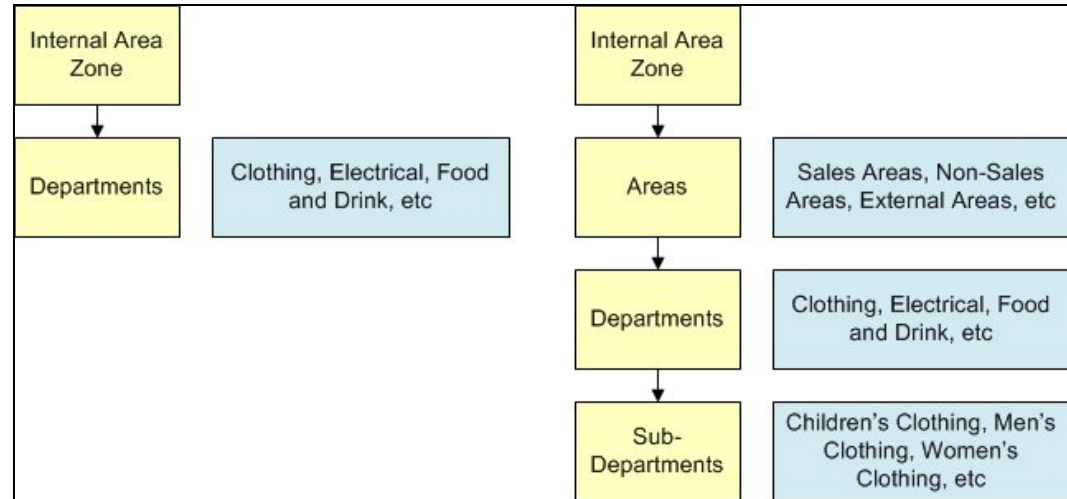
There are two broad strategies for creating a zone hierarchy (more info).

1. Have only one level in the hierarchy of Zone Types 'Type' Department
2. Have multiple levels in the hierarchy of Zone Types 'Type' Department and only place a Zone Description from one level in the hierarchy

Which is to be used has to be decided at the outset as it will affect all other decisions on setting up the Zone Hierarchy.

### Decide on the Number of Levels in the Zone Hierarchy

The number of levels in the hierarchy must be determined. More levels will lead to more flexibility in reporting, but may increase the difficulty in generating accurate reports. The hierarchy could consist of just two levels - for example Internal Area and Departments. Alternatively, it could consist multiple levels - for example Internal Area, Areas, Departments and Sub-Departments.



Not all these zones would necessarily be placed in a drawing: for example the 'Areas' level in the hierarchy could simply be used to

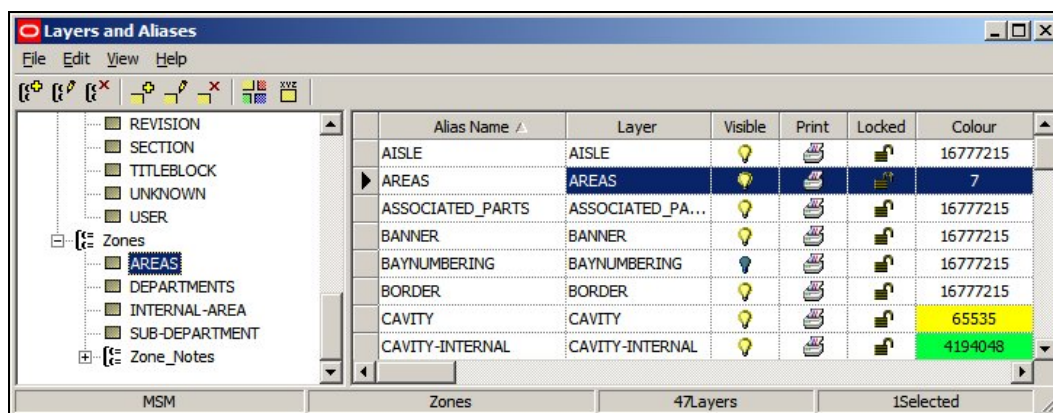
### Decide on the Layer Aliases Required

Macro Space Management provides functionality called Clash Detection to determine whether Zones in a store plan are overlapping (clashing). Only Zones on the same AutoCAD Layer can be detected as clashing.

1. Zones that should not clash (overlap) should be placed on the same Layer
2. Zones that are intentionally superimposed on each other need to be placed on different layers - for example the 'Clothing' zone would need to go on one layer and its children (Children's Clothing, Men's Clothing and Women's Clothing) on another Layer

How many Layer Aliases are required will depend on whether the user has chosen to have only one level in the hierarchy of Zone Types 'Type' Department or to have multiple levels in the hierarchy of Zone Types 'Type' Department and only place a Zone Description from one level in the hierarchy.

The minimum number of Layer Aliases required is two: one for the Internal Area Zone and one for Departments. A more complex hierarchy that places at several levels might require multiple Aliased Layers: in the example below, Internal Area, Areas, Departments and Sub-Department Layers have been set up to allow a four level hierarchy to be placed.



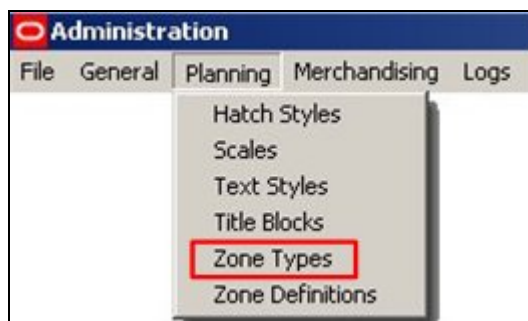
### Decide on the Text Styles Required

Each Zone Type can have a Text Style associated with it. This Text Style determines the form of the Annotation that will be drawn when the zone is placed.

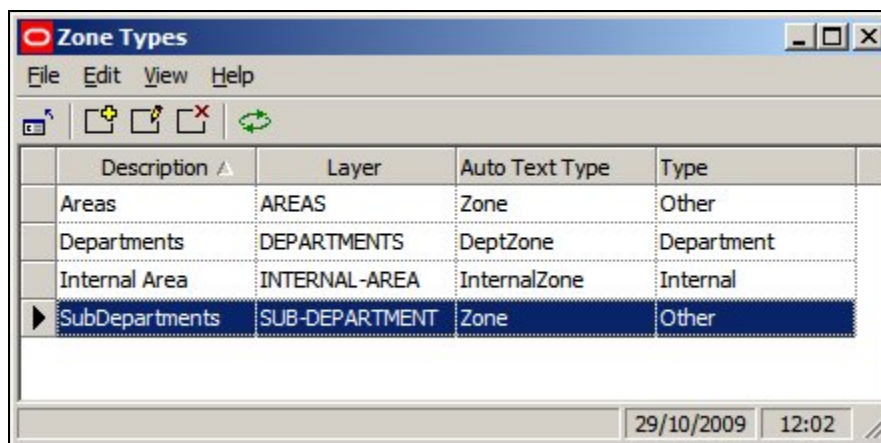
**Note:** Text Styles are configured by selecting the Text Styles option from the Planning menu in the Admin Module.

### Adding, Editing and Deleting Zone Types

Zone Types can be accessed from the Edit Menu in the Administration Module.

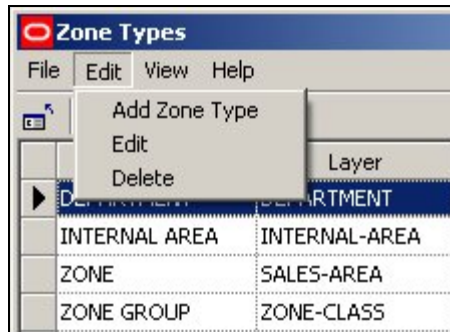


This will bring up the Zone Types dialog box.

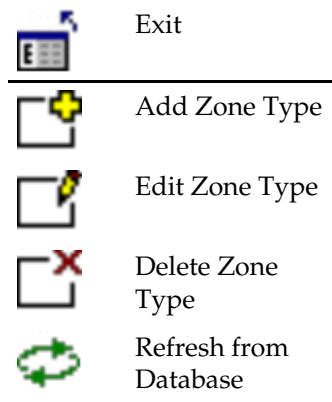


Options can be selected from the Edit pull down menu.



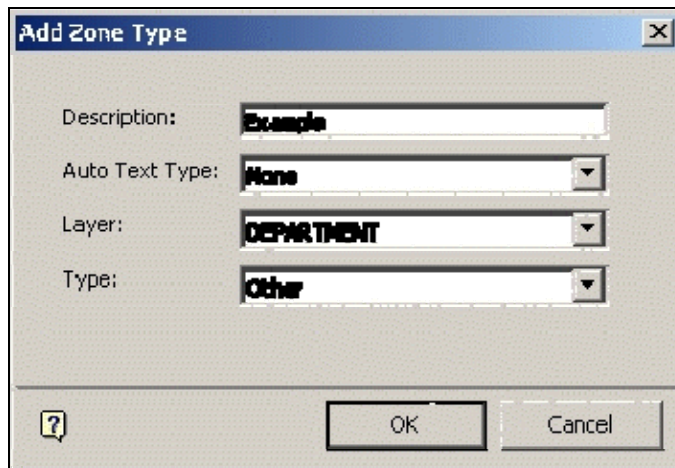


Alternatively, they can be selected from the toolbar.



### Adding Zone Types

When **Add Zone** is selected from the options on the pull down menu or toolbar, the Add Zone Type dialogue box appears.



The Description can be typed in and should be appropriate to the Zone Type being created.

The Auto Text Type can be selected from a drop down list and specifies the Text Style to be used for annotation on the drawing.



The Layer Type is also selected from a drop down list.



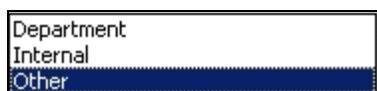
This determines which Layer the Zone will be placed on.

---

**Note:** Clashes can only be detected between Zones on the same layer alias. (Layer Type in the above dialogue box). The Type can also be selected from a drop down list.

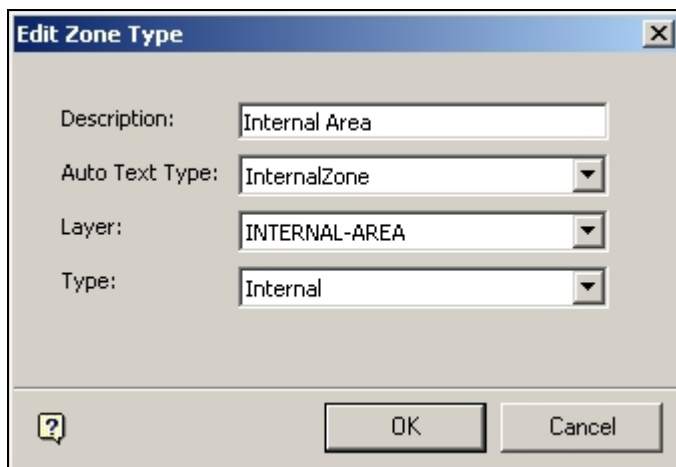
---

The type refers to one of three possible classes the Zone Type can be assigned to.



## Editing Zone Types

When **Edit Zone** is selected from the options on the pull down menu or toolbar, the Edit Zone Type dialogue box appears.



The Description can be edited and should remain appropriate to the Zone Type being created.

The AutoText Type can be edited from a drop down list and specifies the list of what is to be annotated on the drawing.



The Layer Type is also edited from a drop down list.



This determines which Layer the Zone will be placed on.

---

**Note:** Clashes can only be detected between Zones on the same layer alias. (Layer Type in the above dialogue box).

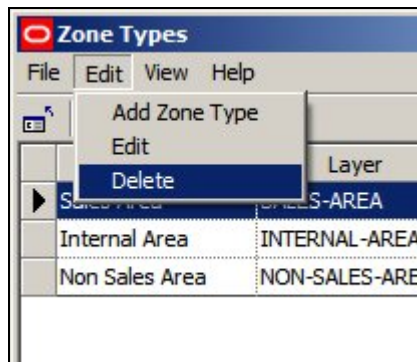
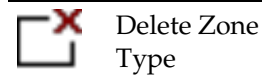
---

The Type can also be edited from a drop down list.



### Deleting Zone Types

**Zone Types can be Deleted** by highlighting them, then selecting the Delete Zone type option from the drop down list on the menu bar, or using the appropriate icon on the toolbar.



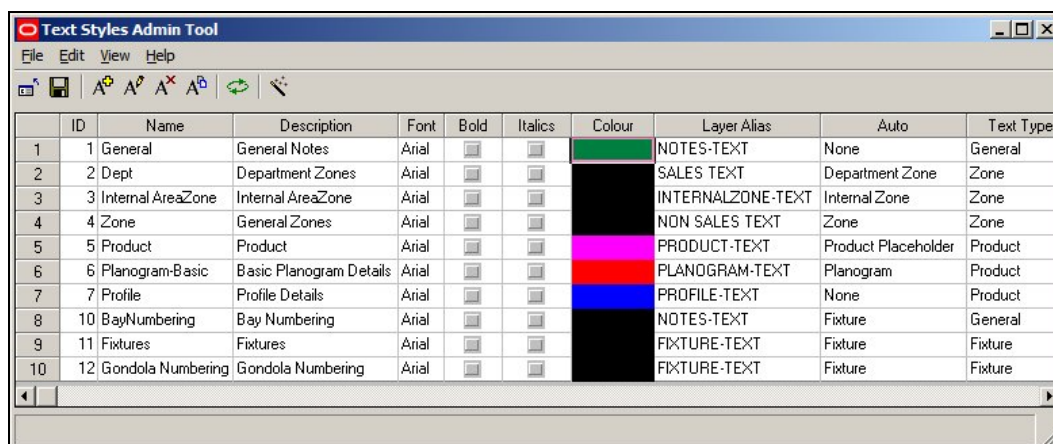
**Note:** Zone Types cannot be deleted if there is a Zone Definition associated with it – the associated Zone Definitions must be deleted or assigned to another category first.

The Internal Zone and Department Zone Types cannot be deleted – only other user defined Types within the Zone Type definition can be deleted.

**Zone Types cannot be deleted** if there is a Zone Definition associated with it – the associated Zone Definitions must be deleted or assigned to another category first.

### Zone Text

**Zone Text** is controlled by the Text Styles Option on the Planning Menu in the Administration module.



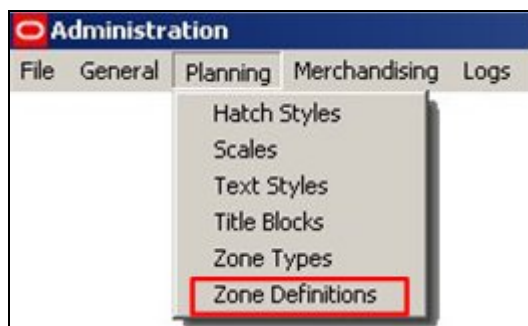
	ID	Name	Description	Font	Bold	Italics	Colour	Layer Alias	Auto	Text Type
1	1	General	General Notes	Arial	<input type="checkbox"/>	<input type="checkbox"/>	Green	NOTES-TEXT	None	General
2	2	Dept	Department Zones	Arial	<input type="checkbox"/>	<input type="checkbox"/>	Black	SALES TEXT	Department Zone	Zone
3	3	Internal AreaZone	Internal AreaZone	Arial	<input type="checkbox"/>	<input type="checkbox"/>	Black	INTERNALZONE-TEXT	Internal Zone	Zone
4	4	Zone	General Zones	Arial	<input type="checkbox"/>	<input type="checkbox"/>	Black	NON SALES TEXT	Zone	Zone
5	5	Product	Product	Arial	<input type="checkbox"/>	<input type="checkbox"/>	Magenta	PRODUCT-TEXT	Product Placeholder	Product
6	6	Planogram-Basic	Basic Planogram Details	Arial	<input type="checkbox"/>	<input type="checkbox"/>	Red	PLANOGRAM-TEXT	Planogram	Product
7	7	Profile	Profile Details	Arial	<input type="checkbox"/>	<input type="checkbox"/>	Blue	PROFILE-TEXT	None	Product
8	10	BayNumbering	Bay Numbering	Arial	<input type="checkbox"/>	<input type="checkbox"/>	Black	NOTES-TEXT	Fixture	General
9	11	Fixtures	Fixtures	Arial	<input type="checkbox"/>	<input type="checkbox"/>	Black	FIXTURE-TEXT	Fixture	Fixture
10	12	Gondola Numbering	Gondola Numbering	Arial	<input type="checkbox"/>	<input type="checkbox"/>	Black	FIXTURE-TEXT	Fixture	Fixture

It provides three default text styles for Zones: Internal Area, Department Zone and Zone - these correspond to the three Default Zone Types. The number of available Text Styles may be increased by modifying the Custom SQL used to specify how the annotation is carried out.

## Zone Definition

### Accessing Zone Definition Options

Zone Definitions can be accessed from the Edit Menu in the Administration Module.

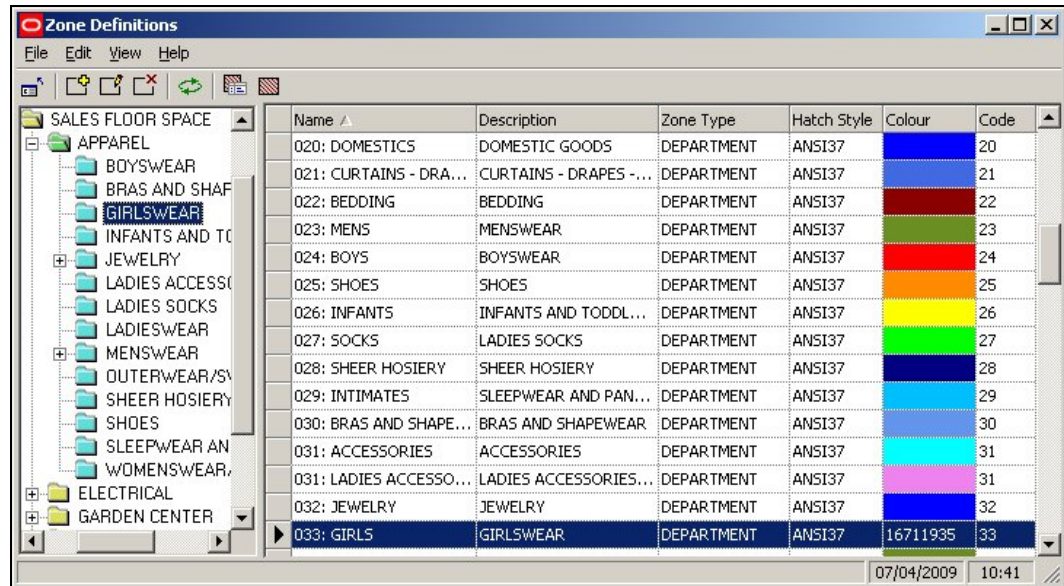


**Note:** changes made to Zone Definitions in the Configuration Module only take effect the next time the Planner Module is restarted.

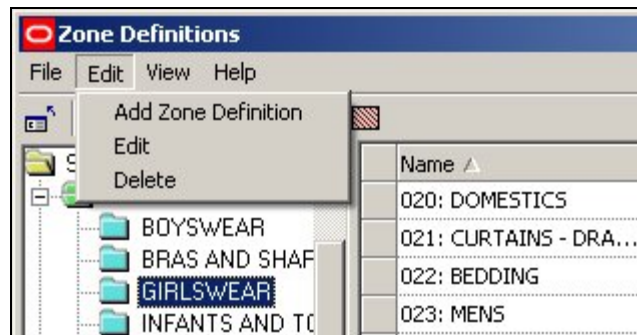
### The Zone Definitions Window

The **Zone Definitions Window** allows Zone Definitions to be Added, Edited and Deleted.

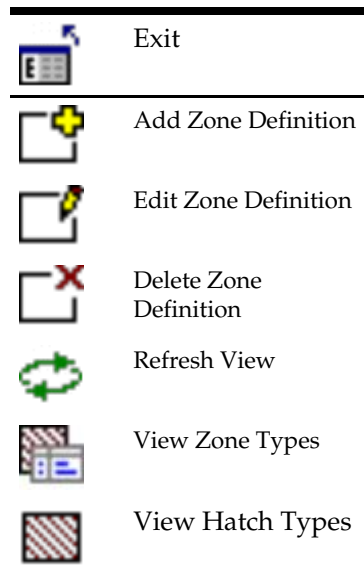




Options can be selected from the Edit pull down menu.

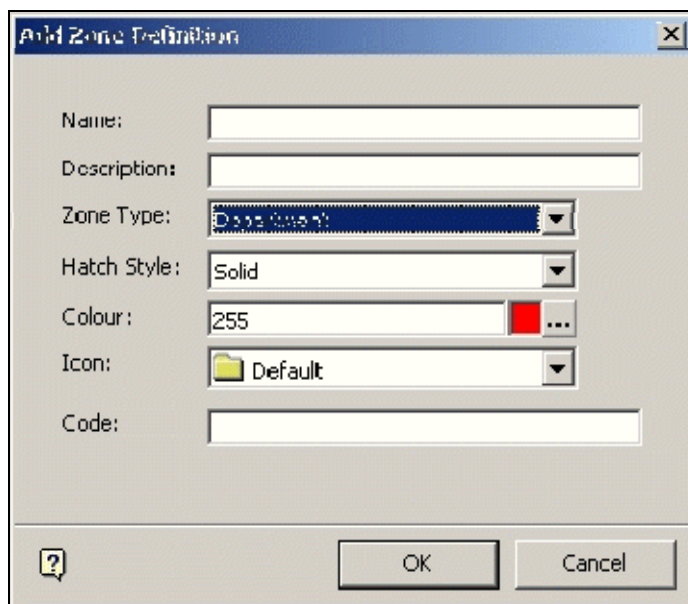


Alternatively, they can be selected from the toolbar.



## Adding Zone Definitions

When **Add Definition** is selected from the options on the pull down menu or toolbar, the Add Zone Type dialogue box appears.

The image shows a dialog box titled "Add Zone Definition". It contains several input fields: "Name:" with an empty text box, "Description:" with an empty text box, "Zone Type:" with a dropdown menu showing "Department", "Hatch Style:" with a dropdown menu showing "Solid", "Colour:" with a text box containing "255" and a color selection button (a red square with "..."), "Icon:" with a dropdown menu showing a folder icon and "Default", and "Code:" with an empty text box. At the bottom, there is a help button (a question mark in a square), an "OK" button, and a "Cancel" button.

The Name and Description can be edited and should be appropriate to the Zone Definition being created.

The Zone Type can be edited from a drop down list



As well as the predefined types shown in the example above, the list will also include any user defined types.

The Hatch Style can also be edited from a drop down list.



This will determine how the Zones appear when coloured on the drawing of the floor plan.

The Zone Color can be edited from a pallet.



It is suggested that Zone colors are selected using a logical scheme; for example clothing in shades of red, electrical goods in shades of blue.

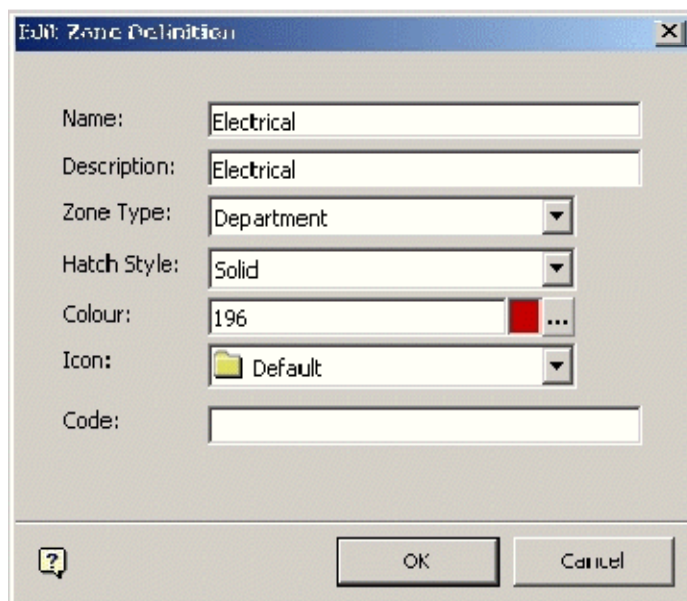
The Zone Description Icon can also be edited from a drop down list.



Finally an edited user defined Code can be typed into the Code window.

### Editing Zone Definitions

When **Edit Definition** is selected from the options on the pull down menu or toolbar, the Edit Zone Definition dialogue box appears.



The Name and Description can be changed and should be appropriate to the Zone Definition being edited.

The Zone Type can be selected from a drop down list



As well as the predefined types shown in the example above, the list will also include any user defined types.

The Hatch Style can also be selected from a drop down list.



This will determine how the Zones appear when coloured on the drawing of the floor plan.

The Zone Color can be selected from a pallet.



It is suggested that Zone colors are selected using a logical scheme; for example clothing in shades of red, electrical goods in shades of blue.

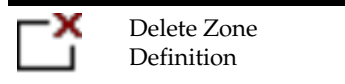
The Zone Definition Icon can also be selected from a drop down list.

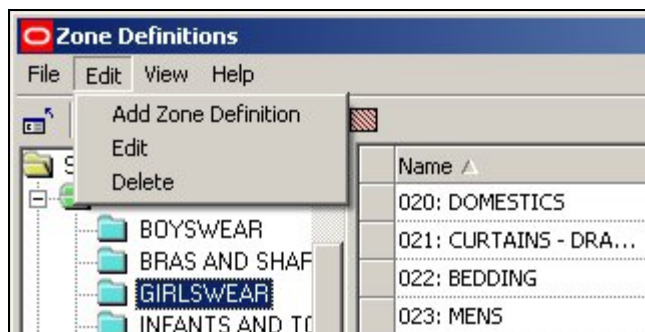


Finally a user defined Code can be typed into the Code window.

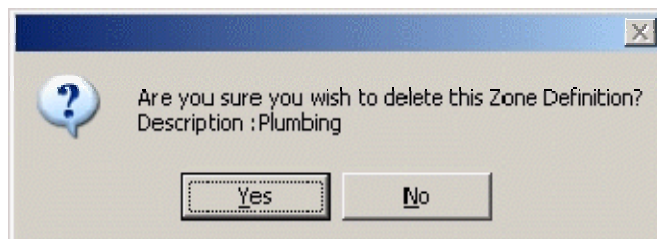
### Deleting Zone Definitions

**Zone Definitions** can be Deleted by highlighting them, then selecting the Delete Zone Definition option from the drop down list on the menu bar, or using the appropriate icon on the toolbar.





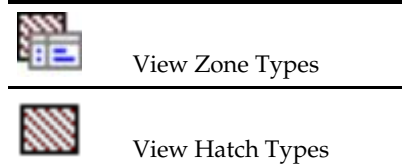
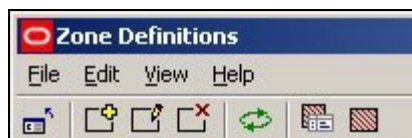
A confirmation dialogue box will appear.



Click on Yes to confirm deletion.

### View Zone Types and View Hatch Types

**View Zone Type** and **View Hatch Types** can be activated using the buttons in the Zone Description toolbar.



Clicking on either button will bring up the appropriate window

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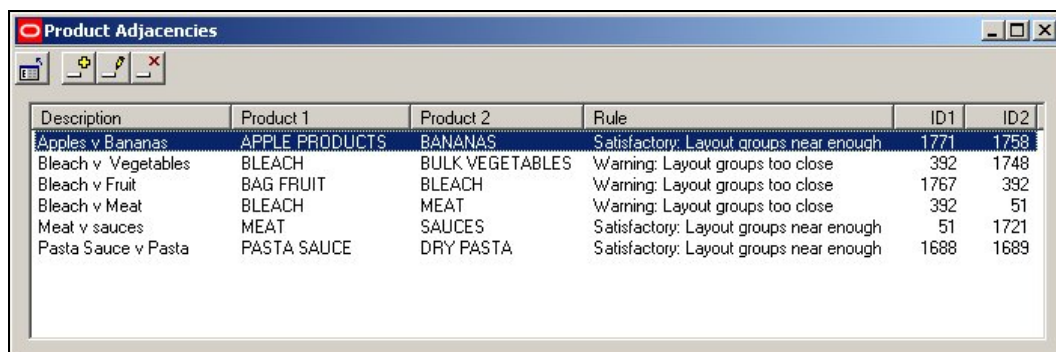
**Note:** If the Zone Description window is maximized, the View Zone Type and View Hatch Types windows will tend to appear behind the Zone Description window. It will have to be minimised before the new windows can be seen.

---

## Admin Merchandising

### Adjacency Rules

**Adjacency Rules** can be used to set up a series of guidelines about which products should be in proximity to one another, and which should not be. For example, it would not be good placement to put bleach next to meat or vegetables. However, more pasta sauce will be sold if it is placed next to pasta.



Description	Product 1	Product 2	Rule	ID1	ID2
Apples v Bananas	APPLE PRODUCTS	BANANAS	Satisfactory: Layout groups near enough	1771	1758
Bleach v Vegetables	BLEACH	BULK VEGETABLES	Warning: Layout groups too close	392	1748
Bleach v Fruit	BAG FRUIT	BLEACH	Warning: Layout groups too close	1767	392
Bleach v Meat	BLEACH	MEAT	Warning: Layout groups too close	392	51
Meat v sauces	MEAT	SAUCES	Satisfactory: Layout groups near enough	51	1721
Pasta Sauce v Pasta	PASTA SAUCE	DRY PASTA	Satisfactory: Layout groups near enough	1688	1689

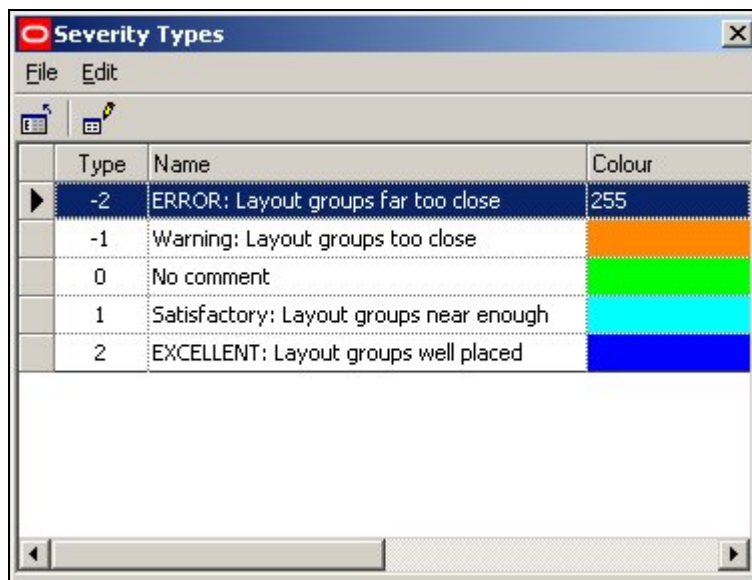
**Note:** Rules are configured in the Severity Types Option from the same menu.

These Adjacency Rules can then be used (in conjunction with other MSM database tables) to produce reports on whether products are well or badly placed. These reports (often in the form of Quick Reports or KPI's) can then be used to improve the layout of merchandise in a store plan - and hence the profitability of the store.

### Severity Types

The **Severity Types** (rules) for the Adjacency Rules are set up using the Severity Types option from the Merchandising menu of the Admin Module.

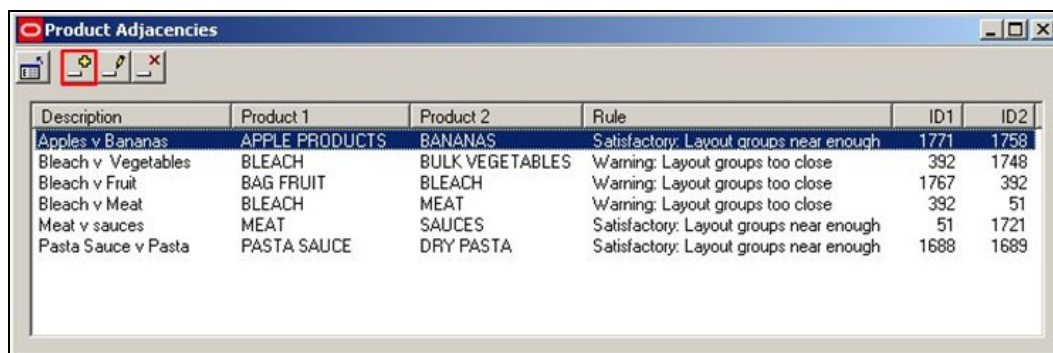




**Note:** User can only alter the text and color for the Severity types via the dialog box. Altering the number of available Severity Types and only be done in the AVTTB\_ADJACENCY\_SEVERITY\_TYPE table.

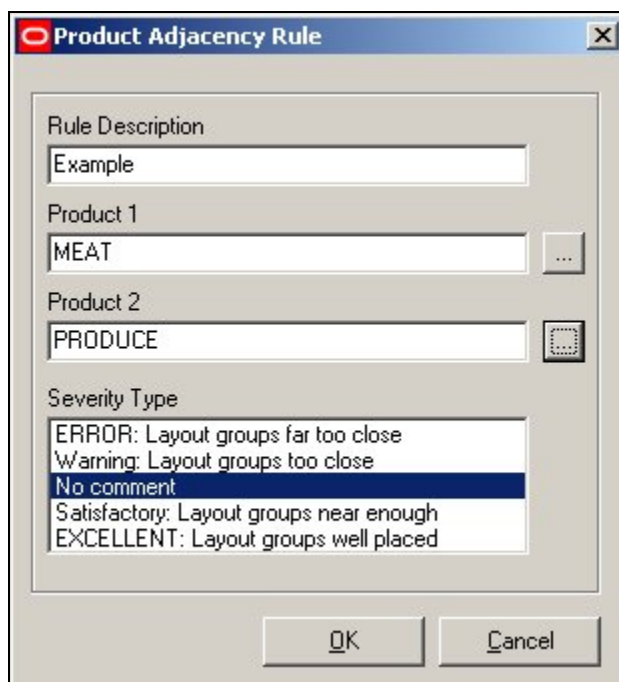
## Setting Up Adjacency Rules

To Set Up an Adjacency Rule, click on the Add Button.



This will bring up the Product Adjacency Rule dialogue box.





To add a Product Adjacency Rule:

1. Type in a Rule Description
2. Select Product 1 (clicking on the button will bring up the Select Products dialogue box)
3. Select Product 2 (clicking on the button will bring up the Select Products dialogue box)
4. Select the Severity Type

The Select Product dialogue box allows users to manually select the required products. Alternatively, the find button can be used to locate successive instances of the search string in the product hierarchy.



Users can select from products at Department, Class (Category) or Sub-Class (Sub-Category) level in the Product Hierarchy. These levels in the hierarchy should not be

subject to frequent change, so a set of Adjacency Rules should only require updating at irregular intervals. (More Info).

## Keeping Adjacency Rules Updated

Adjacency rules are set up at Department, Class (Category) or Sub-Class (Sub-Category) level in the Product Hierarchy.



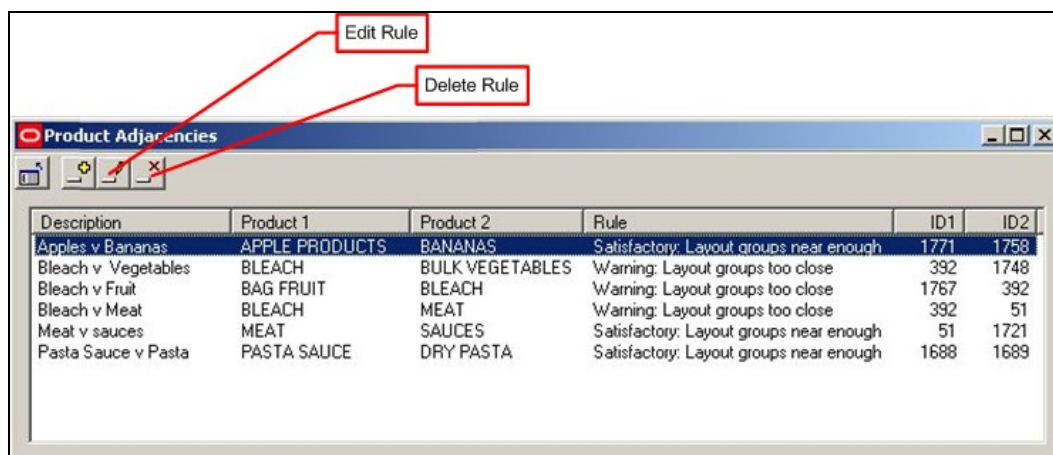
Products are generally subject to regular change at Style, Item and SKU levels in the Product Hierarchy. Department, Class (Category) or Sub-Class (Sub-Category) levels do not change very often, so once Adjacency Rules are set up, they should remain valid for extended periods of time.

It would be possible to produce periodic reports that identify:

1. Deleted Department, Class (Category) or Sub-Class (Sub-Category) items in the Product Hierarchy that are no longer needed in the Adjacency Rules.
2. Newly added Department, Class (Category) or Sub-Class (Sub-Category) items in the Product Hierarchy that may need adding to the Adjacency Rules.

## Editing and Deleting Adjacency Rules

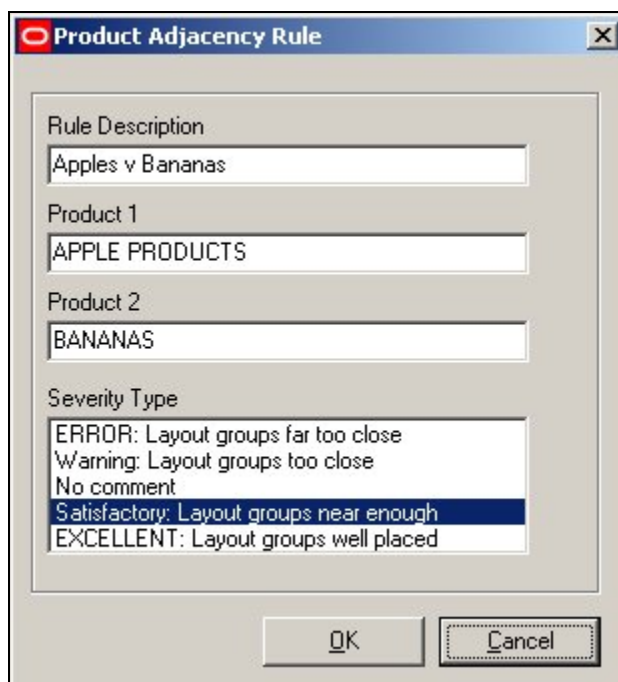
**Editing and Deleting Adjacency Rules** can be carried out by using the appropriate buttons from the toolbar.



Description	Product 1	Product 2	Rule	ID1	ID2
Apples v Bananas	APPLE PRODUCTS	BANANAS	Satisfactory: Layout groups near enough	1771	1758
Bleach v Vegetables	BLEACH	BULK VEGETABLES	Warning: Layout groups too close	392	1748
Bleach v Fruit	BAG FRUIT	BLEACH	Warning: Layout groups too close	1767	392
Bleach v Meat	BLEACH	MEAT	Warning: Layout groups too close	392	51
Meat v sauces	MEAT	SAUCES	Satisfactory: Layout groups near enough	51	1721
Pasta Sauce v Pasta	PASTA SAUCE	DRY PASTA	Satisfactory: Layout groups near enough	1688	1689

### Editing Rules

Editing rules only allows the user to change the Severity Type.



**Product Adjacency Rule**

Rule Description  
Apples v Bananas

Product 1  
APPLE PRODUCTS

Product 2  
BANANAS

Severity Type  
 ERROR: Layout groups far too close  
 Warning: Layout groups too close  
 No comment  
**Satisfactory: Layout groups near enough**  
 EXCELLENT: Layout groups well placed

OK Cancel

In order to change the products in an existing rule, it is necessary to delete the rule and create a new one.

### Deleting Rules

To delete a rule, highlight it, then click the Delete icon. The rule will be deleted without further confirmation.

## Using Adjacency Rules

After the Adjacency Rules have been set up, it is necessary to set up an output for them so that users can see how products in a specific drawing match the specified Adjacency Rules. The results can be based on either:

1. Product Adjacencies

## 2. Aisle Adjacencies

---

**Note:** it is also possible to base the results on distances (More Info).

---

### Product Adjacencies

Product Adjacencies (AVTTB\_PRODUCT\_ADJACENCY table) can be used to look at the relationship of products on the same fixture and on the fixtures to the immediate left and right.

### Aisle Adjacencies

Aisle Adjacencies (AVTTB\_AISLE\_ADJACENCY table) can be used to look at the relationship of products sharing an Aisle.

---

**Note:** An Aisle is a MSM object. It is a line drawn in a store plan in the Planner module that is used to represent one (or more) real life aisles. Fixtures within a specific distance of that line are regarded as belonging to the MSM Aisle. As products are linked to fixtures in the AVTTB\_PRODUCT table, it is then possible to determine what products belong to that MSM Aisle.

---

## SQL

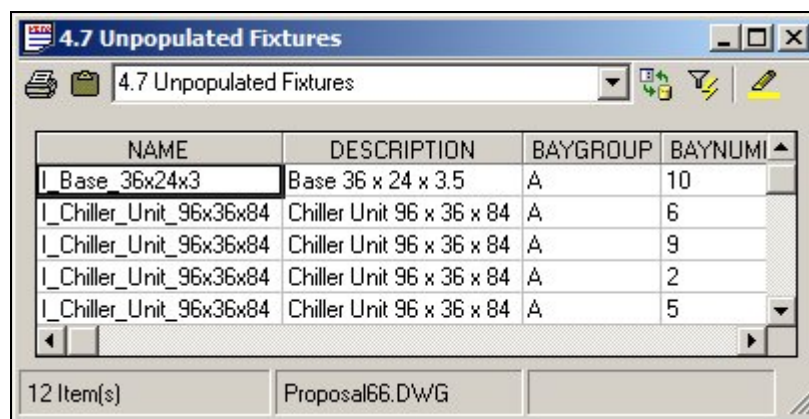
Generally, in order to make use of the Adjacency Rules, it is necessary to use SQL statements to link information from tables in the MSM database into an output that shows the results of the Adjacency rules.

### Tables

For information on which tables to reference when using SQL to generate an output from the Adjacency Rules, please see the Macro Space Management data model. This is available to registered MSM users on application to Oracle.

### Quick Reports

Quick Reports are available in both the Planner and Merchandiser Modules. It would be able to produce a Quick Report that show all the products in a drawing and the results of any Adjacency Rule calculations.



The screenshot shows a software window titled "4.7 Unpopulated Fixtures". Inside the window is a table with four columns: NAME, DESCRIPTION, BAYGROUP, and BAYNUM1. The table contains five rows of data. Below the table, there is a status bar showing "12 Item(s)" and "Proposal66.DWG".

NAME	DESCRIPTION	BAYGROUP	BAYNUM1
I_Base_36x24x3	Base 36 x 24 x 3.5	A	10
I_Chiller_Unit_96x36x84	Chiller Unit 96 x 36 x 84	A	6
I_Chiller_Unit_96x36x84	Chiller Unit 96 x 36 x 84	A	9
I_Chiller_Unit_96x36x84	Chiller Unit 96 x 36 x 84	A	2
I_Chiller_Unit_96x36x84	Chiller Unit 96 x 36 x 84	A	5

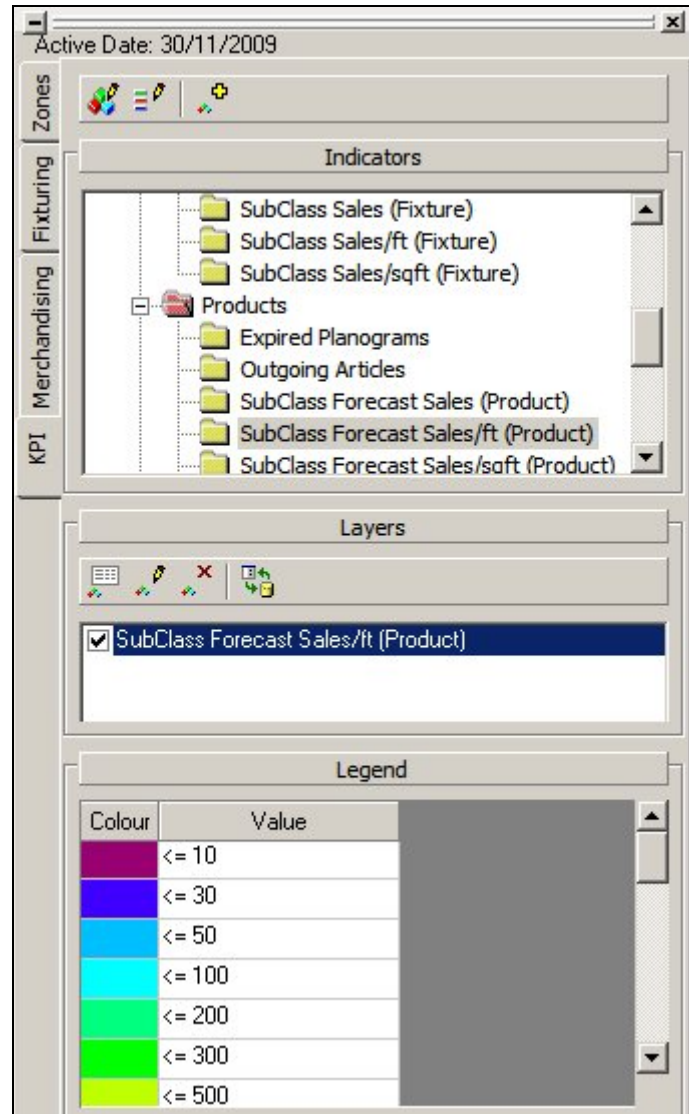
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**Note:** The SQL that populates the Quick Reports is stored in the AVTTB\_CUSTOM\_SQL table.

---

### KPIs (Key Performance Indicators)

KPIs (Key Performance Indicators) are available in both the Planner and Merchandiser Modules. It would be able to produce KPI's that show all the products in a drawing and the results of any Adjacency Rule calculations.



### Reports

It is possible to use Oracle tools such as BI Publisher to produce tabulated reports on the results of adjacency calculations within a drawing. Contact Oracle Technical Support for further information on Oracle applications suitable for producing reports on Adjacency Rules.

## Distances in Adjacency Rule Output

It is possible to use distances in the results from Adjacency Rules

### AVTTB\_PRODUCT\_ADJACENCY\_RULE Table

The Adjacency Rule table (AVTTB\_PRODUCT\_ADJACENCY\_RULE) has a PAR\_DISTANCE Field.

Column Name	ID	Pk	Null?	Data Type	Default
PRD_ID	1	1	N	NUMBER (19)	
PRD_ID2	2	2	N	NUMBER (19)	
PAR_DESC	3		N	NVARCHAR2 (160)	
AST_ID	4		N	NUMBER (5)	
PAR_DISTANCE	5		N	FLOAT	0

This field cannot currently be accessed via the Adjacency Rule dialog box in the Admin module, but can be used to set a distance for each Adjacency Rule.

#### AVTTB\_AISLE\_ADJACENCY Table

The Aisle Adjacency table (AVTTB\_AISLE\_ADJACENCY) has AIL\_DISTANCE\_FROM\_START and AIL\_DISTANCE\_FROM\_AISLE fields

Column Name	ID	Pk	Null?	Data Type	Default
FIL_ID	1	1	N	NUMBER (10)	
FIX_ID	2	2	N	NUMBER (10)	
AIL_NAME	3		N	NVARCHAR2 (64)	
AIL_SEGMENT	4		N	NUMBER (5)	
AIL_ONRIGHT	5		N	NUMBER (10)	
AIL_DISTANCE_FROM_START	6		N	FLOAT	
AIL_DISTANCE_FROM_AISLE	7		N	FLOAT	

These fields could be used to calculate the relative distances of fixtures (and hence products) along the Aisle

---

**Note:** An Aisle is a MSM object. It is a line drawn in a store plan in the Planner module that is used to represent one (or more) real life aisles. Fixtures within a specific distance of that line are regarded as belonging to the MSM Aisle. As products are linked to fixtures in the AVTTB\_PRODUCT table, it is then possible to determine what products belong to that MSM Aisle.

---

#### AVTTB\_PRODUCT\_ADJACENCY Table

The Product Adjacency table (AVTTB\_PRODUCT\_ADJACENCY) contains PAJ\_LENGTH\_LEFT and PAJ\_LENGTH\_RIGHT fields that show the distance of products to the left and right of the current field.



Column Name	ID	Pk	Null?	Data Type	Default
FIL_ID	1		N	NUMBER (10)	
PRD_ID	2		N	NUMBER (19)	
PAJ_START_SEQUENCE	3		N	NUMBER (5)	
PAJ_GONDOLA	4		N	NUMBER (5)	
PAJ_LENGTH	5		Y	FLOAT	
PAJ_END_SEQUENCE	6		N	NUMBER (5)	
PAJ_BAYGROUP	7		Y	VARCHAR2 (25 Byte)	
PAJ_BAYNUMBER	8		Y	NUMBER (5)	
ZON_ID	9		Y	NUMBER (10)	
PRD_ID_LEFT	10		Y	NUMBER (10)	
PAJ_LENGTH_LEFT	11		Y	FLOAT	
PRD_ID_RIGHT	12		Y	NUMBER (10)	
PAJ_LENGTH_RIGHT	13		Y	FLOAT	
PRD_ID_SAME	14		Y	NUMBER (10)	
PAJ_LENGTH_SAME	15		Y	FLOAT	
POG_ID	16		Y	NUMBER (10)	
POG_ID_LEFT	17		Y	NUMBER (10)	
POG_ID_RIGHT	18		Y	NUMBER (10)	
POG_ID_SAME	19		Y	NUMBER (10)	
AST_ID_LEFT	20		Y	NUMBER (5)	
AST_ID_RIGHT	21		Y	NUMBER (5)	
AST_ID_SAME	22		Y	NUMBER (5)	

#### AVTTB\_FIXTURE Table

The fixture table (AVTTB\_FIXTURE) contains information on the X and Y coordinates (FIX\_XPOS and FIX\_YPOS) of a fixture within a store plan.

Column Name	ID	Pk	Null?	Data Type	Default
FIL_ID	1	1	N	NUMBER (10)	
FIX_ID	2	2	N	NUMBER (10)	
BLK_ID	3		N	NUMBER (10)	
ZON_ID	4		Y	NUMBER (10)	
FIX_ACADHANDLE	5		N	VARCHAR2 (20 Byte)	
FIX_XPOS	6		N	FLOAT	
FIX_YPOS	7		N	FLOAT	
FIX_ZPOS	8		N	FLOAT	
FIX_XSIZ	9		N	FLOAT	
FIX_YSIZ	10		N	FLOAT	
FIX_ZSIZ	11		N	FLOAT	
FIX_XANG	12		N	FLOAT	
FIX_YANG	13		N	FLOAT	
FIX_ZANG	14		N	FLOAT	
FIX_MODIFIED	15		Y	NUMBER (5)	
FIX_ALLOCATED_AREA	16		Y	FLOAT	
FIX_FOOTPRINT	17		Y	FLOAT	
FIX_BAYGROUP	18		Y	NVARCHAR2 (50)	
FIX_BAYNUMBER	19		Y	NUMBER (10,4)	
FIX_AISLE_NUMBER	20		Y	NUMBER (5)	
FIX_TAG	21		Y	NVARCHAR2 (30)	
FIX_ALIGNMENT	22		N	NUMBER (3)	1
FIX_CHILD_ALIGNMENT	23		Y	NUMBER (3)	1
MAT_ID	24		Y	NUMBER (10)	
MAN_ID	25		Y	NUMBER (10)	
FIX_VGROUP	26		N	NUMBER (10)	0
FIX_GROUP	27		N	NUMBER (5)	0
FIX_ISPROMO	28		Y	NUMBER (1)	
FIX_CLIPBOARD	29		N	NUMBER (10)	0
FIX_BAYPREFIX	30		Y	VARCHAR2 (5 Byte)	

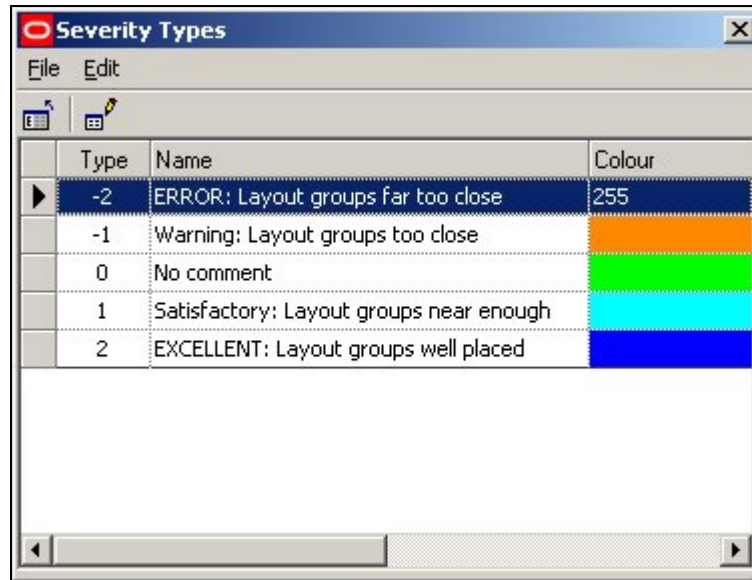
Products are associated with their parent fixtures in the AVTTB\_PRODUCT table. Using the X and Y coordinates (FIX\_XPOS and FIX\_YPOS) of fixtures would enable Adjacency Rules to work on distances between products. This provides an alternative to using the AVTTB\_AISLE\_ADJACENCY and AVTTB\_PRODUCT\_ADJACENCY tables.

## Severity Types

### Overview

**Severity Types** are used in conjunction with Adjacency Rules. They enable users to describe the form of the relationship between two products in the Adjacency Rules.





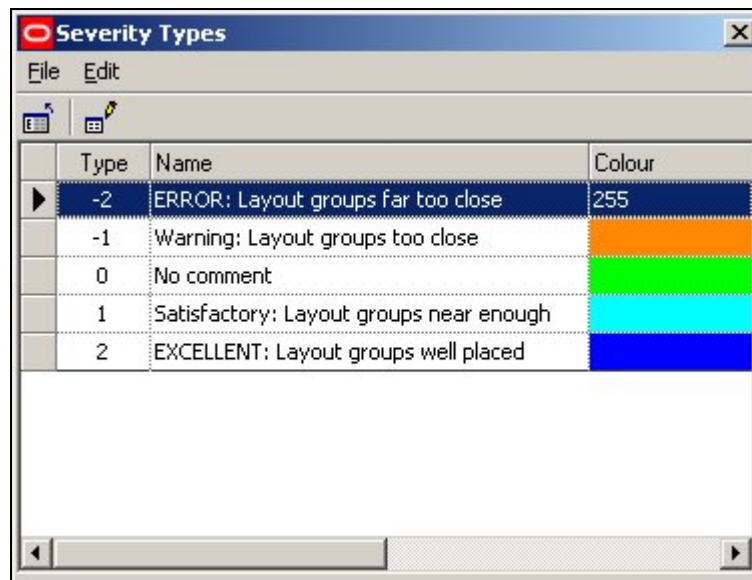
There are five default severity types: These range from badly placed to well placed.

For example, a Product Adjacency Rule might state that bleach cannot be displayed within 5 meters of fresh meat. If this was infringed a warning might appear in the Product Adjacency Report flagging up that this rule had been infringed: ERROR: Layout groups far too close.

Similarly, a Product Adjacency Rule might state that pasta sauces have to be displayed within 2 meters of pasta. If this was achieved during merchandising, then the Product Adjacency Report might flag up: EXCELLENT: Layout groups well placed.

### Editing Severity Types

To edit a Severity Type, click on it to highlight it. Next, select the Edit option in the Edit pull down menu or click on the Edit icon.



This will bring up the Severity Types editing dialogue.

The description and color can be customized to user requirements. Click OK to confirm and return to the Severity Types window.

## Modifying the Severity Type List

There are five default Severity Types supplied with Macro Space Management.

Type	Name	Colour
-2	ERROR: Layout groups far too close	255
-1	Warning: Layout groups too close	
0	No comment	
1	Satisfactory: Layout groups near enough	
2	EXCELLENT: Layout groups well placed	

It is possible to increase or decrease the number of Severity Types, but this must be done directly in the database. This is done by changing the entries in the AVTTB\_ADJACENCY\_SEVERITY\_TYPE table.

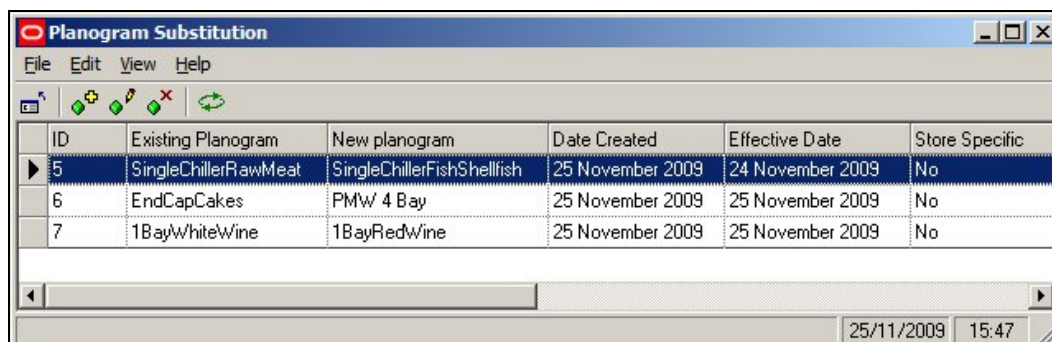
AST_ID	AST_DESC	AST_COLOUR
-2	ERROR: Layout groups far too close	255
-1	Warning: Layout groups too close	35071
0	No comment	65280
1	Satisfactory: Layout groups near enough	16776960
2	EXCELLENT: Layout groups well placed	16711680

All three fields are mandatory, with the AST\_ID field being the primary key. This table is only referenced by SQL and not by the code, so changes to the table will not affect the operation of the Planner and Merchandiser Modules.

## Planogram Substitution and Version Change

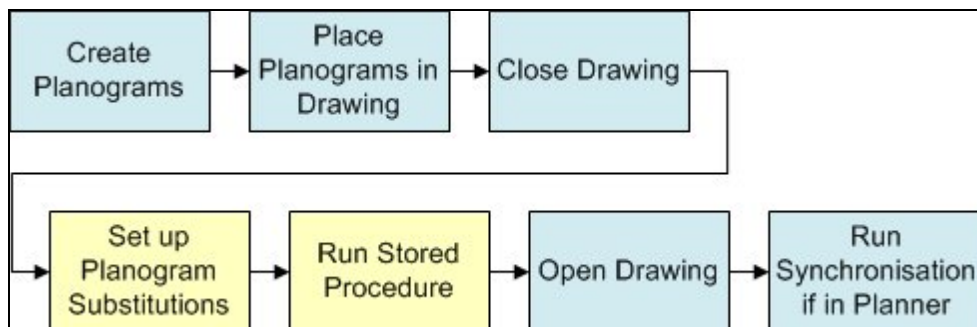
### About Planogram Substitution

**Planogram Substitution** allows users to set up a list of planograms to be substituted. At present only one bay planograms can be substituted for other one bay planograms. Any other form of substitution will fail.



ID	Existing Planogram	New planogram	Date Created	Effective Date	Store Specific
5	SingleChillerRawMeat	SingleChillerFishShellfish	25 November 2009	24 November 2009	No
6	EndCapCakes	PMW 4 Bay	25 November 2009	25 November 2009	No
7	1BayWhiteWine	1BayRedWine	25 November 2009	25 November 2009	No

The Planogram Substitution process is as follows:



1. Planograms are created - either in the Merchandiser module or 3rd Party software
2. The planograms are placed in a drawing
3. The drawing is closed - planogram substitutions cannot be carried out on an open drawing
4. Planogram substitutions are set up in the Admin Module
5. The Planogram Substitutions are carried out by running a Stored Procedure to make changes in the database
6. The drawing is reopened - if in Merchandiser or In-Store Space Collaboration the changes will be immediately apparent
7. If in the Planner module, the open drawing is then 'synchronized to database' to bring in the changes

---

---

**Note:** Stored procedures cannot be run directly from Macro Space Management. They can only be run by someone with database administration rights. Drawings subsequently opened in Merchandiser and In-Store Space Collaboration will be automatically updated with the changed information. Drawings subsequently opened in Planner will require synchronization before they are updated with the changed information.

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Planogram Substitution is often carried out in parallel with Version Change.

## About Version Change

**Version Change** is often done in parallel with Planogram Substitution.

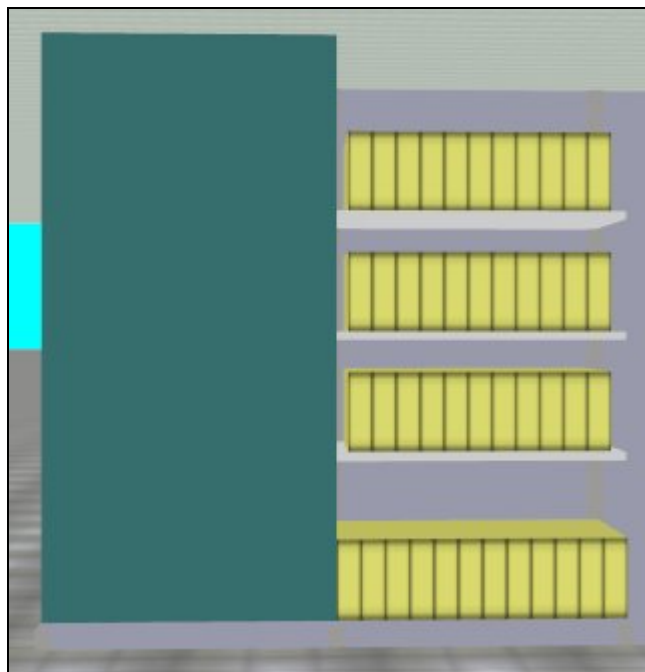
Planogram Versions occur when a small difference is made to a planogram design and it is saved as a different version - for example Version 1 is updated to Version 2. Updating the planogram design will not affect the planograms that have been already placed in store plans. The purpose of Version Change is to update the already placed planograms in drawings with any later versions that might exist.

For Version Change to be carried out, the following conditions must be met:

1. Store Plans on which Version Change is required must be checked in (not in use).
2. Planograms must be Imploded (More Info).

## Exploding and Imploding in Merchandiser

Planograms can be **Exploded** and **Imploded** in Merchandiser. In the example below, the planogram on the left is Imploded and the planogram on the right is Exploded.



Planograms can be toggled between Imploded and Exploded by using the options on the Directions toolbar.



#### **Exploded Planograms**

Exploded planograms have full information placed in the database for both products and shelves. Planograms placed in Merchandiser are placed in Exploded form unless the Implode option has been selected.

#### **Imploded Planograms**

Imploded planograms do not have shelf information placed in the database, and only have a single product block that represents the position of the planogram, not of the individual products on individual shelves. Planograms placed in Planner are placed in Imploded form.

## **Limitations of Planogram Substitution**

### **Planogram Form**

Planograms can only be substituted if they are in Imploded form (More Info). Substituting planograms in Exploded form may lead to inaccuracies, for example in the shelving associated with the planogram.

Planogram substitution is only 2D at present - that is to say one planogram placeholder will be swapped for another. 3D substitution is not carried out - i.e. changes in shelving height, etc, are not made in the drawings.

### **Planogram Size**

The planograms being substituted in are not validated for size or equipment. This could mean that the new planogram is either a different size or uses different equipment to the planogram that is being replaced. It is recommended that users manually confirm that planograms are compatible before carrying out a substitution.

---

**Note:** Because planogram substitution uses Imploded planograms (placeholders), planograms will substitute without problems in the drawing, even if they are incompatible in real life. Consequently, there may be considerable problems in actually implementing a store plan that has used incompatible substitutions.

---

### Only One to One Substitutions are Allowed

It is generally only possible to substitute:

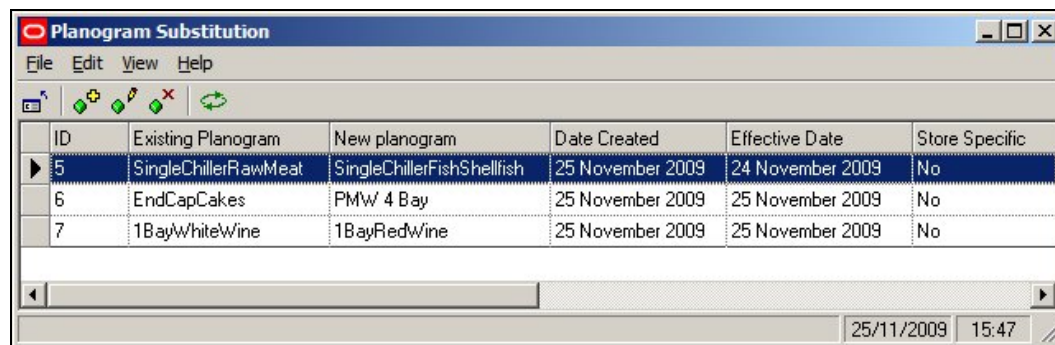
1. A one bay planogram for another one bay planogram placed on a single fixture
2. The first bay of a multi bay planogram for a one bay planogram

All other forms of planogram solutions will fail. Examples of failures include:

1. Attempting to substitute any multi bay planogram for any other multi bay planogram
2. Attempting to substitute any single bay planogram that has simultaneously been placed on multiple fixtures. (Within the database, this will appear as similar to a multi bay planogram)

### Errors in Any Substitution will cause All Substitutions to Fail

If any substitution in the list of substitutions specified in the list of active planogram substitutions in the Admin Module fails, no substitutions in the list will be carried out.



The screenshot shows a window titled "Planogram Substitution" with a menu bar (File, Edit, View, Help) and a toolbar. Below the toolbar is a table with the following data:

ID	Existing Planogram	New planogram	Date Created	Effective Date	Store Specific
5	SingleChillerRawMeat	SingleChillerFishShellfish	25 November 2009	24 November 2009	No
6	EndCapCakes	PMW 4 Bay	25 November 2009	25 November 2009	No
7	1BayWhiteWine	1BayRedWine	25 November 2009	25 November 2009	No

At the bottom right of the window, the date "25/11/2009" and time "15:47" are displayed.

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**Note:** it is recommended that individual substitutions be tested before a long list of automated substitutions is carried out.

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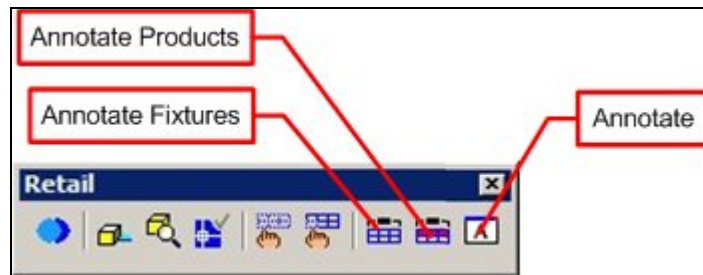
### Active Substitutions

Planogram Substitutions can only be run once. They are then shown as inactive by means of a flag in the database. This is the PGS\_PROCESSED column in the AVTTB\_POG\_SUBSTITUTION table. If set to 0, the Planogram Substitution is active, if set to 1 the Planogram Substitution is inactive.

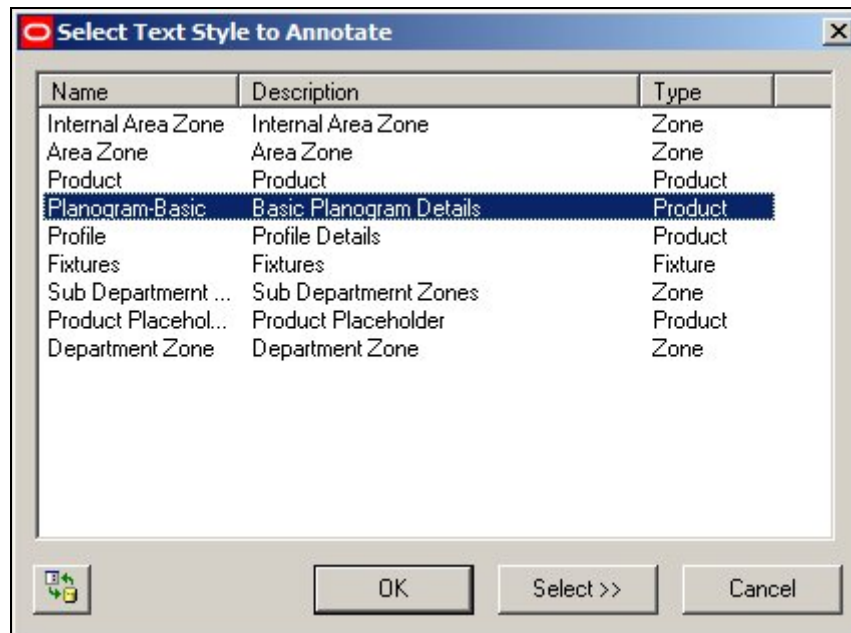
There is currently no way of directly identifying in the Planogram Substitution dialog box in the Admin Module whether a Planogram Substitution is active or not.

### Annotation

After the planograms are substituted and a Planner store plan is reopened, synchronization to database will update the information in the drawing so that the planograms in the drawing now match the planograms in the database. However, synchronization does not update the annotation. This has to be done manually. This is done by selecting the Annotate Option from the Retail Toolbar.



This will bring up the Text Styles Annotation dialog box.

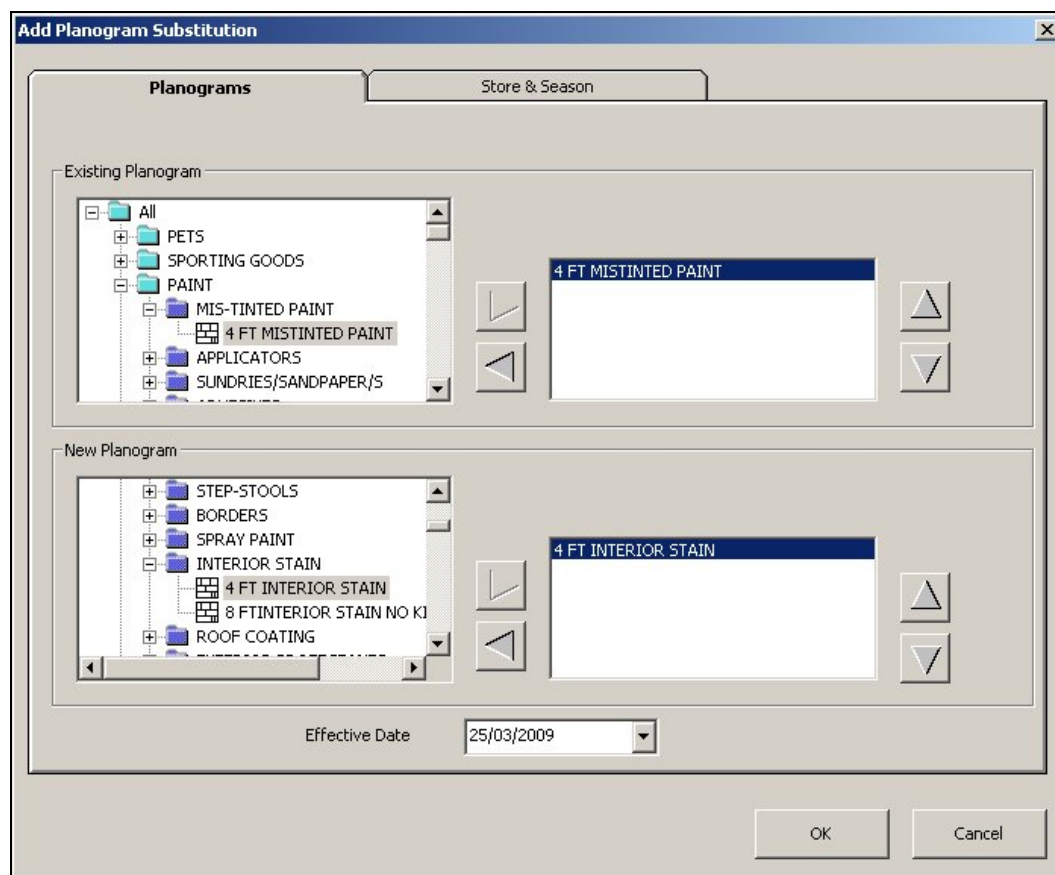


Highlighting the appropriate option and clicking OK will result in any substituted planograms having their annotation updated.

## Selecting the Planograms to be Substituted

The planograms to be substituted are selected in the Planogram tab of the Planogram Substitution dialogue box.





The planogram which it is required to replace is selected from the list of planograms in the Existing Planogram frame. It can be selected or deselected using the arrows. Only a single planogram may be selected to be substituted.

The replacement planogram is selected from the list of planograms in the Existing Planogram frame. It can be selected or deselected using the arrows. Only a single planogram may be selected for substitution.

The effective date is the earliest date at which the planogram substitution can be carried out. For substitution to occur, the effective date must be on or before the day the stored procedure is run. Any substitutions set to a date after the day the stored procedure is run will not be carried out, and must await a subsequent re-running of the stored procedure.

---

**Note:** The planogram hierarchy is configured in Merchandiser.

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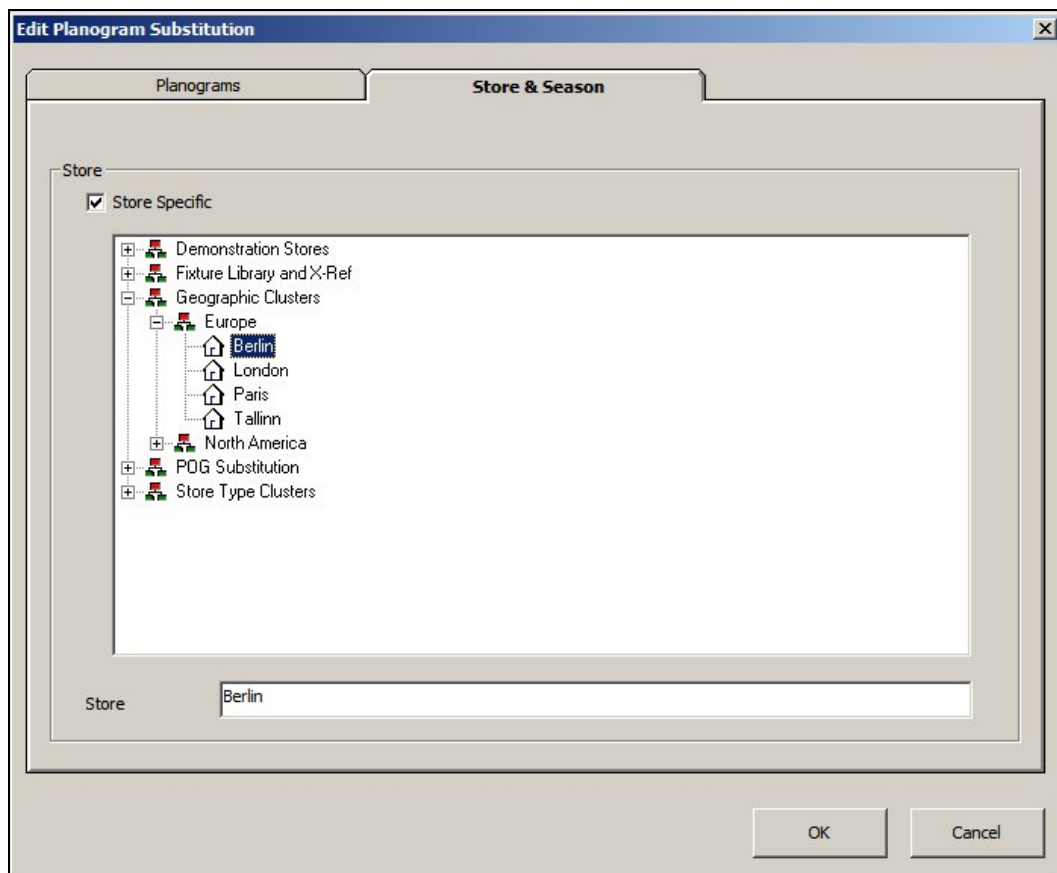
While setting up planogram substitutions, the limitations on substitutions should be taken into account. (More Info).

## Selecting the Stores for Planograms to be Substituted In

The stores in which the planogram substitution is carried out are determined by whether the Store Specific check box is selected or not.



If the checkbox is not ticked, then all stores containing the selected planogram will have the new planogram substituted for it. If the checkbox is ticked, then the substitution will only be carried out in a specific store.



To select the store, first tick the Store Specific Checkbox. Then navigate to the store in the hierarchy and click on it until it shows in the Store text box.

---

**Note:** The store hierarchy is configured in Store Manager. This is available in both Planner and Merchandiser.

---

## Carrying out Planogram Substitutions and Version Changes

Carrying out Planogram Substitutions and Version Changes is as follows:

### Preparation

1. Store Plans on which planogram substitutions are to be carried out must be closed (checked in). Store plans that are shown as in use (checked out) will not have planogram substitutions or version change carried out.
2. Store Plans on which planogram substitutions are to be carried out must have the planograms Imploded. (More Info). If Planograms are in Exploded form, there may be problems with planogram substitution of version changes.
3. The required Planogram Substitutions must have been set up in the Admin Module and must have an Effective Date of on or before the date the Planogram Substitutions. They must also be active (only identifiable through the database).

### Carrying out Planogram Substitutions and Version Changes

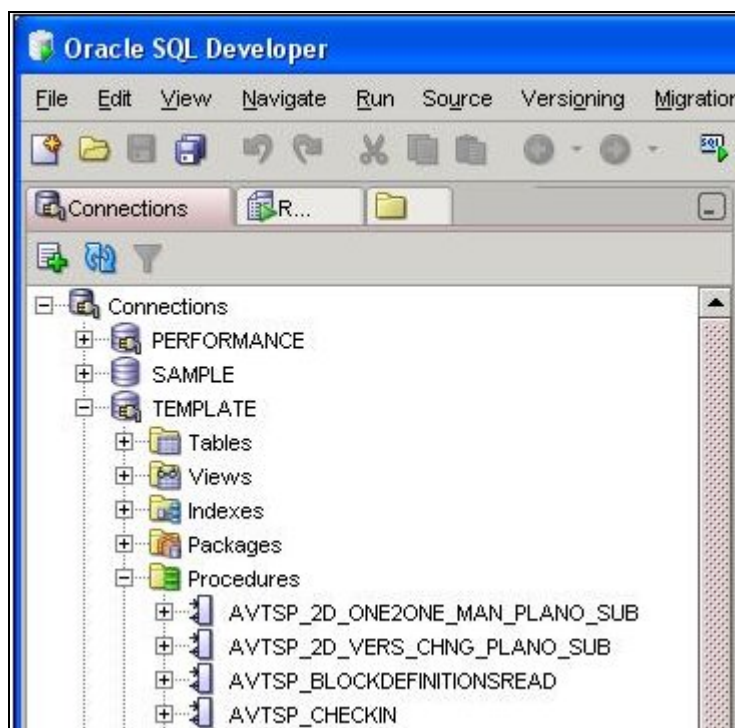
Planogram Substitutions and Version Changes are implemented by means of Stored Procedures.

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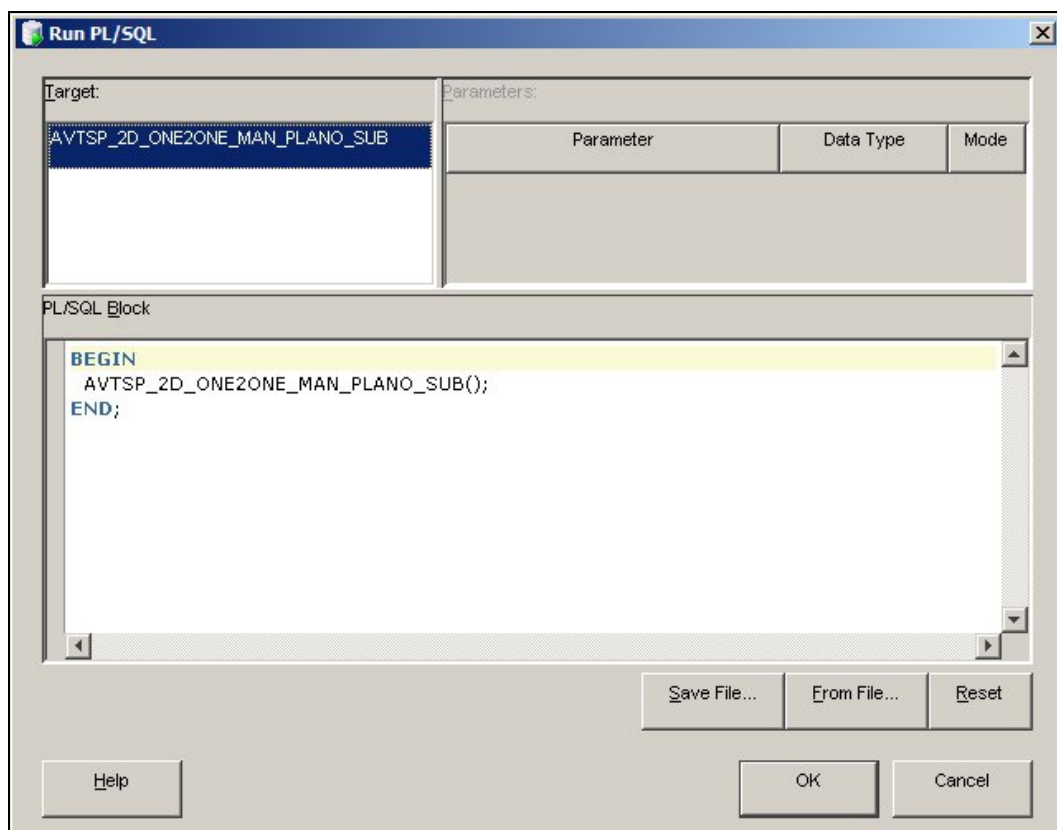
**Note:** Stored procedures cannot be run directly from Macro Space Management. They can only be run by someone with database administration rights.

---

Stored procedures are held in the Macro Space Management database and need to be accessed using a program such as Oracle's SQL Developer.



The relevant stored procedures can then be run, causing the planogram substitutions to be made.



### Planogram Substitution

The Stored Procedure is called AVTSP\_2D\_ONE2ONE\_MAN\_PLANO\_SUB

### Version Change

The Stored Procedure is called AVTSP\_2D\_VERS\_CHNG\_PLANO\_SUB

---

**Note:** it is recommended that Planogram Substitution be carried out before Version Change. This is because Planogram Substitution will automatically substitute in the latest version of the planogram, thus minimizing the amount of Version Changes required.

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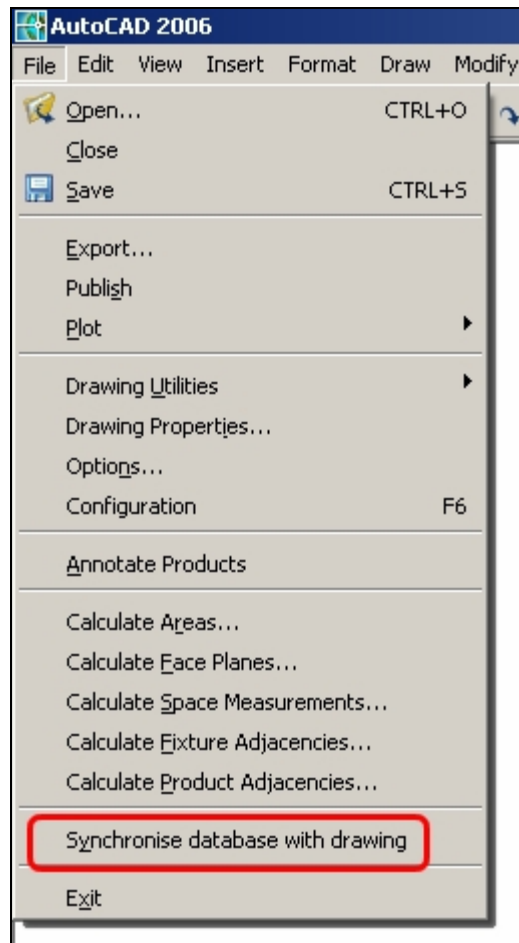
## Planogram Substitutions and Synchronization

**Carrying out planogram substitutions** results in changes being made to the information in the database.

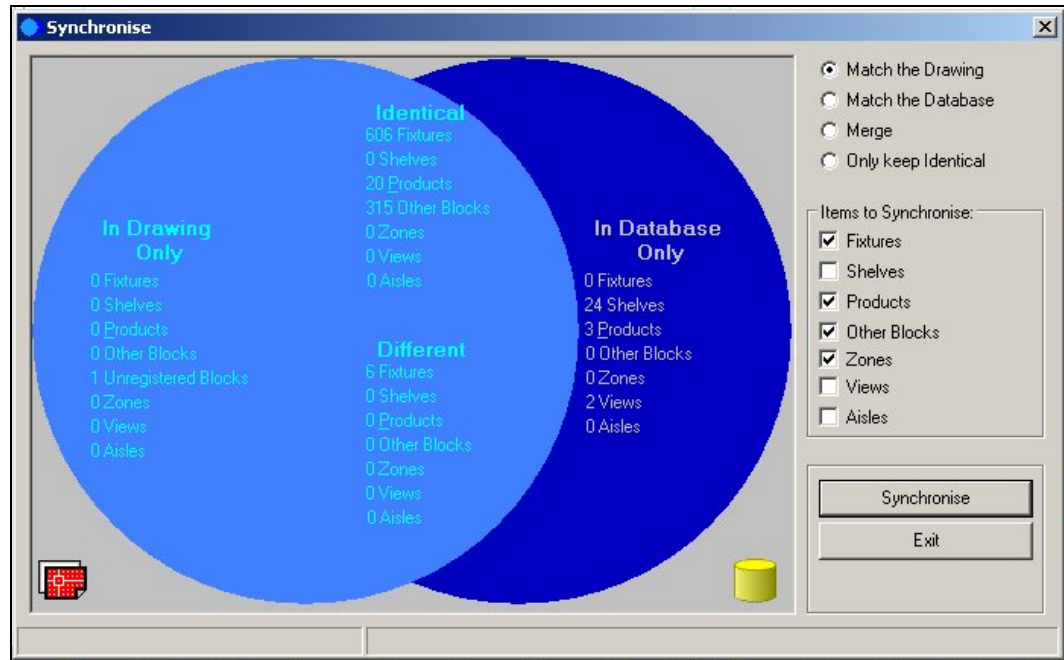
When drawings are opened in some modules ( Merchandiser and In-Store Space Collaboration) the drawings are automatically updated with the changed information.

However, if planogram substitutions have been made to a drawing in Planner, the drawing will not reflect the planogram substitutions made unless the drawing has been synchronized with the database.

The synchronize option can be selected from the File pull down menu.



This will bring up the synchronization dialogue box.



Selecting Match the Database will result in the drawing being updated with the latest planogram changes.

**Note:** the store plan will also have to be re-annotated to ensure the substituted planograms are correctly labeled. This should be done after synchronization.

## Product Code Types

### Overview

**Product Codes** are numerical codes that enable products to be identified at SKU levels. They are often present in Bar code form on the actual products.



Product Codes come in a number of formats

#### UPC Codes

UPC (Universal Product Codes) were developed for the North American Market. They are normally 12 digits long (although variations exist). The most common versions are the UPC-A and UPC-E formats, although other variants exist.

UPC codes are slowly being superseded by EAN (European Article Number).

#### EAN Codes

EAN (European Article Number) are internationally accepted codes. They have been renamed 'International Article Numbers', although the EAN abbreviation is retained. Unlike UPC's (which are specific to North America), EAN's allow the country of the manufacturers of the product to be identified.

The most common form of European Article Numbers is the EAN-13 form, which is 13 digits long. A less commonly used form is EAN-8 (8 digits long) which is sometimes used for smaller items, where fitting a longer bar code might be impractical.

### JAN Codes

JAN (Japanese Article Numbers) are the same as EAN codes.

### GTIN Codes

GTIN (Global Trade Item Numbers) are a family of codes that consolidate codes in the UPC, EAN and JAN systems. GTINs may be 8, 12, 13 or 14 digits long. They can be constructed using any of four numbering structures, depending upon the exact application.

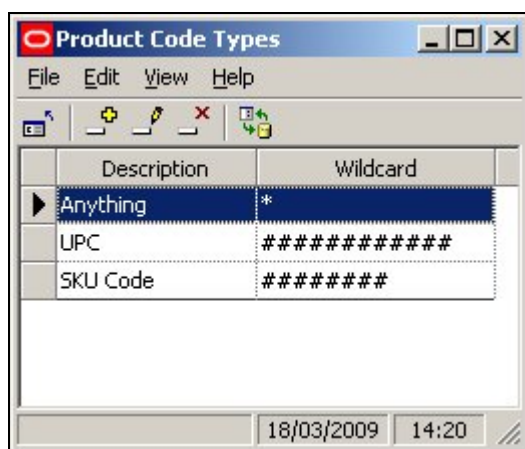
GTIN-8s will be encoded in an EAN-8 bar code.

GTIN-12s will be encoded in UPC-A, ITF-14, or GS1-128 bar codes.

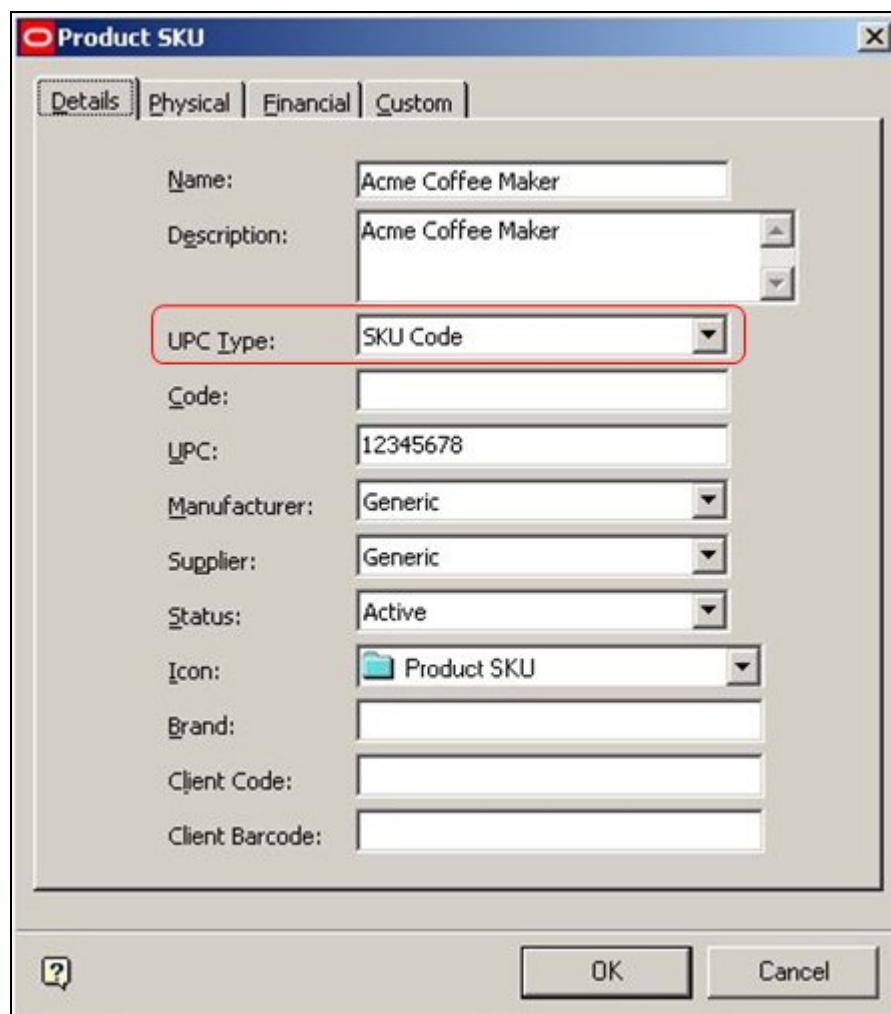
GTIN-13s may be encoded in EAN-13, ITF-14, GS1-128 bar codes

GTIN-14s may be encoded in GS1-128 bar codes

**Product Code Types** can be used to set up masks for the Product Codes to be entered manually within Product Studio. They have no influence on Product Code information imported via the Data Import module.



Product Code Types are used in the SKU dialogue box in Product Studio. The type is selected from the UPC type drop down list. Any data entered for the UPC must then conform to the masks set in the Admin module.

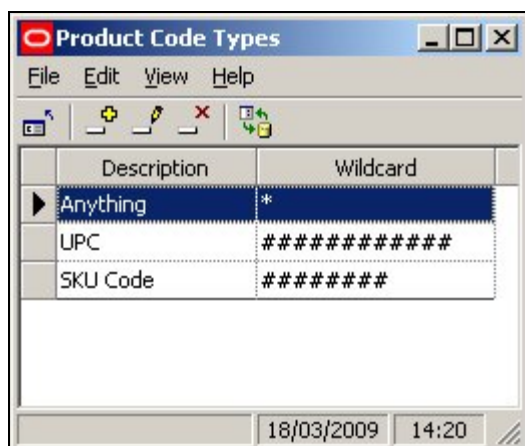


The image shows a Windows-style dialog box titled "Product SKU". It has four tabs: "Details", "Physical", "Financial", and "Custom", with "Details" currently selected. The dialog contains several input fields and dropdown menus. The "Name" field is filled with "Acme Coffee Maker". The "Description" field is also filled with "Acme Coffee Maker". The "UPC Type" dropdown menu is highlighted with a red rectangle and shows "SKU Code" selected. Below this, the "Code" field is empty, and the "UPC" field is filled with "12345678". The "Manufacturer" dropdown shows "Generic", and the "Supplier" dropdown also shows "Generic". The "Status" dropdown shows "Active". The "Icon" dropdown shows a folder icon and the text "Product SKU". The "Brand", "Client Code", and "Client Barcode" fields are all empty. At the bottom right, there are "OK" and "Cancel" buttons. A help icon (?) is located at the bottom left.

Name:	Acme Coffee Maker
Description:	Acme Coffee Maker
UPC Type:	SKU Code
Code:	
UPC:	12345678
Manufacturer:	Generic
Supplier:	Generic
Status:	Active
Icon:	Product SKU
Brand:	
Client Code:	
Client Barcode:	

## Adding and Editing Product Code Types

**Product Code Types** can be added, edited or deleted using the Product Code Type dialogue box. The add, edit or delete options can be accessed from either the menu bar or toolbar.



The following wild card characters can be used:

Character	Meaning
?	Any letter
#	Any number
*	Any number of characters of any type

In addition, the following characters can be added as permanent parts of the mask.

Option	Available
Numbers	0 1 2 3 4 5 6 7 8 9
Separators	! " £ \$ % & ' ( ) - + { } : ; @ ' ~ , . < >   \

For example, a mask could have the form 12345###-###. Any Product Code manually added to a Product SKU in Product Studio will have to conform to that format. Examples of valid inputs are:

12345678-123

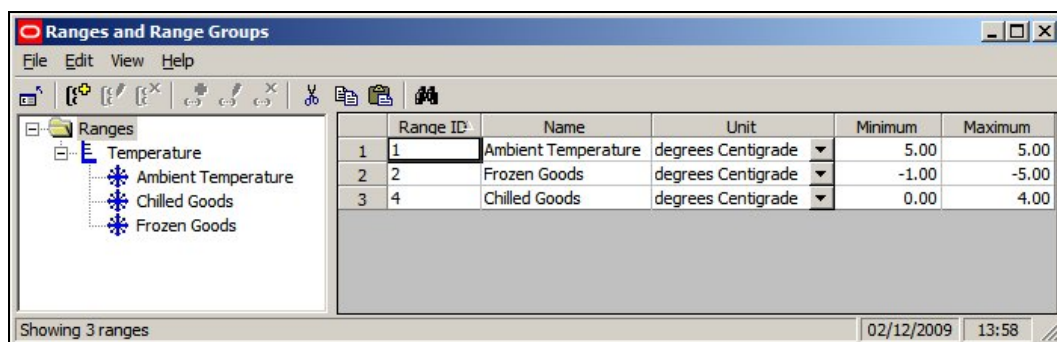
12345123-456

## Ranges

### Overview

**Ranges and Range Groups** are used to set up limits for values for specific types of data.





These Ranges can then be used as filters to ensure that products are placed on compatible items of equipment in the Merchandiser Module. For example, if the Frozen Goods Range is assigned to both a shelf and a product, then the use of the Range will prevent (say) Ice Cream being placed into fixtures or shelves where it could melt.

---

**Note:** Ranges have no effect in the Planner Module.

---

### Range Groups

Range Groups are used to collect together Ranges sharing a common attribute - in the above example, the Temperature Range Group has been used to hold all the Ranges involving temperature.

### Ranges

Ranges are the maximum and minimum values that can be assigned to a particular property of the equipment and products. In the above example, the Frozen Goods Range has been defined as temperatures between -1 and -5 degrees centigrade.

---

**Note:** Ranges are used in parallel with Styles.

---

Currently only temperature ranges can be used. They can be assigned to Fixtures, Shelf Object and Products.

## Where Ranges are Assigned

Ranges can be assigned to fixtures, shelves and products.

### Fixtures and Shelves

Fixtures and Shelf Objects are assigned ranges in the Styles/Ranges tab of the Block Details dialog box in Fixture Studio.

**Block Details: I\_Bin\_36x36x36**

Description: Bin 36 x 36 x 36

Category | Insertion | Size | Connections | Parts | Fixture | UDAs | **Styles/Ranges** | Merchandisable areas | Shelf | Preview

Available Styles: Admin

- Fixture
- Podium
- Chilled Fixture

Selected Styles:

- Fixture

>

<

Temperature range: Ambient Temperature Min: 1 Max: 25 Unit: degrees Centigrade

Save OK Cancel

## Products

Products are assigned Ranges at SKU level using the Physical tab.

The screenshot shows a dialog box titled "Product SKU - Own Brand Beef Mince 500g" with a close button (X) in the top right corner. The dialog has four tabs: "Details", "Physical" (which is selected), "Financial", and "Custom". The "Physical" tab contains the following fields:

- Pack Size:** A numeric input field with the value "1" and up/down arrows.
- Pack Units:** A dropdown menu showing "Pure number".
- Colour:** A text input field with the value "16512" and a color selection button (a small brown square followed by "...").
- Nominal Colour:** A text input field with the value "Brown".
- Nominal Size:** A text input field with the value "Medium".
- Temperature range:** A dropdown menu showing "Chilled Goods".
- Min:** A numeric input field with the value "0" and up/down arrows.
- Max:** A numeric input field with the value "4" and up/down arrows.
- Units:** A dropdown menu showing "degrees Centigrade".

At the bottom of the dialog, there is a help icon (a question mark in a square), an "OK" button, and a "Cancel" button.

## Where Ranges are Used

Ranges are used as follows:

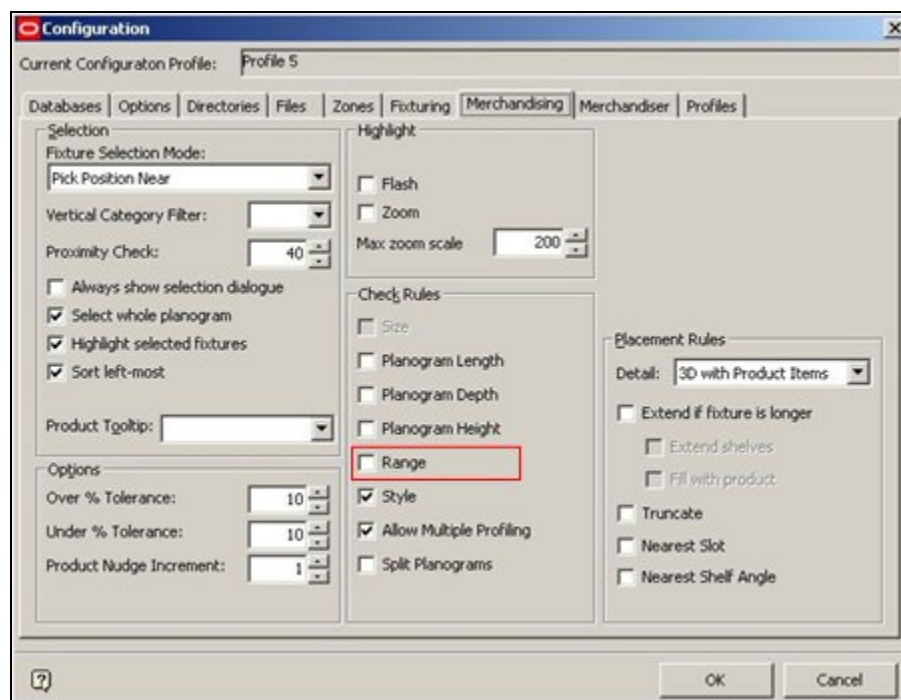
### Products and Equipment

If both the product and the equipment (fixture or shelf) on which it is being placed, have been assigned a Temperature Range, a warning will be generated if an attempt is made to place a product on a fixture or shelf object that does not have a matching temperature range.



### Planograms and Equipment

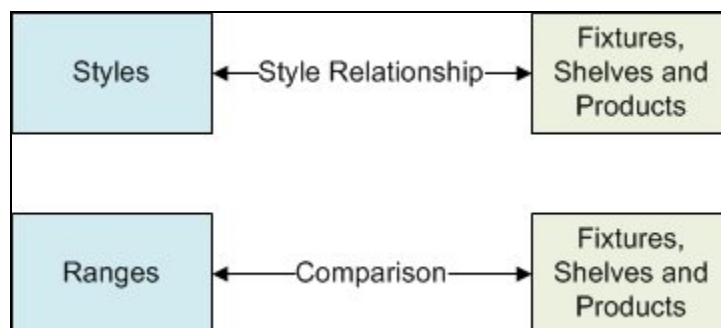
There is currently an option in the Configuration Module to warn if the Range assigned to a planogram is not compatible with the parent fixture.



This option is currently not active.

## About Ranges and Styles

**Ranges and Styles** can be used interchangeably as filters to determine if products can be placed on Fixtures or Shelf Objects..



### Styles

If styles have been assigned to:

1. Fixtures and Products
2. Shelf Objects and Products

and the requisite Style Relationships exist, then styles can be used to determine whether a product can be placed on either a fixture or a shelf object.

### Ranges

If Ranges have been assigned to:

1. Fixtures and Products
2. Shelf Objects and Products

and the ranges are compatible, then they can be used to determine whether a product can be placed on either a fixture or a shelf object.

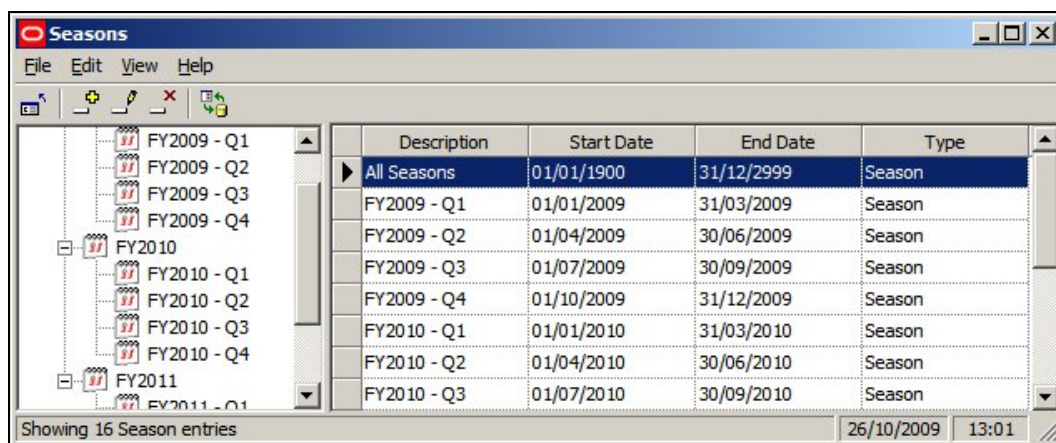
### Example

1. It would be possible to create Chilled Fixture, Chilled Shelf and Chilled Product styles and assign them appropriately to Fixtures, Shelf Objects and Products. The appropriate style relationships could then be set up, and would serve to determine whether products could or could not be placed.
2. It would also be possible to create Basic Fixture, Basic Shelf and Basic Product styles that could be assigned to all Fixtures, Shelf Objects and Products. The pertinent Fixtures, Shelf Objects and Products could then be assigned the 'Frozen' temperature range. In this example, the Range would serve to determine whether products could or could not be placed.

## Seasons

### Overview

The **Seasons Option** is used to set up the list of retailing Seasons. These seasons can then be associated with Revisions (Store Manager), Products (via the database) and Planograms (Planogram design - Merchandiser). Once Revisions, Products and planograms have been associated with Seasons, the information can be used for filtering and reporting purposes.

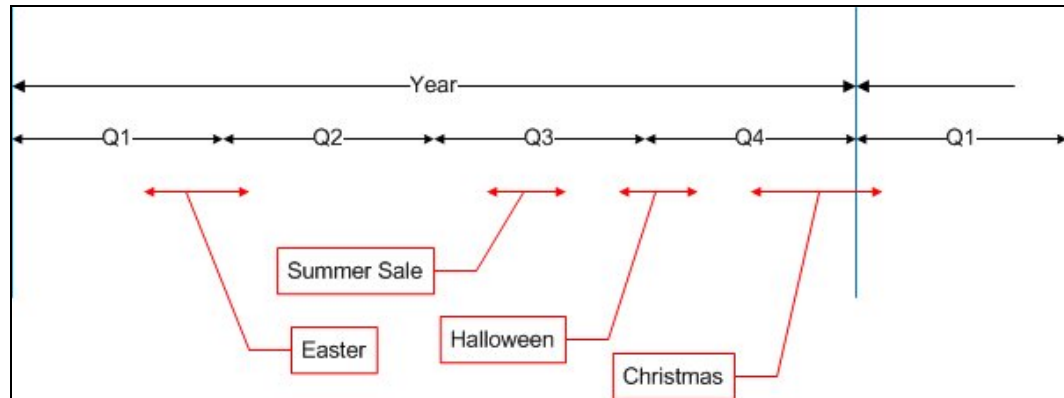


The screenshot shows the 'Seasons' application window. On the left is a tree view showing a hierarchy of seasons: FY2009 (Q1, Q2, Q3, Q4), FY2010 (Q1, Q2, Q3, Q4), and FY2011 (Q1). On the right is a table with the following data:

Description	Start Date	End Date	Type
All Seasons	01/01/1900	31/12/2999	Season
FY2009 - Q1	01/01/2009	31/03/2009	Season
FY2009 - Q2	01/04/2009	30/06/2009	Season
FY2009 - Q3	01/07/2009	30/09/2009	Season
FY2009 - Q4	01/10/2009	31/12/2009	Season
FY2010 - Q1	01/01/2010	31/03/2010	Season
FY2010 - Q2	01/04/2010	30/06/2010	Season
FY2010 - Q3	01/07/2010	30/09/2010	Season

The status bar at the bottom indicates 'Showing 16 Season entries' and the date/time is '26/10/2009 13:01'.

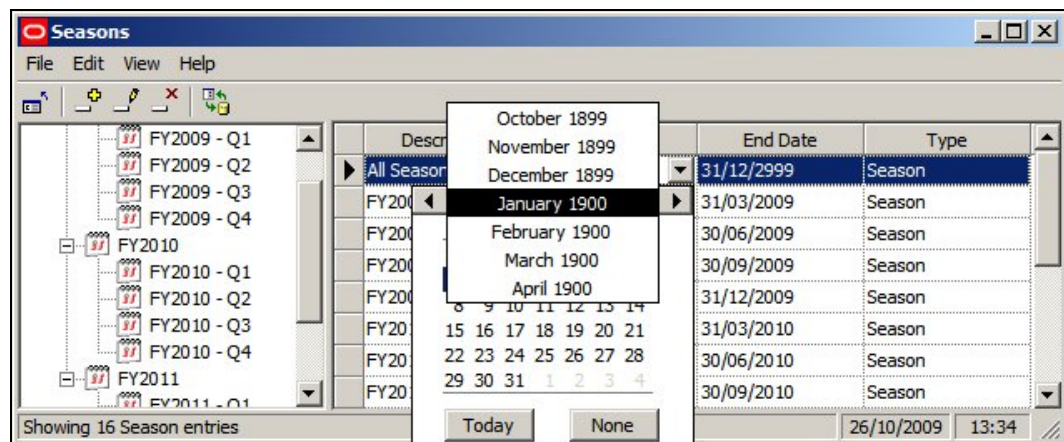
Seasons are arranged in a hierarchy and must have a start and a finish date. Unlike Calendars, seasons can have overlapping date ranges.



In the above example, the year has been divided into four quarters. Seasons can nest within or overlap other seasons. For example the Summer Sale Phase is entirely within Quarter 3, while the Christmas Phase overlaps the year end.

## Configuring Seasons

**Seasons** can be added, edited or deleted by use of the options on the menu bar or tool bar.



### Description

The description is user configurable - any text can be used.

### Start Date and End Date

The Start Date and End Date can be configured using the calendars. These are available as drop down controls. The Start Date and End Date can overlap other seasons.

### Type

Type is selected from the drop down list. These are two options: Season and Phase. These are purely for user convenience and do not have any effect within the software. One way of using then option is to use 'Seasons' to designate regular time intervals (for example Months or Quarters). 'Phases' can then be used to designate irregular time intervals - for example the Christmas Phase might run between 1st November to 4th January.

## Assigning Seasons

**Seasons** are specific time periods used to define when Revisions, Products and Planograms are valid for store planning purposes. If revisions, Products and Planograms are assigned a season, the information can then be used in the Custom SQL for filtering or sorting purposes. This information can also be used in Key Performance Indicators (KPI's).

### Revisions

Revisions can be assigned a season in the Add or Edit Revision dialog box in Store Manager

The screenshot shows the 'Edit Revision' dialog box with the following fields and values:

- Revision ID: 44
- Revision Number: 2
- Revision Description: Med Store - Merchandised
- Revision Directory Name: Med Store - Merchandised
- Status: Proposal
- Season Description: All Seasons (dropdown menu is open showing a list of seasons)
- Birth Date: (empty)
- Death Date: (empty)
- Has Sections: (empty)
- Add Proposal Drawing: (checkbox)

The dropdown menu for Season Description is open, showing the following options:

- All Seasons
- FY2009 - Q1
- FY2009 - Q2
- FY2009 - Q3
- FY2009 - Q4
- FY2010 - Q1
- FY2010 - Q2
- FY2010 - Q3

Information on which season a revision has been assigned to is held in the AVTTB\_REVISION table in the SSN\_ID field. Only a single value can be held, so a revision can only be assigned to a single season.

### Products

Products can only be assigned a season directly in the database, using during data import. Values are added to the AVTTB\_PRODUCT\_SEASON\_LINK table. This links product data in the AVTTB\_PRODUCT\_DEF table with the information in seasons in the AVTTB\_SEASON table.

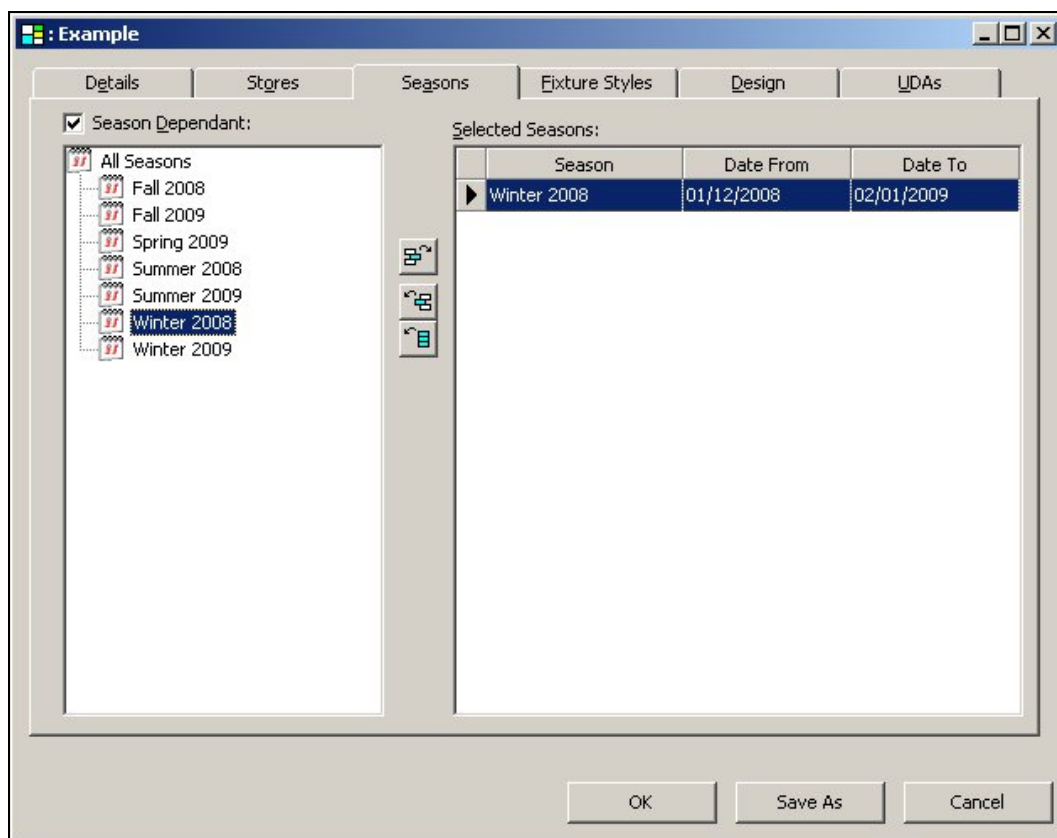


PRD_ID ▲	SSN_ID
5745	18
5747	18
5748	20
5751	19
5750	19

Products can have multiple seasons assigned.

### Planograms

Planograms can be assigned a season in the Planogram Design dialog box in the Merchandiser module.



**Note:** Planogram definitions will typically be imported via data importer. The seasons a planogram is valid for can be assigned during this import definition.

Information on which seasons a planogram has been assigned to is held in the AVTTB\_PLANO\_STORE\_SEASON\_LINK table. Planograms can have multiple seasons assigned.

### Uses for Seasons

Once assigned, seasons can be used for varying purposes. These include:

1. Color coding data that appears in the Object Browser



2. Filtering Data that appears in the Object Grid
3. Classifying Data that is used in KPI's
4. Reporting Purposes

**Color coding data that appears in the Object Browser**

The data that appears in the Properties and Summary windows is powered by Custom SQL. If seasons have been assigned to Revisions, Products and Planograms, it is possible to color code data.

For example, if the Parent revision for the active store plan has been assigned a season, it would be possible to color code the properties for the products or planogram selected in the Object Browser hierarchies in order to show whether the product or planogram selected in the Object Browser has a season compatible with that specified for the parent revision.

**Filtering Data that appears in the Object Grid**

Seasons can be used to filter the data that appears in the Object Grid. This can be either pre-filtered or filtered when in the Object Grid.

**a. Pre-filtering**

If the revision that is acting as a parent for the current store plan has had a season assigned, it is possible to use the custom SQL to pre-filter the data that appears in the Object Grid so that it only populates with products and planograms that have seasons that are compatible with the season set in the parent revision.

**b. Filtering**

If the season is a valid field in the Custom SQL that populates the Object Grid, it is possible for a user to filter the populated by the seasons assigned to it.

**Classifying Data that is used in KPI's**

Key Performance Indicators (KPI's) can be set up to meet customer requirements. It is possible to color code objects in the store plan based on date criteria - including seasons. This is done via the Date Tab of the Key Performance Indicator dialog box in both the Planner and Merchandiser modules.

**Key Performance Indicator**

Details Stores **Date**

☐ Effective Date  
☒ Current Date  
☐ Other Date  
  
☐ Active Date

Data Type: **Week**

- All
- Year
- Season**
- Quarter
- Month
- Week
- Day

OK Cancel

## Importing Seasons

Seasons are stored in the AVTTB\_SEASON table in the database.

	SSN_ID	SSN_PID	SSN_DESC	SSN_TYPE	SSN_CODE	SSN_START_DATE	SSN_END_DATE	ICO_ID
▶	0		All Seasons	0		01/01/1900	31/12/2999	58
	5	0	FY2009	0		01/01/2009	31/12/2009	58
	6	0	FY2010	0		01/01/2010	31/12/2010	58
	7	0	FY2011	0		01/01/2011	31/12/2011	58
	13	5	FY2009 - Q1	0		01/01/2009	31/03/2009	58
	14	5	FY2009 - Q2	0		01/04/2009	30/06/2009	58

This table can be populated by using the Data Importer module as an alternative to entering data manually via the Admin Module.

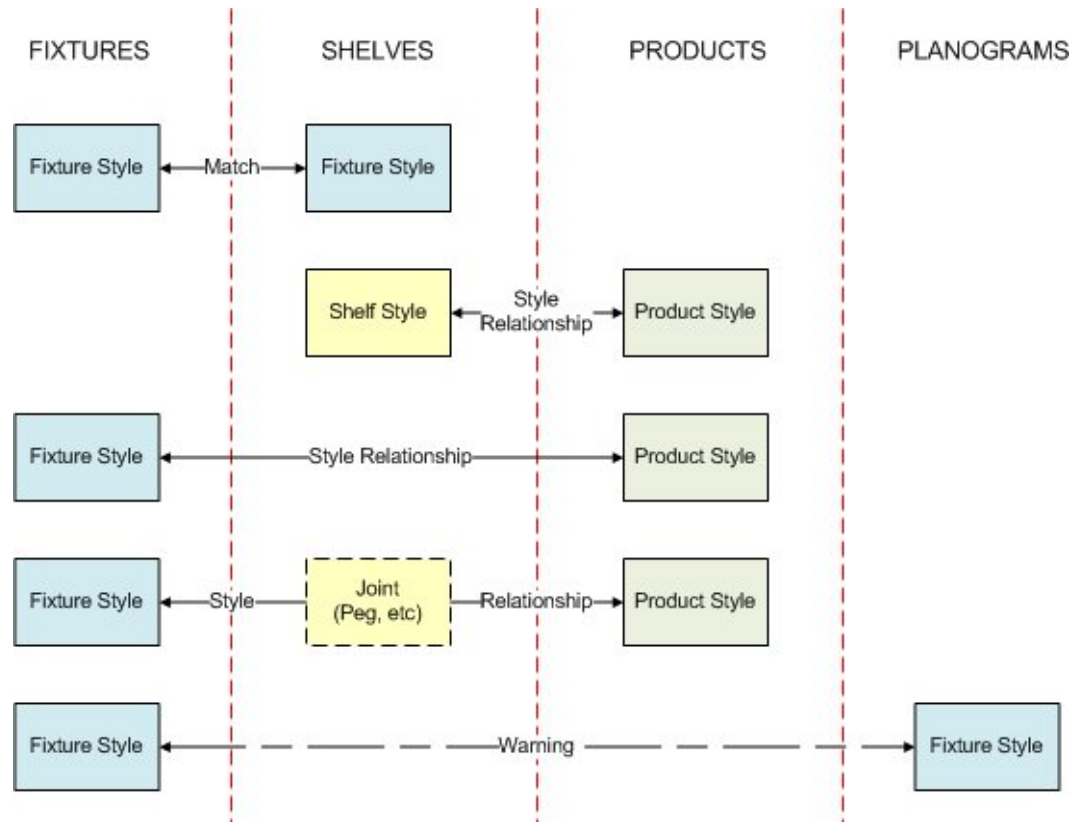
The AVTTB\_SEASONS table must be populated before seasons can be assigned to Revisions, Products and Planograms (AVTTB\_REVISION, AVTTB\_PRODUCT\_SEASON\_LINK and AVTTB\_PLANO\_STORE\_SEASON\_LINK tables).

## Styles

### Overview of Styles

#### Overview

**Styles** are used in the Merchandiser Module as filters, primarily to ensure that products are placed on the correct fixture or shelf. There are a variety of styles and style relationships.



### Fixtures and Shelf Objects

Fixtures have to be assigned a Fixture style in Fixture Studio. Similarly Shelf Objects (shelves, pegs, etc) have to be assigned both a Fixture and a Shelf style in Fixture Studio. When shelving is placed in a fixture in Merchandiser, the Fixture Style assigned to the Fixture must match the Fixture Style assigned to the shelf to allow the shelf to be placed.

### Shelf Objects and Products

Shelves have to be assigned a Shelf style in Fixture Studio. Products (at Display Style level only) are assigned a Product Style in Product Studio. If a relationship between the Shelf and Product Style has been defined in the Administration Module, the Product can be placed on the shelf. If a relationship has not been defined, the product cannot be placed in the Merchandiser Module. (Display styles cannot be placed in the Planner Module).

### Fixtures and Products

Fixtures have to be assigned a Fixture style in Fixture Studio. Products (at Display Style level only) are assigned a Product Style in Product Studio. If a relationship between the Fixture and Product Style has been defined in the Administration Module, the Product can be placed directly onto the fixture. If a relationship has not been defined, the product cannot be placed in the Merchandiser Module. (Display styles cannot be placed in the Planner Module).

### Joints

Some products cannot be placed directly onto fixtures, but must be placed into shelf objects such as pegs. There are two ways of achieving this:

1. Place the shelf object (i.e. peg) first, then place the product
2. Place the product and shelf object simultaneously - joints

### Planograms

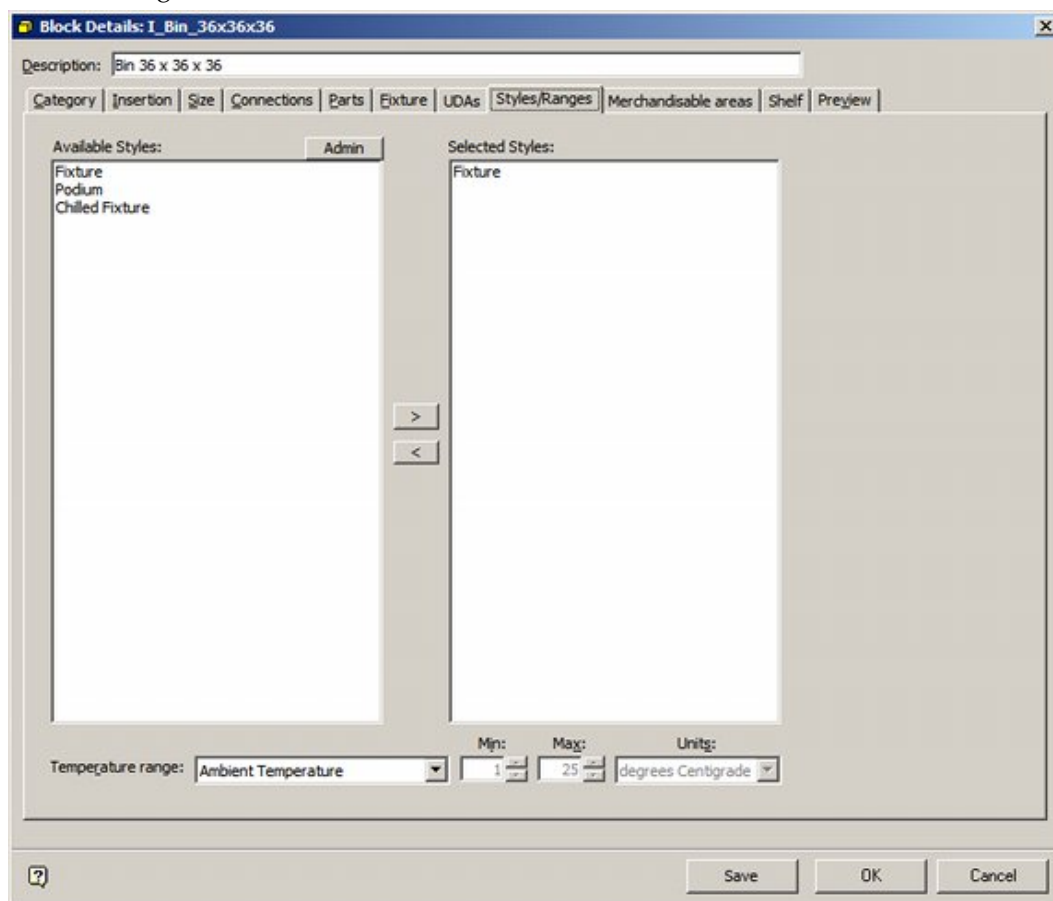
Fixtures have to be assigned a Fixture style in Fixture Studio. Planograms are assigned a Fixture Style in the Planogram Design dialog box in the Merchandiser Module. If the Fixture Style of the Planogram being placed does not match the Fixture Style of the first of the selected fixtures, a warning will be given. The user can then accept the warning, or override it and place the planogram.

## Where Styles are Assigned

**Styles can be assigned** to Fixtures, Shelf Objects, Products and Planograms.

### Fixtures

Fixture Styles are assigned in the Fixture Studio Module in the Styles tab of the Block Details dialog box.



A Fixture is required to have a Fixture style assigned. Only Fixture Styles will be available for selection in the Styles/Ranges Tab.

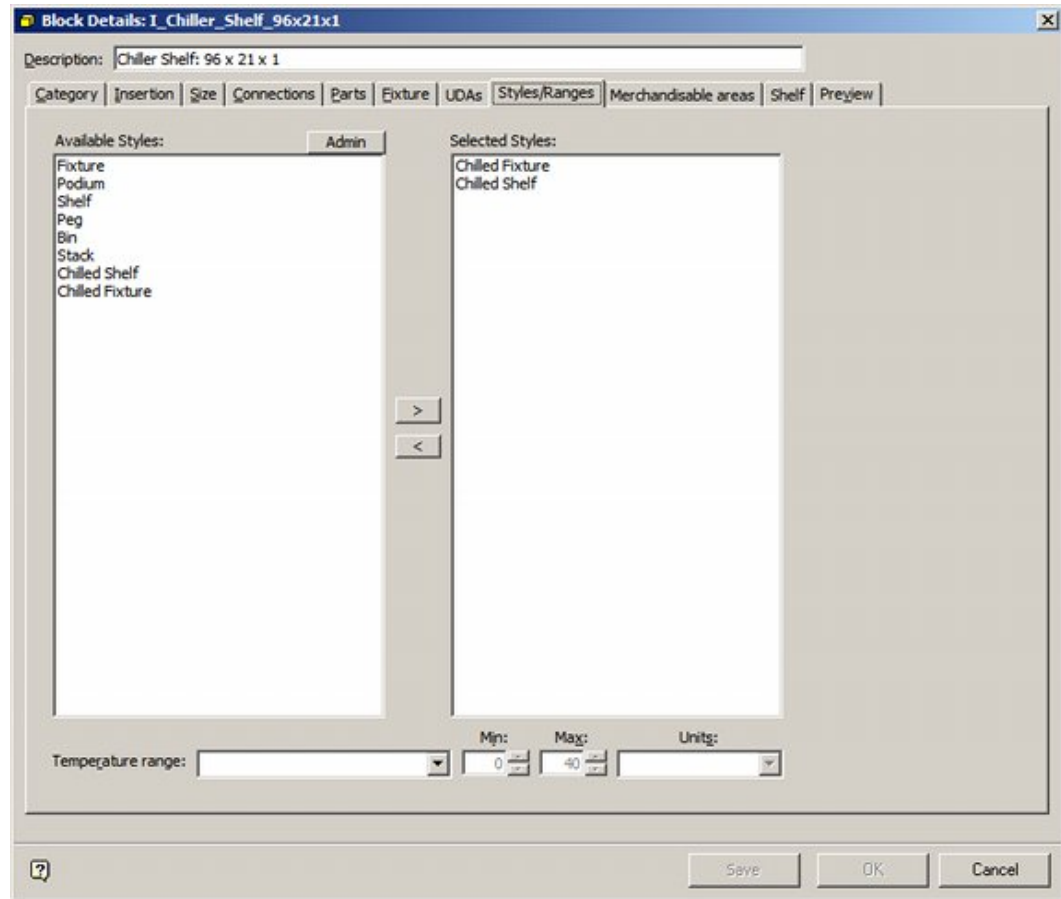
---

**Note:** Whether an object is designated as a fixture is set in the Categories tab.

---

### Shelf Objects

Both Fixture and Shelf Styles are assigned in the Fixture Studio Module in the Styles tab of the Block Details dialog box.



A Shelf Object is required to have both Fixture and Shelf styles assigned. Both Fixture and Shelf Styles will be available for selection in the Styles/Ranges Tab.

**Note:** Whether an object is designated as a Shelf Object is set in the Categories tab.

### Products

Only Products at Display Style Level can be assigned Styles. This is done in the Styles Tab of the Display Style dialog box in Product Studio

**Product Display Style - Shelf Display**

Name: Shelf Display

Description: Brand AA 1 litre Apple White - Shelf Display

Client Code:  Manufacturer: Generic

UPC:  Display Style Type: Unit

Code:  Quantity: 1

Size & Shape | **Styles** | Images | Peg Holes

Available Styles: Hung Product, Specialist or Other Product

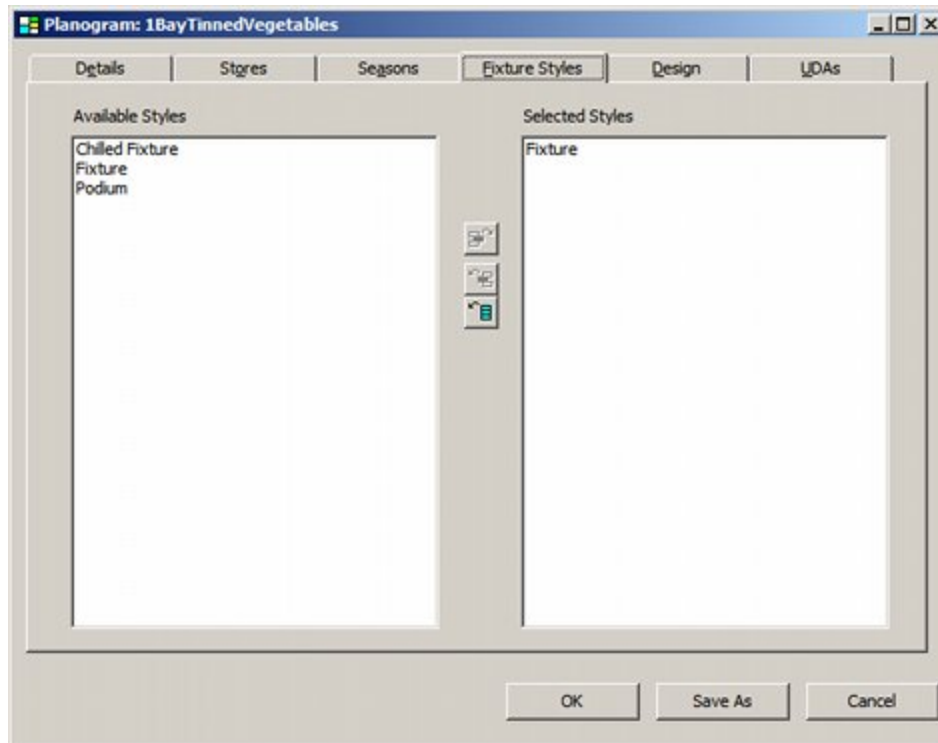
Selected Styles: General Product

OK Cancel

Only Product Styles will be available for Selection.

### Planograms

Planograms are assigned Fixture Styles in the Planogram Design dialog box in the Merchandiser Module.

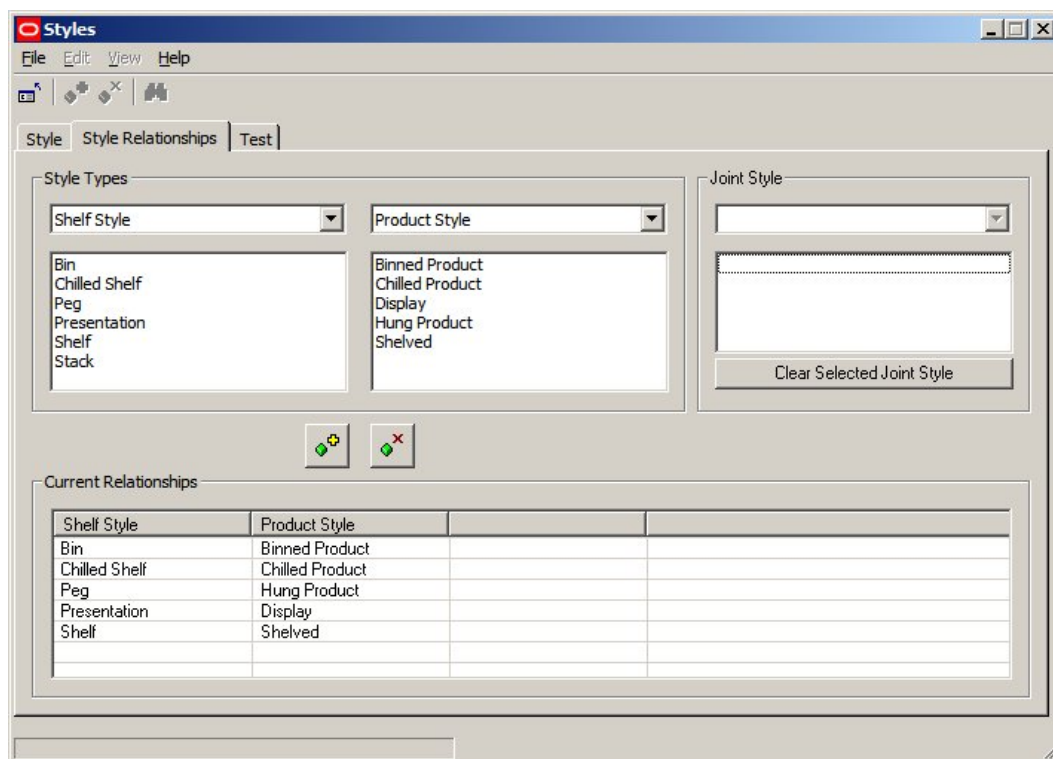


Only Fixture Styles will be displayed.

### Styles and Style Relationships

**Style Relationships** are set up within the Styles option in the Administration module. They control:

1. What products can be placed on what fixture
2. What products can be placed on what shelf
3. What products can be placed on what fixture using a specified shelf object (joints)



Style relationships must be set up before products are placed in Merchandiser.

## Preferred Styles

Preferred Styles are used on Shelf Objects. They enable automatic switching of display styles for a SKU so that the preferred Display Style is placed on a shelf object.

An example would be if electric kettles were available in two display styles: Boxed and Presentation. The Presentation Display Style would typically be for a electric kettle that has been taken out of its box and was being displayed on a shelf above the boxed electric kettles. The 'presentation' electric kettle would be used to show customers what the electric kettle looked like, the boxed' electric kettles would be purchased by customers

An example of this would be a fixture with five shelves on it. The top shelf might contain examples of 'presentation' goods such as electric kettles, electric toasters, bread makers and toasters. The four shelves below would contain respectively boxed electric kettles, electric toasters, bread makers and toasters. for purchase.

By setting the preferred style of the top shelf to accept 'Presentation' Display Styles and the preferred styles of the shelves below to accept 'Boxed' Display Styles, the user can ensure that the correct form of the merchandise goes onto the shelves. If an attempt is made to put 'Presentation' Display Styles onto a shelf that prefers 'Boxed' Display Styles, then the Display Style will automatically be switched to the correct one.

The full process for using preferred styles is

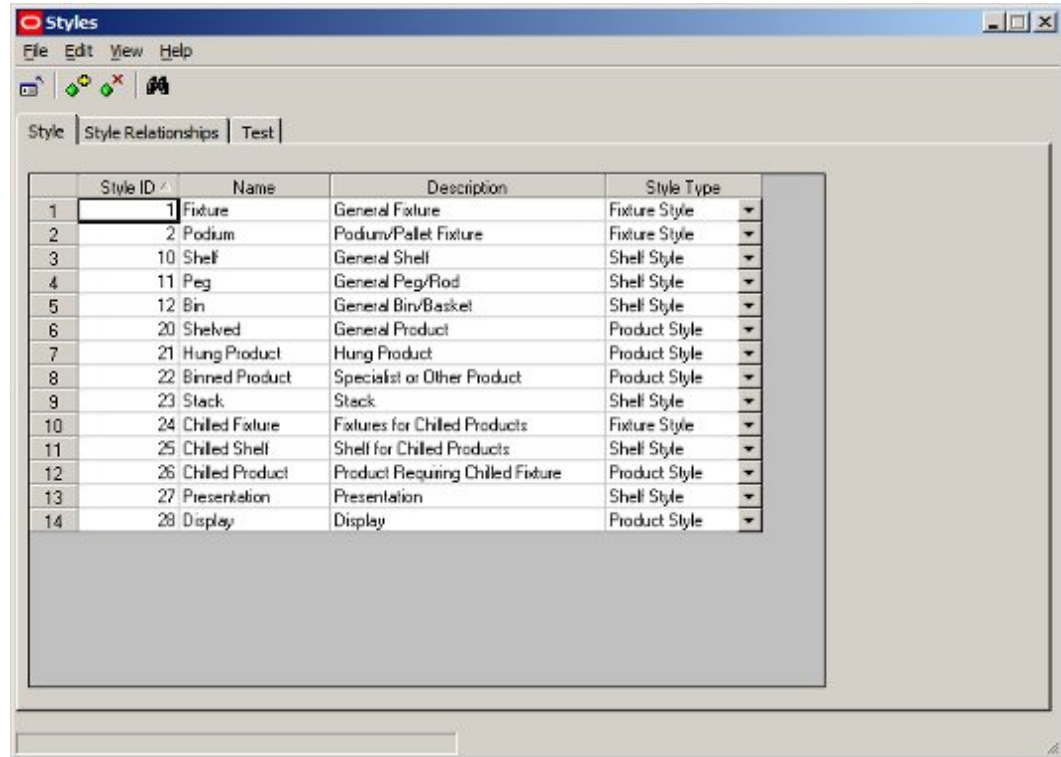
1. Add Appropriate Styles in Admin
2. Set up Style Relationships in Admin
3. Assign Styles to Shelf Objects in Fixture Studio
4. Assign Styles to Display Style level products in Product Studio
5. Set up Preferences for Shelves



6. Drag and drop Display Style products onto shelf - preferred style should be chosen if not correct

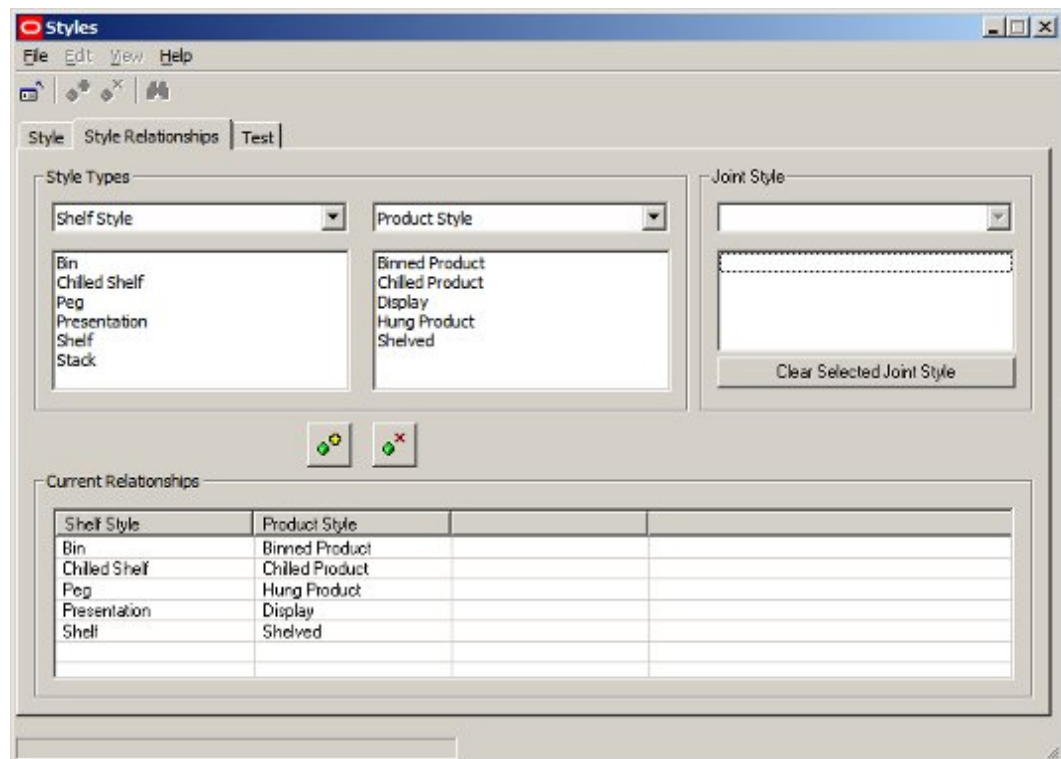
### Add Appropriate Styles in Admin

The appropriate styles have to exist in the Style tab of the Styles dialog box in the Administration module



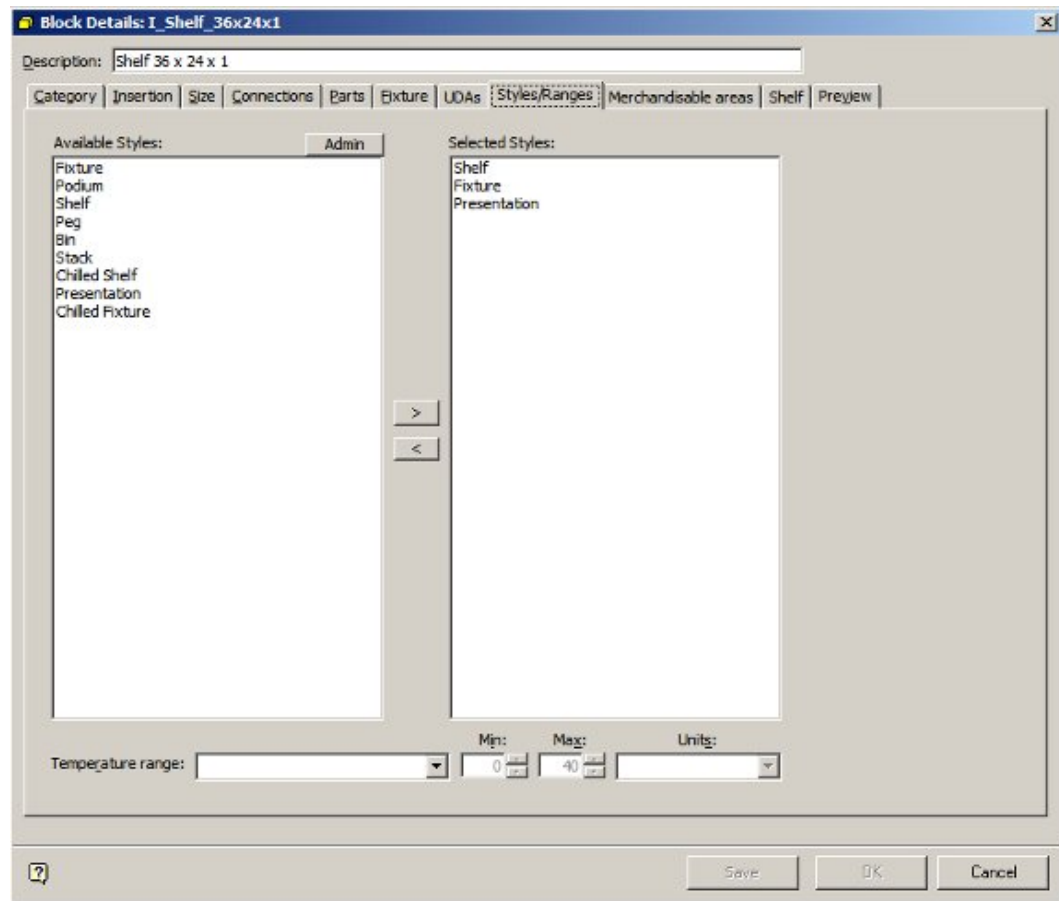
### Set up Style Relationships in Admin

The appropriate style relationships have to exist in the Style Relationship tab of the Styles dialog box in the Administration module



### Assign Styles to Shelf Objects in Fixture Studio

Shelf styles have to be assigned to the shelf object in Fixture Studio. A minimum of two shelf styles are required for Preferred Styles to work.



### Assign Styles to Display Style level products in Product Studio

Product Styles are assigned in Styles Tab of the Product Display Style dialog box in Product Studio.

**Product Display Style - Shelf Display**

Name: Shelf Display

Description: Brand AA 1 litre Apple White - Shelf Display

Client Code:  Manufacturer: Generic

UPC:  Display Style Type: Unit

Code:  Quantity: 1

Size & Shape | **Styles** | Images | Peg Holes

Available Styles: Hung Product, Specialist or Other Product

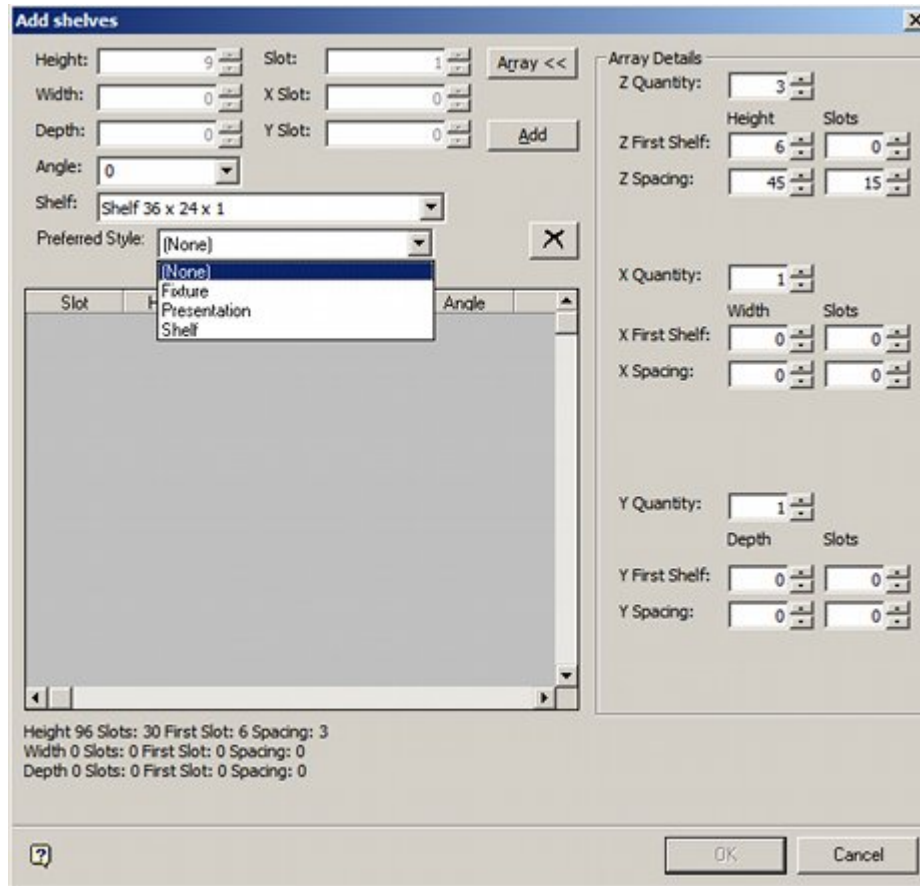
Selected Styles: General Product

OK Cancel

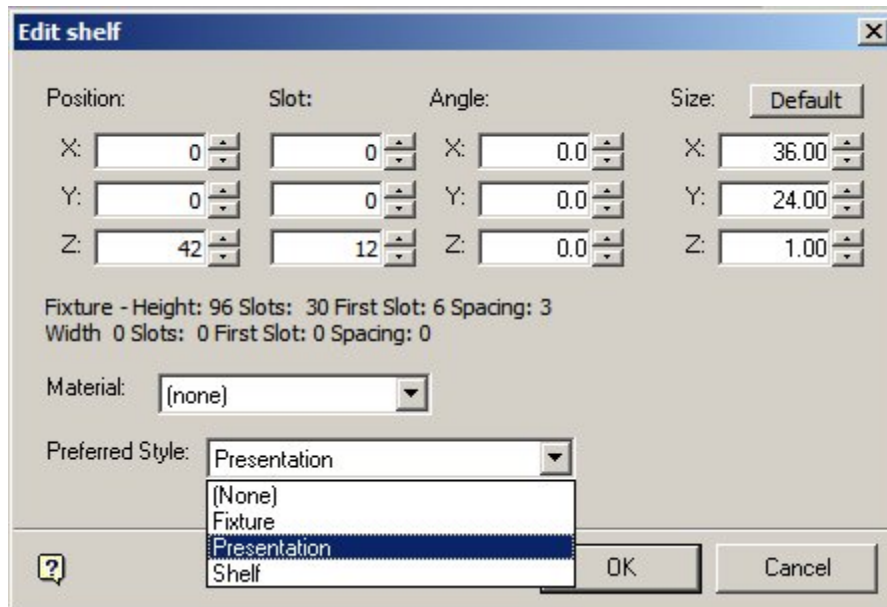
### Set up Preferences for Shelves

The preferences for shelves are set in the Merchandiser module. There are two ways of doing this: on adding the shelves to a fixture, or by editing a specific shelf.

When adding shelves to a fixture, the preferred style can be set using the drop down list in the Add Shelves dialog box.



Once shelves have been added, the Preferred Style can be edited using the Preferred Style drop down list in the Edit Shelf dialog box.



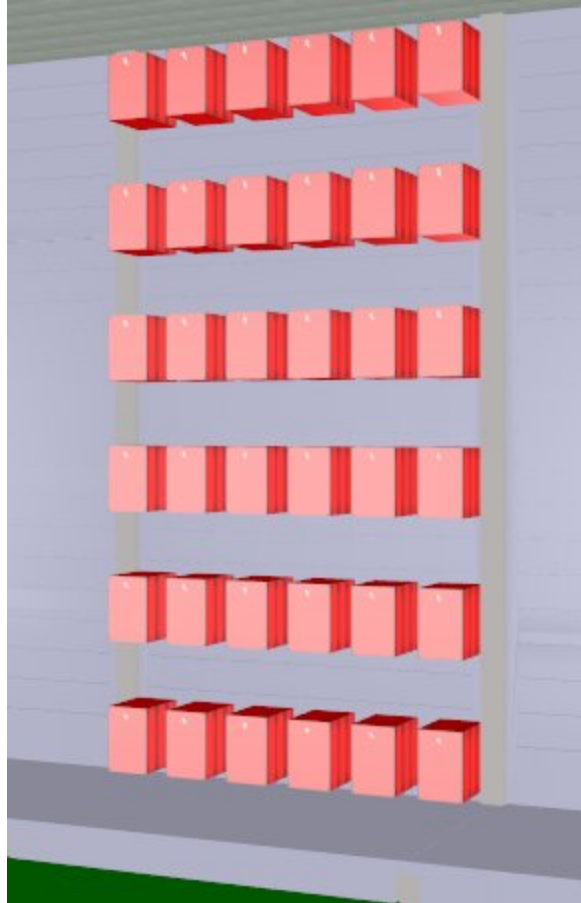
**Drag and Drop Display Style products onto shelf - preferred style should be chosen if not correct**

Once preferred styles have been set for a shelf, they can be used to determine what display style for a specific SKU is placed. If there are several alternatives, dragging and

dropping any display style onto a shelf from that SKU will result in the type of display style being checked, and if necessary changed to the preferred style.

### About Joints

**Joints** are a special type of Style Relationship. They allow a product to be placed directly onto a compatible fixture at the same time as the associated shelf object that the product will be placed on is added.



In the example above products have been directly placed into a slatwall using pegs. Without a joint, the pegs would have to have been placed first, then merchandised with product in a second operation.

Prior to products being added via joints, the following must be true:

1. The Fixture that will support the shelf objects the products are being added to must have a Fixture Style assigned in Fixture Studio
2. The Shelf Object the product will be added to must have a Shelf Style assigned in Fixture Studio
3. The Product must have a Product Style assigned in Product Studio
4. The appropriate Joint (Style Relationship) must be set up in the Styles option within the Admin Module

To add a product using joints requires the following steps:

1. Drag the product from the Object Browser or Object Grid and drop onto the required Fixture.
2. The Add Shelves dialog box will appear allowing users to specify details of the shelf objects to be added.

Slot	Height	Width	Depth	Angle	
0	9.5	3.00	-1.00	0.00	Peg
2	21.5	3.00	-1.00	0.00	Peg
4	33.5	3.00	-1.00	0.00	Peg
6	45.5	3.00	-1.00	0.00	Peg
8	57.5	3.00	-1.00	0.00	Peg
10	69.5	3.00	-1.00	0.00	Peg
0	9.5	9.00	-1.00	0.00	Peg
2	21.5	9.00	-1.00	0.00	Peg
4	33.5	9.00	-1.00	0.00	Peg
6	45.5	9.00	-1.00	0.00	Peg
8	57.5	9.00	-1.00	0.00	Peg
10	69.5	9.00	-1.00	0.00	Peg
0	9.5	15.00	-1.00	0.00	Peg
2	21.5	15.00	-1.00	0.00	Peg
4	33.5	15.00	-1.00	0.00	Peg
6	45.5	15.00	-1.00	0.00	Peg

Height 69.5 Slots: 10 First Slot: 9.5 Spacing: 6  
Width 36 Slots: 5 First Slot: 3 Spacing: 6  
Depth -1 Slots: 0 First Slot: -1 Spacing: 0

**Note:** this dialogue box will not appear if the Add Products Silently option is on in the Edit Menu in Merchandiser.

3. After the Shelf Object details have been specified and the OK button clicked, the Add Products dialog box will appear.

**Own Brand Wine Gums 200g Packet**

Quantity Alignment Detail Orientation Properties

Facings: ☒ One ☒ Fill ☐ Other

Depth: ☐ One ☒ Fill ☐ Other

Stack: ☐ One ☒ Fill ☐ Other

Required:

Grouped: ☒

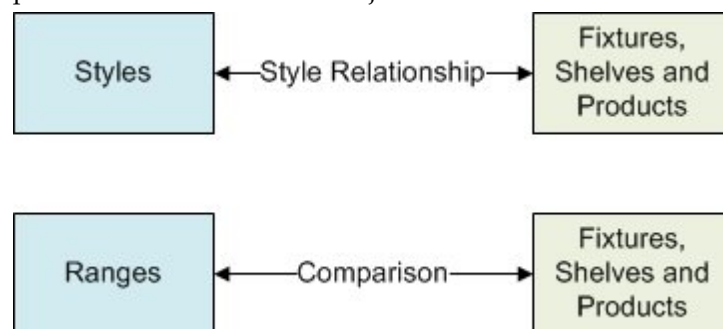
**3 Wine Gums 200g Packet products.**

OK Cancel

4. After specifying the quantity, alignment, etc, and clicking the OK button, the products and shelf objects will simultaneously place on the selected fixture.

### About Styles and Ranges

**Styles and Ranges** can be used interchangeably as filters to determine if products can be placed on Fixtures or Shelf Objects..



#### Styles

If styles have been assigned to:

1. Fixtures and Products
2. Shelf Objects and Products

and the requisite Style Relationships exist, then styles can be used to determine whether a product can be placed on either a fixture or a shelf object.

#### Ranges

If Ranges have been assigned to:

1. Fixtures and Products
2. Shelf Objects and Products

and the ranges are compatible, then they can be used to determine whether a product can be placed on either a fixture or a shelf object.

#### Example

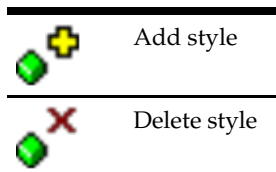
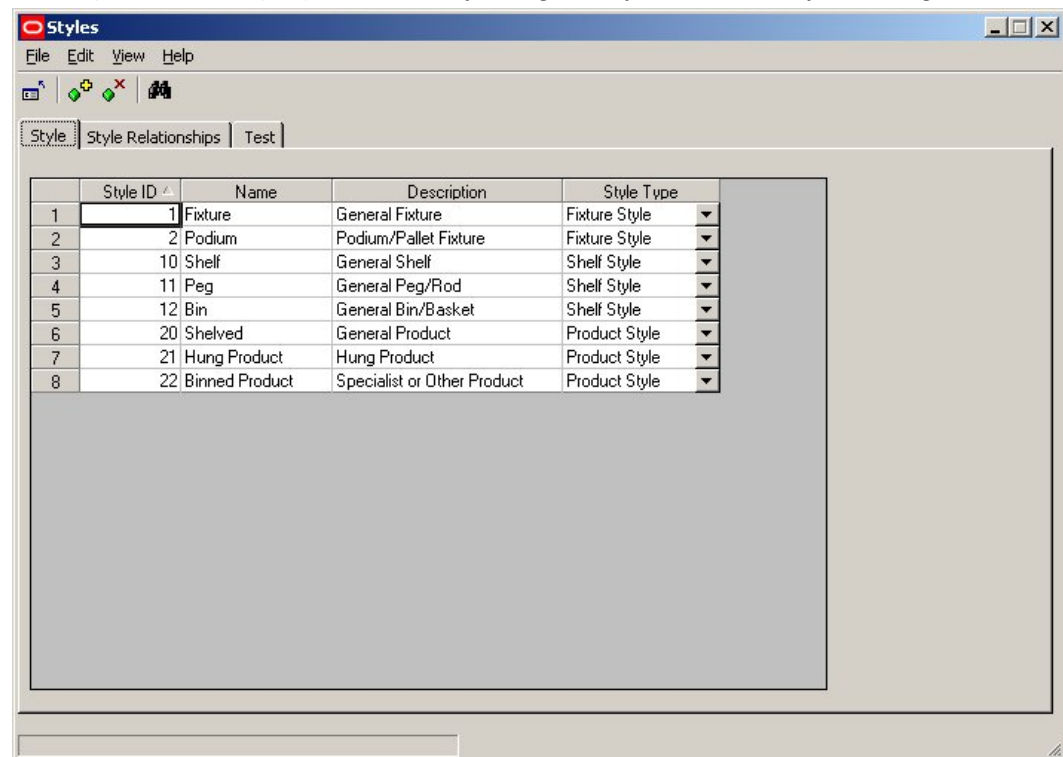


1. It would be possible to create Chilled Fixture, Chilled Shelf and Chilled Product styles and assign them appropriately to Fixtures, Shelf Objects and Products. The appropriate style relationships could then be set up, and would serve to determine whether products could or could not be placed.
2. It would also be possible to create Basic Fixture, Basic Shelf and Basic Product styles that could be assigned to all Fixtures, Shelf Objects and Products. The pertinent Fixtures, Shelf Objects and Products could then be assigned the 'Frozen' temperature range. In this example, the Range would serve to determine whether products could or could not be placed.

## Using Styles

### Adding and Deleting Styles

Adding and Deleting Styles is done by using the Style tab in the Styles dialogue box.



### Adding a Style

To add a style, click on the Add Style icon. A new line will be added in the styles table.

The Style ID is a fixed, sequential number allocated when the style is created.

The Name and Description will initially read Style11 and Description11, where the number is that of the style being created. These can be edited to the style name and description required.

The Style type can be selected from a drop down list.

10	14 Multi	Multipacks allowed	Shelf Style
11	16 Consumer Pack	Consumer Pack	Product Style
12	17 Multipack	Multipack	Product Style
13	18 Pallet box	Pallet box	Product Style
14	20 Fixture pallet	Fixture only holds pallet boxes	Fixture Style
			Module
			Fixture Style
			Shelf Style
			Product Style

Currently only Fixture, shelf and Product styles are active.

### Deleting a Style

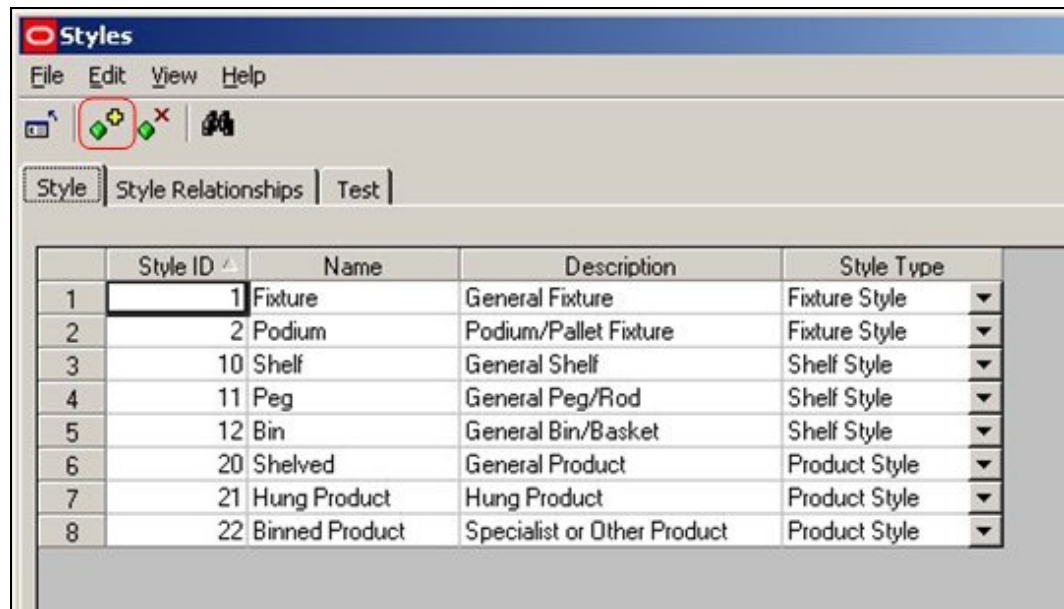
Styles can be deleted by highlighting a style and clicking on the Delete Style icon. If not in use, the style will be deleted. If in use, a warning will appear. This indicates that the style has been assigned to either a fixture, shelf, product or planogram.



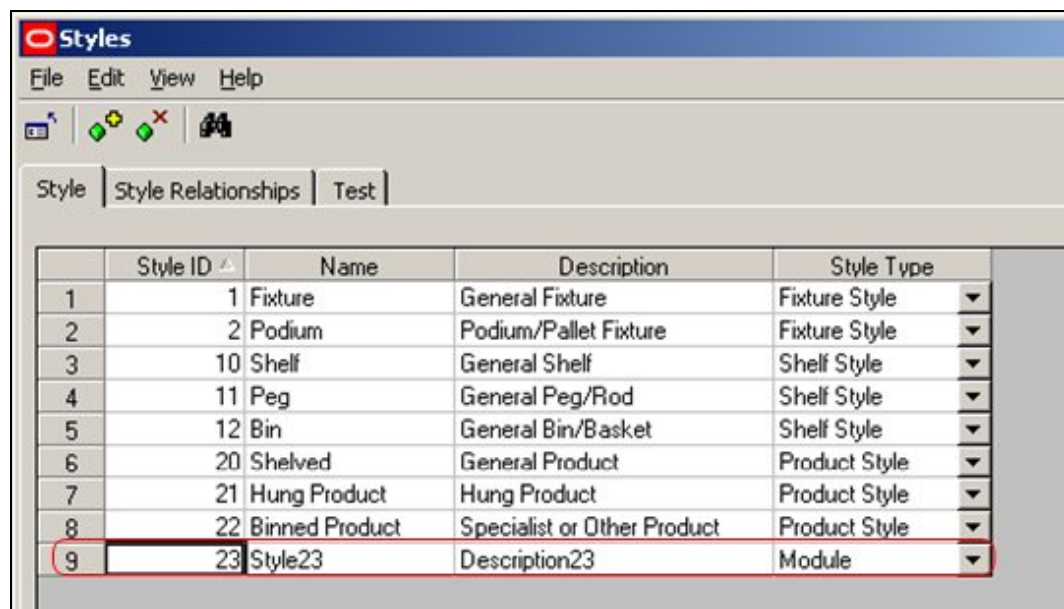
The style must then first be changed in the respective fixture, shelf, product or planogram before it can be deleted.

### Example of Adding a Style

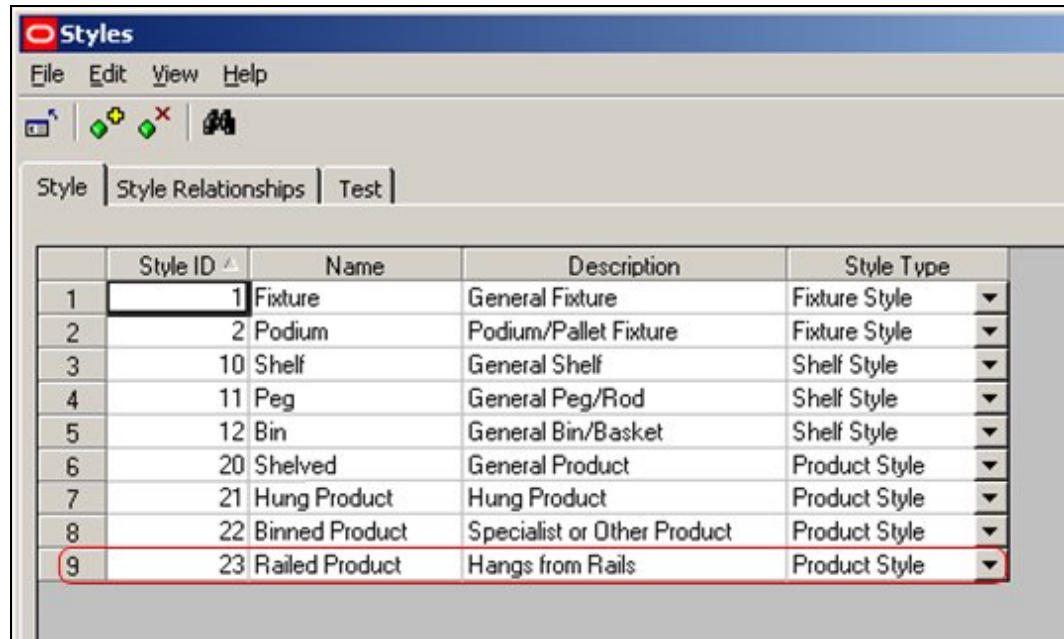
To **Add a Style** to the available list, open the Style option in the Admin Module. Use the Style Tab and click on the Add Style Icon (circled).



This will add another line to the information grid (circled).



Edit this line until it has the desired information.



Finally, exit to save the styles.

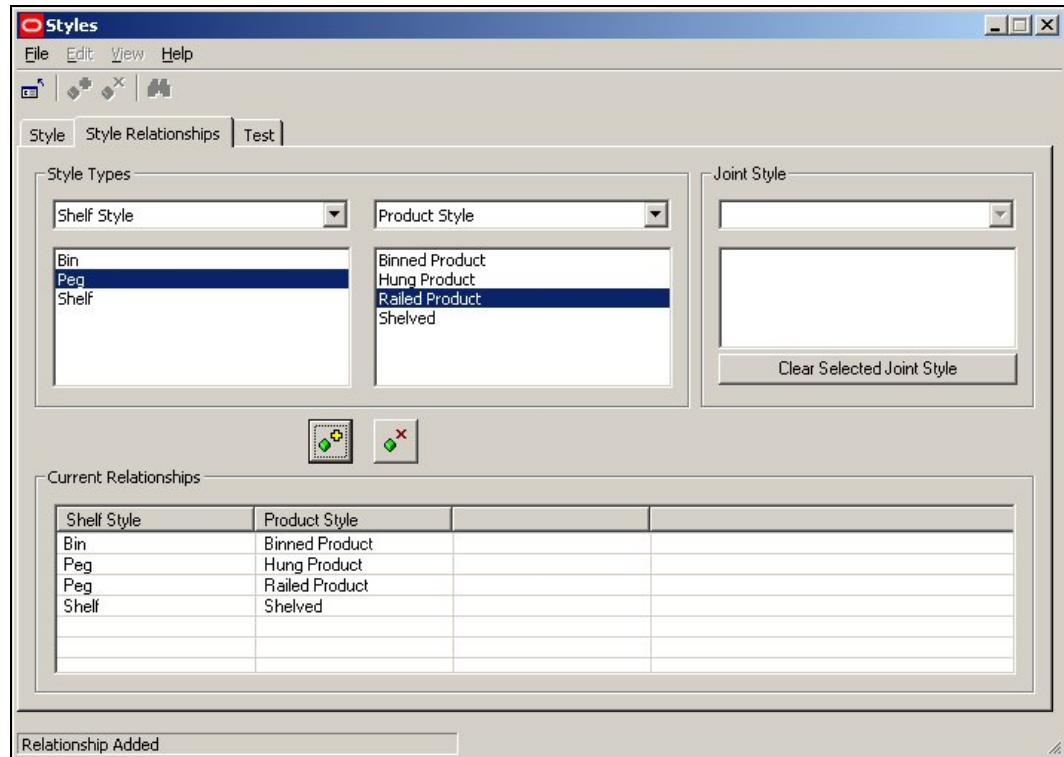
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**Note:** There is a known issue with the Styles option at present. Information is temporarily lost if a second style is added immediately after the first. To overcome this close the Styles dialogue box after each style is added, then re-open it to add the next.

---

### Adding and Deleting Style Relationships

**Style Relationships** can be added and deleted by using the Style Relationships tab in the Styles dialogue box.



Add style  
relationship



Delete style  
relationship

### Adding a Style Relationship

To add a style relationship, first select the style types which it is desired to set up a relationship with. This can be done from the drop down lists – for example it might be required to associate a Shelf style with a Product style.

Next, select the specific types of styles from the lists provided – for example it might be required to associate the Pallet Shelf Style with the Multipack product style.

Finally, click on the Add Style Relationship icon to add the relationship. It will then appear in the list of current relationships.

Valid Style relationships that can be set up are:

Style Relationship	Comment
Fixture - Product	Determines which products can be placed on which fixtures
Shelf Product	Determines which products can be placed on which shelves
Joints	Joints allow products to be placed on fixtures while simultaneously placing any required shelf objects (i.e. pegs, etc). Joints set up the relationship between fixtures, certain types of shelf objects and products.

## Deleting a Style Relationship

Styles relationships can be deleted by highlighting a style and clicking on the Delete Style Relationship icon.

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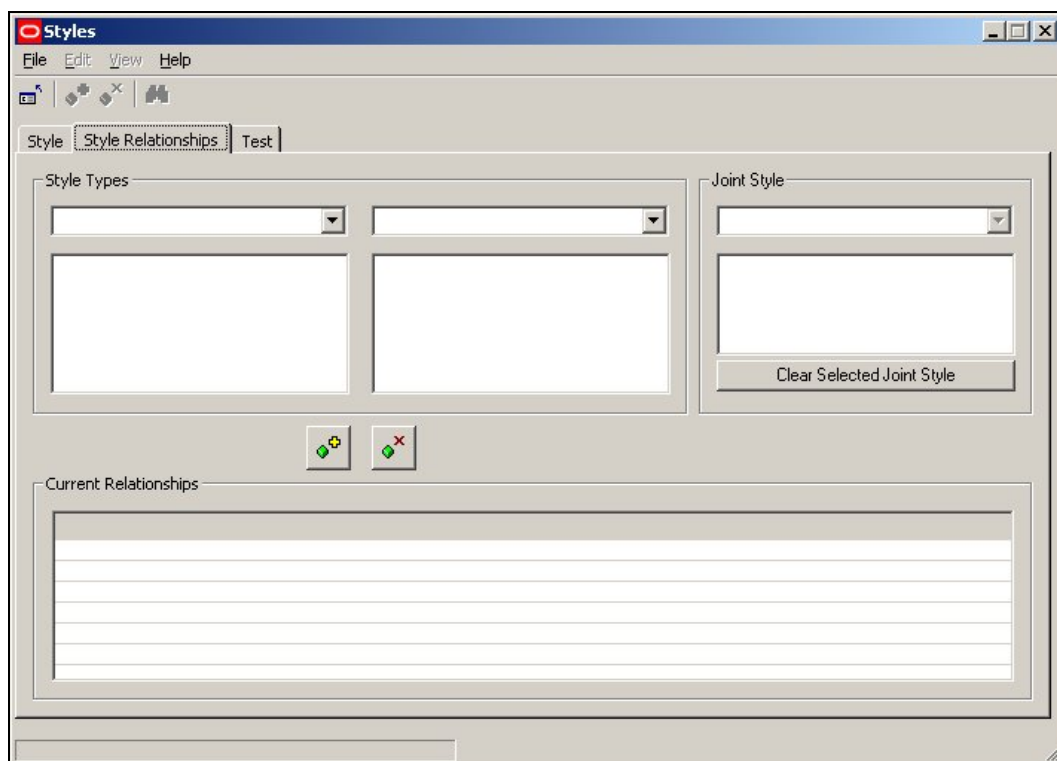
**Note:** Style relationships in use can be deleted without any warning being given. This will not affect any objects placed before the relationship was deleted, but if further objects are to be placed using this relationship, it must be reinstated before they are.

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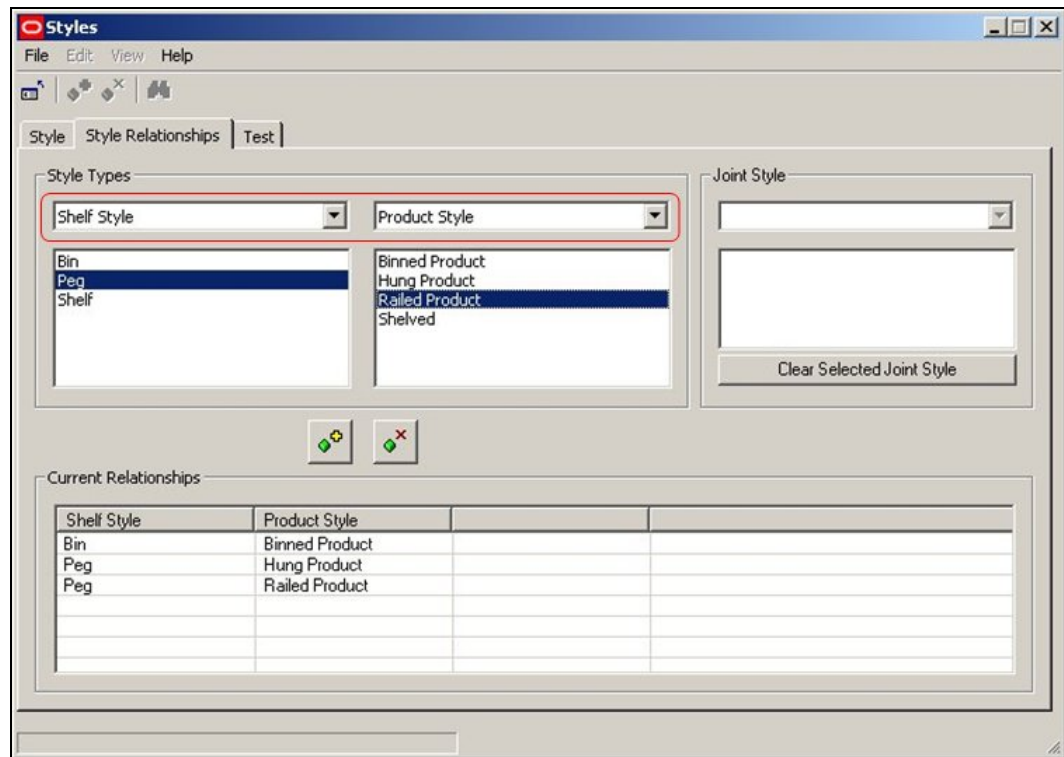
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## Example of Adding a Style Relationship

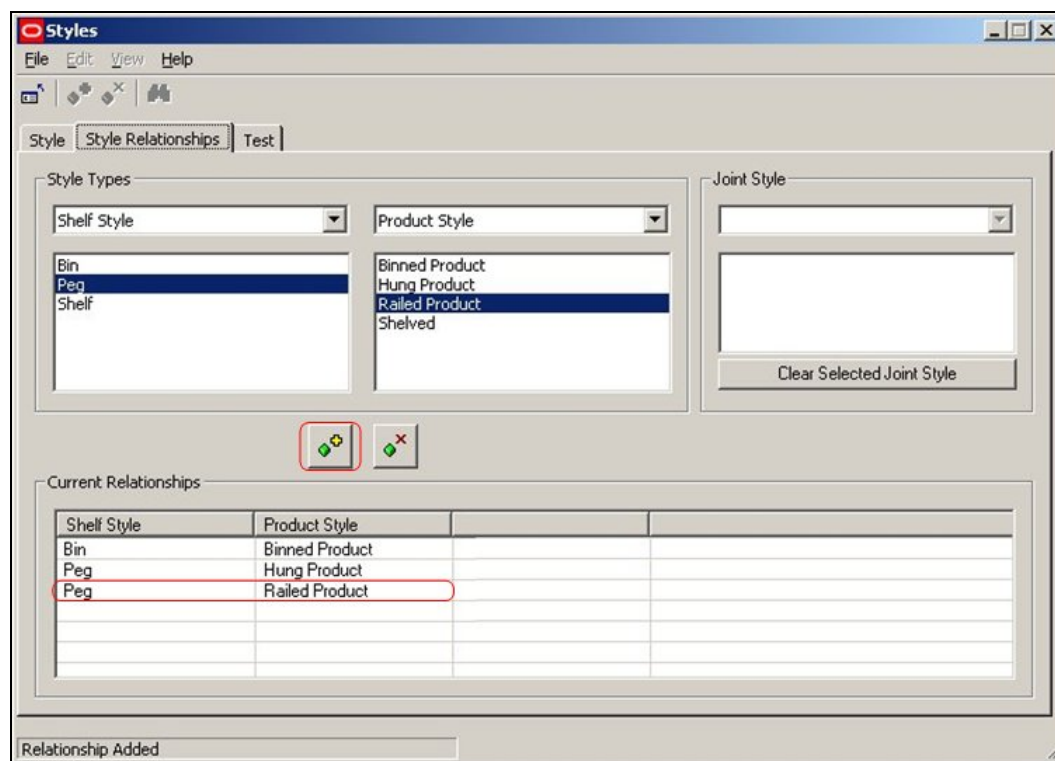
To **Add Style Relationships** to the available list, open the Styles option in the Admin Module. Click on the Style Relationship Tab.



Set the options as required. First select the required style types from the drop down list. Next highlight the styles it is desired to have a relationship with.



Finally, click on the Add Style Relationship icon. This will cause the Style to be added to the list of available Style relationships.

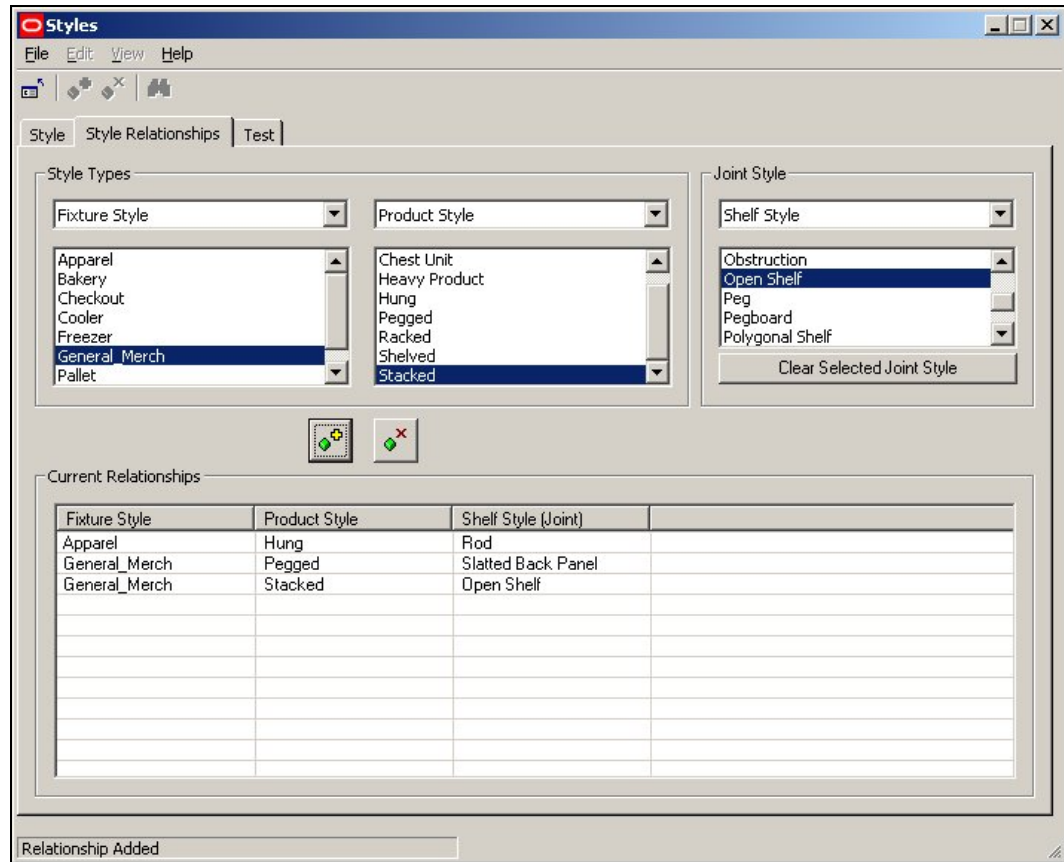




**Note:** If we need place products directly onto a fixture, a Style Relationship would be required between the Fixtures Style and the Product Style. An example of this would be putting products of Boxed Style onto fixtures of Pallet Style.

## Adding and Deleting Joints

Adding and Deleting Joints is done by using the Style Relationships tab in the Styles dialogue box.





	Add joint relationship
	Delete joint relationship

### Adding a Joint

To add a joint, first select the style types which it is desired to set up a relationship with. First select Fixture Style in the left hand drop down list. Next select Product Style in the central drop down list. Finally select Shelf Style in the right hand drop down list.

Next highlight the required styles in each of the three lists. (For example Metal as a Fixture Style, Hung as a Display Style and Peg as a Shelf Style.

Finally, click on the Add Joint Relationship icon to add the relationship. It will then appear in the list of current relationships.

### Deleting a Joint

Joints can be deleted by highlighting a style and clicking on the Delete Style Relationship icon.

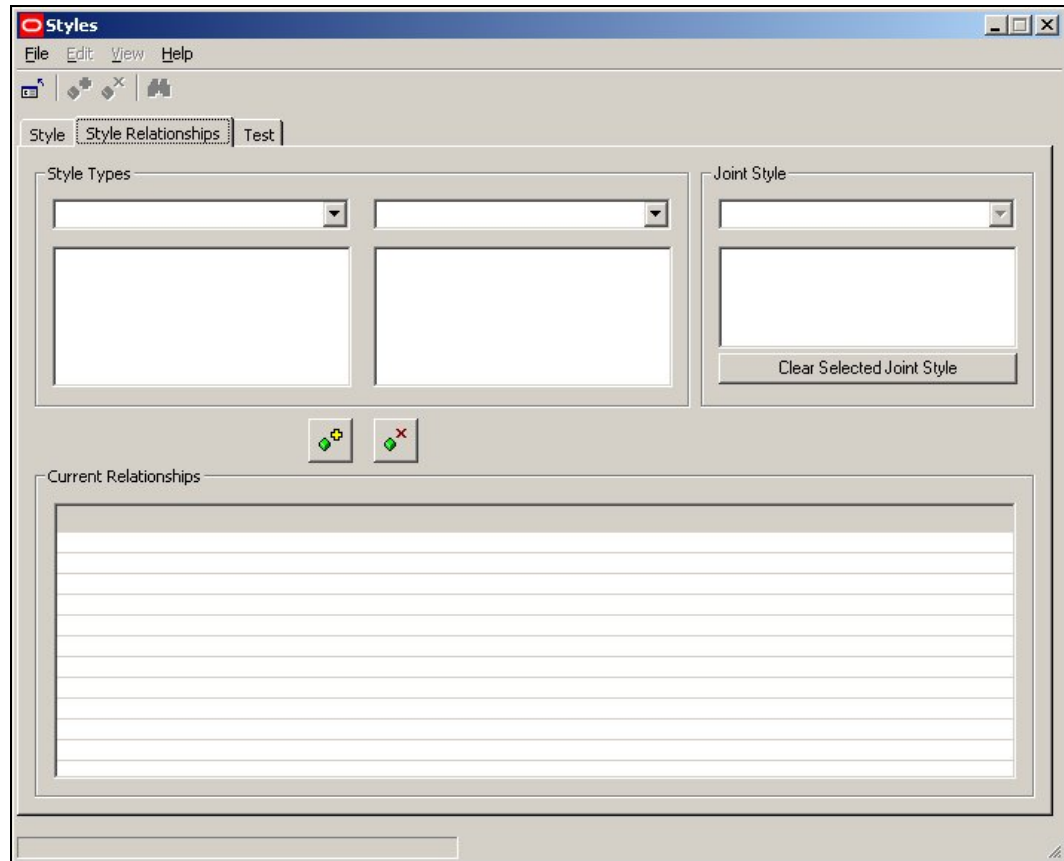
---

**Note:** Joints in use can be deleted without any warning being given. This will not affect any objects placed before the relationship was deleted, but if further objects are to be placed using this relationship, it must be reinstated before they are.

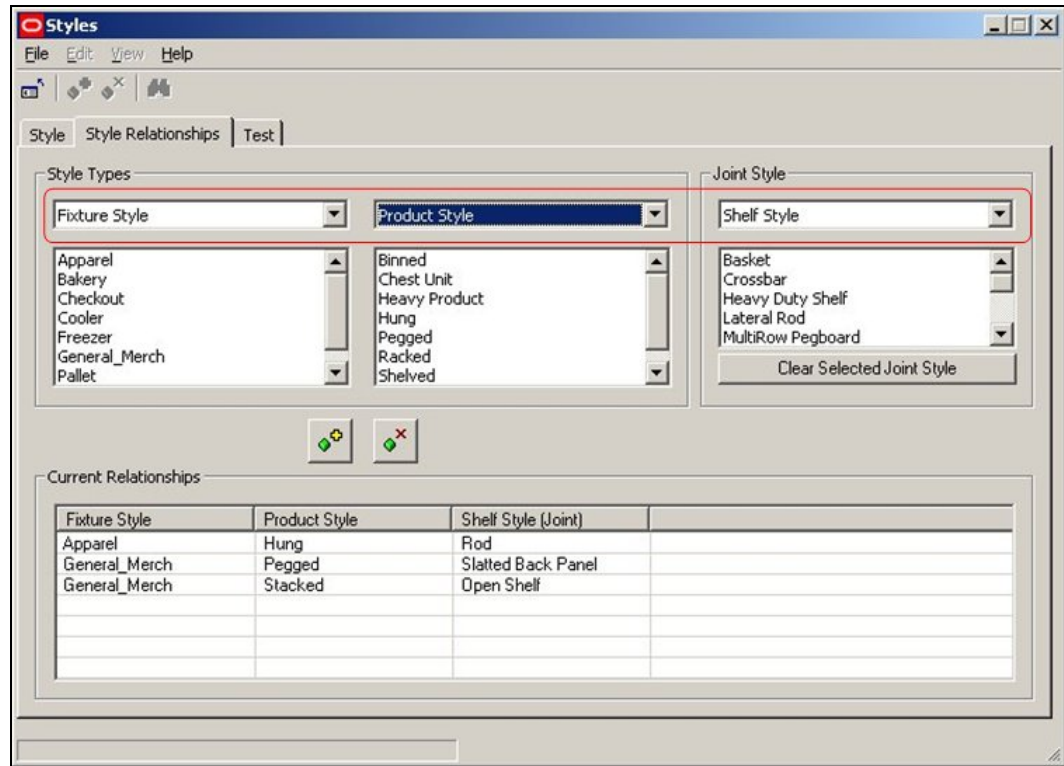
---

### Example of Adding a Joint

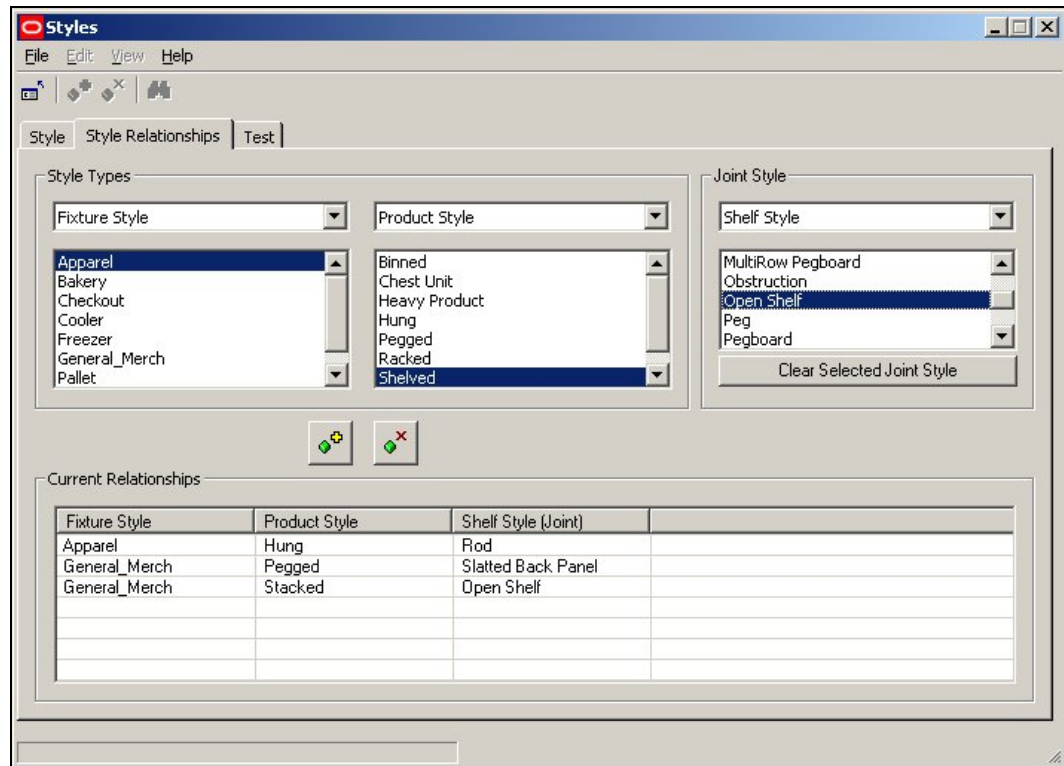
To **Add a Joint** to the available list, open the Styles option in the Admin Module. Click on the Style Relationship Tab.



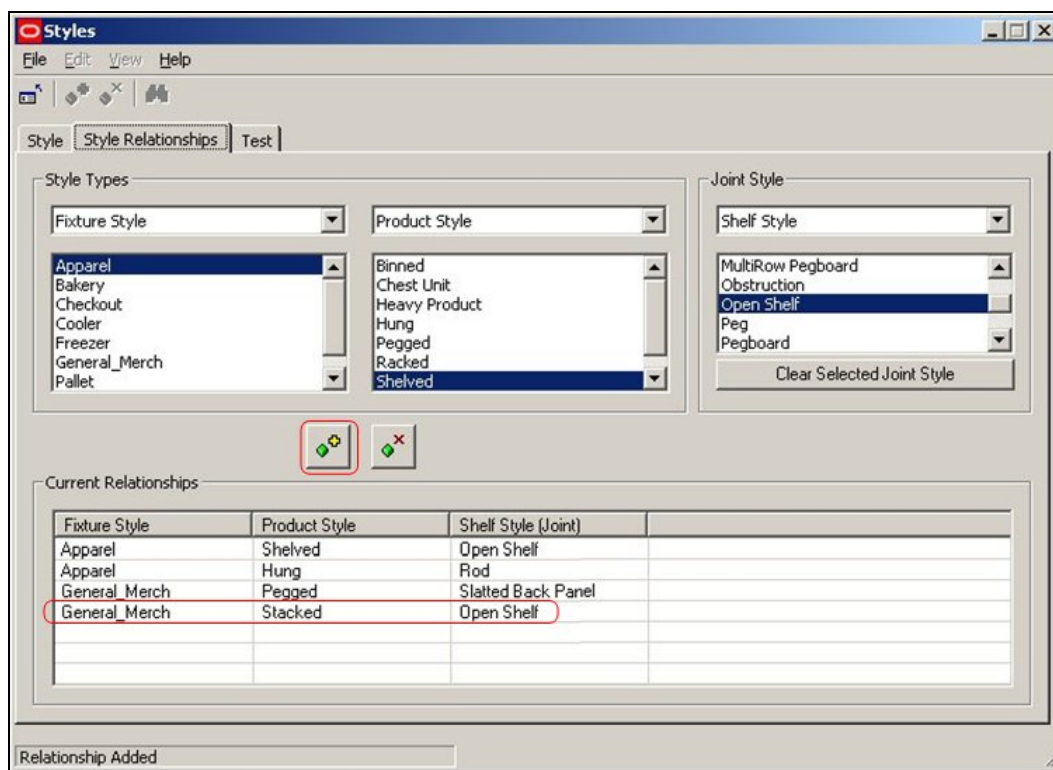
First select Fixture Style in the left hand drop down list. Next select Product Style in the central drop down list. Shelf Style will automatically appear in the right hand drop down list.



Next highlight the required styles in each of the three lists.



Finally, click on the Add Joint Relationship icon to add the relationship. It will then appear in the list of current relationships.



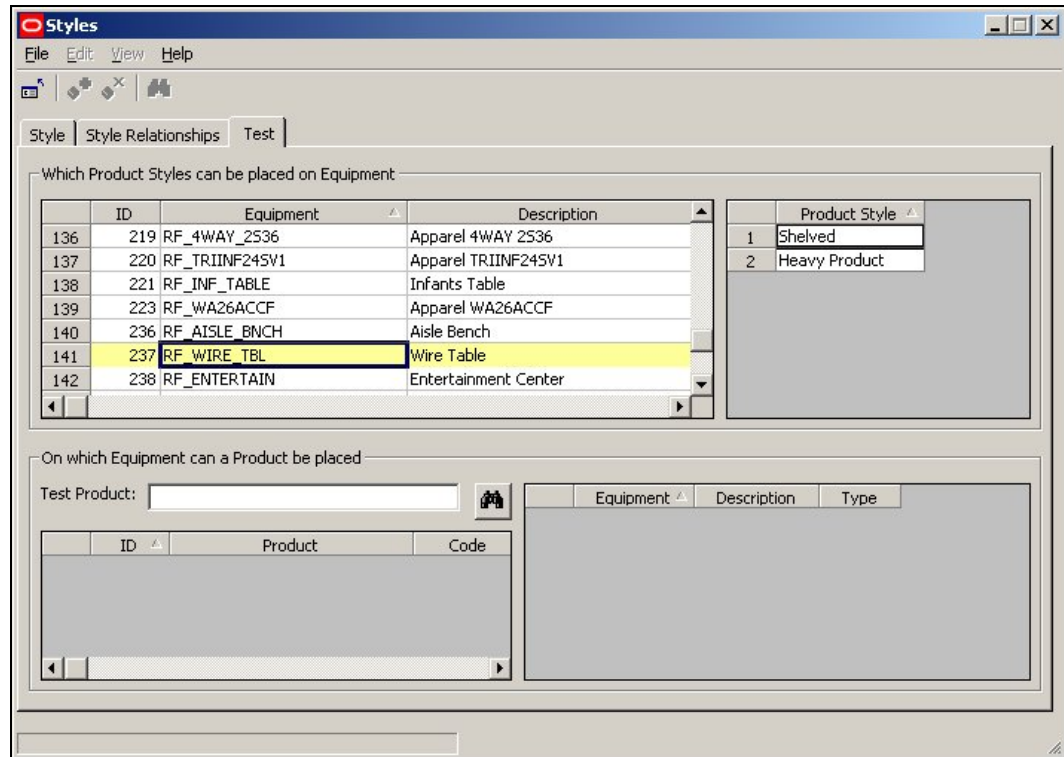
## Testing Style Relationships

**Testing Style Relationships** is done by using the Test tab in the Styles dialogue box.

### Equipment

To see which product styles are associated with an item of equipment, click on that item of equipment in the list of available equipment.

The list of associated product styles will then display.

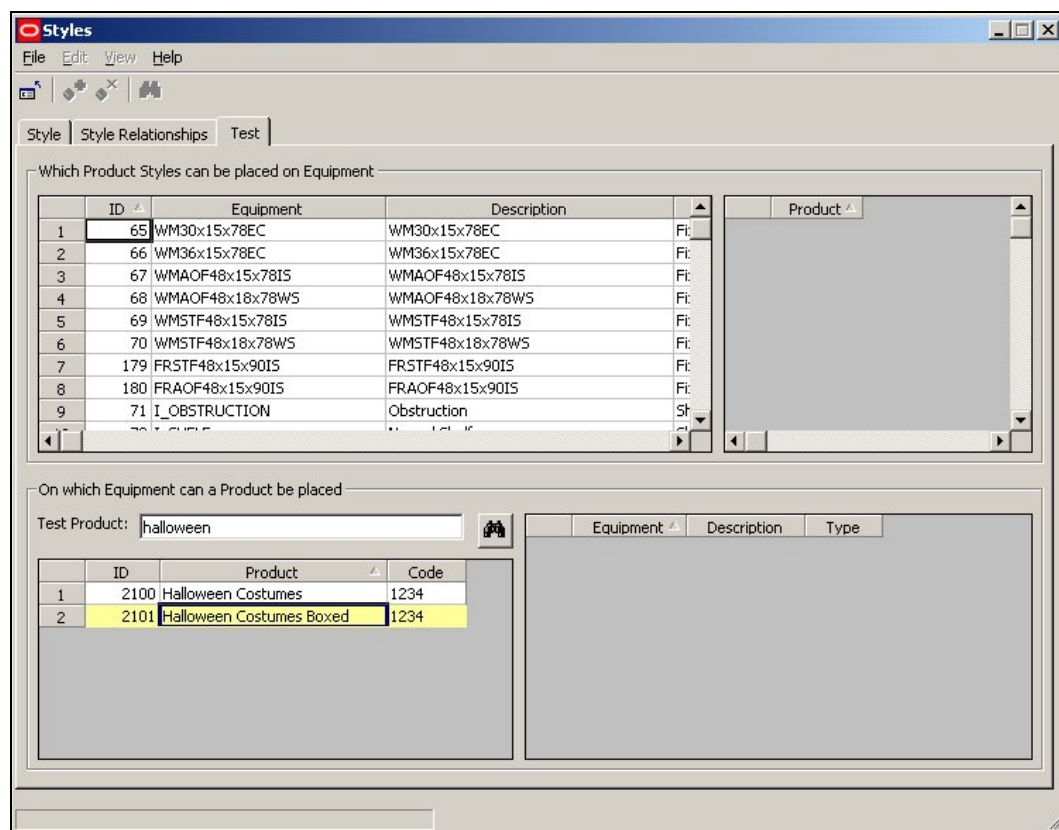


**Note:** The list of equipment can be sorted in ascending or descending order by clicking on the column headers.

## Products

To see which equipment styles are associated with a product, click on that product in the list of available products. The list of associated equipment styles will then display.

Product can be found by entering the product name or code and clicking on the search icon.



**Note:** The list of products can be also sorted in ascending or descending order by clicking on the column headers.

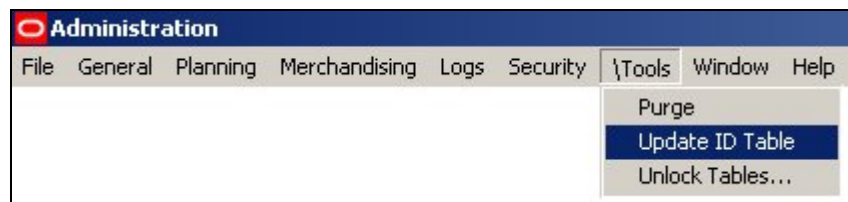
## Joints

Joints can only be tested by trial placements on equipment.

## Next ID

### Overview of Update ID Tables Option

The **Update ID Table** Option is called from the Tools Pull down Menu.



Its function is to reset the AVTTB\_NEXTID table in the central Macro Space Management database in the event of a serious system failure.

This option would normally be used by Administrators.

### The Update ID Tables Option

The central Macro Space Management database contains a AVTTB\_NEXTID table.

This contains the next primary key for a number of key pieces of information in the database.

	NID_TABLENAME	NID_...	NID_COLUMNNAME
18	AVTTB_CONNECTION_SHAPE	6	CNS_ID
19	AVTTB_CONTROLTYPE	8	CTL_TYPEID
20	AVTTB_DATATYPE	9	DAT_ID
21	AVTTB_DBKEY	2	DBK_ID
22	AVTTB_DIMENSION	10	DIM_ID
23	AVTTB_DIRECTORY	31	DIR_ID
24	AVTTB_FILE	14	FIL_ID
25	AVTTB_FILELOG	1	FLG_ID
26	AVTTB_FLOOR	8	FLR_ID
27	AVTTB_FLOORTYPE	14	FLT_ID
28	AVTTB_GENDER	3	GND_ID

These values are used to assign primary keys when new items (for example stores or planograms) are added to the database.

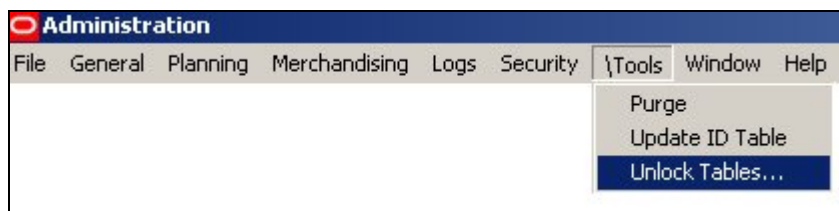
If there is a serious failure and the software crashes, these primary keys may not be fully updated, leading to problems when the software is restarted.

Similarly, if the database is updated by a major import of data, some of the information in the Next ID table can become outdated.

Running the Update ID Tables option takes the latest values of the specified Next ID's (primary keys) from the referenced tables in the database and ensures the Next ID values are updated.

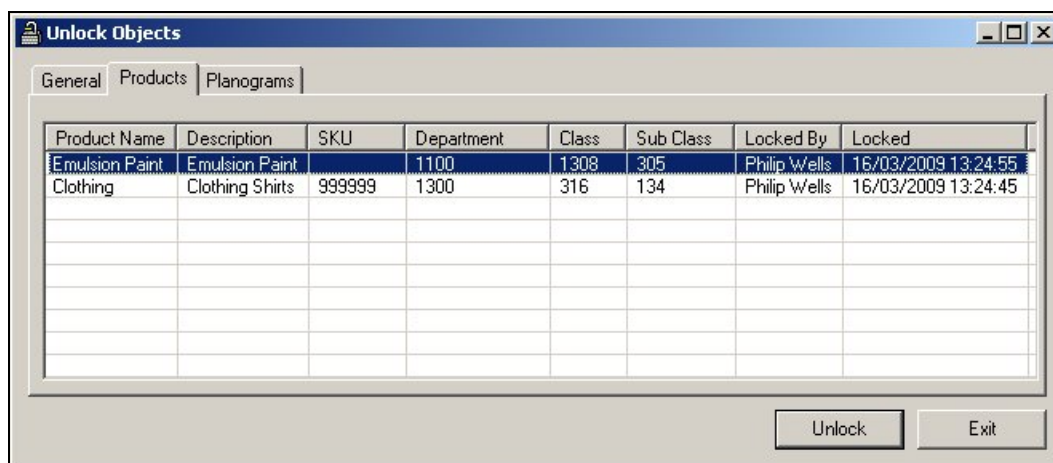
## Unlock Tables

The **Unlock Tables** option allows administrators to unlock tables that have been locked by (for example) a system failure or by people leaving objects such as products checked out.



## The Unlock Tables Option

After the Unlock Tables option has been selected from the Menu Bar, the Unlock Tables dialogue box will appear.



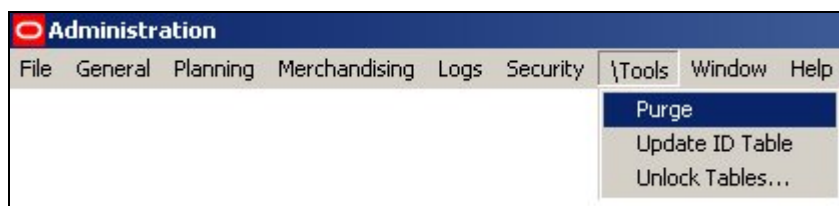
If there are objects to be checked in, this can be done by highlighting them, right clicking to bring up the pop-up menu and choosing the appropriate option.

## Purge

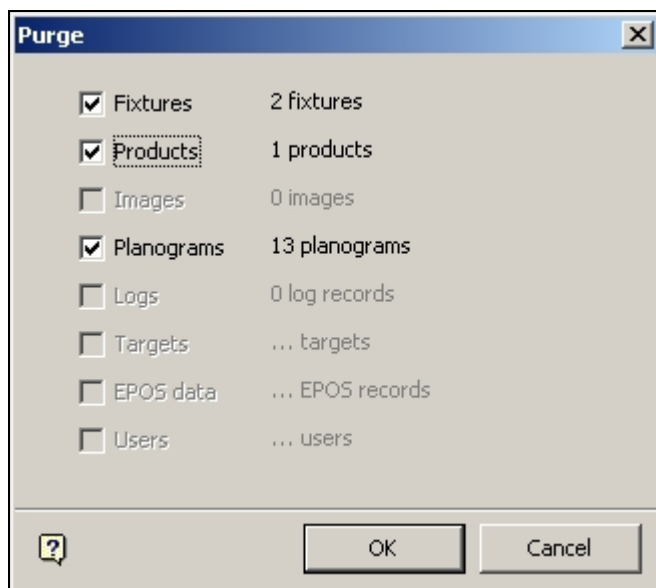
### Overview

**Purge Options** are available using the Purge option on the Tools pull down menu.





This will bring up the Purge dialogue box.



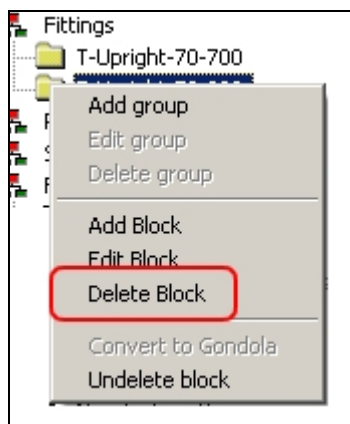
Clicking on OK will purge the selected items.

## Purge Fixtures Option

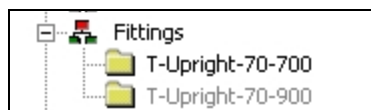
### Deleting Fixtures

Fixtures are deleted in Fixture Studio.

This is done by highlighting the selected fixture and using <Ctrl> + right click to bring up the pop-up menu.

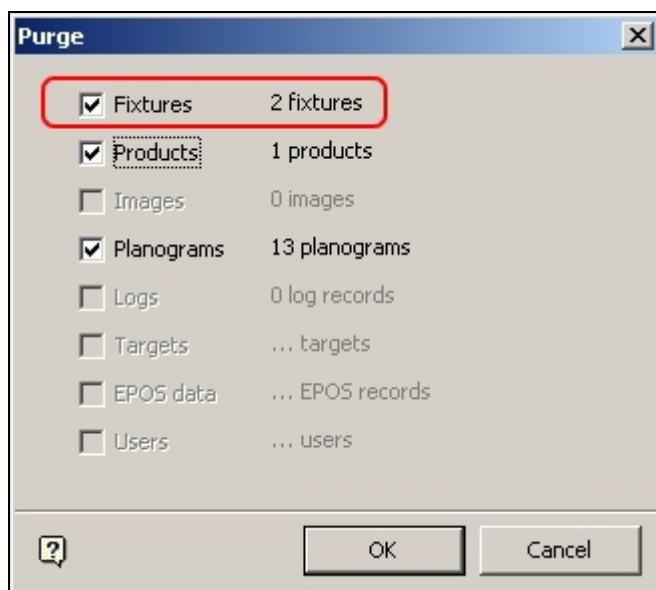


The highlighted fixture can then be marked for deletion by clicking on the Delete Block Option. Fixtures marked for deletion will appear grey rather than black in the Fixtures Hierarchy.

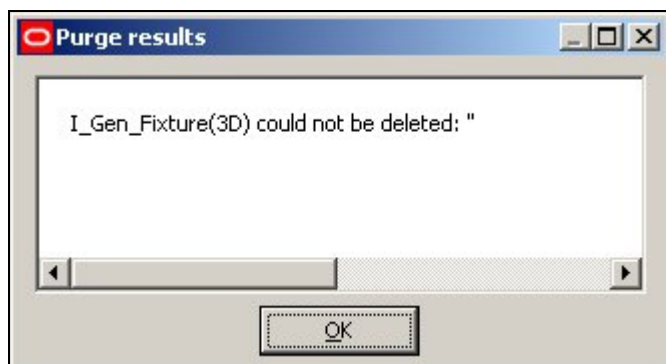


### Purging Fixtures

The fixture will not be permanently deleted from the database until the Fixtures option is checked on the Purge dialogue and the OK button clicked.



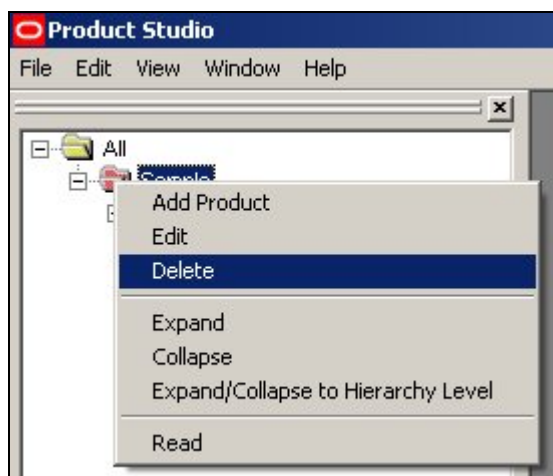
Results will be reported in the Purge Results dialogue box.



## Purge Products Option

### Deleting Products

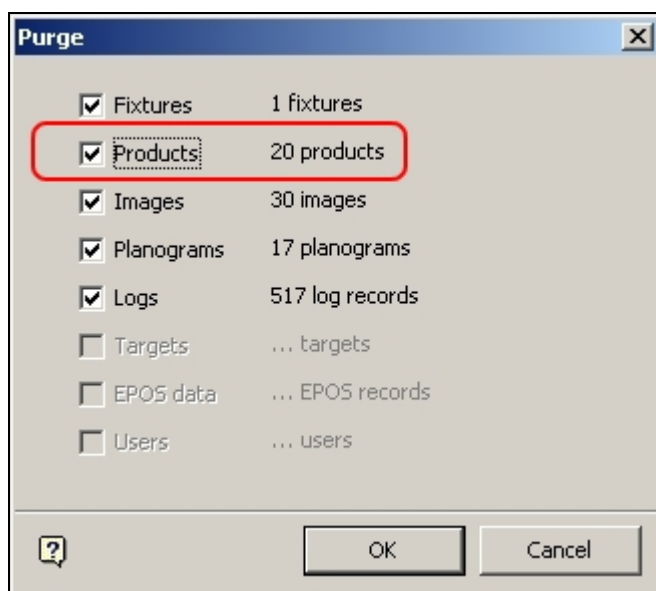
Products are deleted in Product Studio. This is done by highlighting the selected product and using <Ctrl> + right click to bring up the pop-up menu.



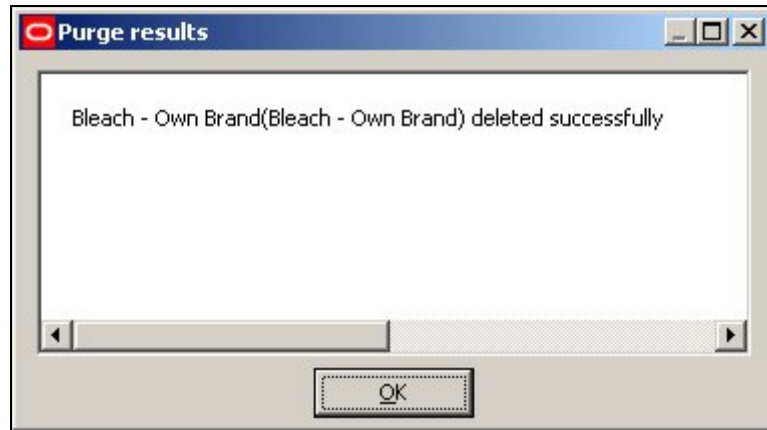
The highlighted product then be deleted by clicking on the Delete Block Option.

### Purging Products

The product will not be permanently deleted from the database until the Product option is checked on the Purge dialogue and the OK button clicked.



Results will be reported in the Purge Results dialogue box.



## Purge Images Option

### Deleting Images

Images are deleted in Product Studio. This is done by highlighting the selected image and using <Ctrl> + right click to bring up the pop-up menu.

**Product Display Style - Shelf Display**

Name: Shelf Display

Description: Clothing Shirts - Shelf Display

Client Code: Manufacturer: Generic

UPC: Display Style Type: Unit

Code: Quantity: 1

Size & Shape Styles Images Peg Holes

Directory: C:\Program Files\AVT\RFV5\RF\_Data\Image\_Root\Clo\

Mapping Format: Box

Import

Browse for Image

Shirt\_Shelf.jpg

- Shelf Display.jpg

Edit

Delete

Front Left Top

Clothing Shirts - Sh

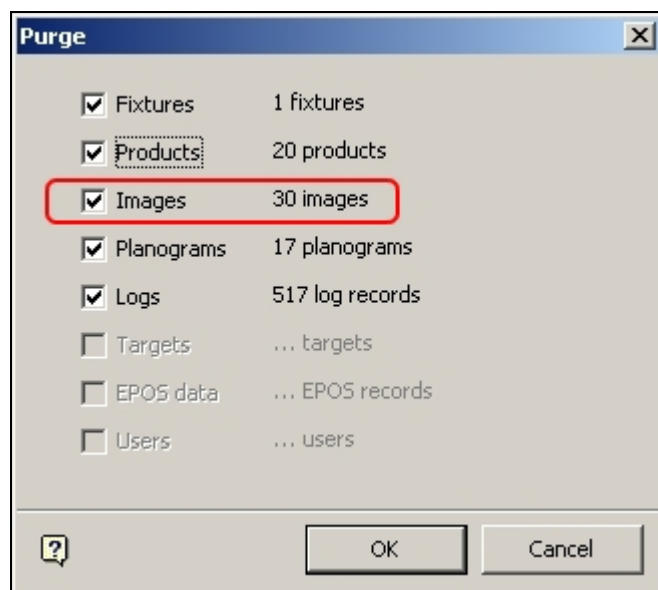
Back Right Bottom

OK Cancel

The highlighted image then be deleted by clicking on the Delete Option.

### Purging Images

The image will not be permanently deleted from the database until the Image option is checked on the Purge dialogue and the OK button clicked.

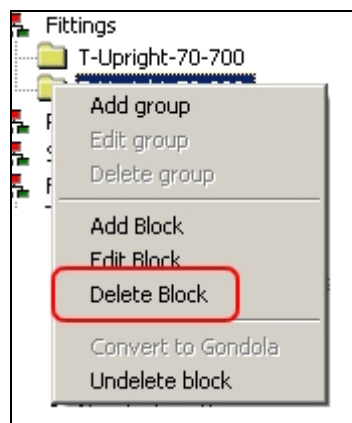


Images will then be deleted without further confirmation.

## Purge Planograms Option

### Deleting Planograms

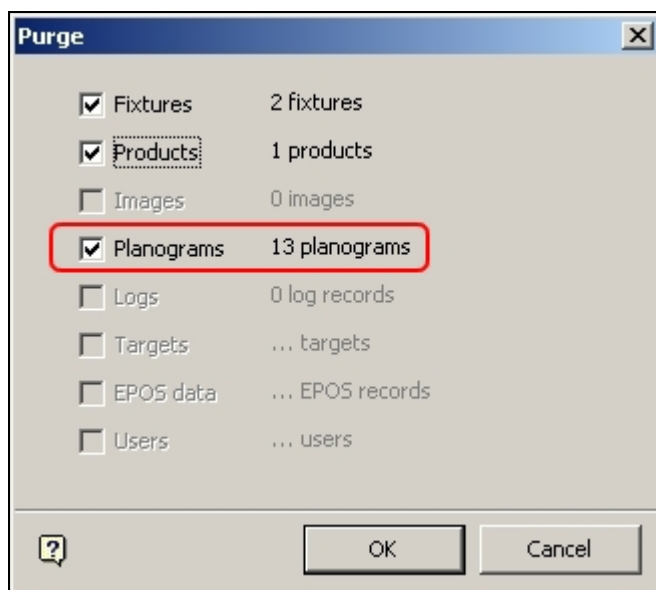
Planograms are deleted in Merchandiser. This is done by highlighting the selected planogram and using <Ctrl> + right click to bring up the pop-up menu.



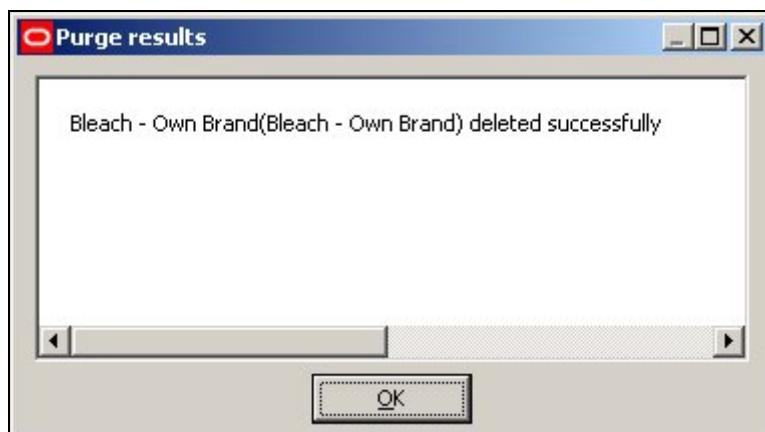
The highlighted fixture can then be marked for deletion by clicking on the Delete Block Option.

### Purging Planograms

The planograms will not be permanently deleted from the database until the Planograms option is checked on the Purge dialogue and the OK button clicked.



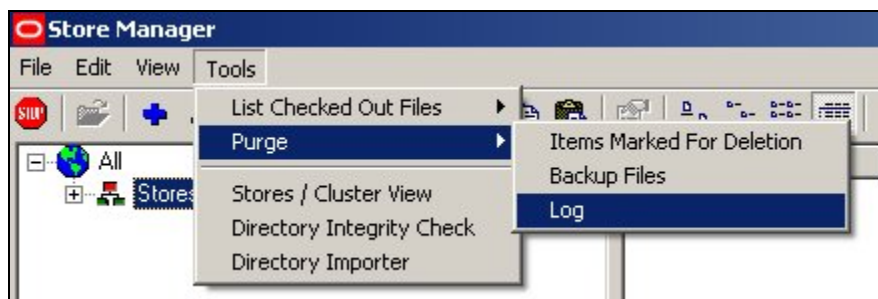
Results will be reported in the Purge Results dialogue box.



## Purge Logs Option

### Deleting Logs

Logs are deleted in Store Manager.



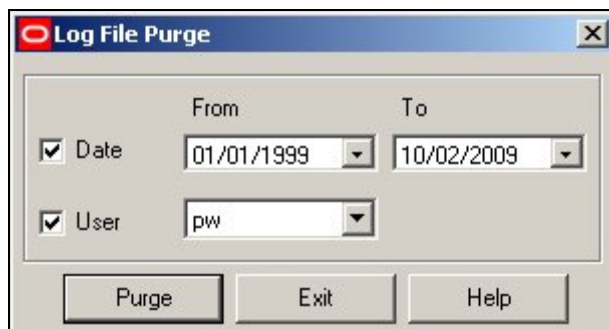
This is done by selecting the Purge > Logs option from the Admin pull down menu.

---

**Note:** The Admin pull down menu is only available to users with Administrator's privileges. It is toggled on and off by means of <Ctrl + A>.

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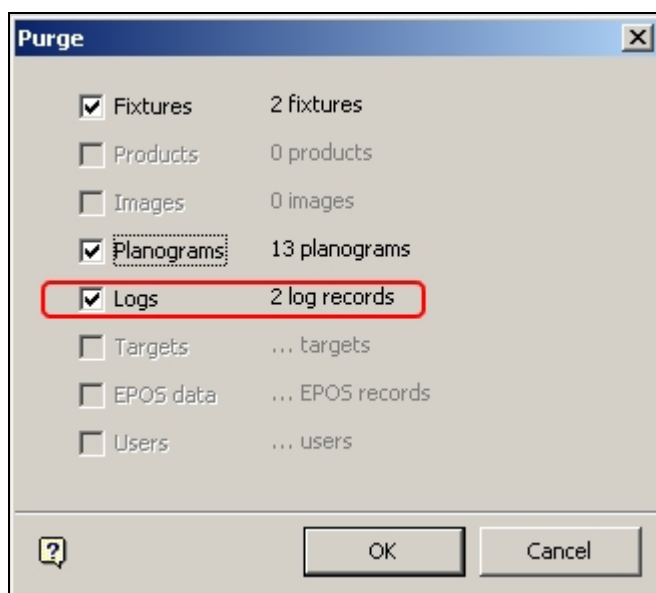
This will bring up the Log File Purge dialogue box.



Log files can then be selected and marked for purging.

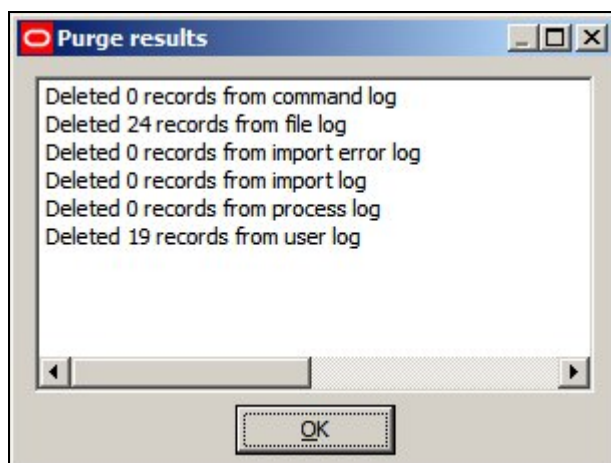
### Purging Logs

The logs will not be permanently deleted from the database until the Logs option is checked on the Purge dialogue and the OK button clicked.



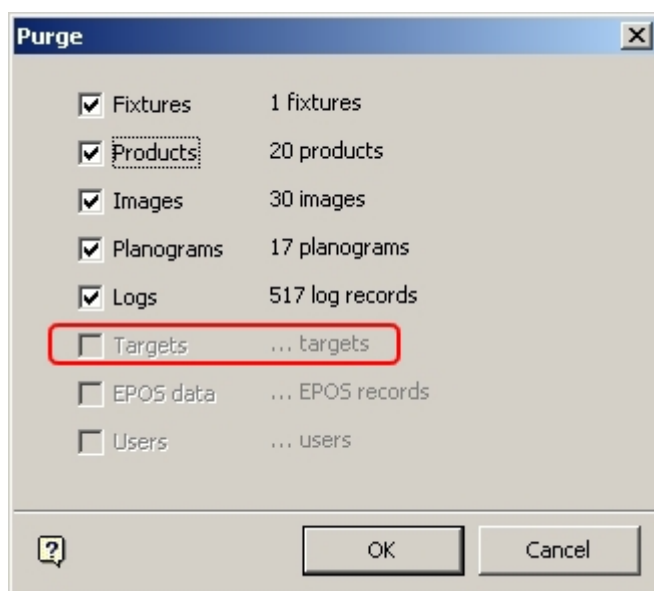
Results will be reported in the Purge Results dialogue box.





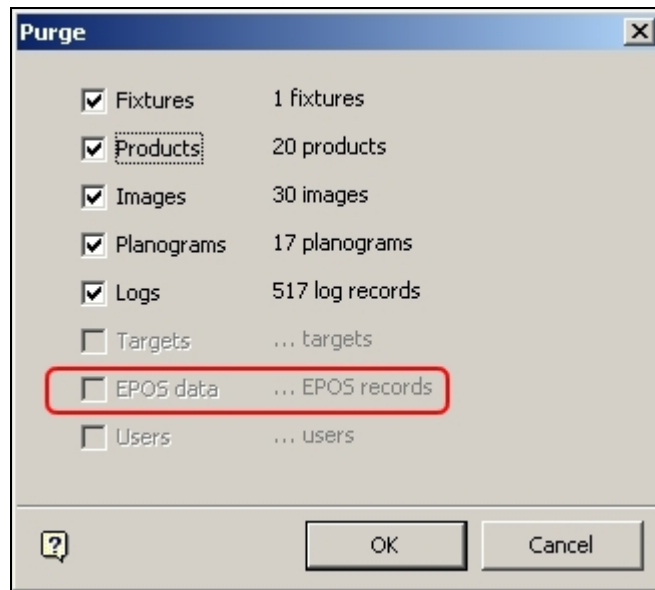
## Purge Targets Option

The **Purge Targets** Option is not enabled in this release of Macro Space Management.



## Purge EPOS Data Option

The **Purge EPOS Data** Option is not enabled in this release of Macro Space Management.



# Logs

Log are in two forms: Text Logs and Database Logs.

## Text Logs

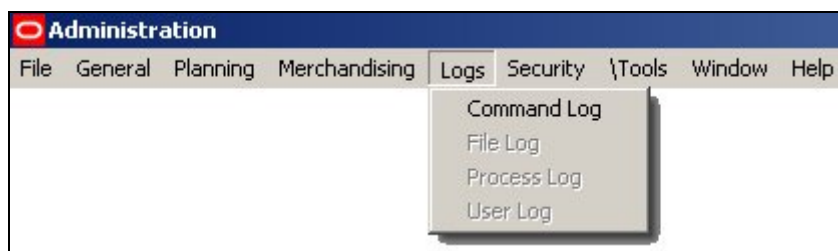
Text logs include .log, AVT5 Store Manager.log, AVT5CAD.log, AVT5Controls.log, AVT5Legacy.log, dbTreeControl.log, Macro Space Management.log, Store Manager.log. These are used mainly for debugging purposes and are not generally used in normal operations.

## Database Logs

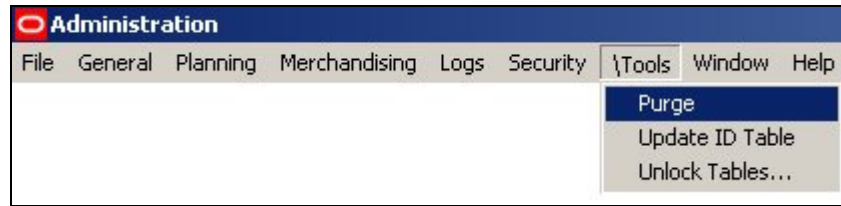
Log	Description
AVTTB_FILE_PROCESS_LOG	Identifies all files that have been subjected to batch processes
AVTTB_FILELOG	Identifies all files that have been checked in or out
AVTTB_IMPORT_ERROR_LOG	Identifies all errors during data import
AVTTB_IMPORT_LOG	Identifies all data imports
AVTTB_POG_IMPORT_LOG	Identifies all planogram imports
AVTTB_POG_SUBST_LOG	Identifies all planogram substitutions
AVTTB_PROCESS_LOG	Identifies all processes that have been invoked [not in use]
AVTTB_USER_LOG	Identifies the times users have logged into MSM
AVTTB_ERROR	Holds errors reported by In-Store Space Collaboration

**Note:** The AVTTB\_FILE\_PROCESS\_LOG\_TYPE table gives information on which processes are being recorded in the AVTTB\_FILE\_PROCESS\_LOG

Logs can be viewed from the Logs option on the menu bar.



Logs can be purged using the Purge option on the tools menu.



## AVTTB\_COMMAND\_LOG

The AVTTB\_COMMAND\_LOG table is not presently in use.

## AVTTB\_FILELOG

The AVTTB\_FILELOG Table identifies the files that have been logged out and by which user.

Column Name ▼	ID ▼	Pk ▼	Null? ▼	Data Type ▼	Default ▼
FLG_ID	1	1	N	NUMBER (10)	
FIL_ID	2		N	NUMBER (10)	
FLG_USER	3		N	NVARCHAR2 (40)	
FLG_DOMAIN	4		N	NVARCHAR2 (40)	
FLG_MACHINE	5		N	NVARCHAR2 (40)	
FLG_LOGGED_OUT	6		N	DATE	
FLG_LOGGED_IN	7		Y	DATE	

The AVTTB\_IMPORT\_ERROR\_LOG table can be purged via the Purge option in the Administration module, or via the Purge option on the Tools menu in the Store Manager module.

Purging in the Admin Module will remove all entries from the table. Purging in Store Manager allows users to remove entries for specific users or between specific dates.

## AVTTB\_FILE\_PROCESS\_LOG

The AVTTB\_FILE\_PROCESS\_LOG table stores the results of automated processes.

Column Name ▼	ID ▼	Pk ▼	Null? ▼	Data Type ▼	Default ▼
FPL_DATE	1		N	DATE	
FPT_ID	2		N	NUMBER (3)	
STR_CODE	3		Y	NVARCHAR2 (20)	
FIL_ID	4		Y	NUMBER (10)	
FPL_ERROR_LEVEL	5		N	NUMBER (3)	0
FPL_ERROR	6		N	VARCHAR2 (200 Byte)	
FPL_MACHINE_NAME	7		N	VARCHAR2 (50 Byte)	
FPL_USERNAME	8		N	VARCHAR2 (50 Byte)	

The Type of Process is specified by the FPT\_ID (File Process Type ID). This is a foreign key to the AVTTB\_FILE\_PROCESS\_LOG\_TYPE table.

File Process Type (FPT_ID)	Description	Comment
0	Result of Synchronization process from Drawing Automation	Not presently active
1	Result of Save process from Drawing Automation	Not presently active
2	Result of Publish process from Drawing Automation	Not presently active
3	Store Section	No longer active
4	Bulk Planogram	No longer active
5	Update Store - Open	Result of running UpdateStatus.exe
6	Update Store - Close	Result of running UpdateStatus.exe
7	Update File - Publish	Result of running UpdateStatus.exe
8	Update File - Current	Result of running UpdateStatus.exe
9	Planograms Substitution Clone	Result of Planogram Substitution
11	Adjacency Calculation	Result of running Automated Calculations

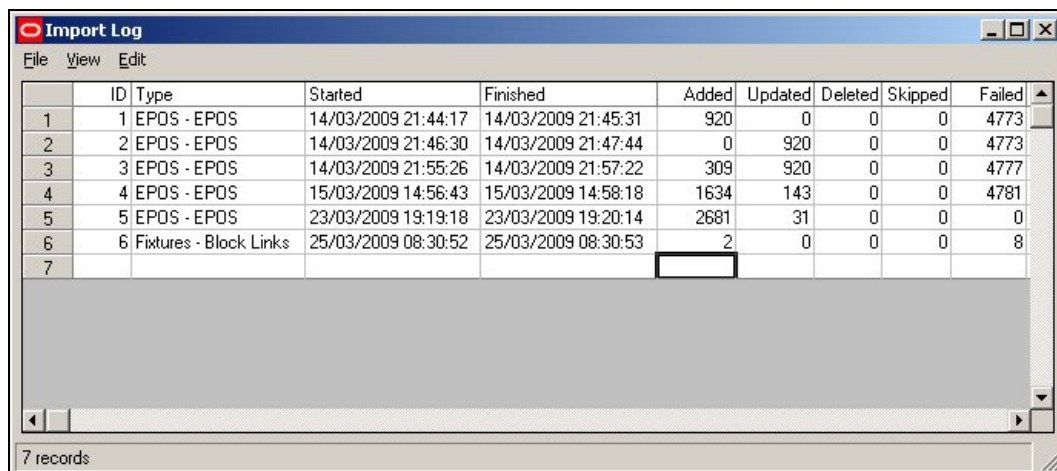
**Note:** Update Status and Automated Calculations are in the C:\Program Files\Oracle Retail\MSM\APPS directory. Planogram Substitution is run using a Stored Procedure.

## AVTTB\_IMPORT\_LOG

The AVTTB\_IMPORT\_LOG identifies the results of imports generated by the Data Importer Module - including the number of records imported, updated, deleted, expired, skipped and failed.

Column Name	ID	Pk	Null?	Data Type	Default
IML_ID	1	1	N	NUMBER (10)	
IMP_ID	2		N	NUMBER (10)	
IML_START_DATE	3		N	DATE	
IML_END_DATE	4		Y	DATE	
IML_ADDED	5		N	NUMBER (10)	0
IML_UPDATED	6		N	NUMBER (10)	0
IML_EXPIRED	7		N	NUMBER (10)	0
IML_SKIPPED	8		N	NUMBER (10)	0
IML_FAILED	9		N	NUMBER (10)	0
IML_MACHINENAME	10		N	NVARCHAR2 (40)	
IML_USER	11		Y	NVARCHAR2 (40)	

The contents of the table are visible in the Import Log dialog box in the Data Importer module.



	ID	Type	Started	Finished	Added	Updated	Deleted	Skipped	Failed
1	1	EPOS - EPOS	14/03/2009 21:44:17	14/03/2009 21:45:31	920	0	0	0	4773
2	2	EPOS - EPOS	14/03/2009 21:46:30	14/03/2009 21:47:44	0	920	0	0	4773
3	3	EPOS - EPOS	14/03/2009 21:55:26	14/03/2009 21:57:22	309	920	0	0	4777
4	4	EPOS - EPOS	15/03/2009 14:56:43	15/03/2009 14:58:18	1634	143	0	0	4781
5	5	EPOS - EPOS	23/03/2009 19:19:18	23/03/2009 19:20:14	2681	31	0	0	0
6	6	Fixtures - Block Links	25/03/2009 08:30:52	25/03/2009 08:30:53	2	0	0	0	8
7									

7 records

The AVTTB\_IMPORT\_LOG table can be purged via the Purge option in the Administration module, or via the Purge option on the Edit menu in the Import Log dialog box.

## AVTTB\_IMPORT\_ERROR\_LOG

The AVTTB\_IMPORT\_ERROR\_LOG identifies the errors that occur during imports generated by the Data Importer Module.





## AVTTB\_POG\_IMPORT\_LOG

The AVTTB\_POG\_IMPORT\_LOG table holds information on all planograms imported into Macro space Management via the Planogram Import Module.

Column Name	ID	Pk	Null?	Data Type	Default
PIL_DATETIME	1		Y	DATE	
PIL_IMPORT_NAME	2		N	VARCHAR2 (250 Byte)	
PIL_SEQUENCE	3		Y	NUMBER (10)	
PIL_OPERATION	4		N	NUMBER (10)	
PIL_PARTNAME	5		Y	VARCHAR2 (100 Byte)	
PIL_DEFINITION	6		Y	NUMBER (10)	
PIL_DESTID	7		Y	NUMBER (10)	
PIL_RESULT	8		N	NUMBER (10)	
PIL_ERRDESC	9		Y	VARCHAR2 (250 Byte)	

The table can only be purged directly in the database.

## AVTTB\_POG\_SUBST\_LOG

The AVTTB\_POG\_SUBST\_LOG table holds the reports of all planogram substitutions.

Column Name	ID	Pk	Null?	Data Type	Default
STR_ID	1		N	NUMBER (10)	
FIL_ID	2		N	NUMBER (10)	
PGS_ID	3		N	NUMBER (10)	
PSL_DATE	4		N	DATE	
PSL_MESSAGE	5		N	VARCHAR2 (100 Byte)	
PSL_ISERROR	6		N	NUMBER (1)	0

The table can only be purged directly in the database.

## AVTTB\_PROCESS\_LOG

The AVTTB\_PROCESS\_LOG table contains details of when files (store plans) were made Authorised or Current in Store Manager.



Column Name	ID	Pk	Null?	Data Type	Default	Histogram
FIL_ID	1		Y	NUMBER (10)		Yes
PRO_ID	2		N	NUMBER (10)		Yes
PRL_BDATE	3		N	DATE		Yes
PRL_DDATE	4		Y	DATE		Yes
PRL_USER	5		N	NVARCHAR2 (40)		Yes
PRL_MACHINE	6		N	NVARCHAR2 (40)		Yes
PRL_DOMAIN	7		N	NVARCHAR2 (40)		Yes
PRL_SUCCESS	8		N	NUMBER (1)		Yes
PRL_COMMENT	9		Y	NVARCHAR2 (510)		Yes

The table can only be purged directly in the database.

## AVTTB\_USER\_LOG Table

The AVTTB\_USER\_LOG Table records the times users log into Macro Space Management

Column Name	ID	Pk	Null?	Data Type	Default
ULG_LOGIN_ID	1	1	N	NVARCHAR2 (50)	
ULG_LOGGED_IN	2	2	N	DATE	
ULG_LOGGED_OUT	3		Y	DATE	
ULG_MACHINENAME	4		N	NVARCHAR2 (50)	
ULG_FAILED	5		N	NUMBER (1)	

It also records when a user has failed to log in.

**Note:** if the Log In ID does not match any user in the database, this indicates a possible unauthorized attempt to access the software.

## AVTTB\_ERROR

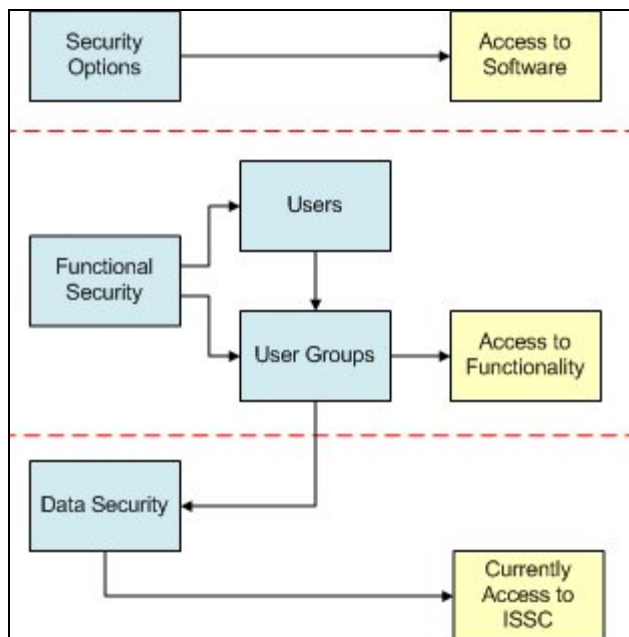
The AVTTB\_ERROR Table mainly holds errors generated during there operation of In-Store Space Collaboration.

Column Name	ID	Pk	Null?	Data Type	Default
ERR_DATE	1		N	DATE	
ERR_USER	2		Y	VARCHAR2 (500 Byte)	
ERR_INNER_EXCEPTION	3		Y	VARCHAR2 (2000 Byte)	
ERR_STACK_TRACE	4		Y	VARCHAR2 (2000 Byte)	
ERR_WINDOWS_USER	5		Y	VARCHAR2 (500 Byte)	
ERR_ERROR_MESSAGE	6		Y	VARCHAR2 (500 Byte)	
ERR_DOMAIN	7		Y	VARCHAR2 (20 Byte)	null
ERR_MACHINE	8		Y	VARCHAR2 (20 Byte)	null
ERR_TRACE	9		Y	VARCHAR2 (2000 Byte)	null
ERR_STR_ID	10		Y	NUMBER (10)	0
ERR_FIL_ID	11		Y	NUMBER (10)	0

The table can only be purged directly in the database.

# Security

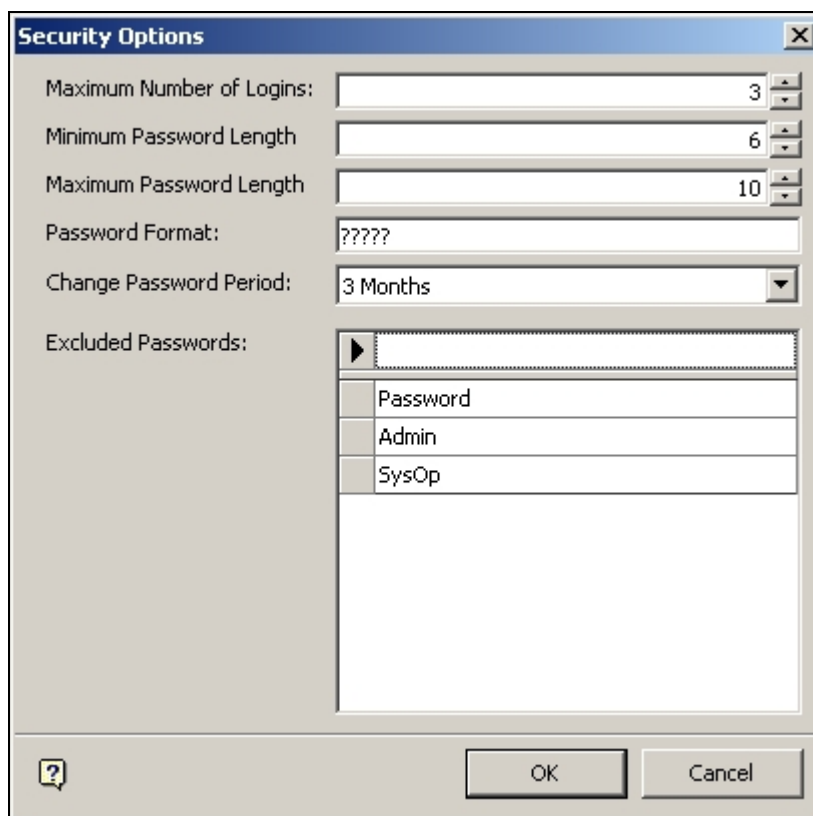
MSM Security is based on three options.



1. **Security Options** control the form that access to the software takes: password format, number of log in attempts allowed, etc.
2. **Functional Security** controls the access to specific modules in Macro Space Management.
3. **Data Security** controls access to specific parts of the functionality - currently what stores and file statuses are visible in In-Store Space Collaboration.

## Security Options

**Security Options** allows Administrators to configure the log in parameters.



The image shows a 'Security Options' dialog box with the following fields and controls:

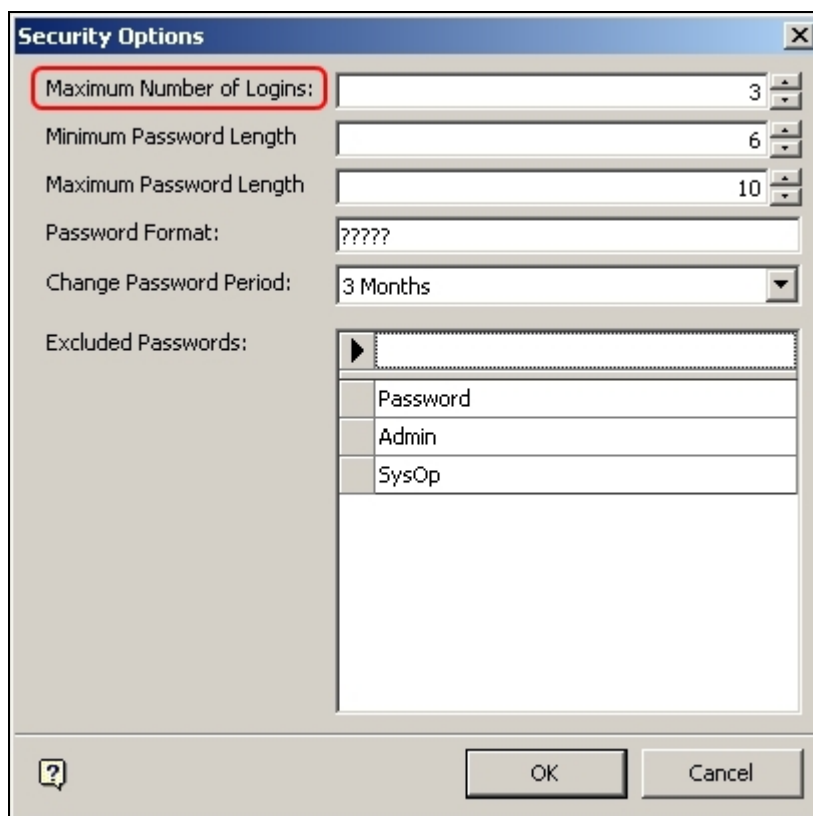
- Maximum Number of Logins:** A spin control set to 3.
- Minimum Password Length:** A spin control set to 6.
- Maximum Password Length:** A spin control set to 10.
- Password Format:** A text field containing '?????'.
- Change Password Period:** A dropdown menu set to '3 Months'.
- Excluded Passwords:** A list box containing 'Password', 'Admin', and 'SysOp'.

At the bottom of the dialog are a help icon (question mark in a square), an 'OK' button, and a 'Cancel' button.

These include the number of incorrect log-ins allowed, maximum and minimum password length, password format, the password change period and Excluded Passwords.

## Maximum Logins

The **Maximum Number of Log In attempts** can be set by means of the spin controls.

The image shows a 'Security Options' dialog box with a blue title bar and a close button. It contains several settings: 'Maximum Number of Logins' (set to 3, highlighted with a red box), 'Minimum Password Length' (set to 6), 'Maximum Password Length' (set to 10), 'Password Format' (set to '?????'), 'Change Password Period' (set to '3 Months'), and 'Excluded Passwords' (a list containing 'Password', 'Admin', and 'SysOp'). At the bottom are 'OK' and 'Cancel' buttons, and a help icon on the left.

Maximum Number of Logins:	3
Minimum Password Length	6
Maximum Password Length	10
Password Format:	?????
Change Password Period:	3 Months
Excluded Passwords:	<ul style="list-style-type: none"><li>Password</li><li>Admin</li><li>SysOp</li></ul>

Any user exceeding the maximum number of log in attempts will have their account deactivated.

This is a security measure to prevent unauthorized users attempting to guess passwords.

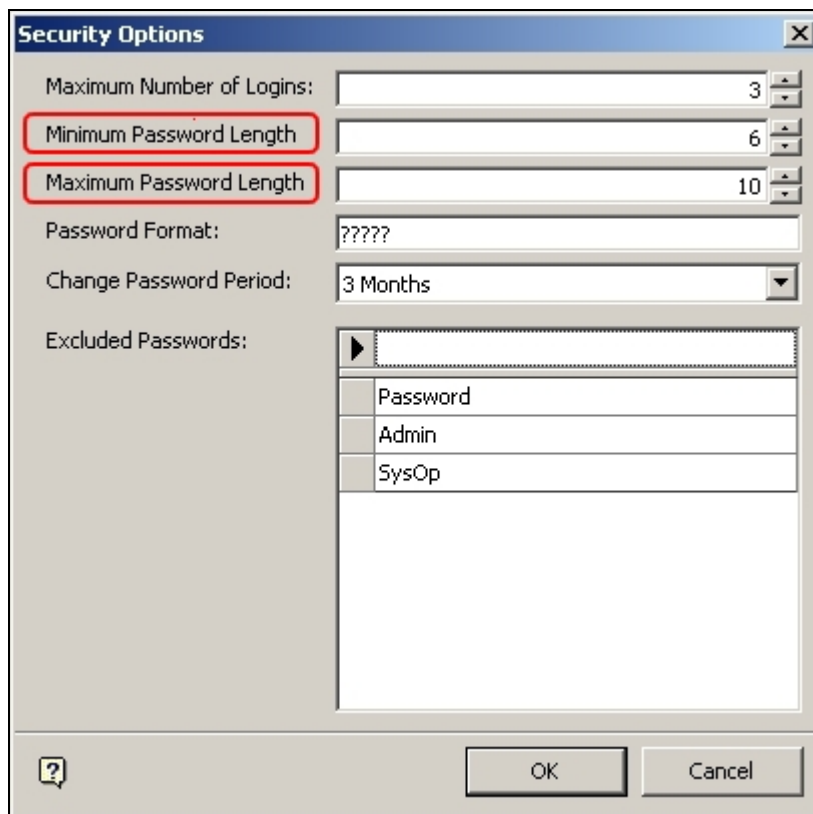
---

**Note:** Accounts can be reactivated by editing the user's account in the Functional Security option.

---

## Minimum and Maximum Password Length

The **Maximum and Minimum Password Lengths** can be set by means of the spin controls.



The image shows a 'Security Options' dialog box with the following fields and controls:

- Maximum Number of Logins:** A numeric spinner box set to 3.
- Minimum Password Length:** A numeric spinner box set to 6, highlighted with a red rectangle.
- Maximum Password Length:** A numeric spinner box set to 10, highlighted with a red rectangle.
- Password Format:** A text box containing '?????'.
- Change Password Period:** A dropdown menu set to '3 Months'.
- Excluded Passwords:** A list box containing 'Password', 'Admin', and 'SysOp'.

At the bottom of the dialog are a help icon (question mark in a square), an 'OK' button, and a 'Cancel' button.

This enables users to set the minimum and maximum number of characters allowed in the password.

The minimum value can be set in the range 1 - 10 characters. The maximum value can be set to a maximum of 15 characters. It cannot be set below the value defined in the minimum value.

## Password Format

The **Password Format** determines what characters are allowed in the password.

The screenshot shows the 'Security Options' dialog box. The 'Password Format' field is highlighted with a red rectangle and contains the text '?????'. Other fields include 'Maximum Number of Logins' (3), 'Minimum Password Length' (6), 'Maximum Password Length' (10), 'Change Password Period' (3 Months), and 'Excluded Passwords' (Password, Admin, SysOp). The 'OK' and 'Cancel' buttons are at the bottom right.

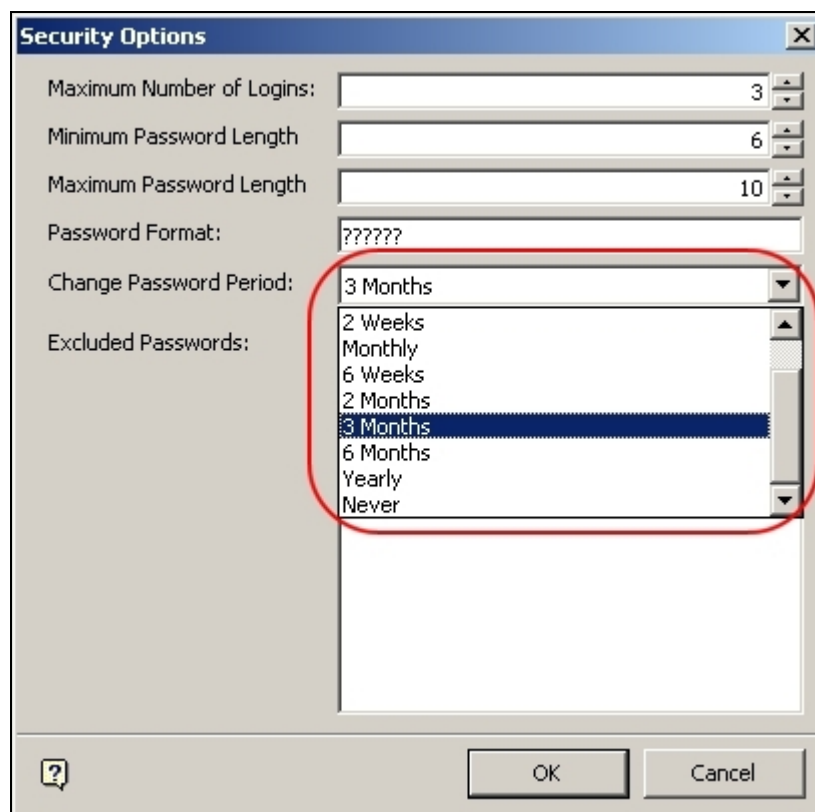
It is possible to enter three characters in this field. They are:

a	Alphabetical character
n	Numerical character
?	Alphanumeric character

It is thus possible to determine the precise form of the password, or leave it in a more general alphanumeric form, as in the example above).

## Change Password Period

The **Change Password Period** option allows the Administrator to set the time required between enforced password changes.



This is set by means of the drop down list. It can be set to any interval between 1 day and yearly. It can also be set to 'never' in which case users will never be asked to change their password.

## Excluded Passwords

The **Excluded Passwords** option allows Administrators to exclude obvious and easy to guess passwords from those allowed to users.



For example, it might be desired to exclude Password, Admin and SysOp as obvious passwords.

It is also possible to exclude obscenities, first names, surnames, etc - anything that might assist an anatomized user to guess a password.

### Entering Passwords

To enter a password, type it into the text box and press <Return>. The excluded password will now be stored in the database.

---

**Note:** If you do not press <Return>, the Excluded Password will not be stored.

---

### Editing Passwords

To edit a password, click on it in the list, make the required changes and press <Return>. The edited excluded password will now be stored in the database.

---

**Note:** If you do not press <Return>, the changes will not be stored.

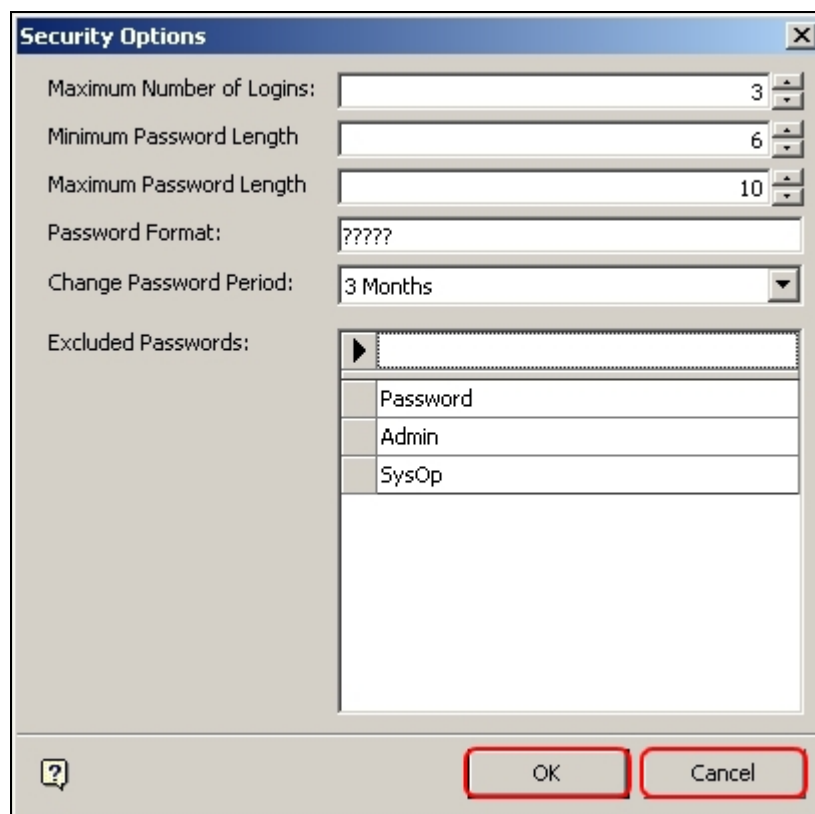
---

### Deleting Passwords

To delete a password, highlight it in the list then press the <Delete> key,

## Exiting Security Options

To Exit Security Options either click on OK or Cancel



The image shows a 'Security Options' dialog box with the following fields and controls:

- Maximum Number of Logins:** A numeric spinner box set to 3.
- Minimum Password Length:** A numeric spinner box set to 6.
- Maximum Password Length:** A numeric spinner box set to 10.
- Password Format:** A text box containing '?????'.
- Change Password Period:** A dropdown menu set to '3 Months'.
- Excluded Passwords:** A list box containing 'Password', 'Admin', and 'SysOp'.

At the bottom of the dialog are three buttons: a help button (question mark icon), an 'OK' button, and a 'Cancel' button. The 'OK' and 'Cancel' buttons are highlighted with red rectangles.

Clicking on OK will save all settings to the database and exit.

Clicking on Cancel will result in all changes (except to Excluded Passwords) being lost.

## Functional Security

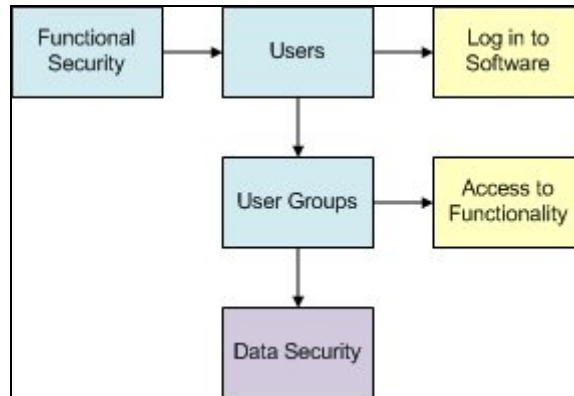
### About Functional Security

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**Note:** In-Store Space Collaboration is an optional application that can be used in parallel to Macro Space Management. It may not be installed in all implementations of Macro Space Management.

---

**Functional Security** is used to control who can log in to the software, and also which parts of the software can be accessed.




---

**Note:** User Groups can also be used within Data Security to control access to Stores and Files accessible to users in In-Store Space Collaboration.

---

### Users

Users can be added - and their User Names and Passwords assigned. This can be used to control logging in to both Macro Space Management and In-Store Space Collaboration.

### User Groups

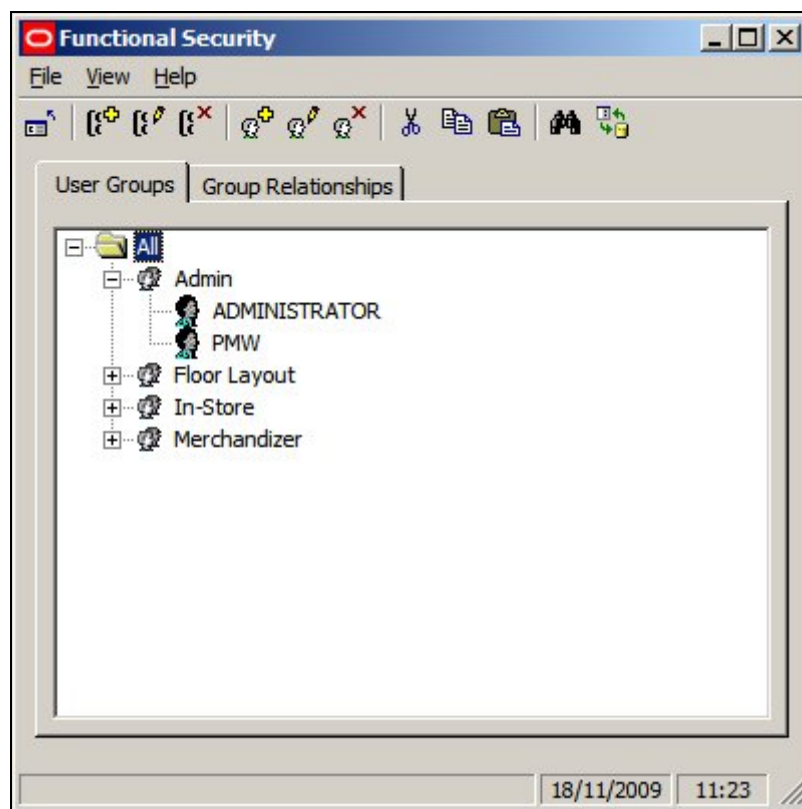
Users are put into User Groups. Membership of a User Group confers the privileges of that User Group on the User. For example the Admin User Group will typically allow the User to access all parts of the software, while membership of other User Groups will give more restricted access.

User Groups are also used in Data Security, which is currently used to control what stores and file (store plan) statuses are visible in In-Store space collaboration.

### The Functional Security Dialog Box

The Functional Security dialog box has two tabs: User Groups and Group Relationships.

1. User Groups Tab



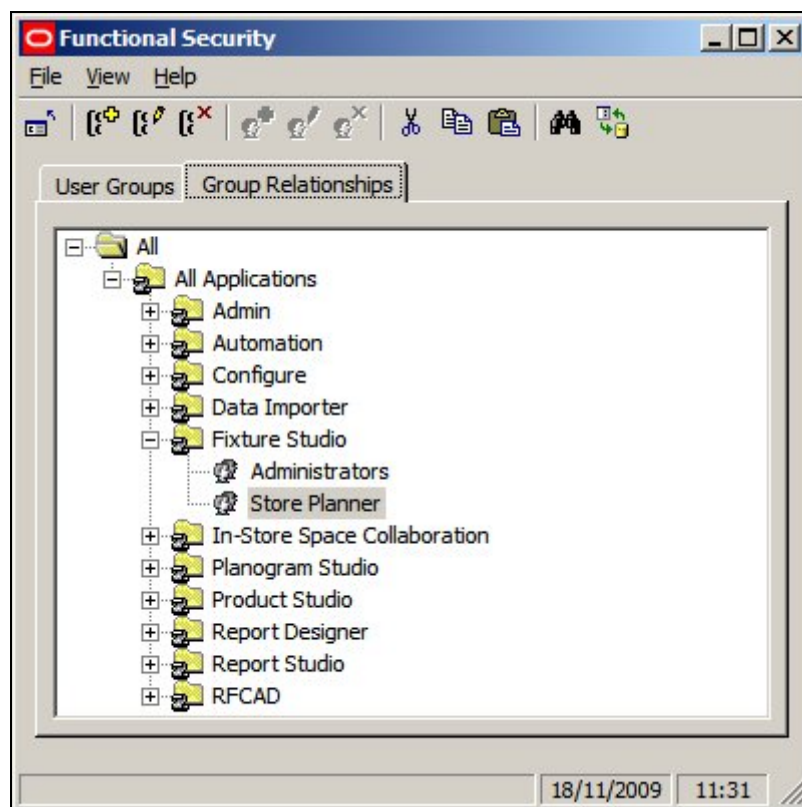
The User Groups tab allows Administrators to create Users and User Groups.

---

**Note:** in the default Database supplied, only users belonging to the Admin User Group can access the functionality within In-Store Space Collaboration. To give other User Groups access to the functionality in ISSC, changes need to be made directly in the database. (More Info)

---

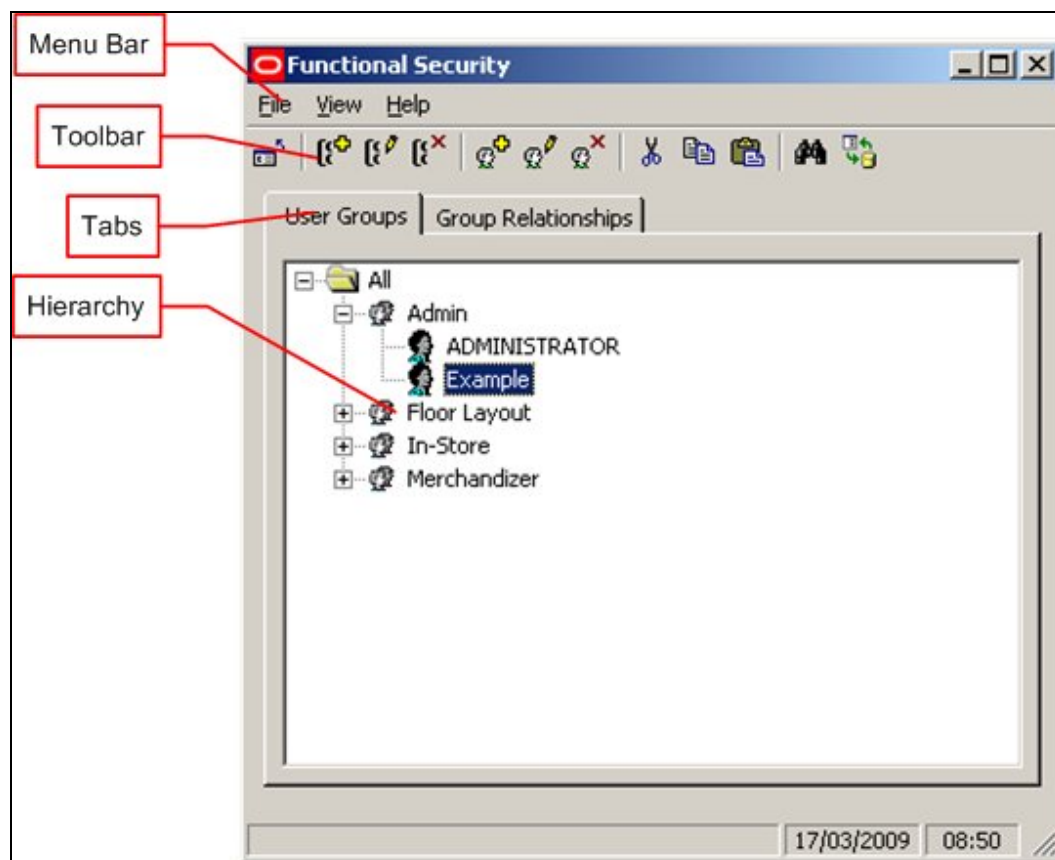
## 2. Group Relationships Tab



The Group Relationships Tab allows Administrators to determine which User Groups can access which modules.

## The Functional Security Window

The Functional Security Window has a series of components.



The **Menu Bar** allows Administrators to access a limited number of options.

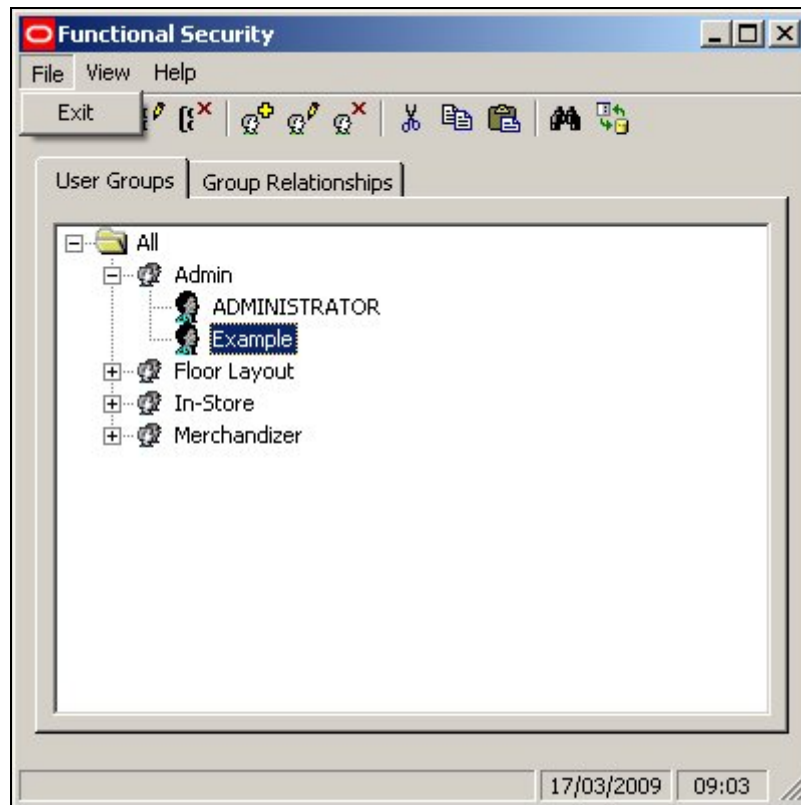
The **Toolbar** allows Administrators to access a series of options affecting User Groups and Group Relationships.

The **Tabs** allow operations to be switched between User Groups and Group Relationships.

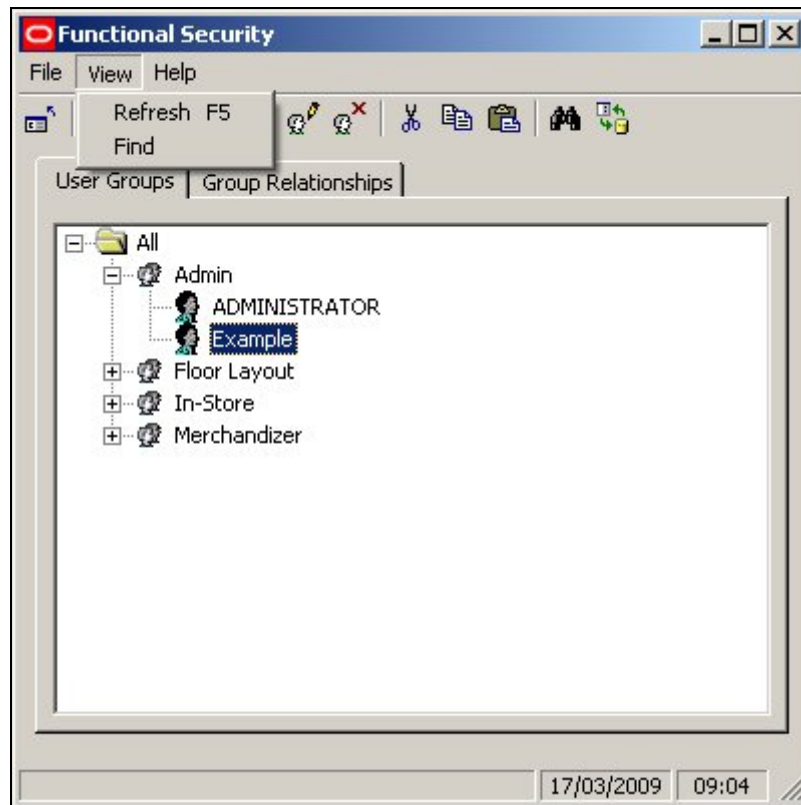
The **Hierarchy** shows the current list of User Groups or Group Relationships.

## Functional Security Menus and Toolbar

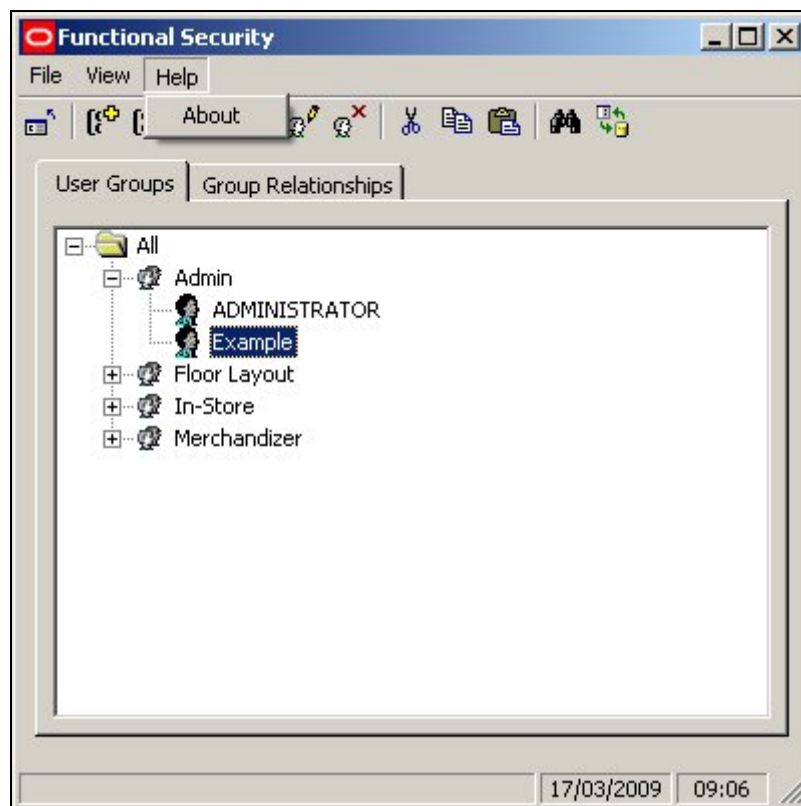
The **File pull down menu** allows users to exit this option.



The **View pull down menu** allows users to refresh the hierarchical tree and to call the Find dialogue

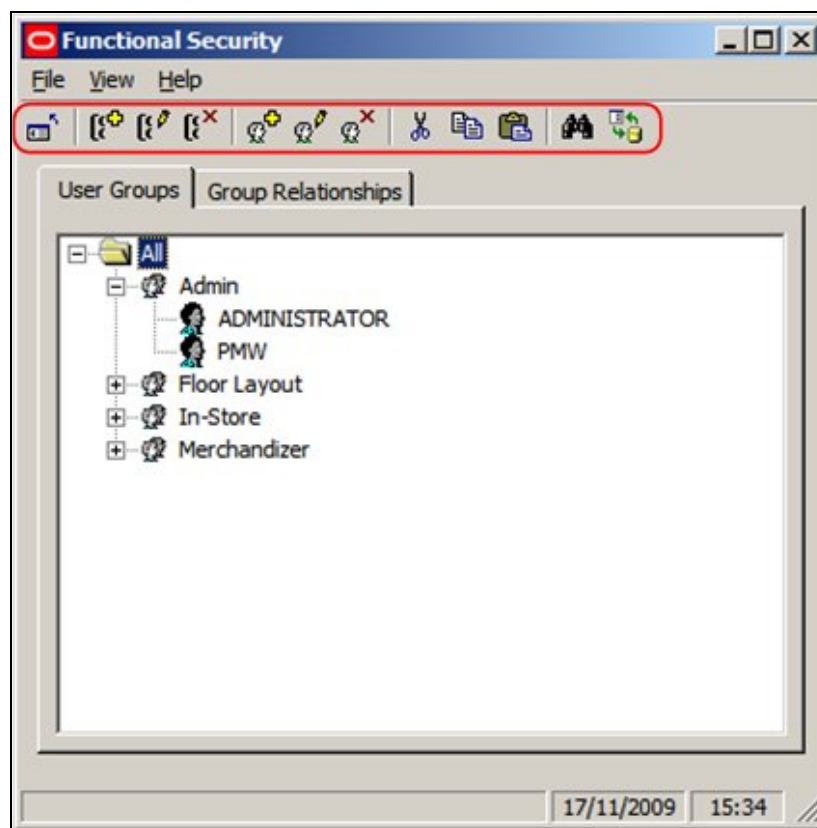











The **Help** pull down menu allows users to check the version of this software.






The **Toolbar** allows users to access various Functional Security options.



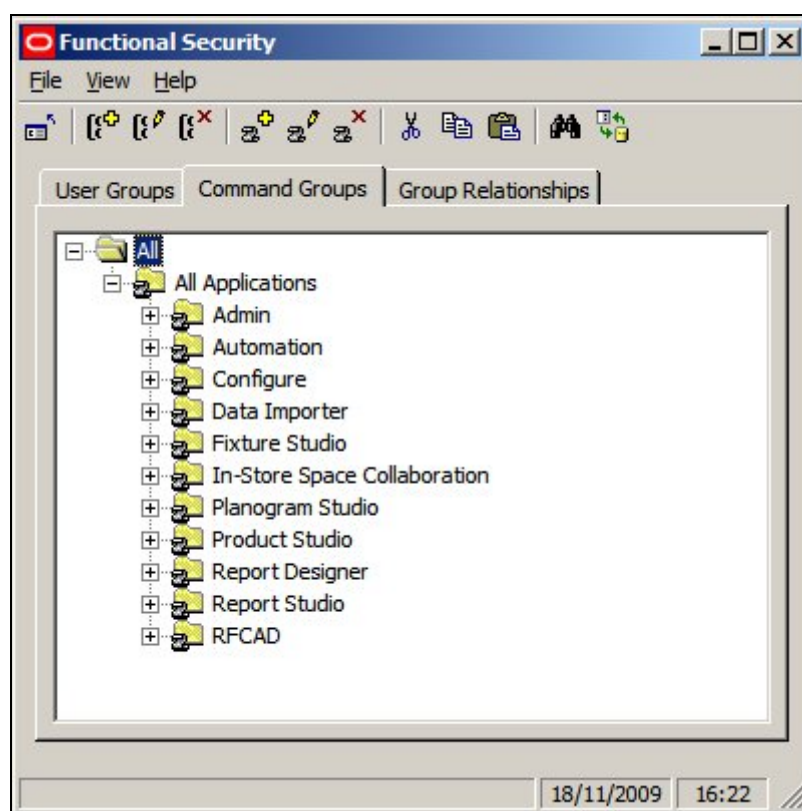


Icon	User Groups	Group Relationships
	Exit	Exit
	Add User Group	Add Command Group
	Edit User Group	Edit Command Group
	Delete User Group	Delete Command Group
	Add User	Not Available
	Edit User	Not Available
	Delete User	Not Available
	Cut	Cut
	Copy	Copy

	Paste	Paste
	Search	Search
	Refresh	Refresh

## <Ctrl> + A and the Command Groups Tab

Using <Ctrl> + A in the Functional Security dialog box brings up the Command Groups tab.



This functionality is for future releases and is not currently enabled.

## Users and User Groups

### User Groups

#### Overview of User Groups

**User Groups** are groups of users. User Groups can be any logical grouping of users. Examples include:

1. Functional Groupings: Store Planners, Merchandisers, etc

2. Responsibilities: Planners, Managers, etc
3. Geographical Groupings: North America, Europe, etc

Each User Group can be assigned specific privileges within the software. When Users are assigned to User Groups, the Users inherit the privileges of the User Group, thus enabling Administrators to control access to the program without configuring it for each individual user.

When planning User Groups, it is recommended that the different ways Macro Space Management and In-Store Space Collaboration use User Groups.

1. User Groups in Macro Space Management are used to give access to Modules - for example the Planner or Merchandiser modules.
2. User Groups in In-Store Space Collaboration are currently used to give access to Stores and to Files of a specific status.

#### Example of 'Functional' User Groups

Admin	Admin Module	Data Importer	Fixture Studio	Product Studio	Planner	Merchandiser
Store Planning	Fixture Studio	Planner				
Merchandising	Product Studio	Merchandiser				
In Store	No access to MSM					

#### Example of 'Responsibility' User Groups

Admin	Admin Module	Data Importer	Fixture Studio	Product Studio	Planner	Merchandiser
Store Planner	Planner	Merchandiser	Access to Editing Stores in ISSC			
Manager	Data Importer	Fixture Studio	Product Studio	Planner	Merchandiser	Access to Editing and Approving Stores in ISSC

The Store Planner and Manager User Groups will have different privileges in Macro Space Management and In-Store Space Collaboration.

1. In MSM the different User Groups will be able to access differing numbers of modules
2. In ISSC the different User Groups will have differing privileges set in Data Security. For example, the Store Planner User Group will be able to edit stores and submit them for approval. The Manager User Group will be able to edit stores and approve the layout.

#### Example of 'Geographic' User Groups

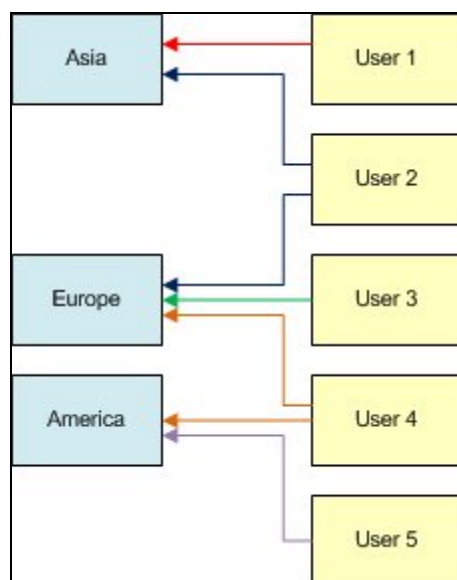



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**Note:** at present Geographic User Groups only find an application in In-Store Space Collaboration. They can be used in Data Security to specify which Stores users can see.

---

Users can be assigned to multiple User Groups.



User 1 can only work in functionality assigned to the Asia User Group

User 2 can work in functionality assigned to both the Asia and Europe User Groups

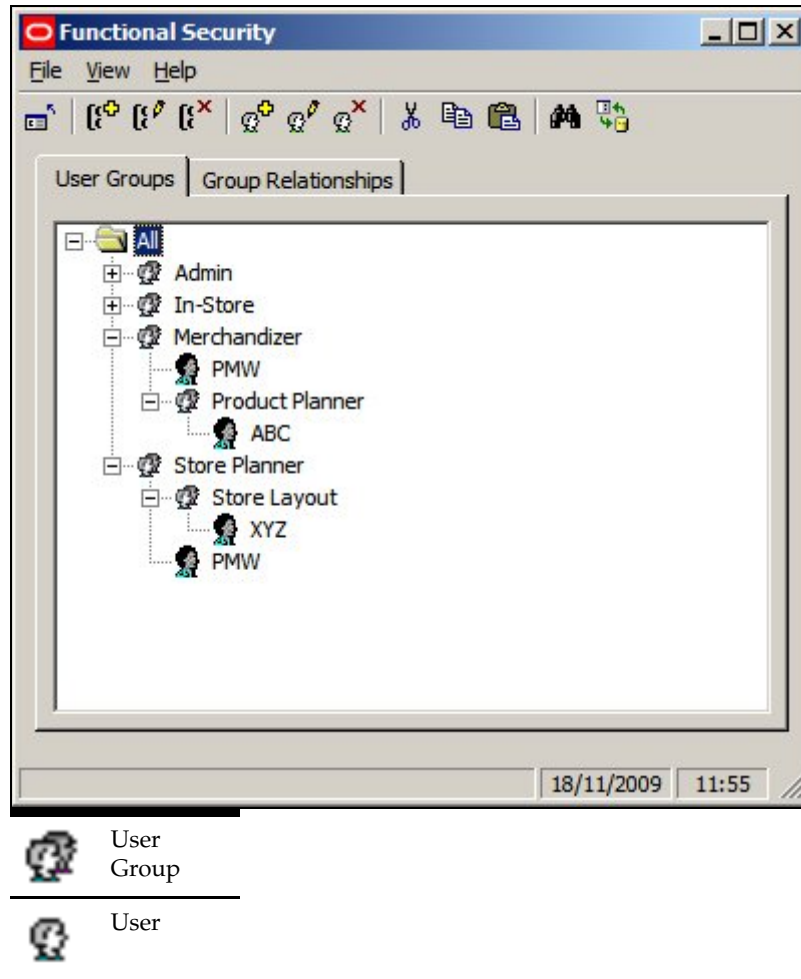
User 3 can only work in functionality assigned to the Europe User Group

User 4 can only work in functionality assigned to the both the Europe and America User Groups

User 5 can only work in functionality assigned to the America User Group

### The User Group Hierarchy

The **User Group Hierarchy** shows the relationship of User Groups and their associated users.



Users Groups can be planned in a hierarchy - for example the Store Planner User Group has Fixture Planner as a child. The Store Planner User Group might allow (Group Relationships Tab) Users to access both the Planner and Fixture Studio Modules, while the Store Layout User Group will only allow access to the Planner Module.

Users can be allocated to Single or Multiple User Groups.

---

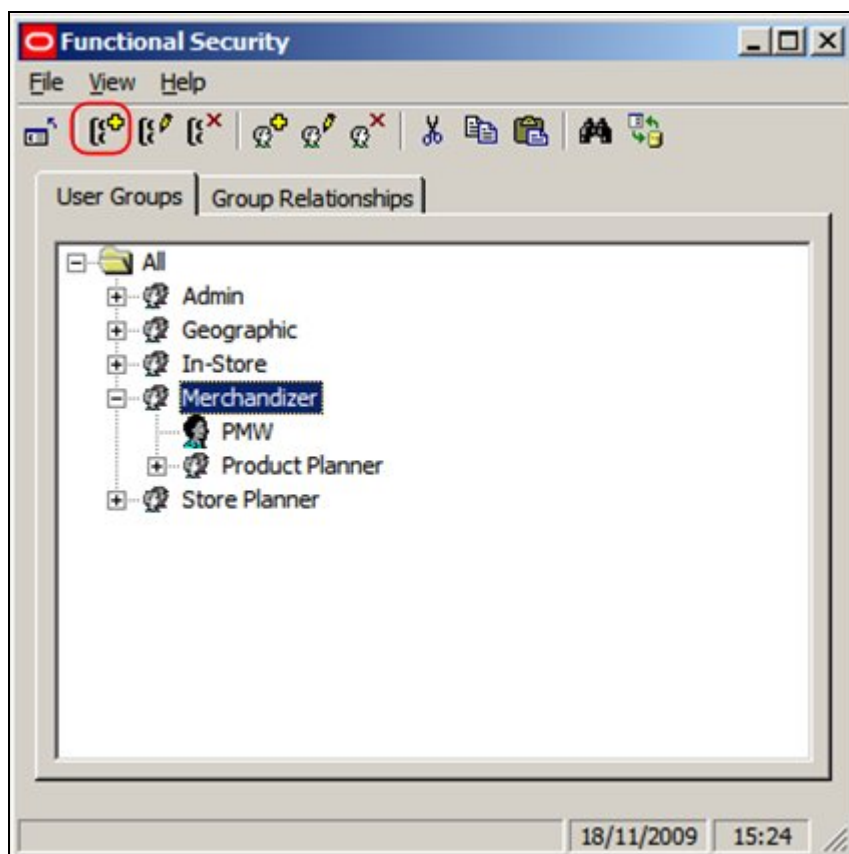
**Note:** If users are allocated to multiple User Groups in a hierarchy the most restrictive permissions will apply. If a function is allowed in one User Group and denied in another, the deny permission will take precedence.

---

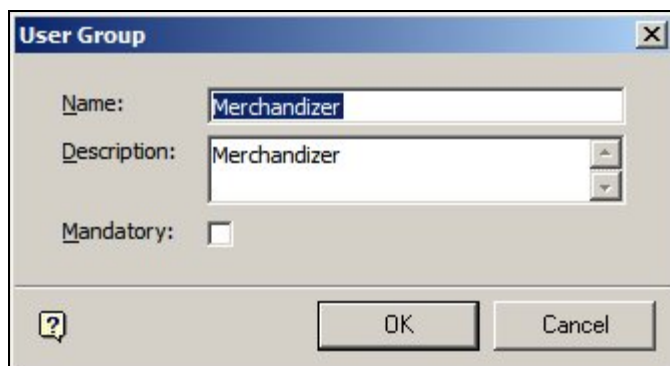
Before Adding, Editing or Deleting User Groups, Administrators should consider how access to both Macro Space Management and In-Store Space Collaboration will be controlled. User Groups can then be configured as required.

### Adding a User Group

To **Add a User Group** select the node in the hierarchical tree that the new User Group is to emanate from and click on the Add User Group Icon.



This will bring up the User Groups dialogue box.



1. Enter the Name of the User Group and the Description.
2. If the mandatory check box is ticked, all new users will automatically be added to this group when they are created.
3. Click on OK and the User Group will be added to the hierarchy.

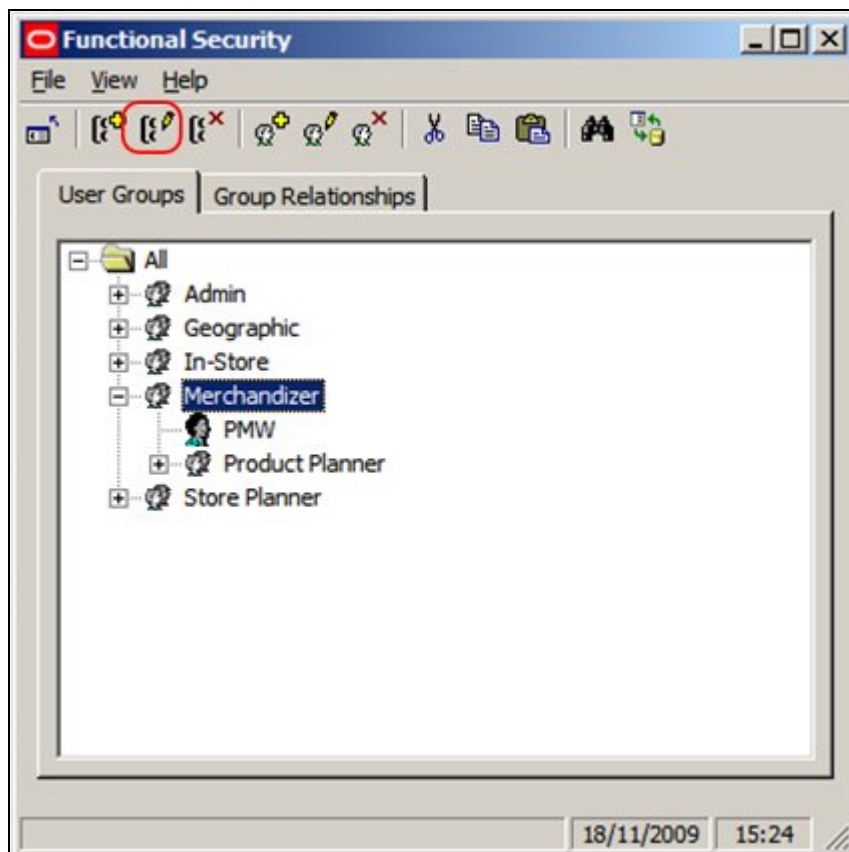
---

**Note:** A User Group cannot be added unless a valid node has been selected in the hierarchical tree.

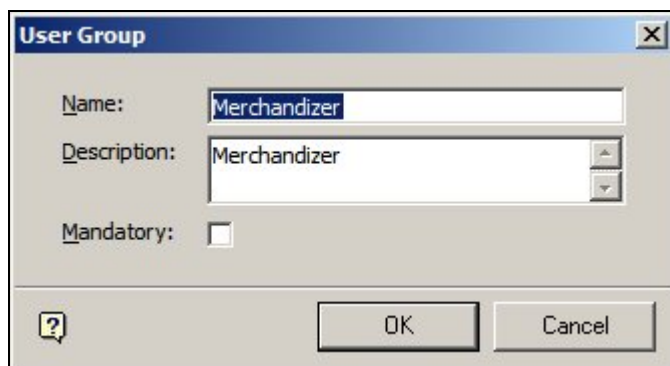
---

### Editing a User Group

To **Edit a User Group** select the User Group in the hierarchical tree and click on the Edit User Group Icon.



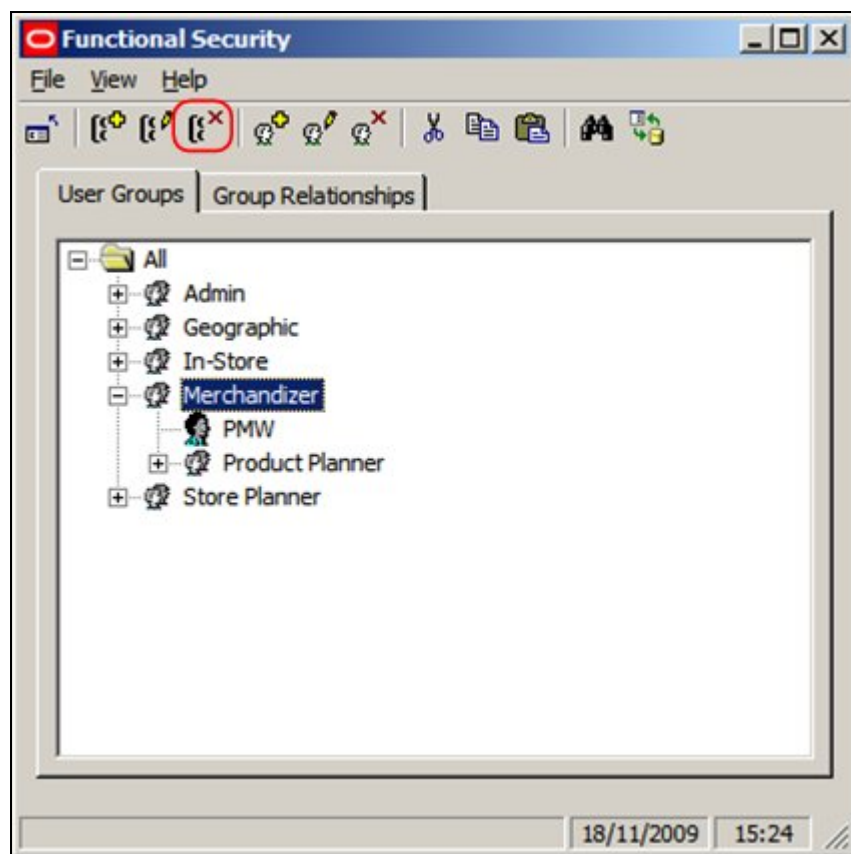
This will bring up the User Groups dialogue box.



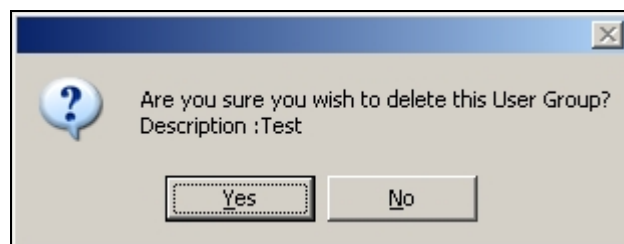
1. Change the Name of the User Group and the Description.
2. (If the mandatory check box is ticked, all new users will automatically be added to this group when they are created).
3. Click on OK and the edited User Group will be appear in the hierarchy.

### Deleting a User Group

To **Delete a User Group** select the User Group in the hierarchical tree and click on the Delete User Group Icon.



This will bring up the Delete Confirmation.



Click on Yes and the User Group will be removed.

### User Groups and Functionality in ISSC

---

**Note:** In-Store Space Collaboration is an optional application that can be used in parallel to Macro Space Management. It may not be installed in all implementations of Macro Space Management.

---

**Privileges** in Macro Space Management can be set using the Functional Security option in the Admin Module. However, privileges in In-Store Space Collaboration have to be assigned by a combination of actions in the Administration module and the database. What functionality users can access in ISSC is controlled by which buttons are active and which buttons are grayed out.





The buttons that are active in In-Store Space Collaboration are controlled by the AVTTB\_MESSAGE\_USER\_GROUP\_LINK table.

Button or Message ID	USG_ID From AVTTB_USER_GROUP	Permission Mask 0 = disabled, 1 = enabled
USG_ID	MSG_ID	MUG_PERMISSION_MASK
1	2	1
4	2	1
1	3	1
4	3	1

1. The USG\_ID is the ID of the User Group it is desired to activate buttons for. It is determined from the AVTTB\_USER\_GROUP table.
2. The MSC\_ID is the identity of the button or form it is desired to give a User Group permissions for.
3. THE MUG Permission Mask determines whether the button is active or grayed out. (1 = active, 0 = disabled).

When a User Group is created in Functional Security, any users associated with that User group will be able to get into In-Store Space Collaboration, but will then find all the buttons on the toolbar grayed out and unavailable. In order for the buttons in In-Store Space Collaboration to become available, all the entries for USG\_ID = 1 (Admin Users) have to be duplicated for the additional User Groups it is desired to make In-Store Space Collaboration available to.

This can be done with a simple SQL Insert statement of the form

```
Insert into AVTTB_MESSAGE_USER_GROUP_LINK
select [User Group ID], MSC_ID, MUG_PERMISSION_MASK
from AVTTB_MESSAGE_USER_GROUP_LINK Where USG_ID = 1
```

where the value of the User Group ID in the AVTTB\_USER\_GROUP table (for example 9) is substituted for [User Group ID]. If it is necessary to disable specific functionality, the MUG\_PERMISSION\_MASK can be set to 0 (Disabled).

---

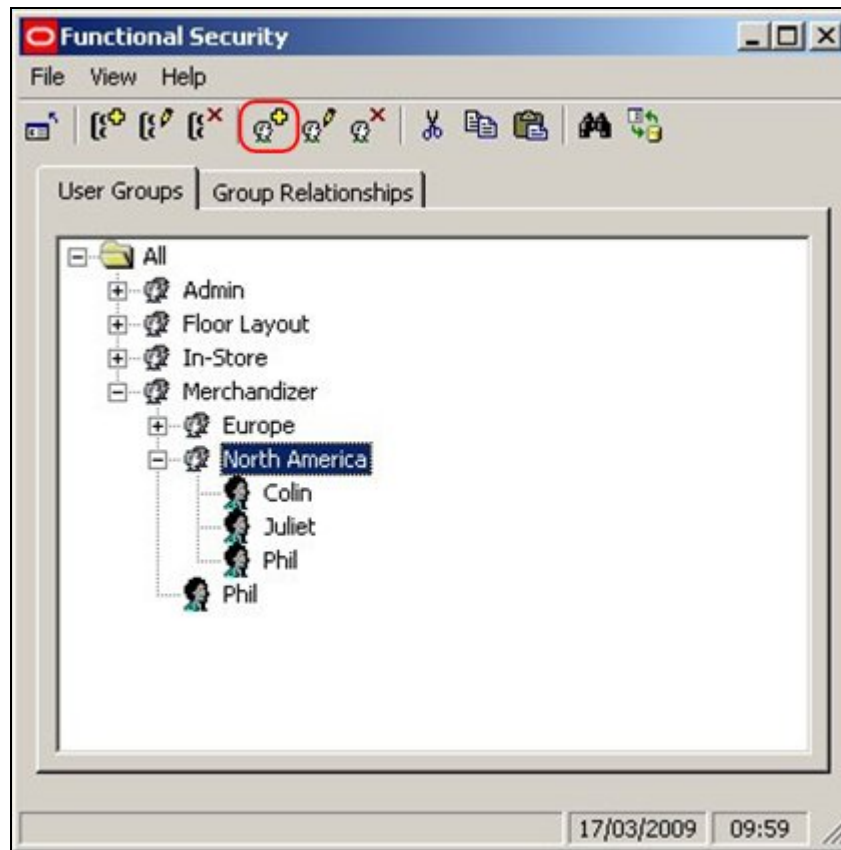
**Note:** for more information on what is controlled by MSC\_ID, please contact Oracle Technical Support.

---

## Users

### Adding a User

**Users are Added to User Groups.** The users then inherit the privileges of those User Groups. To Add a User select a User Group in the hierarchy then click on the Add a User Icon.



This will bring up the User dialogue.

The screenshot shows a 'User' dialog box with two tabs: 'Details' and 'Attributes'. The 'Details' tab is active, displaying the following fields:

- First Name:** Mark
- Last Name:** Twain
- Initials:** MT
- Login ID:** MT
- Password:** \*\*\*\*\*
- Confirm Password:** \*\*\*\*\*
- Expiry Date:** 20 March 2009 (with a dropdown arrow)
- Language:** ENGLISH (with a dropdown arrow)
- Activate:** ☒

At the bottom of the dialog box, there is a help icon (question mark in a square), an 'OK' button, and a 'Cancel' button.

**First Name** is the first name of the User.

**Last Name** is the last name of the User.

**Initials** are the User's initials.

**Login ID** is what will appear in Macro Space Managements Log In dialogue box.

**Password** and **Password Confirmation** allow the administrator to set the initial password. These will be required when logging in to Macro Space Management.

**Expiry Date** sets the initial date at which the password will expire and require changing. (The interval at which the password will require further resets is determined by the Change Password Interval option in the Security Options option).

---

**Note:** the expiry date can be set to a date in the past for new users. This will force a password change when they first log on.

---

**Language** sets the default language for Macro Space Management.

---

**Note:** For any other language than English the AVTTB\_MESSAGE table must first be populated with the appropriate information.

---

**Activate** is grayed out and unavailable when adding a new user. It becomes available when the user is edited.

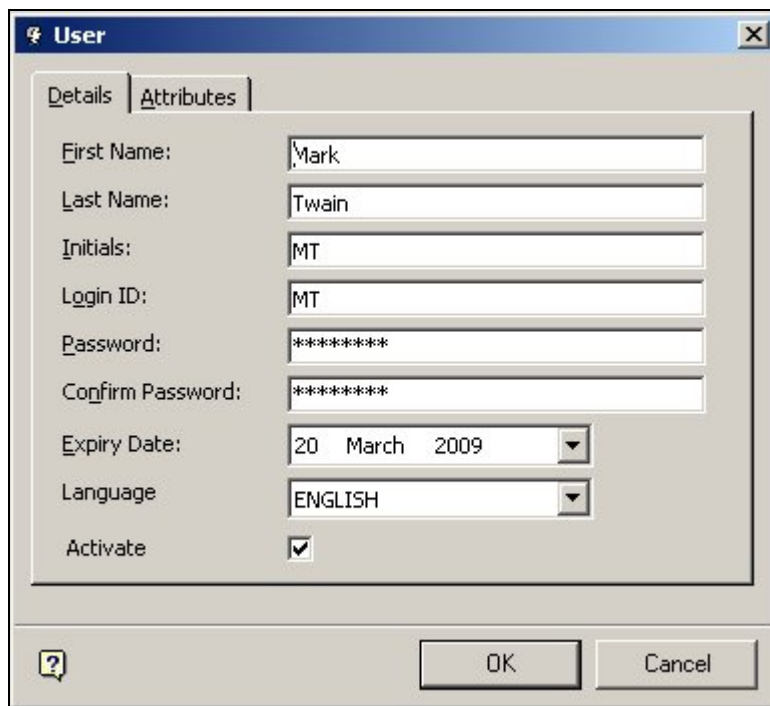
---

**Note:** A User cannot be added unless a valid node has been selected in the hierarchical tree.

---

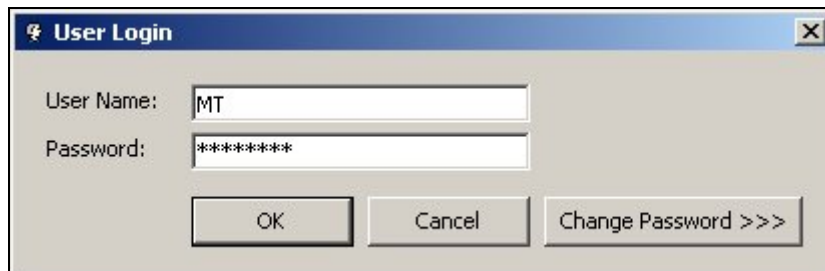
## User Configuration and Logging In

**When Users are added** (or User properties are Edited), Administrators can set the User Name and Password that will be required in the User Log in dialogue box that appears the first time Macro Space Management is opened.

A screenshot of a 'User' dialog box with two tabs: 'Details' and 'Attributes'. The 'Details' tab is active. It contains several input fields: 'First Name' with 'Mark', 'Last Name' with 'Twain', 'Initials' with 'MT', 'Login ID' with 'MT', 'Password' with '\*\*\*\*\*', and 'Confirm Password' with '\*\*\*\*\*'. There are also dropdown menus for 'Expiry Date' (set to '20 March 2009') and 'Language' (set to 'ENGLISH'). An 'Activate' checkbox is checked. At the bottom are 'OK' and 'Cancel' buttons, and a help icon on the left.

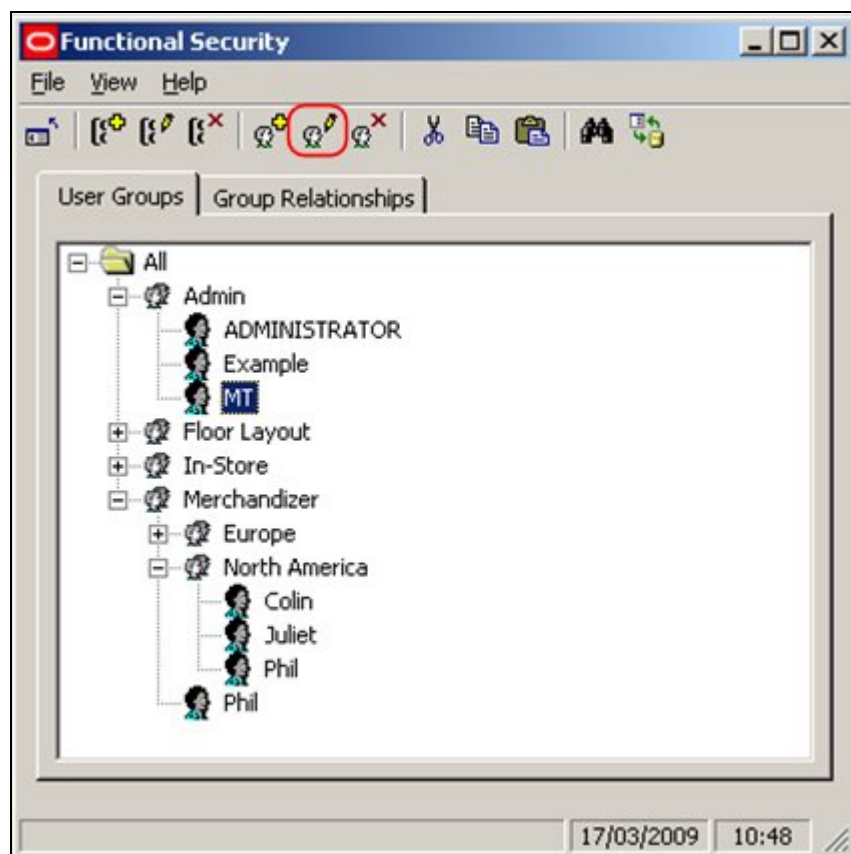
**Note:** the Expiry Date can be set to a date in the past. This will force a password change when the user first logs on.

Thus, the 'Mark Twain' user has a user name of MT and a password set for their log in.

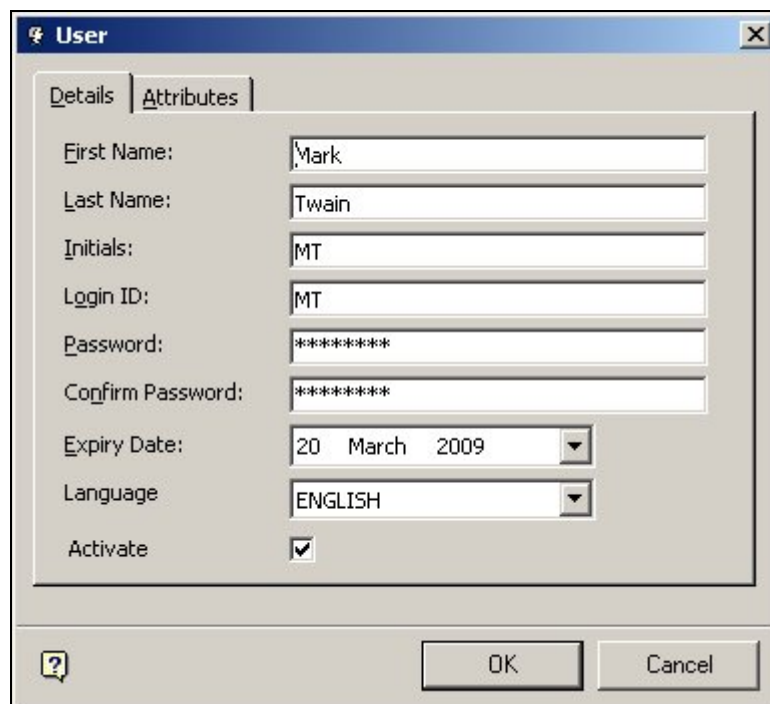
A screenshot of a 'User Login' dialog box. It has two input fields: 'User Name' with 'MT' and 'Password' with '\*\*\*\*\*'. At the bottom are three buttons: 'OK', 'Cancel', and 'Change Password >>>'.

### Editing a User

To **Edit a User** highlight the user in the hierarchy then click on the edit user icon.



This will bring up the User dialogue.



Edit the details as required and press OK.

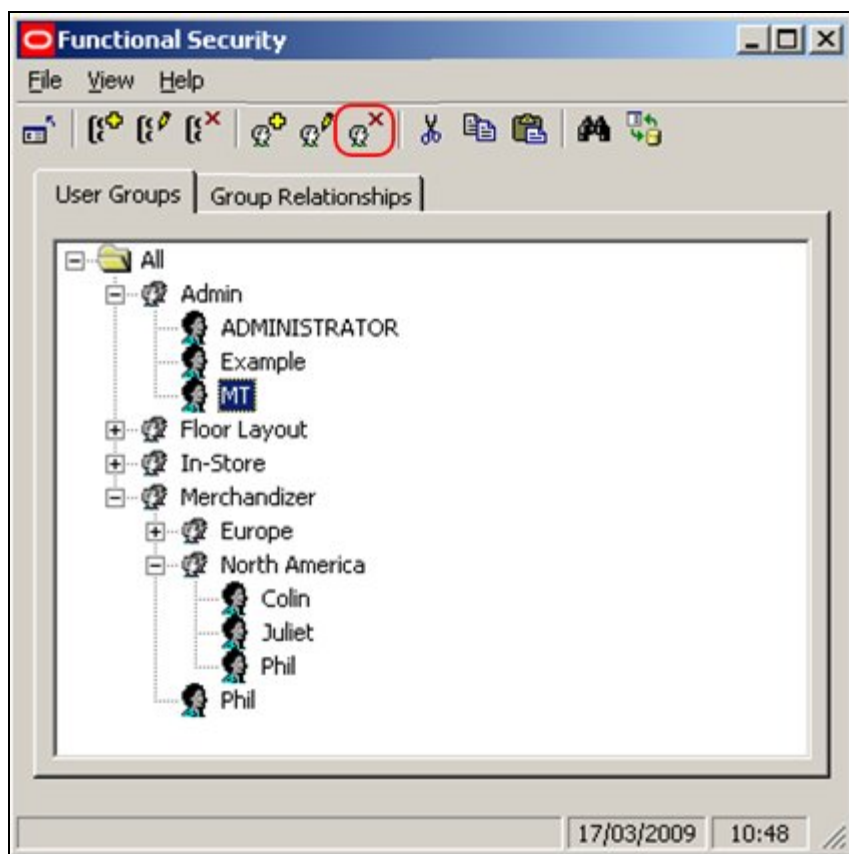
### Deleting a User

To **Delete a User** highlight the user in the hierarchy and click on the delete icon.

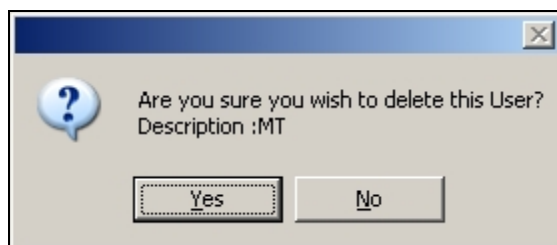
---

**Note:** Deleting a user will remove the user from **all** user groups. Use an alternative method if it is desired to remove the User from a single User Group. Removing Users from User Groups

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This will bring up the Delete Confirmation.



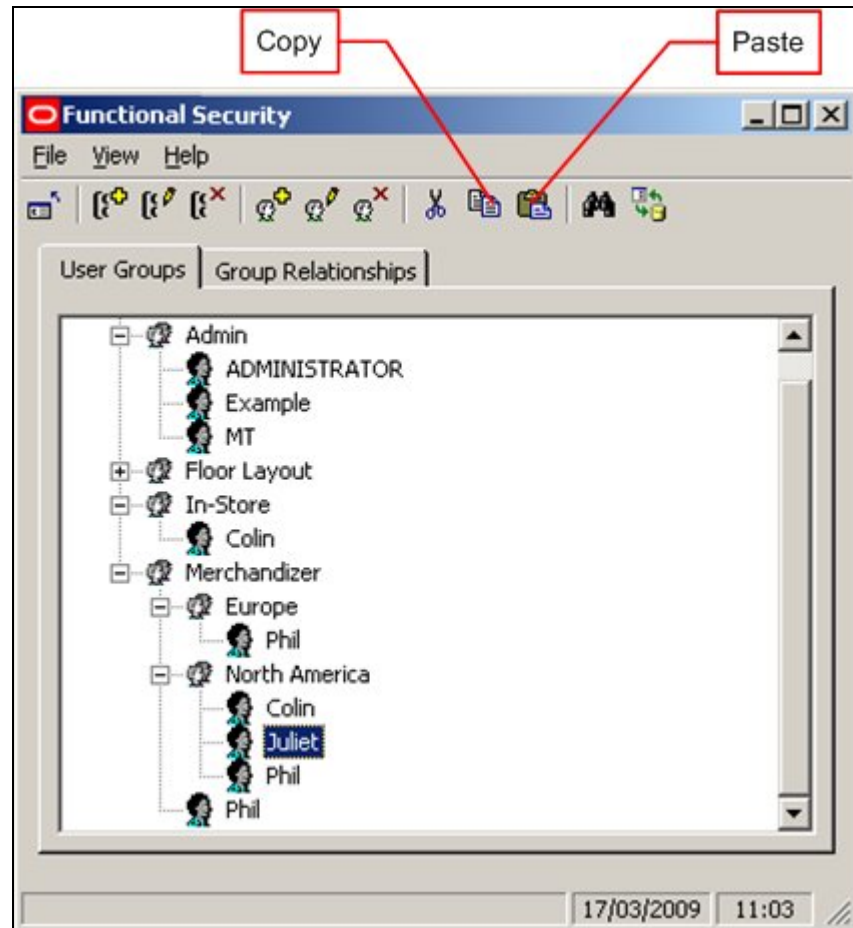
Click on Yes and the User will be removed from all User Groups.

### Adding Users to Multiple User Groups

**Adding Users to Multiple User Groups** is done so that a User can have the privileges associated with both groups.

1. In Macro Space Management it might be desired to give a user access to the a combination of modules that are only possible by putting the User into two separate User Groups.
2. In In-Store Space Collaboration it might be desired to give a user access to User Groups containing multiple geographic areas. For example, a User might be put into two different users groups (France and Germany) to give them access to stores in both of those countries.

To add Users to multiple User Groups use the Copy and Paste options.

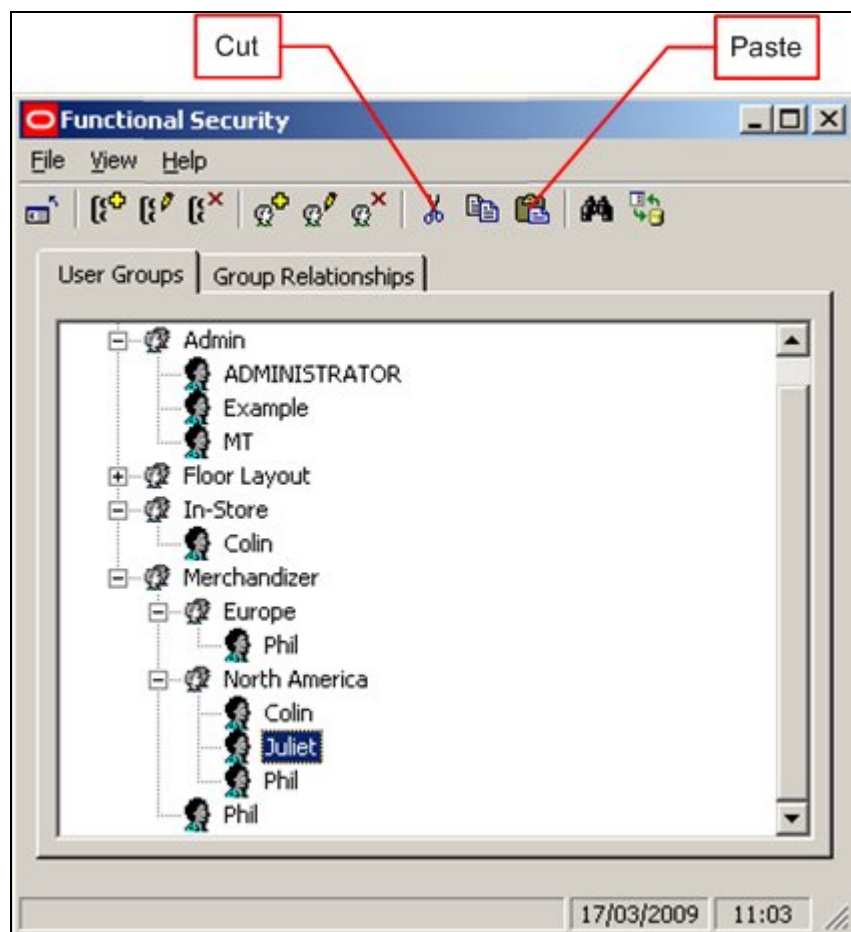


1. Open up the hierarchical tree and highlight an instance of the user you wish to copy.
2. Click on the Copy icon.
3. Highlight the User group it is desired to copy the User to.
4. Click on the Paste icon.

The user will now be copied to the required User Group.

#### Moving Users from one User Group to Another

Moving Users to from one User Group to Another is carried out by using the Cut and Paste options.



1. Open up the hierarchical tree to find and instance of the user you wish to move.
2. Click on the Cut icon.
3. Highlight the User Group it is desired to move the user to.
4. Click on the Paste icon.

The User will now be removed from the first User Group and copied to the second User Group.

### Removing Users from Multiple User Groups

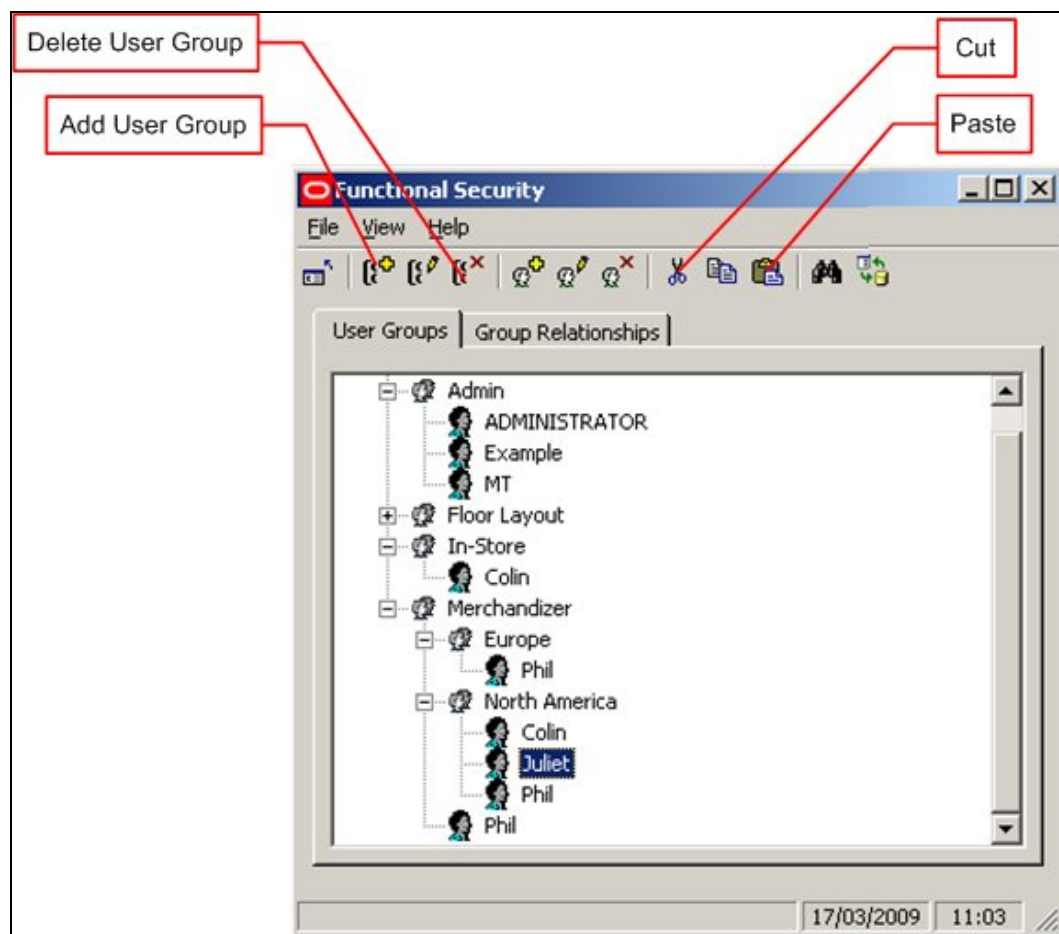
**Removing 'Multiple User Group' Users** from some of those User Groups is not directly possible with the current functionality, but it can be achieved indirectly.

---

**Note:** Do not use the Delete option to remove a User from a single User Group - this will result in the User being deleted from all User Groups.

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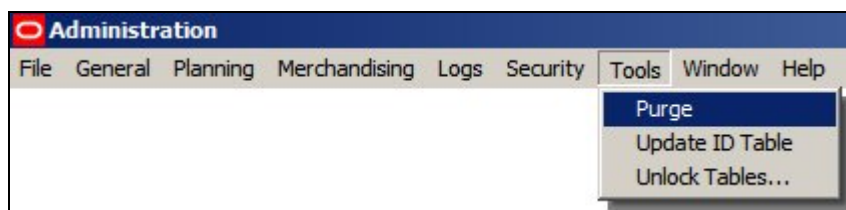
1. Click on the Add Group Icon to create a Temporary Group.
2. Name the Group Temporary or some other similar name.
3. Open the hierarchy and select the User Group and the User it is desired to remove from the Group.
4. Click on the Cut icon.
5. Highlight the Temporary User Group.
6. Click on the Paste icon.

The User will be removed from the selected User Group and copied to the Temporary User Group.

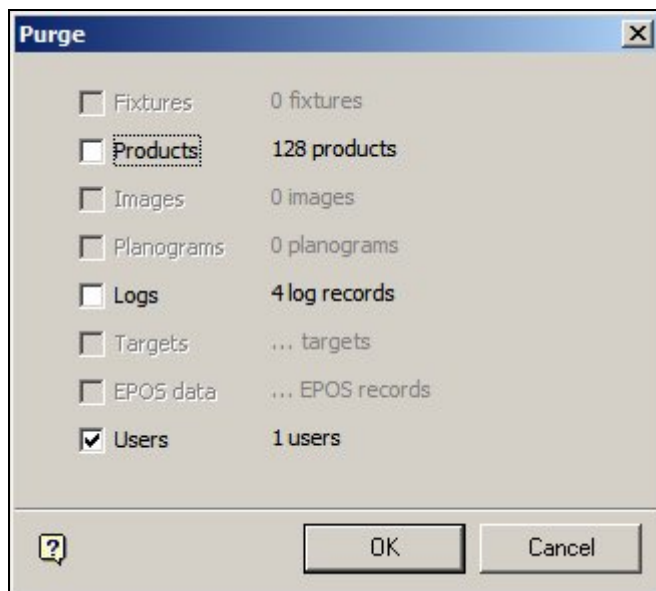
7. Delete the Temporary User Group.

### Purge Users Option

**Purge options** are available using the Purge option on the Tools pull down menu.



The user will not be permanently deleted from the database until the Users option is checked in the Purge dialogue box and the OK button clicked.




---

**Note:** Until the user is purged from the database, they will still be able to use their User Name and Password. Deleting a user in Functional Security alone is not enough to prevent them from accessing Macro Space Management or In-Store Space Collaboration.

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## Group Relationships

### Overview of Group Relationships

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**Note:** Group Relationships only affect access to the modules in Macro Space Management. Specifying what functionality is available to a User Group in In-Store Space Collaboration can currently only be done directly in the database.

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### Group Relationships

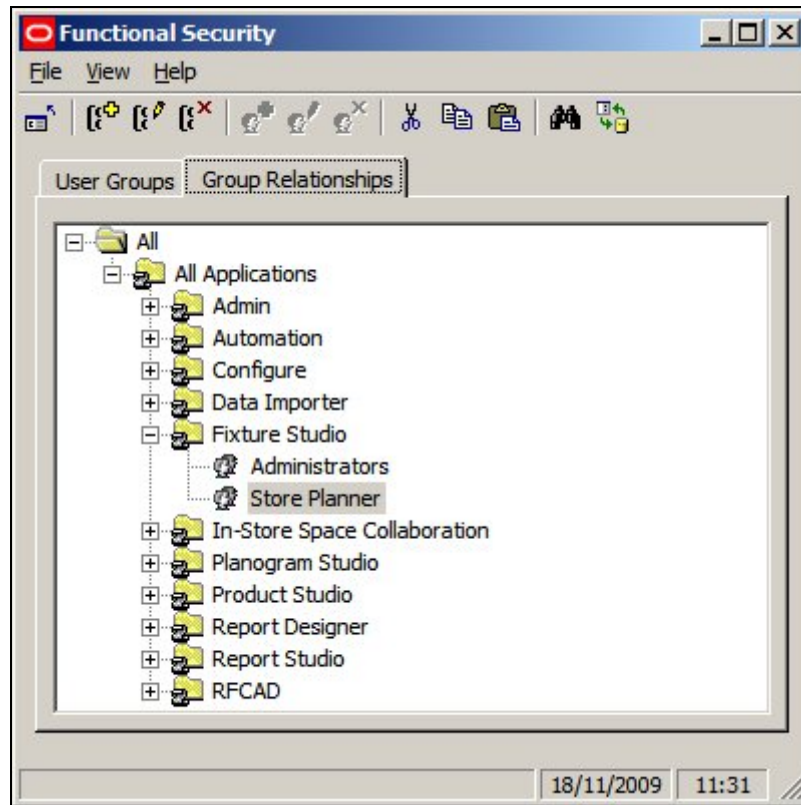
Group Relationships are used to define areas of functionality for which security can be set. These control access to the main modules of Macro Space Management - for example Fixture Studio. User Groups can then be assigned to these areas of functionality - allowing access to be controlled to the different modules.

### Adding, Editing and Deleting Command Groups

At present Adding Command Groups has no effect as there is no way of tying the newly added Command Group into any functionality. The names of Command Groups can be edited, but this is not recommended as it may make it difficult to establish which functionality is having its access controlled. Command Groups can be deleted. This is not recommended as deleting a command group removes all control over access to the module it references.

### Using Group Relationships

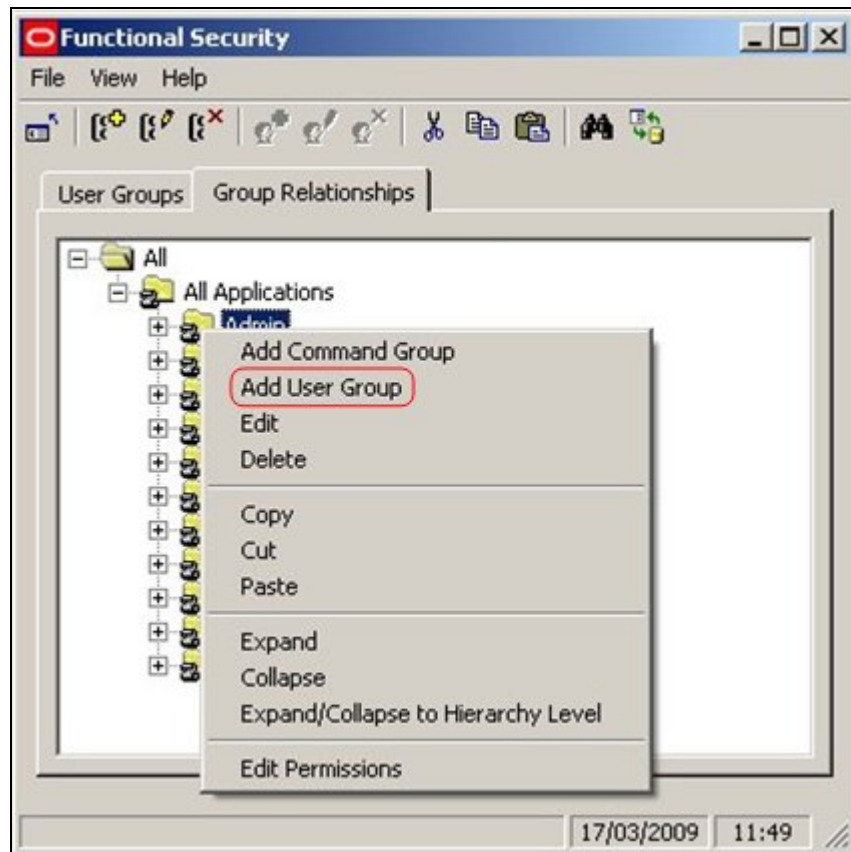
User Groups can be created in the User Groups Tab. Permissions to access specific parts of the Macro Space Management and In-Store Space Collaboration can then be granted by associating User Groups to the top level command groups.



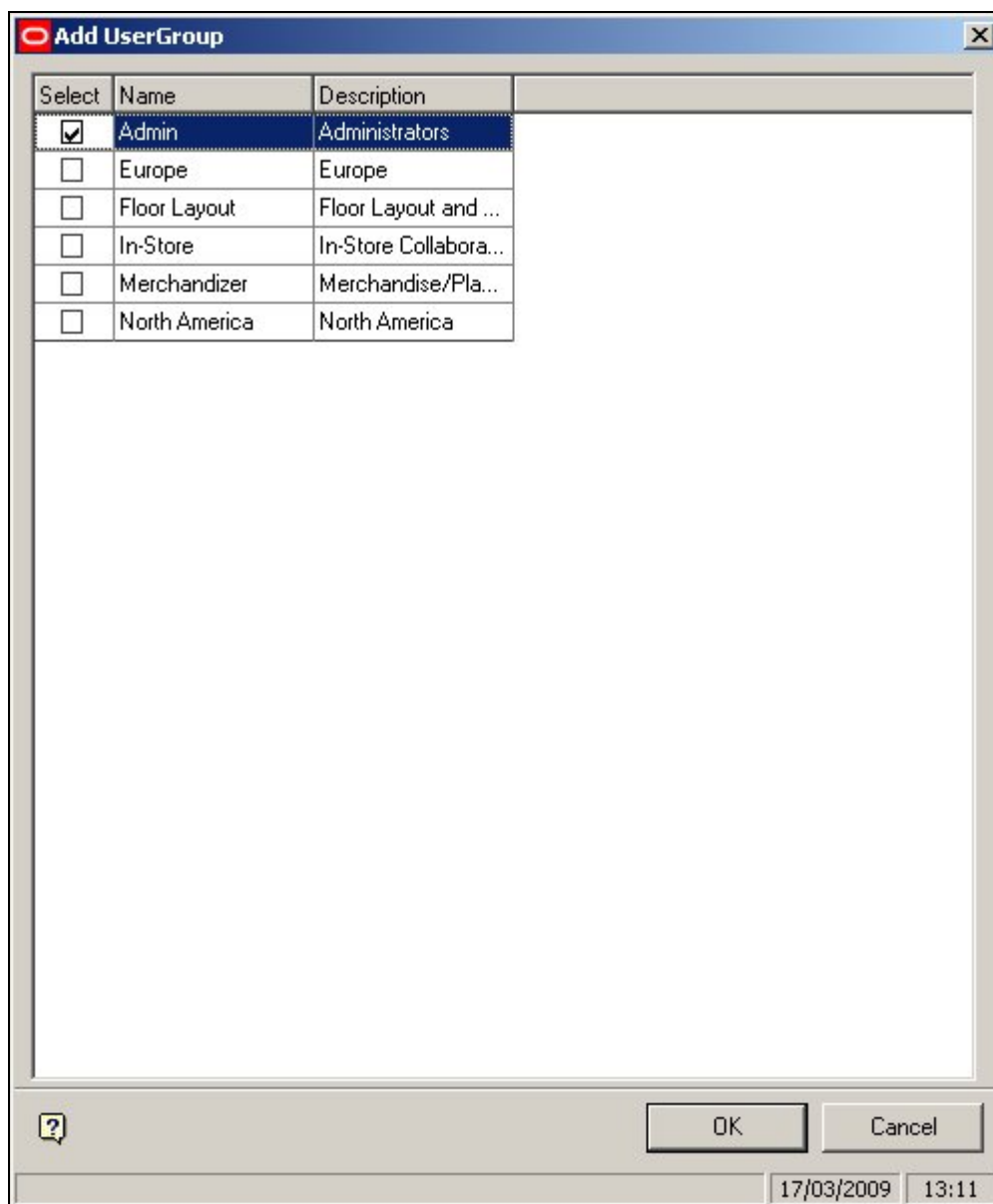
In the above example, Fixture Studio has been made available to users belonging to the Administrator and Store Planner User Groups.

### Adding a User Group to a Command Group

To **Add a User Group** to a Command Group highlight the required Command Group and right click to bring up the pop-up menu.



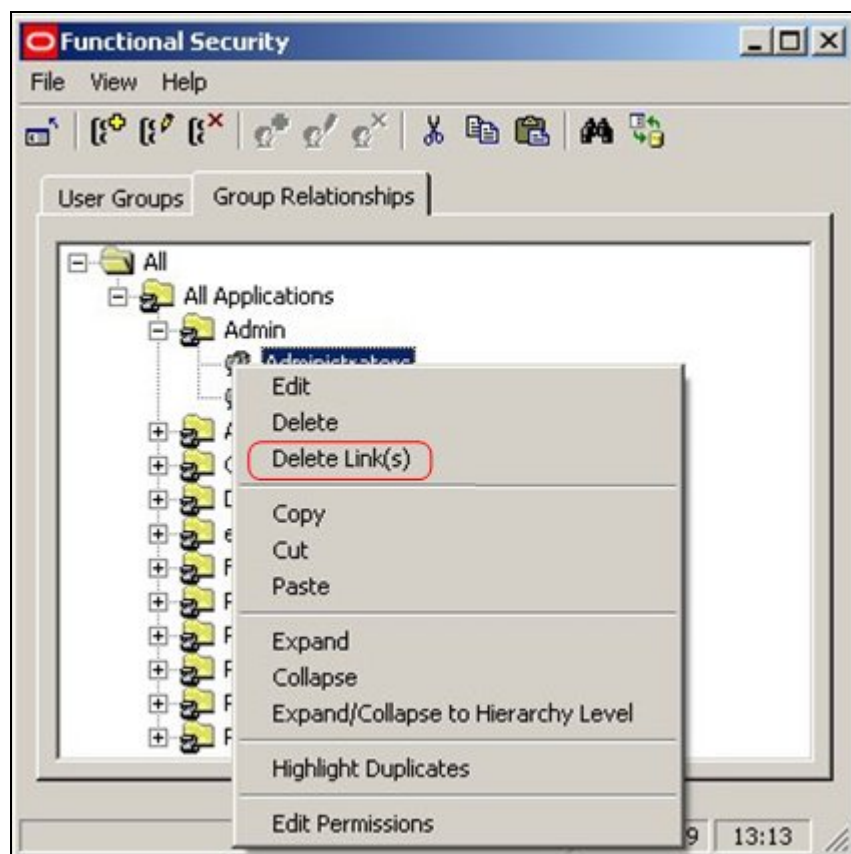
Select Add User Group to bring up a list of available User Groups.



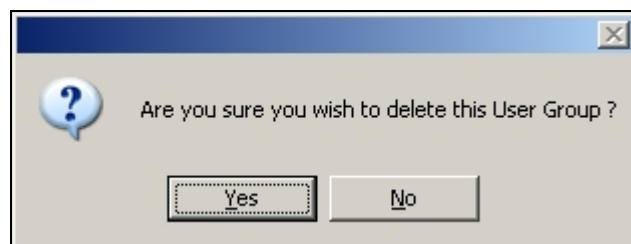
Check the boxes for the required User Groups and click on OK.

### Removing a User Group from a Command Group

To **Remove a User Group** from a Command Group highlight the required User Group and right click on it to bring up the pop-up menu.



Select the Delete Links option. This will bring up a confirmatory dialogue.



Click on OK to confirm.

## Setting Permissions

The **Edit Permissions** option is not active in this release of Macro Space Management



## Data Security

### About Data Security

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**Note:** In-Store Space Collaboration is an optional application that can be used in parallel to Macro Space Management. It may not be installed in all implementations of Macro Space Management.

---

**Data Security** is an extension of Functional Security. It allows Administrators to further restrict the permissions a user may have for a particular Macro Space Management or In-Store Space Collaboration function to specific data within that function. For example a merchandiser may have permissions to add, change and delete merchandise, but it may be desired to restrict those permissions to specific stores.

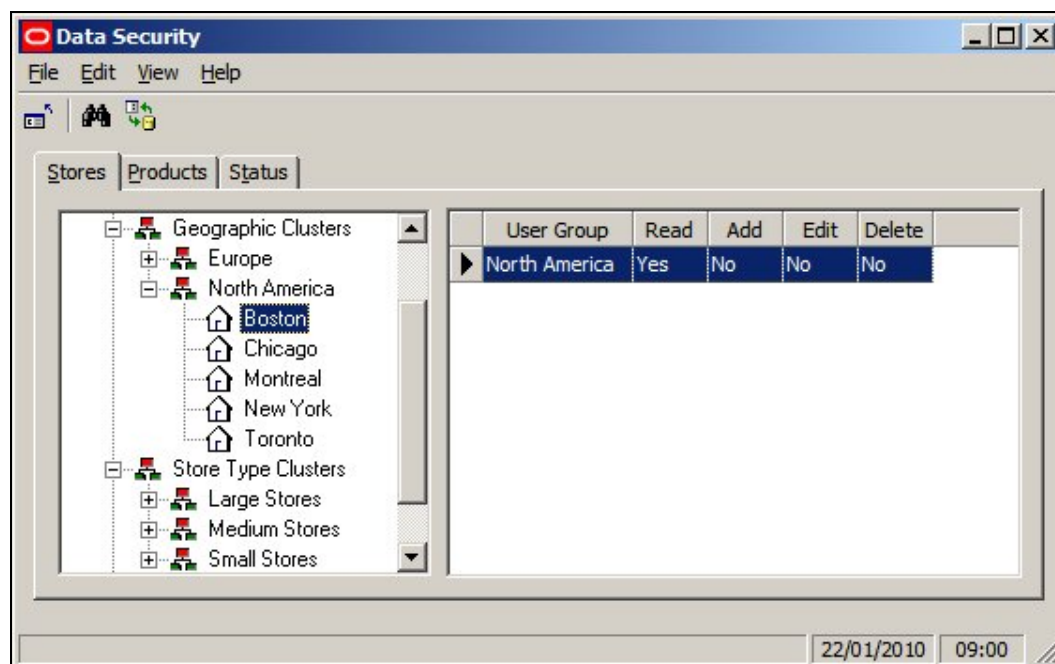
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**Note:** at present Data Security is only operational in In-Store Space Collaboration and has no effect in Macro Space Management.

---

Data Security allows Administrators to further define permissions for User Groups for:

1. Stores
2. Products
3. Statuses.



In the above example, the Boston Store has been made available to ISSC users that are members of the North America User Group. This means that only users with the correct privileges can edit that store.

---

**Note:** User Groups are defined using the Functional Security option (available from the Security menu).

---

## About Data Security

**Data Security** is an extension of Functional Security. It allows Administrators to further restrict the permissions a user may have for a particular Macro Space Management function to specific data within that function. For example a merchandiser may have permissions to add, change and delete merchandise, but it may be desired to restrict those permissions to specific stores.

Data Security allows Administrators to further define permissions for User Groups for Stores, Products and Statuses.

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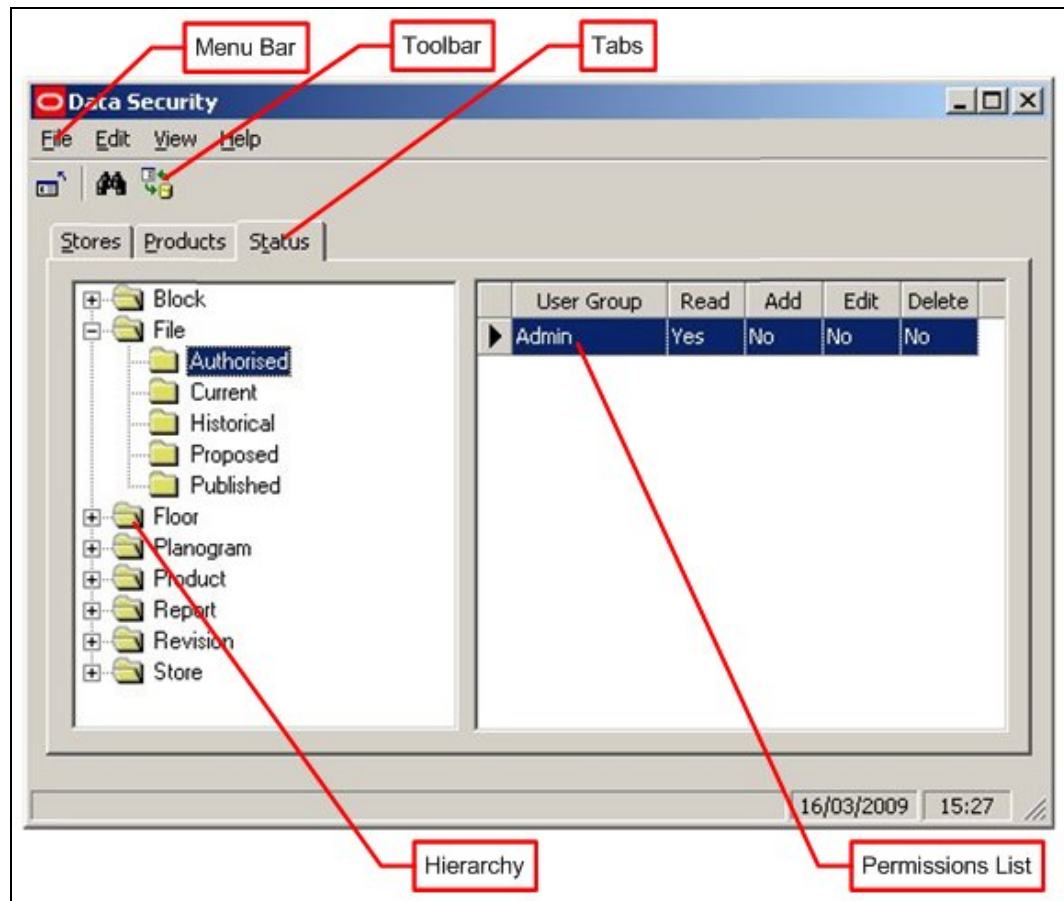
**Note:** at present Data Security is only operational in In-Store Space Collaboration.

---

## The Data Security Window

The **Data Security Window** allows users to set varying options concerning Data Security.





The **Menus** allow users to access various Data Security options.

The **Toolbar** gives access to a limited number of Data Security options.

The **Tabs** allow the users to switch between setting Data security options for Stores, Products and Status.

The **Hierarchy** allows users to see a list of Stores, Products or Statuses.

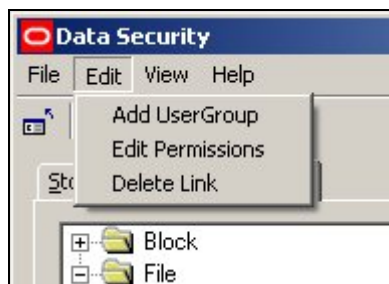
The **Permissions List** enables users to see the list of permissions allocated to that aspect of Macro Space Management.

## Data Security Menus and Toolbar

The **File pull down menu** allows users to exit this section of the Admin Module.



The **Edit pull down menu** allows users to configure the permissions for the data.



The **View pull down menu** allows users to access the find dialogues and to refresh the information in the Data Security window with the latest information in the database.





The **Help pull down menu** calls the About option



The **Toolbar** has three options:



	Exit
	Find
	Refresh

**Exit** closes this part of the Admin Module.

**Find** brings up the search dialogue.

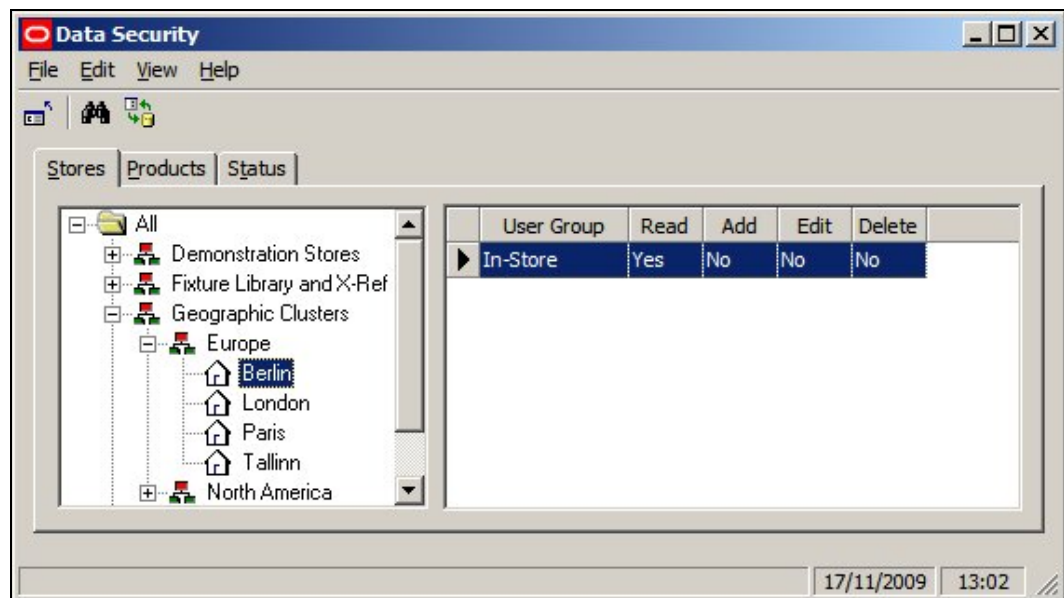
**Refresh** loads the latest version of the information in the database to the Data Security window.

## Using Data Security

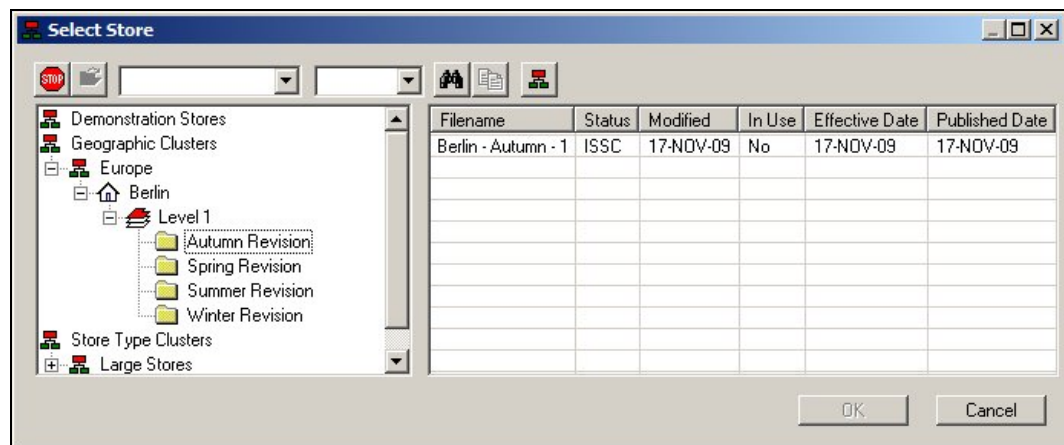
### Overview of Data Security for Stores

**Data Security for Stores** is intended to allow Administrators to assign permission for User Groups to see specific stores.

**Note:** at present this functionality only affects In-Store Space Collaboration. If Macro Space Management users have the appropriate privileges to use either the Planner or Merchandiser Modules, they can access all stores in the Store Hierarchy.

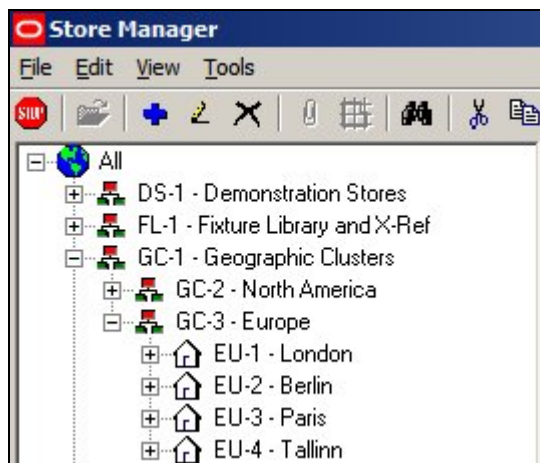


In the above example the Berlin store has been made visible to ISSC users. (Other stores can also be made visible if required).



Stores then become visible to In-Store Space Collaboration Users - note how stores in the Europe cluster in MSM's Store Manager that have not been given permissions to be

accessible in In-Store Space Collaboration do not become visible in ISSC. (London, Paris and Tallinn would need to have the ISSC User Group assigned to them before they became visible).



Also note that any store plans it is desired to edit for the store must also have been given the appropriate permissions in the Statuses Tab of the Data Security dialog box and then must be set in Store Manager for the specified statuses..

## Adding and Removing Permissions for Stores

### Adding Permissions for Stores

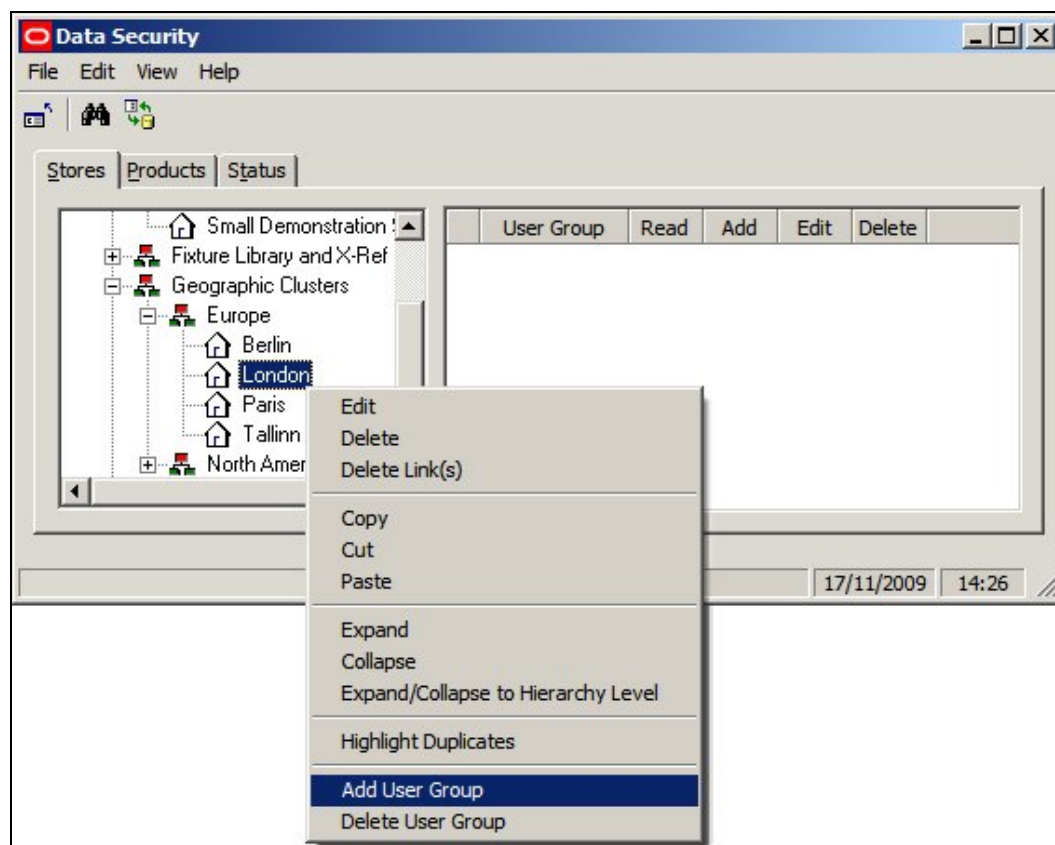
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**Note:** at present this functionality only affects In-Store Space Collaboration. If Macro Space Management users have the appropriate privileges to use either the Planner or Merchandiser Modules, they can access all stores in the Store Hierarchy.

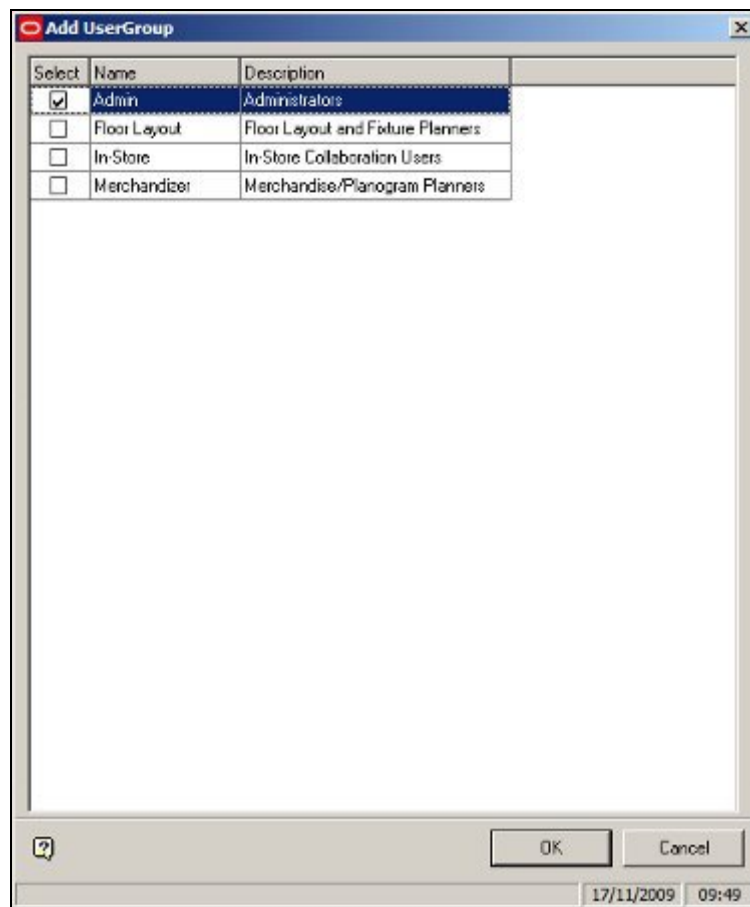
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Adding Permissions for Statuses is done in three stages.

1. Highlight the required store and select the Add User Group option from the right click menu.



2. This will bring up the Add User Group dialog box. The User Groups it is desired to add can be selected from the list.

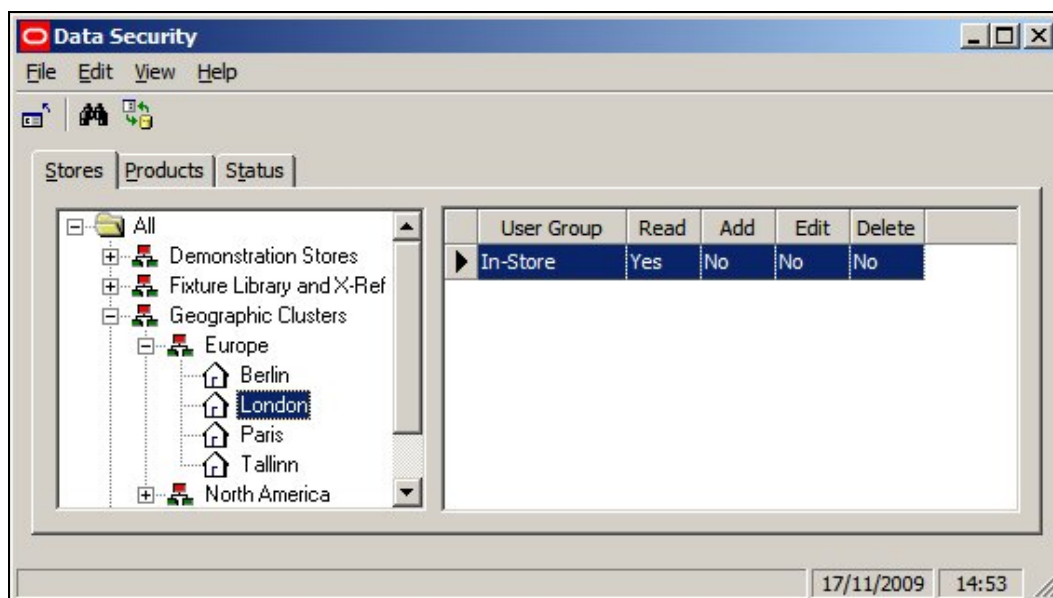


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**Note:** User Groups (and the Users assigned to them) are set up using the Functional Security option.

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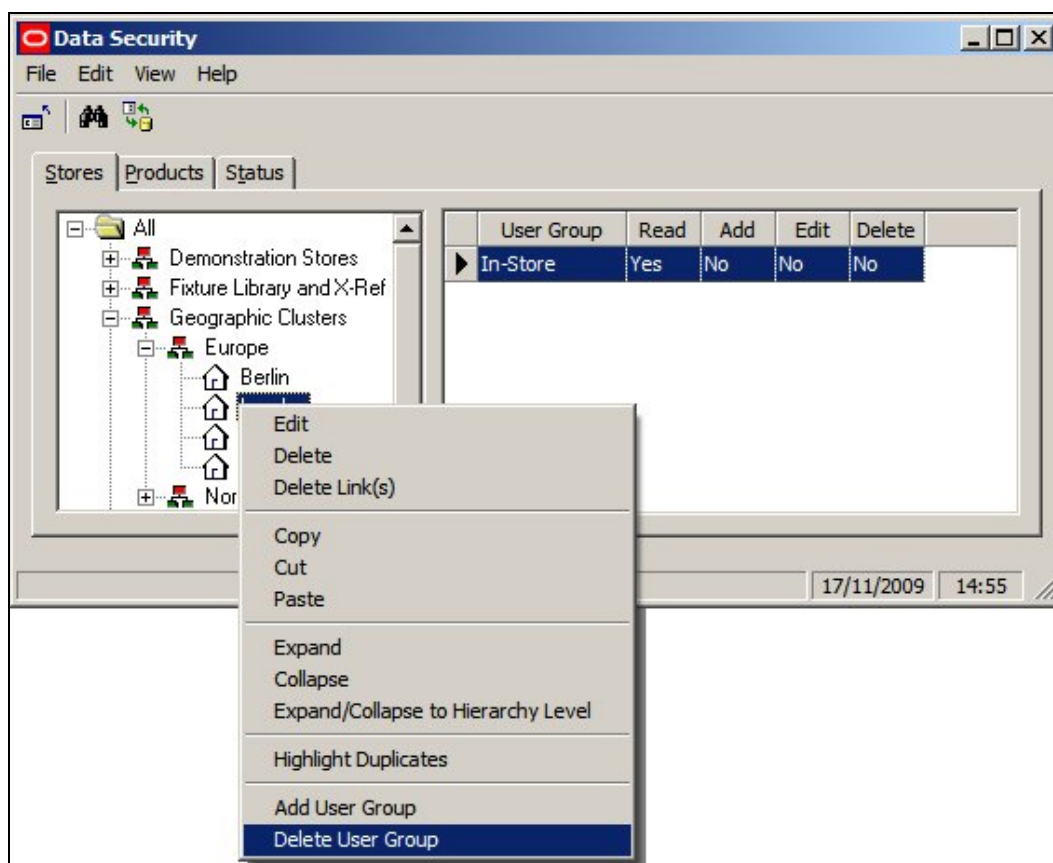
3. On clicking OK, the selected User Group will be added to the list of those that can view that store in In-Store Space Collaboration.



All Users belonging to the selected User Groups will be able to access that store In-Store Space Collaboration. (The store will also have to contain store plans at a status that can be viewed in In-store Space Collaboration).

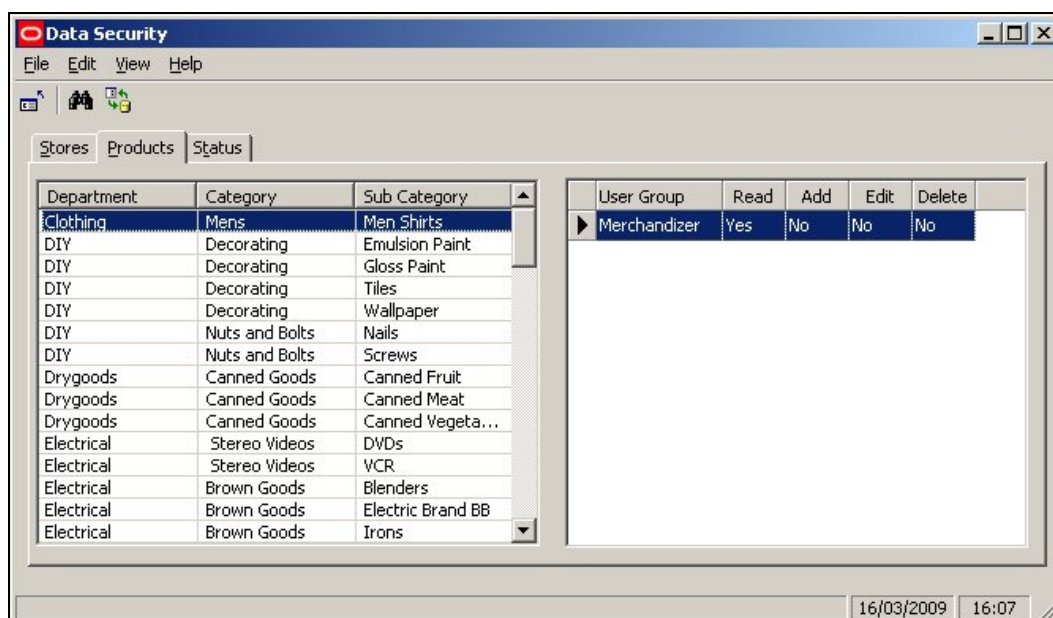
#### Deleting Permissions for Stores

Deleting Permissions for Stores is done by highlighting the User Group it is desired to remove and selecting 'Delete User Group' from the right click menu.



## Overview of Data Security for Products

**Data Security for Products** is intended to allow Administrators to assign permission for User Groups to change specifically identified products.



**Note:** This functionality is not fully implemented in this release. Data Security for Products is not available in either Macro Space Management or In-Store Space Collaboration.

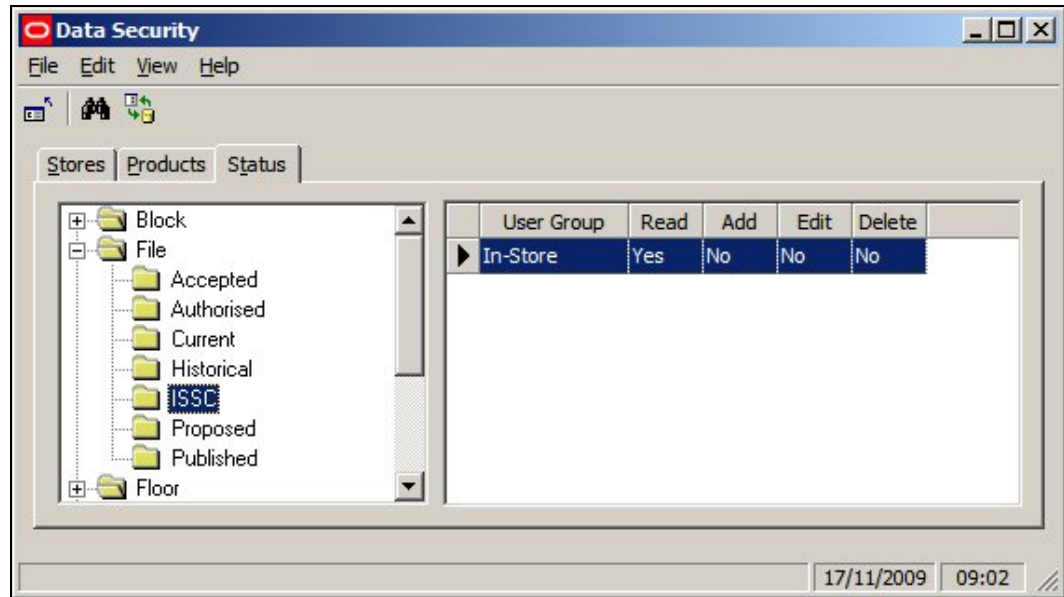
## Overview of Data Security for Statuses

**Data Security for Statuses** is intended to allow Administrators to assign permission for User Groups accessing In-Store Space Collaboration to see store plans at specific statuses.

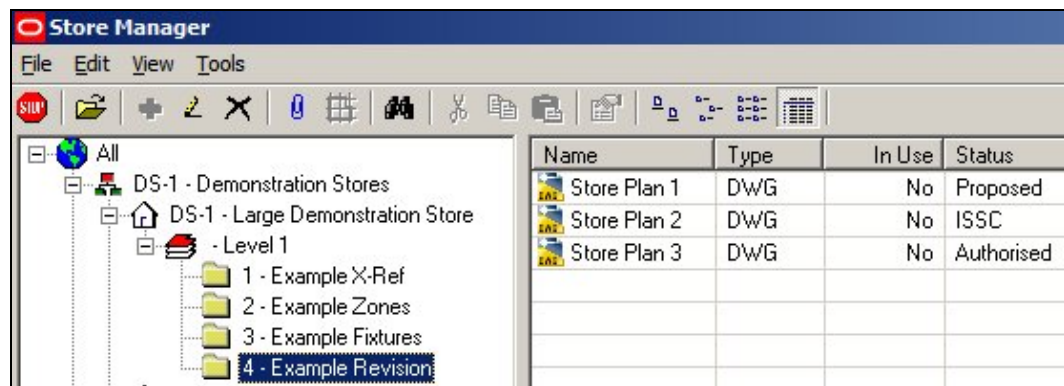
**Note:** at present this functionality only affects In-Store Space Collaboration. If Macro Space Management users have the appropriate privileges to use either the Planner or Merchandiser Modules, they can access store plans at all statuses in the Store Hierarchy.

At present Data Security for Statuses only operates on Files. Setting Data Security for Statuses will have no effect on Blocks, Floors, Planograms, Products, Reports, Revisions and Stores.

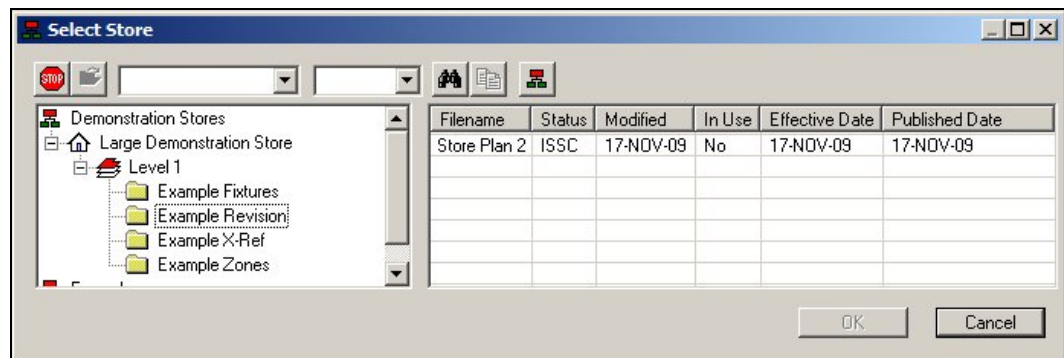




In the above example the ISSC status has been made visible to ISSC users. (Other statuses can also be made visible if required).



When a store plan is ready for use in In-Store Space Collaboration, it is set to ISSC Status in Store Manager.



Store plans of ISSC status then become visible to In-Store Space Collaboration Users - note how store plans set to statuses other than ISSC in store Manager are not visible in In-Store Space Collaboration. Also note that the parent store for the store plan must also have been given the appropriate permissions in the Stores Tab of the Data Security dialog box.

It is possible to set permissions for statuses by function: i.e. Admin Users, ISSC Users, etc. It is also possible to set permissions using other criteria. For example if ISSC User, Junior Manager and Senior Manager User Groups are set up in Functional Security, it would be possible to set up file statuses to that they are visible at the appropriate levels of management.

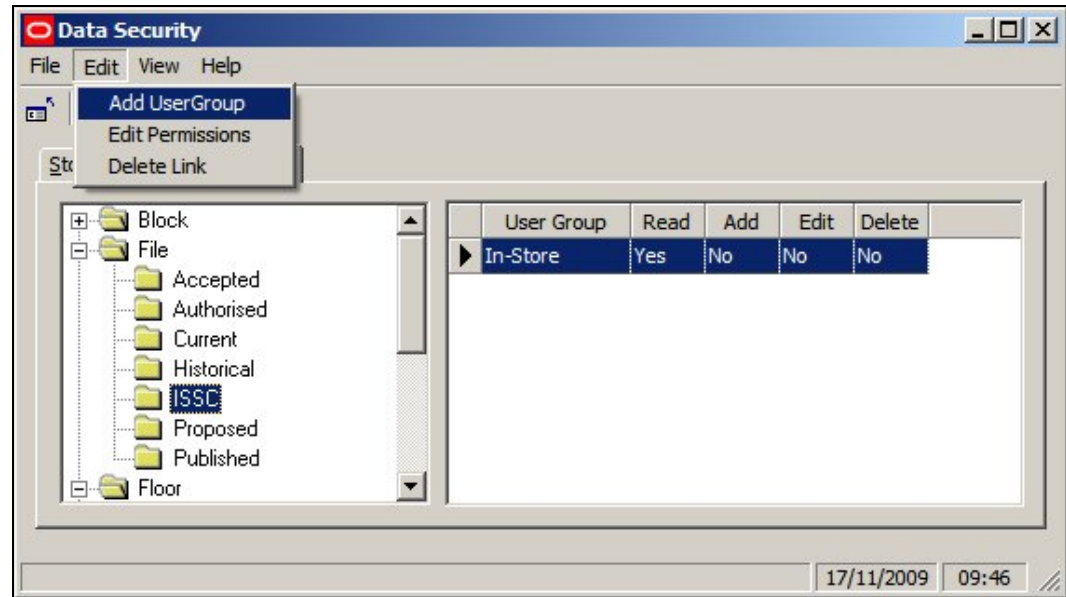
## Adding and Removing Permissions for Statuses

### Adding Permissions for Statuses

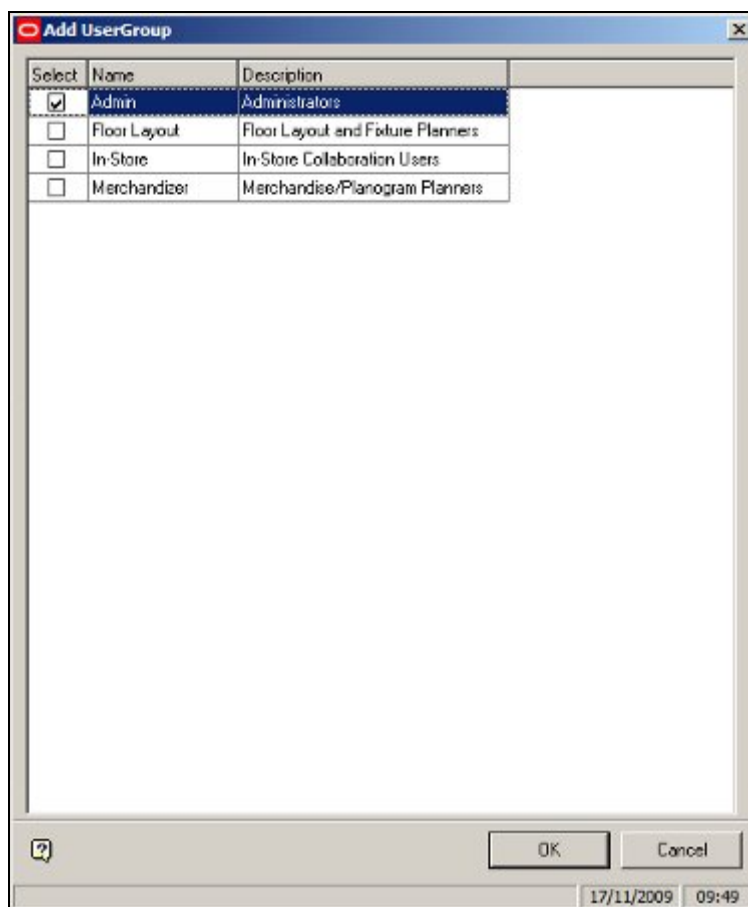
**Note:** at present this functionality only affects In-Store Space Collaboration. If Macro Space Management users have the appropriate privileges to use either the Planner or Merchandiser Modules, they can access store plans at all statuses in the Store Hierarchy.

Adding Permissions for Statuses is done in three stages

1. Highlight the required status and select the Add User Group option from the Edit menu



2. This will bring up the Add User Group dialog box. The User Groups it is desired to add can be selected from the list.

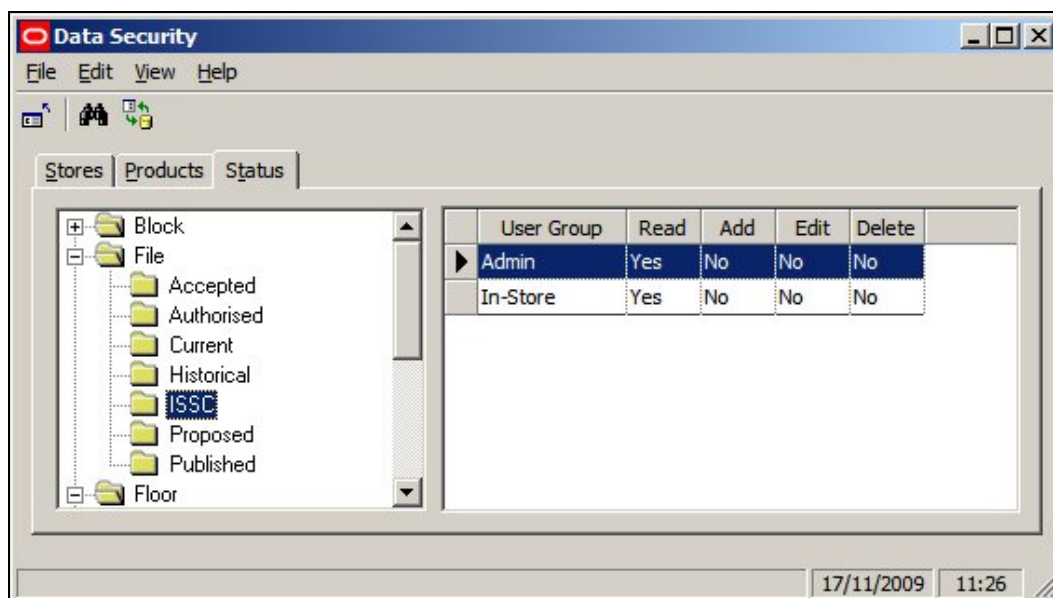


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**Note:** User Groups (and the Users assigned to them) are set up using the Functional Security option.

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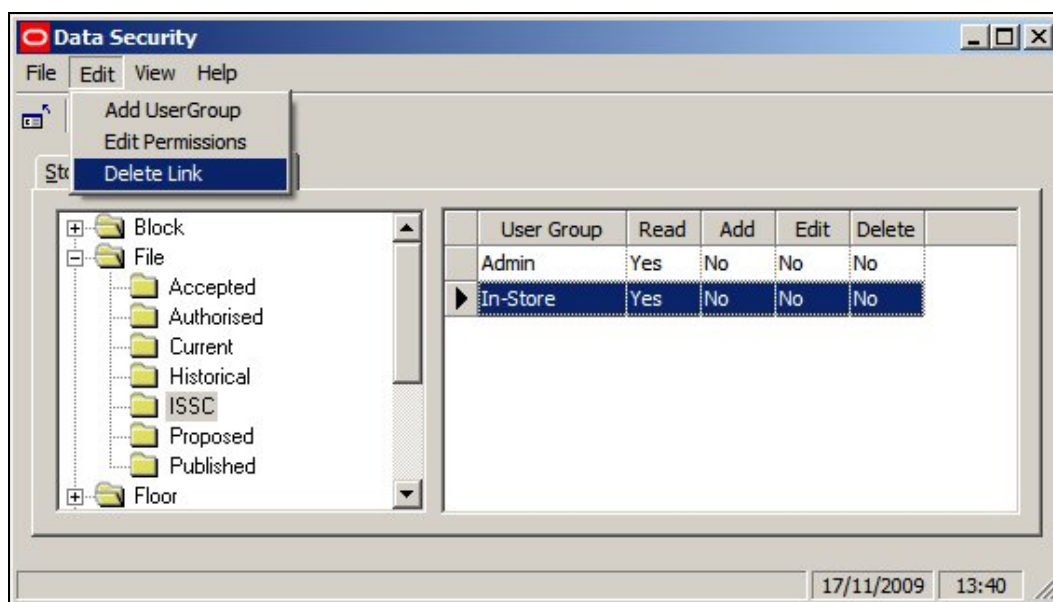
3. On clicking OK, the selected User Group will be added to the list of those that can view store plans of that status in In-Store Space Collaboration.



All Users belonging to the selected User Groups will be able to access store plans of that status in In-Store Space Collaboration (providing they also have rights to access that store).

#### Deleting Permissions for Statuses

Deleting Permissions for Statuses is done by highlighting the User Group it is desired to remove and selecting 'Delete Link' from the Edit menu.



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