Oracle® Retail Macro Space Management

Administration Module User Guide
Release 13.3.1

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Oracle® Retail Macro Space Management Administration Module User Guide, Release 13.3.1

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

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Preface

This document is intended for administrators and power users of Macro Space Management.

Documentation Accessibility

For information about Oracle's commitment to accessibility, visit the Oracle Accessibility Program website at
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Access to Oracle Support

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http://www.oracle.com/pls/topic/lookup?ctx=acc&id=trs if you are hearing impaired.

Related Documents

For more information, see the following documents in the Oracle Retail Macro Space Management Release 13.3.1 documentation set:

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

- *Oracle Retail Macro Space Planning Install Guide*
- *Oracle Retail Macro Space Planning License Information*
- *Oracle Retail Macro Space PlanningData Model*

For more information on In-Store Space Collaboration see the following documents in the Oracle Retail In-Store Space Collaboration Release 13.3.1 documentation set:

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

Customer Support

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

https://support.oracle.com

When contacting Customer Support, please provide the following:

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

Review Patch Documentation

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

Oracle Retail Documentation on the Oracle Technology Network

Documentation is packaged with each Oracle Retail product release. Oracle Retail product documentation is also available on the following Web site:
http://www.oracle.com/technology/documentation/oracle_retail.html

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

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

Conventions

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

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

1

Administration Basics

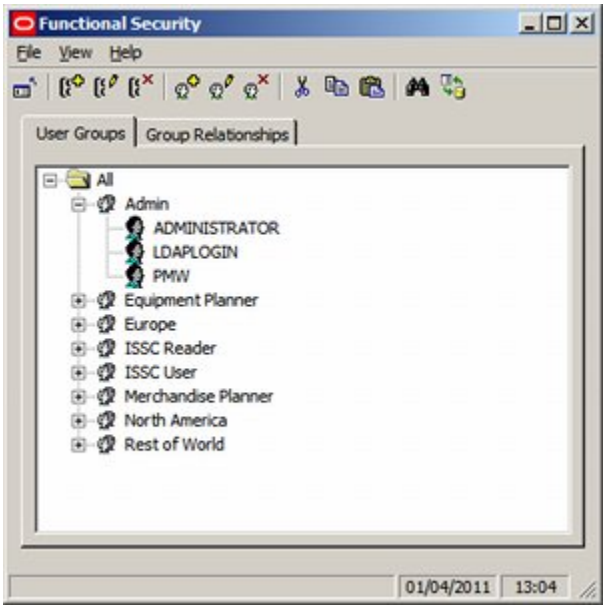
Logging in to the Administration Module

How Passwords and Privileges are Configured

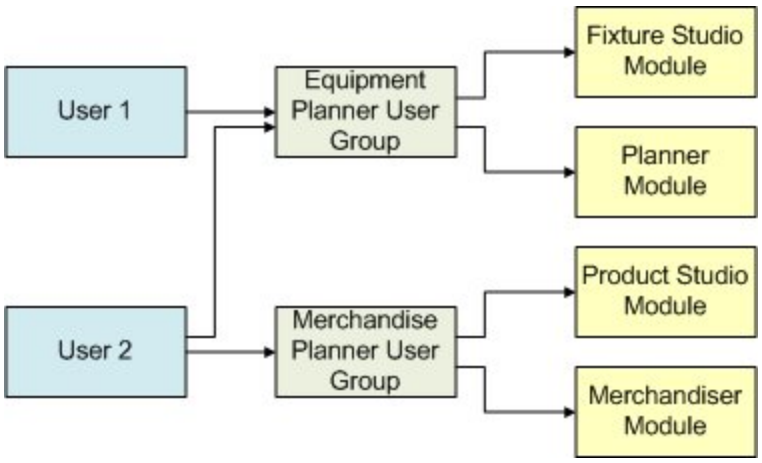
Passwords and privileges are configured in Macro Space Management's Administration module.

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

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



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



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

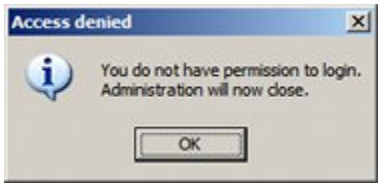
Logging in to Macro Space Management Modules

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



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

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

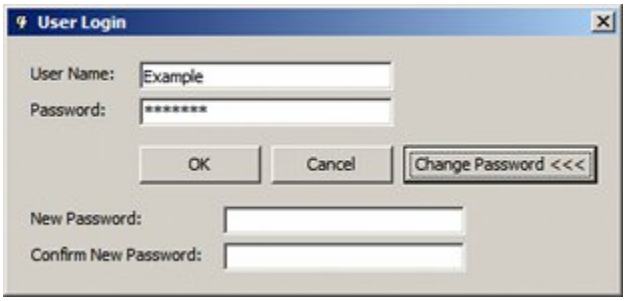


Note: The permissions for which modules can be accessed are configured in the Administration module.

Password Changes

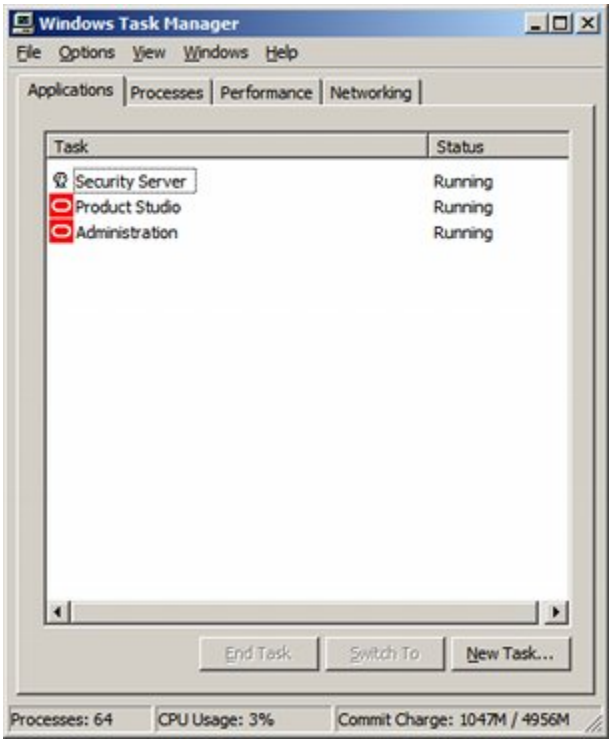
Macro Space Management can be configured to require password changes at specified intervals. If one of these intervals has been exceeded, the user will be asked to change their password the next time they log in. This can be done by means of the **Change**

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

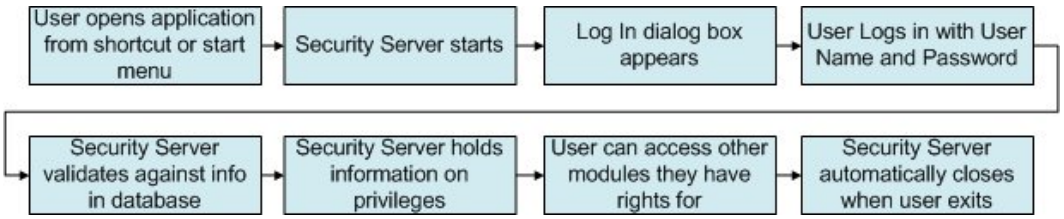


Security Server

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



How Security Server operates is shown in the following flowchart.



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

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

Security Server and Application Errors

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

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

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

Overview of the Admin Module

Admin Module Window

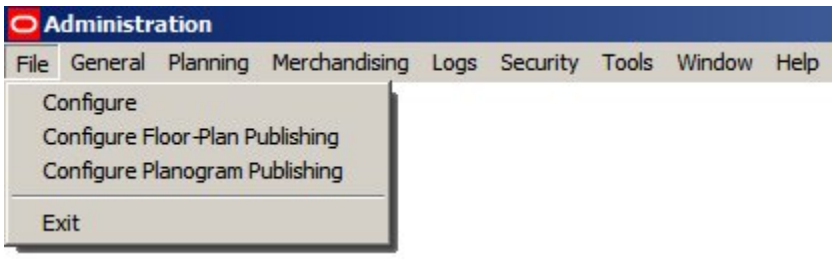
The **Admin Module** window contains a menu bar.



Clicking on any of the options will disclose a pull down menu giving access to further options.

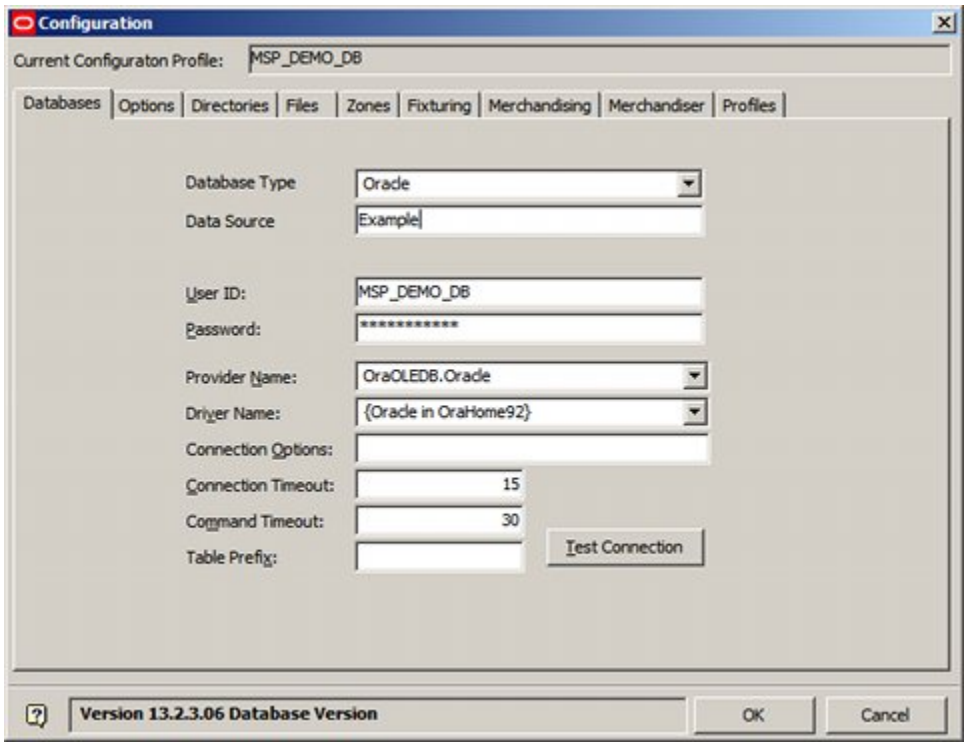
File Pull Down Menu

The **File pull down menu** has four options – Configure, Configure Floor Plan Publishing, Configure Planogram Publishing and Exit.

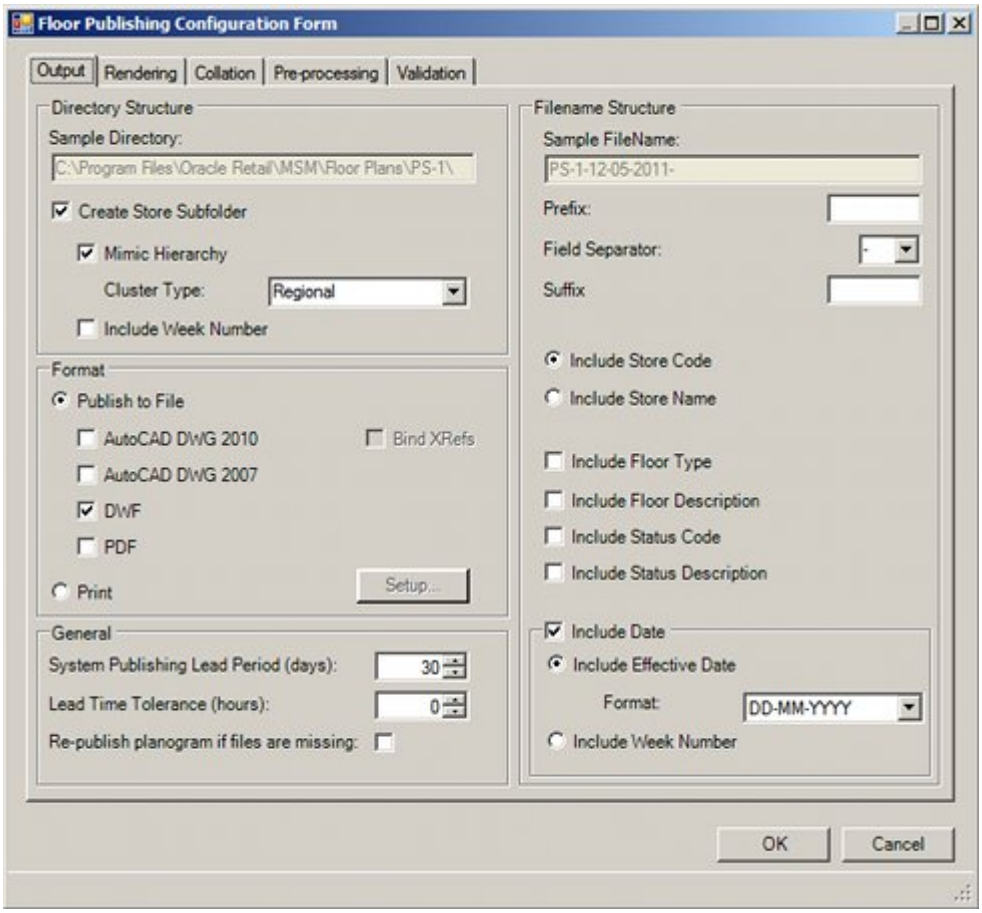


Configure brings up the Configuration Module, where a series of basic settings affecting the local operation of Macro Space Management can be changed.

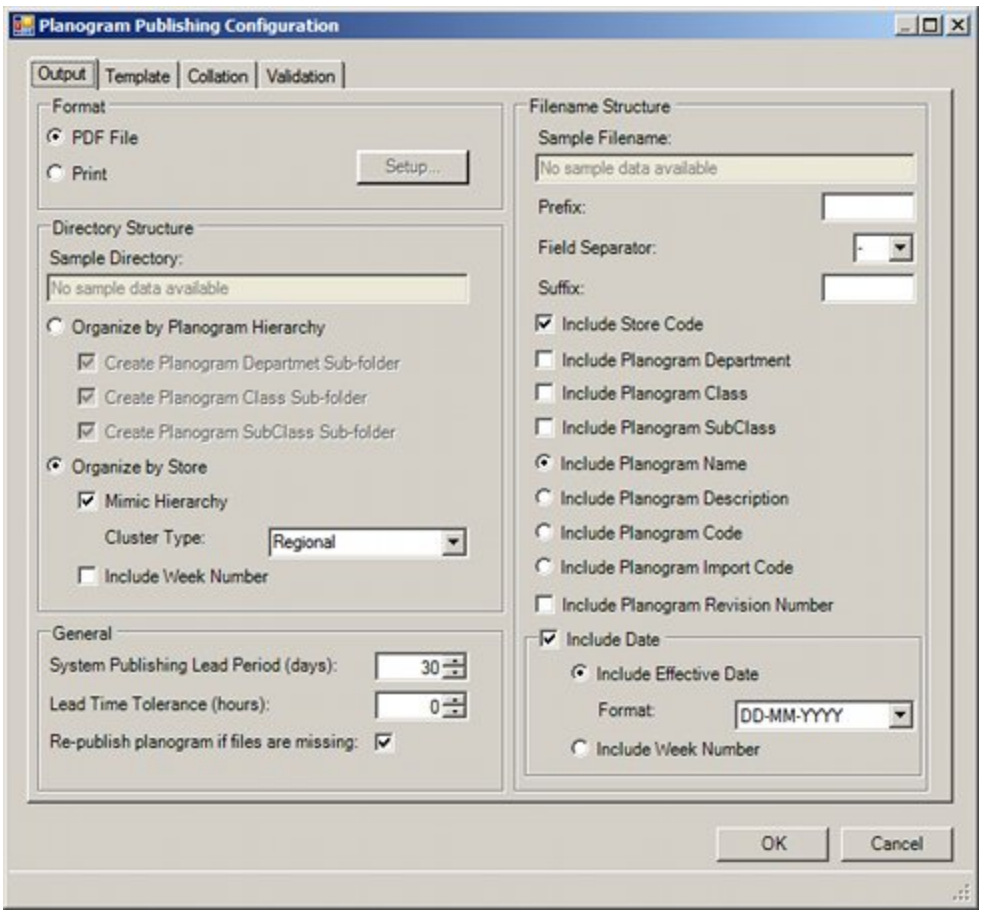
> **Note:** All tabs in the Configuration module will be visible if opened via the Administration module. If opened in other modules, a more restricted selection of tabs will be available.



Configure Floor Plan Publishing brings up the Floor Plan Publishing dialog box, allowing users to publish floor plans to a specified directory for onward distribution with a retail organization.



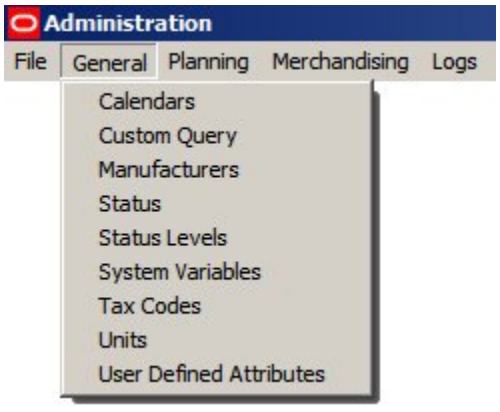
Configure Planogram Publishing brings up the Planogram Publishing dialog box, allowing users to publish planogram designs to a specified directory for onward distribution with a retail organization.



Exit allows the user to close the Admin Module

General Pull Down Menu

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

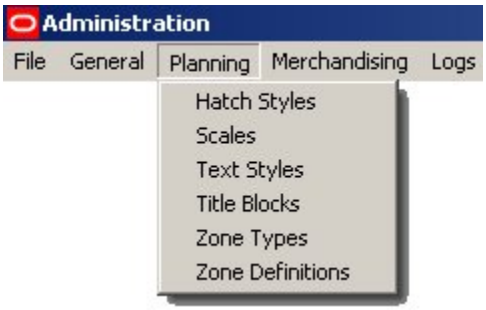


Option	Comment
Calendars	Configure the calendars used for financial planning.

Option	Comment
Custom Query	This option allows users to set up customized queries for the Find dialog box using Custom SQL.
Manufacturers	Configure the list of manufacturers used for fixtures and for merchandise.
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.

Planning Pull Down Menu

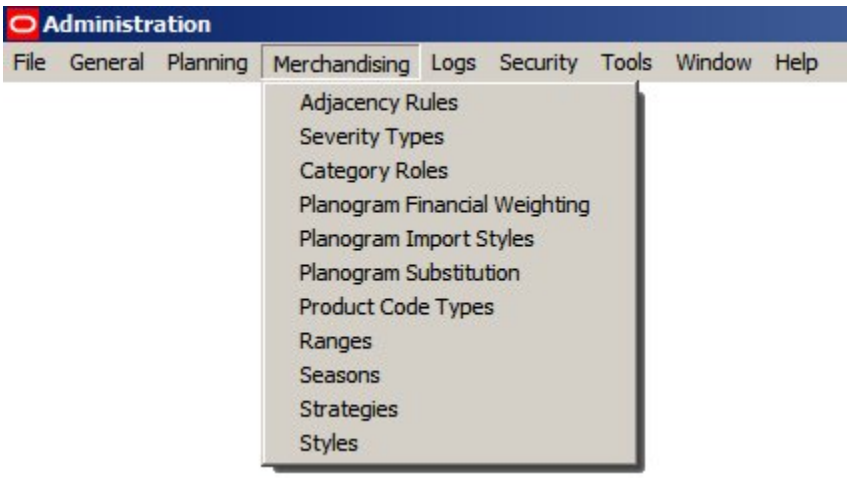
The **Planning** pull down menu gives access to options used for laying out drawings within Macro Space Management.



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.

Merchandising Pull Down Menu

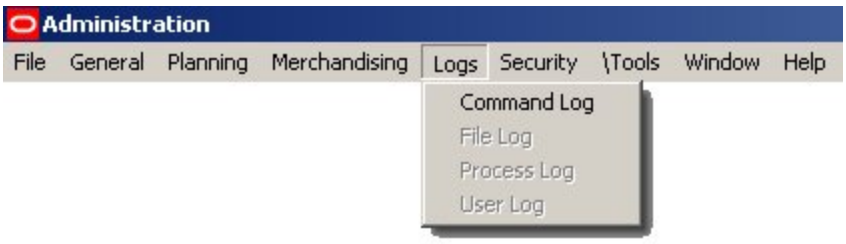
The **Merchandising** pull down menu gives access to options used for Products and Planograms.



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
Category Rules	Allows the user to configure a list of Category Roles used in Category Management
Planogram Financial Weighting	This option allows the user to specify the methods used to rank the financial performance of planograms
Planogram Import Styles	This option allows the user to map import styles in third party planogram tools to those used in Macro Space Planning
Planogram Substitution	Allows the user to specify which planograms to change in a floor plan
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.
Strategies	Allows the user to configure a list of Strategies used in Category Management
Styles	This option allows users to configure Styles and Style Relationships

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

Security Pull Down Menu

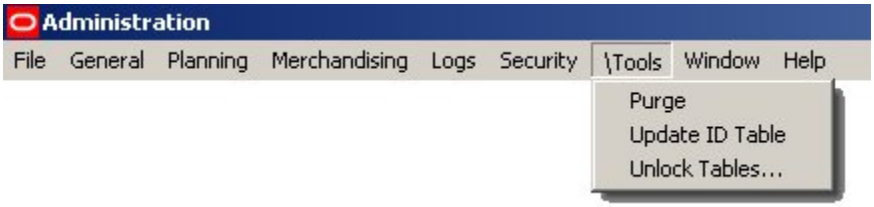
The **Security** pull down menu gives access to options used for assigning access.



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.

Tools Pull Down Menu

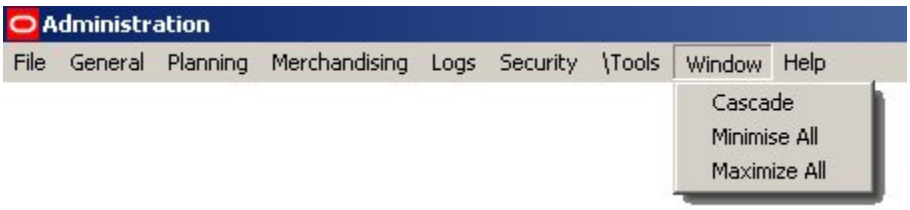
The **Tools** pull down menu gives access to varying administrative options.



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

Window Pull Down Menu

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



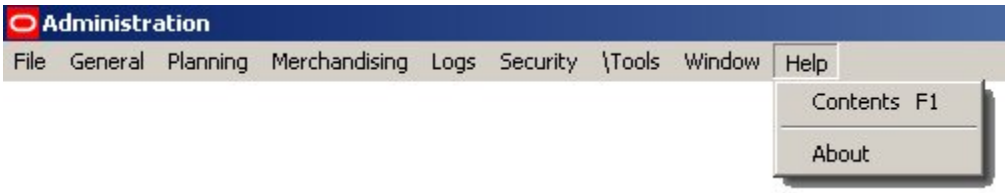
The **Cascade** function arranges open drawing windows so that they overlap.

The **Minimize All** function allows the user to minimize all open dialog interfaces.

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

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.

2

BatchRunner, Automated Calculations and Batch Processes

Overview of BatchRunner

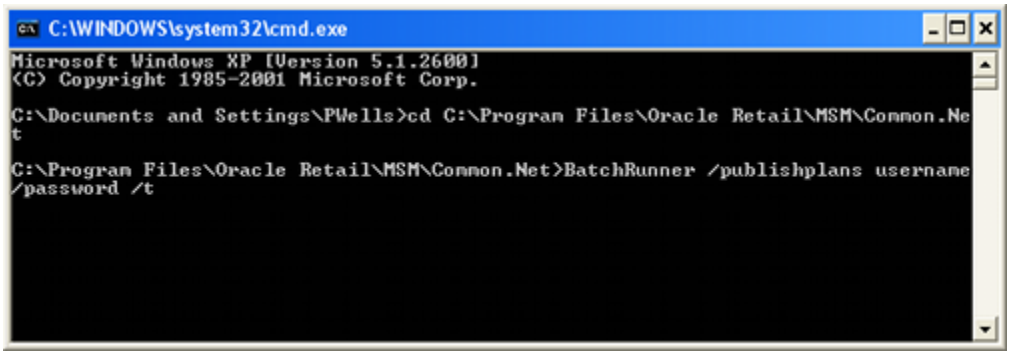
BatchRunner is a small .exe used to execute batch operations. Although BatchRunner cannot be accessed from the Administration Module, many of the batch operations configured in the module require BatchRunner to execute them. The following brief section has been included in this user guide for the benefit of Administrators and System Analysts.

Accessing BatchRunner

BatchRunner is installed on the local drive of every computer Macro Space Management is installed on. It can be found in the C:\Program Files\Oracle Retail\MSM\Common.Net folder. Access to BatchRunner functionality is controlled via the Automation options in the Group Relationships tab of the **Functional Security dialog box** accessed from the Security menu. Any Macro Space Planning user can access BatchRunner, but permission to run floor plan processing, floor plan publishing, planogram publishing and planogram substitution has to be explicitly granted. Users trying to run those functions without the appropriate permissions will receive an error message.

Running BatchRunner

BatchRunner is run from the command line. Although BatchRunner can be run manually from the command line, it is more often done through a scheduling tool. More sophisticated scheduling tools can enter the switch parameters directly into the command line. Alternatively, the scheduler can be used to invoke small DOS batch files containing the switch details.



The user accessing BatchRunner will need to enter the username and password they have been assigned to give them access to MSM. They will also need to have been assigned permissions in the Functional Security dialog box (Security menu) to use the functionality they are invoking.

BatchRunner Options

BatchRunner can run the following batch processes:

Note: See following section for details of command line switches.

Floor Plan Processing

Batch floor plan processing is used to ensure that each AutoCAD floor plan is contains the same information as the database without the need to manually open each floor plan in turn. The options are:

- Synchronizing the floor plan
- Refreshing the annotation
- Updating calculations such as Allocated Areas and Fixture Adjacencies (required for accurate reporting).

Details of how these options execute are determined either by command line switches or by settings in the **Floor Plan Publishing Configuration dialog box**.

Floor Plan Publishing

This allows floor plans to be published to specified Windows directories at specified dates. Floor plans may be published as DWG, DWF and PDF files. Alternatively, they may be printed in hard copy form at a specified printer. How floor plans are published is configured in the **Floor Plan Publishing Configuration dialog box** accessed from the File menu. Batch floor plan publishing is run via the command line. There are only a limited number of command line options available, so the required settings must be configured in the dialog box.

Planogram Publishing

This allows planograms to be published to specified Windows directories at specified dates. Planogram designs may be published as PDF files. Alternatively, they may be printed in hard copy form. How planograms are published is configured in the **Planogram Publishing Configuration dialog box** accessed from the File menu. Planogram publishing is run via the command line. There are only a limited number of command line options available, so the required settings must be configured in the dialog box.

Planogram Substitution

This allows one or more planograms to be substituted for one or more planograms across multiple floor plans. The planogram substitutions must first be defined in the planogram substitution dialog box (accessed from the Merchandising menu). Planogram substitution can then be run as a batch process using command line switches.

BatchRunner Command Line Options

Detailed descriptions of the BatchRunner command line options are given in the pertinent sections of this help file. A summary is given below.

Note: Switches are not case sensitive: /t and /T will have the same effect. Also note that only the /t (terminate) switch is available for floor plan processing, floor plan publishing and planogram publishing.

Floor Plan Processing

The Syntax for Batch Operations will be of the format:

BatchRunner /processplans username/password /t

/substitution

This tells BatchRunner this set of commands is for floor plan processing.

username/password

The MSM user name/password is mandatory. (The user must also have been assigned the right to run floor plan processing in the Functional Security dialog box).

The /t Switch

The /t switch allows the external program invoking planogram substitution to terminate execution of any running floor plan processing operations.

Floor Plan Publishing

The Syntax for Batch Operations will be of the format:

BatchRunner /publishplans username/password /t

/publishplans

This tells BatchRunner this set of commands is for floor plan publishing.

username/password

The MSM user name/password is mandatory. (The user must also have been assigned the right to run floor plan publishing in the Functional Security dialog box).

The /t Switch

The /t switch allows the external program invoking floor plan publishing to terminate execution of any running floor plan publishing operations.

Planogram Publishing

The Syntax for Batch Operations will be of the format:

BatchRunner /publishpogs username/password /t

/publishpogs

This tells BatchRunner this set of commands is for planogram publishing.

username/password

The MSM user name/password is mandatory. (The user must also have been assigned the right to run planogram publishing in the Functional Security dialog box).

The /t Switch

The /t switch allows the external program invoking planogram substitution to terminate execution of any running planogram publishing operations.

Planogram Substitution

The Syntax for Batch Operations will be of the format:

BatchRunner /substitution user name/password [/t] [/p] [/e definition_name_1, definition_name_2, …, definition_name_n] [/c code_1,code_2, …,code_n] [/s id_1, id_2, …, id_n]

/substitution

This tells BatchRunner this set of commands is for planogram substitution.

username/password

The user name/password is mandatory. (The user must also have been assigned the right to run planogram substitutions in the Functional Security dialog box).

The /t Switch

The /t switch allows the external program invoking planogram substitution to terminate execution of any running planogram substitution definitions.

The /p Switch

The /p switch allows the external program invoking planogram substitution to pause execution of any running planogram substitution definitions.

The /e Switch

The /e switch is optional. It can be used to specify a list of planogram substitutions to run.

The /c Switch

The /c switch is optional. It can be used to specify a list of store codes identifying the stores against which planogram substitutions should be run.

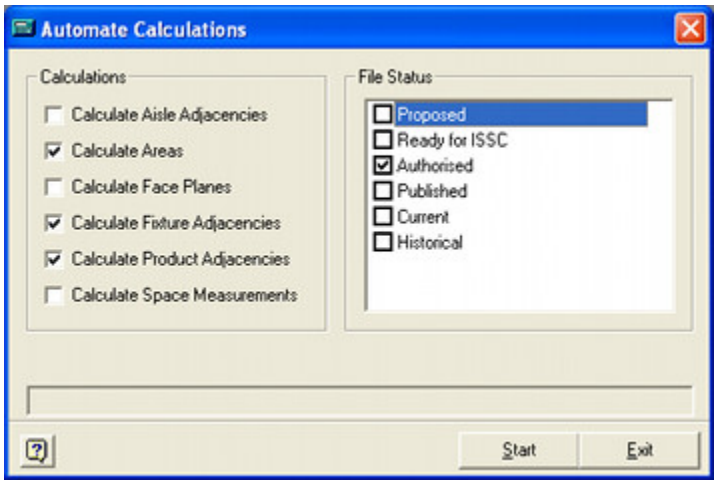
The /s Switch

The /s switch is optional. It can be used to specify the list of file statuses against which planogram substitutions should be run.

> **Note**: for more detail on these switches, see the section on configuring planogram substitutions.

Automated Calculations

Automated Calculations are used to ensure the information held in the database has been updated for reporting purposes. It provides an alternative to some of the options in batch floor plan processing or the options in the pre-processing tab of the **Floor Plan Publishing Configuration dialog box** in the Administration module.



Automated Calculations can be run manually from the dialog box accessed from the provided shortcuts or run directly from the *C:\Program Files\Oracle Retail\MSM\Common* folder. They can also be run from the command lobe using the following syntax:

Path\AVT5AutomatedCalcs.exe /Silent /Options /Status /Files

An example would be:

C:\Program Files\Oracle Retail\MSM\Common\AVT5AutomatedCalcs.exe /Silent /Options 25 /Status 23|25|27

Path and File Name

The path is the location where the AVT5AutomatedCalcs.exe file is located.

/Silent

This option is used to suppress confirmatory dialog boxes when automated calculation is being run in batch mode.

/Options

This is a bitwise value specifying the selected options.

Value	Calculation
0	No selection
1	Aisle Adjacency
2	Allocated Areas
4	Face Planes
8	Fixture Adjacencies
16	Product Adjacencies
32	Space Measurements

/Status

The statuses for files to process are specified as pipe delimited STA_ID's from the AVTTB_STATUS table: for example 23|25|27.

/Files

The ID of specific files to process is specified as a comma separated list of FIL_IDs from the AVTTB_FILE table: for example 235, 483, 679.

3

Business Processes for Floor Plan and Planogram Tools

Information in Planner Floor Plans and the Database

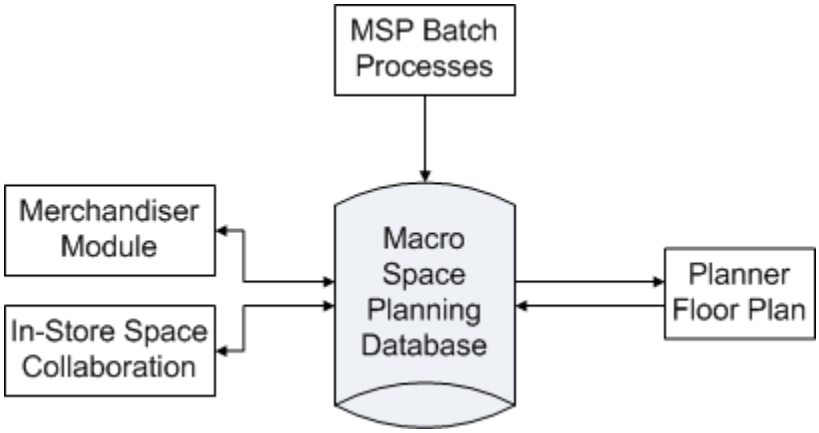
When considering batch processes, it is useful to understand how Macro Space Planning stores and processes data.

The Macro Space Planning Database

All information is held in the Macro Space Planning database. This information can be viewed and edited manually in one of three ways:

- Via an AutoCAD based floor plan in the Planner module.
- Via the Virtual Reality representation in the Merchandiser Module
- Via the simple graphic interface in the In-Store Space Collaboration application.

Data may also be modified directly in the database by means of batch processes. An example of this is running planogram substitutions.



Reading and Writing Data in the Database

If a floor plan is viewed or edited in the Merchandiser module or in the In-Store Space Collaboration application, data is written directly to and from the database. Any changes made in one application are immediately visible in the other. Changes made by a batch process are written directly to the database and are also visible immediately in the Merchandiser module or in the In-Store Space Collaboration application

The situation is more complex for the AutoCAD floor plan in Planner.

Changes made Manually in Planner

What is read from or written back to the database during manual editing varies considerably depending on whether Auto-Synchronisation or Dynamic Synchronization are turned on.

- If Auto-Synchronisation is on, changes made in the database are automatically applied to the AutoCAD floor plan when it is opened. This includes changes made manually in the Merchandiser module or in the In-Store Space

Collaboration application and by batch processes. If Auto-Synchronization is Off, any changes that exist purely in the database will not be reflected in the AutoCAD floor plan and such changes must be included by manual synchronisation.

- If Dynamic Synchronisation is on, changes made to the majority of (but not all) changes made to objects in the floor plan using AutoCAD (rather than Planner) functionality are written to the database at the time. If Dynamic Synchronization is Off, any changes that exist purely in the AutoCAD floor plan may not be reflected in the database and such changes must be included by manual synchronisation.

This means that changes made in the Merchandiser module or in the In-Store Space Collaboration application, made by batch processes or made by AutoCAD tools may result in differences in the data held in the database and in the AutoCAD version of the floor plan. Store planners working in Planner thus need to follow a clear business process to ensure that the information in the database and AutoCAD floor plan remain consistent with each other.

Changes Made by Batch Processes Prior to Publishing Floor Plans

The differences between the database and the information held in the Planner AutoCAD floor plan achieve their greatest significance when considering floor plan publishing. The floor plan that is published is the copy held in the Windows folder on the Macro Space Planning file server. If changes have been made to the database by a batch process (for example planogram substitution) immediately prior to publishing the floor plan, those changes will not yet be reflected in those Planner AutoCAD floor plan. Those floor plans need to be processed prior to publishing to update the products, annotation and any associated calculations. This can be done as a discrete Floor Plan Processing operation run via BatchRunner and the command line. Alternatively, it can be done by using the Floor Plan Processing built into the Floor Plan Publishing process.

Overview of Automated Floor Plan and Planogram Publishing

Introduction

Macro Space Planning is a store planning tool that allows store plans to be created with the aid of imported planograms. After the floor plans have been created, the information needs to be transmitted to the store and executed there. This process is normally executed by administrators, but a brief explanation has been included in the store planning help for the benefit of store planners.

How the Process is Configured and Operated

The process is configured in the Administration module using the Configure Floor Plan Publishing and Configure Planogram Publishing options accessed from the File menu. The process can then run by invoking a small Macro Space Planning tool called BatchRunner. The precise way BatchRunner operates is controlled by command line switches. BatchRunner is normally initiated by a scheduling tool. More sophisticated scheduling tools can automatically pass the command line switches to BatchRunner. The scheduling tool can also operate a small utility called UpdateStatus.exe. This is used to change the status of the floor plan from Published to Current.

BatchRunner and UpdateStatus.exe

BatchRunner can be found in the C:\Program Files\Oracle Retail\MSM\Common.Net folder on each MSM installation. Access to the functionality is controlled in the

Functional Security dialog box in the Administration Module. BatchRunner is controlled via the command line and can run the following operations:

- Processing Floor Plans (running operations such as calculations and restructure drawing).
- Publishing Floor Plans.
- Publishing Planograms.
- Executing Planogram Substitution and Revision Changes.

UpdateStatus.exe can be found in the *C:\Program Files\Oracle Retail\MSM\Common* folder in each MSM installation. Access to the functionality is controlled in the Functional Security dialog box in the Administration Module. When executed, UpdateStatus.exe changes the status of files from Published to Current when the Effective Date is reached or exceeded.

Other Business Processes

Retailers will also have business processes for carrying out actions associated with implementing those floor plans and planograms that are outside of the scope of Macro Space Planning. These include giving the stores access to the published floor plans and planograms and putting the necessary orders into the supply chain.

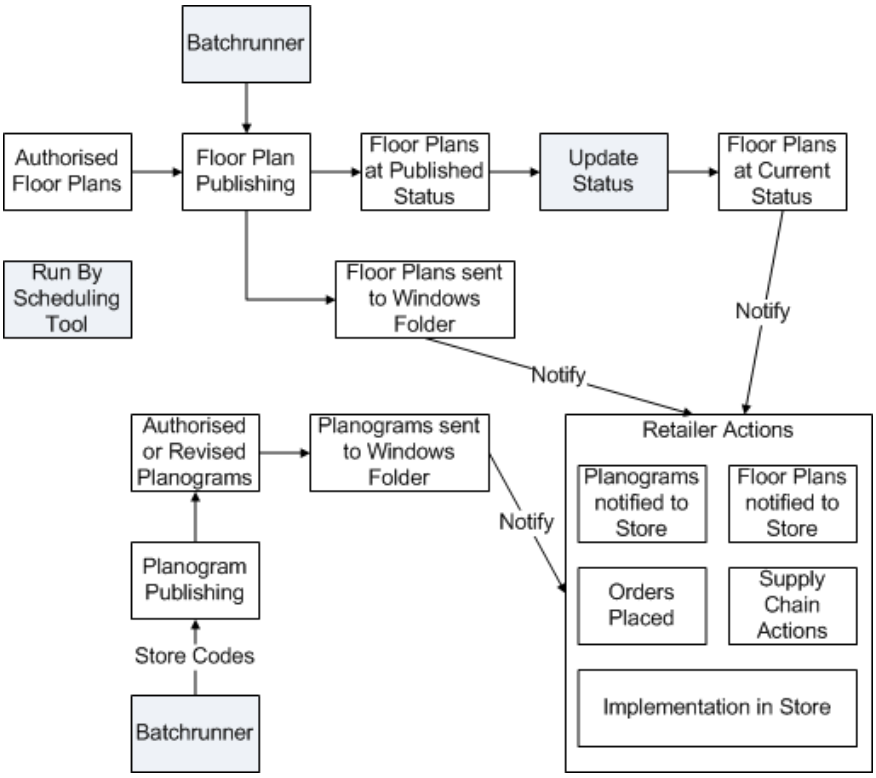
Reports

As installed, Macro Space Planning does not provide any reports for monitoring the results of batch process controlled floor plan processing, floor plan publishing, planogram publishing or planogram substitution. It is the retailer's responsibility to provide these.

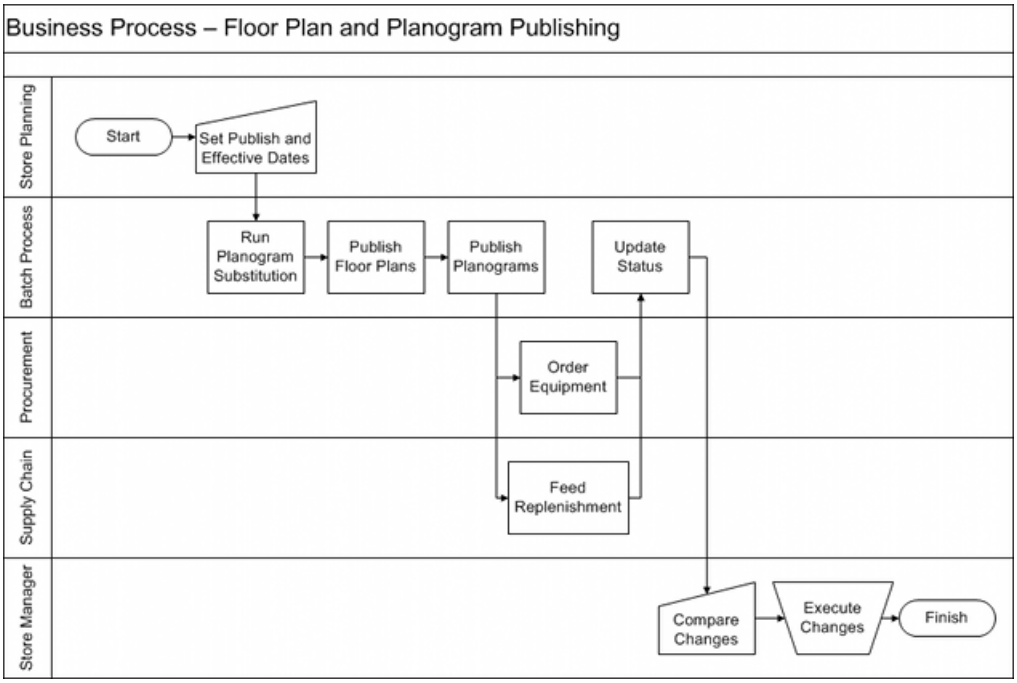
Automated Floor Plan and Planogram Publishing

The basic process is described in the flow chart below. Conceptually, it can be viewed as taking place in the following general stages:

1. A store plan is created and set to Authorized status. At the same time the Publish and Effective Dates are set.
2. BatchRunner will initiate the publishing of both floor plans and planograms to specified directories or printers when the Publish Dates are reached or exceeded.
3. Reaching the Publish date is also the trigger for the retail chain to notify the store that the floor plans and planograms are available in specified locations. The retail chain will also initiate ordering the required equipment and merchandise.
4. When the Current Date is reached, Update Status will change the status of the floor plan to Current. This is the signal to put it into service in the store.



This may be seen in slightly simplified form in this process flowchart:



Details of Process

> **Note**: floor plans and planogram designs can either be published in electronic form or printed as a hard copy. This example assumes electronic form: it is equally applicable for printed documentation.

Generating Floor Plans

For floor plans to be published they must first be at Authorised status with Publish Date and Effective Date set. These dates act as triggers for successive action.

Generating Planogram Designs

Planogram designs are normally imported into Macro Space Planning. There is a chain of logic determining when the planogram design is published.

- When the Publish Date is met or exceeded the planogram will be published. This will set the Last Published Date.
- If the Last Modified Date exceeds the Last Published Date, the planogram will also be published - this indicates that a modification has been made to the planogram.

Floor Plan Publishing

The first stage of the process is to publish the floor plan. For an automated process, this is done via the BatchRunner utility. This will be run by a scheduling tool at regular intervals. When BatchRunner identifies that a Publish Date has been met or exceeded it changes the status of the floor plan from Authorised to Published. Simultaneously, the Floor Plan Publishing tool sends a copy of the floor plan to a Windows folder structure under the Floor Plan Publishing root specified in the Directories Tab of the Configuration Module. (This tab can only be accessed by opening the Configuration Module in the Administration Module).

Floor Plan Publishing and Floor Plan Processing

Floor plan processing allows the AutoCAD drawing representing the floor plan to be refreshed with the latest changes. For example, if planogram substitution has been carried out, the AutoCAD drawing will have to be synchronized relative to the database, have annotation refresh and have the calculations refreshed prior to publishing the floor plan. This can be done as a separate option via the command line or it can be done during the floor plan publishing process using options specified in the **Floor Plan Publishing Configuration dialog box**.

Another use of floor plan processing is to run calculations prior to running reports to ensure the data used for the reports is fully up to date.

> **Note**: The flowchart above assumes floor plan processing is carried out as part of the floor plan publishing process.

Planogram Publishing

In parallel with publishing the floor plan, a set of planogram designs need to be sent to the store. For a routine update, this will just be the planograms that are being changed. For a remodel, a full set of planogram designs will be required. For an automated process, this is done via the BatchRunner utility. This will be run by a scheduling tool at regular intervals. When BatchRunner identifies that the planogram needs to be published by comparing Publish Date, Last Published Date and Last Modified Date, it will cause

that planogram to be published to a Windows folder structure under the Planogram Publishing root specified in the Directories Tab of the Configuration Module. (This tab can only be accessed by opening the Configuration Module in the Administration Module).

> **Note**: Depending in settings in the Planogram Publishing Configuration dialog box in the Administration module, the planogram designs sent to the windows folder will either be a complete set of planograms for the store or just the planograms that have been recently updated or revised.

Notification that Information has been Published

The Floor Plan and Planogram Publishing functionality will send copies of the floor plans and planograms to specified Windows folders. Notifying the store that new floor plans and planograms are available and ensuring that the store can access that information is the responsibility of the retailer.

Implementation Actions by Retailer

After the floor plans and planogram designs have been published, preparations need to be made for executing them in store. This is a retailer responsibility - Macro Space Planning can provide the data to orchestrate those actions.

Executing the Changes

The floor plan also has an Effective Date. UpdateStatus.exe (run at intervals by a scheduling tool) will identify when the Effective Date is met or exceeded and then change the floor plan status to Current. When a floor plan reaches Current status, this is a signal to the store that all planned changes should have been executed on that date and the floor plan put into service.

At the same time as the floor plan is changed to current, its properties are changed to read only to prevent further changes being made in it. The floor plan being changes to current also causes the floor plan it replaces to be changed to Historical status.

Overview of Automated Planogram Substitution

Introduction

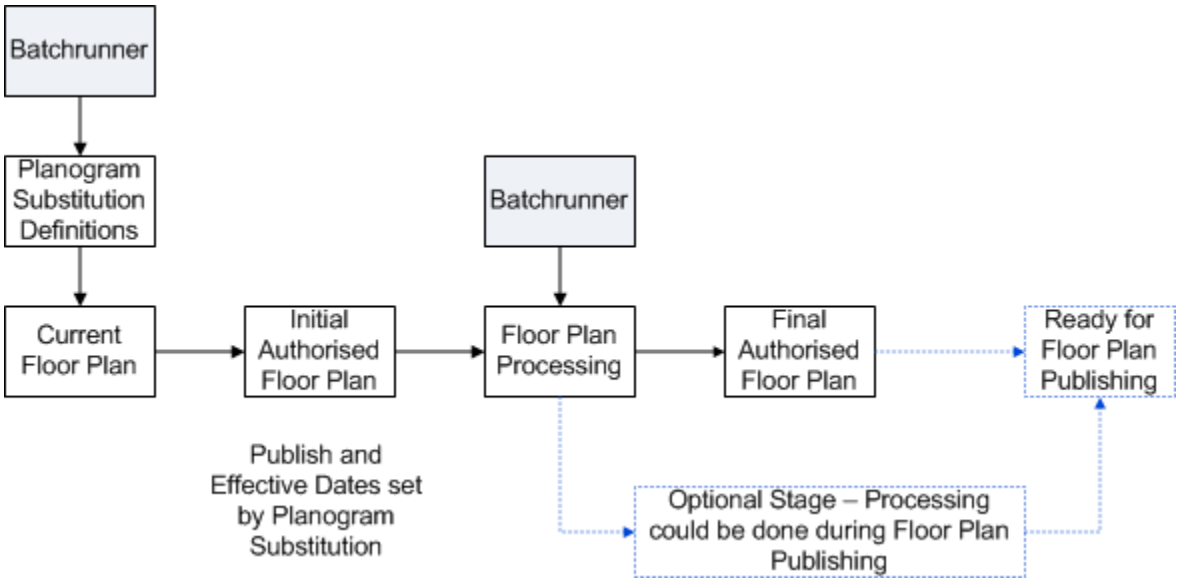
Macro Space Planning allows users with the appropriate privileges to first define planogram substitutions and then to execute those substitutions in selected stores. This section has been included to show how a floor plan can be updated with a different suite of planograms using batch processes. The updated floor plans (and new planogram designs) can then be published by batch processes in turn.

There are several ways of accomplishing this: the diagram below shows how a Current floor plan can be used to generate a duplicated file incorporating the required planogram substitutions.

> **Note**: This example assumes the PLANOGRAM_SUBSTITUTION_COPY_FILE system variable is set to On (allowing floor plans of Current Status to be modified by Planogram Substitution) and that planogram substitution definitions have been set up accordingly.

How the Process is Configured and Operated

Planogram Substitutions are configured in the Planogram Substitution dialog box. This can be accessed from the Administration Module, the Planner Module, the Merchandiser Module and directly from the provided shortcut. BatchRunner is capable of running those planogram substitutions against a specified floor plan – in this case a floor plan at Current status in a specific store.



As a result of running the planogram substitution a duplicate floor plan will be created in the same revision at Authorised status. This floor plan will have the Publish Date set to the Effective Start Date of the Planogram Substitution. The Effective Date of the floor plan will be set based on the Publish Data of the floor plan and the time interval specified in the EFFECTIVE_DATE_LEAD_PERIOD system variable. The AutoCAD version of this floor plan will be an exact copy of the floor plan it was cloned from as the planogram substitutions were executed purely in the database.

The next stage is therefore to use floor plan processing to update the AutoCAD version of the floor plan so it reflects the revised information in the database. This is done by means of the Floor Plan Processing option. BatchRunner can run varying options depending on the switches used in the command line. The options required are:

- Synchronization: 'Match the Database' will bring in the planogram substitutions held in the database. (An alternative is to use the Auto-Sync option).
- Annotation: The new planograms will require the annotation refreshed to reflect the changes.
- Calculations: These require updating so that any subsequent reporting will be accurate.

> **Note**: Floor Plan Publishing has the option to carry out floor plan processing as part of the publishing process. This example shows how floor plan processing can be run as a separate operation. One reason for doing this would be a store planner briefly looking at the duplicated store plan before submitting it for the floor plan publishing operation.

Note: If the duplicated floor plan is opened in the Merchandiser Module or in In-Store Space Collaboration, the information is read directly from the database and no synchronisation is needed. However, it is the AutoCAD version of the floor plan that is published; this needs to be updated before Floor Plan Publishing is carried out.

Once the AutoCAD version of the floor plan has been processed, it will be identical to the information held in the database. As it is at Authorized status with the Publish Date and Effective Date set, the floor plan will be published by any automated floor plan publishing process when the Publish Date is reached of exceeded.

Reports

As installed, Macro Space Planning does not provide any reports for monitoring the results of batch process controlled planogram substitution. These would normally be configured during the implementation process to requirements specified by the retailer.

Immediate Publishing of Floor Plans and Planograms

Overview of Immediate Publishing

The majority of retail organizations will publish floor plans and planograms as part of an overnight batch process. This process can be scheduled on different frequencies varying from daily to weekly. Occasions will inevitably occur when there is a need to publish information before the next scheduled batch run. Planner has several tools to assist in this process. Three are:

- **Immediate Floor Plan Publishing**: Publish selected floor plans at Authorised status that have met or exceeded their Publish Date.
- **Immediate Planogram Publishing**: Publish selected planograms. The planograms available for publishing will depend on criteria set in the Administration Module.
- **Print Planograms**: This allows a store planner to print off a copy of selected planograms in the currently active floor plan. Alternatively, they may be generated in PDF form.

Access to Immediate Floor Plan Publishing and Immediate Planogram Publishing is controlled by settings in the Functional Security dialog box in the Administration module. Planograms can be printed from the currently active store plan by any users with access rights.

Publishing Floor Plans

This option is for urgent publishing of floor plans. An example of this would be if floor plans are being published and transmitted to store by a weekly batch process. If this batch process ran every weekend, there might be a need to publish selected floor plans in mid-week so as to avoid waiting for the next scheduled batch run.

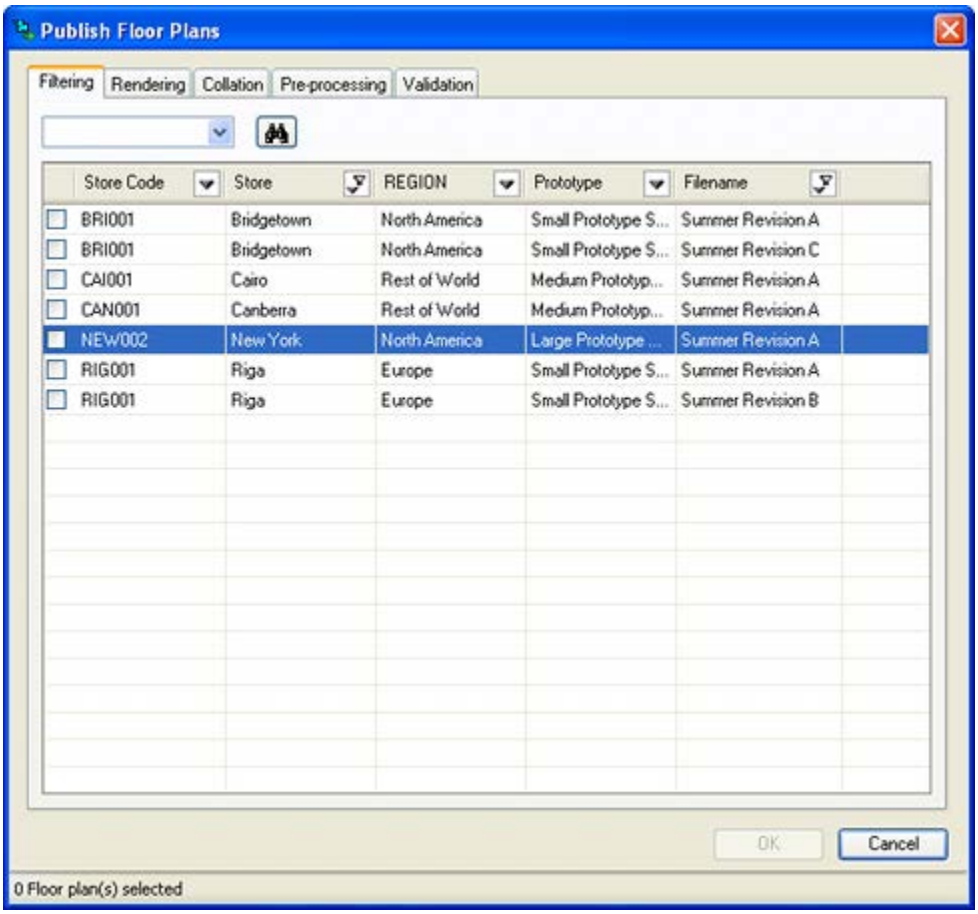
Permission to Access the Floor Plan Publishing Functionality

Publishing a floor plan will often trigger other actions within a retail organization. Generally, it will cause orders to be placed into the supply chain and the store to start planning for the changes. Accordingly, users require permission to access to the functionality. This is done in the Group Relationships tab of the **Functional Security**

dialog box in the Administration Module. Users without this permission will not be able to open the dialog box.

The Publish Floor Plans Dialog Box

The Publish Floor Plans dialog box is accessed from the File menu. It opens with the same settings as those for batch processing - these are configured using the **Configure Floor Plan Publishing dialog box** in the **Administration Module**. Floor plans can be selected for publishing by ticking the check boxes and clicking **OK**.



This dialog box will show all floor plans at Authorised Status that have met or exceeded their Publish Date.

Where Floor Plans Will Be Published To

Immediate publishing of floor plans will result in the files being sent to the same folders as used for the batch process. The root folder for this is specified in the Directory Tab of the Configuration Module. (This tab can only be accessed if the Configuration Module is opened from the Administration Module). The file structure below the root folder and the form of the file name are specified in the Output tab of the **Floor Plan Publishing Configuration dialog box** in the Administration module.

Other Floor Plan Publishing Tabs

- **Rendering**: The Rendering tab gives a number of options for controlling the visual appearance of the floor plan when published.

- **Collation**: The Collation tab determines the way floor plans will be published below the Floor Plan Publishing root.
- **Pre-Processing**: This option allows the user to carry out a series of operations on the floor plan to ensure that the information in it and data associated with it are completely up to date.
- **Validation**: These are the checks that are performed before the floor plan is published. Any individual floor plan that fails validation will not be published, while an entry will be written to the pertinent log table.

Immediate Publishing of Planograms

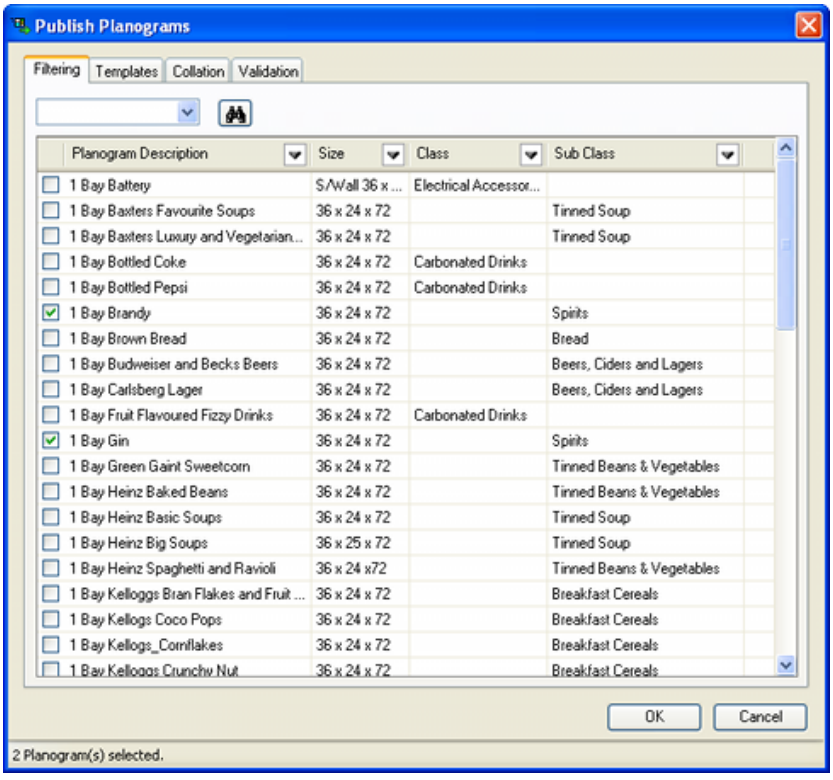
This option is for urgent publishing of planograms. An example of this would be if planograms are being published and transmitted to store by a weekly batch process. If this batch process ran every weekend, there might be a need to publish selected planograms in mid-week so as to avoid waiting for the next scheduled batch run.

Permission to Access the Immediate Planogram Publishing Functionality

Because the Immediate Planogram Publishing option could result in large numbers of planograms being published during working hours (with the corresponding load on the system), users require permission to access to the functionality. This is done in the Group Relationships tab of the **Functional Security dialog box** in the Administration Module. Users without this permission will not be able to open the dialog box.

The Immediate Planogram Publishing Dialog Box

The Immediate Planogram Publishing dialog box is accessed from the File menu. It opens with the same settings as those for batch processing - these are configured using the Configure Planogram Publishing dialog box in the Administration Module. Planograms can be selected for publishing by ticking the check boxes and clicking **OK**.



The quantity of planograms that appear in this dialog box depends on a setting in the Output tab of the **Planogram Publishing Configuration dialog box** in the Administration module.

- If the **Re-publish planogram if files are missing** option is checked, all planograms (irrespective of whether the have been published or not) will be available for selection.
- If the **Re-publish planogram if files are missing** option is not checked, only planograms that have not been published or planograms that have been modified since they were last published will be available for publishing.

> **Note**: Care should be taken when selecting planograms for Immediate Planogram Publishing if the **Republish planogram if files are missing** option is checked. Planograms will be published for all stores that have that planogram placed. If a large number of planograms are selected for publishing, this will means a substantial amount of processing and significant amounts of data passed over the network. If Immediate Planogram Publishing is run with during the day with large amounts of planograms selected, it may slow the response for other users.

Where Planograms Will Be Published To

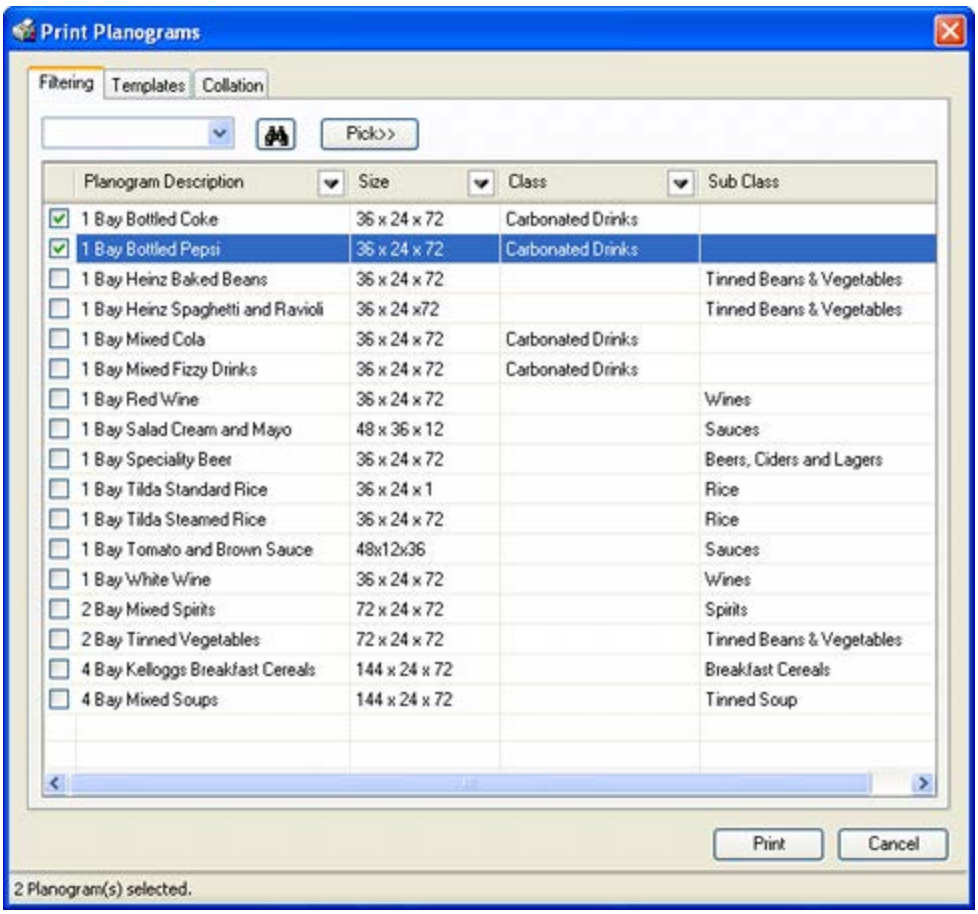
Immediate publishing of planograms will result in the files being sent to the same folders as used for the batch process.

Other Planogram Publishing Tabs

- **Templates**: The Templates tab allows the user to select the form the planogram definition will be output in.
- **Collation**: The Collation tab determines the way planograms will be published below the Planogram Publishing root.
- **Validation**: These are the checks that are performed before the floor plan is published. Any individual floor plan that fails validation will not be published, while an entry will be written to the pertinent log table.

Printing Planograms

The Planogram Printing option is called from the File menu and allows planograms from the currently active floor plan to be printed. The selected planograms will be sent to the default printer for the computer Macro Space Management is running on. Planograms can be selected for printing by ticking the check boxes and then clicking OK.



Planograms are selected in the Filtering tab, with the type of report required selected in the Templates tab. (These templates are configured in the report designer module). The sequence the planograms are printed in is specified in the Collation tab. This is useful if a large number of planograms are being printed.

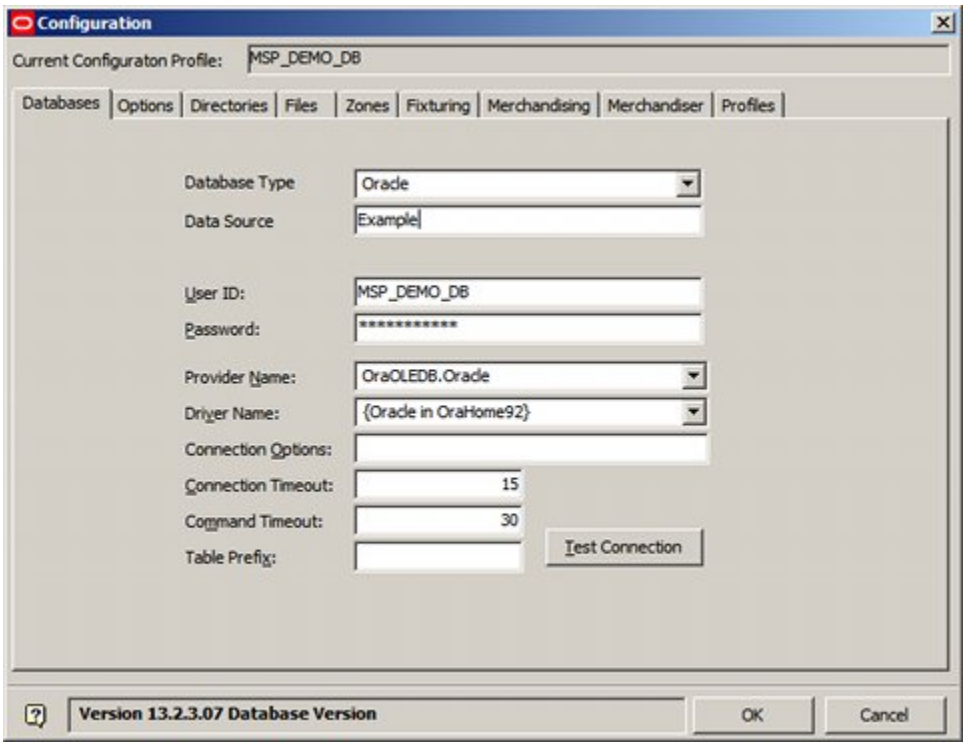
4

File Options

Configuration Module

Overview of the Configuration Module

The Configuration module allows users to configure local aspects of their installation of Macro Space Management. If opened via the Admin module, the full range of configuration options is available. If opened from any other Macro Space Planning modules, a more restricted range of tabs will be available.

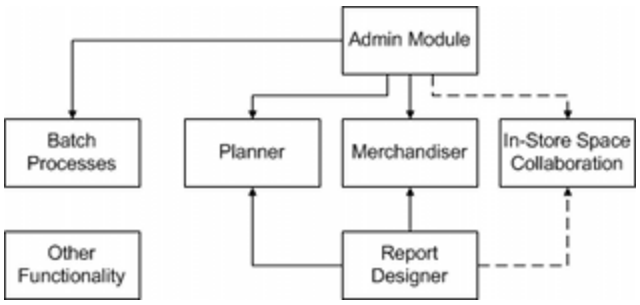


Note: for more information see the help file for the Configuration module.

Overview of Floor Plan and Planogram Publishing

Structure of Floor Plan and Planogram Publishing

This section of help is intended to give a top level view of Printing and Publishing Floor Plans and Planograms. (The next section will discuss it in more detail). It is important that Administrators understand how the functionality in different modules interconnects as this will allow the functionality to be correctly configured and used.



Administration Module

This module is used to configure access to the different parts of the functionality. It is also used to assign permissions to print or publish specific floor plans and planograms. Finally, it is used to configure how the batch processes for publishing floor plans and planograms operate.

Batch Processes

Batch processes can be used to run Floor Plan Pre-processing, Floor Plan Publishing and Planogram Publishing. These batch processes are typically run overnight so that processor hungry tasks can be executed without affecting the manual users of the system.

Planner Module

The Planner module has two sorts of functionality: functionality that can be used by all users of the module and functionality for which permissions have to be granted in the Administration module

- Functionality all users can access
  - Find and Open Floor Plans
  - Search and Print Floor Plans
  - Print Planograms (from active floor plan)
- Functionality users require permissions for
  - Pre-Processing floor Plans
  - Immediate Publishing of Floor Plans
  - Immediate Publishing of Planograms

Merchandiser Module

The Merchandiser module has two sorts of functionality: functionality that can be used by all users of the module and functionality for which permissions have to be granted in the Administration module

- Functionality all users can access
  - Print Planograms (from active floor plan)
- Functionality users require permissions for
  - Immediate Publishing of Planograms

In-Store Space Collaboration Application

This sister application to Macro Space Management gives users the ability to print planograms from the currently active floor plan. This is the same functionality as is available in the Planner and Merchandiser modules.

Report Designer

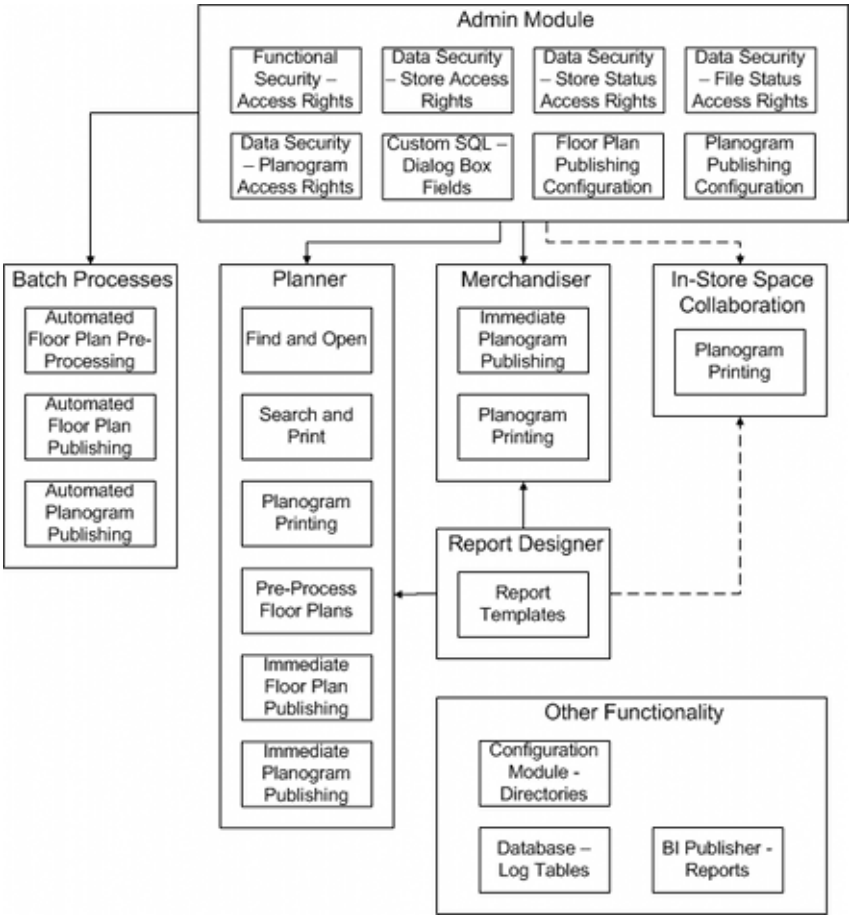
The Report Designer module allows users to design planogram reports that can be used to output information via the Planogram Publishing (batch process), Immediate Planogram Publishing and Planogram Printing options.

Other Functionality

The Configuration module allows users to specify where the folders holding published floor plans and planograms are located. Tables in the database hold information on the results of floor plan pre-processing, floor plan publishing and planogram publishing. These results can then be accessed via BI Publisher reports.

Overview of Floor Plan and Planogram Publishing

Floor Plan and Planogram Publishing is functionality that encompasses the Administration, Planner and Merchandiser modules in Macro Space Management and is also used in a limited way in the In-Store Space Collaboration application. It enables users to either print (hard copy form) or publish (electronic form) floor plans and planogram designs as an aid to implementing physical changes within stores. The diagram below summarizes how the functionality is configured and used. (A simpler form of this diagram can be found in the previous section).



Administration Module

The Administration module is used to configure access to the different parts of the functionality. It is also used to assign permissions to print or publish specific floor plans

and planograms. Finally, it is used to configure how the batch processes for publishing floor plans and planograms operate.

Assigning Permissions

The Administration Module has three options that affect publishing and printing of floor plans and planograms.

- The **Functional Security** option (Security menu) allows Administrators to control who can run Floor Plan Pre-Processing, Floor Plan and Planogram Publishing as batch processes. It also controls who can access Pre-Processing Floor Plans, Immediate Floor Plan Publishing and Immediate Planogram Publishing in the Planner Module. Finally, it controls who can access Immediate Planogram Publishing in the Merchandiser Module.
- The **Data Security option** (Security menu) allows Administrators to control what stores, store statuses and file statuses a user can print or publish from in the Planner and Merchandiser modules (and in In-Store Space Collaboration) - this in turn control what floor plans they see. It also allows Administrators to control what planograms a user can print or publish.

Fields in Dialog Boxes

The Custom Query dialog box allows an Administrator to specify what fields will appear in the following dialog boxes:

- **Find and Open** dialog box in the Planner module.
- **Search and Print** dialog box in the Planner module.
- **Pre-Process Floor Plans** dialog box in the Planner module.
- **Print Planograms** dialog box in the Planner and Merchandiser modules and in the In-Store Space Collaboration functionality.
- **Immediate Floor Plan Publish** dialog box in the Planner module.
- **Immediate Planogram Publish** dialog box in the Planner and Merchandiser modules.

Configuring Outputs for Batch Processes

The outputs for two batch processes are configured in the administration module:

- The **Floor Plan Publishing Configuration** option allows users to configure how floor plans will be published, either as a batch process, or immediately when invoked by a user in the Planner module.
- The **Planogram Publishing Configuration** option allows users to configure how planograms will be published, either as a batch process, or immediately when invoked by a user in the Planner or Merchandiser modules.

> **Note**: The outputs for the Floor Plan Pre-processing batch process are configured through the command line switches.

Batch Processes

Batch processes can be used to run Floor Plan Pre-processing, Floor Plan Publishing and Planogram Publishing. These batch processes are typically run overnight so that processor hungry tasks can be executed without affecting the manual users of the system.

- **Floor Plan Pre-Processing** - running a series of calculations to make sure that information used for reporting, and so on., is as accurate as possible. The outputs are configured via command line switches.

- **Floor Plan Publishing** - printing or publishing all floor plans that are at or after their Publish Date.
- **Planogram Publishing** - printing or publishing all planograms that are at or after their Publish Date.

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

Planner Module

The Planner module has two sorts of functionality: functionality that can be used by all users of the module and functionality for which permissions have to be granted in the Administration module.

Functionality All Users Can Access

- **Find and Open** - allowing users to list and open all floor plans they have rights to access.
- **Search and Print** - allowing users to list and print all floor plans they have rights to access.
- **Print Planograms** - allowing users to list and print all planograms they have rights to access in the currently active floor plan.

Functionality Users Require Permissions For

- **Pre-Processing floor Plans** - allowing users to run a series of calculations on the floor plans they have rights to access to make sure that information used for reporting, and so on, is as accurate as possible.
- **Immediate Publishing of Floor Plans** - manually causing all floor plans they have rights to access and that are on or after their Publish Date to be printed or published.
- **Immediate Publishing of Planograms** - manually causing all planograms they have rights to access and that are on or after their Publish Date to be printed or published.

Merchandiser Module

The Merchandiser module has two sorts of functionality: functionality that can be used by all users of the module and functionality for which permissions have to be granted in the Administration module.

Functionality All Users Can Access

- **Print Planograms** - allowing users to list and print all planograms they have rights to access in the currently active floor plan.

Functionality Users Require Permissions For

- **Immediate Publishing of Planograms** - manually causing all planograms they have rights to access and that are on or after their Publish Date to be printed or published.

In-Store Space Collaboration

Users in the In-Store Space Collaboration application can access the following functionality:

- **Planogram Printing** - manually selecting planograms in the currently active floor plan for printing.

Report Designer

The Report Designer module allows users to design planogram reports that can be used to output information via the Planogram Publishing (batch process), Immediate Planogram Publishing and Planogram Printing options. Permission to access this module is assigned via Functional Security in the Administration Module.

Other Functionality

There are three other parts of the application that are affected by the Floor Plan and Planogram Publishing functionality.

- **Configuration Module** - the Directories tab allows users to specify where the root folders holding published floor plans and planograms are located. Sub-folders holding specific published floor plans and planograms will be created as children of these root folders.
- **Tables** in the database hold the results of floor plan pre-processing, floor plan publishing and planogram publishing operations.
- **BI Publisher** (or a similar application) can be used to generate reports based on the information held in the database - for example the names and results of floor plans that have been processed.

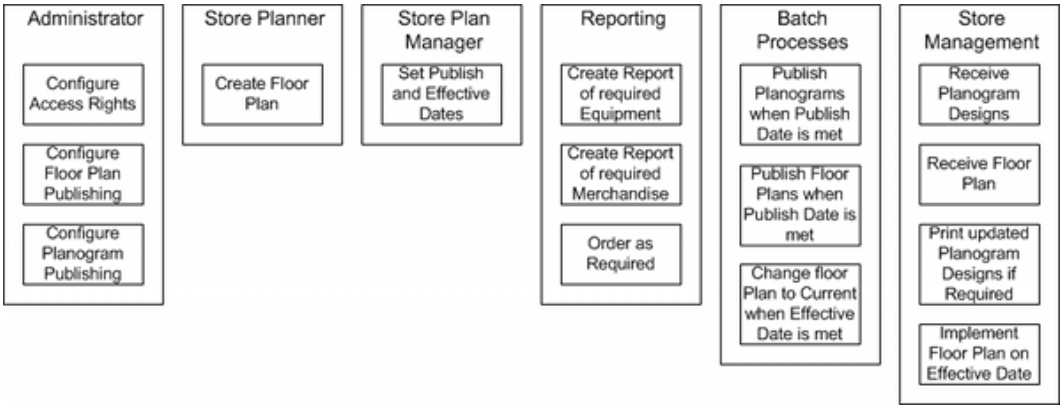
Business Flows and Floor Plan and Planogram Publishing

Note: this illustration of the uses for Floor Plan and Planogram Publishing is a simplified example to show how this functionality might be used. Details of actual use are likely to be more complex and will be retail organization specific.

Summary

Information (in different forms) has to be distributed to different parts of retail organizations. Some of this information may be distributed in the form of reports. Other information may be distributed in the form of Floor Plans (showing the layout of equipment and merchandise) and Planogram Designs (showing specific arrangements of shelf objects and products in a planogram).

The Floor Plan Publishing and Planogram Publishing functionality in Macro Space Planning provides the mechanism for distribution of Floor Plans and Planogram Designs. One way of achieving this is summarized in the simplified business process diagram below.



Administrator

The Administrator will configure who has access to the floor plan publishing and planogram publishing options in the Planner and Merchandiser modules. (All users with access to the Planner and Merchandiser modules and In-store Space Collaboration will be able to print planograms from the currently active floor plan).

The Administrator will also configure the parameters determining the details of the output for bulk publishing of floor plans and planogram designs. These control the form of the output (electronic or hard copy), the pre-processing carried out to make sure the information presented is accurate and how the output is to be collated.

Store Planner

As part of the normal store planning process, a store planner will be instructed to create a new floor plan or revise an old one.

Store Plan Manager

As part of the normal store planning process, a store planner manager will authorize the floor plan to come into service. As part of that process he will set the Publish Date (when information will be distributed to the store) and the Effective Date (when the floor plan will come into service).

Reporting

Other systems within the retail organization (for example, BI Publisher running automated reports) generate data on the equipment and merchandise required to implement the floor plan. This data can then be fed into the retailer's purchasing systems to ensure the equipment and merchandise arrives at the store in a timely manner.

Batch Processes

The pertinent batch processes would be run at regular interval - possibly on a daily basis. When the publish date of a planogram or the floor plan is reached, those items will be published to a specified location. The retails will have other mechanisms to ensure that they are distributed to the store in question.

Publishing a floor plan will result in the status of the floor plan changing to Published. Another batch process (Update Status) will change the status of the floor plan to Current when the Effective Date is met or exceeded.

Store Management

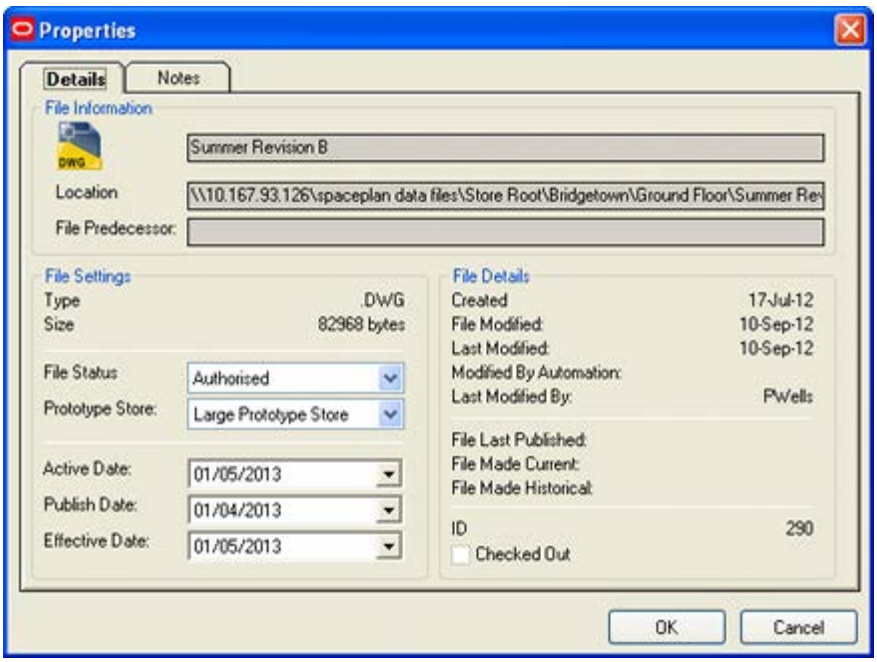
Store Management will receive a copy of the published floor plan, together with copies of the required planogram designs required to implement that plan. This will enable the store manager to start planning for the change.

The ordering system should also have delivered the required equipment and merchandise at the store a short time before they are required. This will enable the store manager to ensure that they have the physical materials to implement the change.

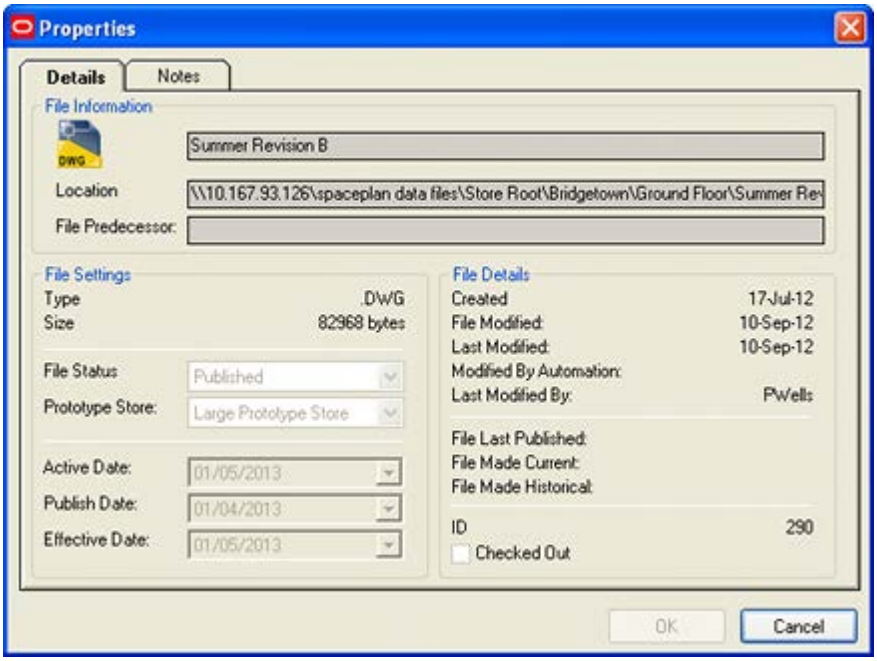
On the date the floor plan becomes Current (when the Effective Date is met or exceeded), the store manager and their staff can put the floor plan into service.

Floor Plan Publishing and Status Change

When floor plans are reviewed and accepted for subsequently being put into service, the status is set to Authorized and the Publish Date and Effective Dates set in the **File Properties** dialog box in Store Manager.



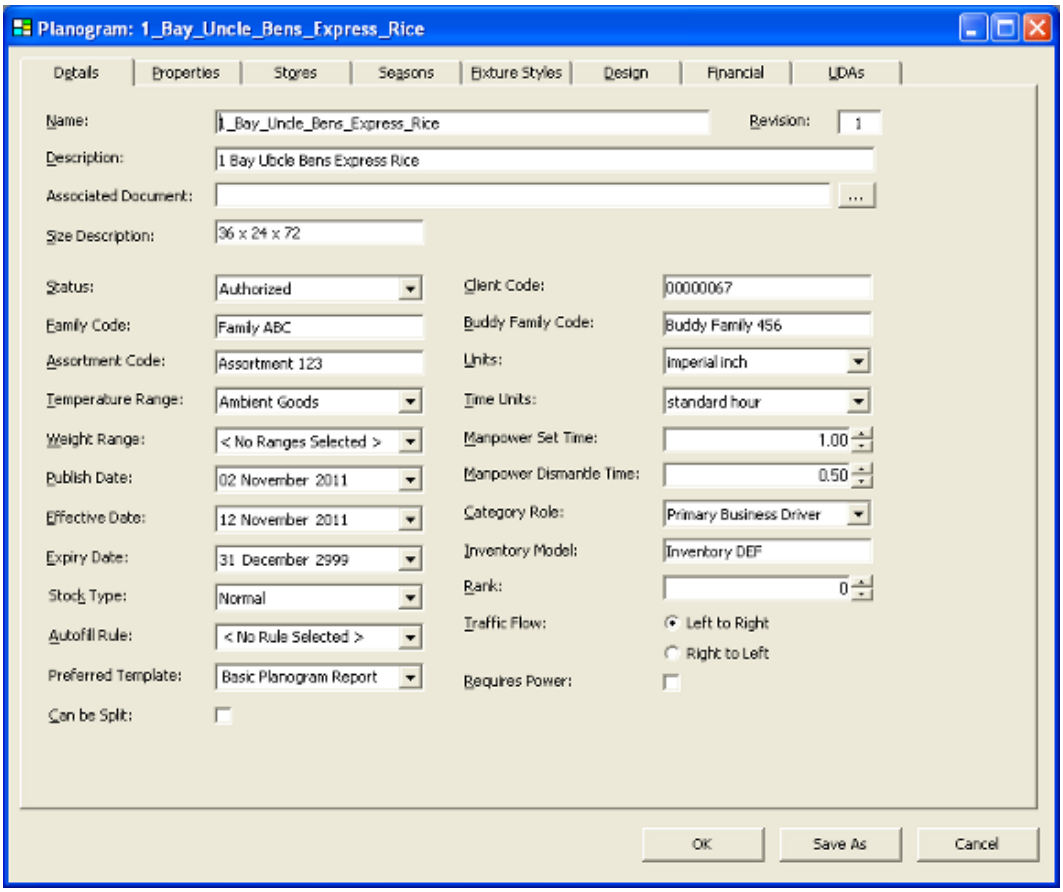
When Floor Plan Publishing is run, the status of the Floor Plan will be changed to Published. (Depending on settings in the Status dialog box, it may also be changed to Read Only).



This change of status allows the progress of the floor plan through its business life cycle to be monitored.

Planogram Publish and Effective Dates

When planograms are designed, they are assigned a **Publish Date** and an **Effective Date**. These are set in the Details Tab of the Planogram Design dialog box in the Merchandiser module.



Publish Date is the date at which the planogram design information can be disseminated to the end user in preparation for implementing the planogram. This is often done by means of the Planogram Publishing functionality.

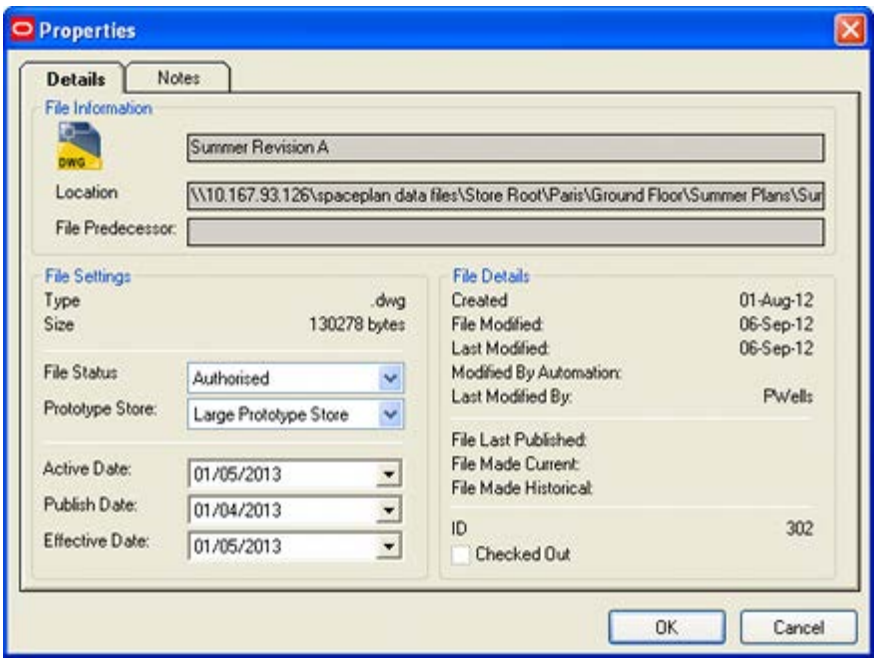
Effective Date is the date at which the planogram design is scheduled to come into service. This is often used in conjunction with the Active Date (top of Object Browser in Planner and Merchandiser) to ensure that when in a floor plan is put into service it does not contain any planograms that are not yet ready for implementation.

Configuring Floor Plan Publishing

Overview of Floor Plan Publishing

Purpose of Floor Plan Publishing

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



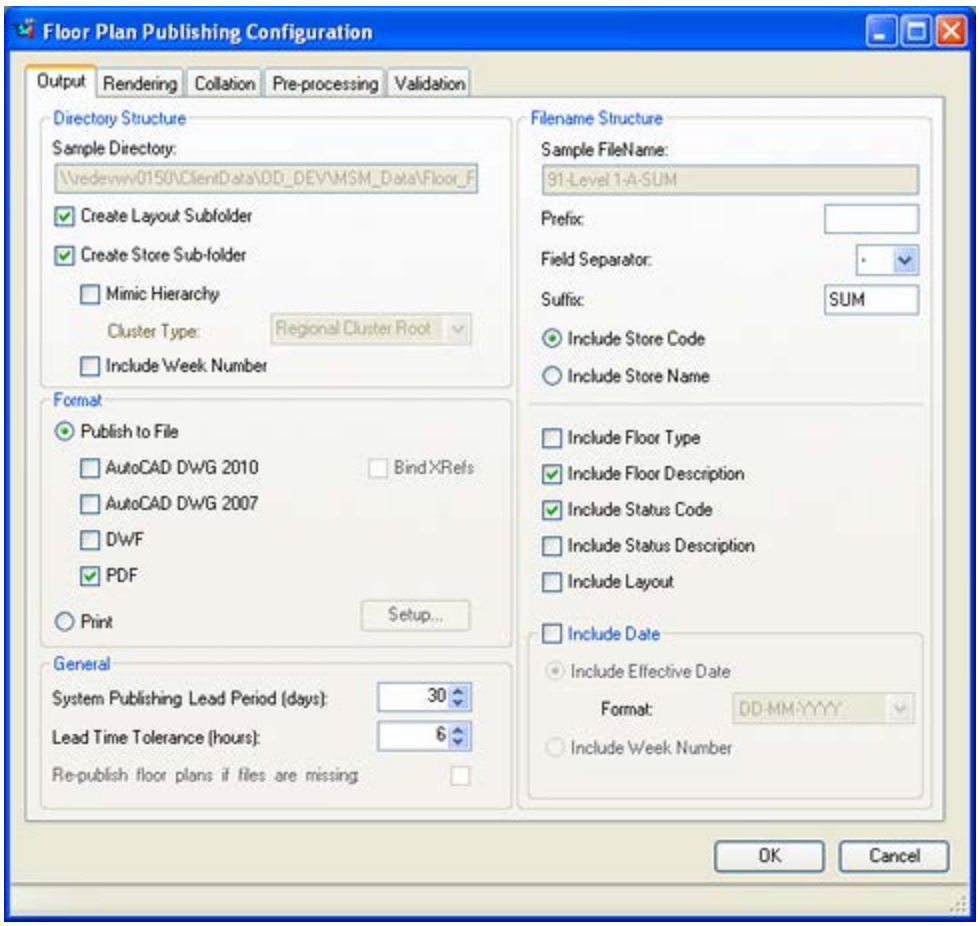
> **Note:** publishing floor plans should not be confused with reporting on that floor plan. Reporting is used for the collation of information required for ordering the equipment and merchandise required to implement the floor plan. Reports will be used in conjunction with the purchasing system and supply chain planning in order to ensure the required equipment and merchandise arrive at the required locations in a timely manner.

The Floor Plan Publishing functionality is used to disseminate floor plans to specified printers or Windows folders to facilitate implementing those floor plans.

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

The Floor Plan Publishing Configuration Dialog Box

The Floor Plan Publishing Configuration dialog box is used to set up the parameters controlling floor plan publishing.



The dialog box contains five tabs; each with a specific purpose.

Output Tab - this tab is used to configure how floor plans will be output. Settings here determine the folder structure and the type and naming convention for the floor plans.

Rendering Tab - this tab is used to control the visual appearance of the floor plan: what layers are displayed, how it is drawn, what titles blocks or tabs to use.

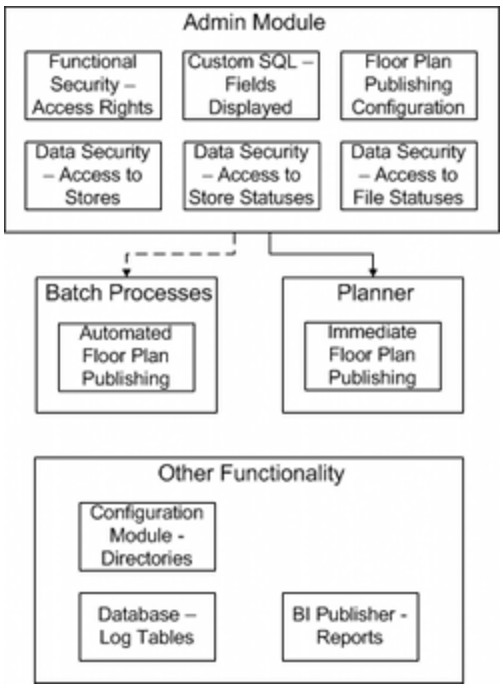
Collation Tab - this tab controls the sequence in which floor plans are published. It is more important when printing hard copy output.

Pre-Processing Tab - this tab controls which pre-processing operations are to be run before publishing a floor plan. These include synchronizing, restructuring the blocks, updating annotation and updating the calculations used for reporting purposes.

Validation Tab - this tab controls the validation operations used to ensure that the information in the floor plan will not lead to practical problems in implementing the floor plan.

Using Floor Plan Publishing

The basic method of operation is as follows:



1. Admin Module

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

   a. The **Functional Security option** (Security menu) allows Administrators to control who can run Floor Plan as a batch process. It also controls who can access Immediate Floor Plan Publishing in the Planner Module.

   b. The **Data Security option** (Security menu) allows Administrators to control what stores, store statuses and file statuses a user can use to print or publish from within the Planner module - this in turn control what floor plans they see.

   c. The **Custom Query dialog box** allows an Administrator to specify what fields will appear in the Immediate Floor Plan Publish dialog box in the Planner module.

   d. Configuring **Outputs for Batch Process**: the outputs for the batch process are configured in the administration module using the Floor Plan Publishing Configuration dialog box.

2. Running as a Batch Processes

   Floor Plan Publishing can be run as a batch process - this is typically run overnight so that these processor hungry tasks can be executed without affecting the manual users of the system. The settings determining how Floor Plan Publishing operates when called by the batch process are set in the **Floor Plan Publishing Configuration** dialog box.

   Floor Plan Pre-Processing (running a series of calculations to make sure that information used for reporting, and so on, is accurate) can either be done as a separate preceding batch process, or it can be done according to settings in the Pre-Processing Tab of the **Floor Plan Publishing Configuration** dialog box.

The rights to for both Floor Plan Pre-Processing and Floor Plan Publishing are set in Functional Security in the Admin Module.

3. Planner Module

   Within the Planner module, the Immediate Publishing of Floor Plans functionality can only be accessed by users that have been granted permissions in the Admin module.

4. Other Functionality

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

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

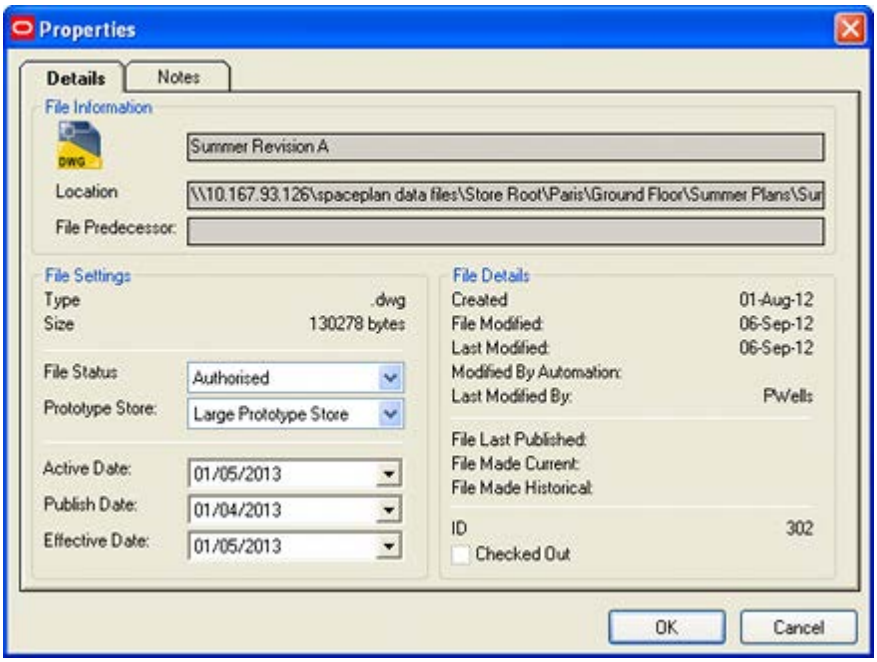
b. Tables in the Macro Space Planning database hold the results of floor plan pre-processing and floor plan publishing operations.

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

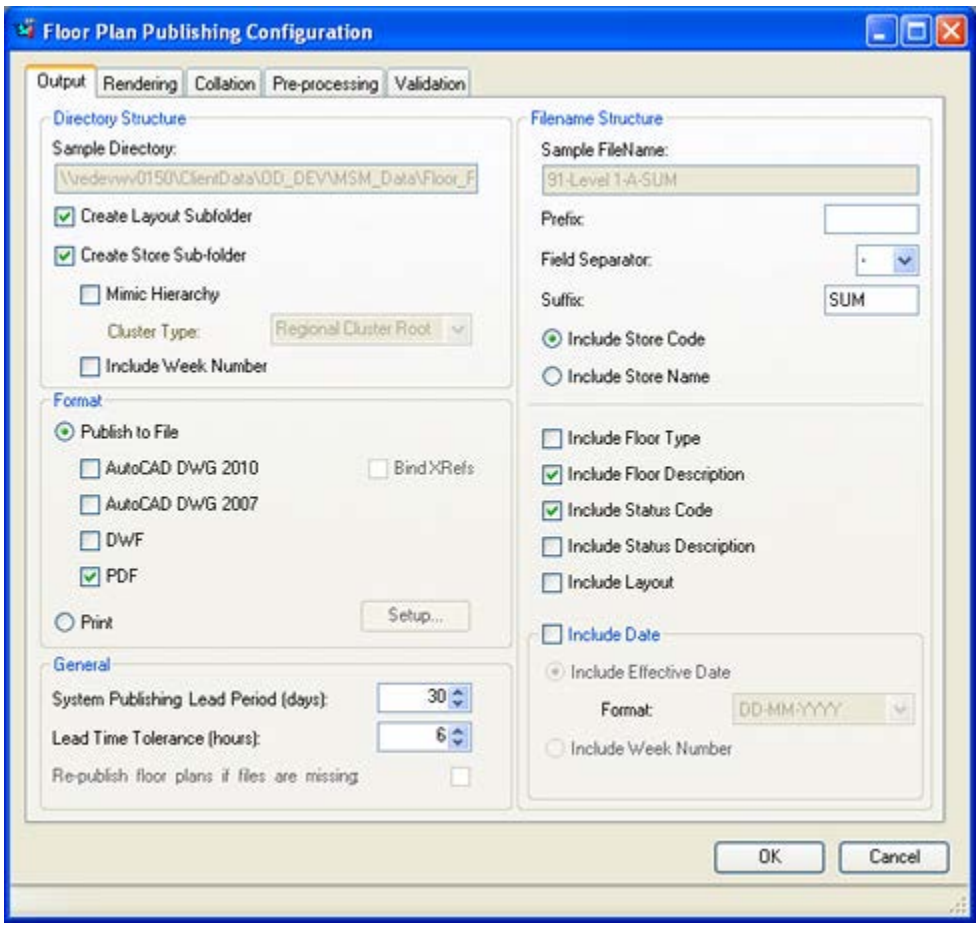
Dates Floor Plans will be Published

The purpose of publishing a floor plan is to disseminate information on the type, quantity and layout of equipment and merchandise to those tasked with implementing the change. Publishing a floor plan can be done in hard copy or electronic format. The date at which this is executed depends on the Publish Date set in the **File Properties** dialog box in Store Manager.

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



Another factor affecting the date at which at which floor plans will be published is the **Lead Time Tolerance (Hours)** setting on the Output tab of the Floor Plan Publishing Configuration dialog box.



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

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

Criteria for Publishing Floor Plans

There are two criteria for publishing floor plans:

1. Publish Date has been exceeded

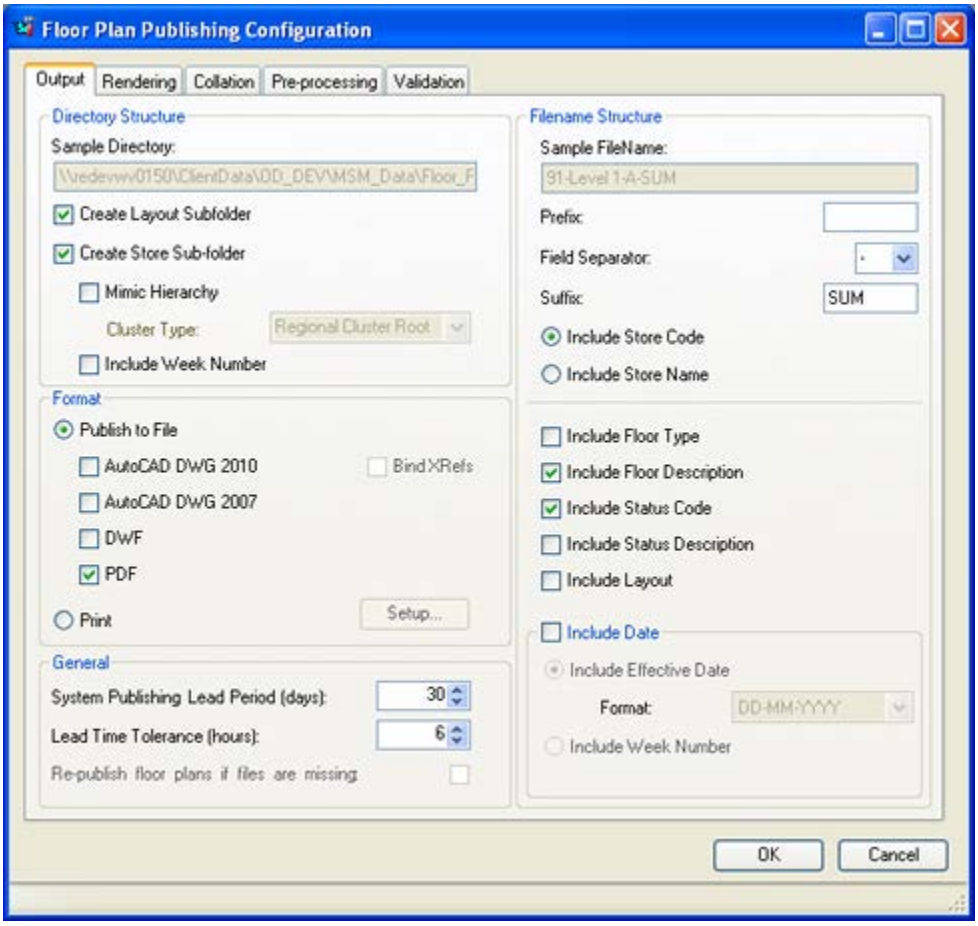
   If the Publish Date set in the File Properties dialog box in Store Manager matches or is before the current date (taking into account the Lead Time Tolerance (Hours) setting), the floor plan will be published.

2. Floor Plan has been updated since it was Published

   In some implementations of Macro Space Planning it is possible that the floor plan may have been modified after it was last published. The condition for this is that the **Modified by Planner** date is greater than the **Last Published Date**.

The Output Tab - Directory Structure

The **Output Tab** is used to configure how floor plans will be output. Settings here determine the folder structure and the type and naming convention for the floor plans.



Directory Structure

The **Sample Directory** text box contains an example of a path to a directory based on the current selections in this frame.

- **Create Layout Subfolder -** if both **Create Layout Subfolder** and **Create Store Subfolder** are unchecked, all floor plans will be published to a single directory specified by the Floor Plan Publish option in the Directories tab of the Configuration module. If checked, the name of the layout will be added to the directory path below the Floor Plan Publish root.
- **Create Store Subfolder** - if unchecked, all floor plans will be published to a single directory specified by the Floor Plan Publish option in the Directories tab of the Configuration module. If checked, the name of the store will be added to the directory path below the Floor Plan Publish root.

- **Mimic Hierarchy** - If Create Store Subfolder has been selected and this option is checked, an intermediate set of directories representing Clusters will be placed between the Store sub-folders and the Floor Plan Publishing root.
- **Cluster Type** - this option allows the user to specify the cluster type to be used for the mimic hierarchy option. One type can be selected from the drop down list of cluster types.

Note: for this option to work effectively, stores must have been assigned to cluster types in a logical way. Stores not in the selected cluster type will be placed in store specific sub-folders immediately below the Floor Plan Publish root.

- **Include Week Number** - this option will add the week number to the path for the directory.

Examples of Directory Structures

The basic directory structure will be created in the sequence

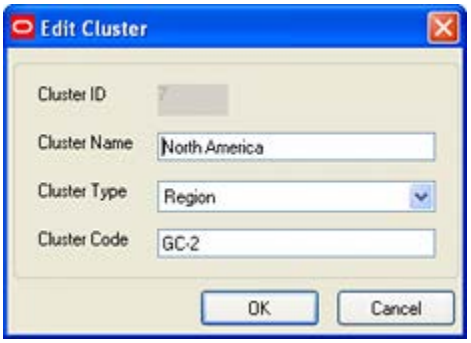
1. MSM Publish Folder
2. Layout Name
3. Store

As examples:

- With **Create Layout Subfolder** and **Create Store Subfolder** checked, a directory structure of **MSM Publish Folder\Electrical\150** will be created where Electrical is an example layout name and 150 is an example store code.
- With only the **Create Layout Subfolder** checked, a directory structure of **MSM Publish Folder\Food&Drink** will be created where Food&Drink is an example layout name.
- With only the **Create Store Subfolder** checked, a directory structure of **MSM Publish Folder\190** will be created where 190 is an example store code.
- With neither the Create Layout Subfolder nor the Create Store Subfolder options checked, all published floor plans will be created in the MSM Publish Folder.

Other Settings

- **Mimic Hierarchy** – this option allows users to mimic the cluster hierarchy based in a specific type of cluster. The Cluster type is set in the drop down list and corresponds to the cluster types set in the Clusters dialog box in Store Manager.



- **Include Week Number** - this option allows users to create further sub folders below the store sub-folder. These will be named based on the Active Date for the floor plan (set at the top of the Object Browser) and information in the Calendars option accessed from the General Menu. The Active Date will be compared to the

calendar dates associated with the 'Week' calendar type. If it finds a match, the sub folder will be given the text name for that week.

> **Note:** this option will not work unless the Calendars option has been set up to include 'Week' type information.

Format

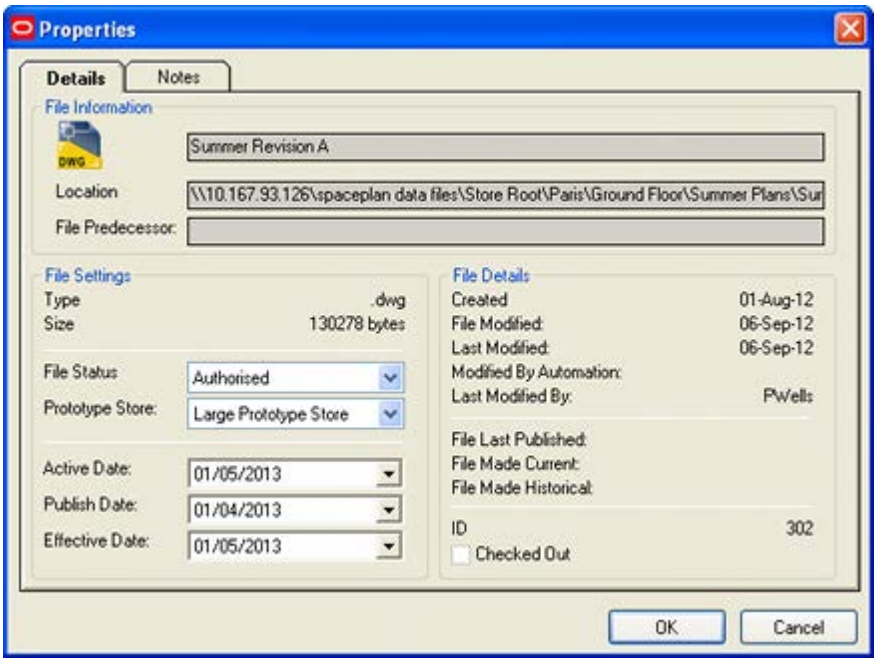
The form in which the floor plan is published can be set by the radio button. It can be either electronic (Publish to File) or hard copy (Print).

The following electronic formats are available:

- **AutoCAD DWG 2010** - produce the output in the form of an AutoCAD 2010 DWG file.
- **AutoCAD DWG 2007** - produce the output in the form of an AutoCAD 2007 DWG file.
  - If either of these options is checked, the Bind Xrefs option will be available. Binding Xrefs will use the AutoCAD 'Bind' rather than the 'Insert' option. This allows the Architectural Plan (if assigned) to be published along with the floor plan.
- **DWF** - produce the output in the form of a Drawing Web Format (DWF) file.
- **PDF** - produce the output in the form of aPortable Document Format (PDF) file.

General

- The System Publishing Lead Period sets the EFFECTIVE_DATE_LEAD_PERIOD system setting. This variable in turn is used to set the default publish date in the File Properties dialog box in Store Manager. (This date can be manually altered if required).



When the Publish Date is reached or exceeded, Floor Plan Publishing will cause the floor plan to be published in either electronic or hard copy form.

- Lead Time Tolerance allows for the fact that some batch processes may be started before midnight. If a floor plan has a Publish Date of 18th June, the batch process

could be run starting 22.00 hrs on 17th June. This would not pick up floor plans with Publish dates of 18th June. The Lead Time Tolerance can be set to any value up to 23 hours. This time will be added to the Publish Date for batch processes.

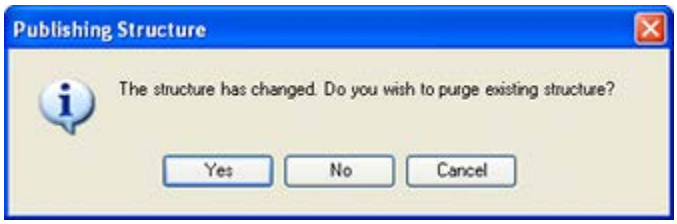
For example, setting the Lead Time Tolerance to 6 hrs will ensure that a batch process started after 18.00 hrs on 17th June will publish all floor plans with a Publish Date of 18th June.

- Republish Floor Plans if Missing - if selected, this option will put a fresh copy of the floor plan into the selected windows folders if the following circumstances are met:
  - A windows folder where a floor plan would be expected to be present is empty.
  - The Windows folder structure has been changes due to different settings in the output tab, and a new set of folders needs to be populated with floor plans.

Note: The floor plan will automatically be republished if it has been modified since the last time it was published

Publishing Structure

If changes are made to the setting in the Format frame, the structure of the windows folders used to store the information will change. On closing the Planogram Publishing configuration dialog box, the user will be presented with a dialog box telling the user that the folder structure has changed.

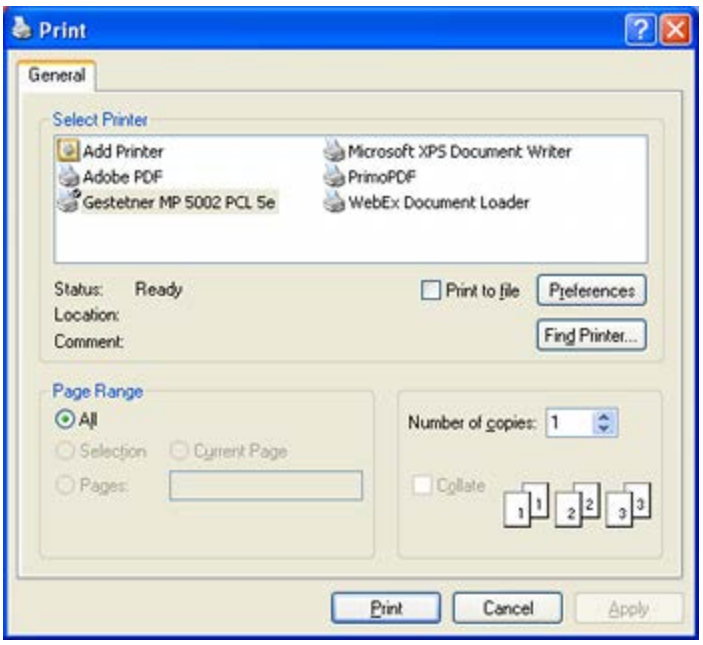


The options will have the following effect:

- **Yes** - the existing structure will be purged and all subsequent floor plans published to the new structure.
- **No** - the existing structure will be left unchanged and all subsequent floor plans published to the new structure.
- **Cancel** - the user can go back to the dialog box and change the Directory Structure back to the old options.

Print

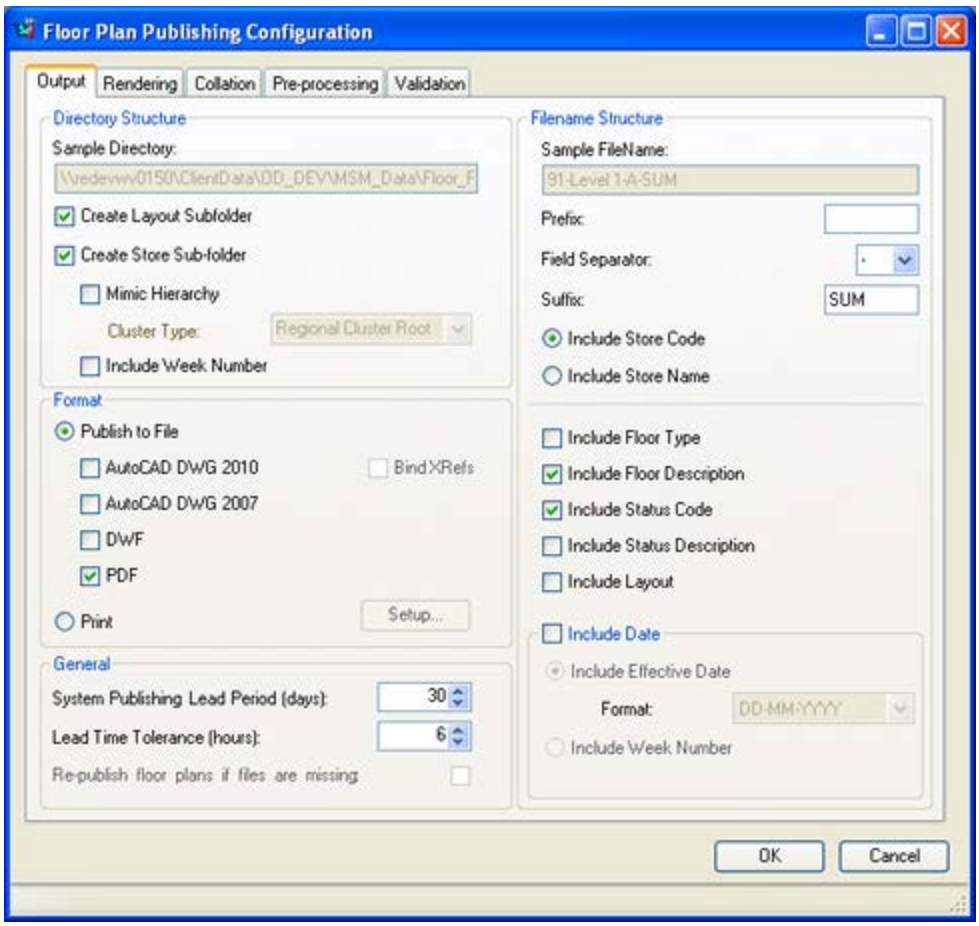
Selecting the **Print** radio button followed by **Setup** brings up the standard Print dialog box.



This enables the users to select the printer, paper orientation, and so on. The sequence planogram designs will be printed depends on the settings in the Collation tab.

The Output Tab - Filename Structure

The **Output Tab** is used to configure how floor plans will be output. Settings here determine the folder structure and the type and naming convention for the floor plans.



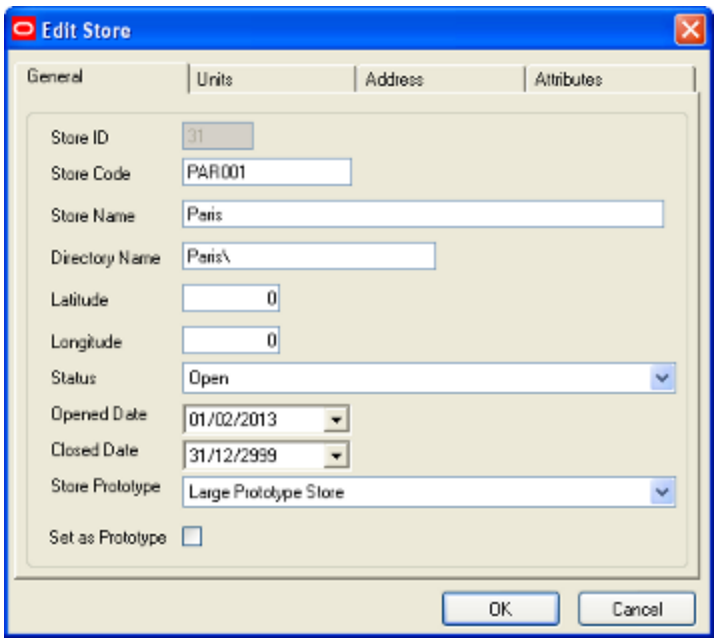
Filename Structure

These options allow users to specify the format of the file name. It will be built up by combining all the selected options.

The **Sample Filename** text box contains an example of a filename based on the current selections in this frame.

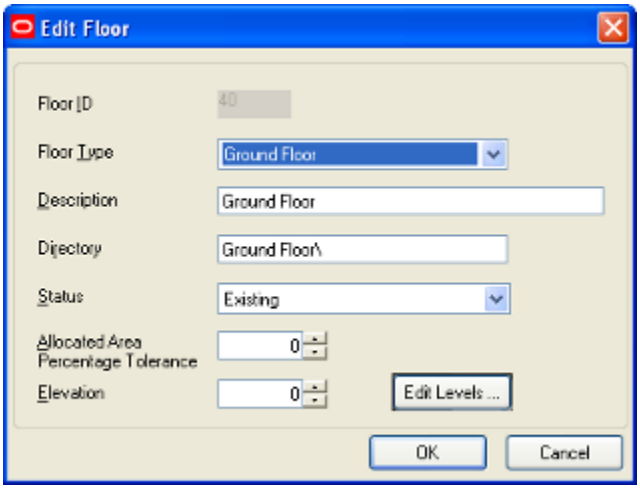
- **Prefix** - this is the initial part of the file name. It can be up to 10 characters long and can contain any character except / \ : * ? " < > and |.
- **Field Separator** - this is the symbol used to separate the different parts of the filer name. It can take the form of an underscore or a hyphen (_ or -).
- **Suffix** - this is the terminating part of the file name. It can be up to 10 characters long and can contain any character except / \ : * ? " < > and |.
- **Include Store Code** - the file name must include either the store code or store name. Which is to be used is selected by means of the radio button.
- **Include Store Name** - the file name must include either the store code or store name. Which is to be used is selected by means of the radio button.

Store Code and Store Name are set in the Store dialog box in Store Manager.

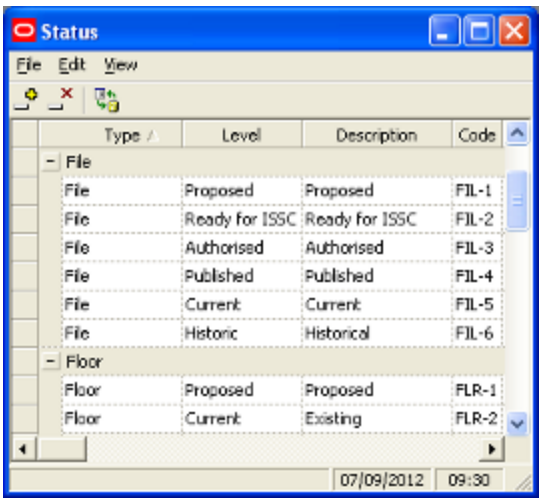


- The file name format can also include the Floor Type, Floor Description, Status Code or Status Description. They are selected by means of the appropriate check boxes.
  - **Floor Type** - if checked, the floor type will be included in the file name.
  - **Floor Description** - if checked, the floor description will be included in the file name.

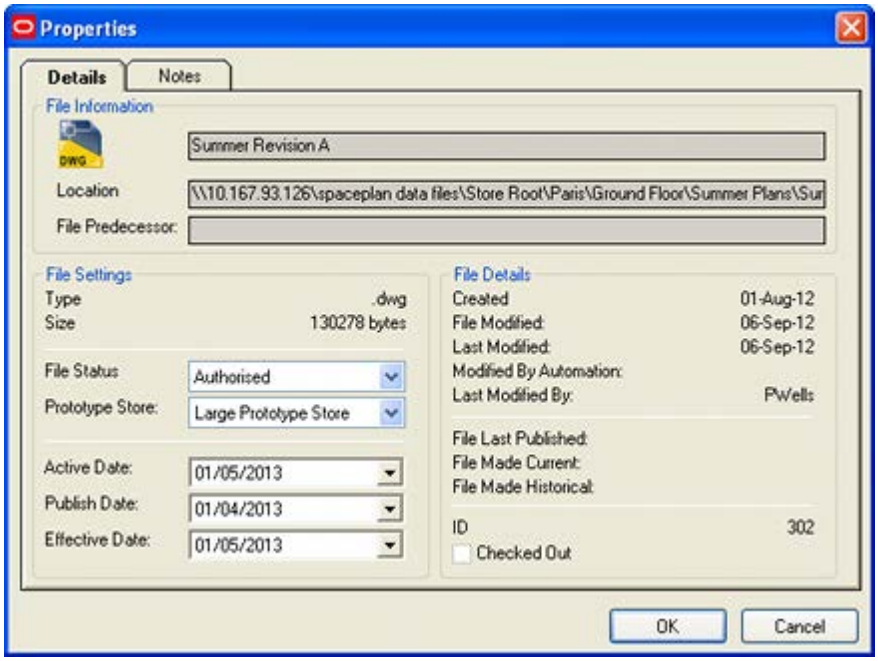
Floor Type is set from the drop down list in the floor dialog box in Store Manager. Floor Description is set in the text box in the same dialog box.



  - **Status Code** - If checked, the status code will be included in the file name. Status code is configured in the Status dialog box accessed from the General Menu of the Administration module.



– **Status Description** - If checked, the status description will be included in the file name. The Status for a floor plan is set in the File Properties dialog box accessed in Store Manager.



– **Include Layout** will include the name of the AutoCAD Layout in the file name.



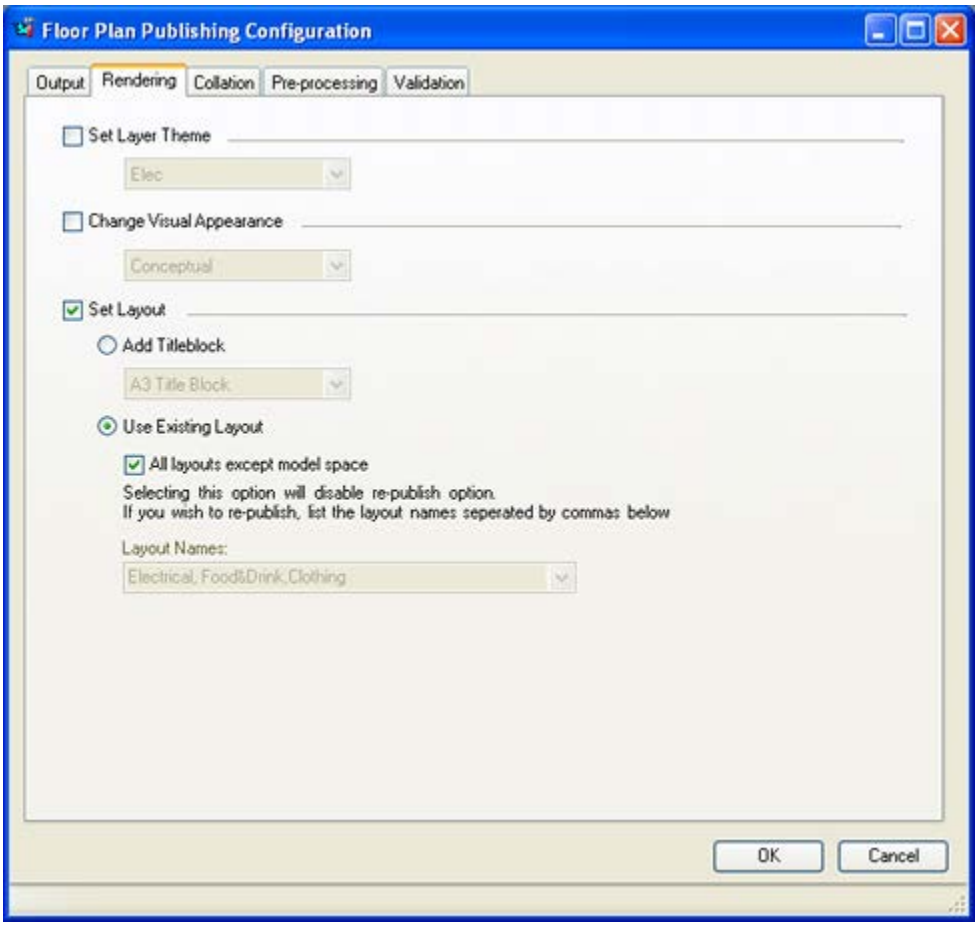
– **Include Date** allows a date to be included in the file name. There are two options, one of which must be selected by mans of the Radio button.
  - **Include Effective Date** - this adds the Effective Date (the date the floor plan goes into service. The format is set by the **Format** drop down list.
  - **Include Week Number** - this will take the Effective Date for the floor plan (set in the File Properties dialog box in Store Manager) and information in the Calendars option accessed from the General Menu. The Effective Date will be compared to the calendar dates associated

with the 'Week' calendar type. If it finds a match for these dates, the sub folder will be given the text name for that week.

Note: this option will not work unless the Calendars option has been set up to include 'Week' type information.

The Rendering Tab

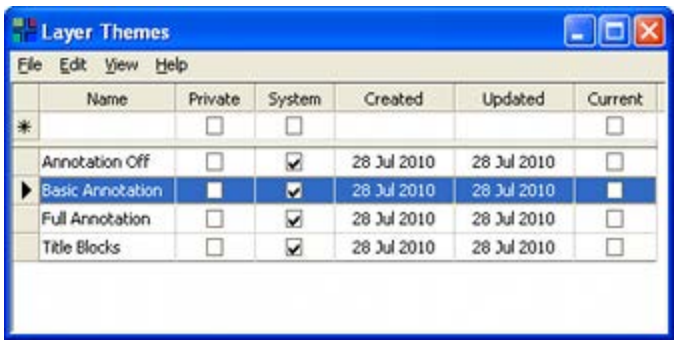
The **Rendering Tab** is used to ensure the visual appearance of the floor plan is as desired.



Set Layer Theme

If the check box is selected, users can select a layer theme from the drop down list. A number of layer themes can exist - each holding a specific set of settings for the individual layers. Selecting a specific layer theme, will automatically configure the individual layers to the settings designated for that layer theme.

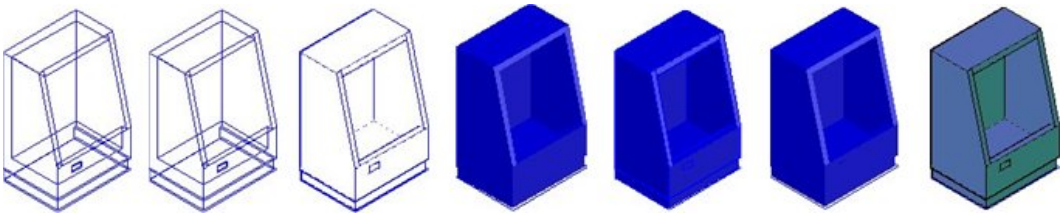
These layer themes are configured in the Layer Themes dialog box accessed from the Layer Aliased dialog box on the Format menu in the Planner module.



Change Visual Appearance

If the check box is ticked, this allows users to change the visual appearance of the drawing. The options are:

- 2D Wire Frame
- 3D Wire Frame
- Hidden Detail
- Shaded
- Shaded with Edges
- Conceptual
- Realistic



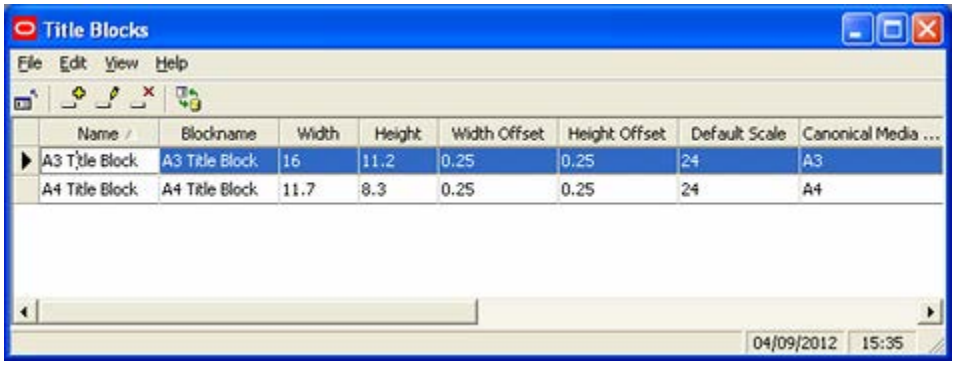
The images above show the different visual appearances available. Within the Planner module, the option can be set in either the Visual Styles toolbar or Visual Styles Manager.

Set Layout

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

1. Add Titleblock

   If the Add Titleblock option is selected, users may select a title block from a drop down list. The list of available title blocks is configured using the Title Block option on the Planning menu in the Admin module.



2. Use Existing Layout

If the Use Existing Layout option is selected, the user has two options; to publish all layouts except model space, or to publish selected layouts.

- All layouts except model space

  If this option is selected, all layouts except the model space layout will be published for each floor plan. The layout names option will also be greyed out and unavailable.

  If this option is chosen, it will not be possible to republish floor plans. This is because without a list of specified layout names, it is not possible to determine which layouts require republishing.

- Layout Names

  If this option is selected, users can enter a name matching the name of a paper space tab. This may be typed in. Alternatively it may be selected from the drop down list, which will contain the last ten names. Information in the drop down list is not case sensitive and the following wild cards may be used:

Wild Card	Comment
*	Any number of characters
?	Any single character
#	Any single number

If wild cards are used, the Republish option will only publish a single match for each floor plan. For example, if the wildcard is Con*, the Confectionery layout will be published and the Consumables layout will be omitted.

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

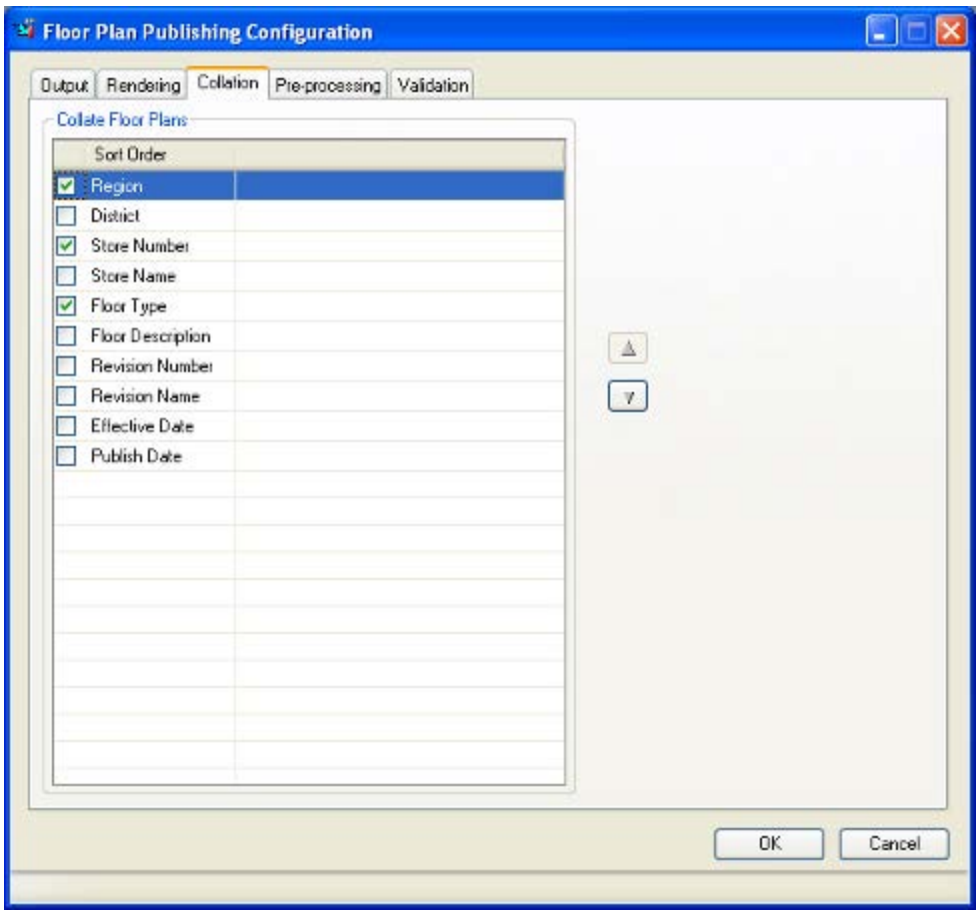


If multiple layout names are required, these should be separated by a comma.

The Collation Tab

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

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

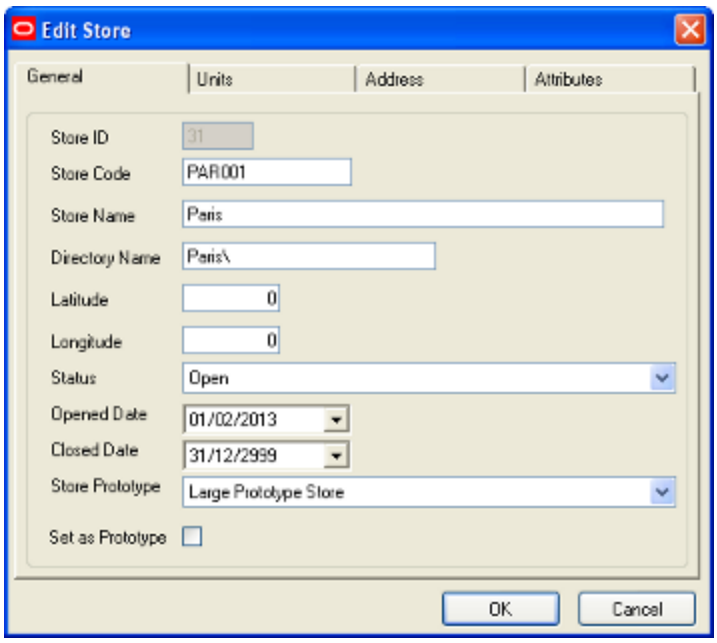


The available options can be ordered by highlighting them, then using the up or down arrows. The options are made active by using the check boxes.

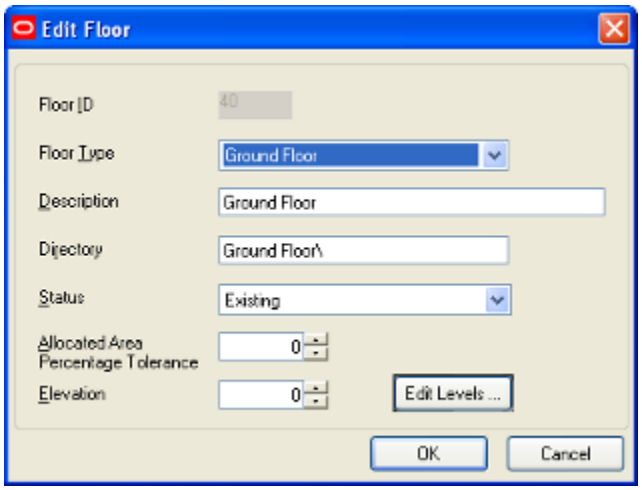
- **Region** is a specific type of cluster set in the Cluster type drop down list in the Cluster dialog box in Store Manager.
- **District** is a specific type of cluster set in the Cluster type drop down list in the Cluster dialog box in Store Manager.



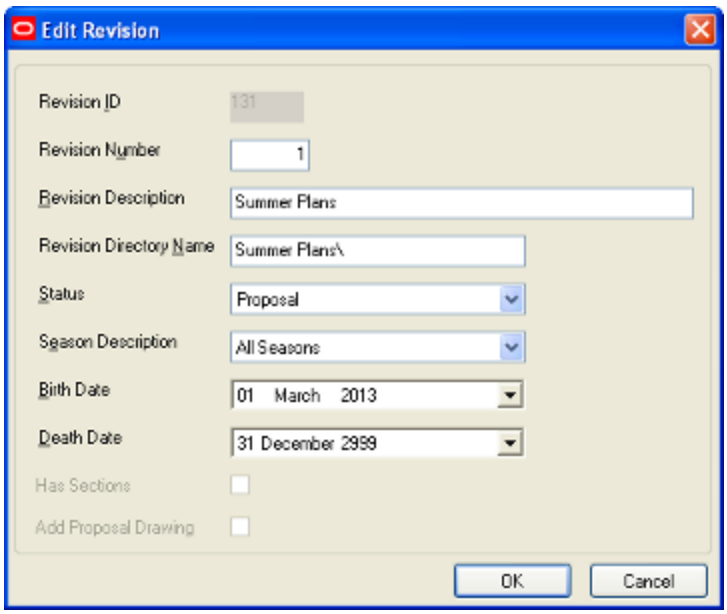
- **Store Number** is the Store Code in the Store dialog box in Store Manager.
- **Store Name** is the Store Name in the Store dialog box in Store Manager.



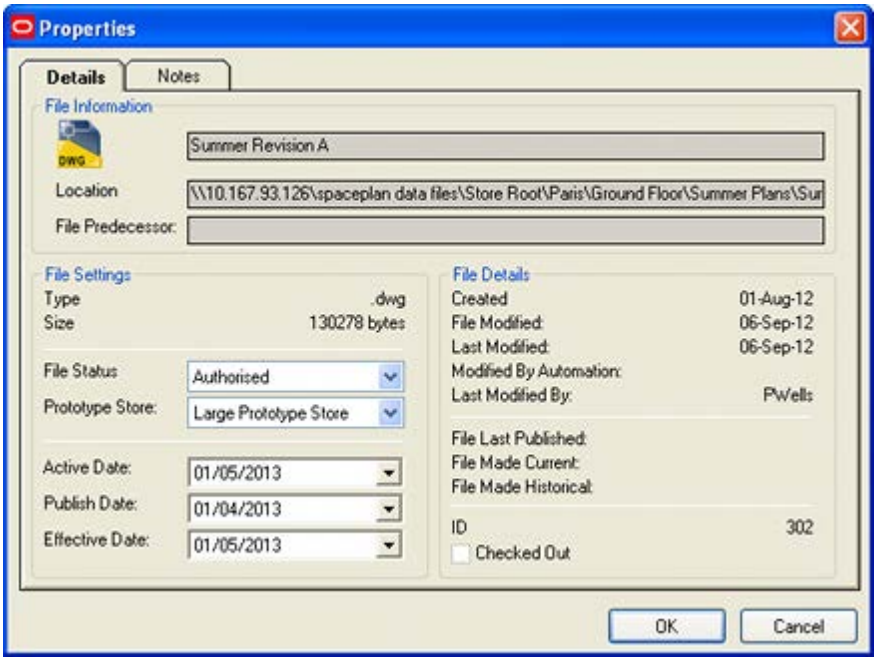
- **Floor Type** is the type selected from the drop down list in the Floor dialog box in Store Manager.
- **Floor Description** is the Description in the Floor dialog box in Store Manager.



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

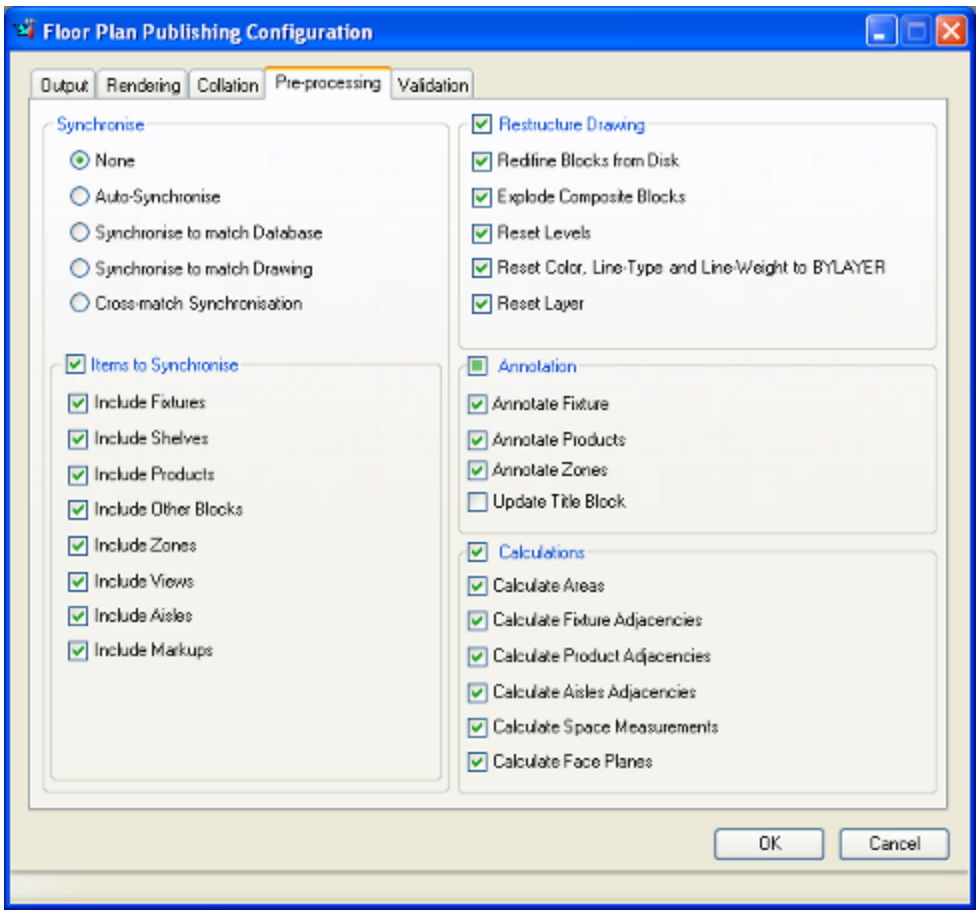


- Publish Date is the Publish Date set in the File Properties dialog box in Store Manager.
- Effective Date is the Effective Date set in the File Properties dialog box in Store Manager.



The Pre-processing Tab

The **Pre-processing tab** is used to ensure that the information in the floor plan is up to date.



Synchronize

Synchronize is used to make sure that the information in the floor plan matches that held in the Macro Space Planning database. This information could differ for a number of reasons:

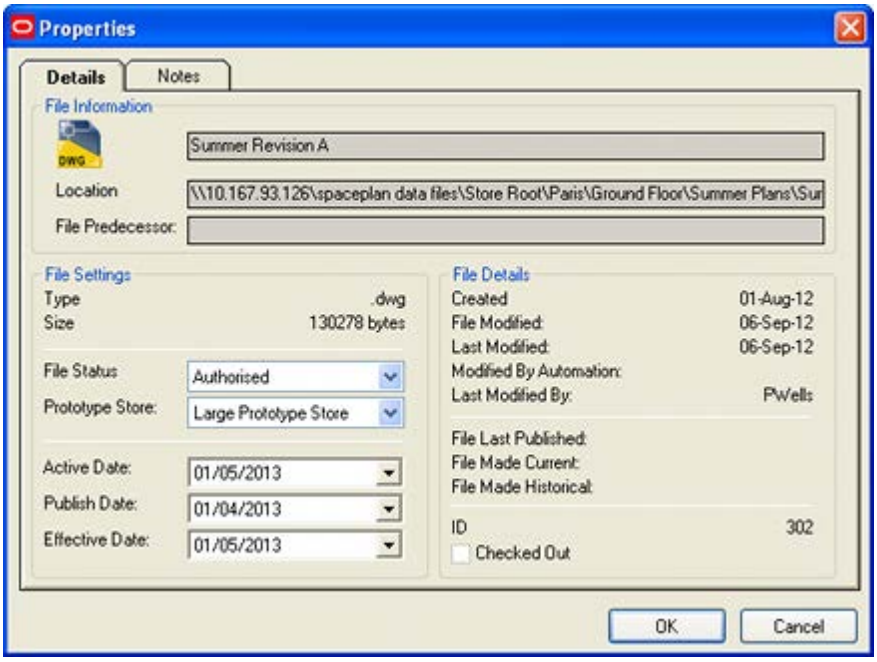
- Changes have been made in the floor plan using AutoCAD tools and these changes have not been written to the database.
- Changes have been manually made to floor plans in the Merchandiser module, or in In-Store Space Collaboration.
- Changes have been made to floor plans in the database by batch processes.
- Changes have been made to the floor plan outside Macro Space Planning - for example in raw AutoCAD.

The following options are available:

- **None** - no synchronization operations will be carried out.
- **Auto-Synchronize** - the application will automatically detect which form of synchronization is required:
  - If the information in the database exceeds the date the floor plan was last modified and saved in Planner (or modified in raw AutoCAD), the information will be synchronized "match the database".
  - If the date of the information in the floor plan (or the date it was modified in raw AutoCAD) exceeds the date the information was written to the database, the information will be synchronized "match the drawing".

  - If (i) the date the floor plan was last modified in raw AutoCAD exceeds the date the floor plan was last modified in Planner and (ii) the date the floor plan was last modified in Planner is less than the date the floor plan was last modified in Merchandiser, In-Store Space Collaboration or by a batch process, synchronization will be by 'cross-matching'.
    - Information in the floor plan for zones, fixtures and other blocks and aisles will be written to the database.
    - Information in the database for shelves and merchandise will be written into the floor plan.
- **Synchronize to Match Database** - information in the database will be written into the floor plan.
- **Synchronize to Match Drawing** - information from the floor plan will be written to the database.
- **Cross Match** - information on zones, fixtures and other blocks and aisles will be written to the database, while information on shelves and merchandise will be written into the floor plan.

Date information can be seen in the File Properties dialog box in Store Manager.



Items to Synchronize

Once the synchronization method has been selected, specific items can be selected for the synchronization operation to work on.

- **Include Fixtures** - fixtures and fittings will be synchronized.
- **Include Shelves** - shelf objects will be synchronized.
- **Include Products** - products and planograms will be synchronized
- **Include Other Blocks** - this synchronizes all blocks assigned as type 'other' in Fixture Studio.
- **Include Zones** - Zones will be synchronized.
- **Include Views** - view positions in Planner or Merchandiser will be synchronized. (This will not affect In-Store Space Collaboration).

- **Include Aisles** - Aisles will be synchronized.

The following points should be noted:

- If shelf positions are changed in Planner and the 'Synchronize to Match Drawing' option is selected, the modified shelf positions will be written back to the database. This will affect any instances of placed planograms using those shelves.
- Zones can only be added, edited or deleted in Planner. If 'Synchronize to Match Database' is selected, the current zone information in the Planner floor plan will be changed to match that held in the database. This might be done to reverse changes made and saved in the Planner module.
- Aisles can only be added, edited or deleted in Planner. If 'Synchronize to Match Database' is selected, the current aisle information in the Planner floor plan will be changed to match that held in the database. This might be done to reverse changes made and saved in the Planner module.

Restructure Drawing

Restructure Drawing allows users to update the drawing so that the blocks in the drawing match the latest information defined in Fixture Studio.

- **Redefine Blocks from Disc** - this results in the DWG files in the floor being updated with the latest versions of those DWG files held in the fixture library defined in Fixture Studio.
- **Explode Composite Blocks** - this will explode all blocks defined as composites in Fixture Studio. These blocks will be placed on Layer 0 and will require having Color, Line type and Line-Weight to set to BYLAYER. (This can be done using the Reset Color, Line Type and Line weight to BYLAYER command).

  Note: Composite Blocks that are not flagged as composite in Fixture Studio will not be exploded.

- **Reset Levels** - this will reset the elevation of the block to that defined by the level assigned to it in the Insertion Tab of the Block Details dialog box in Fixture Studio.
- **Reset Color, Line type and Line-Weight to BYLAYER** - this option will look at the color, line type and line weight of each instance of a block in the drawing. If they differ from the defaults for that layer, they will be set back to those defaults.
- **Reset Layer** - if blocks have been moved to a layer different to that specified in the Insertion Tab of the Block Details dialog box in Fixture Studio, the block will be restored to the default layer.

Annotation

The annotation option allows users to update the annotation in the floor plan so it matches the latest annotation rules specified in the Text Styles option in the Admin Module.

- **Annotate Fixtures** - all fixtures that have the 'Include in Fixture Annotation' checkbox ticked in the Category Tab of the Block Details dialog box in Fixture Studio will have their annotation updated.
- **Annotate Products** - all products, planograms and planogram profiles will have their annotation updated.
- **Annotate Zones** - all zones will have their annotation updated.

- **Update Title Block** - all text boxes in the title block that reference information in the database will have that information updated.

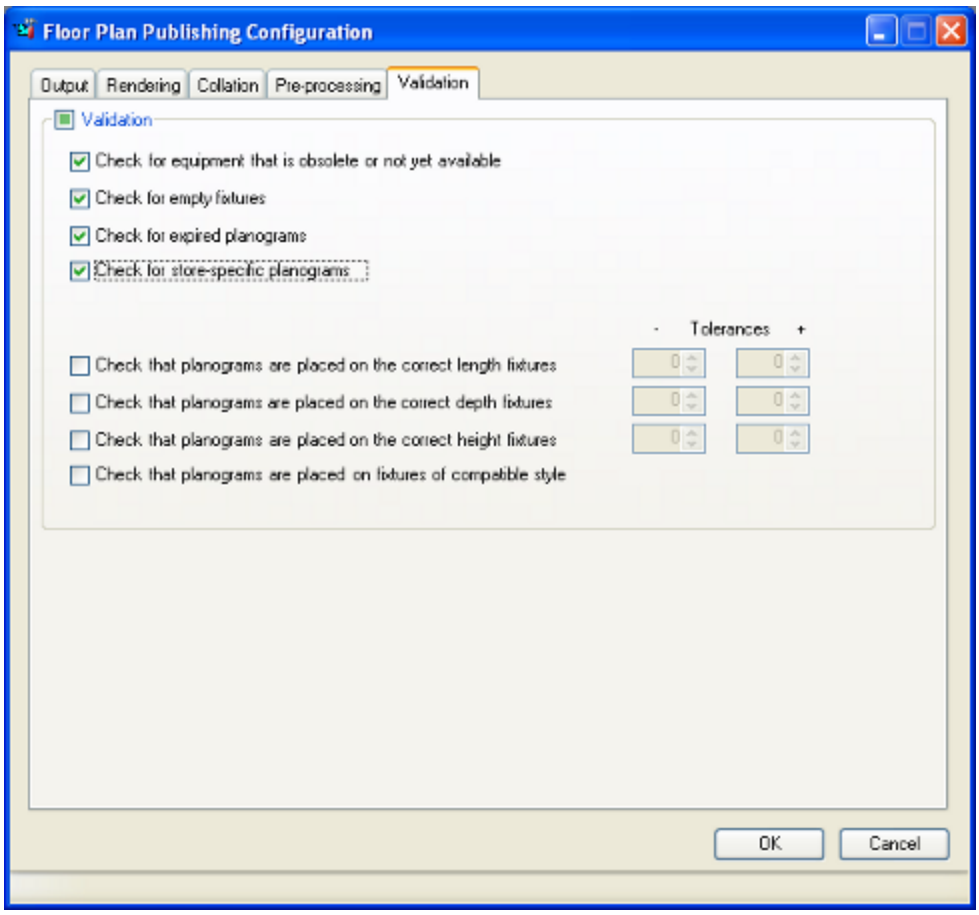
Calculations

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

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

The Validation Tab

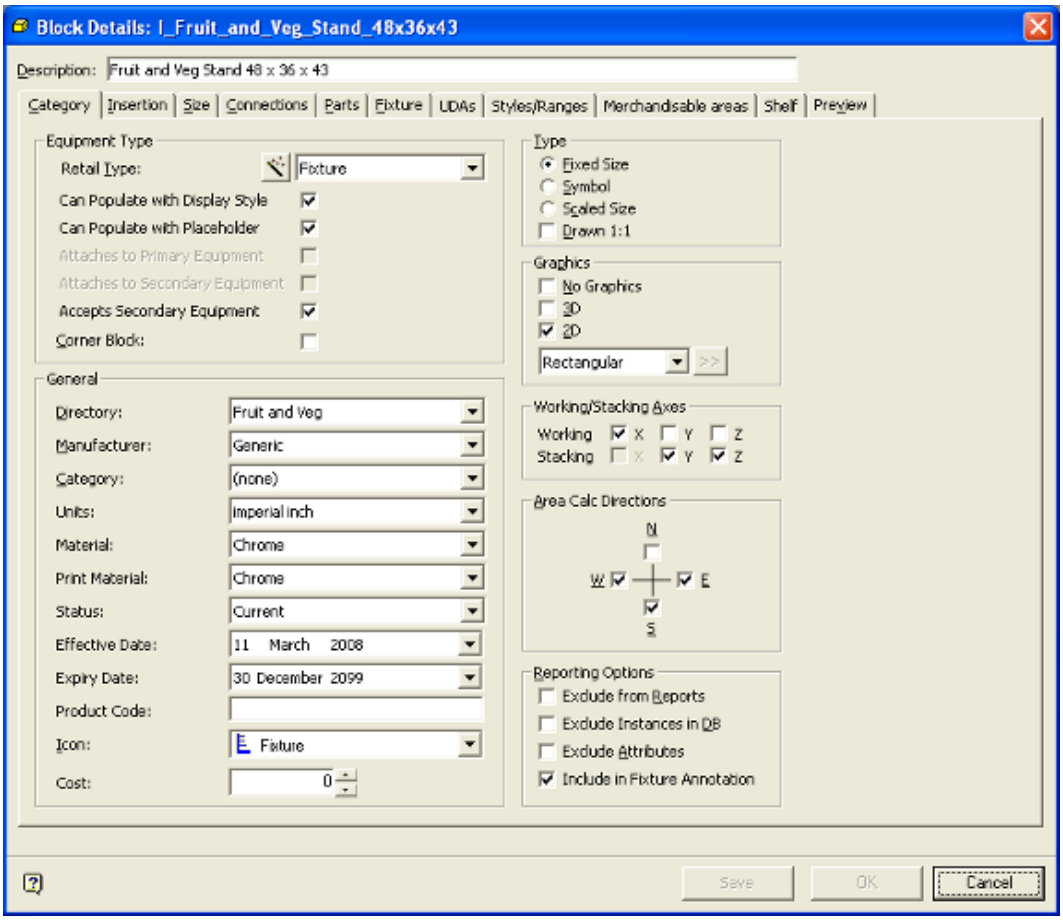
The **Validation Tab** enables users to set a series of validation checks that must be satisfied before the floor plan is published. If any of the checks have failed, the floor plan will be not be published and details written to the AVTTB_PROCESS_FILE_LOG table. Information in this table can be read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



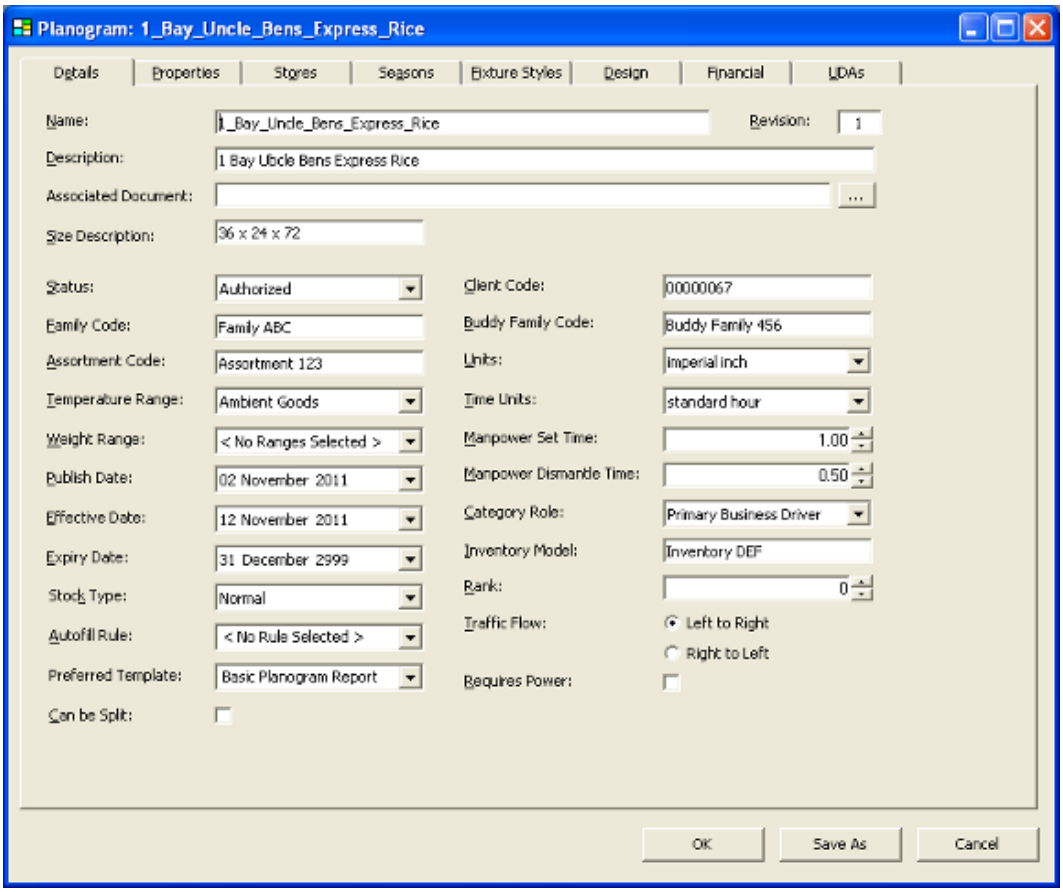
The tolerance values will use the system units, i.e. inches for imperial systems, and millimeters for metric systems. The values on the left are the lower tolerance; the values on the right are the upper tolerance.

- Check for equipment that is obsolete or not yet available - if selected, this validation option will compare the effective and expiry dates of the equipment against the effective date of the planogram.

The Effective and Expiry Dates of the equipment are set in the Category tab of the Block Details dialog box in Fixture Studio.



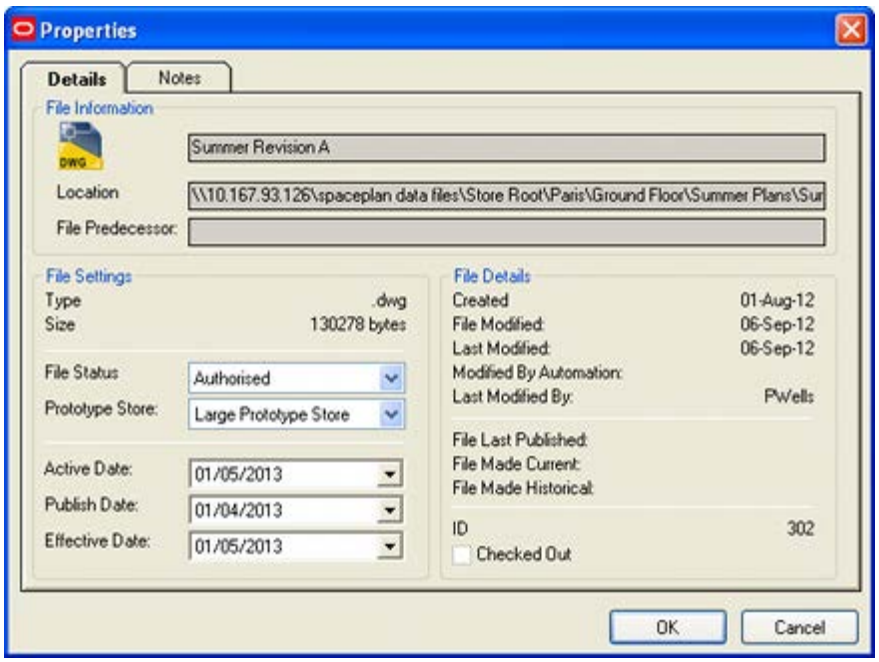
The Effective Date and Expiry date for the Planogram is set in the Details tab of the Planogram design dialog box in the Merchandiser module.



- **Check for empty fixtures** - if selected, this validation option will search for fixtures that can contain merchandise, but on which no merchandise has been placed.
- **Check for expired planograms** - if selected, this validation option will compare the effective and expiry dates of the planogram against the effective date of the floor-plan. It will check:
  - The Effective Date of the Planogram is less than or equal to the Floor Plan Effective Date
  - The Floor Plan Effective Date is less than the Planogram Expiry Date

  The Effective Date and Expiry date for the Planogram is set in the Details tab of the Planogram design dialog box in the Merchandiser module (see screen shot above).

  The Floor Plan Effective Date is set in the File Properties dialog box in Store Manager. (Store Manager can be accessed from the Planner or Merchandiser modules).

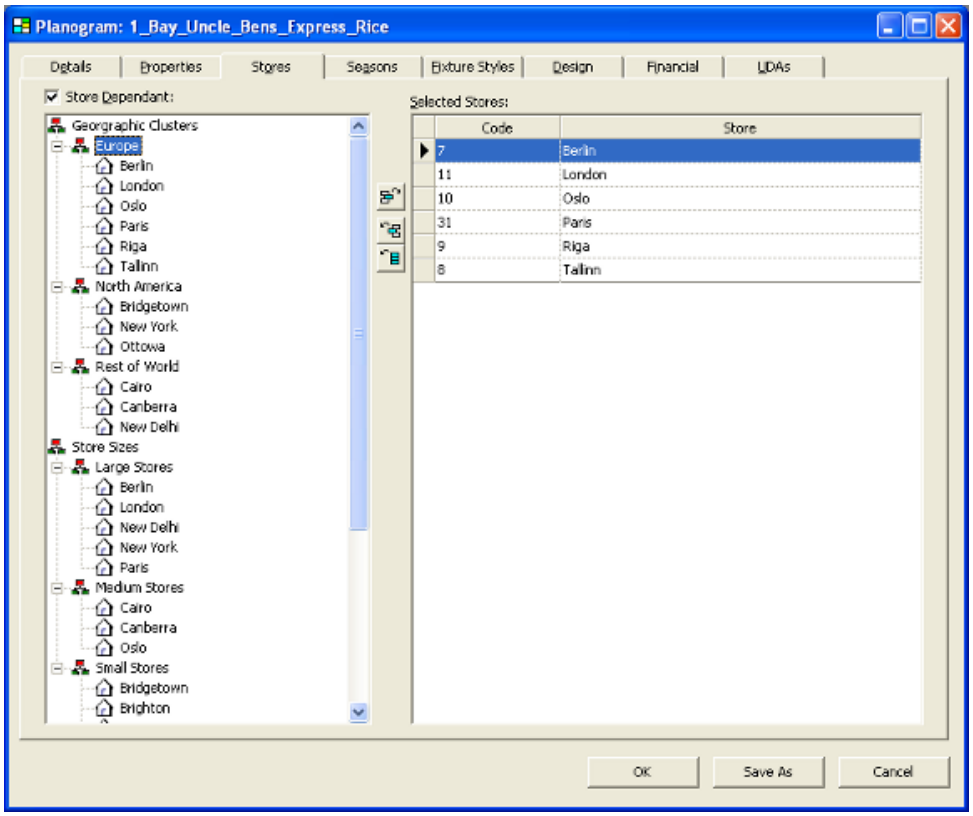


Note: Active Dates can also be set in the File Properties dialog box in Store Manager.

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

- **Check for store-specific planograms** - if selected, this validation option will check the placed planograms are either store specific and associated with this store, or are generic planograms that are associated with all stores.

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



- **Check that planograms are placed on correct length fixtures** - if checked, this option will check that the length of the planogram conforms to the total length of the fixtures on which it is placed within the limits set by the tolerance controls.
- **Check that planograms are placed on correct depth fixtures** - if checked, this option will check that the depth of the planogram conforms to the individual depths of the fixtures on which it is placed within the limits set by the tolerance controls.
- **Check that planograms are placed on correct height fixtures** - if checked, this option will check that the height of the planogram conforms to the individual heights of the fixtures on which it is placed within the limits set by the tolerance controls.
- **Check that planograms are placed on correct fixture styles** - if checked, this option will check that the fixture style assigned to the planogram matches the fixture styles assigned to the individual fixtures on which it has been placed.

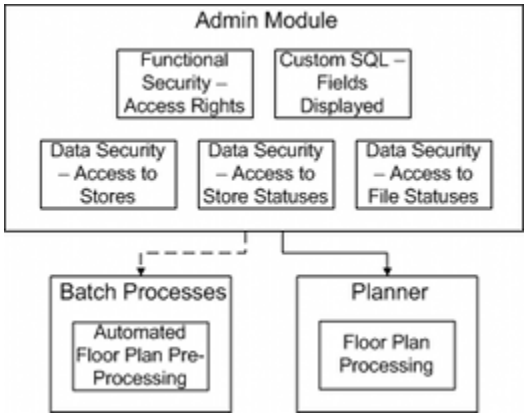
If an error occurs, it will prevent the floor-plan from being published. Errors will be logged in the AVTTB_FILE_PROCESS_LOG table identifying the process name, the floor-plan name and identifier, the date and time and the machine name on which it occurred. This information may be read in a report generated from (for example) BI Publisher.

Floor Plan Automated Processing

Overview of Floor Plan Automated Processing

Overview of Floor Plan Automated Processing

Floor Plan Processing is used to prepare floor plans for further use after manual or other batch operations have been carried out. The options available are:



The basic method of operation is as follows:

Admin Module

- Permissions to use the floor plan pre-processing functionality are assigned in the Functional security dialog box in the Admin module.
- The stores that users have permissions to process floor plans for are set in the Stores tab of the Data Security dialog box in the Admin Module.
- The store statuses that users have permissions to process floor plans for are set in the Stores option of the Status tab of the Data Security dialog box in the Admin Module.
- The file statuses that users have permission to process are set in the Files option of the Status tab of the Data Security dialog box in the Admin module.

  Note: the floor plans that a user has permission to process are dependent on the combination of store, store status and file status permissions.

- The fields that users can see in the Floor Plan Processing dialog box are specified in the Custom SQL dialog box in the Admin Module.

Batch Processes

Floor Plan Pre-Processing can be run as a batch process. In order to do this, a user must first have been assigned permission in the Functional Security dialog box in the Admin Module. The Batch Process will then execute using command line switches to define parameters.

Planner Module

In order to use Immediate Floor Plan Pre-Processing a user must first have been assigned permission in the Functional Security dialog box in the Admin Module. When the Floor

Plan Processing dialog box first opens, the user must manually chose the required settings.

The options available in **Floor Plan Processing** are:

- Synchronization

Synchronization is used to ensure that the floor plan (DWG file) used in the Planner module and the information held in the database is identical. Differences can occur if for instance, changes are made to the floor plan outside the Macro Space Planning, or changes are made to the database by processes such as planogram substitution. Using synchronize resolves these differences.

- Rendering

Rendering is used to ensure the visual appearance of the published or printed drawing conforms to a specified format. This includes configuring the layers used in the floor plan, the visual appearance of the blocks used, refreshing the data displayed in the title block and selecting the layout tab in AutoCAD paper space.

- Restructuring Drawing

The restructure options are used to ensure that the blocks in the floor plan conform to the latest versions defined in the Fixture Studio module. For example, the functionality can be used to ensure that the version of the DWG file used to represent the block is the latest version, that its color, line type and line weight are set to the correct values for the layer is designated to be on and that its elevation in the drawing (z coordinate) is identical to the value specified in Fixture Studio.

- Annotation

The annotation options are used to refresh zone, fixture and product annotation. They are also used to ensure the information displayed in the Title Block is up to date. For example, if the Planogram Substitution functionality has been used to change some of the planograms in the floor plan, it would be necessary to re-annotate the floor plan to reflect the changed merchandise.

- Calculations

The calculation option is used to ensure that information used for reporting purposes is up to date. For example, if the Planogram Substitution functionality has been used to change some of the planograms in the floor plan, Product Adjacency, Aisle Adjacency, Face Plane and Space Measurement calculations would probably have to be re-run to ensure the information generated for any reports associated with that floor plan was up to date.

Purpose of Floor Plan Automated Processing

The purpose of Floor Plan Automated Processing is to prepare floor plans for further use after manual or other batch operations have been carried out. The options available are:

Synchronization

Synchronization is used to ensure that the floor plan (DWG file) used in the Planner module and the information held in the database is identical. Differences could build up between the two. For example changes could be made in the Merchandiser module - these changes are written directly to the database, but are not written to the floor plan (DWG file) used in the Planner module. Using synchronize resolves these differences.

Rendering

Rendering is used to ensure the visual appearance of the published or printed drawing confirms to a specified format. This includes configuring the layers used in the floor plan,

the visual appearance of the blocks used, refreshing the data displayed in the title block and selecting the layout tab in AutoCAD paper space.

Restructuring Drawing

The restructure options are used to ensure that the blocks in the floor plan conform to the latest versions defined in the Fixture Studio module. For example, the functionality can be used to ensure that the version of the DWG file used to represent the block is the latest version, that its color, line type and line weight are set to the correct values for the layer is designated to be on and that its elevation in the drawing (z coordinate) is identical to the value specified in Fixture Studio.

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The calculation option is used to ensure that information used for reporting purposes in up to date. For example, if the Planogram Substitution functionality has been used to change some of the planograms in the floor plan, Product Adjacency, Aisle Adjacency, Face Plane and Space Measurement calculations would probably have to be re-run to ensure the information generated for any reports associated with that floor plan was up to date.

Examples of the use of Floor Plan Automated Processing are given below:

- Ensure Floor Plan data is up to date before generating reports

  If manual changes have been made in floor plans, it is by no means guaranteed that the person editing the floor plan has remembered to update the calculations before saving and closing the drawing. Running the calculations via Floor Plan Automated Processing is a prudent step to ensure reporting accuracy.

- Planogram substitutions have been run as a batch process

  The need then is to prepare the floor plans for when they are next manually opened, or for when they are published. The processing tasks would include:

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

- Floor Plans are to be published and reports are to be generated

  If floor plans are to be published and reports are to be generated, business work flows may make it sensible to run Floor Plan Automated Processing as a predecessor to generating the reports and floor plans. In this case Floor Plan Publishing would be configured without any options selected on the pre-processing tab.

Examples Uses of Floor Plan Automated Processing

Ensure Floor Plan data is up to date before generating reports

If manual changes have been made in floor plans, it is by no means guaranteed that the person editing the floor plan has remembered to update the calculations before saving and closing the drawing. Running the calculations via Floor Plan Automated Processing is a prudent step to ensure reporting accuracy.

Planogram substitutions have been run as a batch process

The need then is to prepare the floor plans for when they are next manually opened, or for when they are published. The processing tasks would include:

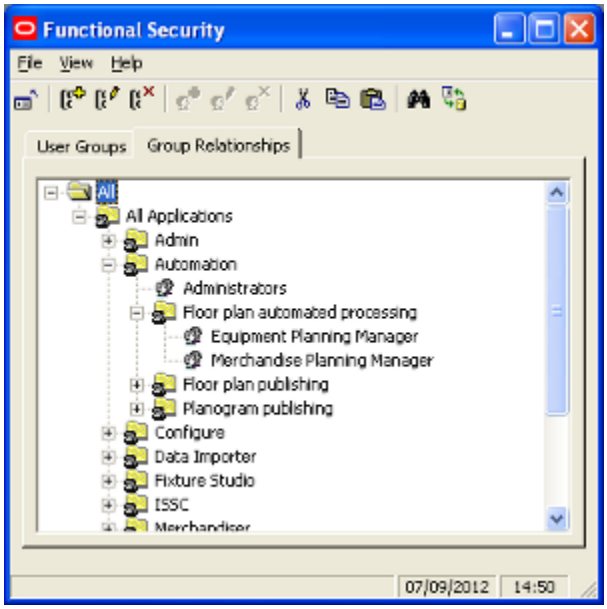
- Synchronize (batch the database) to bring the substituted planograms into the Planner floor plans (DWG files).
- Annotation to update the annotation associated with the changed planograms.
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Floor Plans are to be published and reports are to be generated

If floor plans are to be published and reports are to be generated, business work flows may make it sensible to run Floor Plan Automated Processing as a predecessor to generating the reports and floor plans. In this case Floor Plan Publishing would be configured without any options selected on the pre-processing tab.

Permissions to Run Floor Plan Automated Processing

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

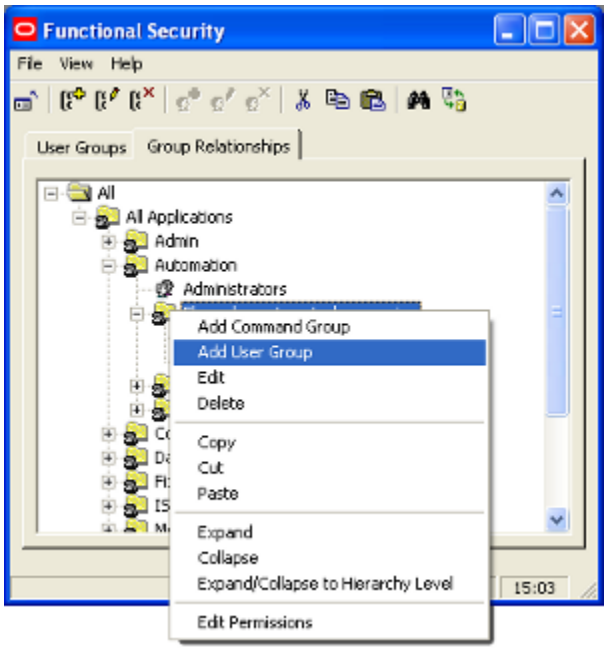


Users assigned to the Automation Command Group (such as the Administrator User Group) can run all Automation Functionality. User Groups assigned to the child Command Groups (Floor plan automated publishing, Floor plan publishing, Planogram publishing) have the ability to use that functionality. In the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

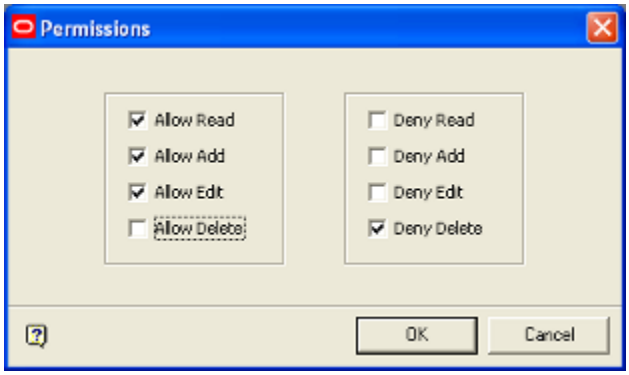
Equipment Planning Manager and Merchandise Planning Manager User Groups have been assigned permission to use the Floor Plan Automated Processing functionality.

> **Note:** Floor Plan Automated Processing (the right to run calculations on floor plans) is a separate user group to Floor Plan Publishing. Floor Plan Publishing users can run calculations on floor plans as part of the publishing process. To run Floor Plan Automated Publishing 'stand alone' as a preparatory action for outputting reports, etc, requires the user to have separate permission for that functionality.

The User Groups precise rights depend on settings in the Permissions dialog box. This is accessed from the right click menu in the Functional Security dialog box.



This will bring up the Permissions dialog box.



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

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

Running Floor Plan Pre-Processing

There are two ways Floor Plan Pre-processing can be run once permissions have been granted:

- As a batch process
- Manually invoked In the Planner module from the File > Drawing Utilities module.

Running Floor Plan Automated Processing through the Command Line

Using Batch Runner

The batch process is executed via a Macro Space Management executable called BatchRunner.exe. By default, this is installed in the C:\Program Files\Oracle Retail\MSM\Common Files\.NET folder.

> **Note:** It is recommended that batch processes be executed using an installation of Macro Space Management on a server. This ensures that the batch process can be executed at the specified time without the risk of the computer being turned off or the batch process being interrupted.

Floor Plan Automated Processing is run as a batch process through the Windows Command Line. This can be done in two general ways:

- Directly as a manually entered command or via a manually invoked batch file.
- Automatically, where planogram publishing is run by a third party scheduling tool.

The syntax for running via the command Line is as follows:

BatchRunner /processplans username/password /t

1. BatchRunner identifies that the batch process should be run using the Batch Runner utility. This utility is automatically installed with the rest of Macro Space Management.

   > **Note:** The path to the directory containing BatchRunner should also be included in the command line syntax - for example *C:\Program Files\Oracle Retail\MSM\Common Files\.NET\BatchRunner*

2. **processplans** identifies that the functionality to run as a batch process is called processplans.
3. **username/password** must be a valid combination for a user in the Macro Space Planning database who belongs to a User Group with permissions to use the functionality controlled by the **Floor Plan Automated Processing** Command Group in the Functional Security dialog box.
4. **/t** is an optional switch. It allows the third party scheduling tool to terminate the Planogram Publishing process after the current planogram has been published.

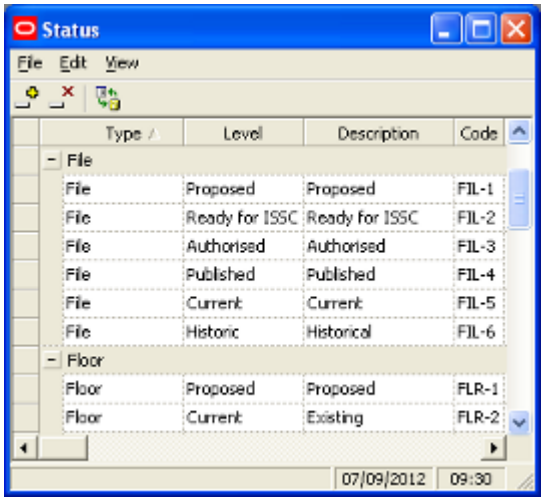
Other Batch Runner Command Line Switches

The following other command line switches are available.

- Files to be processed

Files to be processed can be filtered as follows:

– The /s switch will restrict files to be processed to files with a specific file status. The Syntax is /s Code 1, Code 2, Code 3, and so on, where the Code is the code field in the Status dialog box accessed from the General menu. The code is user specific, but a typical example would be /S FIL-2, FIL-3. If no status code is defined, it will assume all non-read-only file status values should be processes.



Note: The codes are case sensitive: FIL-1 is not the same as Fil-1.

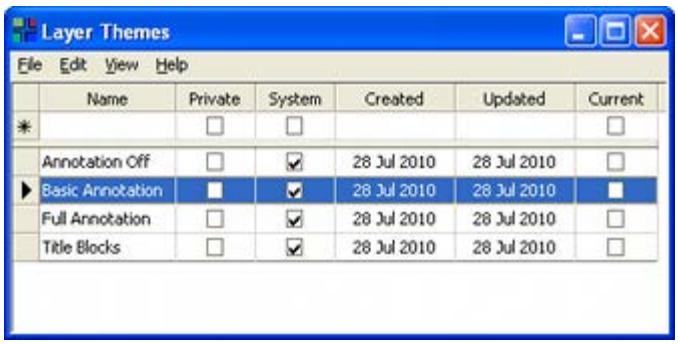
– The /OUTOFSYNC switch will only process those floor plans where differences exist between the Planner floor plan and the database. The first condition for this is AutoCAD File Date (from the DWG file properties) > Last Modified Date (in the database). The second condition for this is Last Processed Date (in the database) > Last Modified Date (in the database).

Note: further switches have to be set to specify the nature of the synchronization.

- Rendering

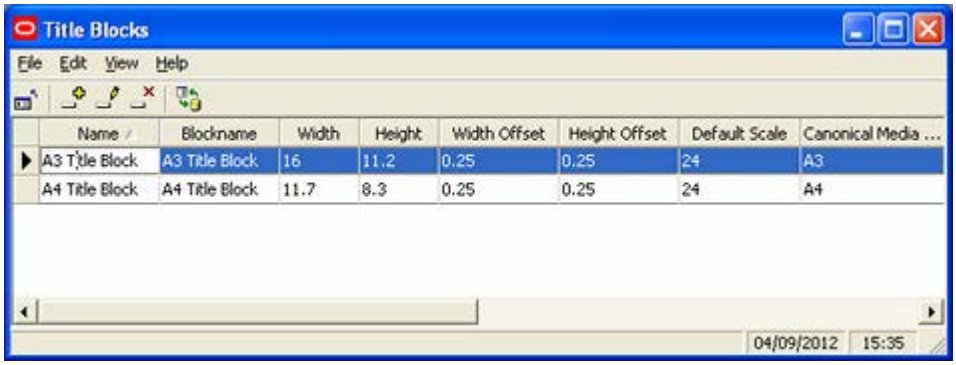
The Rendering commands can be configured with the following switches:

– The /THEME switch will cause the floor plan to be rendered with a specific layer theme. The syntax is /THEME a where 'a' is the name of the layer theme. A typical example would be /THEME "Full Annotation". The available themes can be seem in the Layer Themes dialog box accessed from the Layer Aliased dialog box on the Format menu in the Planner module.



– The /VISUAL switch will cause the floor plan to be rendered with one of seven visual styles. The syntax is /VISUAL a where 'a' is the name of the visual style. A typical example would be /VISUAL"2D Wire Frame". The available options are 2D Wire Frame, 3D Wire Frame, Hidden Detail, Shaded, Shaded with Edges, Conceptual and Realistic. These correspond to those available in the Visual Styles toolbar or Visual Styles Manager.

– The /TITLEBLOCK switch will cause a Title Block to be added to the floor plan being printed or published. The syntax is TITLEBLOCK a where 'a' is the name of the Title Block. A typical example would be /TITLEBLOCK "ANSI D". The list of available title blocks is configured using the Title Block option on the Planning menu in the Admin module.



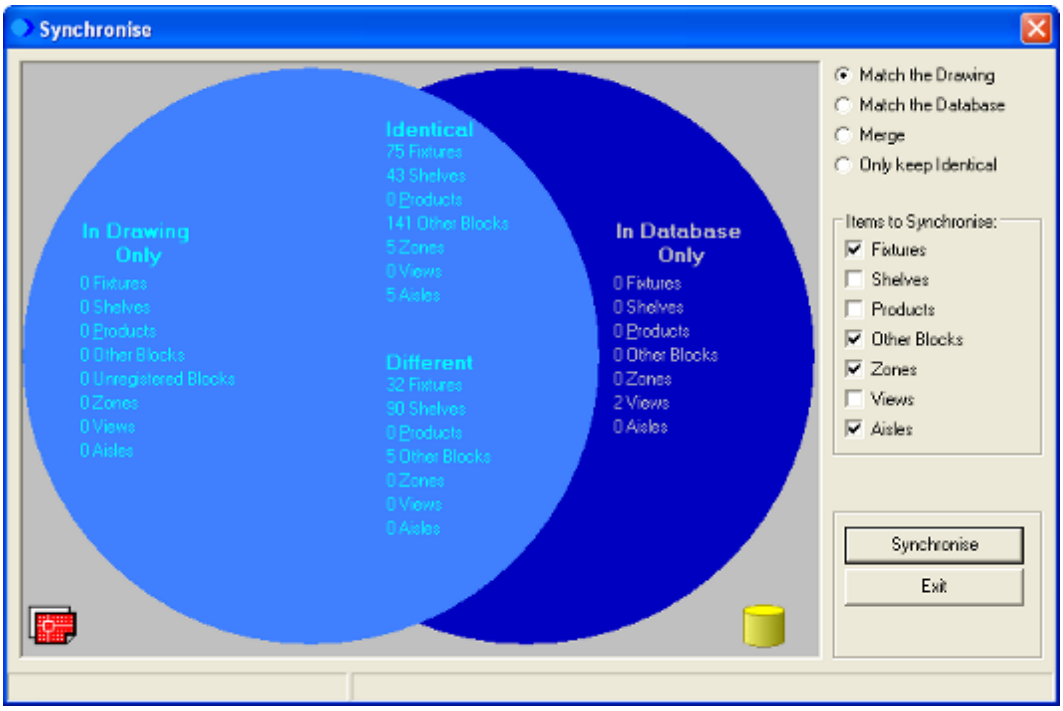
– The /LAYOUT switch will cause a specific layout tab to be used for the floor plan being printed or published. The syntax is /LAYOUT a. a where 'a' is the name of the layout. A typical example would be /LAYOUT "Overall Store". The names of the layout (paper space) tabs can be seen at the foot of the floor plan in the Planner module. In the example below they are named Overall store, food and drink, Electrical and Clothing.



Note: If a name used in the Rendering switches contains spaces, then it must be enclosed in double-quotes.

- Synchronization

The Synchronization command is configured using the following switch: /SYNC n, m. This controls similar options to those available in the Synchronization dialog box available in the Planner module.



The /SYNC n, m switch works as follows:

- **n is the type of synchronization**:

0 = None

1 = Auto-Synchronize

2 = Match Drawing

3 = Match Database

4 = Cross-Match

- **m is a bitwise integer for the items to synchronize**:

The values used to make up the bitwise integer are:

1 = Include Fixtures

2 = Include Shelves

4 = Include Products

8 = Include Other Blocks

16 = Include Zones

32 = Include Views

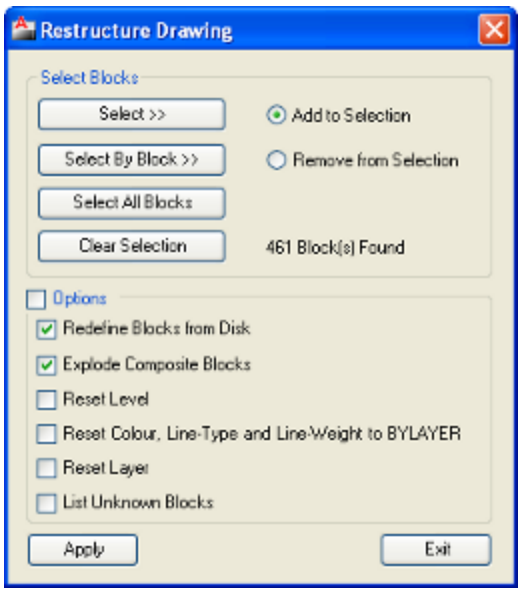
64 = Include Aisles

128 = Include Markups

Setting m to a value of 7 would thus synchronize Fixtures, Shelves and Products.

- Restructure Drawing

The Restructure option is configured using the following switch: /RESTRUCTURE n, where n = bitwise integer for the restructuring options. These correspond to the options available in the Restructure Drawing dialog box accessed from the Modify > Blocks menu in the Planner module.



The values used to make up the bitwise integer are:

1 = Redefine blocks from disk

2 = Explode composite blocks

4 = Reset level

8 = Reset color, line-type, line-weight to BYLAYER

16 = Reset layer

Setting n to a value of 5 would thus run the Redefine blocks from disk and Reset level options.

- Annotation

The Annotate option is configured using the following switch: /ANNOTATE n, where n = bitwise integer for the annotation options. The values used to make up the bitwise integer are:

1 = Annotate Fixtures

2 = Annotate Products

4 = Annotate Zones

8 = Update Title Block

Setting n to a value of 2 would thus run the Product Annotation option.

- Calculate

The Calculate option is configured using the following switch: /CALCULATE n, where n = bitwise integer for the calculation options. The values used to make up the bitwise integer are:

1 = Calculate Areas

2 = Calculate Fixture Adjacencies

4 = Calculate Product Adjacencies

8 = Calculate Aisle Adjacencies

16 = Calculate Space Measures

32 = Calculate Face Planes

Setting n to a value of 14 would thus run the Fixture Adjacency, Product Adjacency and Aisle Adjacency options.

Logging and Reporting Results from Floor Plan Automated Processing

The results from Automated Processing of Floor Plans are stored in two tables within the database.

AVTTB_PROCESS_FILE_LOG

This table holds information on the date, file, processes carried out, machine and log in ID and whether the result was successful or not.

- The PFL_PROCESSTYPE field describes the type of process involved: 1 = Process Files
- The PFL_LOGTYPE field describes the type of information in the PFL_DETAILS field: 1 = Error, 2 = Warning, 3 = Information and 4 = Summary

Information in this table gives an overview of the results.

AVTTB_ERROR

This table holds information on errors generated during the floor plan processing. It is more technical than the AVTTB_PROCESS_FILE_LOG table and contains information that will be off assistance to Data Base Administrators.

Note: for more information on these tables see the Macro Space Planning Data Model.

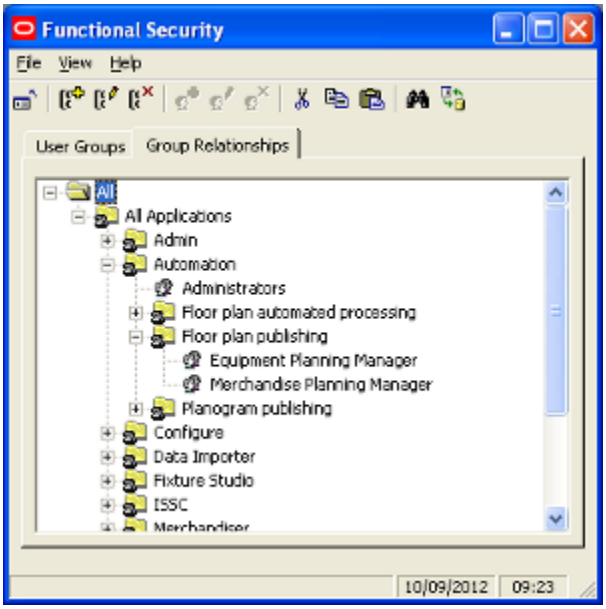
BI Publisher

In order to facilitate analysis of the results, it is normal to view results via a report generated from BI Publisher (or similar software).

Running Floor Plan Publishing as a Batch Process

Permissions to Run Floor Publishing as a Batch Process

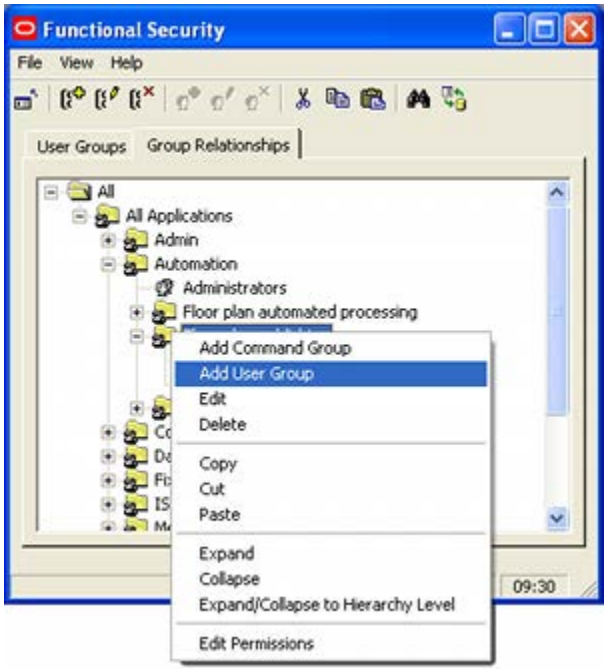
Before a user can run Floor Plan Publishing as a batch process, they must first have been assigned the appropriate permissions in the Admin module. This is done using the Functional Security dialog box accessed from the Security menu.



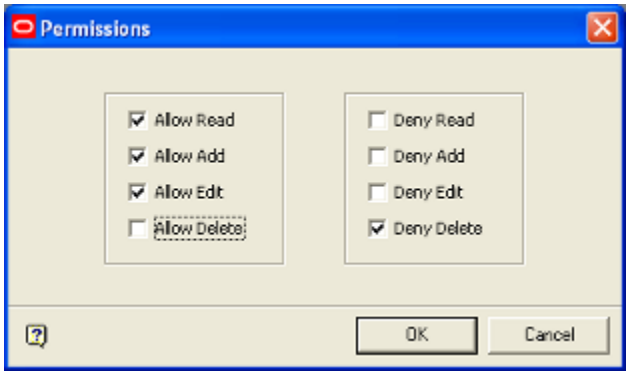
Users assigned to the Automation Command Group (such as the Administrator User Group) can run all Automation Functionality. User Groups assigned to the child Command Groups (Floor plan automated publishing, Floor plan publishing, Planogram publishing) have the ability to use that functionality. In the example above, the Equipment Planning Manager and Merchandise Planning Manager User Groups have been assigned permission to use the Floor Plan Publishing functionality.

> **Note:** Floor Plan Automated Publishing (the right to run calculations on floor plans) is a separate user group. Users with permissions for Floor Plan Publishing can set calculation options in the Pre-processing tab of the Floor Plan Publishing Configuration dialog box. These will execute during the publishing of floor plans. They will not execute otherwise unless the user is a member of a User Group with permissions for the Floor Plan Automated Publishing User Group.

The User Groups precise rights depend on settings in the Permissions dialog box. This is accessed from the right click menu in the Functional Security dialog box.



This will bring up the Permissions dialog box.



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

Running Floor Plan Publishing though the Command Line

Using Batch Runner

The batch process is executed via a Macro Space Management executable called BatchRunner.exe. By default, this is installed in the C:\Program Files\Oracle Retail\MSM\Common Files\.NET folder.

> **Note:** It is recommended that batch processes be executed using an installation of Macro Space Management on a server. This ensures that the batch process can be executed at the specified time without the risk of the computer being turned off or the batch process being interrupted.

Floor Plan Publishing is run as a batch process through the Windows Command Line. This can be done in two general ways:

- Directly as a manually entered command or via a manually invoked batch file.
- Automatically, where planogram publishing is run by a third party scheduling tool.

The syntax for running via the command Line is as follows:

BatchRunner /publishplans username/password /t

- **BatchRunner** identifies that the batch process should be run using the Batch Runner utility. This utility is automatically installed with the rest of Macro Space Management.

  > **Note:** The path to the directory containing BatchRunner should also be included in the command line syntax - for example *C:\Program Files\Oracle Retail\MSM\Common Files\.NET\BatchRunner*

- **publishplans** identifies that the functionality to run as a batch process is called publishplans
- **username/password** must be a valid combination for a user in the Macro Space Planning database who belongs to a User Group with permissions to use the functionality controlled by the **Planogram Publishing** Command Group in the Functional Security dialog box.
- **/t** is an optional switch. It allows the third party scheduling tool to terminate the Planogram Publishing process after the current planogram has been published.

Recording of Results

When Planogram Publishing is run as a Batch Process, the following information is logged or modified:

- **Invalid username/password**

If an invalid user name and password is used to start the batch process, the invalid user name will be written to the Error Log (AVTTB_ERROR table), together with the machine name and the date and time.

- **Start times, finish times and floor plan publishing results**

The start time, finish time, user log in name, machine used, type of information and result will be written to the Floor Plan Publishing Log (AVTTB_PROCESS_FILE_LOG table). If the process was halted by the third party scheduling tool because the Terminate option was enabled, this will also be recorded.

Publishing Logic

The following logic will be used in publishing floor plans.

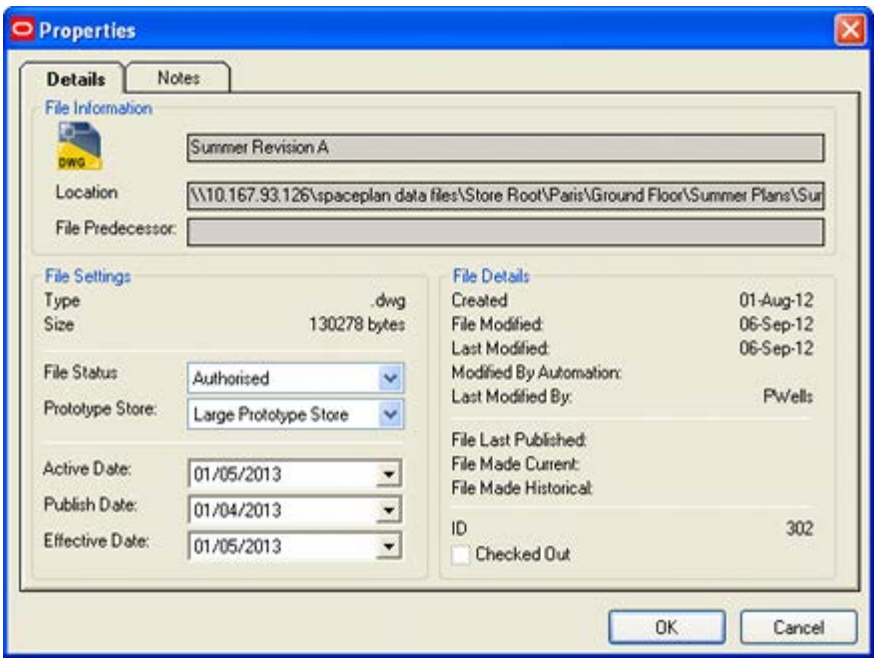
- Floor plans will be published when the current date and time (taking into account the Lead Time Tolerance) reaches the **Publish Date** set for the Floor Plan.
- Floor Plans will also be published when they have been updated since they were last published. The condition for this is that the **Last Modified Date** is greater than the **Last Published Date**.
- Planograms will be republished if the **Republish Planogram if the files are missing** option is checked in the Output Tab of the Planogram Publishing configuration dialog box. In this case planograms at Publish or Current status will be republished where the published file is missing from the publish directory - this may occur if the file is deleted or the publish directory structure has changed.

Changes to data stored for the Floor Plan

After the floor plan has been successfully published, the following information will be updated for the floor plan:

- The floor-plan **Last Modified Date** will be updated to the current date and time.
- The floor-plan status will be changed to **Published** if its status order is less than published. For instances where a floor-plan is being republished, its current status may already be Published or Current.
- The floor-plan's **Last Published Date** will be updated to the current UTC date and time.

The Last Modified Date, Last Published Date and Status can be seen in the File Properties dialog box accessed in Store Manager.



Logging and Reporting Results from Floor Plan Publishing

The results from Floor Plan Publishing are stored in two tables within the database.

AVTTB_PROCESS_FILE_LOG

This table holds information on the date, file, processes carried out, machine and log in ID and whether the result was successful or not.

- The PFL_PROCESSTYPE field describes the type of process involved: 2 = Process Files
- The PFL_LOGTYPE field describes the type of information in the PFL_DETAILS field: 1 = Error, 2 = Warning, 3 = Information and 4 = Summary

Information in this table gives an overview of the results.

AVTTB_ERROR

This table holds information on errors generated during floor plan publishing. It is more technical than the AVTTB_PROCESS_FILE_LOG table and contains information that will be off assistance to Data Base Administrators.

> **Note:** For more information on these tables see the Macro Space Planning Data Model.

BI Publisher

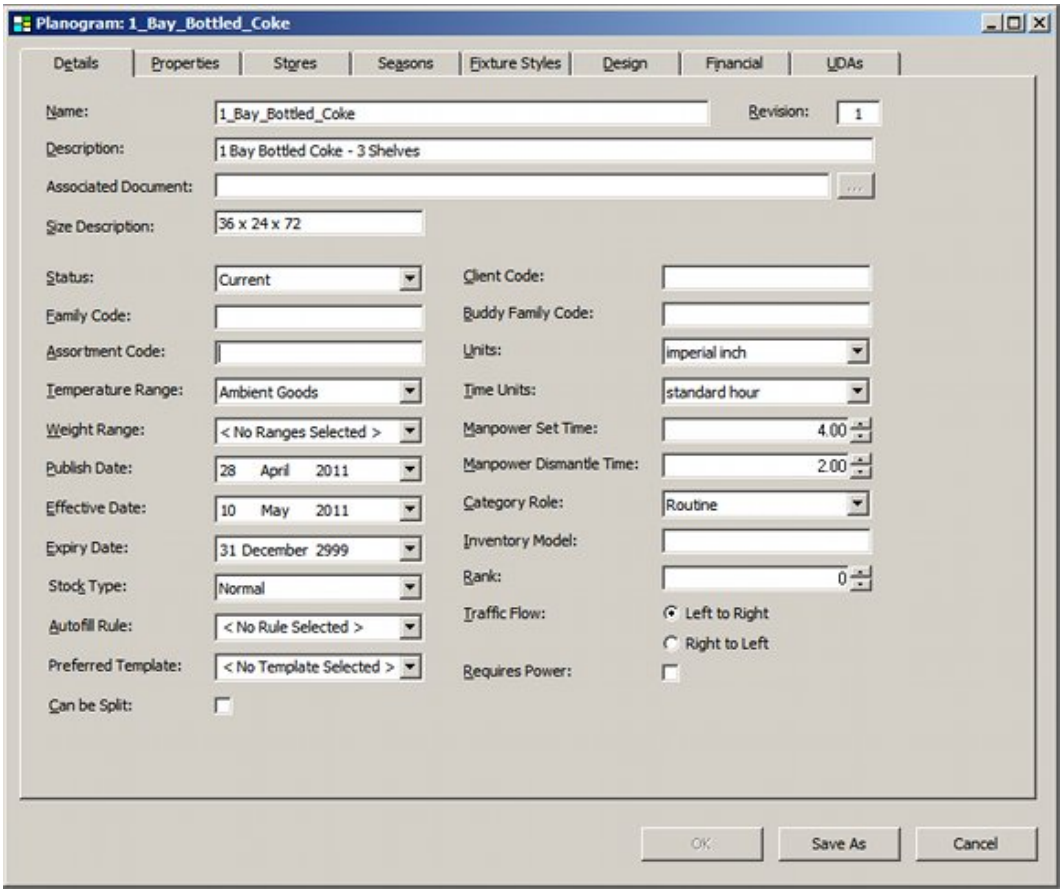
In order to facilitate analysis of the results, it is normal to view results via a report generated from BI Publisher (or similar software).

Configuring Planogram Publishing

Overview of Planogram Publishing

The purpose of publishing a planogram is to disseminate information on the type, quantity and location of shelves and merchandise to those tasked with implementing the

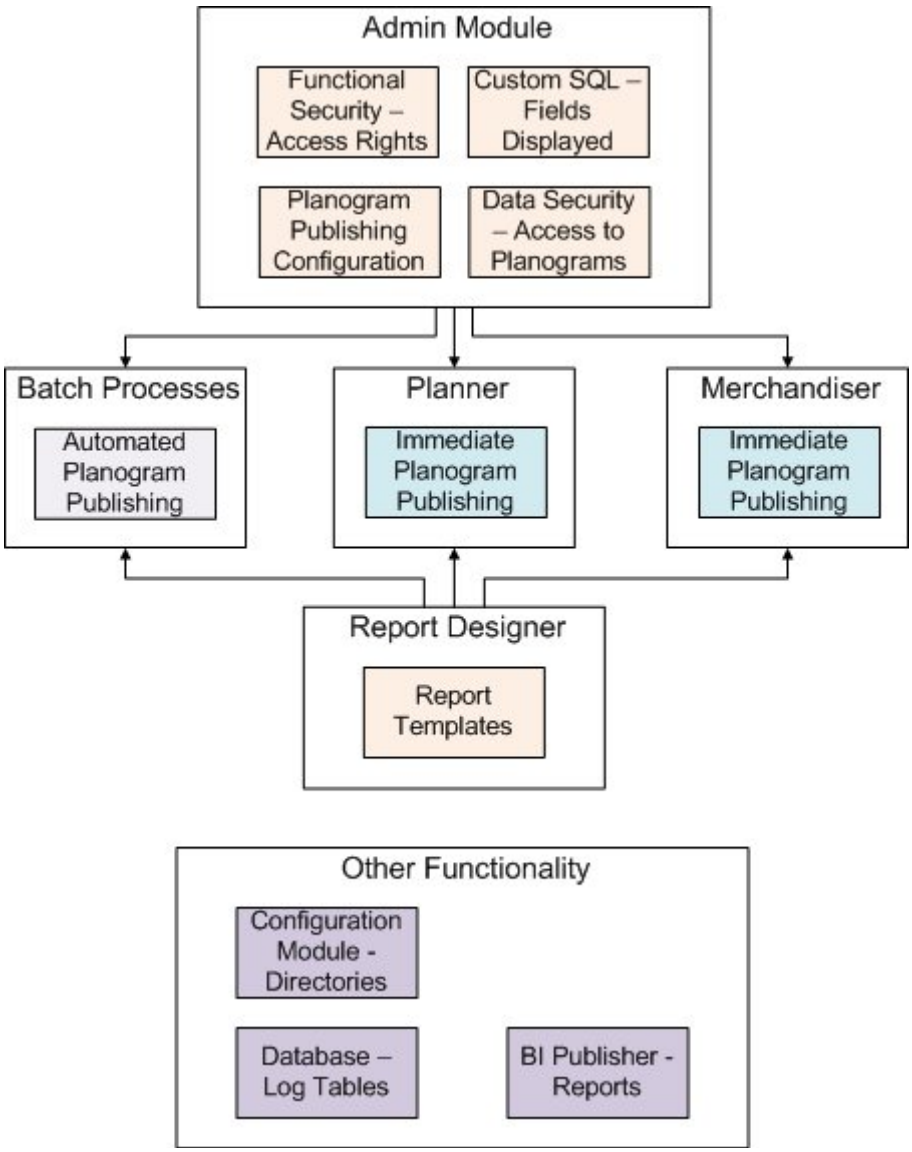
change. Publishing a planogram design can be done in hard copy or electronic format. The date at which this is executed depends on the Publish Date set in the Details tab of the Planogram Design dialog box in the Merchandiser module.



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

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

The basic method of operation is as follows:



1. Admin Module

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

   - The **Functional Security** option (Security menu) allows Administrators to control who can run Planogram Publishing as a batch process. It also controls who can access Immediate Planogram Publishing in the Planner Module. It also allows Administrators to control who can access Report Designer to create report templates for publishing planogram designs.
   - The **Data Security** option (Security menu) allows Administrators to control what planograms a user can print or publish from in the Planner and Merchandiser modules (and in In-Store Space Collaboration).

- The **Custom Query** dialog box allows an Administrator to specify what fields will appear in the **Immediate Planogram Publish** dialog box in the Planner module.
- **Configuring Outputs for Batch Process**: the outputs for the batch process output of planogram designs are configured in the administration module using the **Planogram Publishing Configuration** dialog box.
- **Running as a Batch Process**: Planogram Publishing can be run as a batch process - typically run overnight so that this processor hungry tasks can be executed without affecting the manual users of the system. The settings determining how this operates are set in the **Planogram Publishing Configuration** dialog box.

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

2. Planner Module

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

3. Merchandiser Module

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

4. Report Designer

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

5. Other Functionality

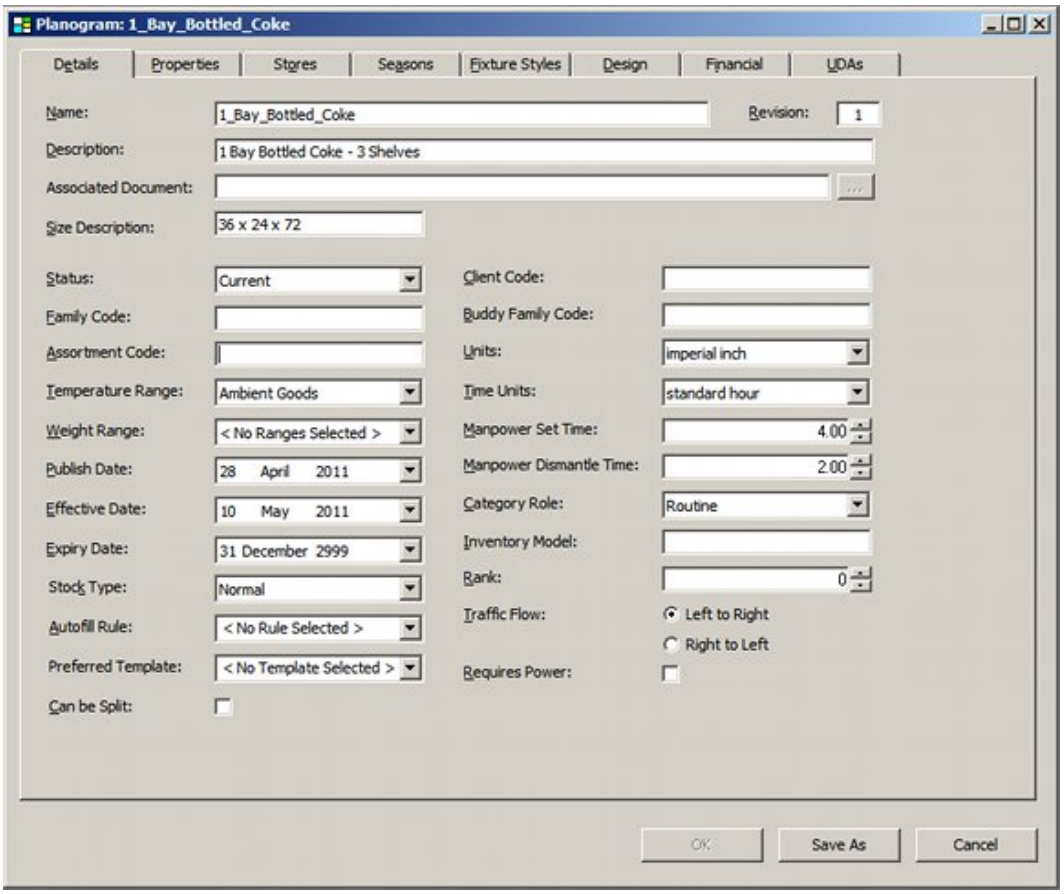
There are three other items of functionality that affect planogram publishing.

- **Configuration Module** - the Directories tab allows users to specify where the root folders holding published planograms are located. Sub-folders holding specific planograms will be created as children of this root folder.
- **Tables** in the database hold the results of planogram publishing operations.
- **BI Publisher** (or a similar application) can be used to generate reports based on the information held in the database - for example the names and results of planograms that have been published.

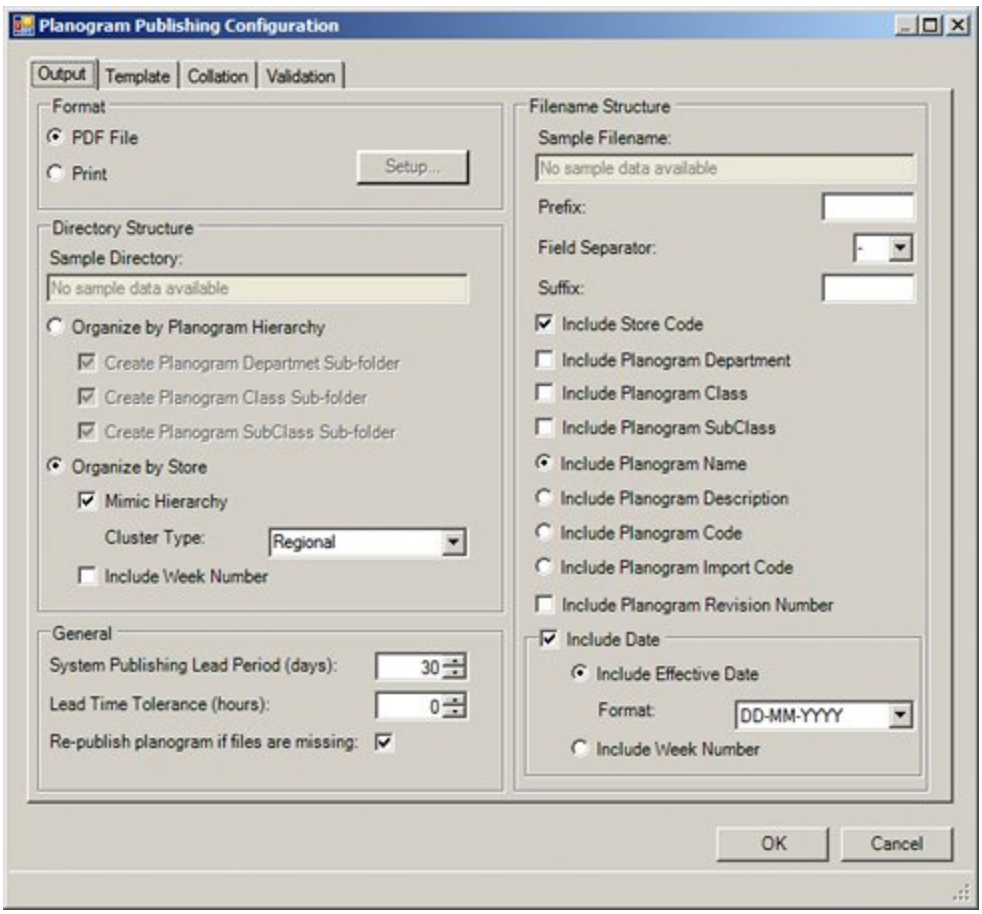
Dates Planograms will be Published

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

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



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



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

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

Criteria for Publishing Planograms

There are two criteria for publishing planograms:

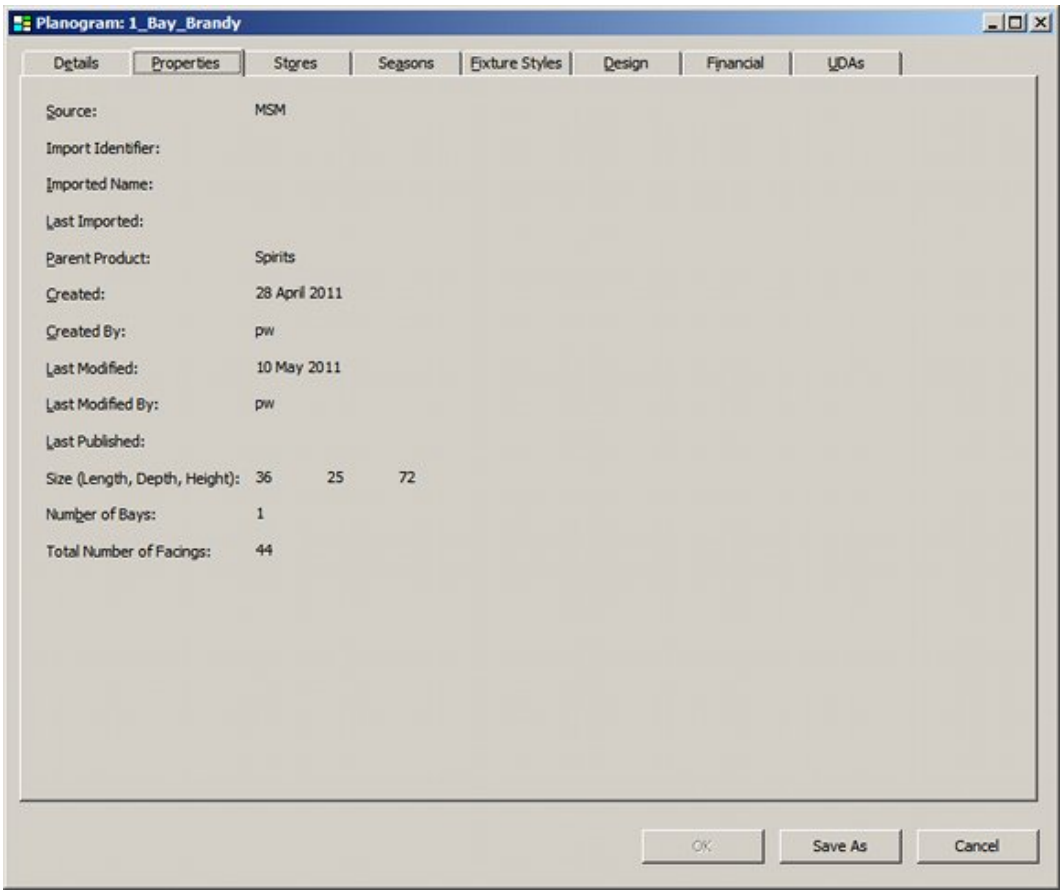
- Publish Date has been exceeded

  If the Publish Date set in the Planogram Design dialog box in Merchandiser exceeds the current date (taking into account the Lead Time Tolerance (Hours) setting), the planogram will be published.

- Planogram has been Updated since it was Published

  It is possible that the planogram may have been modified after it was last published - for example of a later revision has been created. The condition for this is that the Last Modified date is greater than the Last Published Date. These

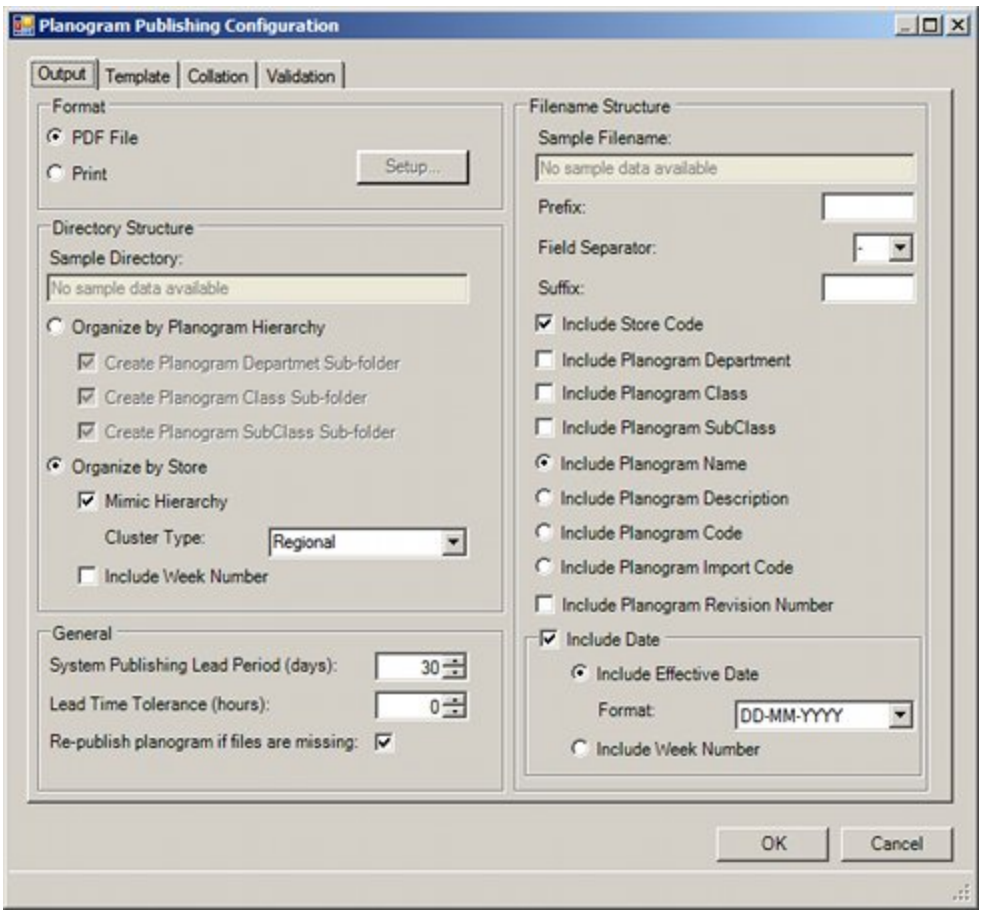
can be seen on the Properties tab of the Planogram Design dialog box in the Merchandiser module.



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

Overview of Planogram Publishing Dialog Box

The Planogram Publishing Configuration dialog box is used to set up the parameters controlling planogram publishing.



The dialog box contains four tabs; each with a specific purpose.

Output Tab - this tab is used to configure how planogram designs will be output. Settings here determine the folder structure and the type and naming convention for the planogram designs.

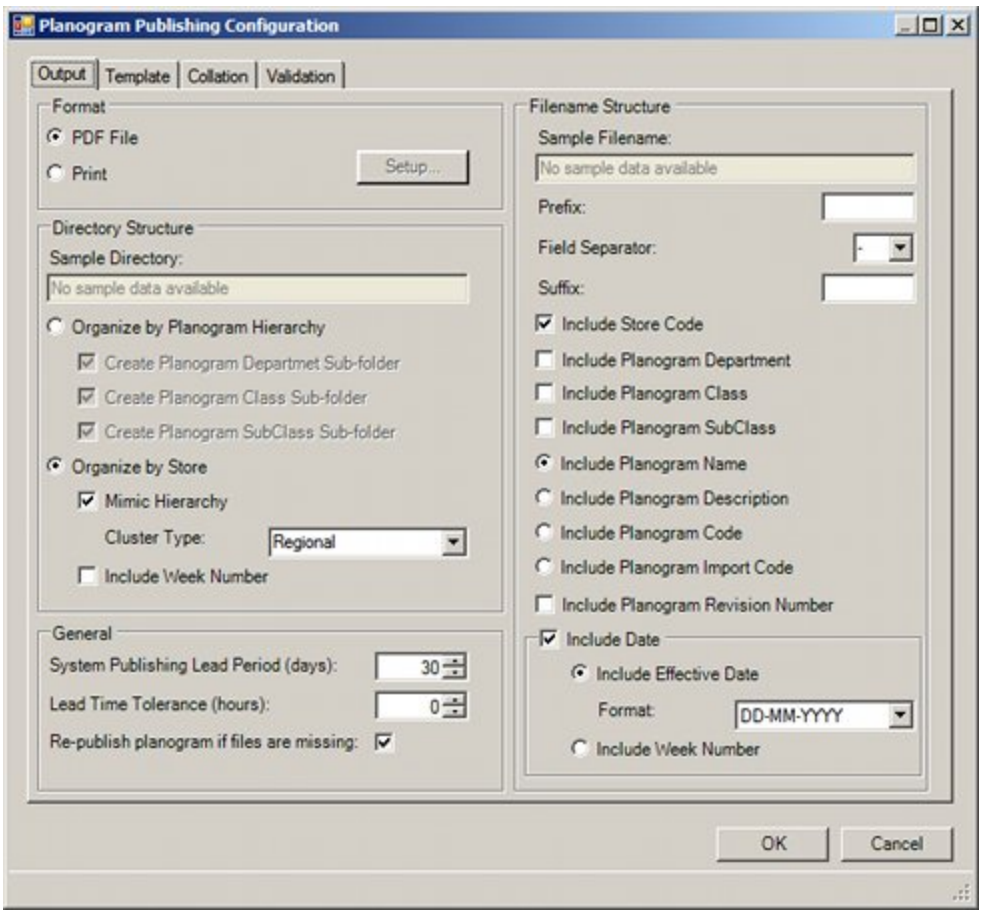
Template Tab - this tab is used so specify the type of report that will be used to output details of the planogram design.

Collation Tab - this tab controls the sequence in which planogram designs are published. It is more important when printing hard copy output.

Validation Tab - this tab controls the validation operations used to ensure that only valid planograms are published.

The Output Tab - Directory Structure

The Output Tab is used to configure how planogram designs will be output. Settings here determine the folder structure and the type and naming convention for the planogram designs.



Format

The format in which the planogram design is published can be set by the radio button. It can be either electronic (PDF File) or hard copy (Print). The option selected by the radio button will gray out or make active the pertinent portions of the tab.

PDF File

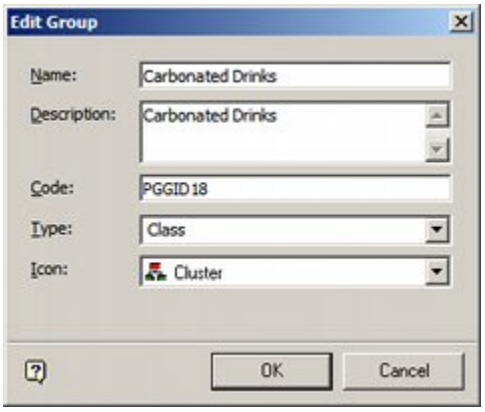
The **Sample Directory** text box contains an example of a path to a directory based on the current selections in this frame.

There are two ways that the directories containing the PDF files can be organized:

1. In folders conforming to the parent Department, Class and Sub-class of the planogram
2. In folders that conform to the store hierarchy in Store Manager.
   a. **Organize by Planogram Hierarchy** - if this option is selected, the folders will be organized by the following logic:
   - If no check box is ticked, all planogram designs will be published to a single directory specified by the Planogram Publish directory specified in the Directories tab of the Configuration module.
   - If the **Create Planogram Department Sub-folder** check box is ticked, planograms with that parent Department will be published to a Windows folder of that name below the Planogram Publish directory.

- If the **Create Planogram Class Sub-folder** check box is ticked, planograms with that parent Class will be published to a Windows folder of that name below the Planogram Publish directory.
- If the **Create Planogram Sub-Class Sub-folder** check box is ticked, planograms with that parent Sub-Class will be published to a Windows folder of that name below the Planogram Publish directory.
- If multiple options are checked, then a hierarchy of folders will be created below Planogram Publish directory. For example, if the **Create Planogram Department Sub-folder** and the **Create Planogram Class Sub-folder** are checked, a set of Planogram Department sub-folders will be created below Planogram Publish directory. A further set of Planogram Class sub-folders will be created below the pertinent Planogram Department sub-folders.

Planogram Group Types are assigned in the Type drop down list in the Planogram Group dialog box accessed in the Object Browser in the Merchandiser module.



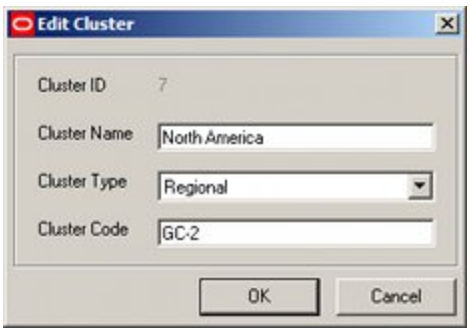
> **Note:** users will require the appropriate permissions to access this functionality. These permissions are set in the Functional Security dialog box accessed from the Security menu in the Admin Module.

b. Organize by Store - if this option is selected, the planograms will be put into folders named for their parent stores. They will be organized by the following logic:

- **Mimic Hierarchy** - If this option is checked, an intermediate set of folders representing Clusters will be placed between the Store sub-folders and the Planogram Publishing root.
- **Cluster Type** - This option allows the user to specify the cluster type to be used for the mimic hierarchy option. One type can be selected from the drop down list of cluster types. If the selected cluster type has child clusters, then these child clusters will also be also be included in the folders used to hold the planogram files. For example, if the cluster type of 'Region' has been selected, the hierarchy will contain folders named after the 'Region' type clusters. Each of these folders will have children named after the 'district' type folders.

> **Note:** for this option to work effectively, stores must have been assigned to cluster types in a logical way. Stores not in the selected cluster type will be placed in store specific sub-folders immediately below the Planogram Publish root.

Cluster types are set in the Clusters dialog box in Store Manager.

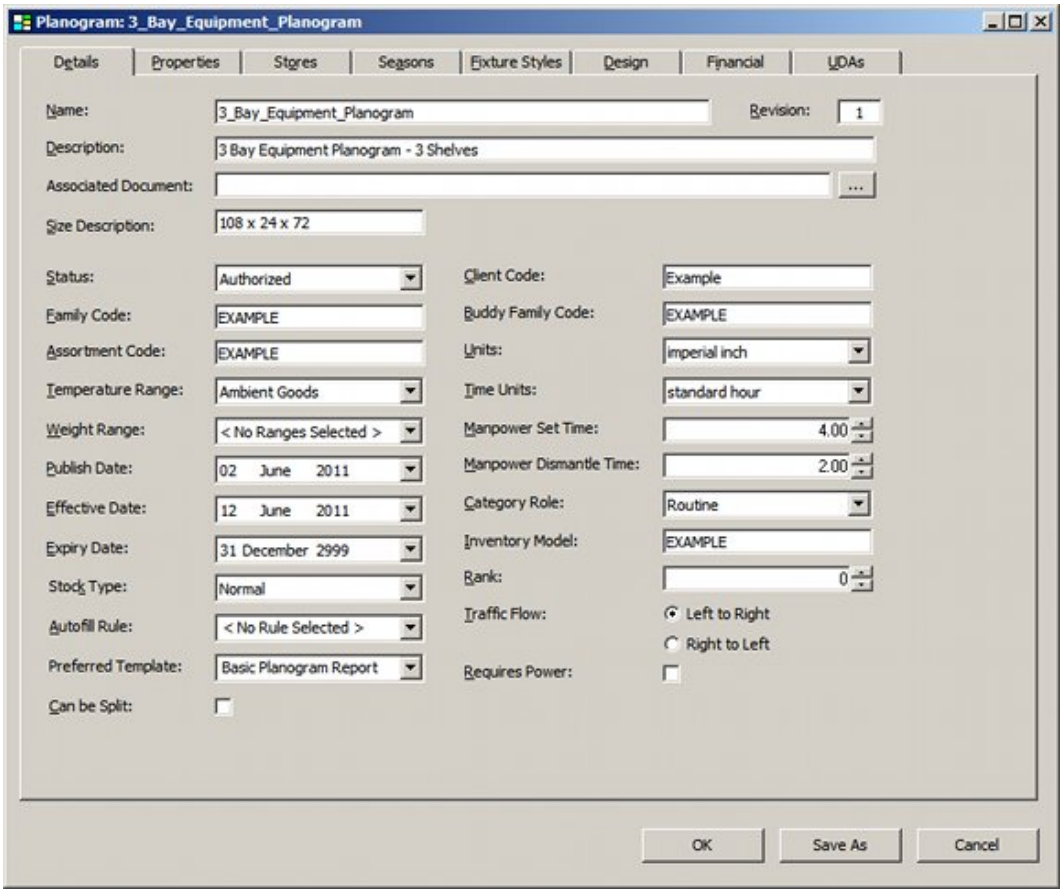


- **Include Week Number** - this option allows users to create further sub folders below the store sub-folder. These will be named based on the Active Date for the floor plan (set at the top of the Object Browser) and information in the Calendars option accessed from the General Menu. The Active Date will be compared to the calendar dates associated with the 'Week' calendar type. If it finds a match, the sub folder will be given the text name for that week.

> **Note:** this option will not work unless the Calendars option has been set up to include 'Week' type information.

General

1. The **System Publishing Lead Period** sets the **POG_PUBLISH_DATE_LEAD_PERIOD** system variable. This variable in turn is used to set the default Publish Date in the Planogram Design dialog box in Merchandiser. (This date can be manually altered if required).



When the Publish Date is reached or exceeded, Planogram Publishing will cause the planogram design to be published in either electronic or hard copy form.

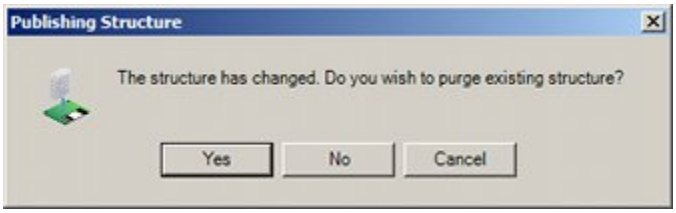
2. **Lead Time Tolerance** allows for the fact that some batch processes may be starred before midnight. If a planogram design has a Publish Date of 18th June, the batch process could be run starting 22.00 hrs on 17th June. This would not pick up planogram designs with Publish dates of 18th June. The Lead Time Tolerance can be set to any value up to 23 hours. This time will be added to the Publish Date for batch processes.

   For example, setting the Lead Time Tolerance to 6 hrs will ensure that a batch process started after 18.00 hrs on 17th June will publish all planogram designs with a Publish Date of 18th June.

3. **Republish Planogram if files are Missing** - If selected, this option will include all planograms which are at the published or current status but where the published file is missing from the publish directory - this may occur if the file is deleted or the publish directory structure has changed.

Publishing Structure

If changes are made to the setting in the Format frame, the structure of the windows folders used to store the information will change. On closing the Planogram Publishing configuration dialog box, the user will be presented with a dialog box telling the user that the folder structure has changed.

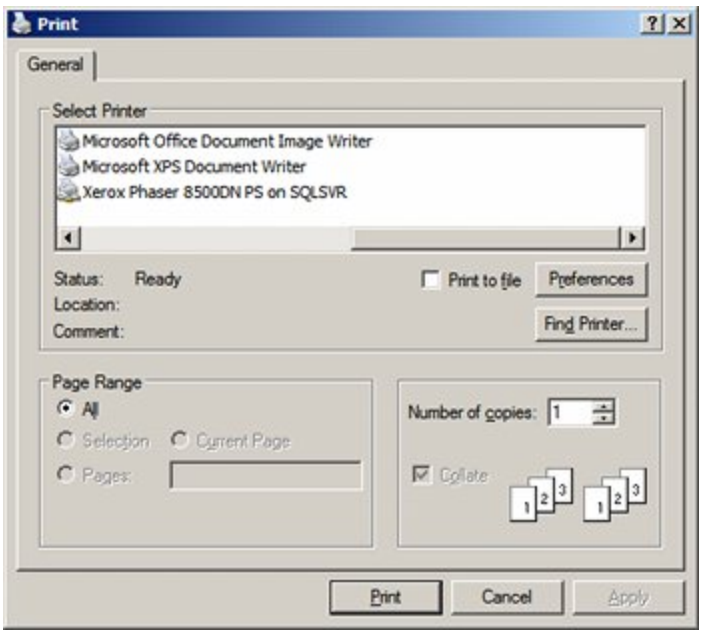


The options will have the following effect:

- **Yes** - the existing structure will be purged and all subsequent planograms published to the new structure.
- **No** - the existing structure will be left unchanged and all subsequent planograms published to the new structure.
- **Cancel** - the user can go back to the dialog box and change the Directory Structure back to the old options.

Print

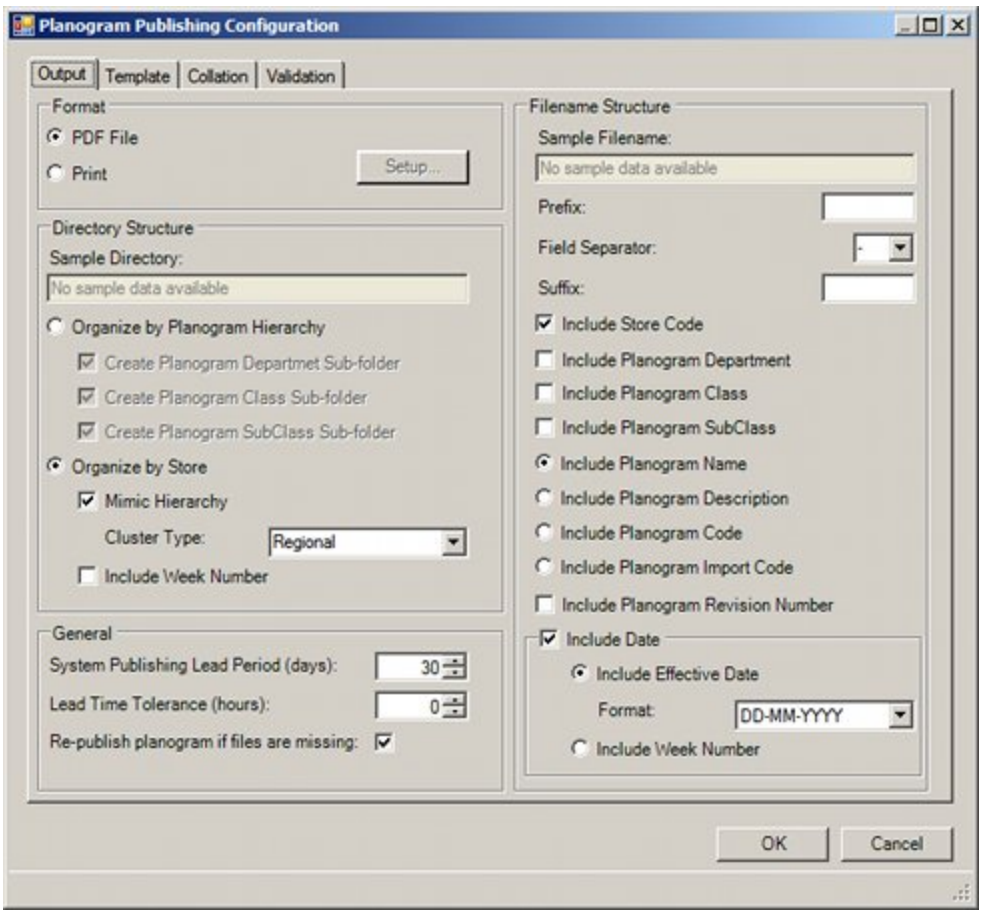
Selecting the **Print** radio button brings up the standard Print dialog box.



This enables users to select the printer, paper orientation, and so on. The sequence planogram designs will be printed depends on the settings in the Collation tab.

The Output Tab - Filename Structure

The Output Tab is used to configure how planogram designs will be output. Settings here determine the folder structure and the type and naming convention for the planogram designs.

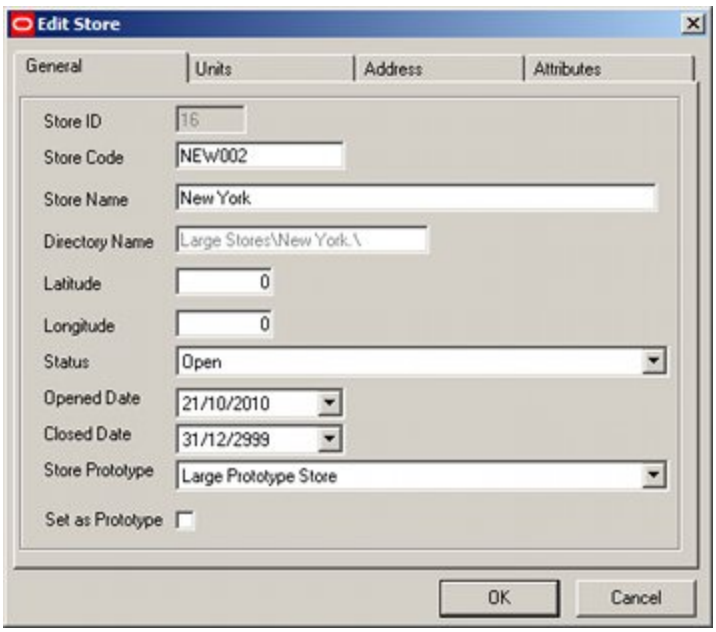


Filename Structure

These options allow users to specify the format of the file name. It will be built up by combining all the selected options.

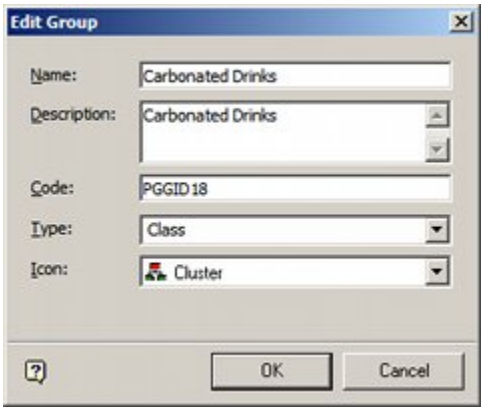
The **Sample Filename** text box contains an example of a filename based on the current selections in this frame.

1. **Prefix** - this is the initial part of the file name. It can be up to 10 characters long and can contain any character except / \ : * ? " < > and |.
2. **Field Separator** - this is the symbol used to separate the different parts of the filer name. It can take the form of an underscore or a hyphen (_ or -).
3. **Suffix** - this is the terminating part of the file name. It can be up to 10 characters long and can contain any character except / \ : * ? " < > and |.
4. **Include Store Code** - the file name can include the store code. This is set in the Stores dialog box in store Manager.



5. **Include Planogram Department** - this would include the Department assigned to the Planogram Group in the Planogram Hierarchy.
6. **Include Planogram Class** - this would include the Class assigned to the Planogram Group in the Planogram Hierarchy.
7. **Include Planogram Sub-Class** - this would include the Sub-Class assigned to the Planogram Group in the Planogram Hierarchy.

   Planogram Group Types are assigned in the Type drop down list in the Planogram Group dialog box accessed in the Object Browser in the Merchandiser module.



   If the selected option has not been assigned to the Planogram Group, the information will be left blank in the file name.

8. Include Planogram Name, Planogram Description, Planogram Code or Planogram Import Code

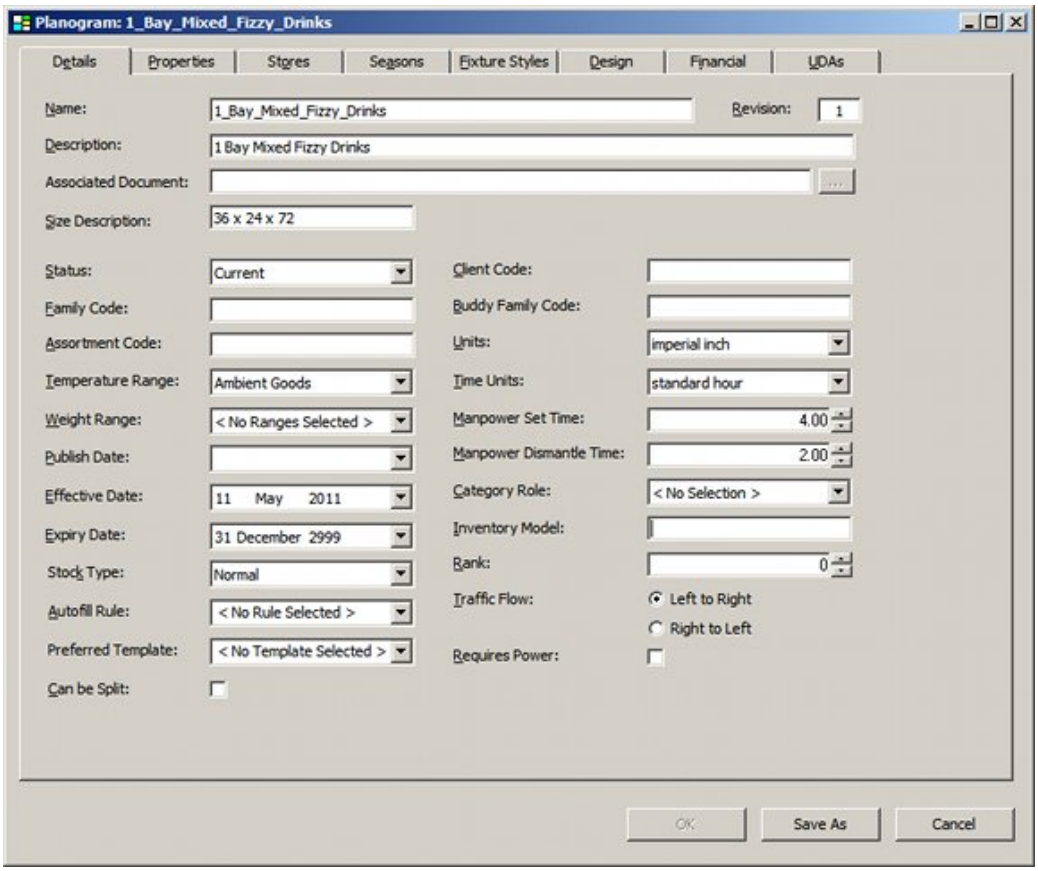
   The file name must include one of Planogram Name, Planogram Description, Planogram Code or Planogram Import Code. A radio button has been provided to ensure that one option is selected.

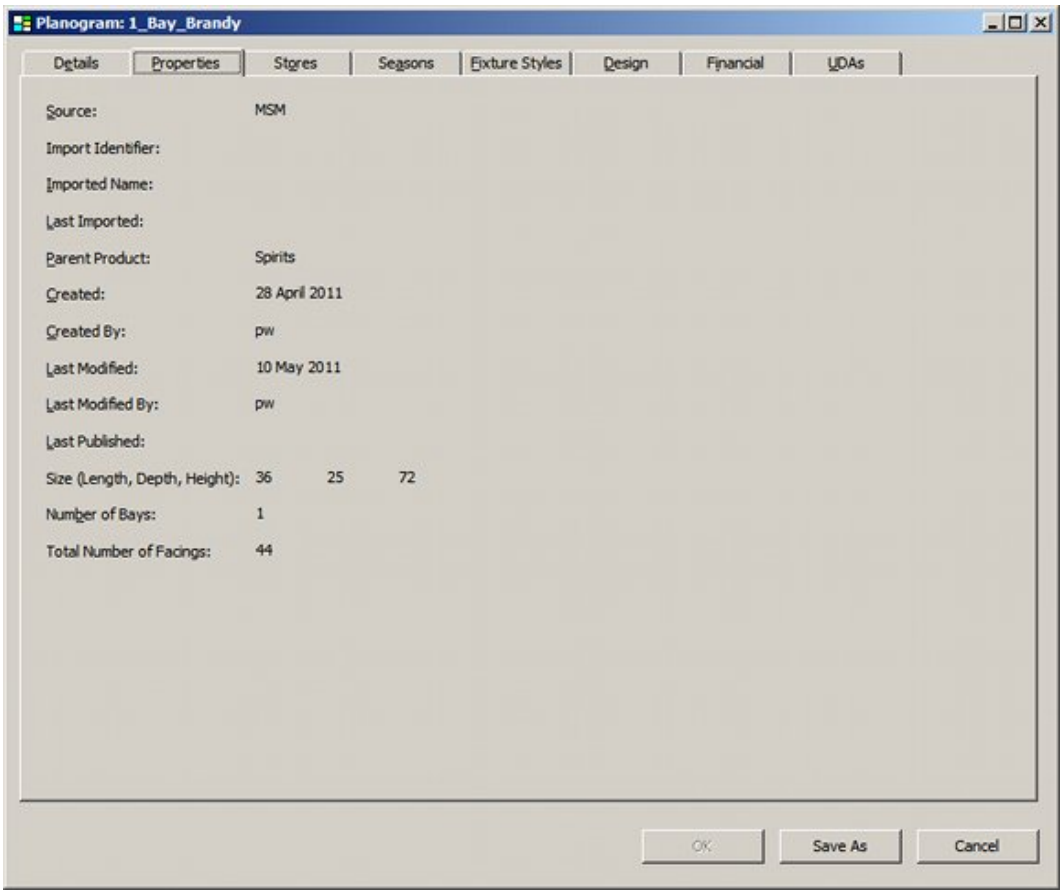
   a. Planogram Name is set in the Details tab of the Planogram Design dialog box in Merchandiser.

b. Planogram Description is set in the Details tab of the Planogram Design dialog box in Merchandiser.

c. Planogram Code is set in the Client Code field of the Details tab of the Planogram Design dialog box in Merchandiser.

d. Planogram Import Code can be seen in the Import Identifier field in the Properties tab of the Planogram Design dialobg box in Merchandiser.





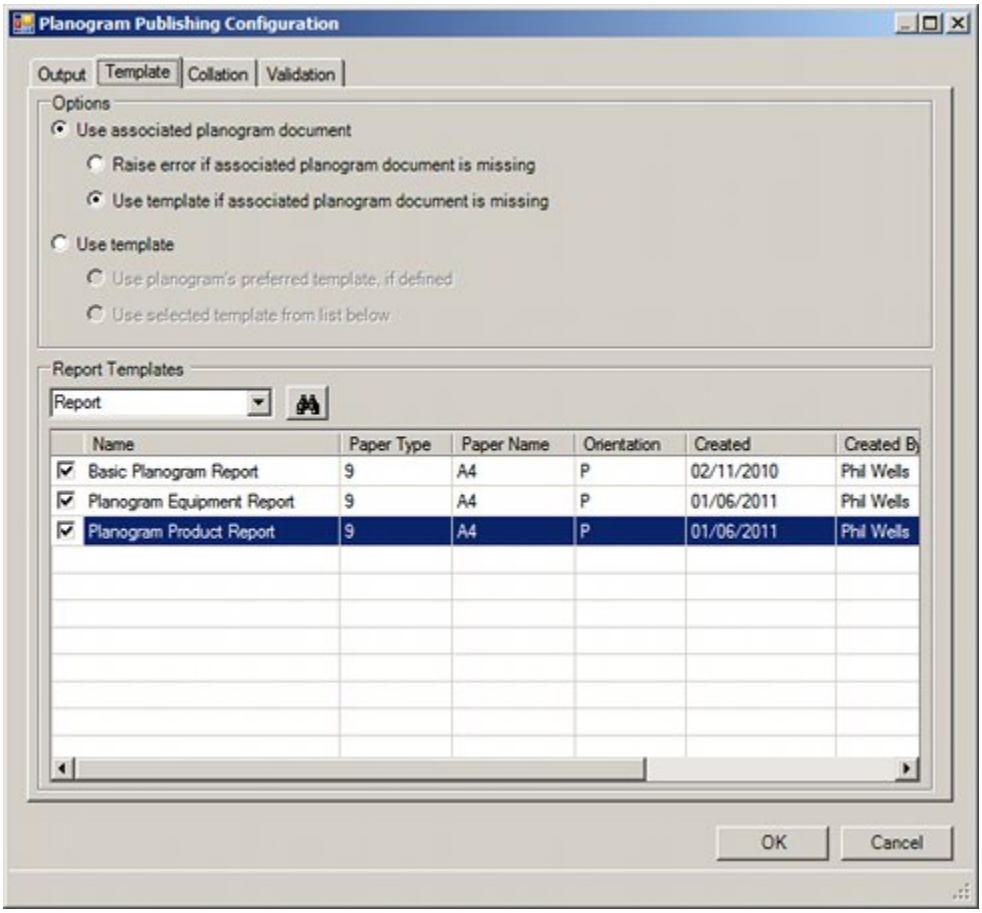
9. **Planogram Revision Number** - the Revision Number is set automatically. It can be seen the Details tab of the Planogram Design dialog box in Merchandiser.
10. **Include Date** allows a date to be included in the file name. There are two options, one of which must be selected by mans of the Radio button.
    a. **Include Effective Date** - this adds the Effective Date (the date the floor plan goes into service. The format is set by the **Format** drop down list.
    b. **Include Week Number** - this will take the Effective Date for the floor plan (set in the File Properties dialog box in Store Manager) and information in the Calendars option accessed from the General Menu. The Effective Date will be compared to the calendar dates associated with the 'Week' calendar type. If it finds a match, the sub folder will be given the text name for that week.

> **Note:** this option will not work unless the Calendars option has been set up to include 'Week' type information.

The Template Tab

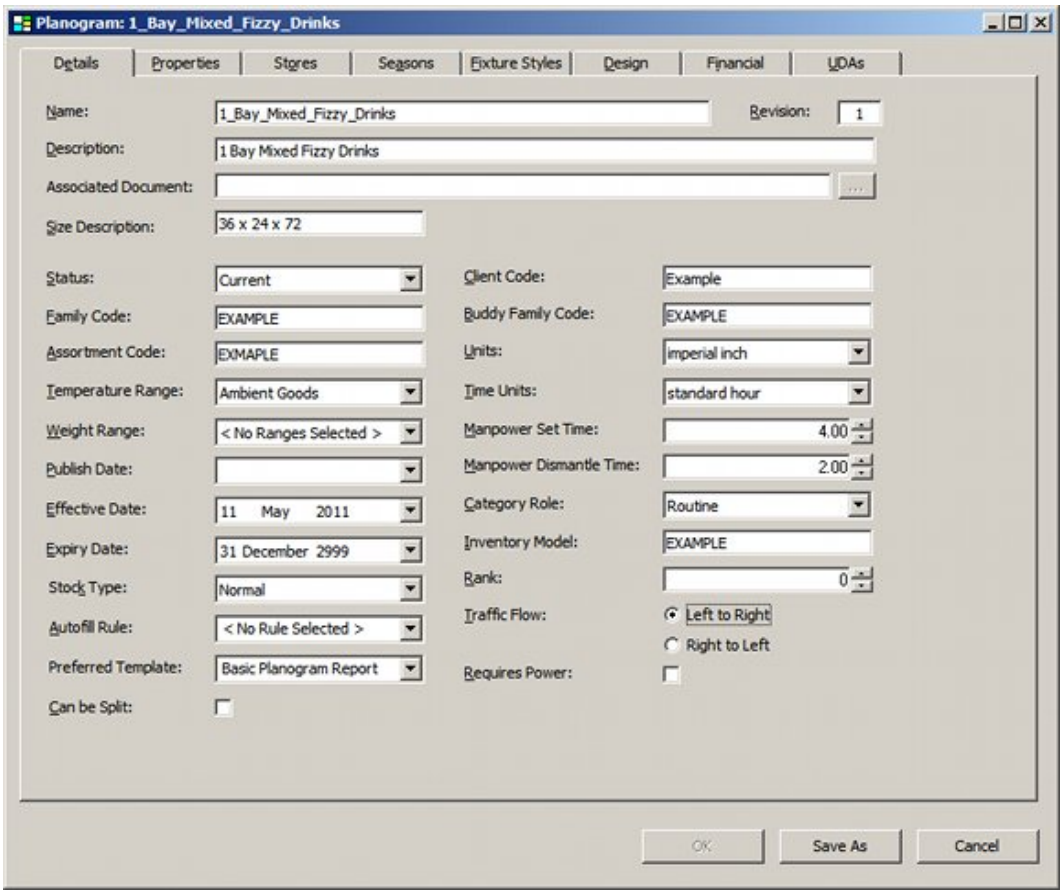
The **Template Tab** allows users to specify the template format to be used when printing planogram designs.

IMPORTANT NOTE: There is a known issue with planogram templates. The Template Tab has an option to print associated planogram documents. At present this option is not available in the Print Planogram dialog box in MSM or ISSC. Accordingly, the option should be set to **Use Template**.



The user can use a radio button to specify the form the report will take: an imported 'associated planogram document' or a template that is configured in the Report Designer Module.

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



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

a. Write an error to the AVTTB_PUBLISH_POG_LOG table. Information in this table can be read by means of a BI Publisher report or similar.

b. Use the default Report Designer template.

2. **Use Template** - this option allows the user to define the way the template from the Report Designer module is selected. There are two options (selected using the radio button):

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

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

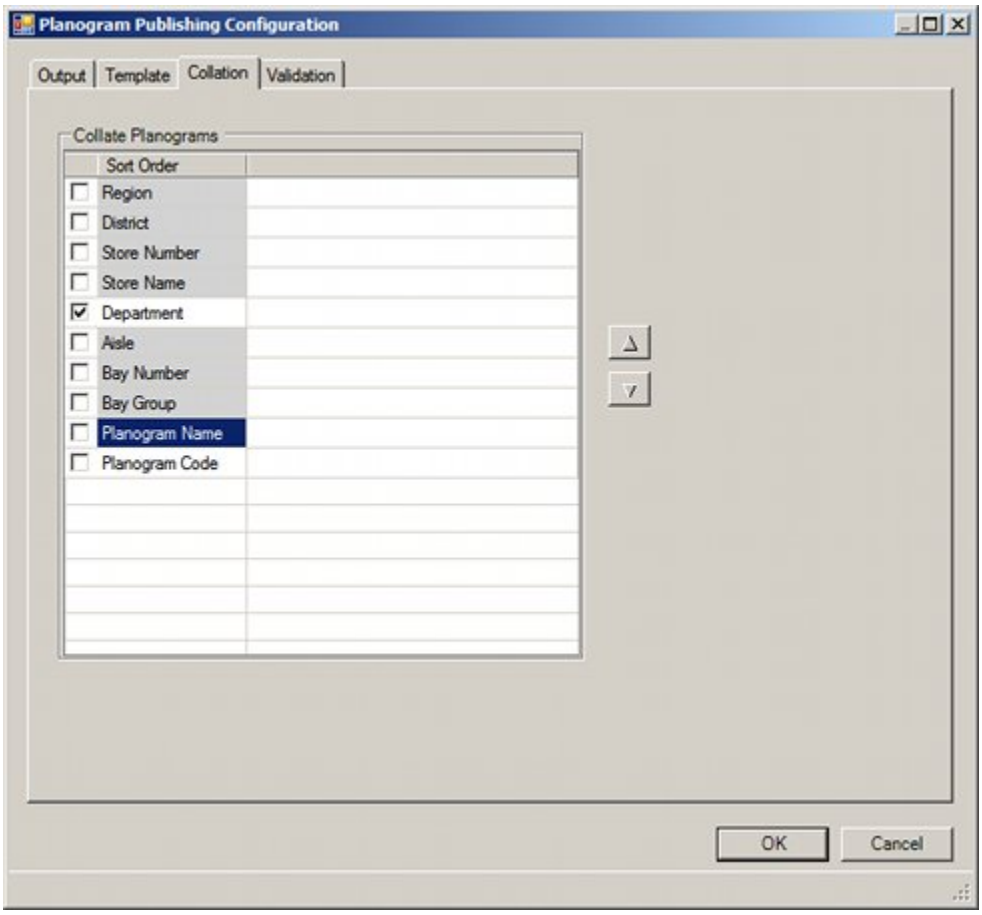
   If necessary the list of templates can be searched by entering a text string into the drop down list, then clicking the **Find** button. (Actual or implied wild cards can be used). Each click of the Find button will cause the search engine to move forward through the matching results until no results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

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

The Collation Tab

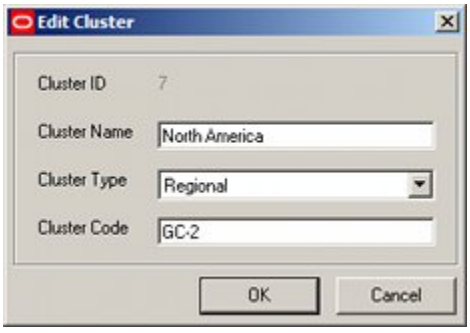
The Collation Tab allows users to specify the sequence the planogram designs will be published or printed in. Its main use is in printing hard copy versions of the designs where the sequence they are printed in makes it easier to sort and distribute them after printing.

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

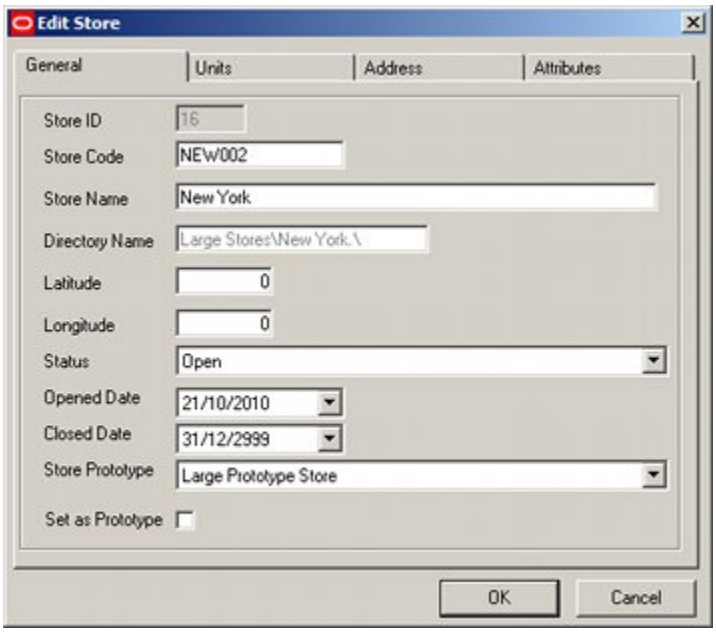


The available options can be ordered by highlighting them, then using the up or down arrows. The options are made active by using the check boxes.

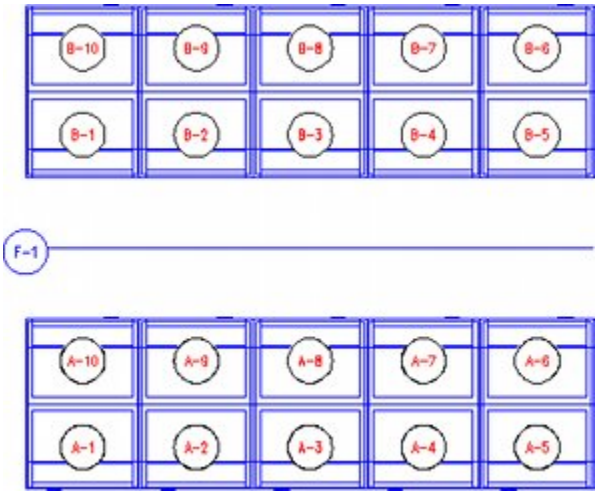
1. **Region** is a specific type of cluster set in the Cluster type drop down list in the Cluster dialog box in Store Manager.
2. **District** is a specific type of cluster set in the Cluster type drop down list in the Cluster dialog box in Store Manager.



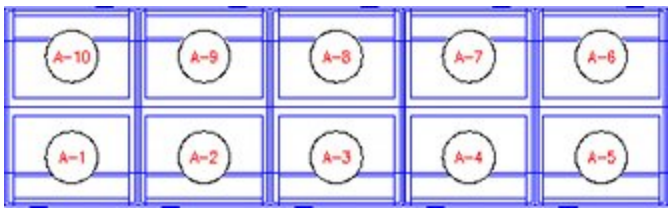
3. **Store Number** is the Store Code in the Store dialog box in Store Manager.
4. **Store Name** is the Store Name in the Store dialog box in Store Manager.



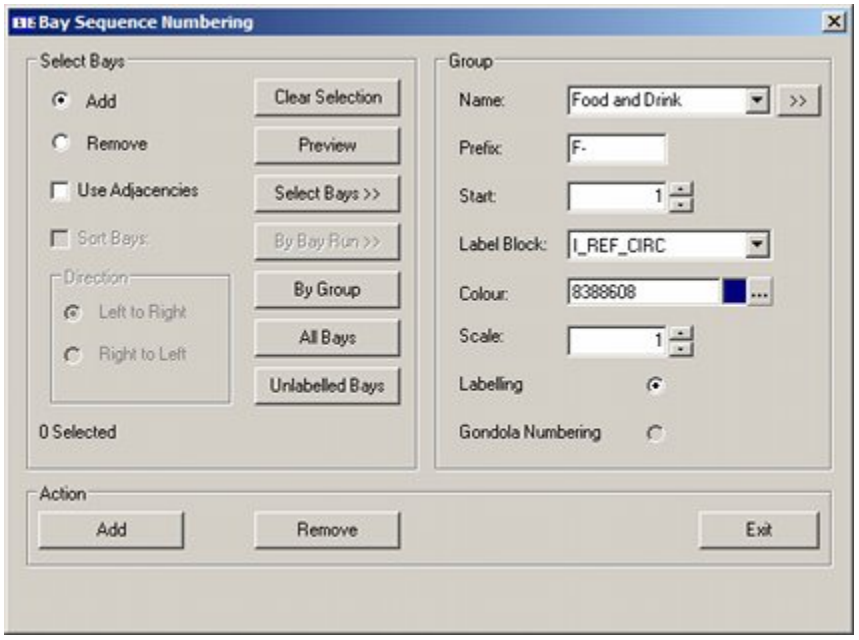
5. **Department** is the department (zone) in the floor plan the planogram is associated with.
6. **Aisle** is the aisle the planogram is associated with. For this option to operate, aisles must first be drawn in the floor plan in the Planner module. In the example below, Aisle F-1 has been drawn between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



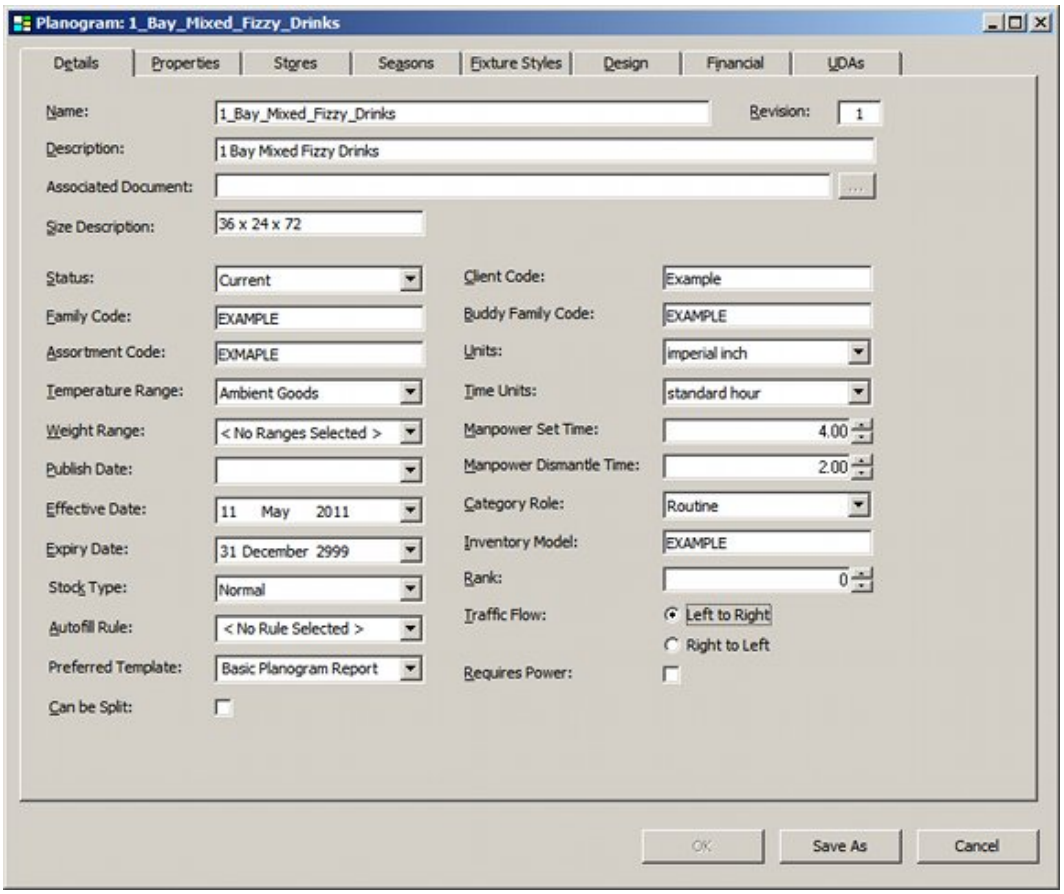
7. **Bay Number** is the bay number associated with the fixtures the planogram is placed on. For this option to operate, the fixtures in the floor plan must previously have been bay numbered.



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

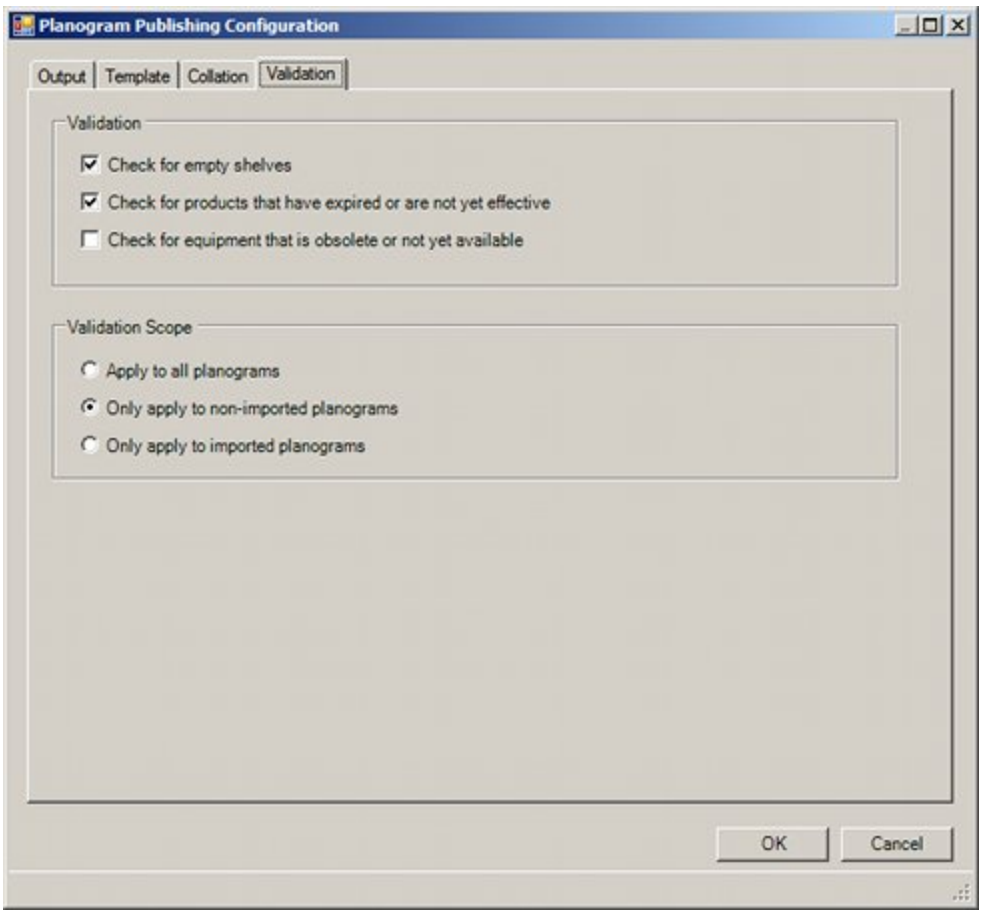


9. **Planogram Name** is the name of the planogram. This is set in the Name field of the Planogram Design dialog box in Merchandiser.
10. **Planogram Code** is the code for the planogram. This is set in the Client Code field of the Planogram Design dialog box in Merchandiser.



The Validation Tab

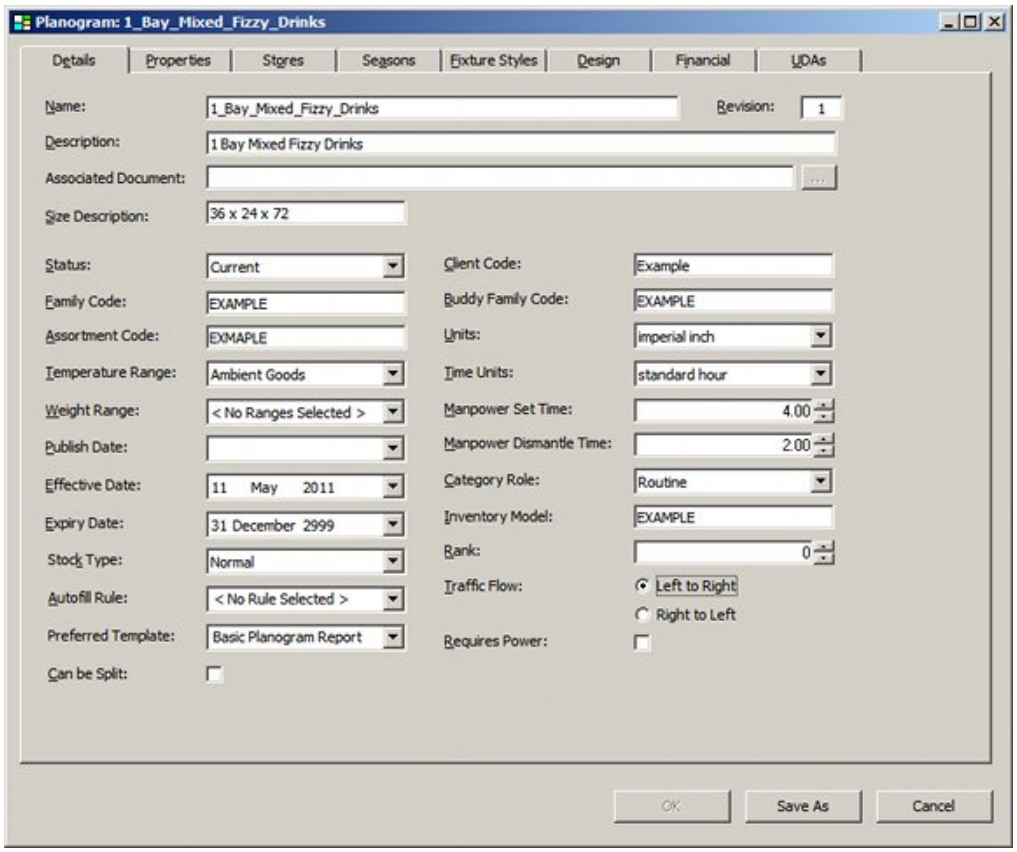
The Validation tab enables users to set a series of validation checks that must be satisfied before the planogram design is published. If any of the checks have failed, the details will be written to the AVTTB_PUBLISH_POG_LOG table. Information in this table can be read by means of a BI Publisher report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



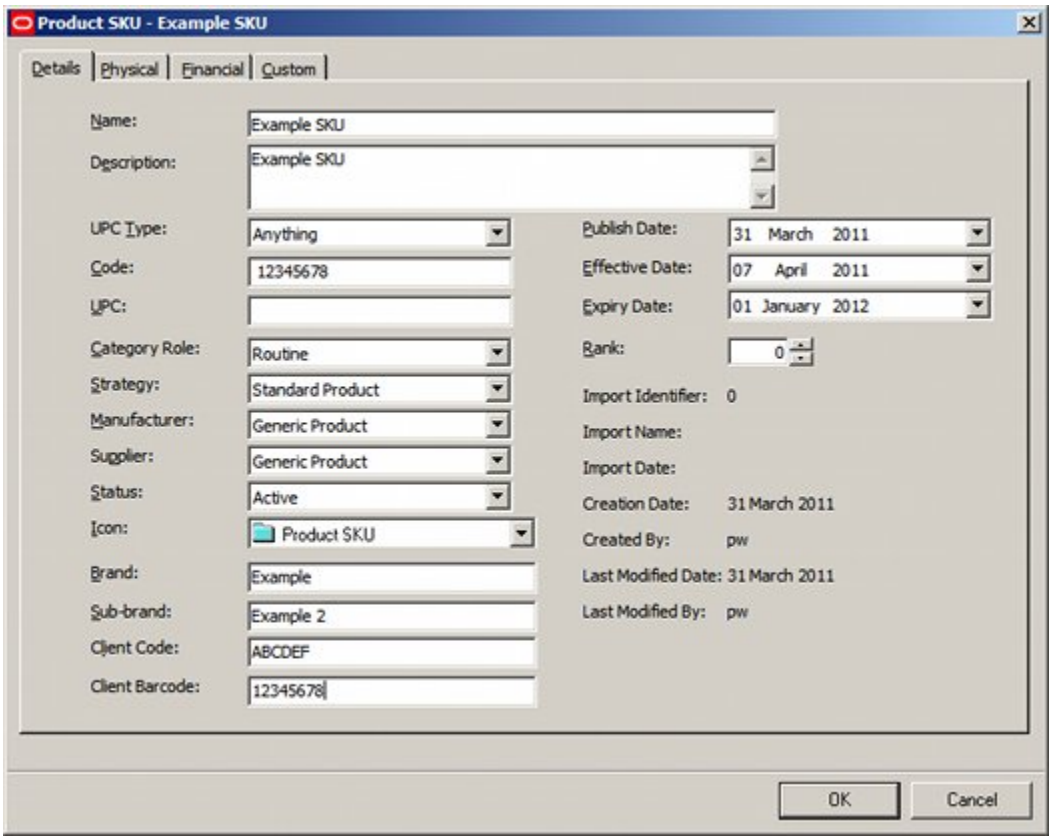
1. **Check for empty shelves** - this option will check the parent fixture and associated shelf objects. It will raise an error report if:
   a. The fixture and associated shelf objects can be populated with product display styles, but no product display style has been placed.
   b. The fixture and associated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

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

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



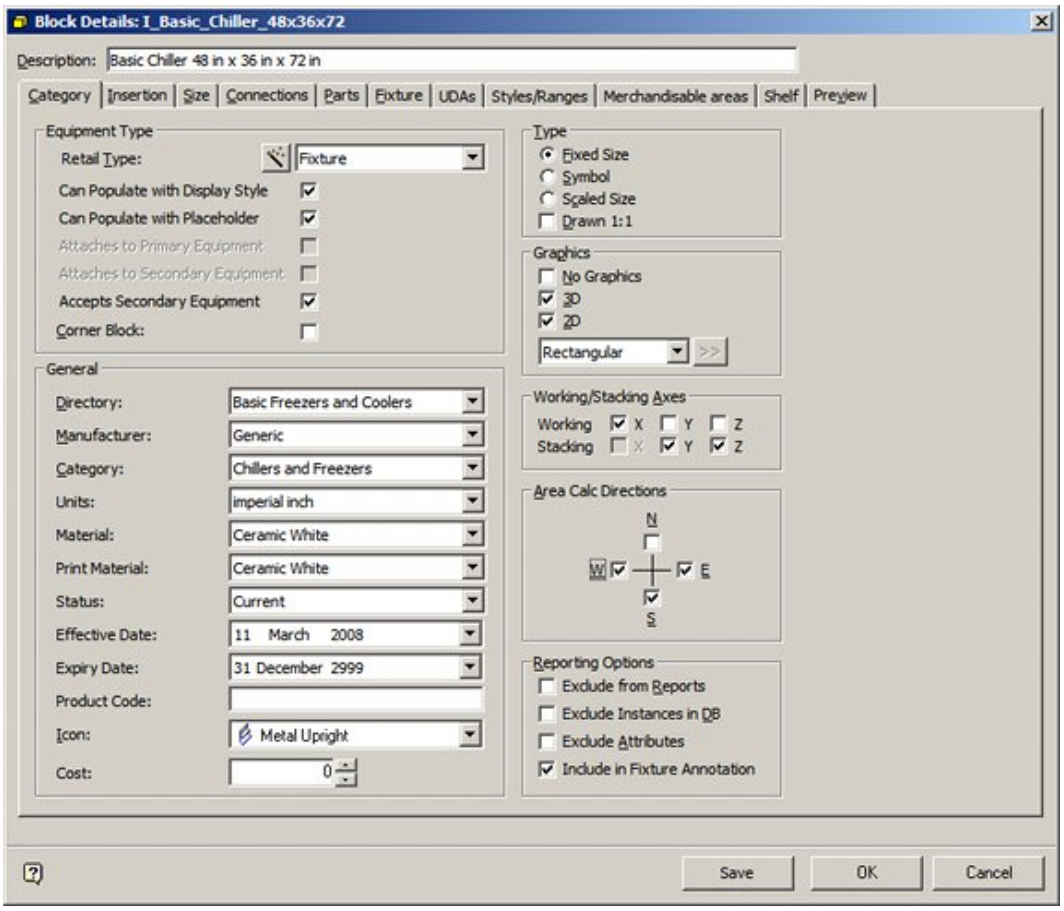
The Product Effective and Expiry dates are set in the Details tab of the SKU dialog box in Product Studio.



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

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

   The Equipment Effective and Expiry dates are set in the Category tab of the Block Details dialog box in Fixture Studio.



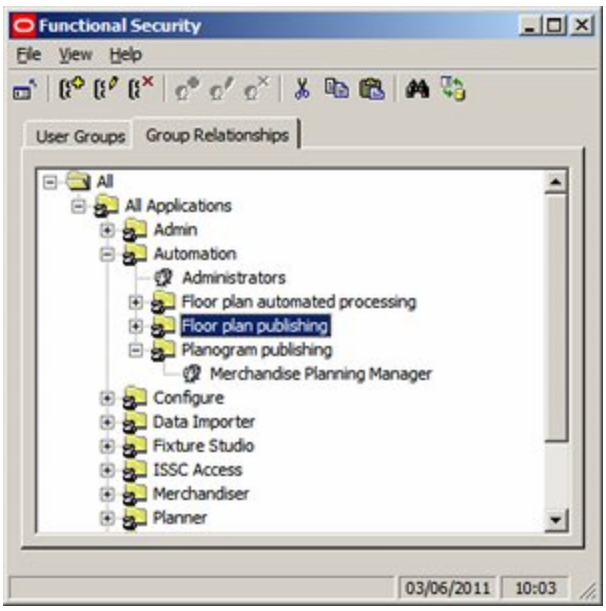
4. Validation Scope - this controls when to apply the validation checks. There are three options - selectable by the radio button.
   - Apply to all planograms.
   - Apply to non-imported (manually created) planograms.
   - Apply to imported planograms.

The application will automatically distinguish between imported and manually created planograms by means of the information held in the Macro Space Planning database. This can be used to reduce the time required for validating planograms - for example if the planogram designs have already been validated in the third party software used to design them, there may be no need to validate them again when this functionality is used to publish planograms.

Running Planogram Publishing as a Batch Process

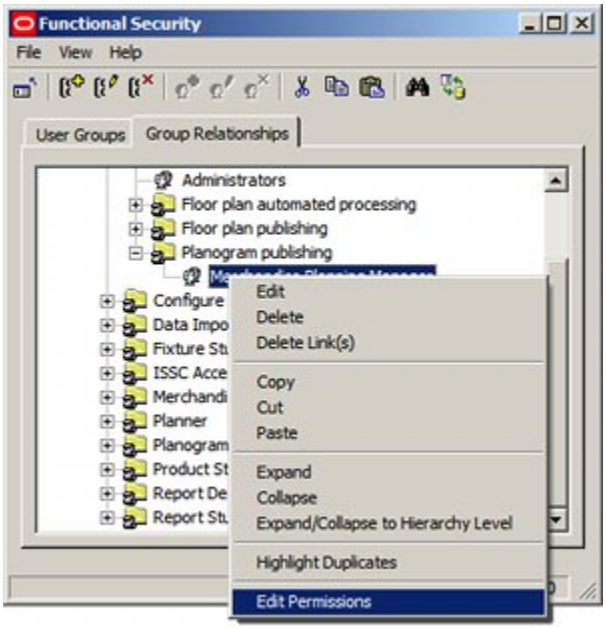
Permissions to Run Planogram Publishing as a Batch Process

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

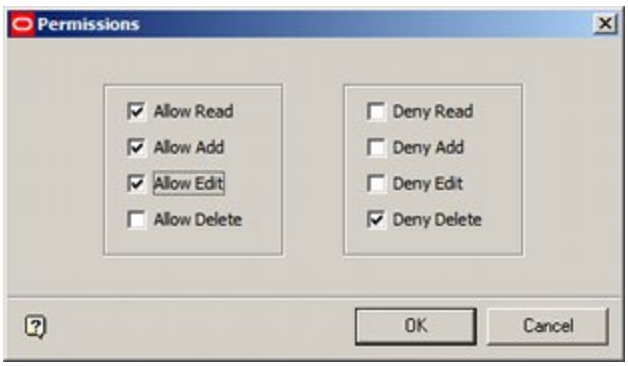


Users assigned to the Automation Command Group (such as the Administrator User Group) can run all Automation Functionality. User Groups assigned to the child Command Groups (Floor plan automated publishing, Floor plan publishing, Planogram publishing) have the ability to use that functionality. In the example above, the Merchandise Planning Manager User Group has been assigned permission to use the Planogram Publishing functionality.

The User Groups precise rights depend on settings in the Permissions dialog box. This is accessed from the right click menu in the Functional Security dialog box.



This will bring up the Permissions dialog box.



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

Running Planogram Publishing through the Command Line

Using Batch Runner

The batch process is executed via a Macro Space Management executable called BatchRunner.exe. By default, this is installed in the C:\Program Files\Oracle Retail\MSM\Common Files\.NET folder.

> **Note:** It is recommended that batch processes be executed using an installation of Macro Space Management on a server. This ensures that the batch process can be executed at the specified time without the risk of the computer being turned off or the batch process being interrupted.

Planogram Publishing is run as a batch process through the Windows Command Line. This can be done in two general ways:

1. Directly as a manually entered command or via a manually invoked batch file.
2. Automatically, where planogram publishing is run by a third party scheduling tool.

The syntax for running via the command Line is as follows:

BatchRunner /publishpogs username/password /t

1. **BatchRunner** identifies that the batch process should be run using the Batch Runner utility. This utility is automatically installed with the rest of Macro Space Management.

   > **Note:** The path to the directory containing BatchRunner should also be included in the command line syntax - for example *C:\Program Files\Oracle Retail\MSM\Common Files\.NET\BatchRunner*

2. **publishpogs** identifies that the functionality to run as a batch process is called publishpogs
3. **username/password** must be a valid combination for a user in the Macro Space Planning database who belongs to a User Group with permissions to use the

functionality controlled by the **Planogram Publishing** Command Group in the Functional Security dialog box.

4. **/t** is an optional switch. It allows the third party scheduling tool to terminate the Planogram Publishing process after the current planogram has been published.

Recording of Results

When Planogram Publishing is run as a Batch Process, the following information is logged or modified:

1. Invalid username/password

   If an invalid user name and password is used to start the batch process, the invalid user name will be written to the Error Log (AVTTB_ERROR table), together with the machine name and the date and time.

2. Start times, finish times and planogram publishing results

   The start time, finish time, user log in name, machine used, type of information and result will bewritten to the Planogram Publishing Log (AVTTB_PUBLISH_POG_LOG table). If the process was halted by the third party scheduling tool because the Terminate option was enabled, this will also be recorded.

> **Note:** in order to read the varying log tables, a report will be required using a tool like BI Publisher.

Publishing Logic

The following logic will be used in publishing planogram designs.

1. Planograms will be published when the three following conditions are met:
   a. The current date and time (taking into account the Lead Time Tolerance) exceeds the **Publish Date** set for the planogram
   b. The **Planogram Last Published Date** is null (i.e. the planogram has not been published)
   c. The **Planogram Expired Date** exceeds the current date and time (taking into account the Lead Time Tolerance)
2. Planograms will also be published when the have been updated since they were last published. The condition for this is that the Planogram Last Modified Date is greater than the Planogram Last Published Date.

> **Note:** these dates can be found on the Details and Properties tab of the Planogram design dialog box in Merchandiser.

3. Planograms will be republished if the Republish Planogram if the files are missing option is checked in the Output Tab of the Planogram Publishing configuration dialog box. In this case planograms at Publish or Current status will be republished where the published file is missing from the publish directory - this may occur if the file is deleted or the publish directory structure has changed.

Validation

Validation is described in more detail in the section on the **Validation Tab** in the **Planogram Publishing Configuration** dialog box. The following checks (if selected) will be carried out:

1. The planogram will be checked to see if any shelf objects are empty.
2. The planogram will be checked to see if any products are not yet available, or have expired.

3. The equipment in the planogram will be checked to confirm it is available and has not been scheduled to go out of service.

In the event of any planogram failing the validation check; publishing of that planogram will be stopped and an entry written to the Planogram Publishing log (AVTTB_PUBLISH_POG_LOG table). The process will then move on to publish the next planogram.

Publishing

What is published will depend on the settings in the **Output Tab** in the **Planogram Publishing Configuration** dialog box.

1. The planogram design can be published as one of two options:
   a. An imported planogram report from the third party software.
   b. A customized report set up using Macro Space Management's Report Designer module.
2. The planogram designs will be published into Windows folders conforming to the selected options in the Output tab. These can be:
3. Based on the parent stores - in this instance a copy of the planogram design will be published into each pertinent store folder.
4. Based on the Planogram Groups - in this instance a copy of the planogram design will be published into the pertinent folder. A further distribution mechanism will then be required to send the planograms to the pertinent stores.
5. The planogram design report will be named according to the selected options in the Output tab.
6. If the path to the folder containing the planogram designs is too long, or if the file name is too long, the planogram design will not be published and an entry written to the Planogram Publishing log (AVTTB_PUBLISH_POG_LOG table). The process will then move on to publish the next planogram.

Logging and Recording Results from Planogram Publishing

The results from Planogram Publishing are stored in two tables within the database.

AVTTB_PUBLISH_POG_LOG

This table holds information on the date, planogram, machine and log in ID and whether the result was successful or not.

1. The PPL_LOGTYPE field describes the type of information in the PPL_DETAILS field: 1 = Error, 2 = Warning, 3 = Information and 4 = Summary

Information in this table gives an overview of the results.

AVTTB_ERROR

This table holds information on errors generated during planogram publishing. It is more technical than the AVTTB_PROCESS_FILE_LOG table and contains information that will be off assistance to Data Base Administrators.

> **Note:** for more information on these tables see the Macro Space Planning Data Model.

BI Publisher

In order to facilitate analysis of the results, it is normal to view results via a report generated from BI Publisher (or similar software).

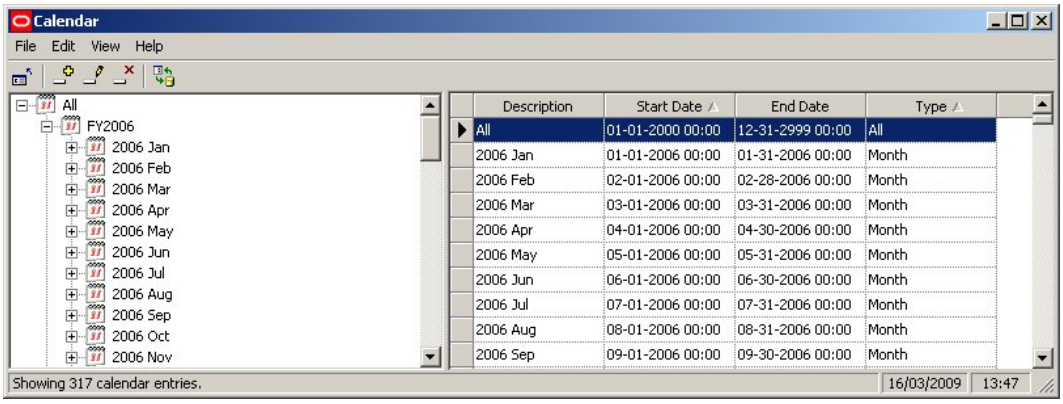
5

General Options

Calendars

Overview of 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:

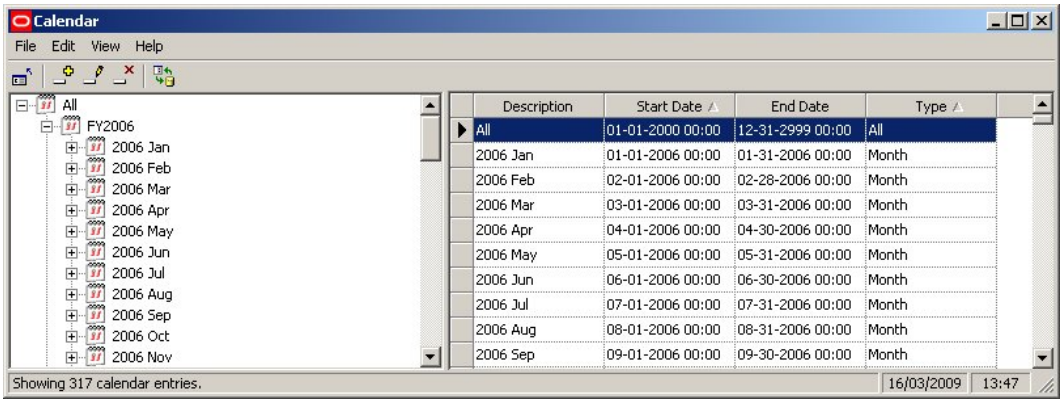
1. Financial Reporting
2. Importing EPOS data within specific date ranges.
3. Displaying KPI's for specific date ranges.
4. Roll ups - 4/5 week months

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:

1. Years
2. Quarters
3. Seasons
4. Months
5. Weeks
6. 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:

1. Data by years for the last three years
2. Data by quarters for the last four quarters
3. Data by seasons for the last three seasons
4. Data by months for the twelve months
5. Data by weeks for the last three months
6. Data by days for the last four weeks

> **Note:** EPOS data types are identified by Calendar ID (CAL_ID).

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

> **Note:** performance can also be improved by indexing the EPOS table, partitioning the EPOS table, and so on.

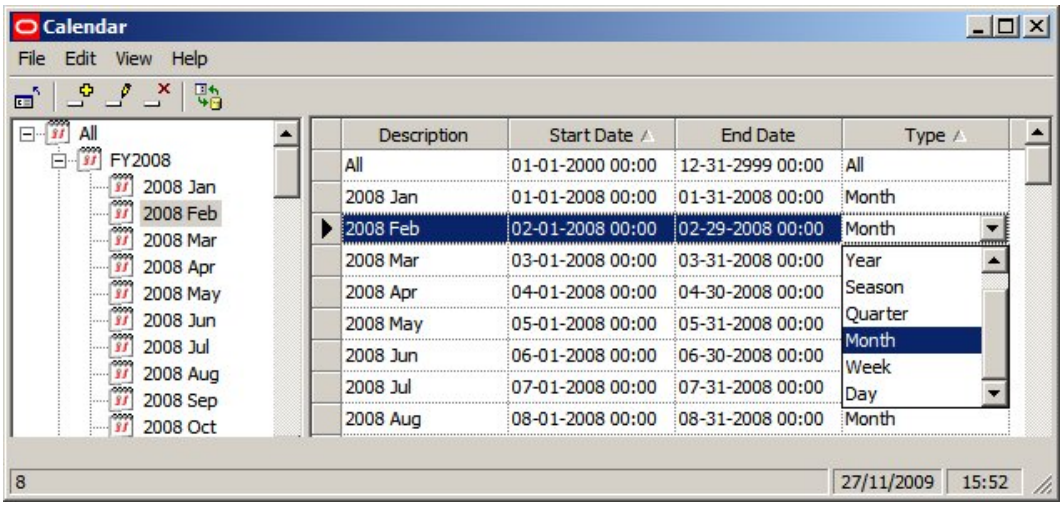
Using Calendars in KPIs

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

1. The calendar is imported or set up
2. Data is imported into the table holding EPOS data
3. The KPI is configured
4. 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)

1. PRD_ID (Product ID) identifies the Product
2. STR_ID (Store ID) identifies the Store
3. 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

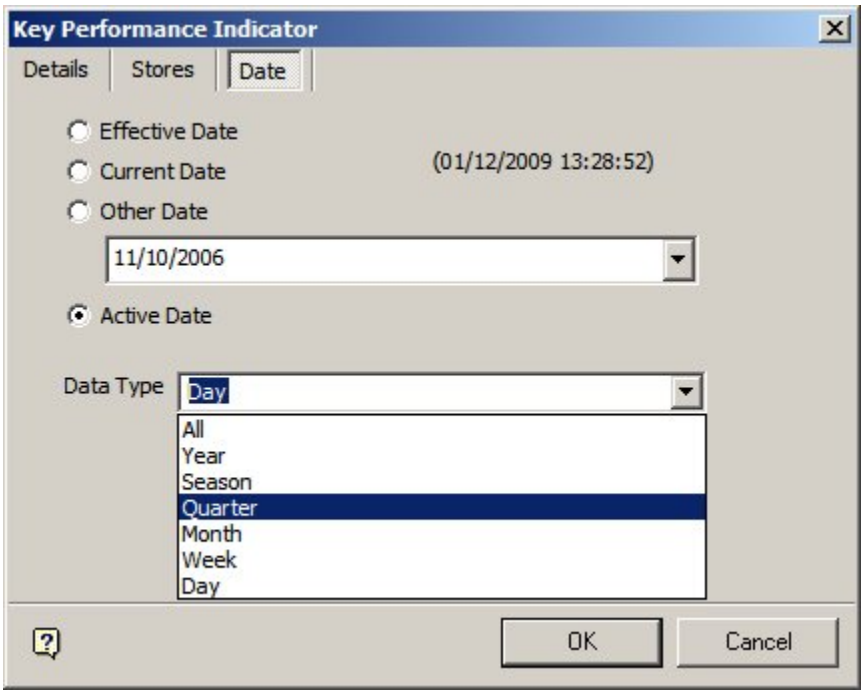
The KPI is then configured. It can either be set up as a View or as a Stored Procedure. The KPI will typically take financial information from the EPOS table and combine it with information from other MSM tables. For example the AVTTB_PRODUCT table contains information on which products are on what fixtures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

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).

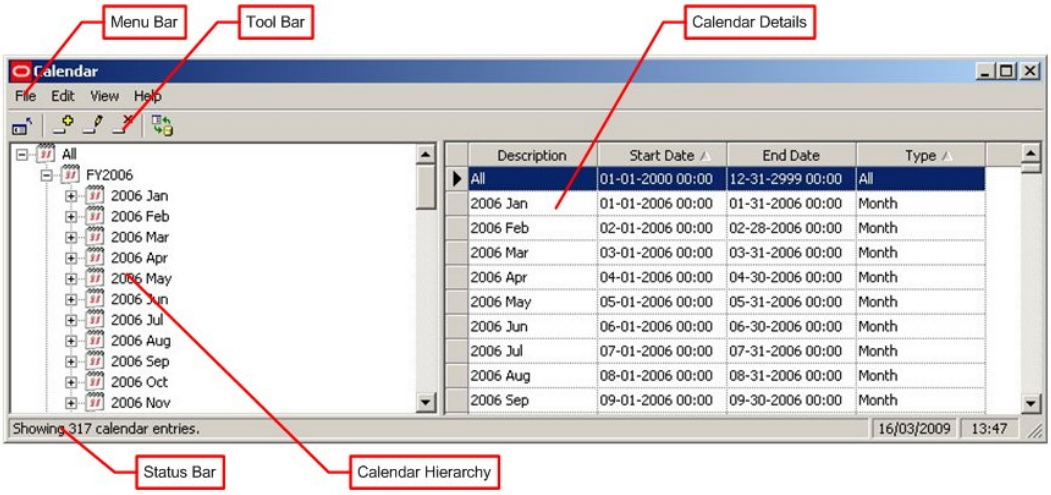
The type of calendar period can be identified from the Calendar Type ID (CAT_ID). This is a foreign key to the AVTTB_CALENDAR_TYPE table. The CAT_ID's are as follows:

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.

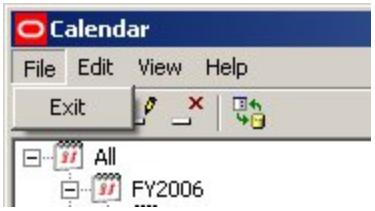
The **Calendar Hierarchy** allows users to see the available calendars.

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

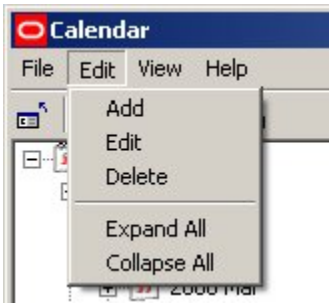
The **Status Bar** gives information on the number of calendars in the selected section.

Calendars Menu Bar and Toolbar

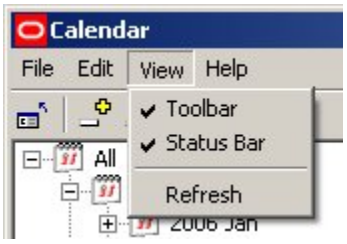
The **File pull down** menu allows users to exit the application.



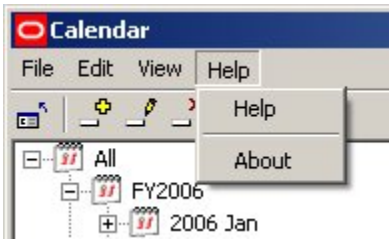
The **Edit pull down** menu allows users to add, edit and delete calendars. It also allows users to expand or collapse sections of the calendar hierarchy.



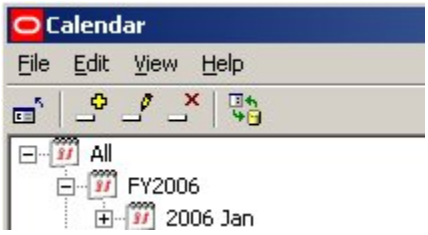
The **View pull down menu** allows users to turn the Toolbar and status bar display on or off. It also enables users to refresh the hierarchy with any changes made by other users.



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



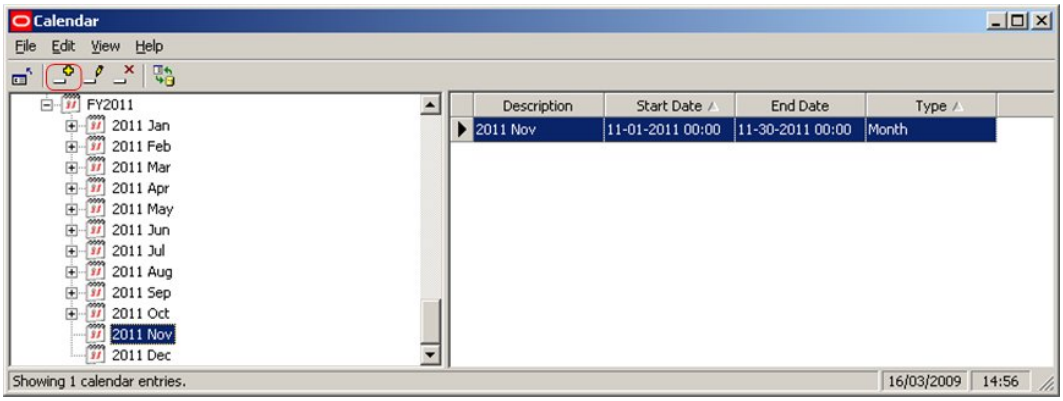
Toolbar



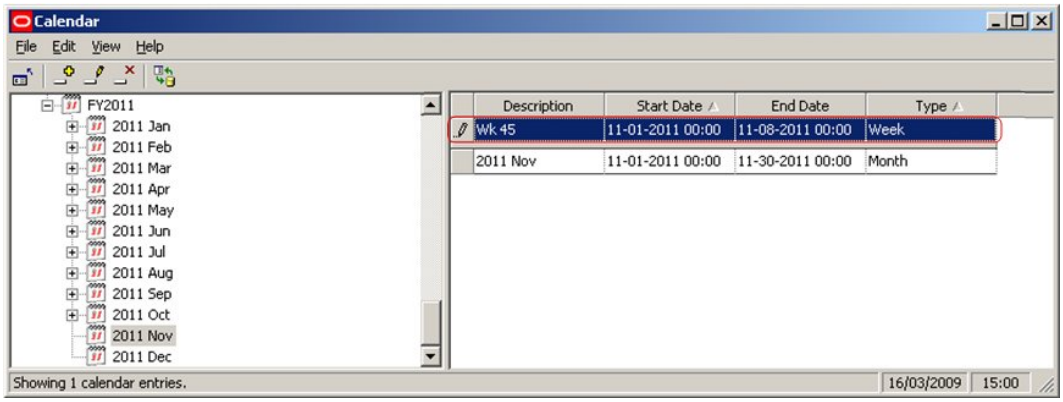
Icon	Description
	Exit
	Add Calendar
	Edit Calendar
	Delete Calendar
	Refresh Calendars

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.

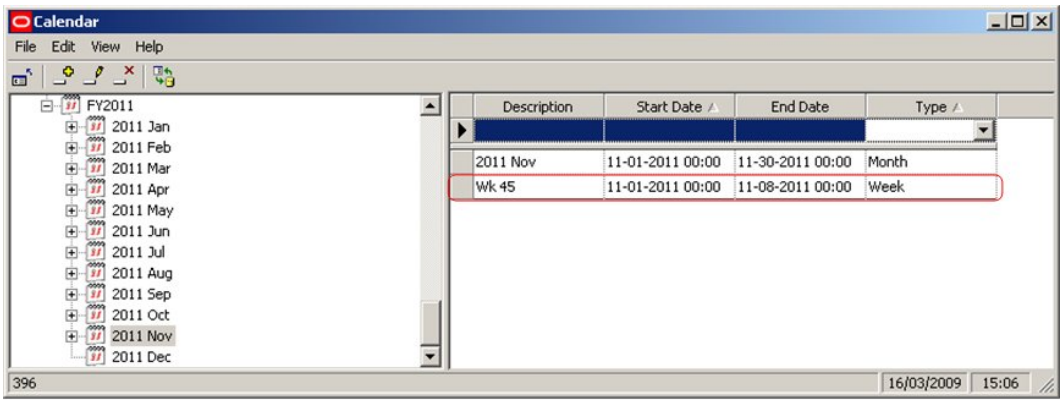


This will open a new line in the Calendar Details section.

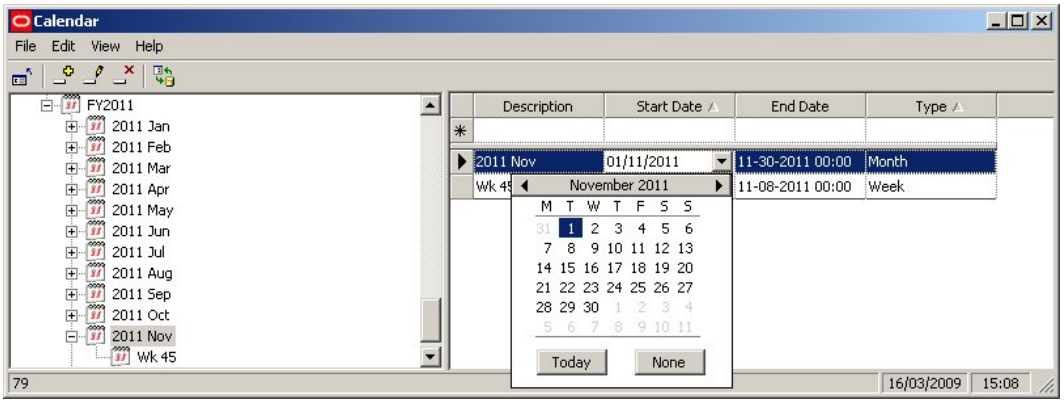


Type in the details and press <Return>. The calendar will be added to the list.

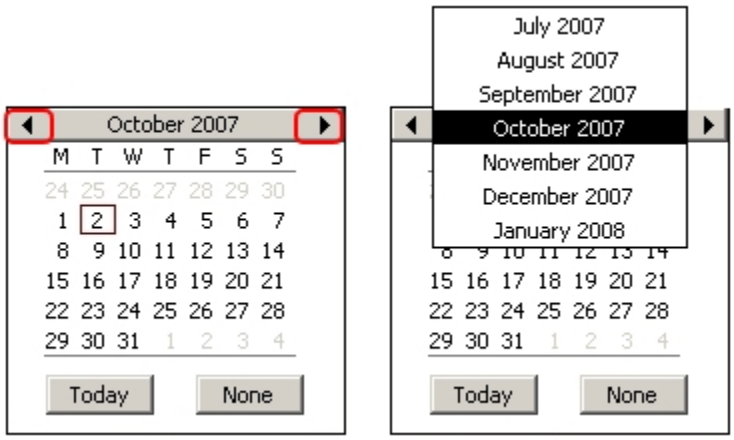
> **Note**: If <Return> is not pressed, the data will not be saved to the database.



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



There are two ways of selecting the month.



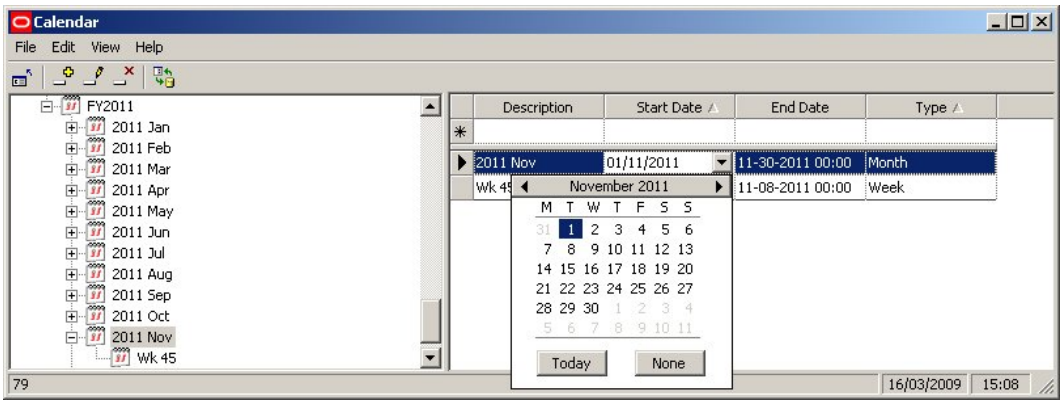
Users can use the left or right arrows (left hand image) to move between months.

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 calenders in case Import Routines and KPI's reference the calendar.

To **Delete a Calendar** highlight the required calendar and click on the delete icon

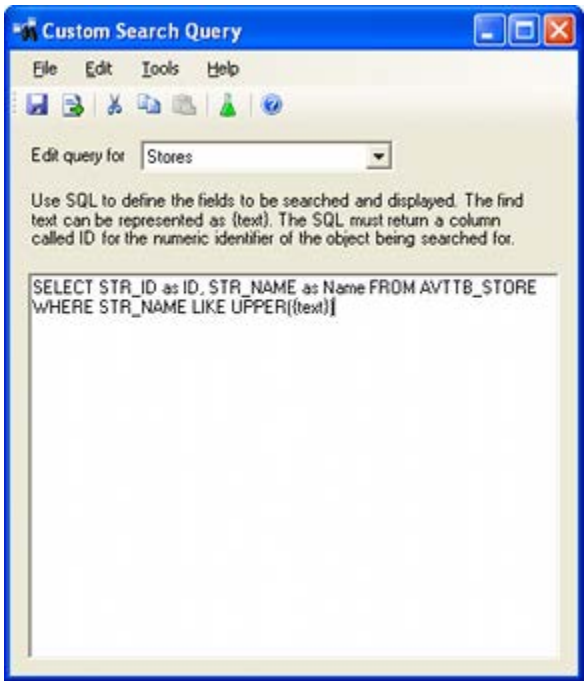
The calendar will be deleted without further warning if not in use. If in use, a delete conformation will be requested.

Custom Search Query

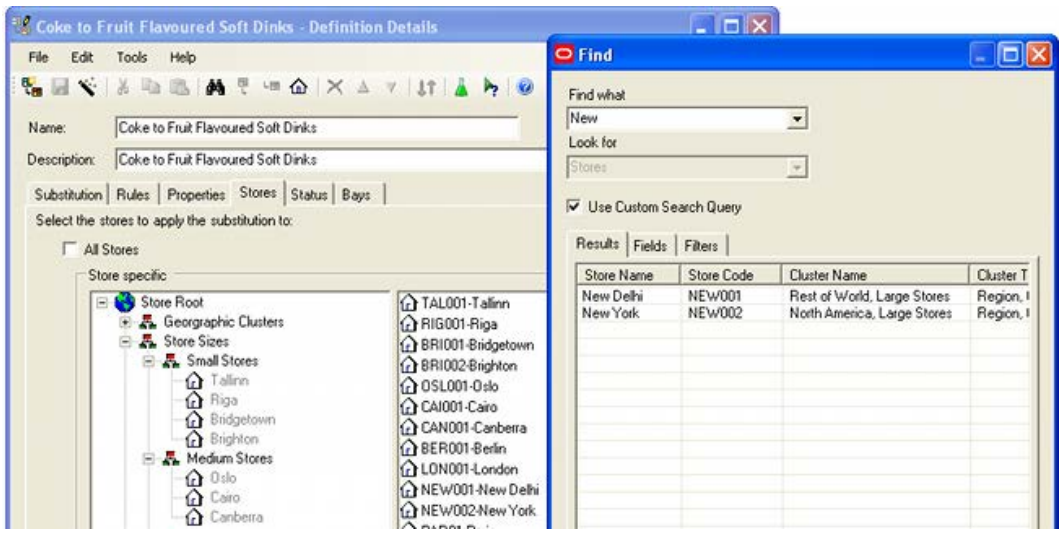
Custom Queries

Custom SQL

Macro Space Planning has the ability to use a specially extended form of SQL called Custom SQL. The software code allows the use of placeholders - denoted by the use of curly brackets. Then the code will substitute a 'live' value into the SQL query every time it executes it. The screen shot below shows an example of Custom SQL with a query of the form **Select STR_ID as ID, STR_NAME as name from AVTTB_STORE where STR_NAME LIKE UPPER({text})**.

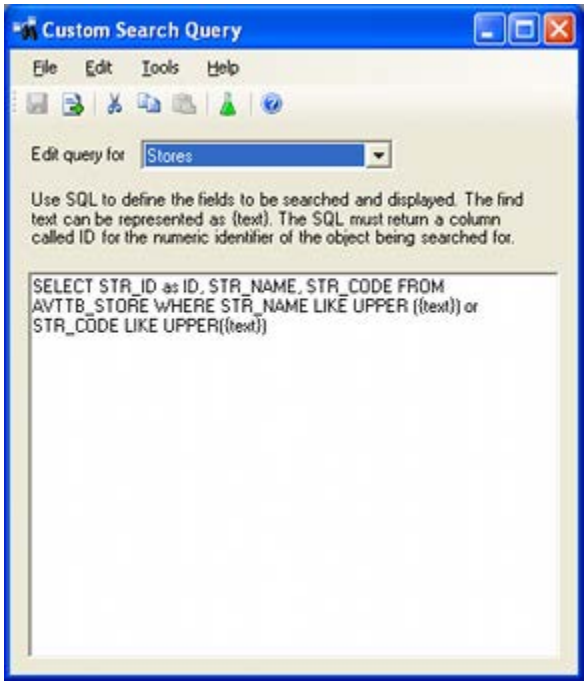


This Custom SQL is used in the Search function in the Find Store dialog box in the Planogram Substitution functionality accessed from the Merchandising menu in the Administration module.



When a user types **New** in as a search string (with Use Custom Search Query selected), the SQL statement is converted to **Select STR_ID as ID, STR_NAME as name from AVTTB_STORE where STR_NAME LIKE UPPER('%New%)**. (Note the use of implied wild cards). The SQL query is then used to search though the data in the Find dialog box, stopping at each matching instance.

The initial example only searches for a store name. It is possible to modify the Custom SQL to search for additional fields. In the example below, the Custom SQL has been extended to allow the user to search for either a store name or a store code.



Note: Placeholders are case sensitive. {Text} is not a valid placeholder, while {text} is.

Individual Conditions Associated with Each Instance of Custom SQL

Each query meets specific rules to operate. These rules appear below the drop down list and will vary when different queries are selected. The required syntax must be followed for the query to work.





Testing the Query

A test button has been provided for the convenience of Administrators.



After the Custom SQL has been written, clicking the test button will validate it. SQL cannot be saved to the database until it has been validated successfully.

Uses of Custom SQL

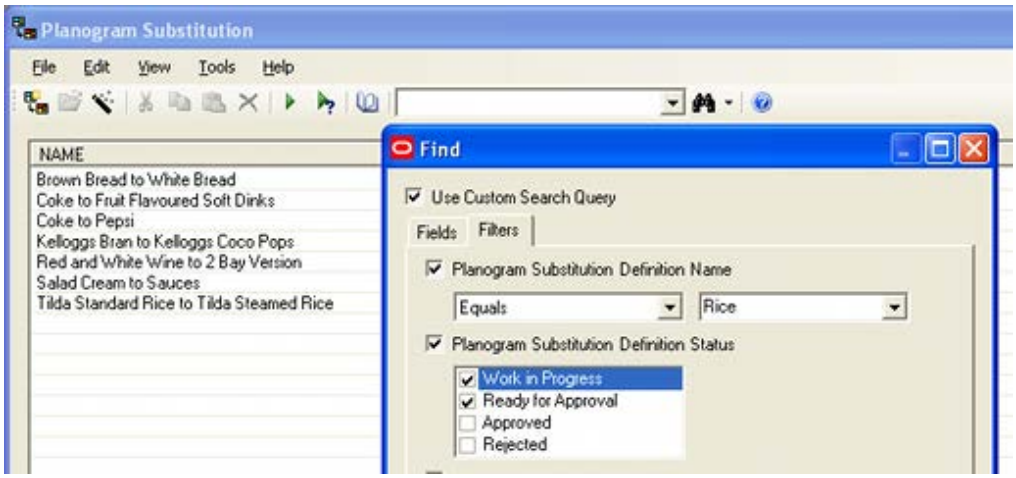
Custom SQL is used in a variety of ways within the Macro Space Planning Application. The Custom Query dialog can be used by Administrators without access to the database to modify some of that custom SQL. Users doing this should have strong SQL skills and access to the Macro Space Planning database. The Custom Search Query can be used for two purposes:

Modify the Custom Search Options in the Planogram Substitution Dialog Boxes

There are three options that affect how Custom Searches can be configured in the planogram Substitution functionality.

Find in the Planogram Substitution dialog box.

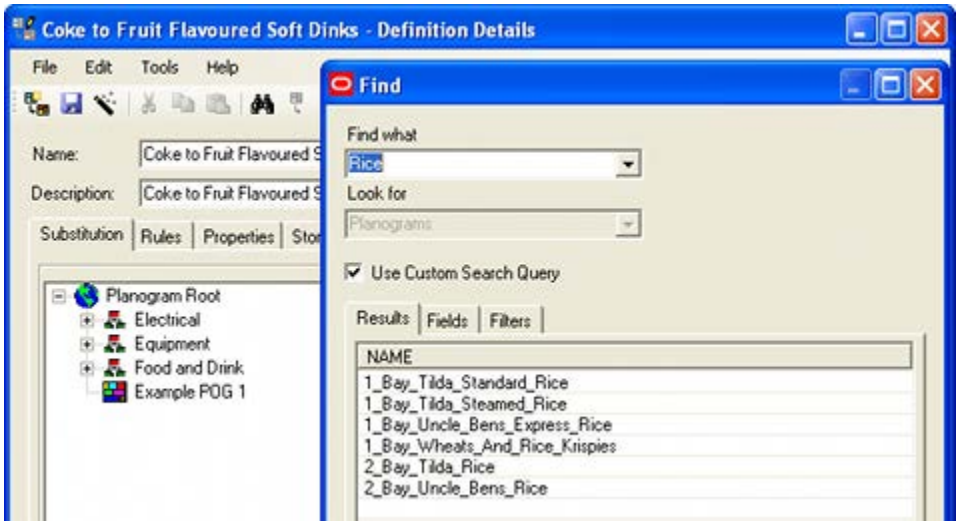
If the **Find Options** are selected from the drop down list by the Find icon on the toolbar of the **Planogram Substitution dialog box**, the **Find dialog box** will appear. If the Use Custom Search Query check box is used, the Custom SQL in the **Planogram Substitution Definition** option in the **Custom Search Query dialog box** will be used for the search.



Find in the Store and Planogram Tabs of the Planogram Substitution Definition dialog box

Clicking **Find** on the Planogram Substitution Definition dialog box toolbar will bring up the Find dialog box. If the Use Custom Search Query check box is used, Custom SQL from the **Custom Search Query dialog box** will be used for the search.

- If in the **Stores** tab, the **Stores** Custom SQL will be used.
- If in the Substitution Tab, the **Planogram** Custom SQL will be used.

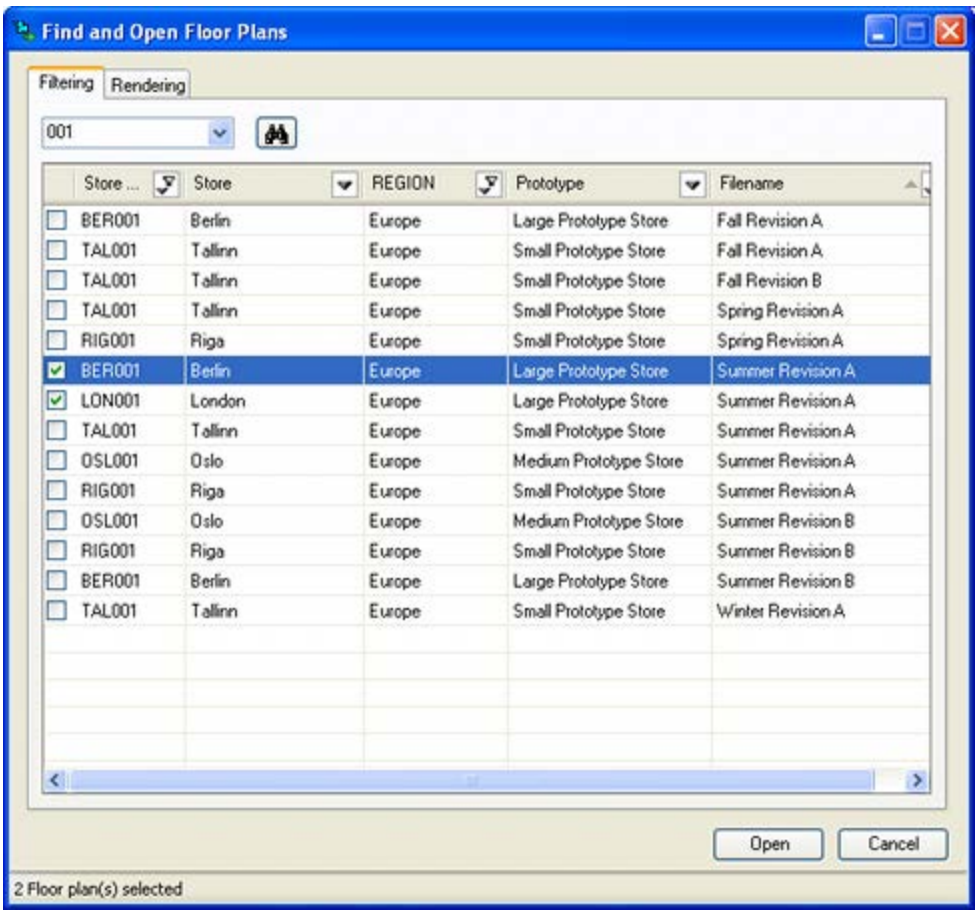


Populating Specific Dialog Boxes

Custom SQL is also used to select the fields to populate a number of dialog boxes.

Find and Open Dialog Box

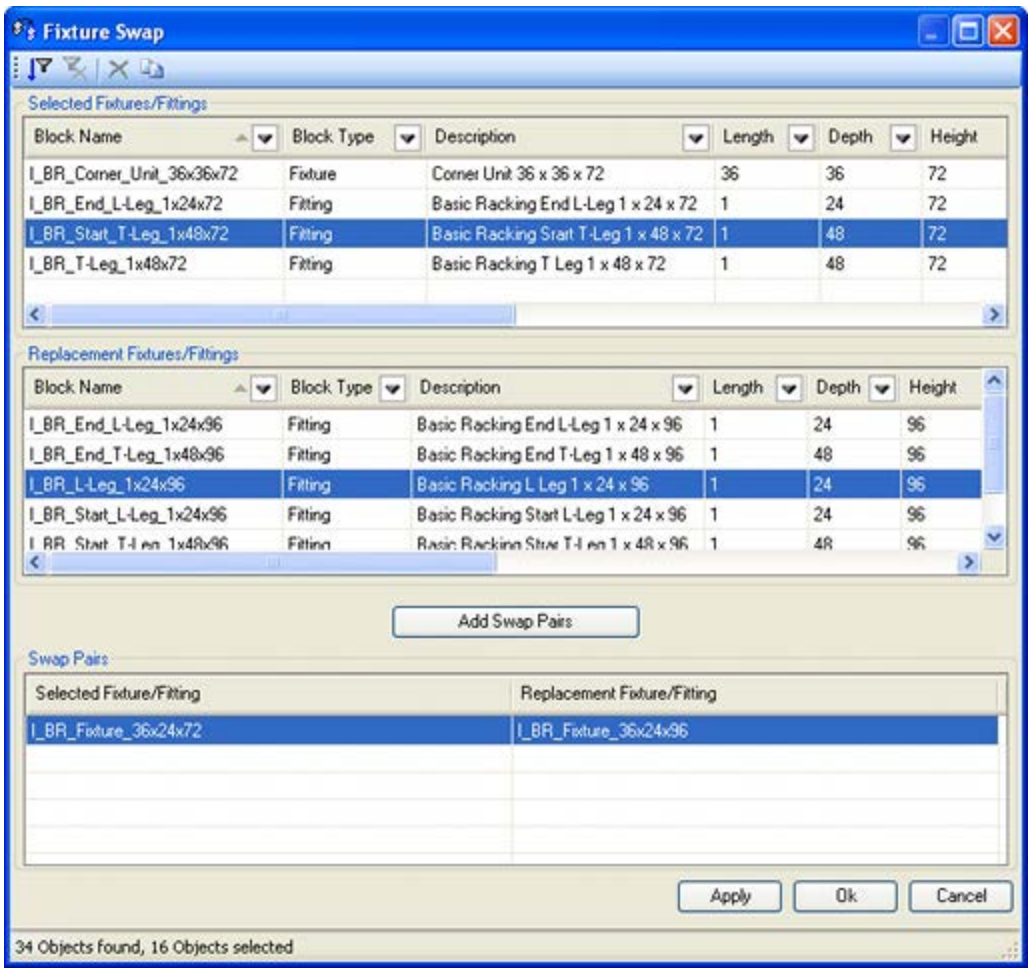
The Fixture Swap dialog box is accessed from the File menu in the Planner module. It is used as an alternative method to Store Manager for opening floor plans for editing. The fields that appear are controlled by the Custom SQL in the **Floor Plan Print** option in the Custom Search Query dialog box in the Administration Module.



Note: In this instance, the Find and Open dialog box does not have its own separate Custom SQL.

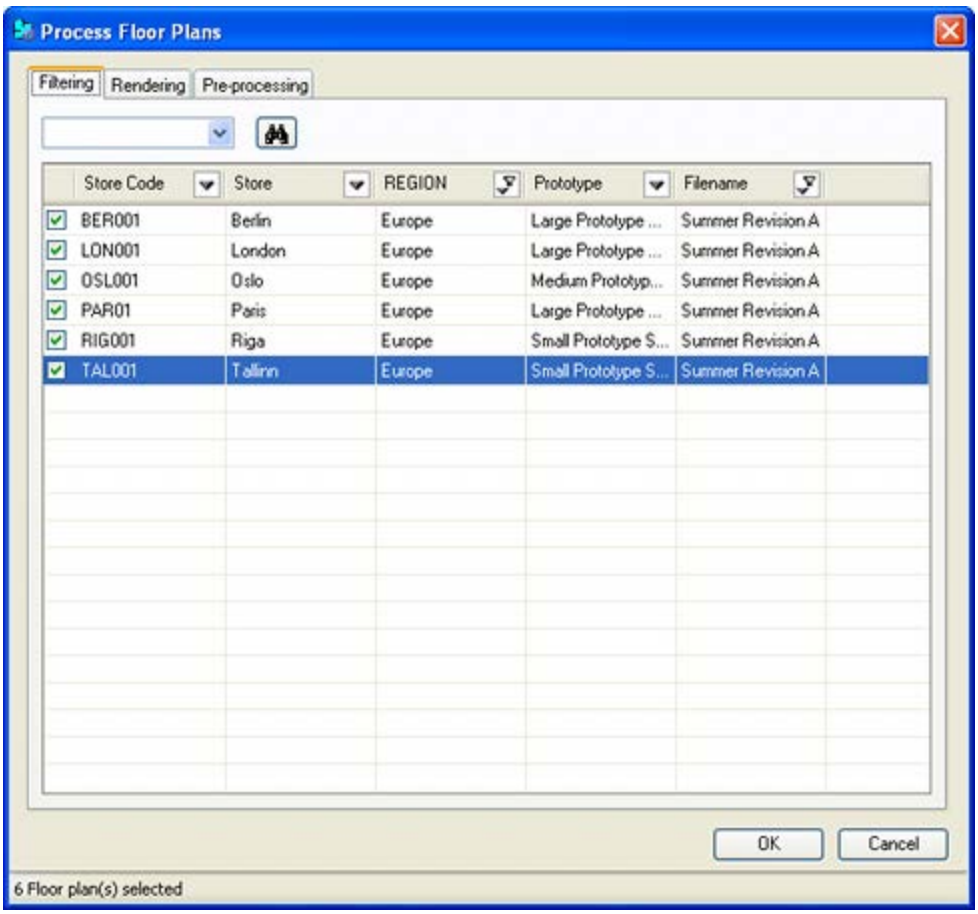
Fixture Swap

The Fixture Swap dialog box is accessed from the Fixturing toolbar in the Planner module. It is used to swap out one fixture for another in the currently active floor plan. The fields that appear are controlled by the Custom SQL in the **Fixture Swap** option in the Custom Search Query dialog box in the Administration Module.



Process Floor Plans

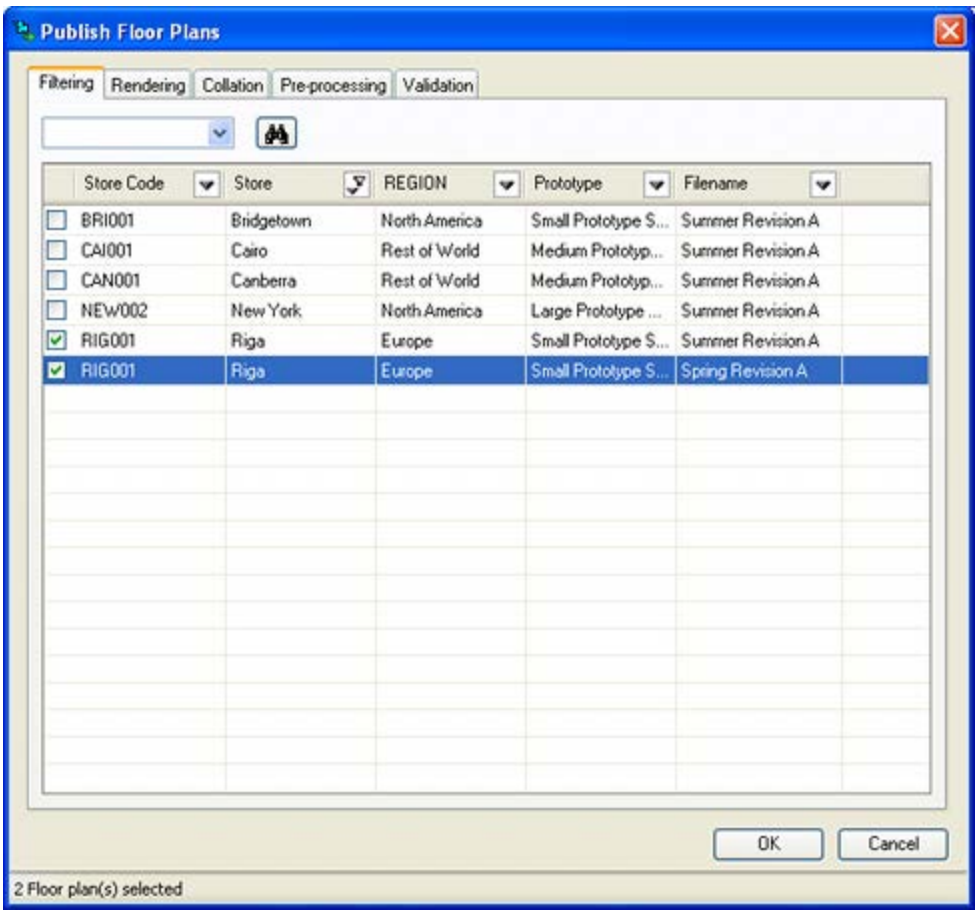
The Publish Floor Plan dialog box is accessed from the File > Drawing Utilities menu in the Planner module. It is used to carry out automated updating operations on floor plans such as refreshing annotation. The fields that appear are controlled by the Custom SQL in the **Floor Plan Print** option in the Custom Search Query dialog box in the Administration Module.



Note: In this instance, the Process Floor Plans dialog box does not have its own separate Custom SQL.

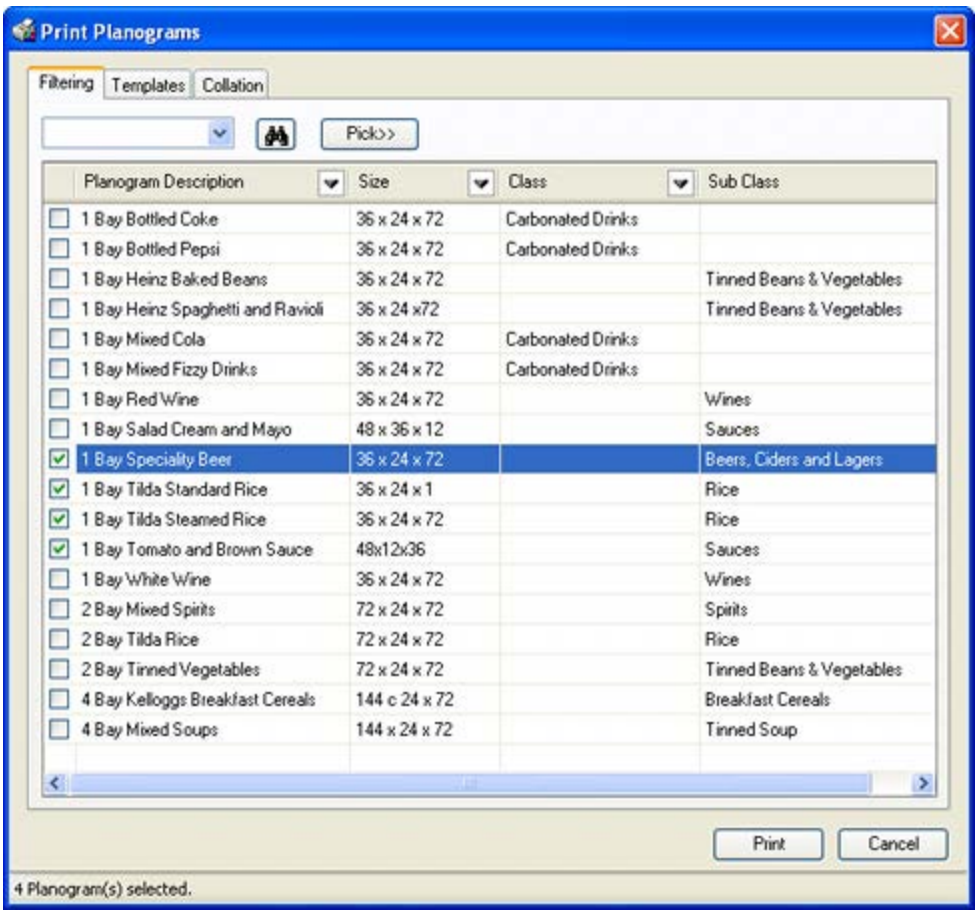
Publish Floor Plans

The Publish Floor Plan dialog box is accessed from the File menu in the Planner module. It is used to Publish (hard copy or electronically) floor plans in preparation for putting them into service. The fields that appear are controlled by the Custom SQL in the **Floor Plan Print** option in the Custom Search Query dialog box in the Administration Module.



Print Planograms

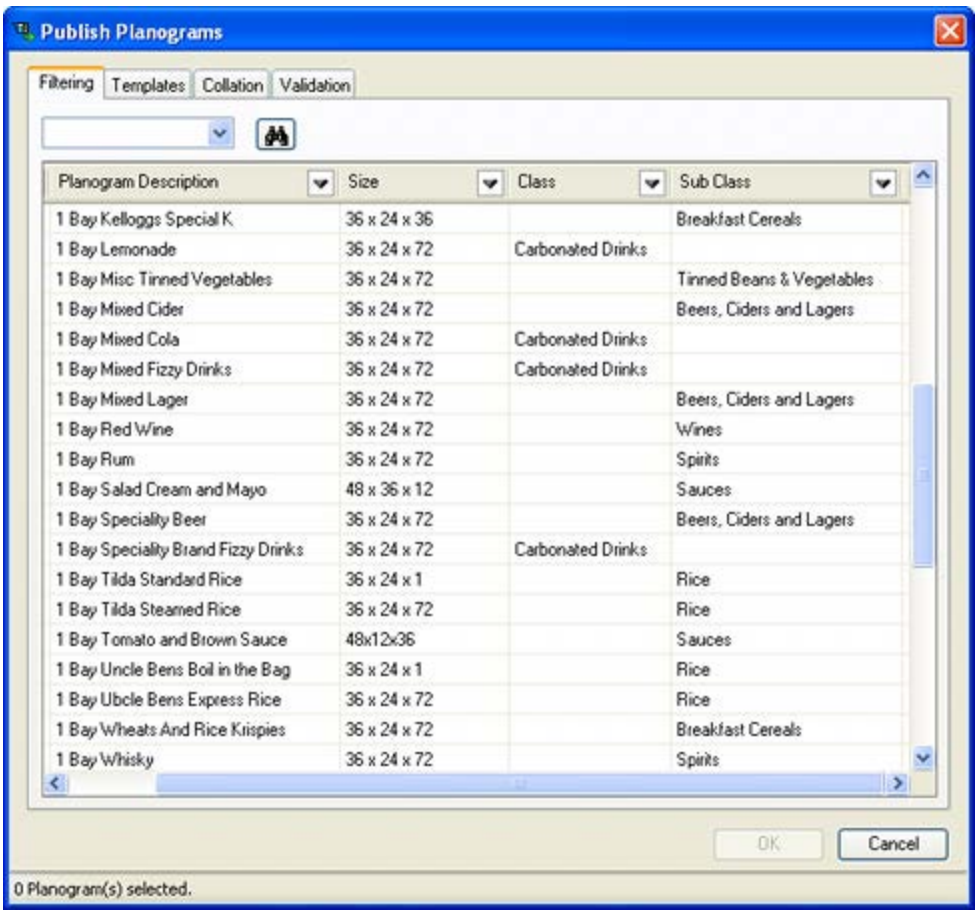
The Publish Planogram dialog box is accessed from the File menu in the Planner module by selecting the Publish planograms immediately option. It is also available from the File menu in the Merchandiser module and from the toolbar in In-Store Space Collaboration. It is used to print planogram designs for planograms in the currently active floor plan. The fields that appear are controlled by the Custom SQL in the **POG Print** options in the Custom Search Query dialog box in the Administration Module.



Publish Planograms

The Publish Planogram dialog box is accessed from the File menu in the Planner module by selecting the Publish planograms immediately option. It is also available from the File menu in the Merchandiser module. It is used to Immediately Publish (hard copy or electronically) planogram designs for planograms. This dialog box can be used as an alternative to waiting for planograms to be published via a batch process.

The fields that appear are controlled by the Custom SQL in the **Publish by Store Hierarchy** or **Publish by POG Hierarchy** options in the Custom Search Query dialog box in the Administration Module. Which Custom SQL is used is determined by settings in the **Configure Planogram Publishing** dialog box accessed from the File menu is the Administration module.



Summary of Where Custom Queries are Used

This section provides a brief summary of the Custom SQL accessed from the Custom Search Query dialog box accessed from the General menu.

Dialog Box	Function	Modules	How Accessed	Custom SQL
Planogram Substitution	Find	Administration	General Menu	Planogram Substitution Definition
Planogram Substitution Definition - Stores Tab	Find	Administration	Planogram Substitution dialog box	Stores
Planogram Substitution Definition - Substitution Tab	Find	Administration	Planogram Substitution dialog box	Planogram
Find and Open	Populate data	Planner	File menu	Floor Plan Print
Fixture Swap	Populate Data	Planner	Fixturing toolbar	Fixture Swap

Dialog Box	Function	Modules	How Accessed	Custom SQL
Process Floor Plans	Populate Data	Planner	FileMenu > Drawing Utilities	Floor Plan Print
Publish Floor Plans	Populate Data	Planner	File Menu	Floor Plan Print
Print Planograms	Populate Data	Planner Merchandiser	File Menu File menu	POG Print
Publish Planograms	Populate Data	Planner Merchandiser In-Store Space Collaboration	File Menu File Menu Toolbar	Publish by Store Hierarchy Publish by POG Hierarchy

Manufacturers

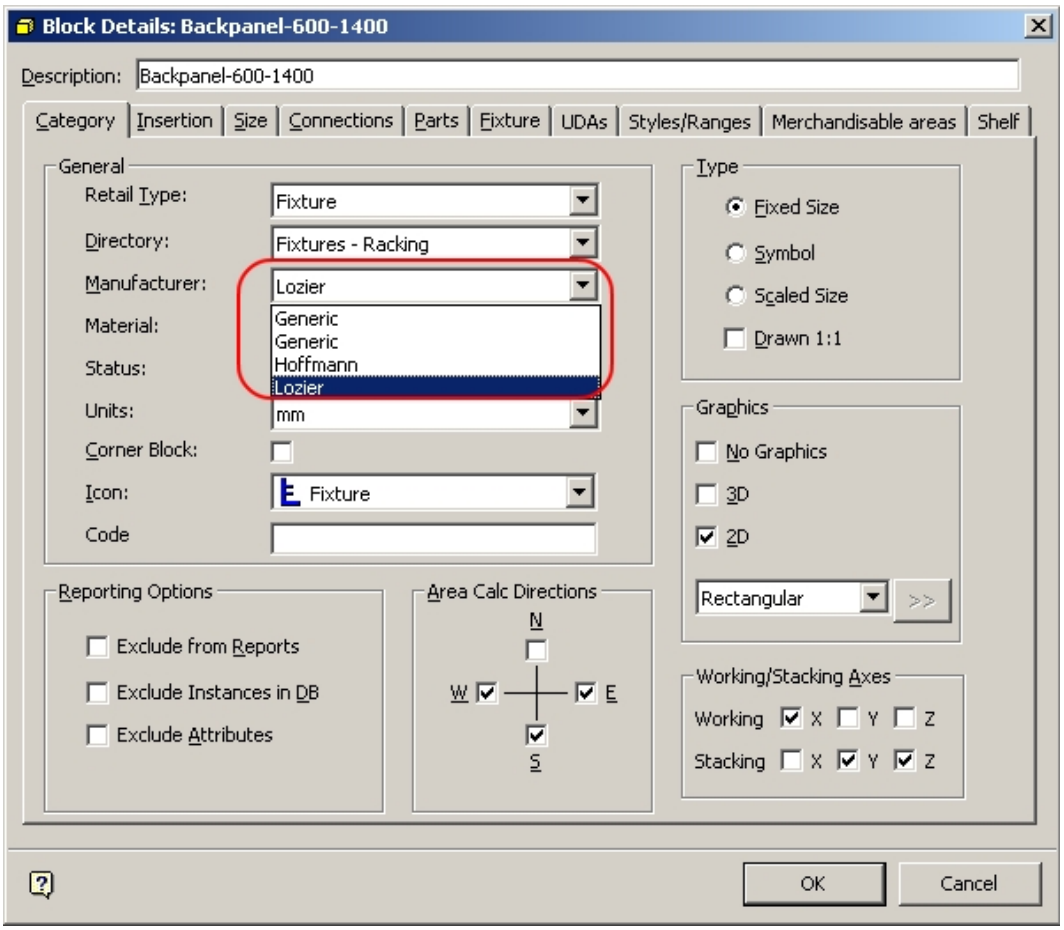
Overview of Manufacturers Option

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

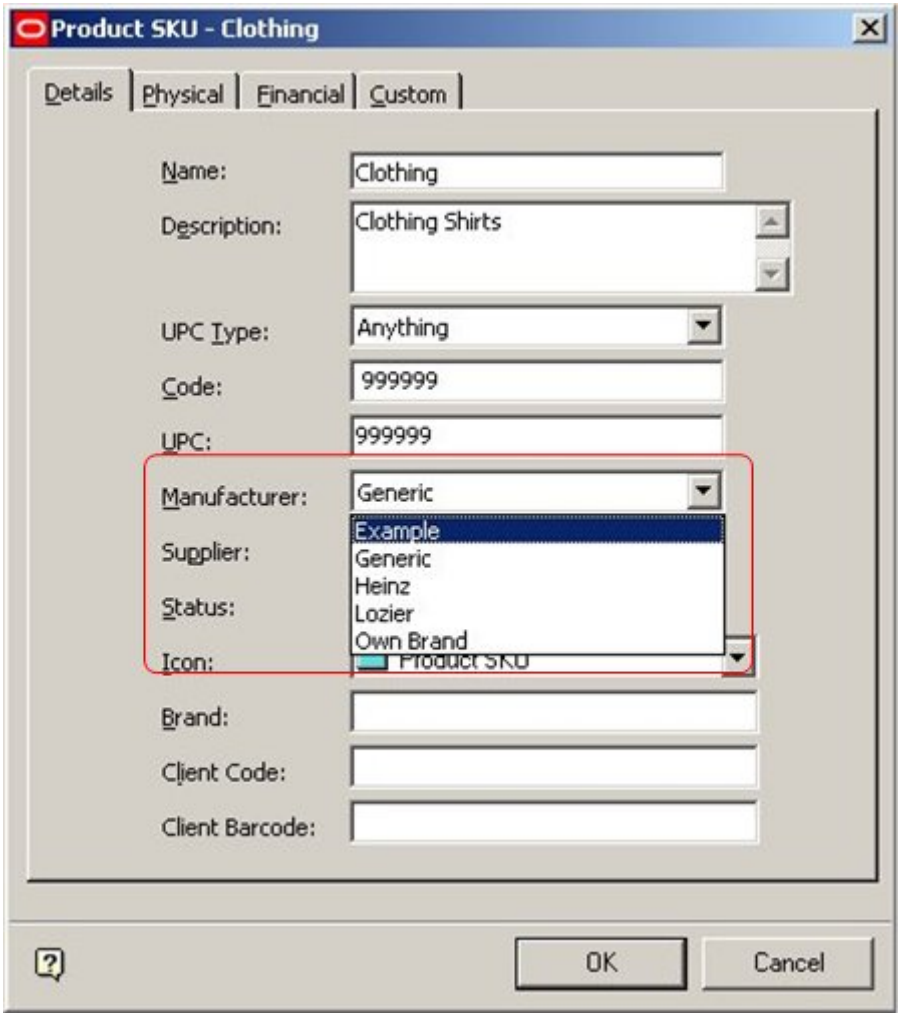


The list of manufacturers is used in two places in the software:

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



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

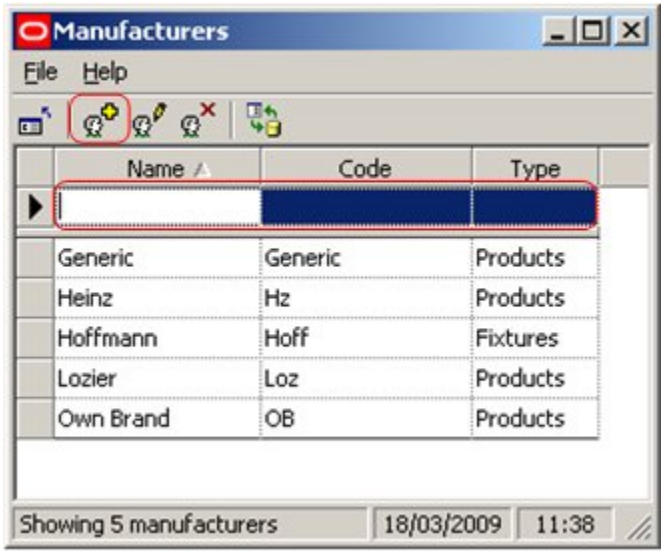


Note: A Manufacturer would typically be the company that produces the product, a Supplier the wholesaler that supplies it.

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 and then edited.

Adding a Manufacturer

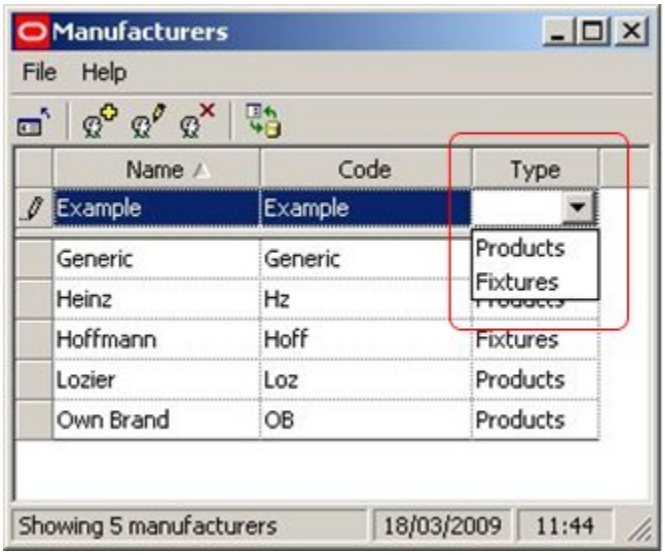
To **Add a Manufacturer**, click on the Add Manufacturer icon.



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

Type in the Manufacturer's 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.



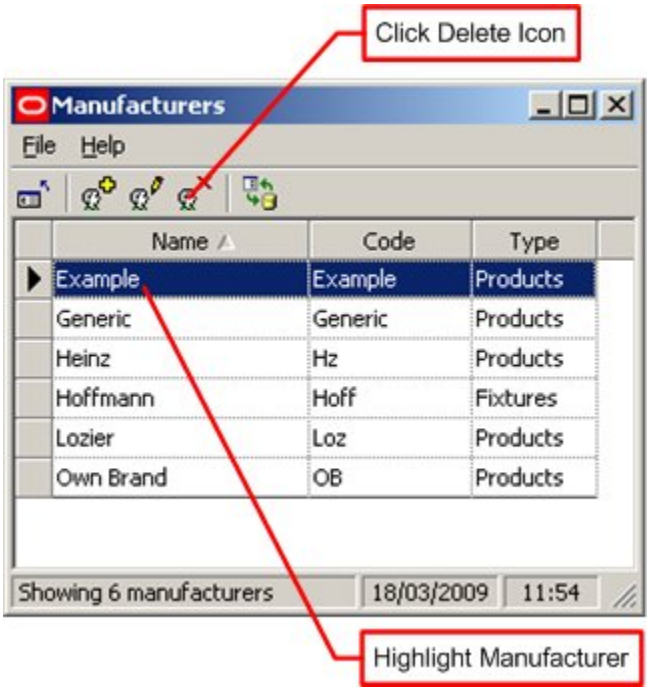
Edit the entries as required.

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

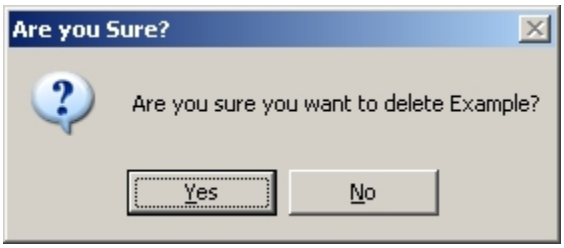
> **Note**: Ensure <Return> is pressed for every entry. If not, the information will not be stored in the central Macro Space Management database.

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.

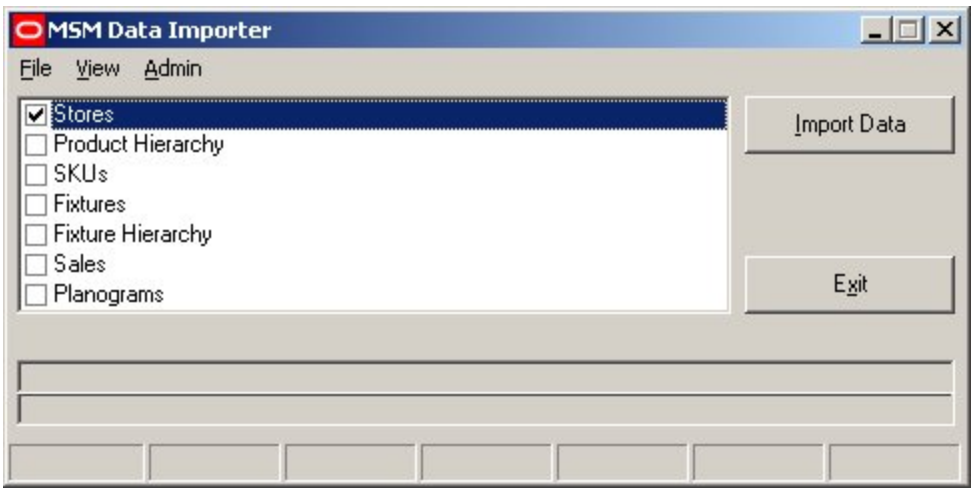
Users can exit the Manufacturers dialogue box by clicking on the exit icon.



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.

Status & Status Levels

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.

> **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.

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).

> **IMPORTANT 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
Planogram Substitution	Planogram Substitutions are lists of planograms to be swapped in specific stores at specific times
Products	Products can be given statuses at all levels in the hierarchy
Report	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 Authorized 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

System Variables

Some System Variables have an influence on Statuses.

> **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:

3. Their Effective date is after the Active date of the drawing
4. 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.

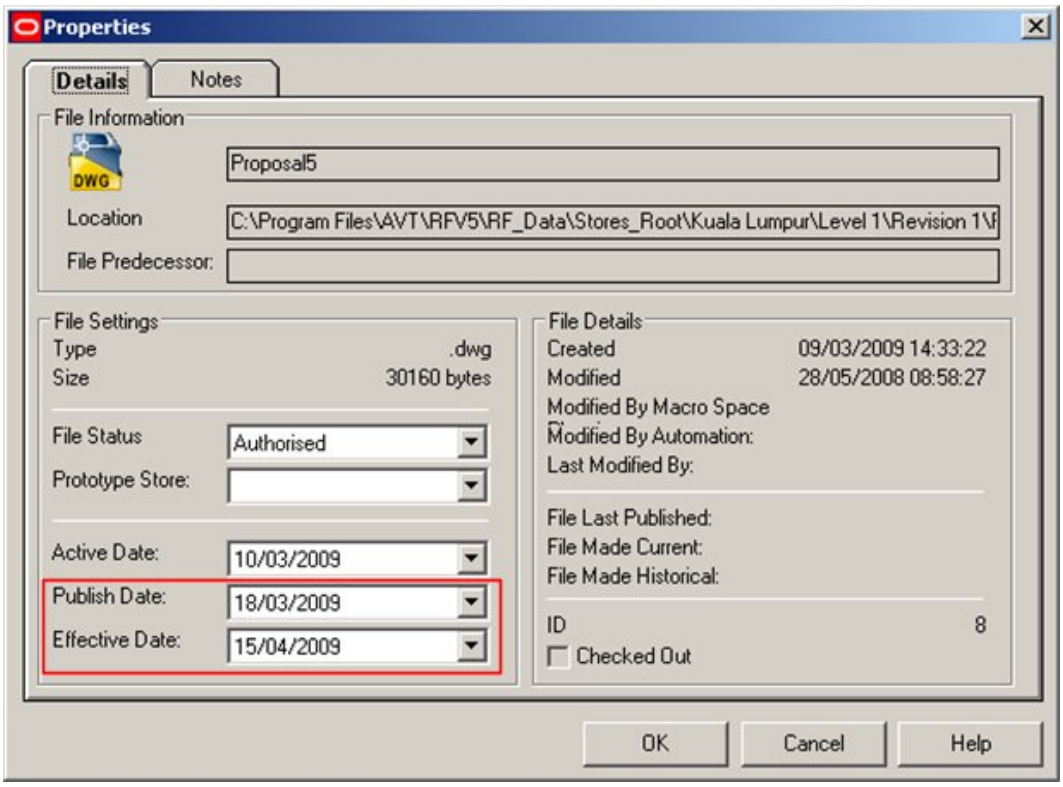
Data Importer

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

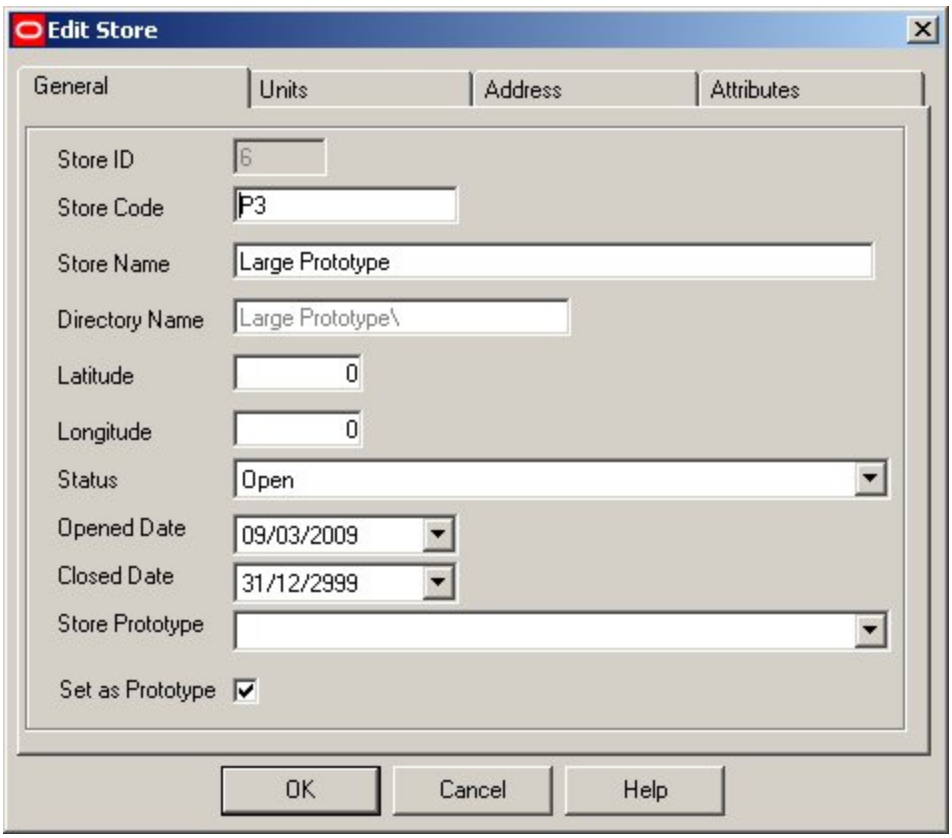
Statuses and UpdateStatus.exe

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

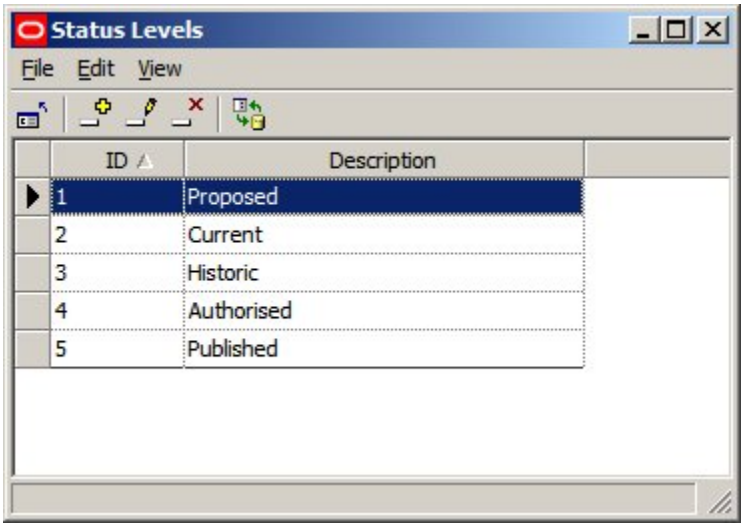
1. Change the status of a file from Authorized to Published if the Publish Date has been exceeded
2. Change the status of a file from Published to Current if the Effective Date has been exceeded
3. Change the status of a file from Current to Historical if another file in that floor has had its status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



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



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 Authorized to Current, it changes the ID in the database from 4 to 2.



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 the Software

Statuses can be manually set in the software.

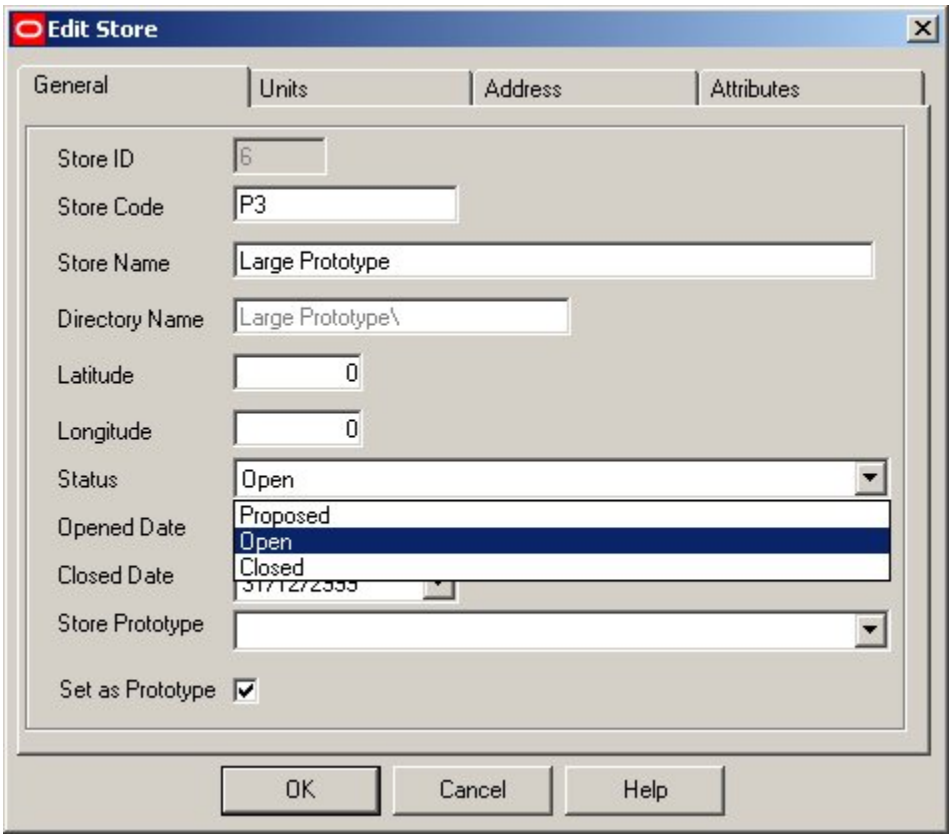
Note: Customizing Macro Space Management may be done to customer specific requirements. Because of that customization, there may be small differences between the generic examples in this Help file and a specific implementation of Macro Space Management. For advice on any aspect of customization or terminology,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

Clusters

Clusters (and sub clusters) do not have statuses.

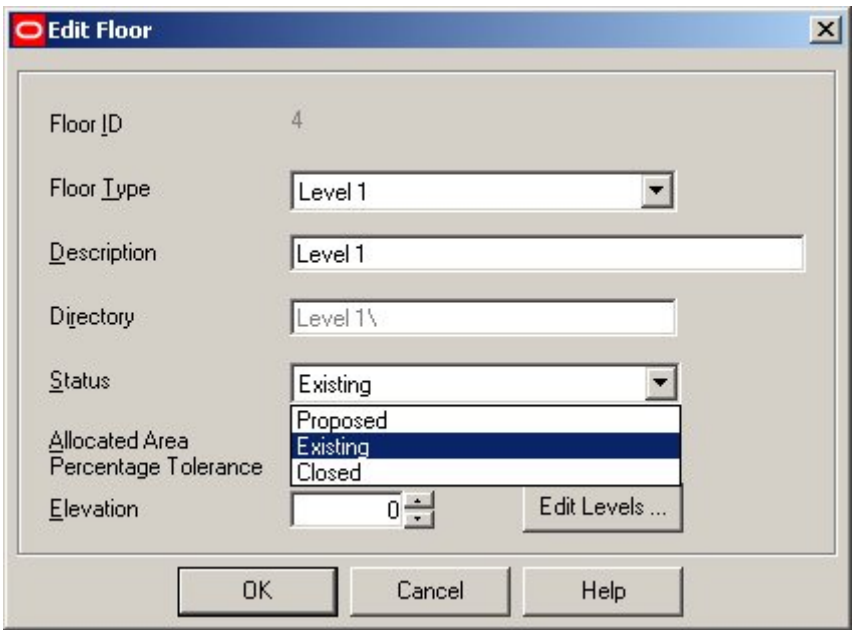
Stores

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



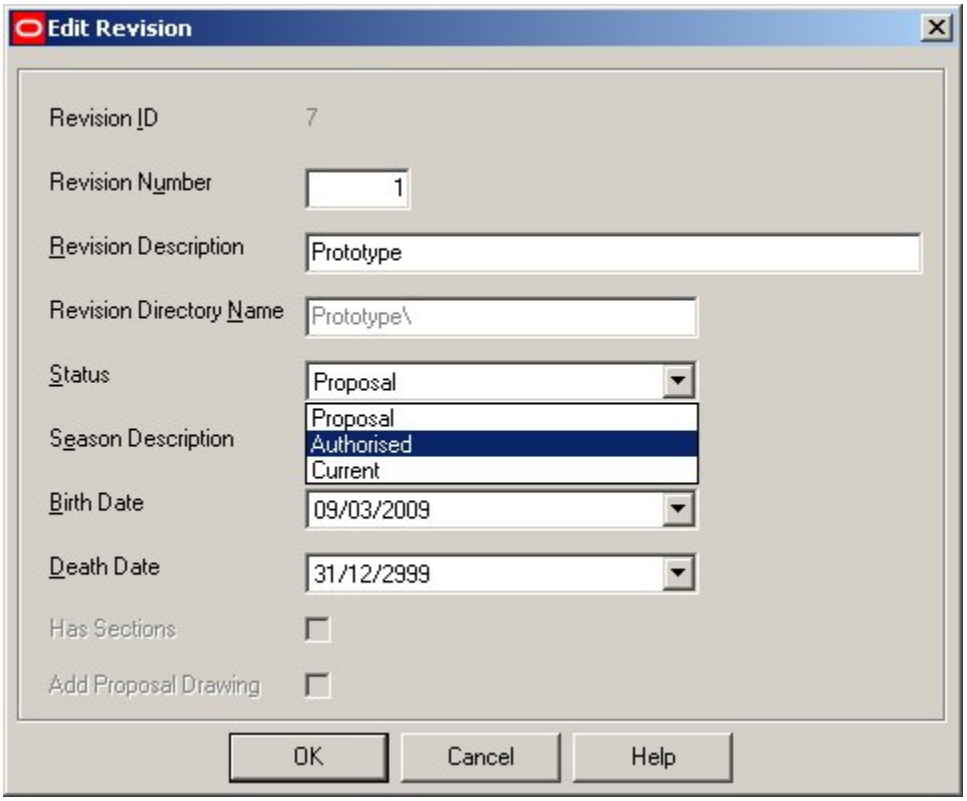
Floors

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



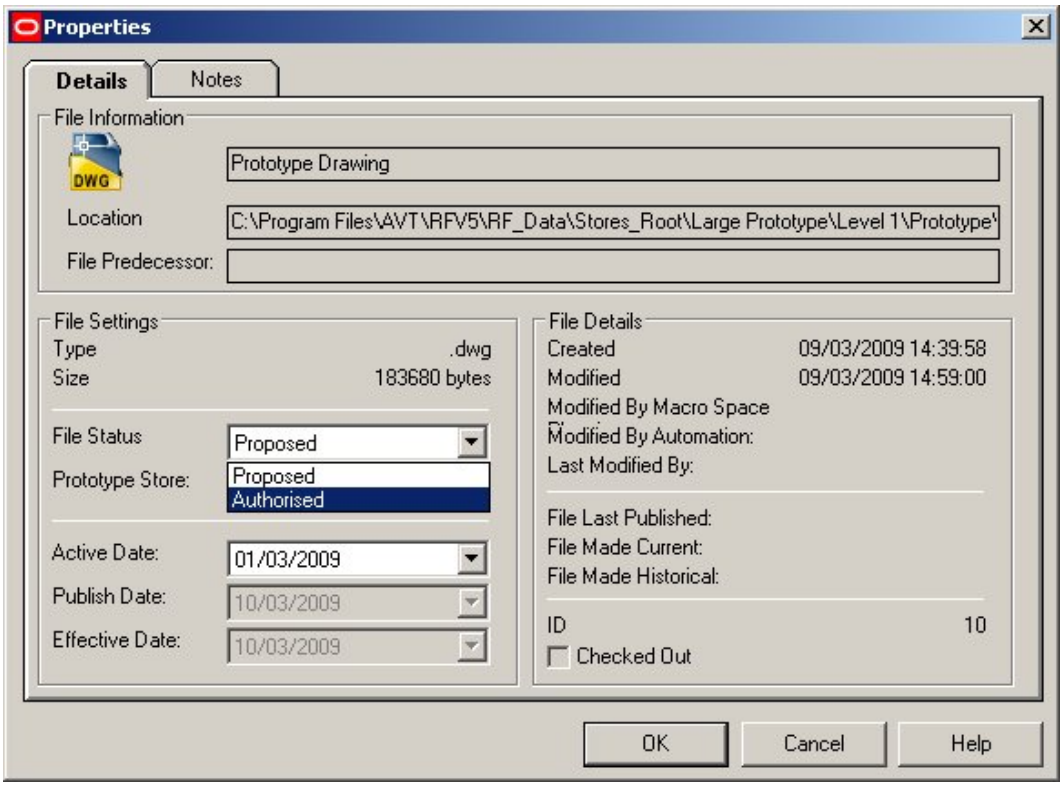
Revisions

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

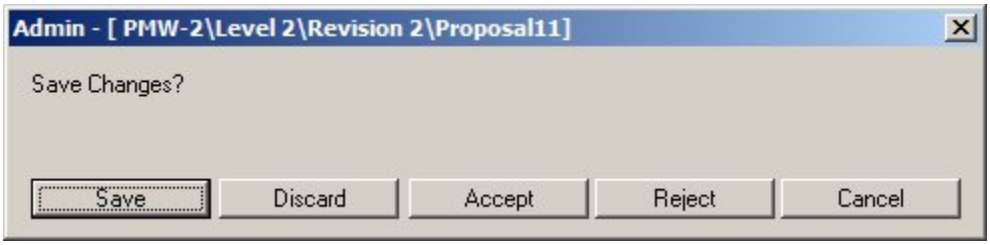


Files (Store Plans)

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

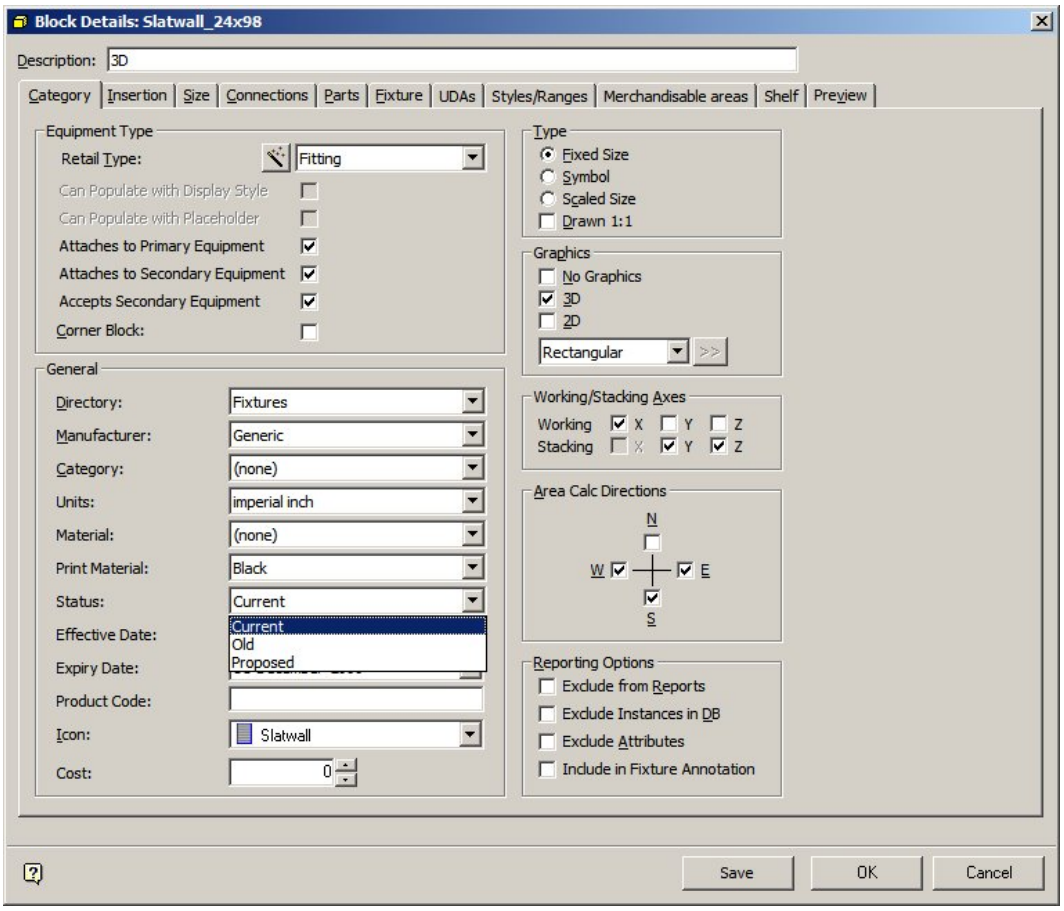


The status of a file can also be changed by clicking **Accept** or **Reject** on exiting a changed store plan in In-Store Space Collaboration.



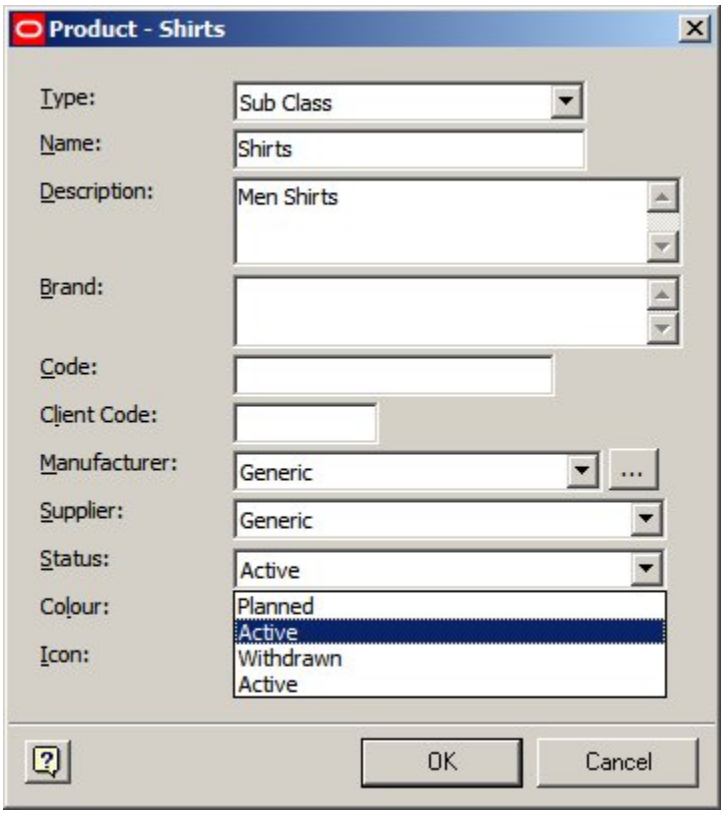
Blocks (Fixtures)

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

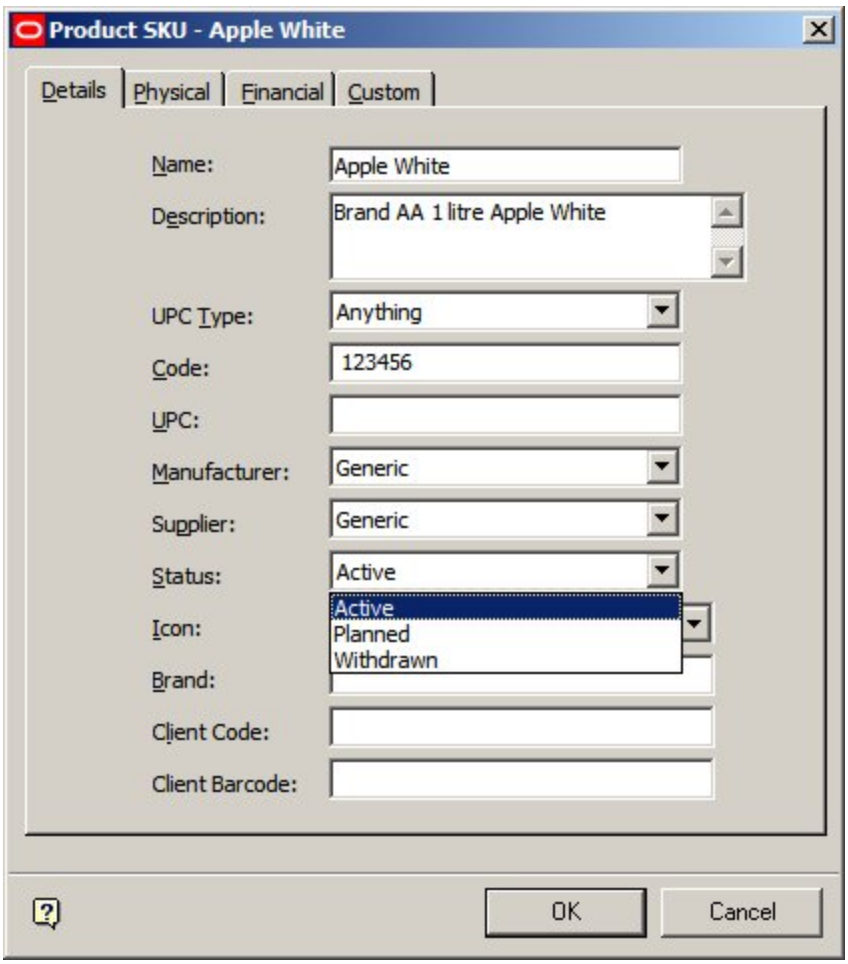


Products

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.

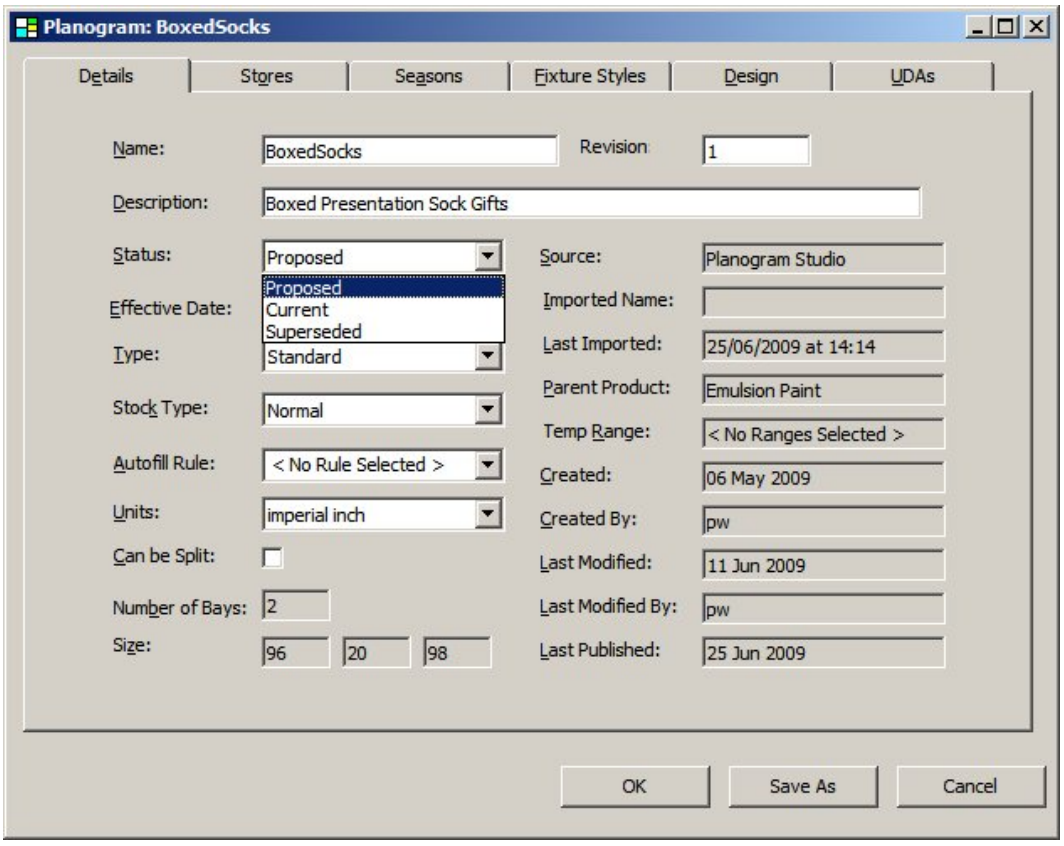


For items at SKU level, the status is set in the Product SKU dialogue box.



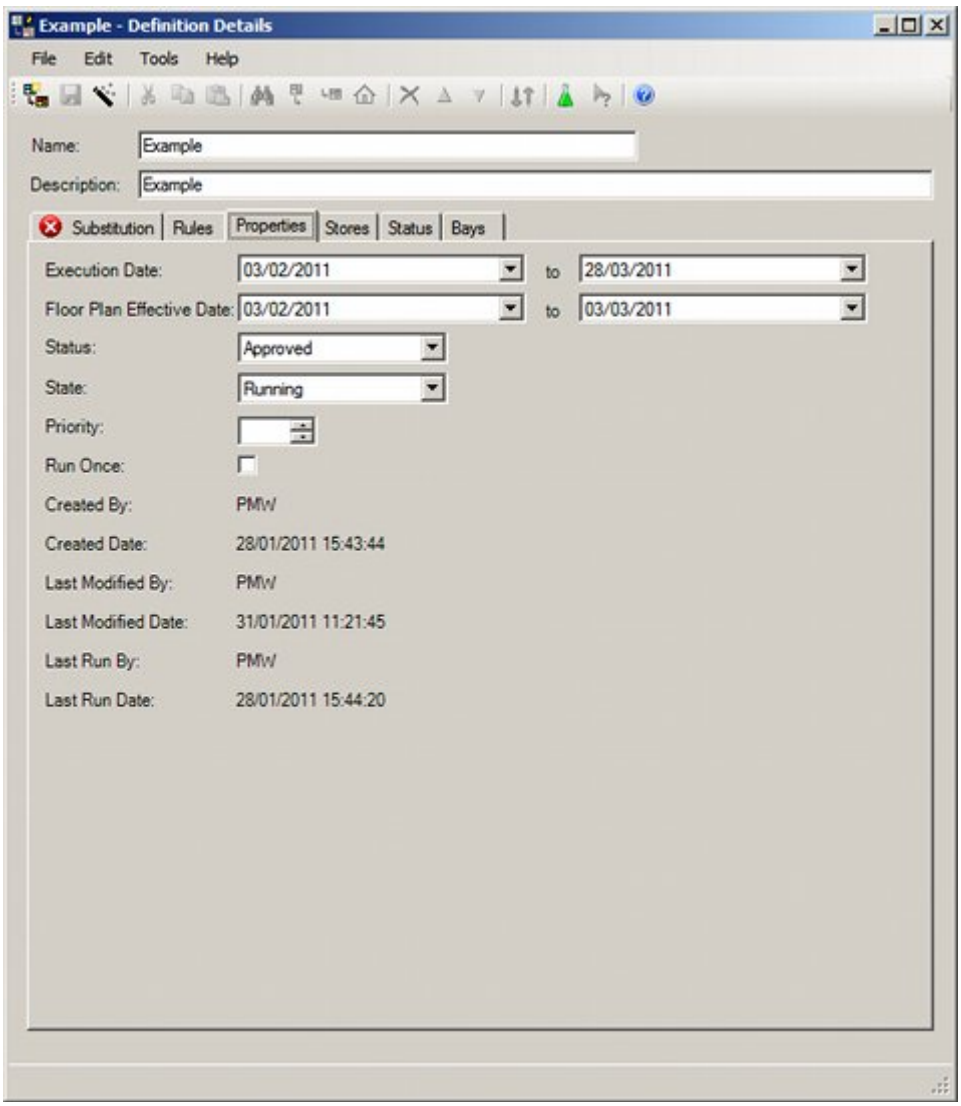
Planograms

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



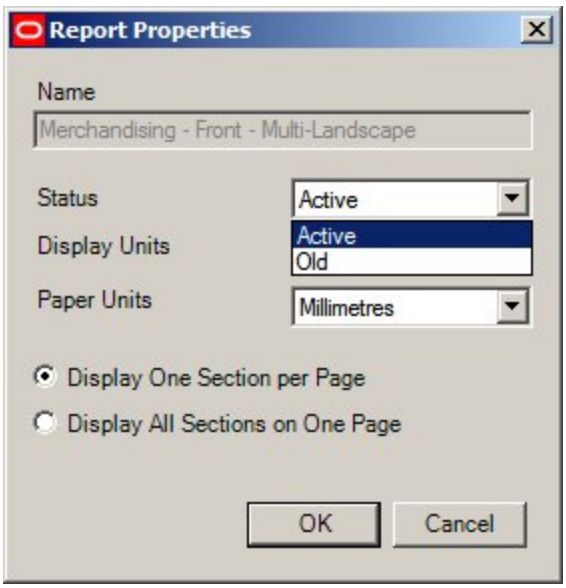
Planogram Substitutions

The status of a planogram substitution is set in the Properties tab of the Definition details dialog box in the Planogram Substitution module.



Reports

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



Statuses and In-Store Space Collaboration

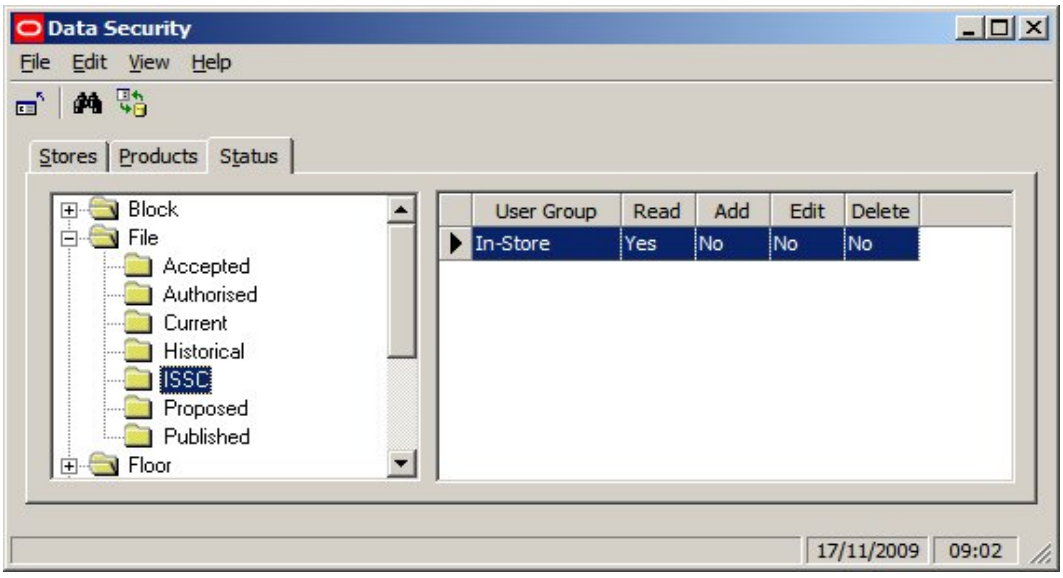
Overview

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 the Save dialog box when closing a floor plan 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.

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.

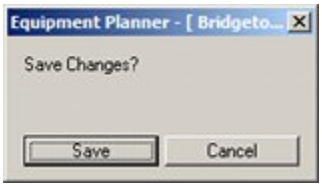


In the above example, users in the In-Store user group will be able to see files that have been set to ISSC status in Macro Space Managements' Store Manager module.

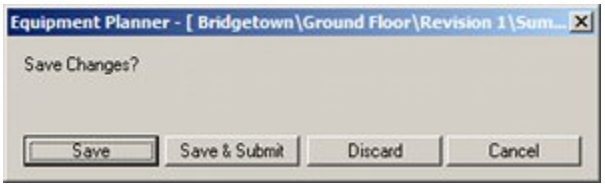
Effect of Accept or Reject in In-Store Space Collaboration

When a drawing is closed in In-Store Space Collaboration (after making changes) a Save dialogue box comes up. The nature of the dialogue box seen by a specific user will vary slightly depending on settings in the database.

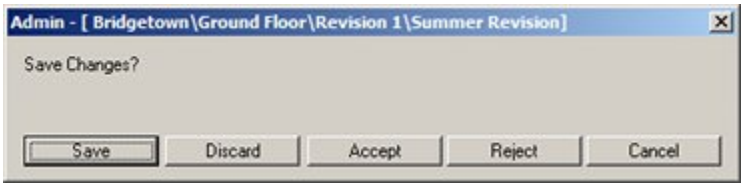
The most basic dialog box only has **Save** and **Cancel** options.



An alternative dialog box has a **Save & Submit** option. Clicking this button will change the current status of the floor to one further on in the status flow for the drawing.

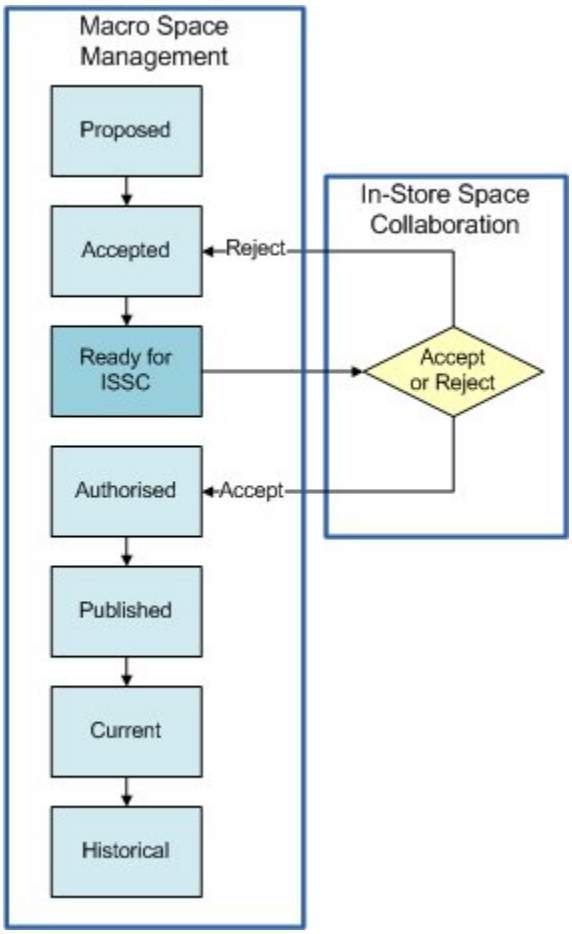


A further type of dialog box has **Accept** and **Reject** buttons. Clicking **Accept** will change the current status of the floor plan to one further on in the status flow for the drawing; clicking **Reject** will change the status of the floor plan back to a prior status.



Example of Use of Statuses

An example of using the statuses in this manner can be seen in the flowchart below.



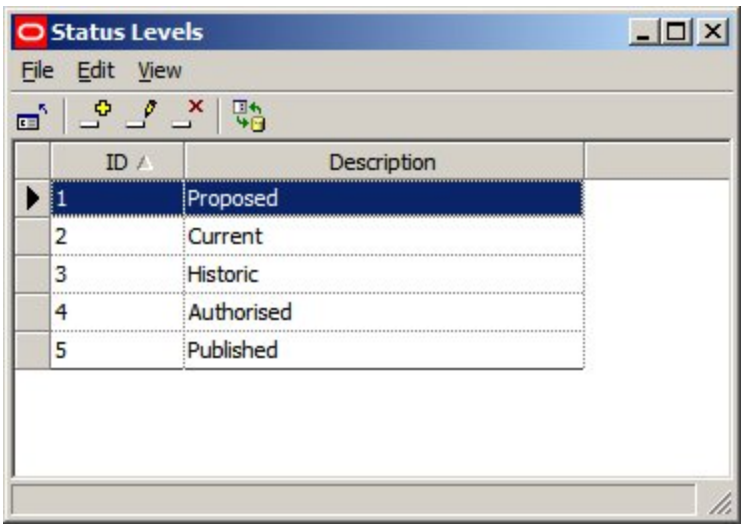
Planning starts in Macro Space Planning. The floor plan is only visible in Macro Space Management while it is at Proposed or Accepted status. When the status reaches Ready for ISSC, the floor plan becomes visible in In-Store Space Collaboration. After working on the floor plan, the use will be presented with the dialog box containing **Accept** and **Reject** buttons. Clicking **Accept** moves the status onto Authorized. Clicking **Reject** moves the status back to Accepted. This allows the ISSC user to take part in the store planning process.

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).

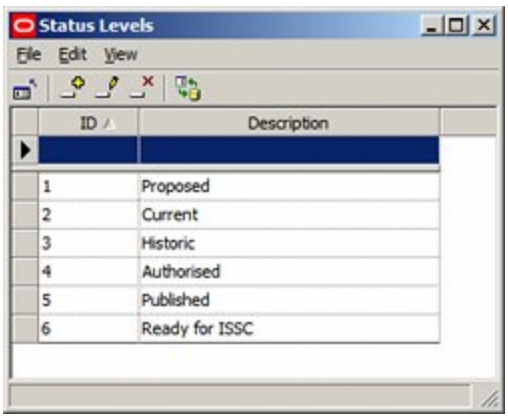
1. In some circumstances, manually changing the status of a Revision will change the status of the files within it.
2. In some circumstances, the status of files and revisions can be changed automatically by UpdateStatus.exe.
3. In some circumstances, the status of stores can be changed automatically 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:

1. Authorized
2. Published
3. Current
4. 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.

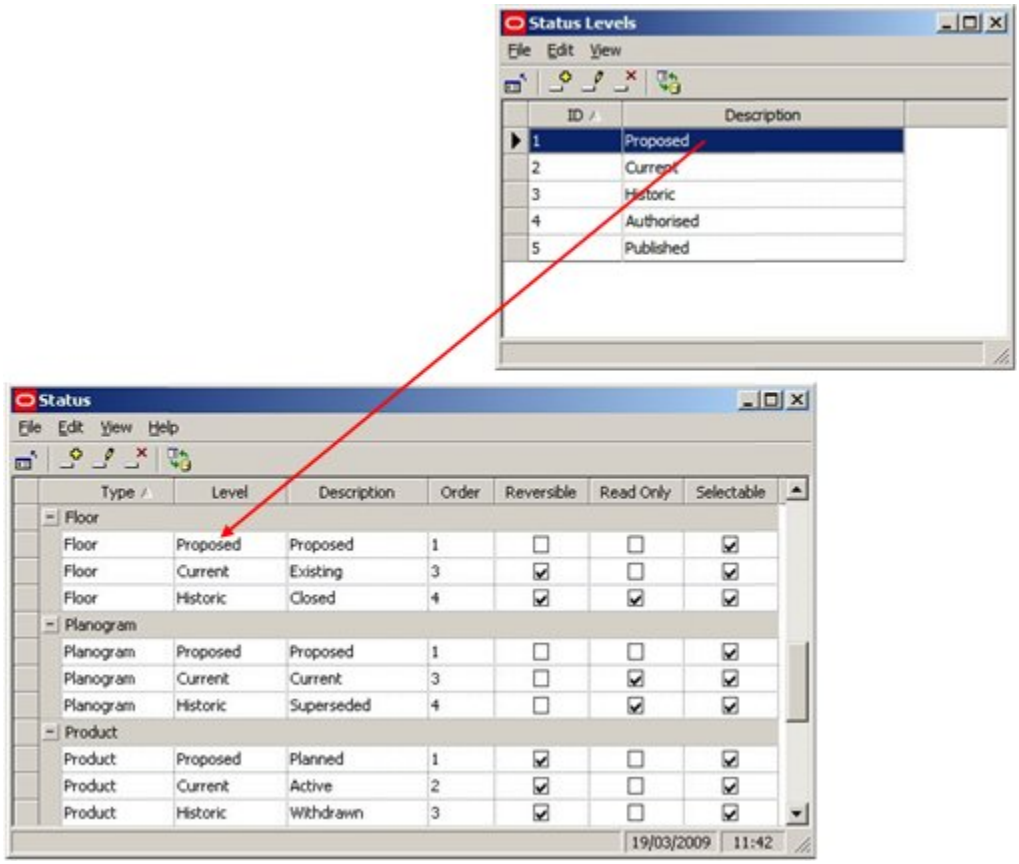


Accordingly, the generic description can be slightly modified - for example changing 'Proposed' to 'Proposal' - but the generic description associated with a particular Status Level ID should not be changed. For example associating 'Historic' status with Status Level ID 4 (rather than 3) will cause problems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

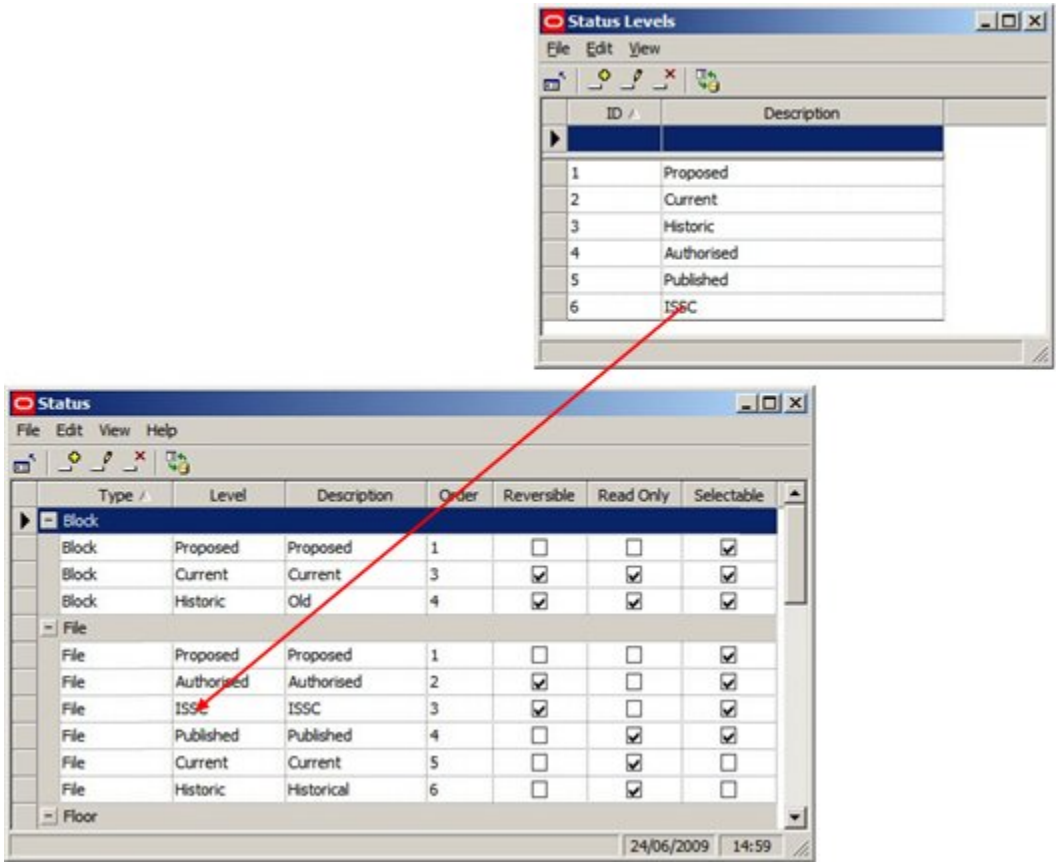
Custom Status Levels should therefore be added to the generic Status Levels and not substituted for them.

Using Status Levels

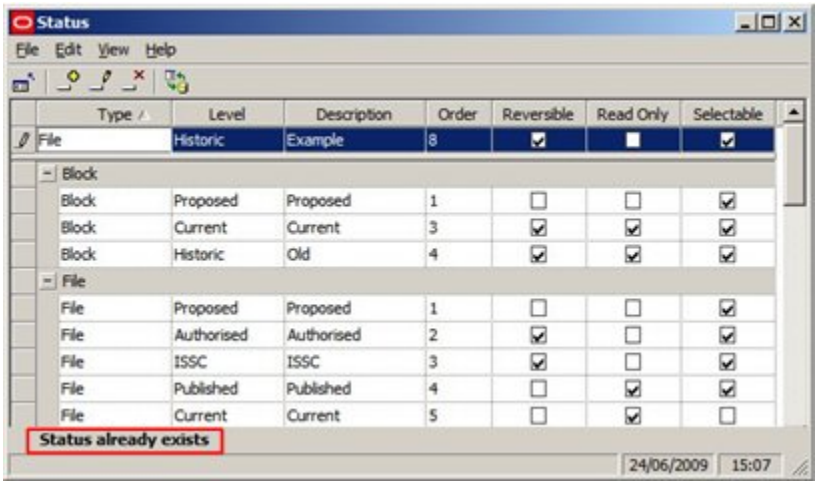
The **Descriptions in the Status Level dialogue box** appear within the Status dialogue box as the Level for a specific status. Each status must be associated with a specific and unique status level.



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.

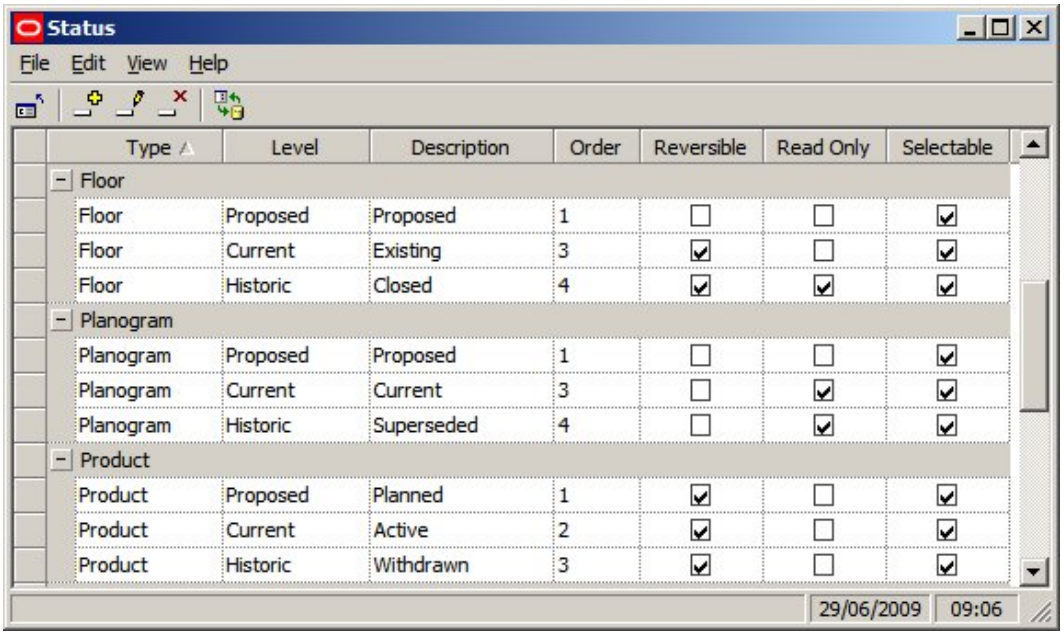


About Status Options

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:** 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.



Type	Level	Description	Order	Reversible	Read Only	Selectable
Floor						
Floor	Proposed	Proposed	1	☐	☐	☑
Floor	Current	Existing	3	☑	☐	☑
Floor	Historic	Closed	4	☑	☑	☑
Planogram						
Planogram	Proposed	Proposed	1	☐	☐	☑
Planogram	Current	Current	3	☐	☑	☑
Planogram	Historic	Superseded	4	☐	☑	☑
Product						
Product	Proposed	Planned	1	☑	☐	☑
Product	Current	Active	2	☑	☐	☑
Product	Historic	Withdrawn	3	☑	☐	☑

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 Authorized 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.

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'.

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.

Accept

The Status specified in the Accept column is the status that the original status will be changed to if a user:

1. Clicks **Accept** or **Submit** in the Save dialog box of In-Store Space Collaboration
2. When prompted to Submit or to Accept in Planogram Substitution

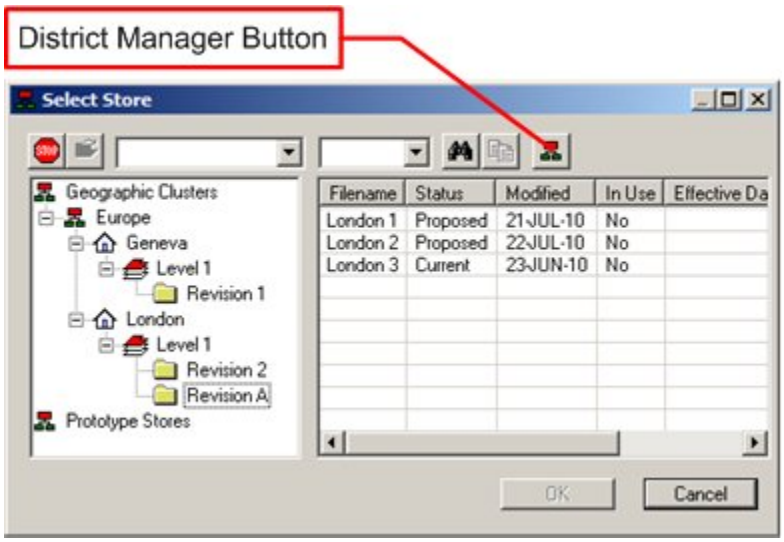
Reject

The Status specified in the Reject column is the status that the original status will be changed to if a User:

1. Clicks **Reject** in the Save dialog box of In-Store Space Collaboration
2. When prompted to Reject in Planogram Substitution

Approve

The Approve check box will enable and disable the existing functionality of listing of files for approval via the **District Manager** button in ISSC. This will only have an effect for file statuses.



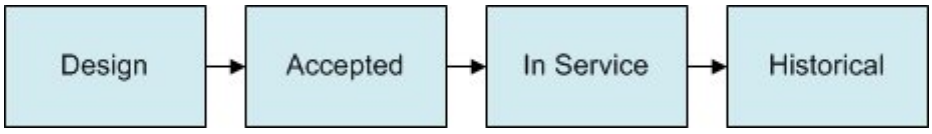
Each file status that has the Approve check box ticked will appear in the list of available files in the Select Store dialog box when the district Manager button is clicked.

Code

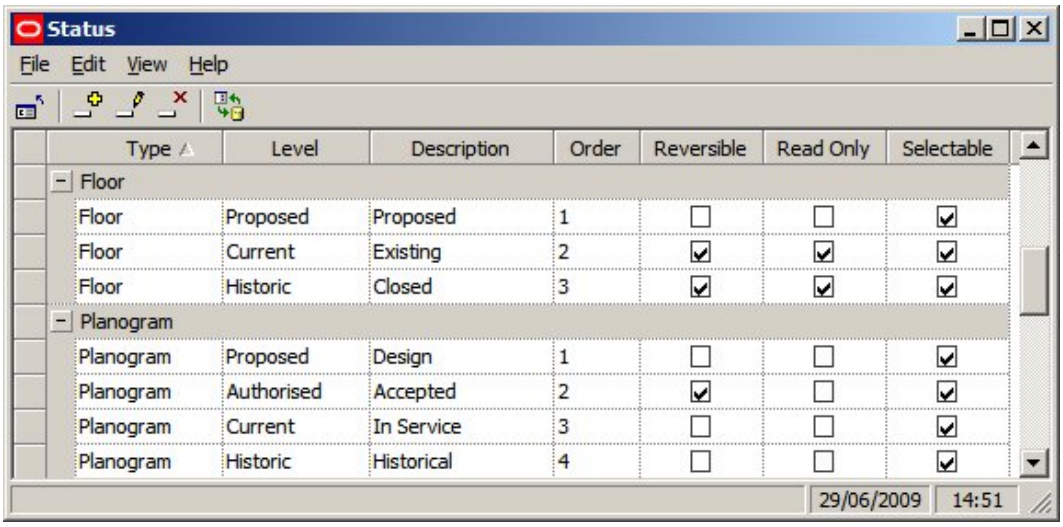
The code column allows uses Administrators to enter any status codes in use in third party software. When data is imported from that software, the code column can be used as a 'look-up' to map the third party status to its Macro Space Management equivalent.

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:

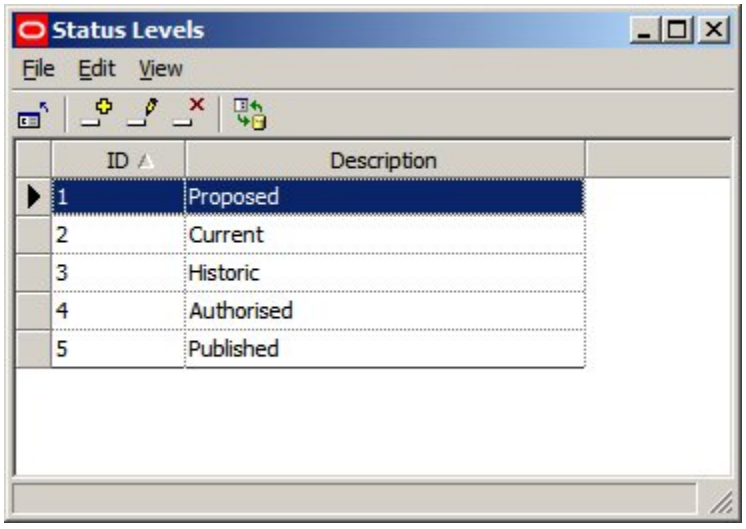


Type

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 Design description, the Authorized 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 Authorized 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.

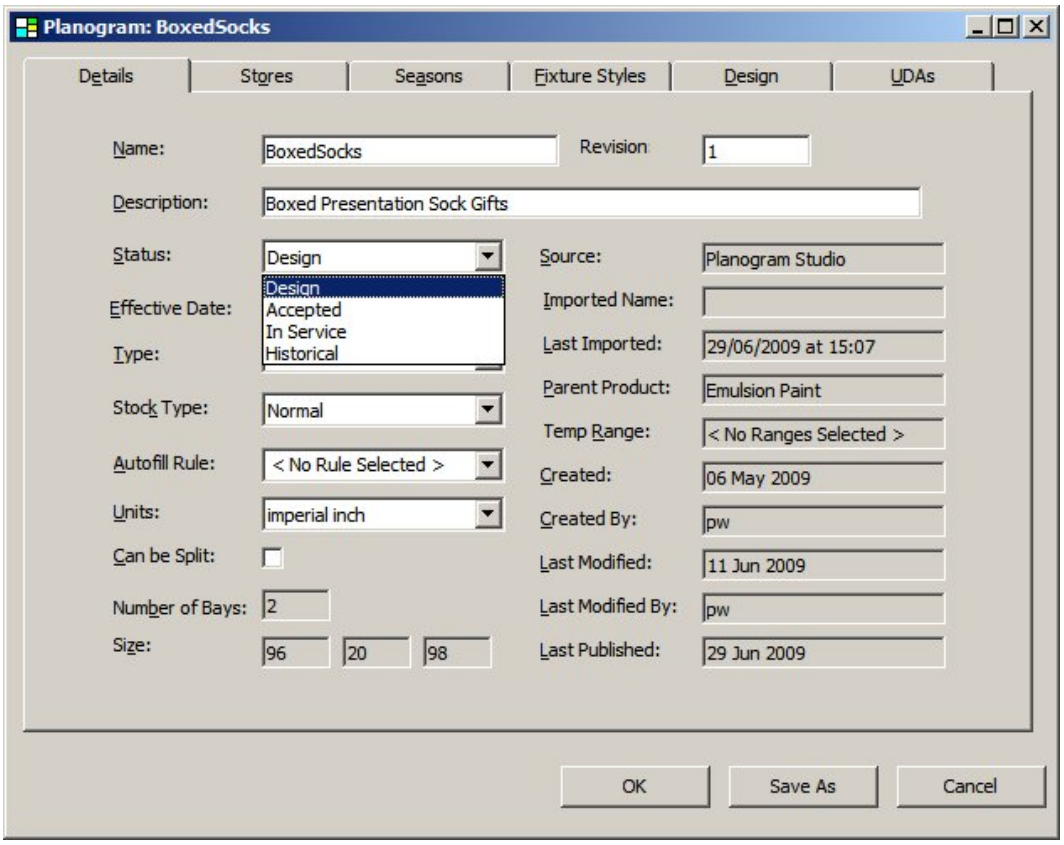
Read Only

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.

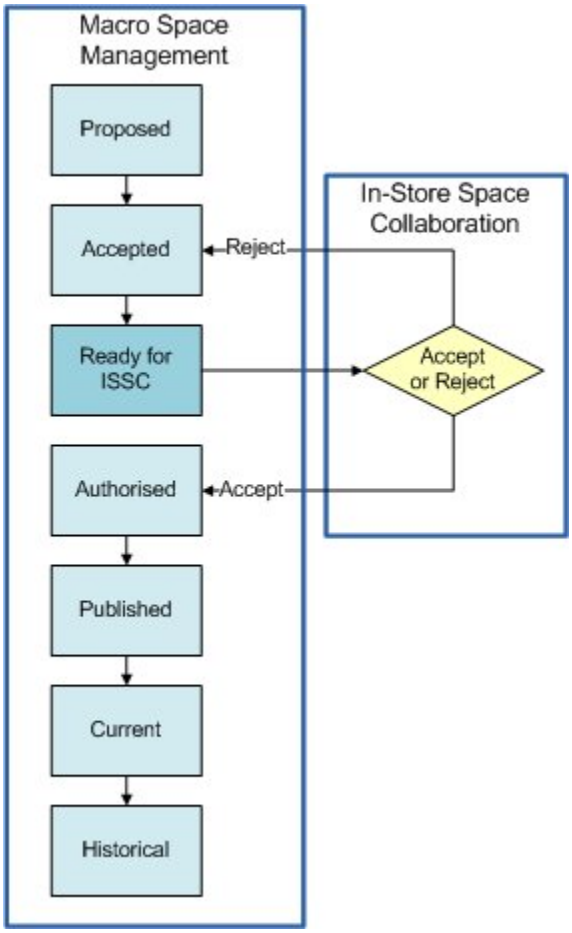
Selectable

Statuses have to be 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.



Advanced Example of Configuring Statuses

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

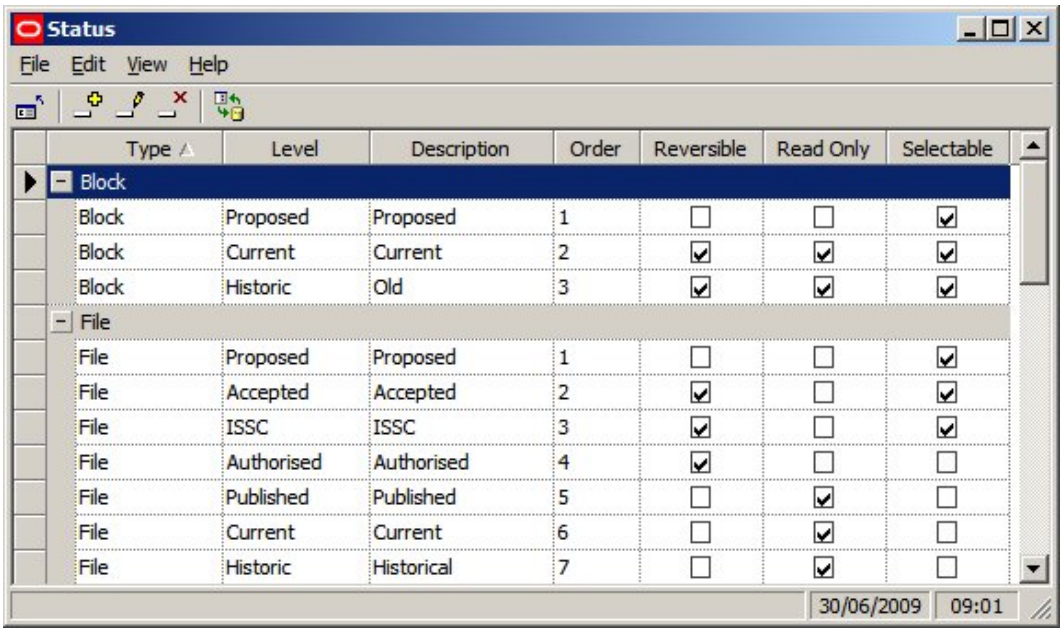


Here the file has three statuses that are set in Macro Space Management's Store Manager Module. The third of these statuses (ISSC) is also visible in In-Store Space Collaboration, where users can click **Accept** or **Reject** on exiting the drawing.

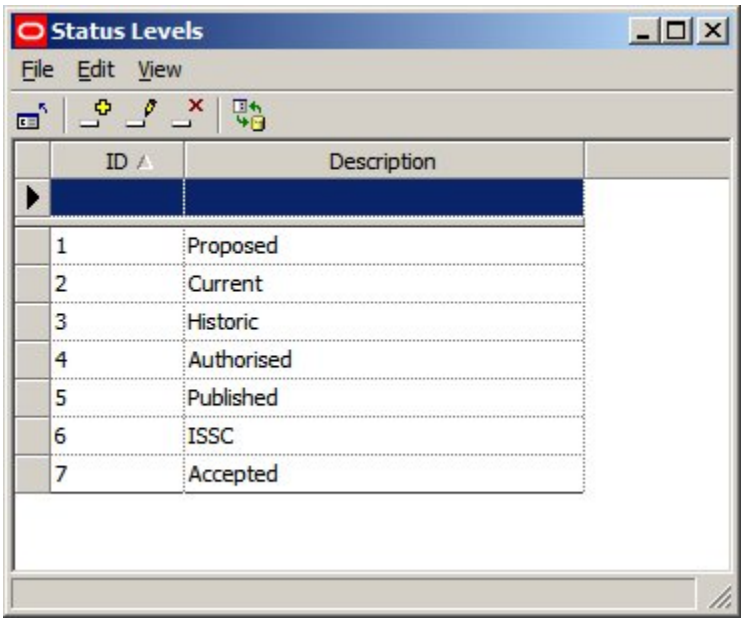
Clicking **Accept** in In-Store Space Collaboration will change the status to authorized; clicking **Reject** in In-Store Space Collaboration will change the status back to Accepted.

When the drawing reaches Authorized 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:



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 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, and so on.

Note: care was taken to map the Authorized, 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, and so on.

Reversible

Several statuses have been made reversible (Authorized, ISSC and Accepted). This allows users to change the status back to a 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.

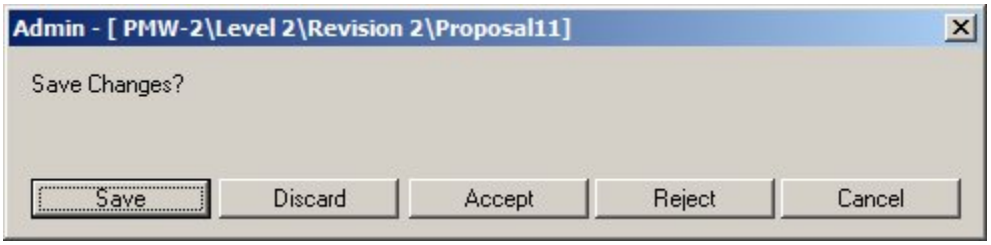
Selectable

Statuses have to be 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.

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

Accept

The Status specified in the Accept column is the status that the original status will be changed to if a User clicks **Accept** or **Submit** in the Save dialog box of In-Store Space Collaboration. This is set to 'Authorized'.

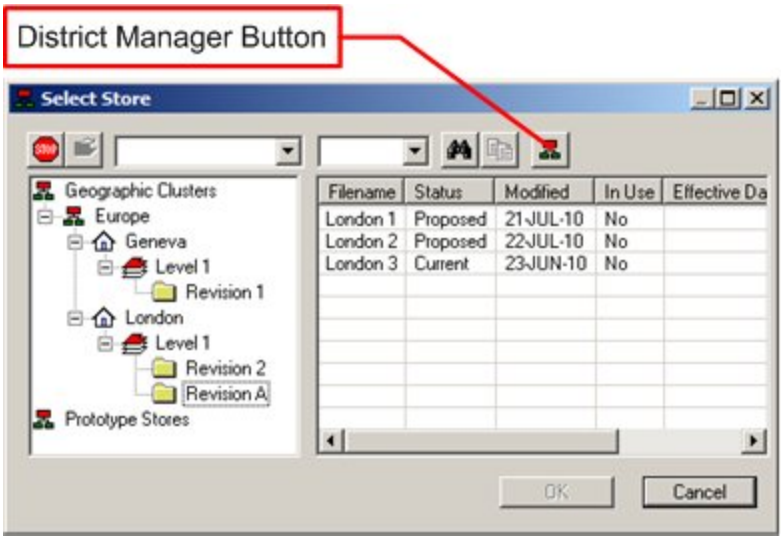


Reject

The Status specified in the Reject column is the status that the original status will be changed to if a User clicks the Reject button in the Save dialog box of In-Store Space Collaboration. This is set to 'Accepted'.

Approve

The Approve check box will enable and disable the listing of files for approval via the District Manager button in ISSC.



Any status for files that should appear when the District Manager button is clicked should have the Approve checkbox ticked.

Note: The District Manager button is set to disabled by default. It can only be enabled directly in the database. This is done by setting the MUG_PERMISSION_MASK to 1 for the pertinent User Group ID (USG_ID) for MSC_ID = 7243 in the AVTTB_MESSAGE_USER_GROUP_LINK table.

Code

The code column allows uses Administrators to enter any status codes in use in third party software. When data is imported from that software, the code column can be used as a 'look-up' to map the third party status to its Macro Space Management equivalent.

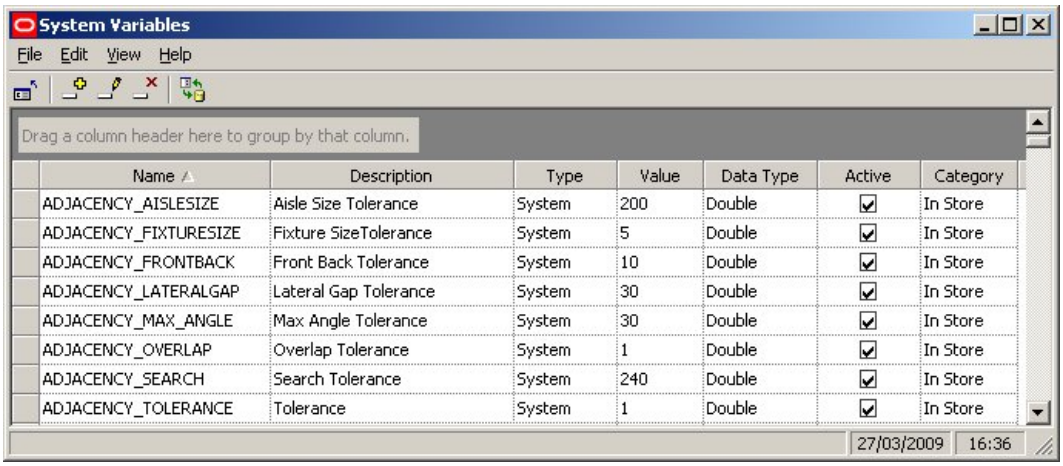
System Variable Overview

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, and so on.

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.

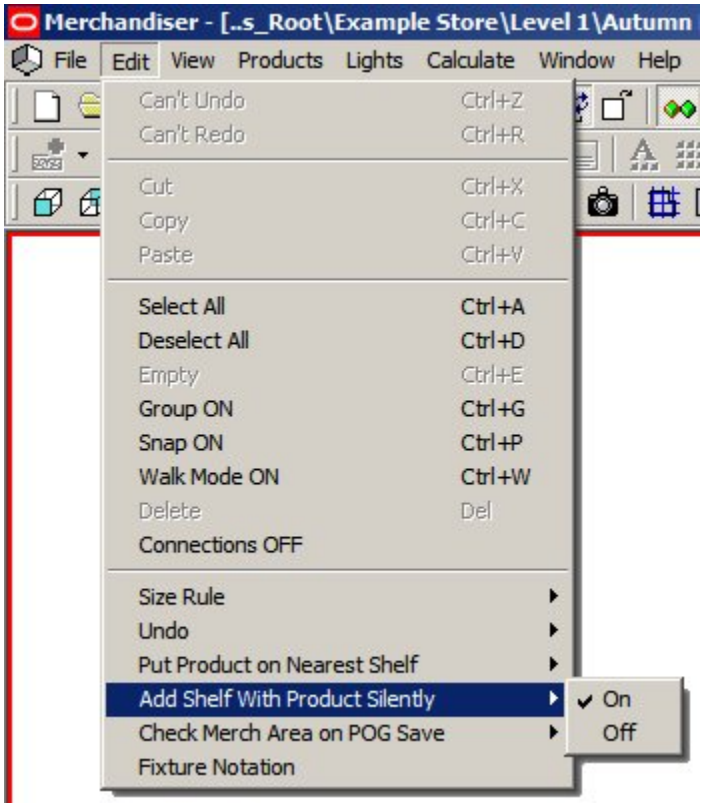


System Variables can be changed in several ways.

- Through dialogue boxes in the software
- Through the Configuration Module
- Through the Administration Module

Through the Software

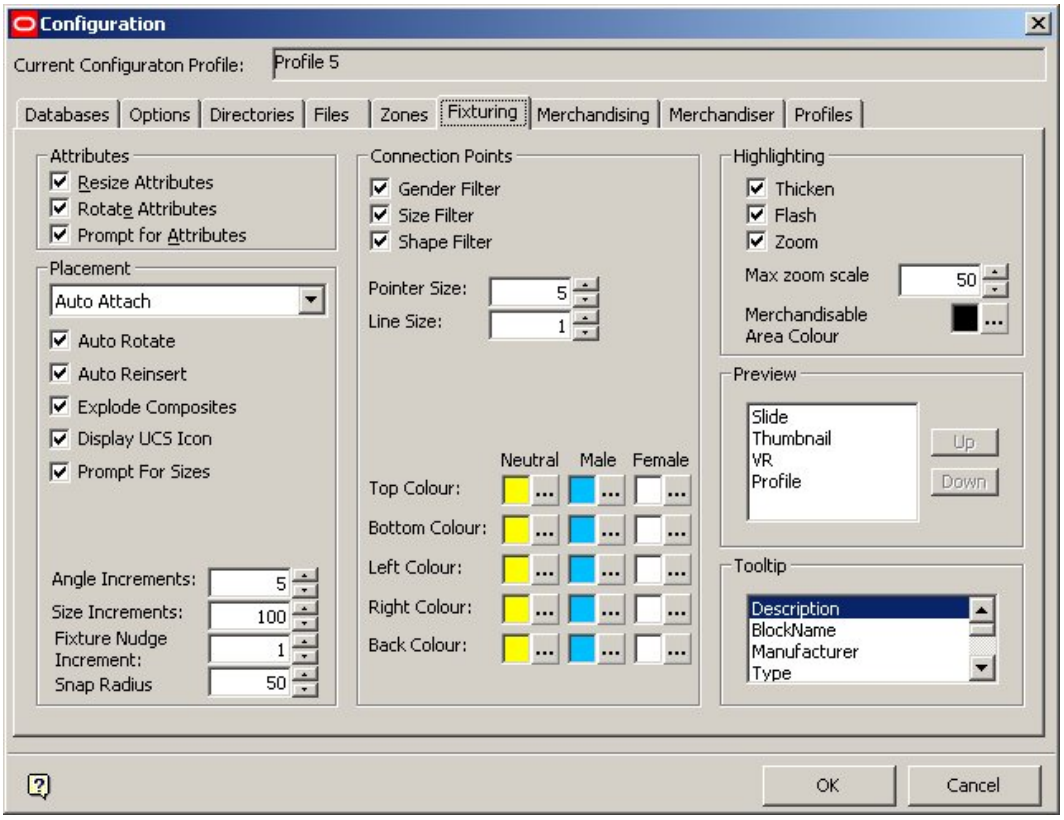
System variables can be changed through the software. This may be explicit, as when the user deliberately selects a value in a dialogue box. It may also be implicit, as some system variables are used to hold the values of (for example) the positions and sizes of dialogue boxes.



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.

Through the Configuration Module

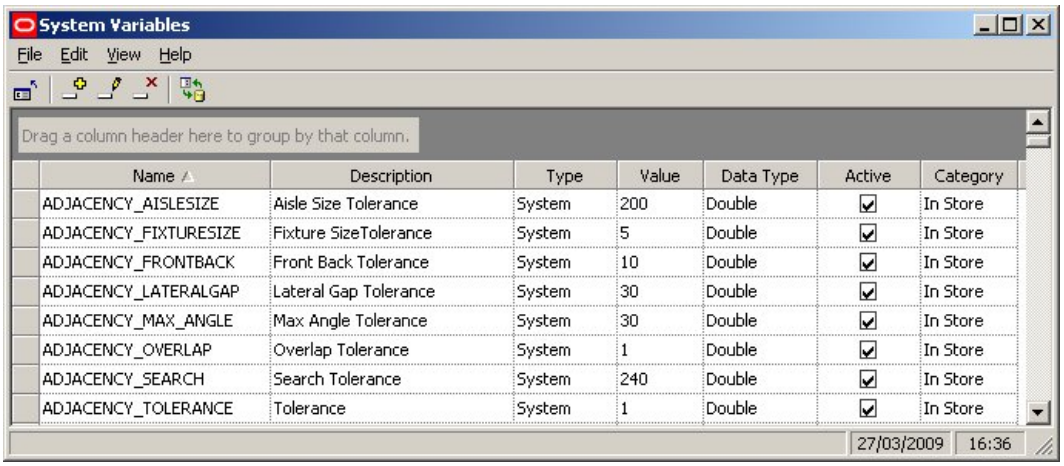
The Configuration Module allows a series of settings to be customized by the user. Some are saved as system variables.



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.



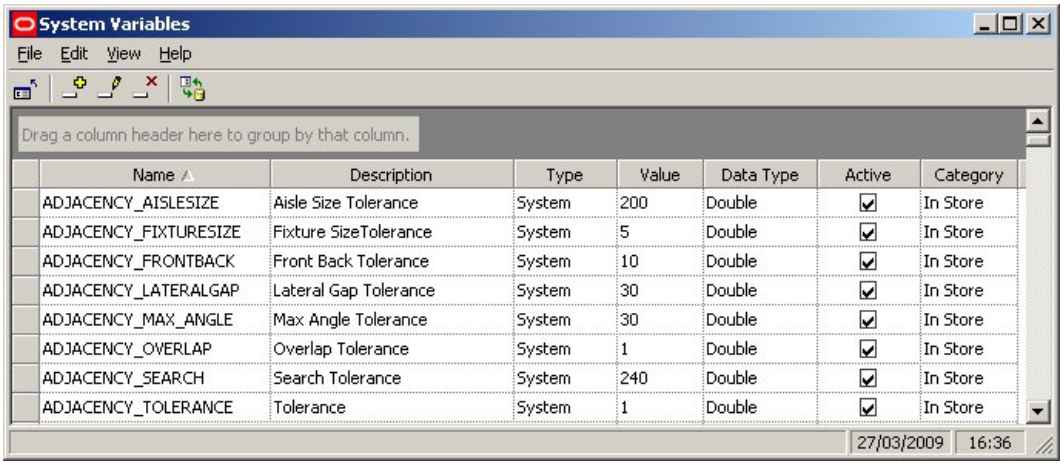
This allows a user with Administrator's privileges to change the value of a system variable.

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 Variable Options

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



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 drop down 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.

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.

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 coordinates 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 -9×10^{18} to 9×10^{18}.
Single	Any number (1.23, 2.2345) in the range -3×10^{38} to 3×10^{38}.
Double	Any number (1.23, 2.2345) in the range -2×10^{308} to 2×10^{308}.
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' preference. 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.

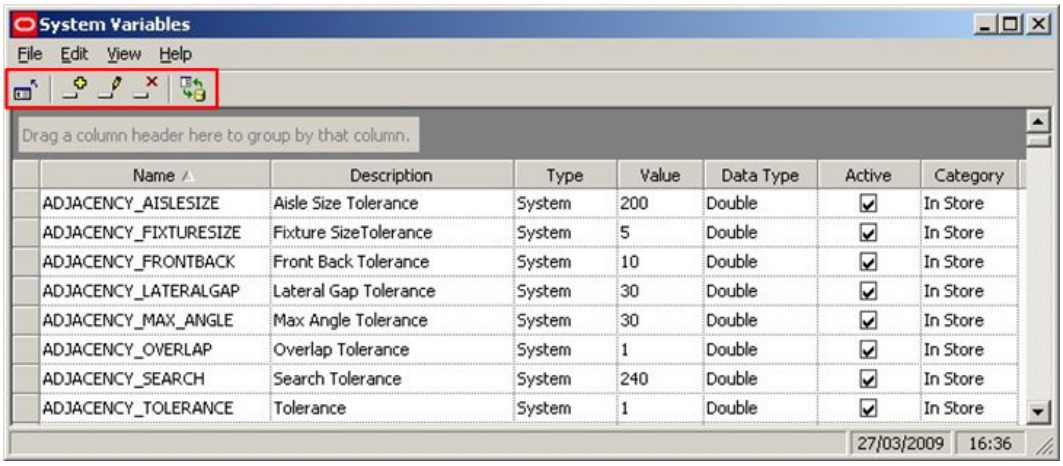
SVT_ID	SVT_NAME
0	AutoCAD
1	Store Manager
2	Merchandising
3	Fixturing
4	Zoning
5	Security
6	Admin
7	Report Studio
8	Fixture Studio
9	Product Studio
10	Planogram Studio
11	In Store
12	RFConfig
13	Report Designer

Adding, Editing and Deleting System Variables

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

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.



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.

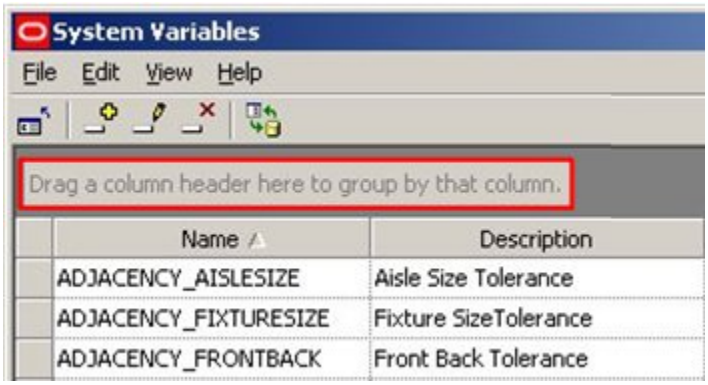
Deleting System Variables

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

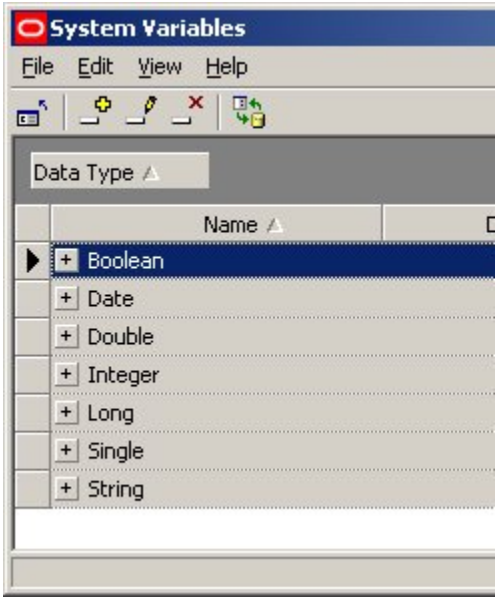
> **Note**: Deleting keys system variables referenced by the software may cause the system to suffer a critical failure.

Grouping by Columns

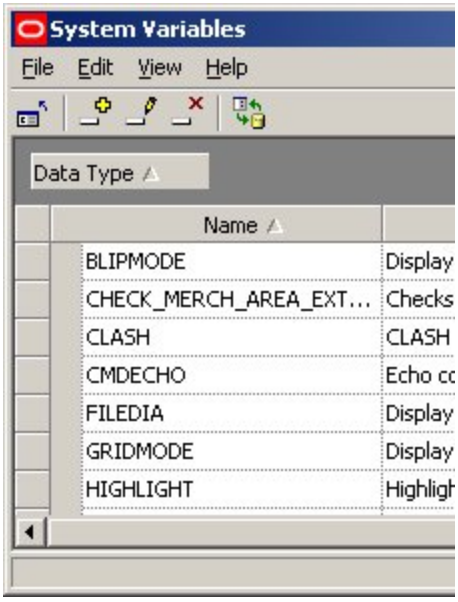
The user has the option of **grouping** system variables together by column header types. To do this, drag a column header into the indicated space at the head of the dialogue box.



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.



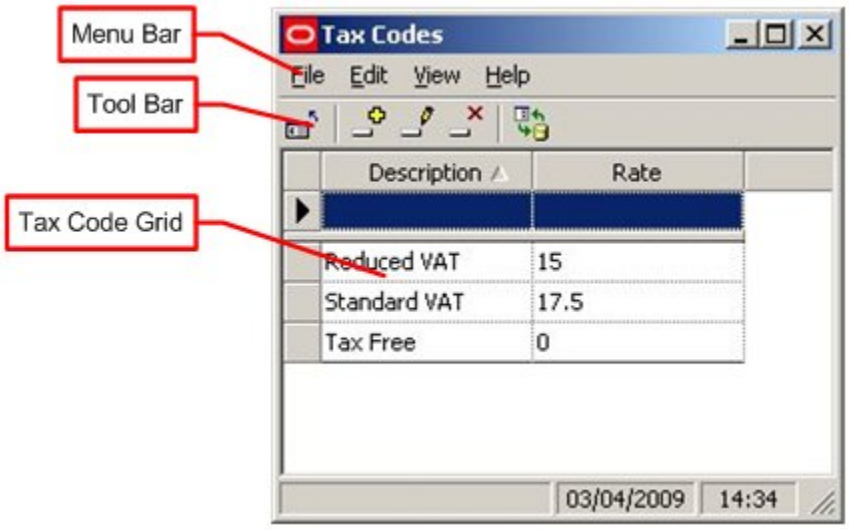
To return to the default display, just drag the selected column header out of the space at the head of the dialogue box.

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.



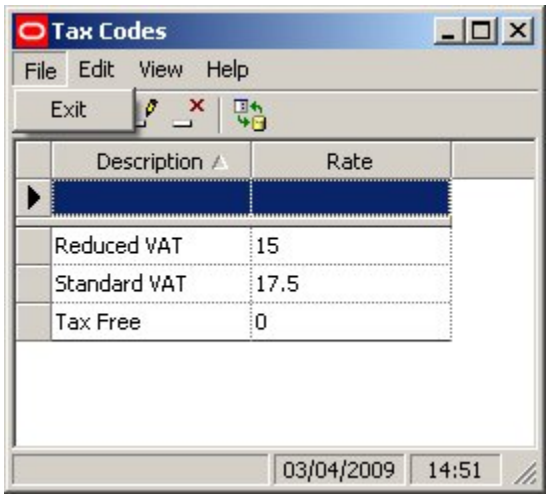
Pull down menus give access to various Tax Code options.

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

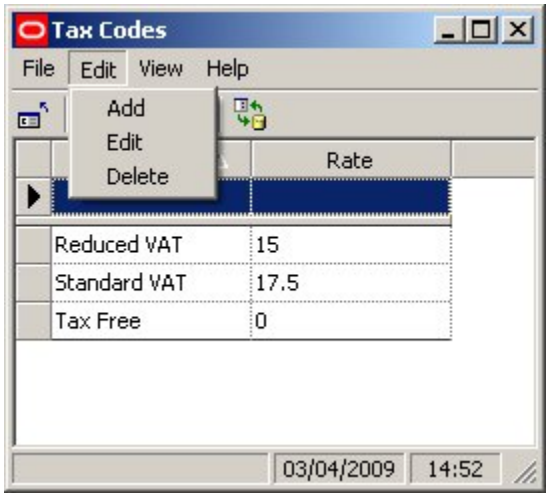
The Tax Codes are displayed in the **Tax Code Grid**.

Menus and Toolbars

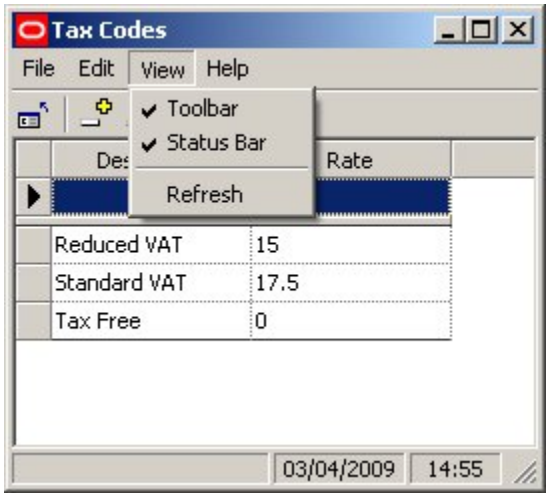
The **File Menu** allows users to exit the option.



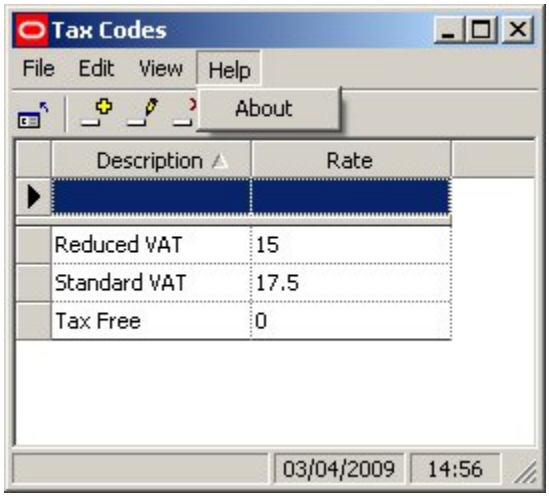
The **Edit Menu** allows users to Add, Edit or Delete Tax Codes



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.

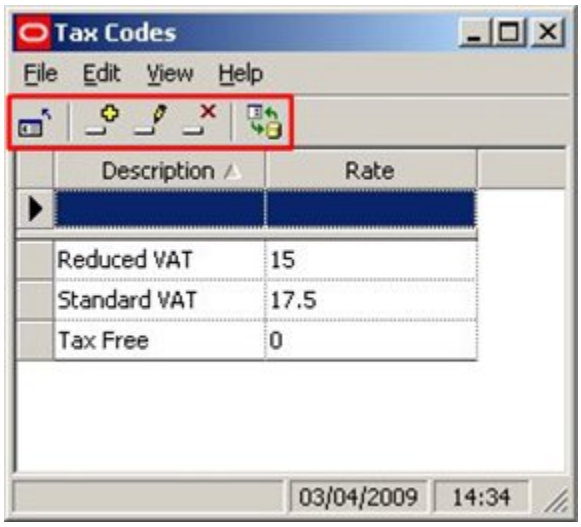


The Help Pull Down Menu



Clicking on About displays the current version number of the software.

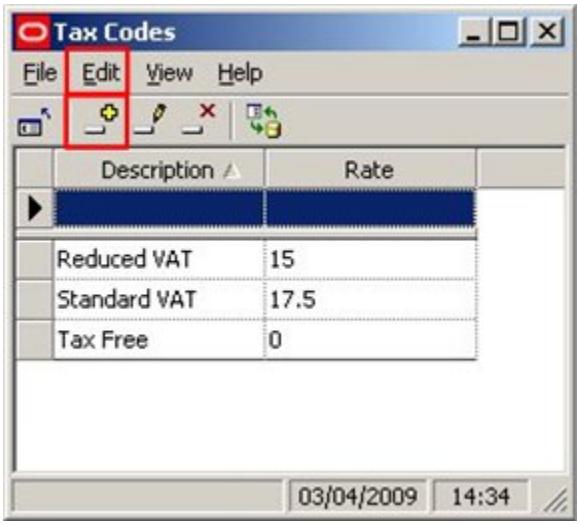
The **Toolbar** gives access to varying Tax Code options



Icon	Description
	Exit
	Add Tax Code
	Exit Tax Code
	Delete Tax Code
	Refresh

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.

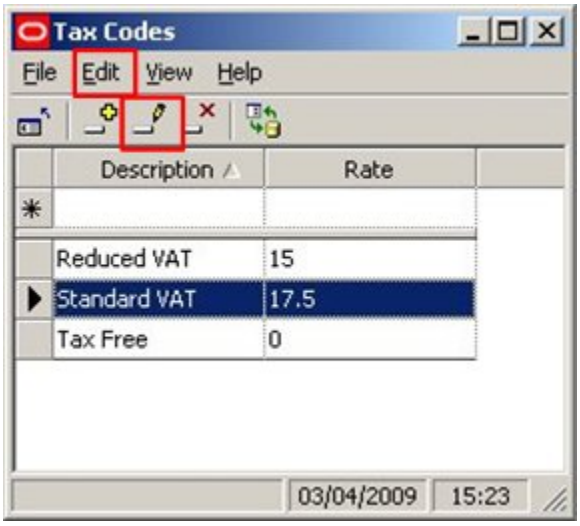


Type a description into the Description text box then click in the Rate text box and enter the required Tax Rate.

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.

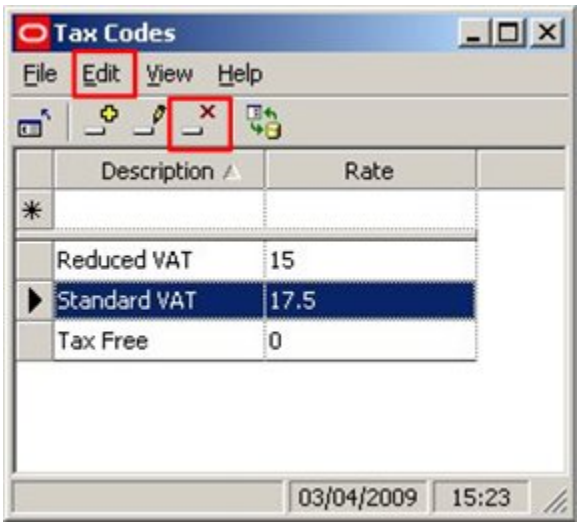
Editing the Tax Codes can be done by clicking in the relevant box in the Tax Code grid, then typing in the amended values. Alternatively, highlight the relevant tax code and use the edit options in the edit menu or in the toolbar.



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.



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

Refreshing and Exiting

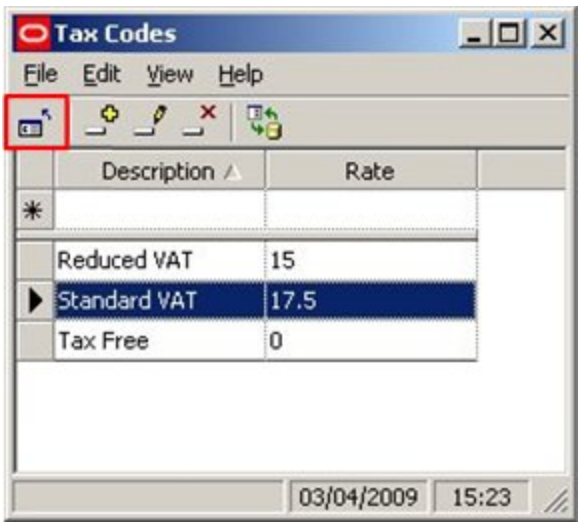
Refreshing is of use when multiple people are using the same option in Admin.



Clicking on Refresh 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.

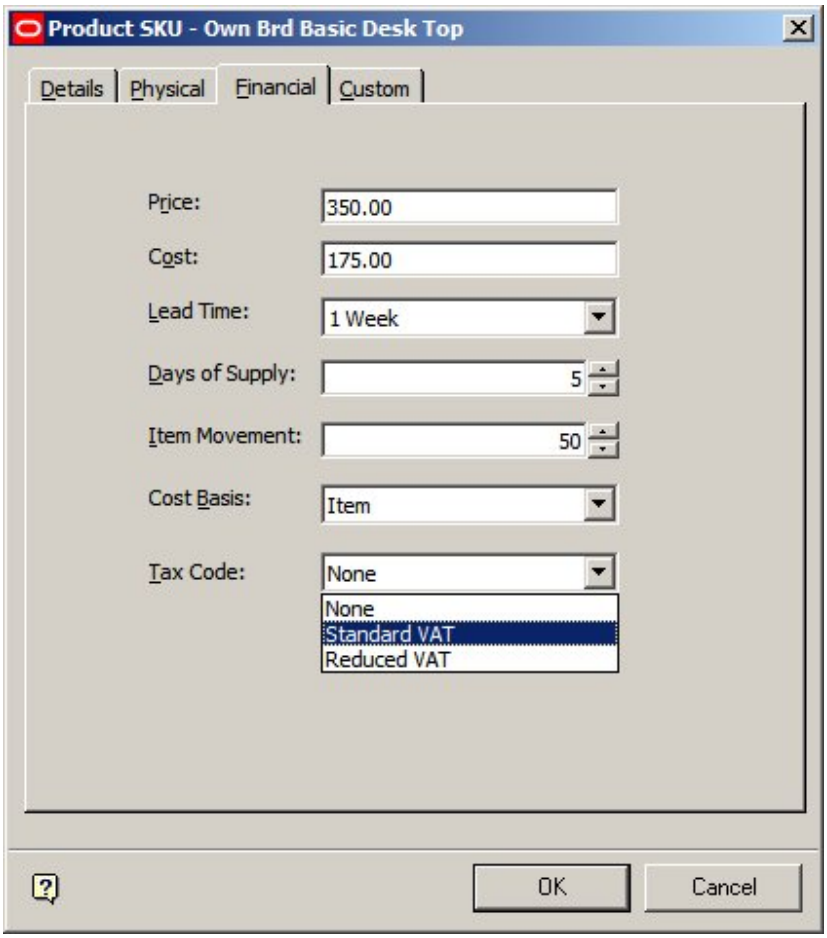
The **Exit option** will cause users to exit this part of the Admin Module.



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



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.

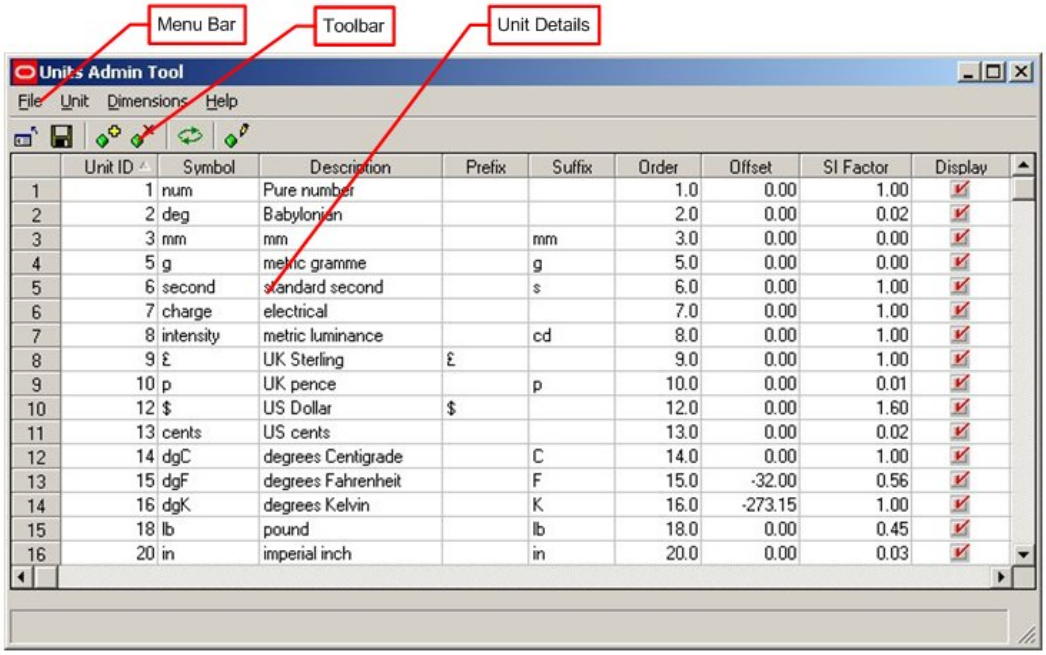
The AVTTB_TAX_CODES table must be populated before Tax Codes can be assigned to Products (AVTTB_PRODUCT_ITEM table)

Units

Overview of Units Option

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.



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

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;

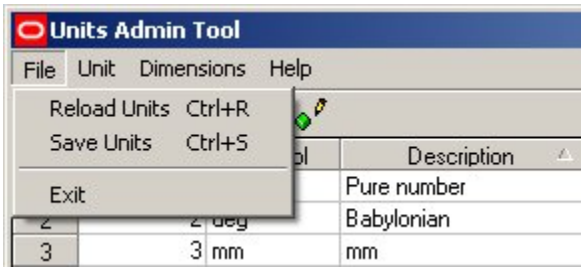
Name	Symbol	Measurement
Metre (Meter)	m	Length
Kilogram	Kg	Weight
Second	s	Time
Ampere	A	Electric current
Kelvin	K	Temperature
Mole	mol	Quantity of matter
Candela	cd	Light intensity

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

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

File Pull Down Menu

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



Reload Units

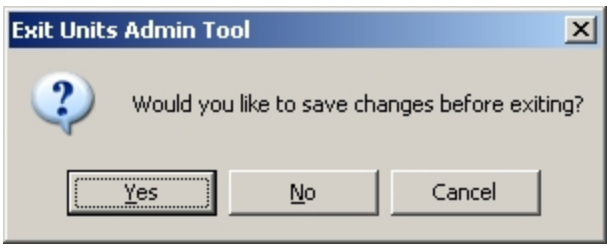
This option allows users to reload the display grid with the values for the units when they were last saved. This will overwrite any alterations made to the values of the units but not saved.

Save Units

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

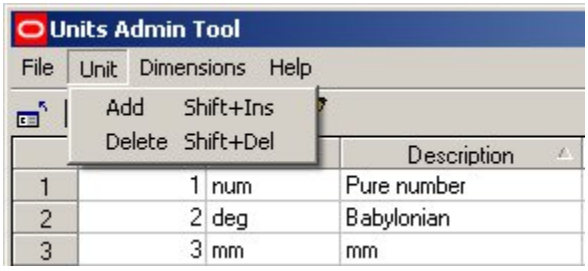
Exit

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



Units Pull Down Menu

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



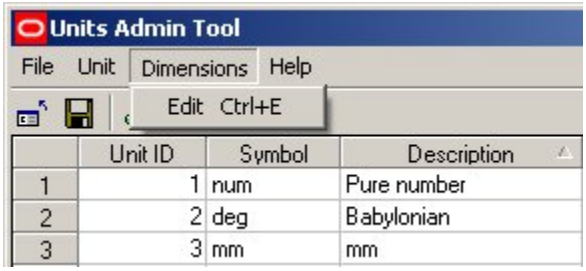
To add a unit, click **Add**. This will add a new line in the table of units.

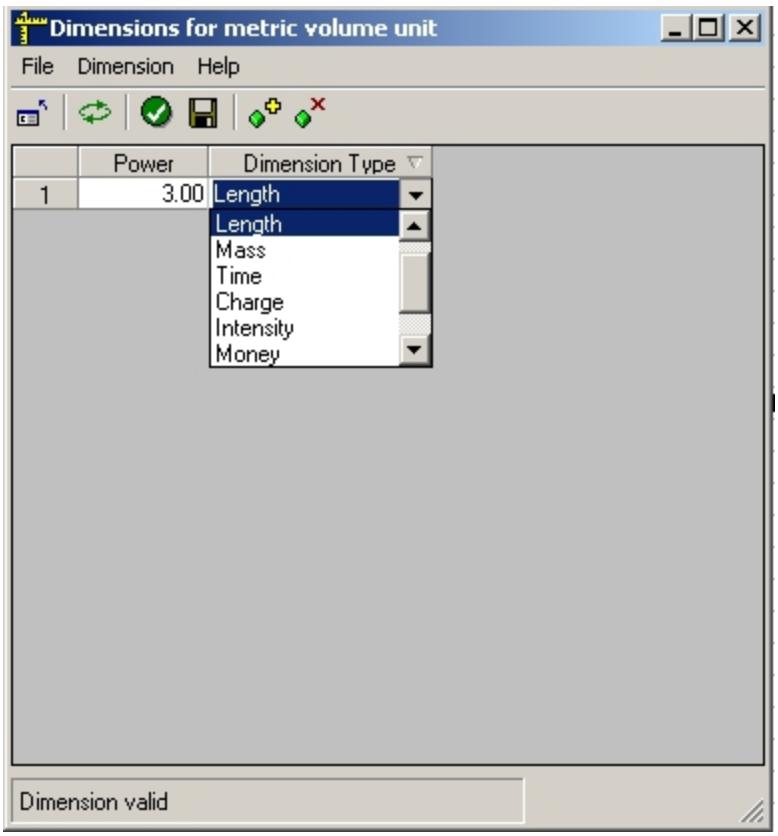
To delete a unit, highlight a line and click **Delete**. The Unit will then be deleted from the table of units.

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

Dimensions Pull Down Menu

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





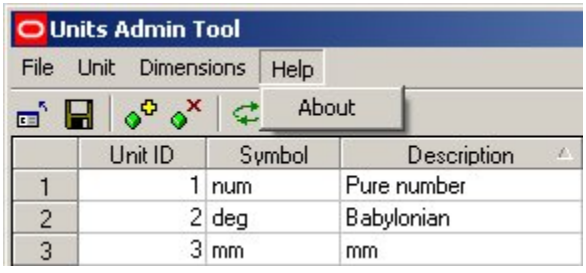
When entering a new dimension, it has to be related to the basic dimensions of Number, Length, Mass, time, Charge, Intensity, Money, or Angle.

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

Basic Dimension	Power	Result
Length	1	Length
	2	Area
	3	Volume

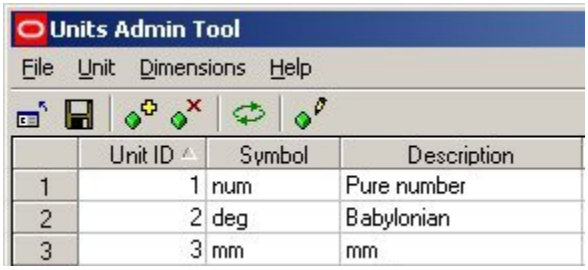
Help Pull Down Menu

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.



Toolbar

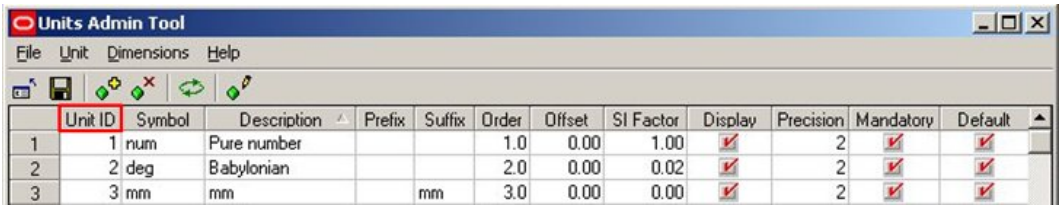
The **Toolbar** allows users to access varying options affecting the addition, editing, deletion and saving of units.



Icon	Description
	Exit
	Save
	Add Unit
	Delete unit
	Refresh
	Edit Unit

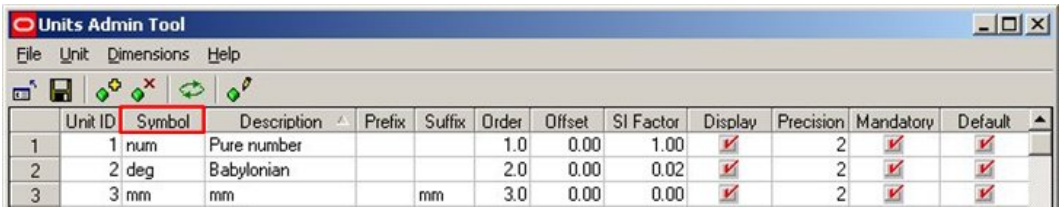
Unit Details

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

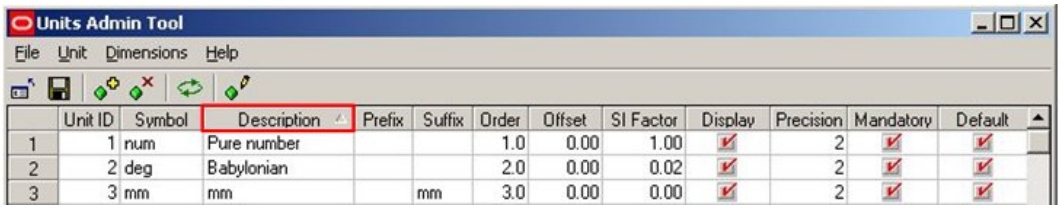


It is not editable by the user.

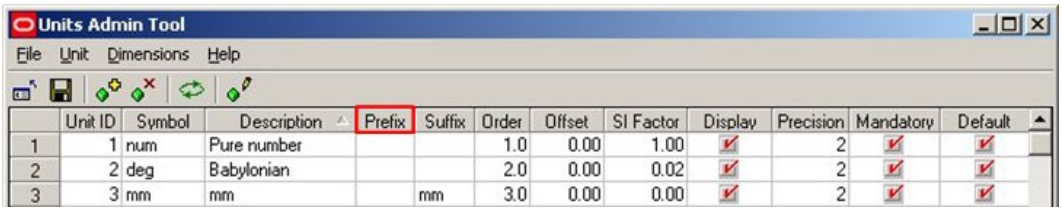
The **Symbol** is used in Reports, and so on.



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

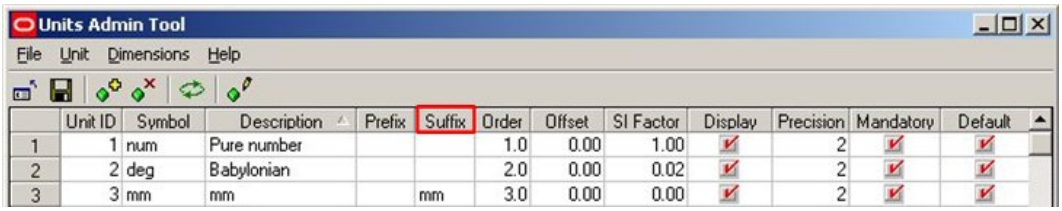


Prefixes are used before units.



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 and so on.



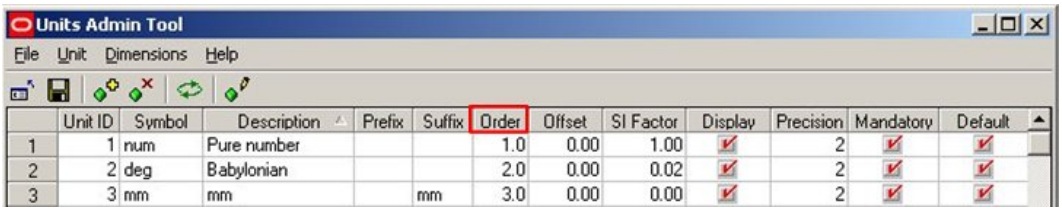
The suffix for Kilograms is Kg so weights will be displayed as follows:

5 Kg, 10.7 Kg, 0.3 Kg

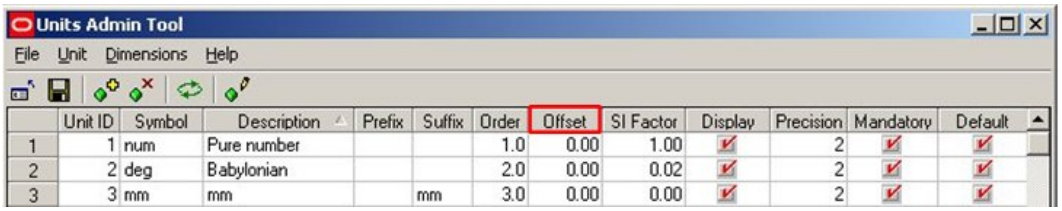
Similarly the suffix for meters is m so lengths will be displayed as follows:

5 m, 10.7m, 0.3 m

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



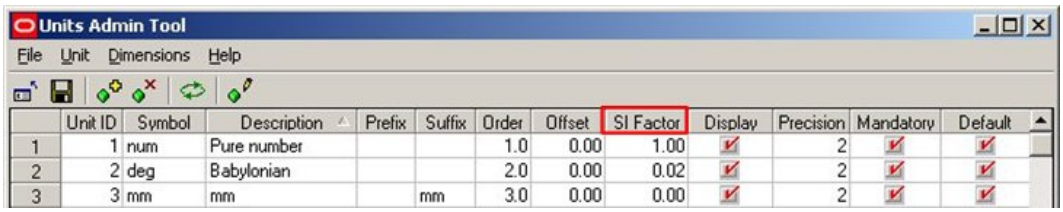
The **Offset** Option is used where the unit is related to a base dimension by a y = mx + c relationship. It represents the constant c in the equation.



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 x 0.555) -32

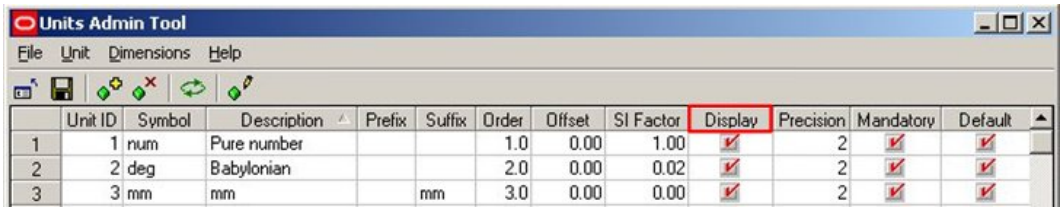
The **SI Factor** is used where the unit is related to a base dimension by a y = mx + c relationship. It represents the coefficient m in the equation.



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

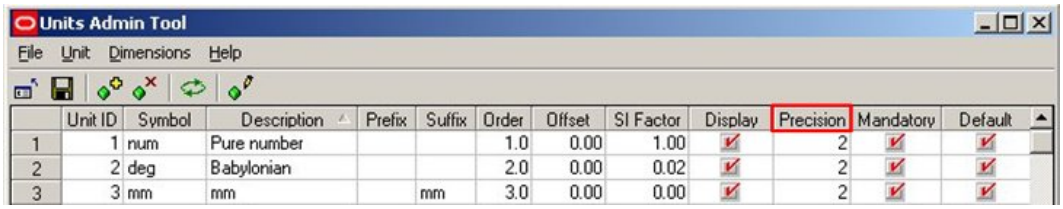
As another example, there are 39.37 inches to the meter, so the SI factor is 0.0254: 1 in = 0.0254 meters.

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.



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

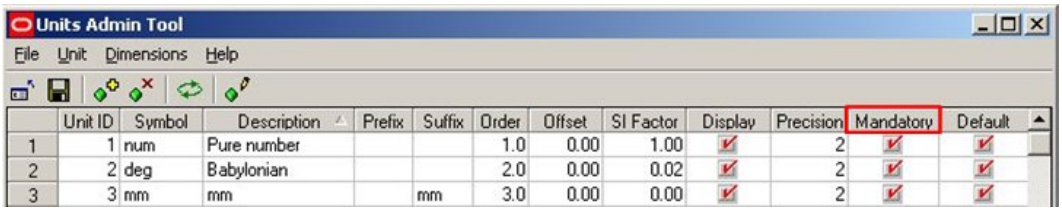
Precision determines the number of decimal places that will display when the value of a unit is shown.



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.

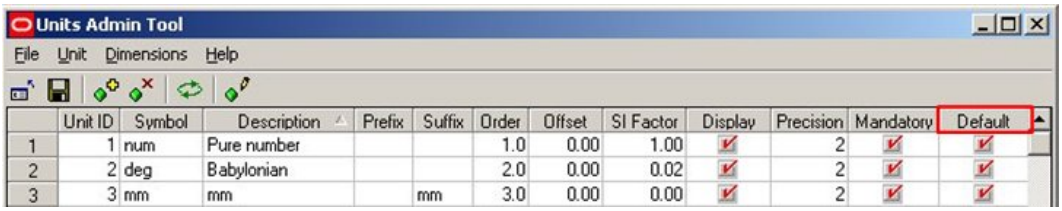


	Unit ID	Symbol	Description	Prefix	Suffix	Order	Offset	SI Factor	Display	Precision	Mandatory	Default
1	1	num	Pure number			1.0	0.00	1.00	☑	2	☑	☑
2	2	deg	Babylonian			2.0	0.00	0.02	☑	2	☑	☑
3	3	mm	mm		mm	3.0	0.00	0.00	☑	2	☑	☑

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

> 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	☑	2	☑	☑
2	2	deg	Babylonian			2.0	0.00	0.02	☑	2	☑	☑
3	3	mm	mm		mm	3.0	0.00	0.00	☑	2	☑	☑

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 centimeters, kilograms and degrees centigrade.

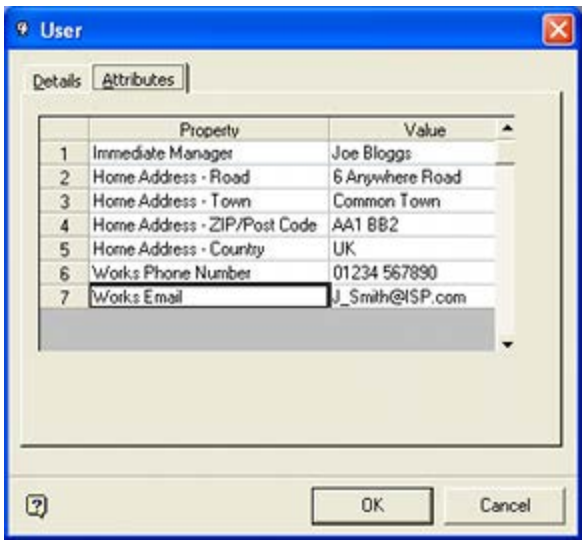
> Note: In current releases of Macro Space Management it is possible that the Mandatory and Default column headings have been swapped.

User Defined Attributes

Overview of User Defined Attributes

Overview of UDAs

User Defined Attributes (UDAs) allow a Macro Space Management Administrator to configure customizable fields for Users, Stores, Files, Fixtures, Products and Planograms. These fields can then be populated with data by import or by manual entry.



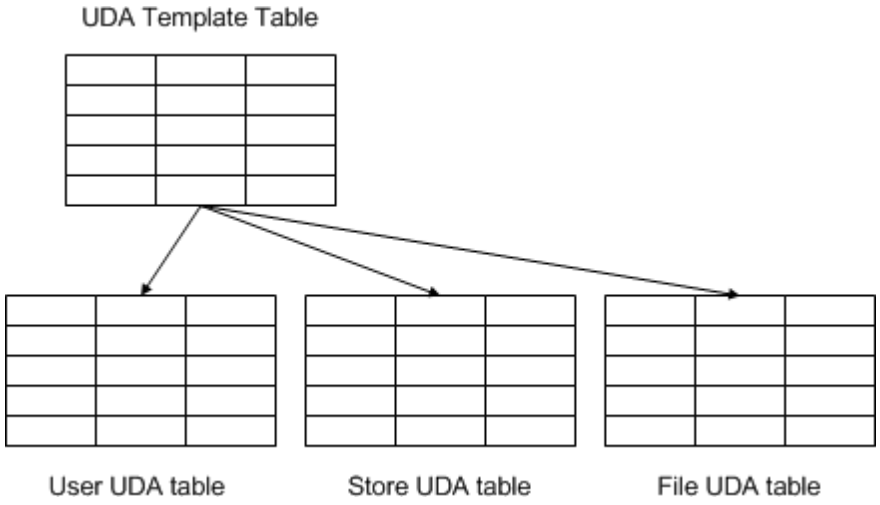
In the example above, additional information is being assigned to the user in the Administration module via User Defined Attributes.

The flexibility given by UDAs gives individual retailers the option to do one of two things:

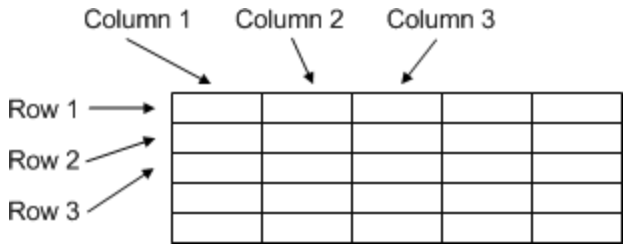
- Import UDA information from other software applications to assist in store planning functionality.
- Manually enter UDA information to describe information or parameters related to the store planning process

How UDAs Work

UDAs have a slightly different table structure to standard relational database tables.



The User Defined Attributes dialog box in the Administration Module is used to write data to a template table to hold information on how data is structured.



Each of the individual UDA tables is made up of a specific number of columns. When data is entered into the User Defined Attributes dialog box in the Administration Module it specifies (for example) that Column 1 in the User UDA table is to be used to store the user's manager name, that column 2 is to be used to store the user's work e-mail address, and so on. Individual retail chains can thus decide which items of data to store as **user defined attributes** up to the limit of the number of columns in the tables.

> **Note**: The exception to this is the Variable Attributes assignable to fixtures placed in floor plans. These are configured in Fixture Studio, but the general principle is the same.

When a UDA is displayed to the user, the column header is read from the UDA template table and the data from the individual UDA table - for example the User UDA table. This gives considerable flexibility as to the quantity and type of data stored.

Once configured, the attributes can be used in two main ways:

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

Modifying User Defined Attributes

Once User Defined Attributes have been configured, the configuration should only be modified after careful thought.

Adding Additional UDAs

Adding additional UDAs will not generally cause any problems. Unless data is retrospectively added for existing objects in the database, these will have blank values for the newly created UDAs.

Modifying UDAs

Modifying UDAs is not recommended as this could leave a database table holding a mixture of information from the old and new version of the UDA. It is better to create a new UDA and either delete or conceal the existing UDA.

Deleting UDAs

It is possible to delete UDAs. This can generally be done my means of a simple SQL script.

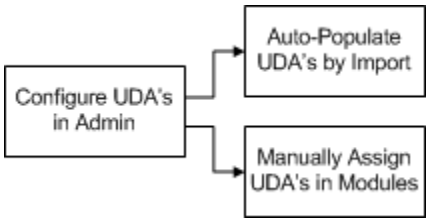
Consequences of Modifying UDAs

Before existing UDAs are modified in any form, it is suggested that the person making the changes verifies this will not impact existing functionality. Possible areas to check include:

- Custom SQL: This could affect operations such as populating the Object Grid with data.
- Data Importer Module: This could cause problems if a deleted UDA field is populated during an import.
- ODI: Again, this could cause problems if a deleted UDA field is populated during an import.
- Reports: Problems could occur if a UDA field referenced by a report is modified or deleted.

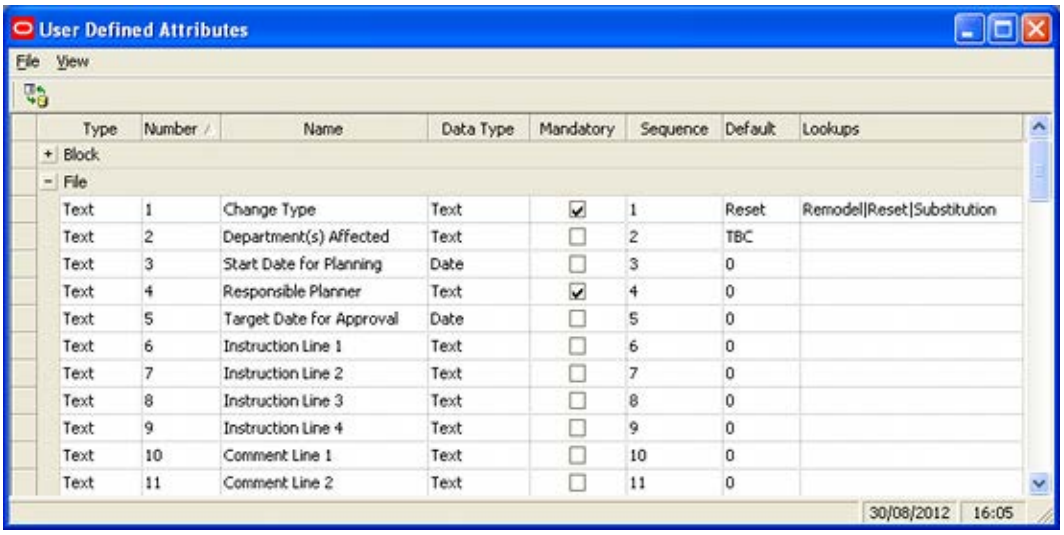
Overview of Configuring and Populating UDAs

User Defined Attributes require two stages:



Configuring UDA's in Admin

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



Individual UDA's can be assigned specific names, date types, default values, and so on. In the above example, UDA fields have been designated for files (floor plans).

Auto-populating UDAs by Data Import

Once UDA's have been set up in the Administration module, it is possible to populate them via data import. The UDA tables affected are:

UDA	Table	Primary Key
File	AVTTB_FILE_UDA	FIL_ID
Fixture	AVTTB_BLOCK_UDA	BLK_ID

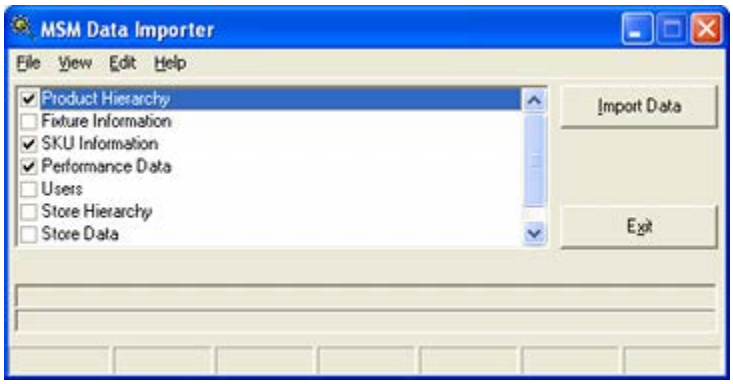
UDA	Table	Primary Key
Product	AVTTB_PRODUCT_UDA	PRD_ID
General Planogram Data	AVTTB_PLANO_UDA	POG_ID
Planogram Profile (Bay) Data	AVTTB_PROFILE_UDA	PRF_ID
Planogram Equipment Data	AVTTB_POG_FIXEL_UDA	FXL_ID
Planogram Product Data	AVTTB_POG_PRODUCT_DATA	PPR_ID
Store	AVTTB_STORE_UDA	STR_ID
User	AVTTB_USER_UDA	USR_ID

Variable Fixture Attributes are stores in the AVTTB_ATTRIBUTE table.

There are two options for importing data:

MSMs Data Importer Module

MSM contains a data import module.



This can be used to populate the majority of tables in the Macro Space Planning database. Because UDAs can be customized to meet a specific retailer's requirements, additional data imports will need to be set up to bring in the information.

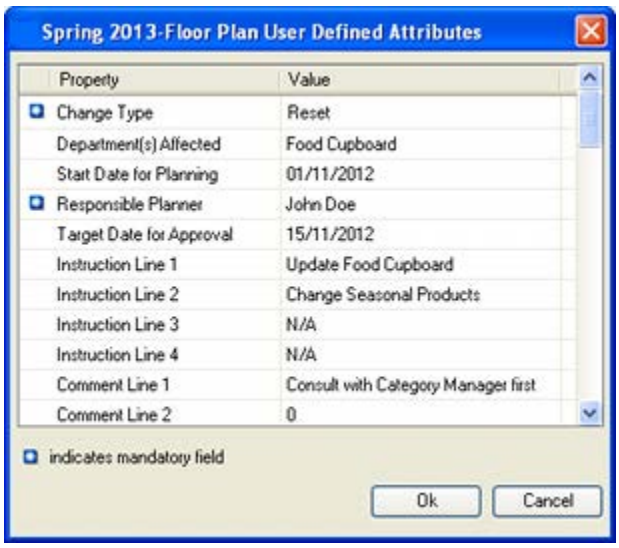
Oracle Data Integrator

Oracle Data Integrator (ODI) is an Extract-Transform-Load tool. Because planograms are more complex to import than the majority of information in the Macro Space Planning database, it is recommended that ODI be the tool of choice for importing planogram information. These planogram imports can be configured to include UDA information for the planogram itself, its profiles (bays), its equipment and its products.

Manually Assigning UDA's in Modules

Once UDA's have been configured in the Admin Module, individual values can be assigned to instances of Fixtures, Files, Planograms (general properties, profile

information, equipment information and product information), Products, Stores and Users. In the example below, UDA's are being assigned to a floor plan - each field being populated having previously been designated in the Administration Module.



Values can be entered, selected from drop down lists or calendars or assigned by ticking or unticking a check box.

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:

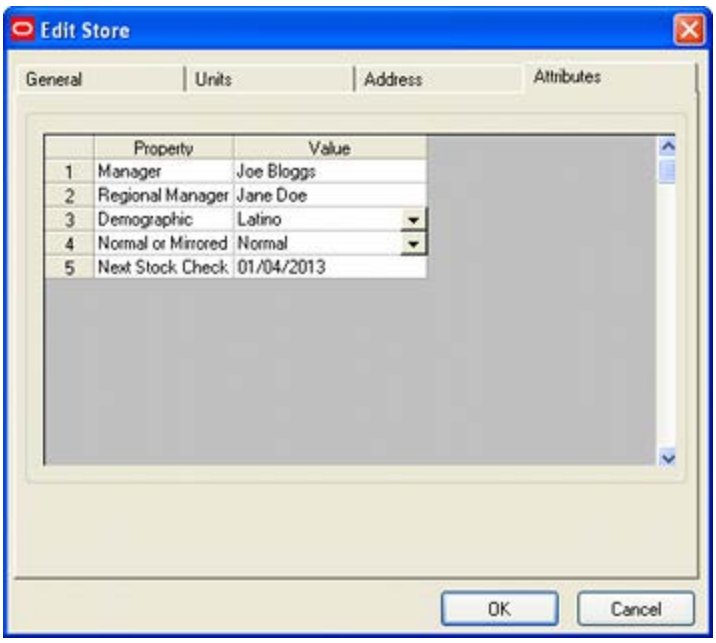
Users

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.



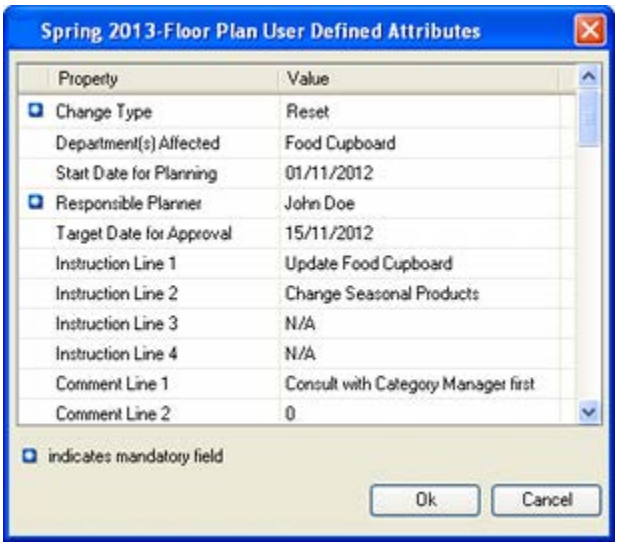
Stores

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



Files

UDA's for floor plans can be accessed by clicking the UDA button in the File Properties dialogue box in Store Manager.

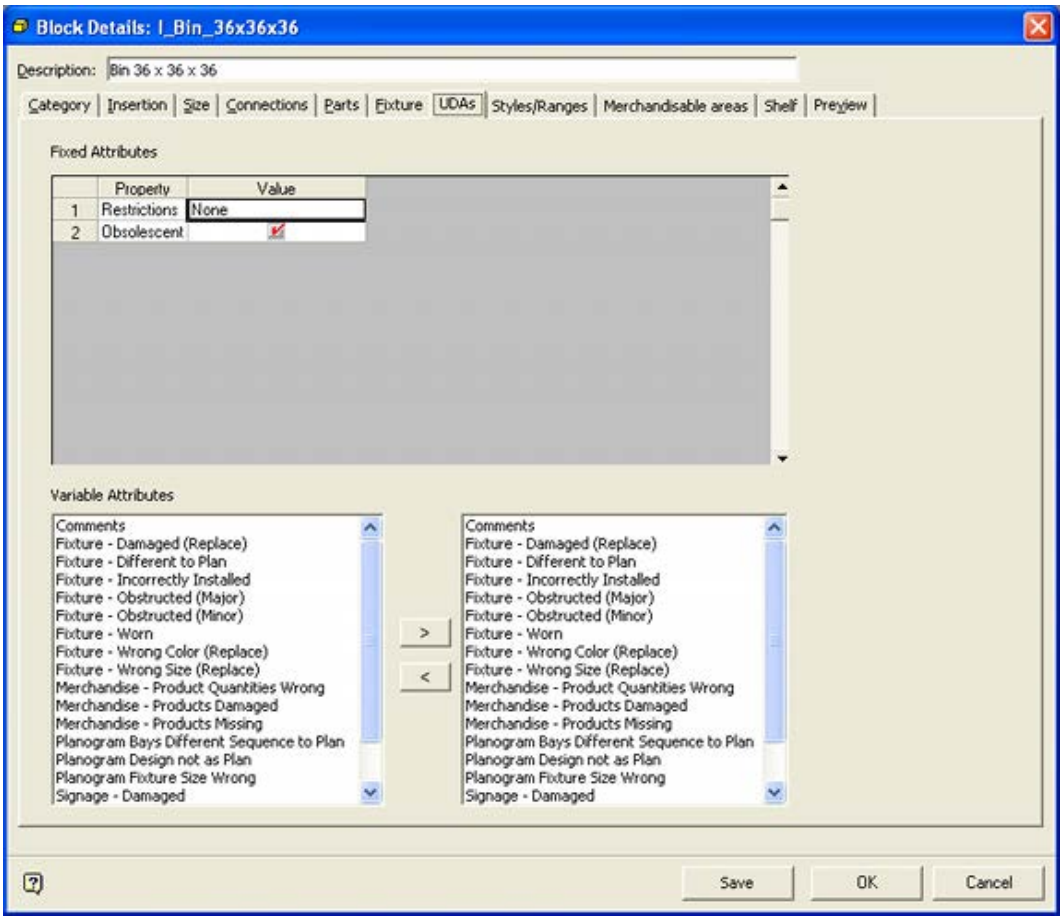


Fixtures

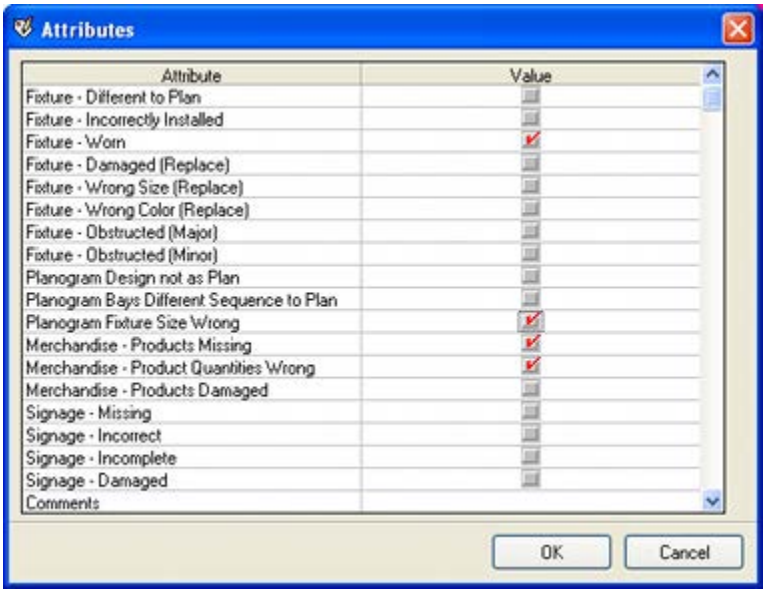
Fixture UDA's are in two forms: Fixed and Variable.

1. Fixed Attributes are set in the User Defined Attributes section of the Administration module. These attributes are constant 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.

The **Fixed Attributes** are set at the top of the Block Details dialog box. These are common to all fixtures of that type.



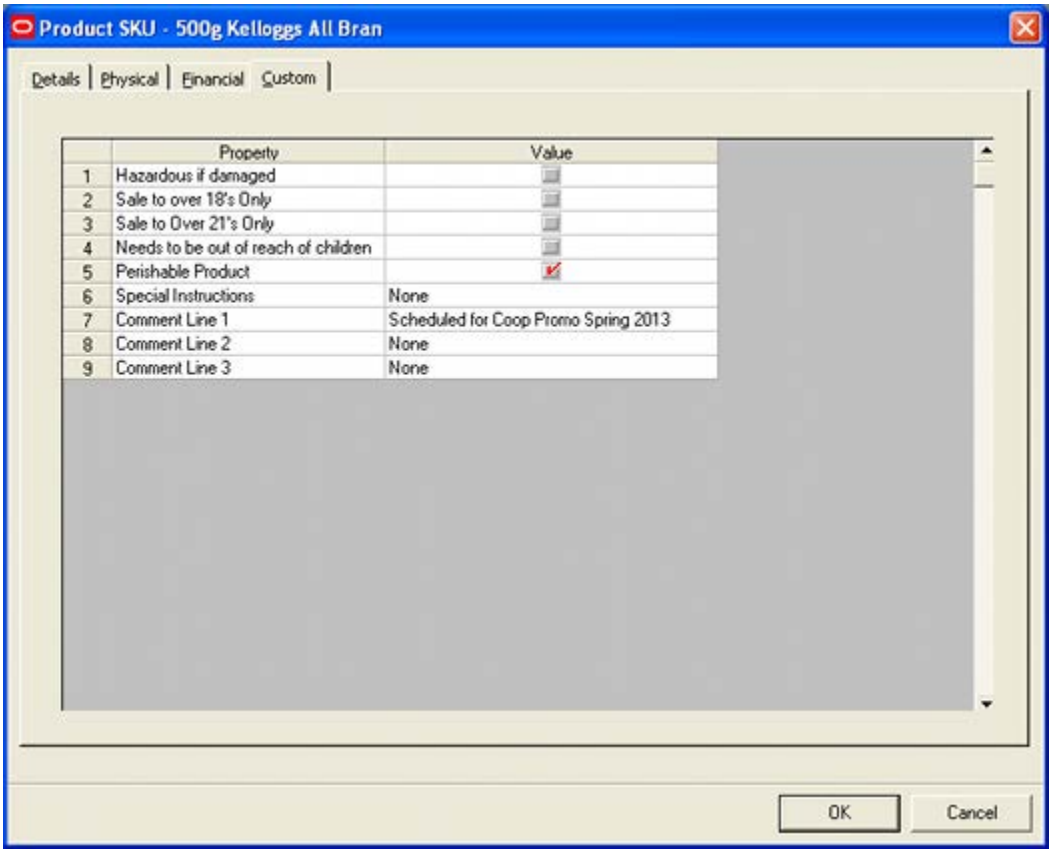
The Variable Attributes are configured in the Block Details dialog box in Fixture Studio. Specific values are set on a case by case basis for individual fixtures placed in floor plans. This can be done in both the Planner and Merchandiser modules (and in In-Store Space Collaboration).



In the example above, the variable attributes have been configured for compliance checking. A user would survey the store on-site using In-Store Space Collaboration. The result then becomes available to a planner at headquarters using Macro Space Management. They could (using a set of specially developed KPI's) easily identify any problematic fixtures on-site at the real life store.

Products

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



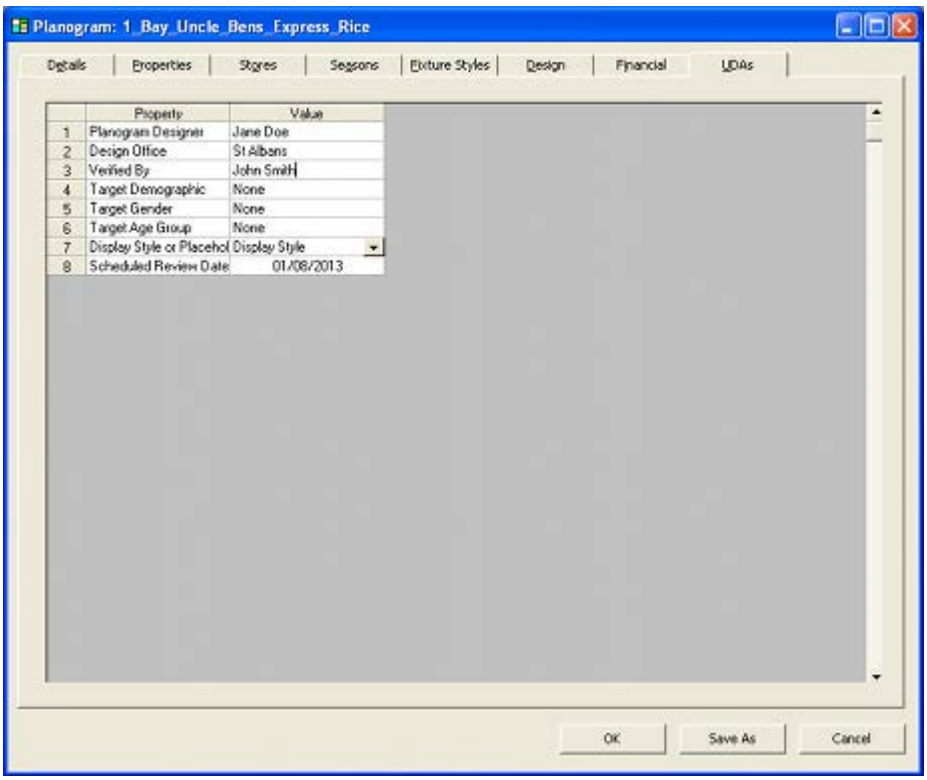
Planograms

Four sorts of UDA's are associated with planograms.

- UDA's Associated with the general planogram design
- UDA's associated with Planogram Profiles (bays) in the planogram design
- UDA's associated with specific items of equipment in the planogram design
- UDA's associated with specific products in the planogram design

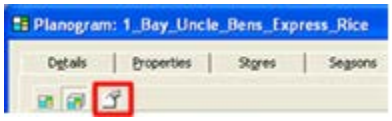
UDA's Associated with the general planogram design

General UDA's for Planograms are set in the UDA tab of the Planogram Design dialogue box in the Merchandiser module.

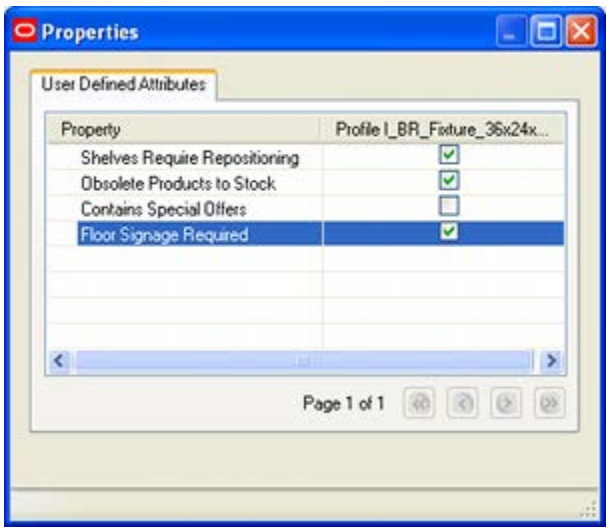


UDA's associated with Planogram Profiles (bays) in the planogram design

UDA's associated with a specific profile (bay) in a planogram can be seen by highlighting that bay in the Planogram Design window in the Merchandiser module and clicking the Object Properties icon on the toolbar.



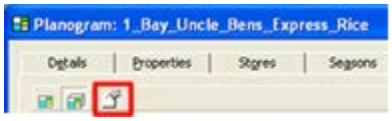
This will bring up the Profile User Defined Attributes dialog box.



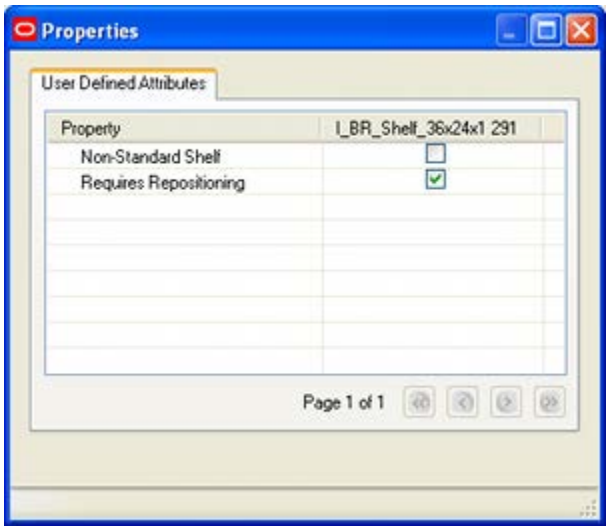
Note: the number after the parent fixture for the profile (not shown in this screen shot) is the FIX_ID from the AVTTB_FIXTURE table. It is a unique identifier for the profile/bay the UDA refers to.

UDA's associated with specific items of equipment in the planogram design

UDA's associated with a specific item of equipment in a planogram can be seen by highlighting that item of equipment in the Planogram Design window in the Merchandiser module and clicking the Object Properties icon on the toolbar.



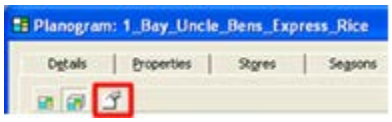
This will bring up the Equipment User Defined Attributes dialog box.



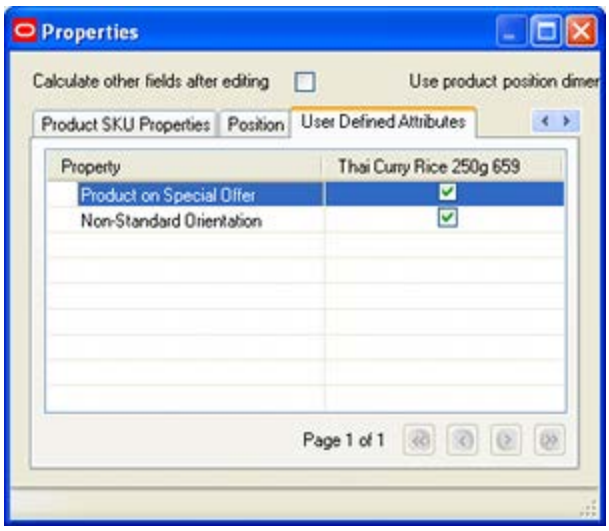
Note: the number after the item of equipment (62 in the above example) is the FXL_ID from the AVTTB_POG_FIXEL table. It is a unique identifier for the item of equipment the UDA refers to.

UDA's associated with specific products in the planogram design

UDA's associated with a specific product in a planogram can be seen by highlighting that item of merchandise in the Planogram Design window in the Merchandiser module and clicking the Object Properties icon on the toolbar.



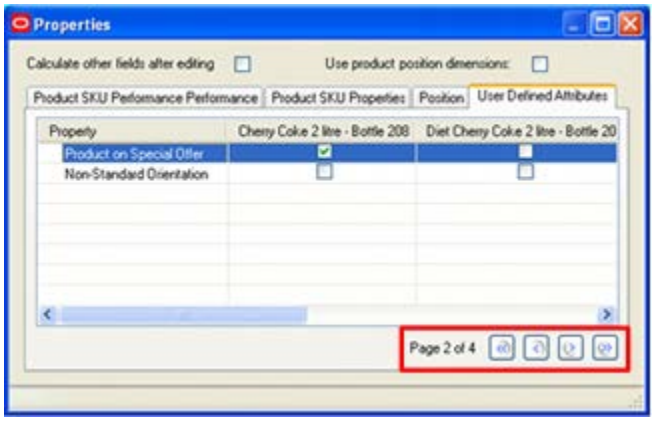
This will bring up the Product User Defined Attributes dialog box.



Note: the number after the item of merchandise (659 in the above example) is the PPR_ID from the AVTTB_POG_PRODUCT table. It is a unique identifier for the item of merchandise the UDA refers to.

Multi-Page Results

If multiple objects are selected, up to five results will be displayed on the opening page. If more than five objects are selected, the multi-page controls become active and users can move between pages.

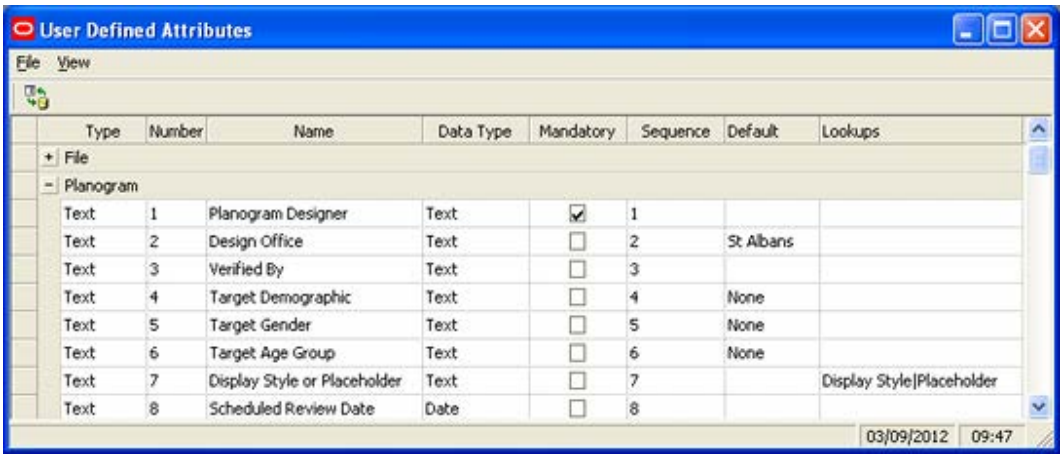


Configuring User Defined Attributes

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.

Overview of the UDA Dialog Box

UDAs are configured in the User Defined Attributes dialog Box



Menu and Toolbar Options

The File and view menus five the option to close the dialog box, refresh the contents and toggle display of the toolbar and status bar on and off.

UDA Types

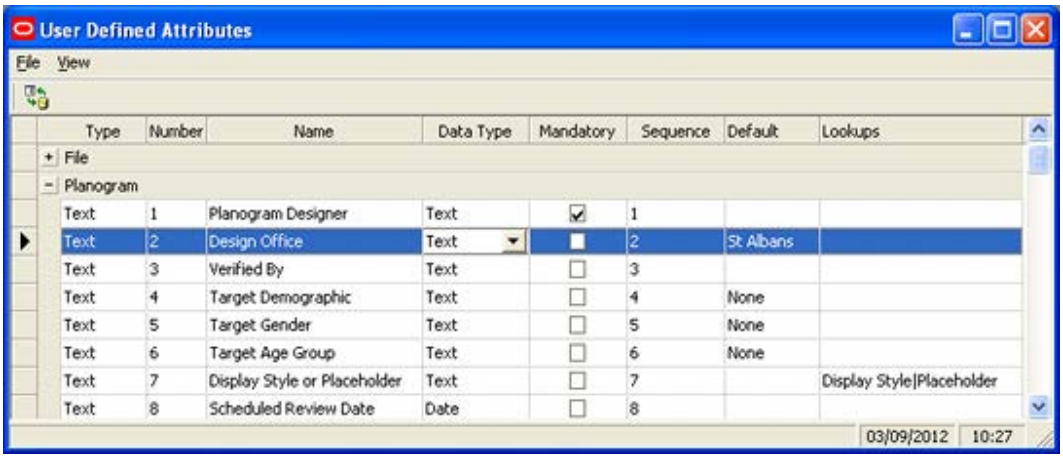
User Defined Attributes can be configured for the following objects. Users can see the varying UDA options as gray bars. They can be expanded or contracted by using the '+' or '-' signs.

UDA Type	Where Used	Dialogue Box and Module
Block	Fixture (Block) Definitions	1) Block Definition dialog box/Fixture Studio 2) Fixture Attributes option from toolbar in Planner and Merchandiser modules
Planogram Design	Planogram Definitions	UDA tab of the Planogram design dialog box/Merchandiser Module
Planogram Profile	Profiles (Bays) within Planograms	Design tab of the Planogram design dialog box/Merchandiser Module
Planogram Equipment	Equipment within Planograms	Design tab of the Planogram design dialog box/Merchandiser Module
Planogram Products	Products within Planograms	Design tab of the Planogram design dialog box/Merchandiser Module
Product	Product Definitions	Product SKU Dialogue/Product Studio
File	file Properties	File Properties dialog box/Store Manager
Store	Store Definition	Add/Edit Store dialogue box /Store Manager
User	User Definition	User dialog box in Functional Security/Administration Module

Each UDA option has a fixed number of options that can be configured to user specific requirements.

Configuring UDAs

Configuring UDAs is done in the User Defined Attributes dialog box.



Selecting Type of UDA

The initial stage is to select the UDA type. This is done by highlighting the required type, then clicking the '+' sign of open it up. Each type of UDA contains a fined number of lines of data. Any line can be edited by highlighting it.

> **Note**: When entering data, it is generally necessary to press **Return** or click in another cell before the entry is written back to the database.

Type

The Type field is specified in the database and cannot be edited in the User Defined Attributes dialog box. Rows are in blocks of different types including Text, Number, Date and Flag. Fields of type Text can be set to any value using the Data Type drop down list. Fields of other types cannot be set to any other value than their native type.

> **Note**: If a text field is set to another data type (for example Date), any SQL statement referencing the field will need to convert it to the correct type of data. For example if a date has been stored in the text field, the Oracle **To_Date** function should be used to convert it into a date for reporting purposes. Similarly, if numbers are stored as text, they will sort in alpha numeric sequence rather than numerical sequence.

Check box data (ticked or un-ticked values) are stored in the flag fields. The application assumes that o is not selected, while any non-zero value is selected.

If currencies are stored, they are normally stored in the Number fields. It is common to define a currency type in a drop down list in a text field. This currency type can then be combined with the currency value in a report.

Number

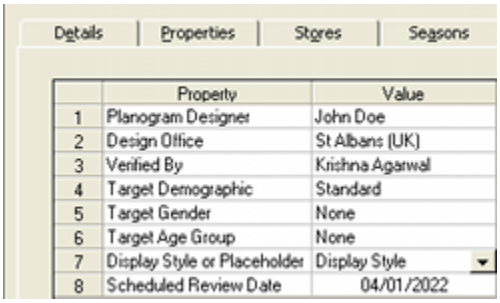
The Number field is specified in the database and cannot be edited in the User Defined Attributes dialog box. It references the column number in the pertinent IDA table in the database.

POG_ID	PGU_VALUE1	PGU_VALUE2	PGU_VALUE3	PGU_VALUE4
3	Jane Doe	Boston (US)	Jitindar Kullar	Afro-American
4	John Doe	St Albans (UK)	Krishna Agarwal	Standard
5	Jane Doe	Boston (US)	Jitindar Kullar	Afro-American
6	Jane Doe	Boston (US)	Jitindar Kullar	Afro-American
7	John Doe	St Albans (UK)	Krishna Agarwal	Standard

In the example above the Number 1 field is the PGU_VALUE1 column, the Number 2 field is the PGU_VALUE2 column and so on in the AVTTB_PLANO_UDA table.

Name

The Name field is the Name that will be shown in the appropriate UDA dialog box. In the example below, the names assigned in the UDA Dialog box in the Administration module appear in the Property field of the UDA Tab of the Planogram Design dialog box in the Merchandiser module.



Data Type

The Data Type is set from a drop down list. This specified the form of data for a specific UDA and constrains the data that can be entered in the pertinent UDA dialog box. Only text fields can be set to anything other than their native type.



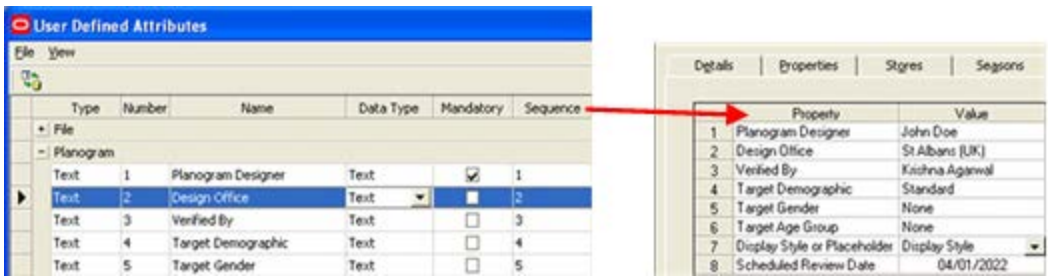
For example, if a field is set to type 'Date', users will be invited to pick a date from a Calendar; conversely, if a field is set to Boolean, uses will be able to tick or un-tick a check box.

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 dialog box) until the data has been entered.

Sequence

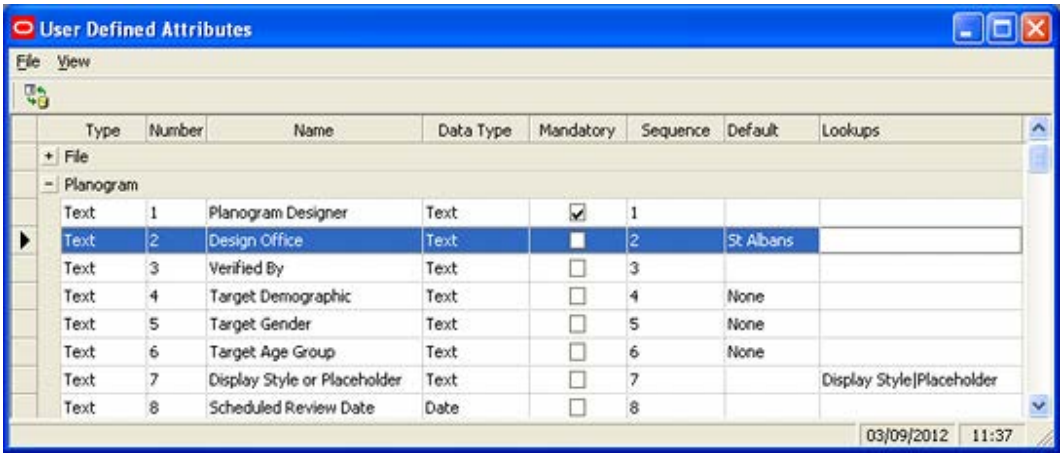
This is the sequence the UDA's will be display in the dialogue box they are associated with. For example, assigning a UDA the sequence number of 3 means it will display 3rd in the list of UDA's.



Specifying the sequence is useful when specifying data of different types. For example, the first field to be displayed could be a text field, the second a numeric field, the third a flag field and the fourth another text field. Using sequences allow data to be displayed in a very specific sequence.

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.

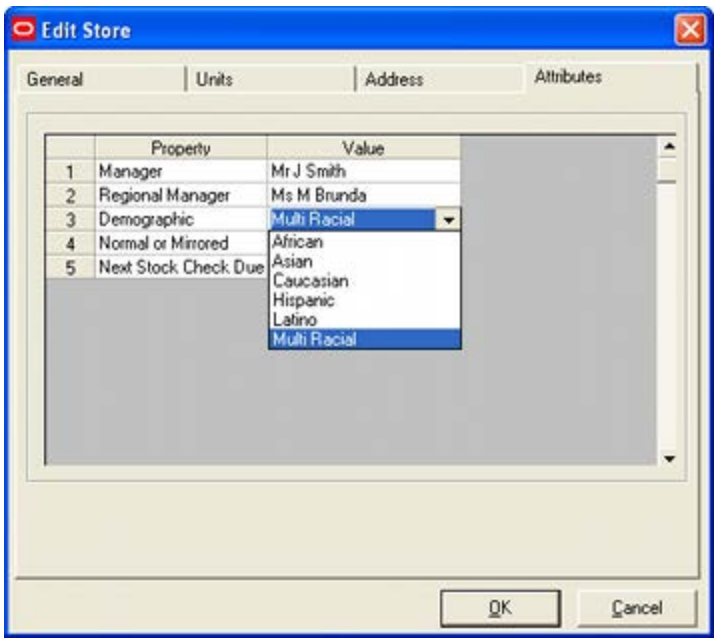


In the above example, the default value for Design Office has been set to St Albans. This value will appear when the UDA dialog box is opened for the first time. It can be overwritten as necessary.

Lookups

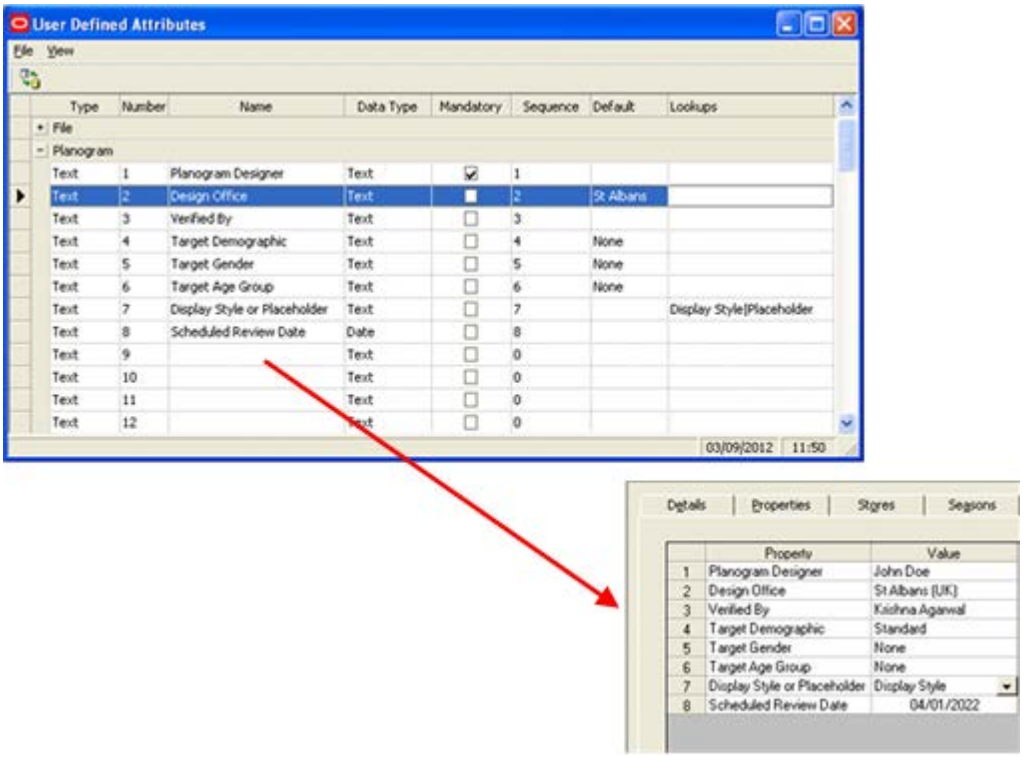
This field specifies values that may be selected from a drip down list. Values must be entered using a pipe (vertical bar) to separate them. An example would be A|B|C.

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 the customer demographic for a specific store is selected from a look ups via a drop down list.



Blank Lines

Each type of UDA can have multiple options configured. For example, Planogram UDAs can have up to 60 lines of data. Only lines that have been configured in the User Defined Attribute dialog box will appear in the UDA dialog boxes assigned by users. For example, if only eight lines of data have been configured, only eight lines will appear in the dialog box.



Imported Data

As well as manually setting up data, data can be imported via Macro Space Planning's Data Importer module or via Oracle Data Integrator (ODI). If data is imported via these applications, the data type must be matched to the data type in the pertinent fields in the database or errors will result.

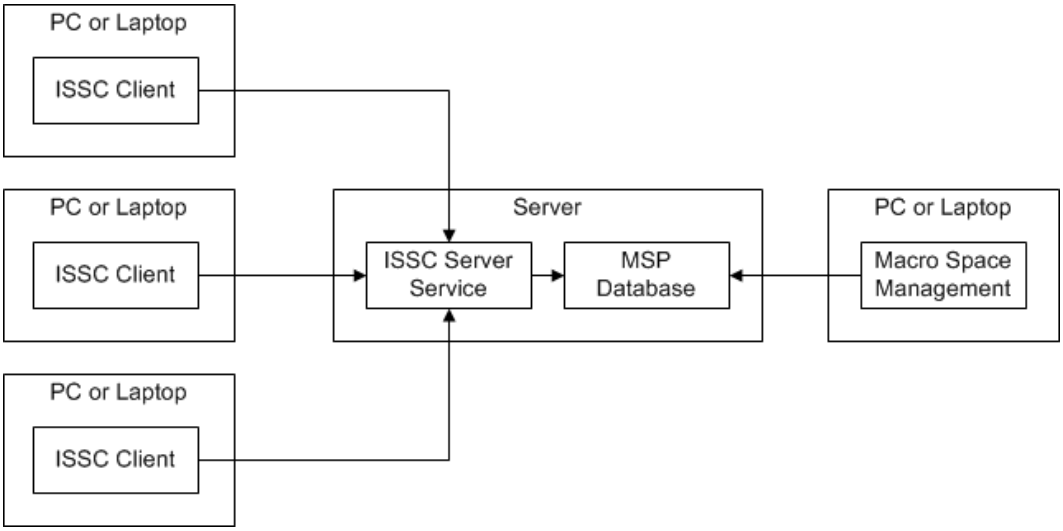
6

In-Store Space Collaboration System Variables

General Information

When Changes to ISSC System Variables Take Effect

The basic configuration for Macro Space Planning can be specified as follows:



Macro Space Management

Macro Space Management has a direct connection to the Macro Space Planning database, Changes made to system variables in the Administration module are immediately written back to the database.

In-Store Space Collaboration

The application users see - the ISSC client is installed on their personal PC or laptop. The client has connection details for the ISSC Server service. This is typically installed on the server containing the MSP database and serves as a gateway to that database.

The ISSC Server Service and ISSC System Variables

The ISSC Server Service holds system variables in memory. This speeds up use of the ISSC application but it means system variables do not dynamically update. In order to make changes made to ISSC system variables take effect on the ISSC Clients, the ISSC server Service must be stopped and restarted. This causes the system variables to be reloaded into memory, updating their values.

ISSC System Variables not in Use

The following ISSC System Variables are not in use.

Note: This list is not exhaustive.

IN-STORE_FIXTURE_ATTRIBUTES_PRINT_FONT
IN-STORE_FIXTURE_ATTRIBUTES_PRINT_FONT_SIZE
N-STORE_FIXTURE_ATTRIBUTES_PRINT_HEADING_FONT
IN-STORE_FIXTURE_ATTRIBUTES_PRINT_HEADING_FONT_SIZE
IN-STORE_FIXTURE_ATTRIBUTES_PRINT_HIGHLIGHTS
IN-STORE_FIXTURE_ATTRIBUTES_VERSION
IN-STORE_GRIP_COLOUR
IN-STORE_GRIP_HOTCOLOUR
IN-STORE_GRIP_SIZE
IN-STORE_MERGE_PLANOGRAMS
IN-STORE_PROMOTION_USER_GROUP
IN-STORE_SELECTION_LEVEL
IN-STORE_STMPSERVER
IN-STORE_SUBMIT_STATUS
MAX_FIXTURE_SELECTION
OPTIONS_PRE_POPULATED_PRODUCTS

System Variables used to Configure ISSC

Client and Server 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.

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.

Problems Communicating with the Server Service

If the ISSC Server Service cannot establish a connection to the database, a warning message will result. The times it takes for this dialog box to appear and how long it is visible are controlled by two system variables.



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

The **IN-STORE_TIMEOUT_MESSAGE** system variable determines the amount of time the warning message will display. After the specified time has expired, In-Store Space Collaboration will automatically shut down (unless the wait button is clicked).

Help Files

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:** The ISSC help is in Webhelp format. This differs from the CHM files used for Macro Space Management.

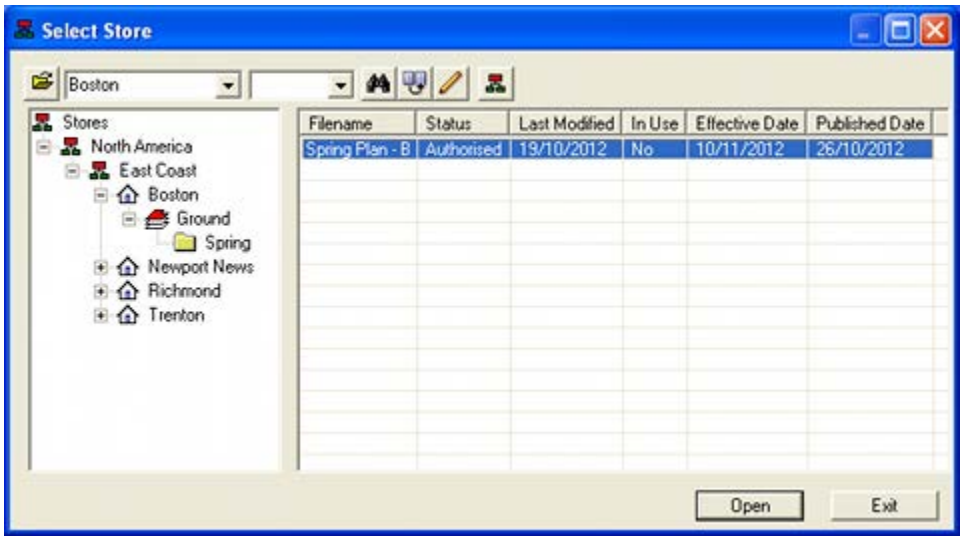
Module Block ID

The **MODULE_BLOCK_ID** system variable is used to identify the block used when moving products temporarily into an 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

Skipping Zone Selection

The **SKIP_ZONE_SELECT** system variable affects whether the Select Data dialogue box is shown during the process of selecting a floor plan. 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;

3. If set to 0, the dialogue box will display and users will be able to select zones before opening the store plan
4. If set to 1, the dialogue will not appear and the store plan will open displaying all zones

Controlling Fixture, Product and Planogram Annotation

Overview of ISSC Annotation

There are five forms of annotation used in top graphical view. The appearance of each is controlled by system variables.

Zone Annotation

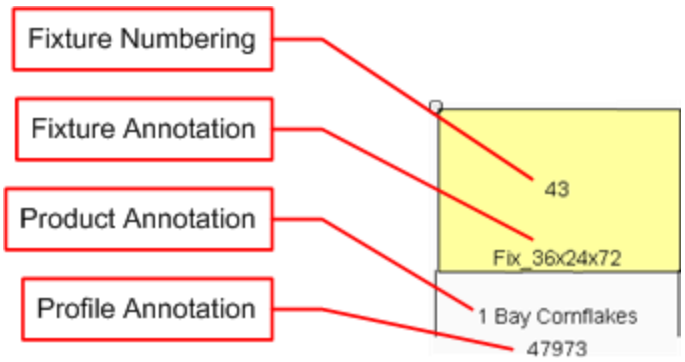
Zones are annotated with the zone name and area.

Food
and
Drink
2360sqft

The only thing that can be controlled for zone annotation is the text size.

Other Forms of Annotation

The other four forms of annotation are more controllable.



Fixture Numbering

Fixture Numbering is used to allocate a reference number for a fixture. This is unique within a floor plan and can be used for reporting purposes or to locate a fixture. Fixture Numbering can be one of three forms:

- Bay Numbering - this depends on bay numbering being assigned to the floor plan in the Planner module.
- Fixture Tags - this depends on information being imported into the Macro Space Planning Database
- Fixture IDs - these are based in Macro Space Planning's own internal fixture identification numbers.

Fixture Annotation

Fixture annotation is used to identify the type of fixture.

Product Annotation

Product annotation specifies the name of the product or planogram present on the fixture.

Profile Annotation

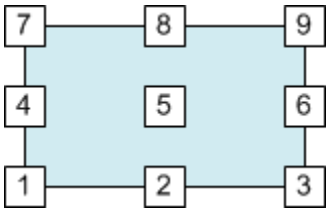
Profile annotation is associated with planograms. It gives information on individual bays within a planogram.

Configuring Annotation Position

The position of each type of annotation is configured in a similar way. This is done via a set of system variables.

Text Insertion Position

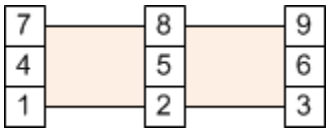
The origin of the annotation position is specified relative to the extents of the fixture. There are nine options.



For example, specifying option 1 will result in the annotation being located relative to the bottom left corner of the fixture; option 9, the top right corner.

Text Justification Position

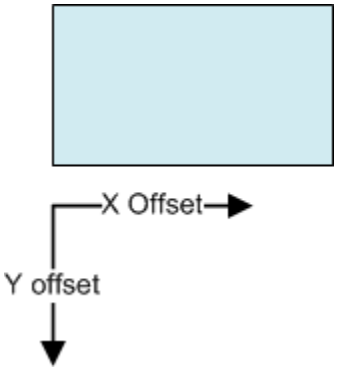
A datum position is also specified for the justification of the text. There are 9 options.



For example, specifying option 8 will result in the text being justified from the centre top position, while specifying position 4 will result in the text being justified from the left, centre position.

Text Offsets

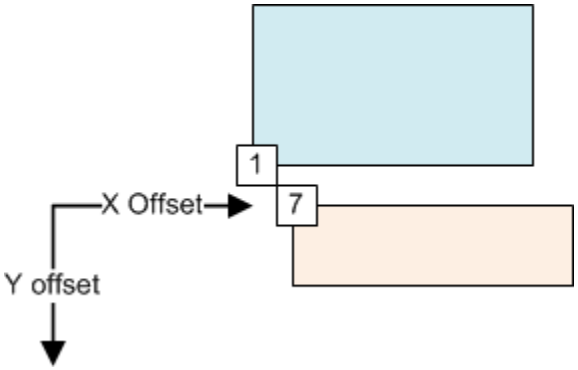
In addition, text can be offset by a standard distance in the X and Y axes.



Positive values of X move the text to the right, negative values to the left. Similarly, positive values of Y move the text up, negative values of Y move the text down.

Example of Positioning

In the example below, the text has been given a Text Insertion Position of bottom left [1] and a Text Justification Position of top left [7]. It has also been moved to the right with a positive X offset and down with a negative Y offset.



Configuring Annotation Appearance

The annotation's appearance can be modified by specifying the font and font size.

Font

The font may be specified as any font present on the computers used to run the ISSC client. If the font is not present, it will default to Arial.

Font Size

Font size is an arbitrary value. Increasing it increases the size of the text, reducing it makes the text smaller.

ISSC Zone Annotation

Zones are annotated with the zone name and area.



The only thing that can be controlled for zone annotation is the text size. This done using the TEXT_ZONE_TEXTSIZE system variable.

ISSC Fixture Numbering

The following system variables affect fixture numbering.

ISSC_BAY_ANNOTATION

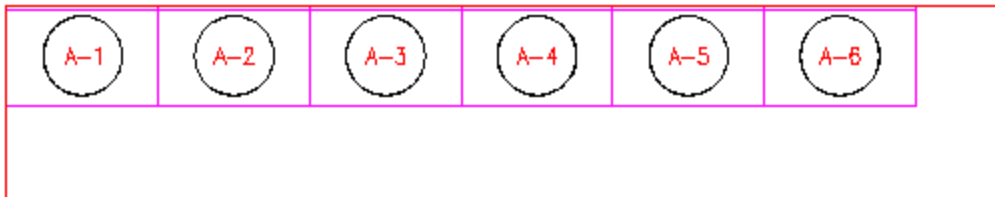
The ISSC_BAY_ANNOTATION system variable determines what form of annotation is used for fixtures in an ISSC floor plan. This annotation is used for reference purposes, enabling fixtures to be uniquely identified in reports and subsequently located by users examining a floor plan.

There are three options:

SV Value	Description
0	This will use the Bay Number Prefix and Bay Number from the AVTTB_FIXTURE table. This option will result in the same bay numbering appearing as is present in the Planner module of Macro Space Management. If the floor plan has not been bay numbered in the Planner module, no bay numbers will be present in the ISSC version of the floor plan.
1	This will use the Fixture Tag (FIX_TAG) from the AVTTB_FIXTURE table. This value can only be populated from data import. If data is not imported, no bay numbers will be present in the ISSC version of the floor plan.
2	This will use the fixture ID (FIX_ID) from the AVTTB_FIXTURE table. This will ensure that all fixtures within a floor plan have a unique number allocated. These numbers will be allocated in the sequence that the fixtures were placed in the floor plan. Accordingly, numbers may not run in adjacent sequences. In addition, as fittings are excluded from this form of numbering it, their FIX_ID;'s will be omitted from the annotation - resulting in gaps in the numbering.

Annotation based on Bay Numbering

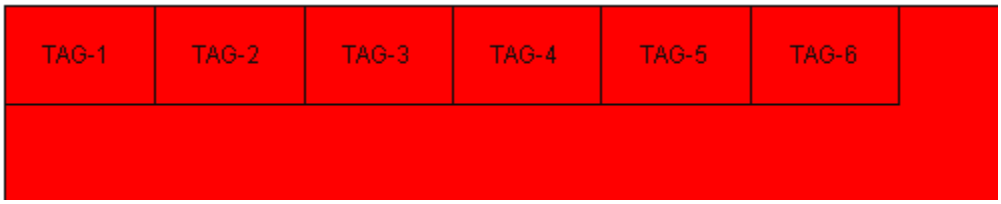
The bay numbering must first be created in the Planner module.



The numbers can then be seen in ISSC.



Annotation based on the Fixture Tag



Note: This example has been produced by populating the field in the database using a SQL statement.

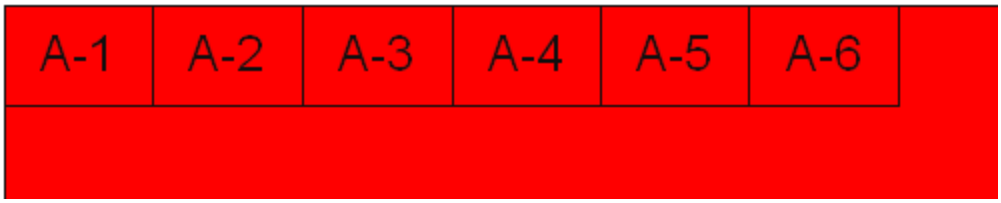
Annotation based on Fixture ID



TEXT_FIXTURE_TEXTSIZE

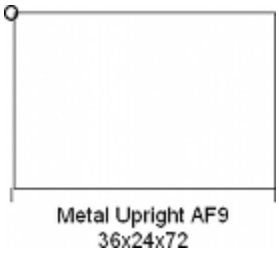
The TEXT_FIXTURE_TEXTSIZE system variable controls the size of the annotation used for fixtures and bay numbering in In-Store Space Collaboration. The value is in inches for imperial databases and millimeters for metric ones. This enables administrators to set the fixture annotation text size to any pertinent value. The example below shows the effect on fixture numbering.





ISSC Fixture Annotation

The system variables described below enable users to configure fixture annotation for In-Store Space Collaboration.



It shows the TEXT_FIXTURE_OPTION system variable set to 15361, which has resulted in the fixture being annotated with the fixture description, plus the fixture dimensions.

TEXT_FIXTURE_COLOUR

This option affects the color of the text. It can be set to any value between 0 - 255. These values correspond to the AutoCAD Color Index values. The first eight values in the series are:

Value	Color
0	Black
1	Red
2	Yellow
3	Green
4	Cyan
5	Blue
6	Mauve
7	White

Note: This system variable is not currently in use.

TEXT_FIXTURE_DIMASZ

This system variable is not in use.

TEXT_FIXTURE_DIMSD1

This system variable is not in use.

TEXT_FIXTURE_DIMSD2

This system variable is not in use.

TEXT_FIXTURE_DIMSE1

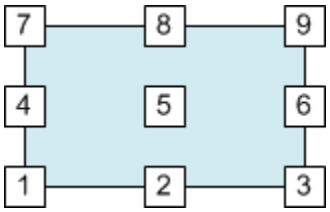
This system variable is not in use.

TEXT_FIXTURE_DIMSE2

This system variable is not in use.

TEXT_FIXTURE_INSERTION

This option affects where the fixture is positioned relative to the fixture. There are nine options.

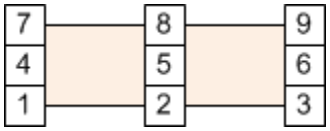


For example, specifying option 2 will result in the bay number being located in the centre of lower face of the fixture.

Note: This system variable is not currently in use.

TEXT_FIXTURE_JUSTIFICATION

This option affects how the text is justified. There are 9 options.



For example, specifying option 8 will result in the fixture text being justified from the top centre.

Note: This system variable is not currently in use.

TEXT_FIXTURE_NARROWFIXTUREOFFSET

This system variable is not in use.

TEXT_FIXTURE_OPTIONS

This system variable holds a bitwise variable governing what and how the fixture text is displayed. The bitwise values are:

1 - Turn fixture text on.

2 - Scale size: this option turns on scaling for fixture text. It currently has no effect in ISSC.

4 - Scale offset: this option turns on scaling for the X and Y offsets for product text. It currently has no effect in ISSC.

8 - Reduce text size to fit. This option currently has no effect in ISSC.

16 - Reduce text width to fit. This option currently has no effect in ISSC.

32 - Change text to multiline to fit. This option currently has no effect in ISSC.

64 - Narrow Fixture Check. This option currently has no effect in ISSC.

128 - Major display units. This option currently has no effect in ISSC.

256 - This option is not currently in use.

512 - Include block name.

1024 - Use block description.

2048 - Include the block length.

4096 - Include the block depth.

8192 - Include the block height.

16384 - Separate. This option affects how fixture annotation works for gondolas. If the Separate option is selected, the fixture annotation will display once per fixture. If the Separate option is not on, the fixture annotation will display once per gondola side. This option currently causes an error in ISSC if selected.

TEXT_FIXTURE_PRECISION

The TEXT_FIXTURE_PRECISION system variable determines the number of decimal places if the block length, depth or height is specified in the TEXT_FIXTURE_OPTIONs bitwise system variable.

TEXT_FIXTURE_TEXTFONT

The TEXT_FIXTURE_TEXTSIZE system variable controls the font used for fixture annotation. It can be set to any font supported by Windows. If the font does not exist on a user's computer, the font will default to Arial.

TEXT_FIXTURE_TEXTSIZE

The TEXT_FIXTURE_TEXTSIZE system variable controls the size of the annotation used for fixtures and bay numbering in In-Store Space Collaboration. The value is in inches for imperial databases and millimeters for metric ones. This enables administrators to set the fixture annotation text size to any pertinent value. The example below shows the effect on fixture numbering.

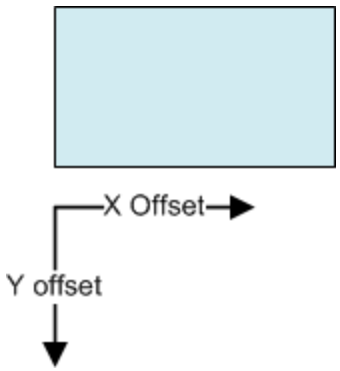


TEXT_FIXTURE_WIDTHFACTOR

This system variable is not in use.

TEXT_FIXTURE_X_OFFSET

The X offset is used to 'fine-tune' the position of the fixture annotation.

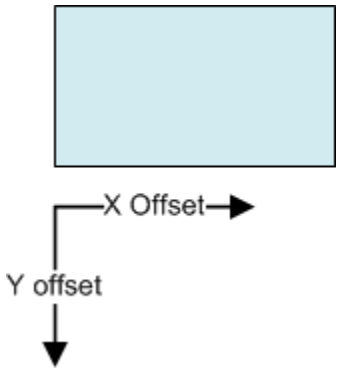


Positive values of X move the text to the right, negative values to the left.

Note: This system variable is not currently in use.

TEXT_FIXTURE_Y_OFFSET

The X offset is used to 'fine-tune' the position of the fixture annotation.

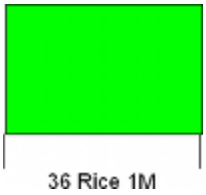


Positive values of Y move the text up, negative values of Y move the text down.

Note: This system variable is not currently in use.

ISSC Product Annotation

The system variables described below enable users to configure product annotation for In-Store Space Collaboration.



The example shows the TEXT_PRODUCT_OPTION system variable set to 3585. As a result, there are three items of information in the product text. 36 refers to the length of the fixtures containing the product and Rice is the product name. 1M refers to the number of bays (modules)

TEXT_BAYNUMBER_COLOUR

This option affects the color of the text. It can be set to any value between 0 - 255. These values correspond to the AutoCAD Color Index values. The first eight values in the series are:

Value	Color
0	Black
1	Red
2	Yellow
3	Green
4	Cyan
5	Blue
6	Mauve
7	White

Note: This system variable is not currently in use.

TEXT_PRODUCT_DIMASZ

This system variable allows the user to set the size of the dimension arrows.

Note: This system variable is not currently in use.

TEXT_PRODUCT_DIMSD1

This system variable allows the user to suppress the left dimension line for the product text. 0 = do not suppress dimension line, 1 = suppress dimension line.

Note: This system variable is not currently in use.

TEXT_PRODUCT_DIMSD1

This system variable allows the user to suppress the right dimension line for the product text. 0 = do not suppress dimension line, 1 = suppress dimension line.

Note: This system variable is not currently in use.

TEXT_PRODUCT_DIMSE1

This system variable allows the user to suppress the left extension line for the product text. 0 = do not suppress extension line, 1 = suppress extension line.

Note: This system variable is not currently in use.

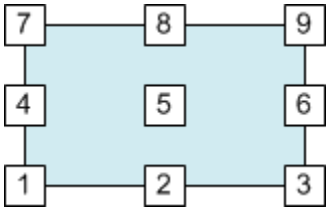
TEXT_PRODUCT_DIMSE2

This system variable allows the user to suppress the right extension line for the product text. 0 = do not suppress extension line, 1 = suppress extension line.

Note: This system variable is not currently in use.

TEXT_PRODUCT_INSERTION

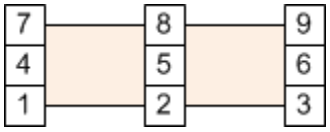
This option affects where the product text is positioned relative to the fixture. There are nine options.



For example, specifying option 5 will result in the product text being located in the centre of the fixture.

TEXT_PRODUCT_JUSTIFICATION

This option affects how the text is justified. There are 9 options.



For example, specifying option will 5 result in the product text being justified from the centre of the text.

TEXT_BAYNUMBER_NARROWFIXTUREOFFSET

This system variable is not in use.

TEXT_PRODUCT_OPTIONS

This system variable holds a bitwise variable governing what and how the product text is displayed. The bitwise values are:

1 - Turn product text on.

2 - Scale size: this option turns on scaling for product text. It currently has no effect in ISSC.

4 - Scale offset: this option turns on scaling for the X and Y offsets for product text. It currently has no effect in ISSC.

8 - Reduce text size to fit. This option currently has no effect in ISSC.

16 - Reduce text width to fit. This option currently has no effect in ISSC.

32 - Change text to multiline to fit. This option currently has no effect in ISSC.

64 - Narrow Fixture Check. This option currently has no effect in ISSC.

128 - Major display units. This option currently has no effect in ISSC.

256 - Show flow direction. This option currently has no effect in ISSC.

512 - Use planogram description. This option is not active and the product or planogram description will be automatically displayed.

1024 - Include number of bays. This value has M (for module) as a suffix.

2048 - Display sum of fixture lengths for products or planogram.

4096 - Use alternative units for product text. This option currently has no effect in ISSC.

> **Note**: failure to add a valid bitwise value will cause the product text to default to a basic option.

TEXT_PRODUCT_TEXTFONT

The TEXT_PRODUCT_TEXTFONT system variable controls the font used for profile annotation. It can be set to any font supported by Windows. If the font does not exist on a user's computer, the font will default to Arial.

TEXT_PRODUCT_TEXTSIZE

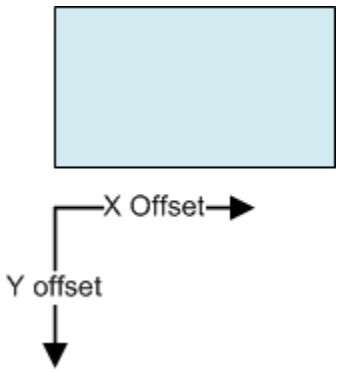
The TEXT_PRODUCT_TEXTSIZE system variable controls the size of the annotation used for product text in In-Store Space Collaboration. The value is in inches for imperial databases and millimeters for metric ones. This enables administrators to set the product text size to any pertinent value.

TEXT_PRODUCT_WIDTHFACTOR

This system variable is not in use.

TEXT_PRODUCT_X_OFFSET

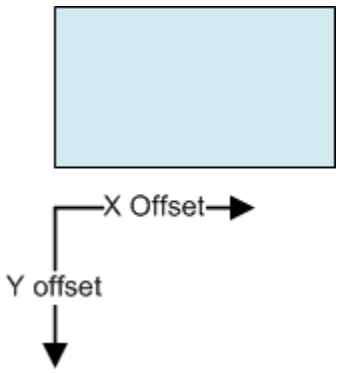
The X offset is used to 'fine-tune' the position of the product text.



Positive values of X move the text to the right, negative values to the left.

TEXT_PRODUCT_Y_OFFSET

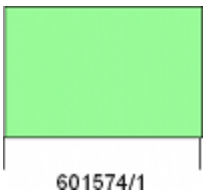
The X offset is used to 'fine-tune' the position of the product text.



Positive values of Y move the text up, negative values of Y move the text down.

ISSC Profile Annotation

The system variables described below enable users to configure profile annotation for In-Store Space Collaboration. Profile annotation is used to give additional information on planogram bays.



The example shows the TEXT_PROFILE_OPTION system variable set to 20481. The first number is the assortment code, the second the bay number. Items of data are separated by a backslash.

TEXT_PROFILE_COLOUR

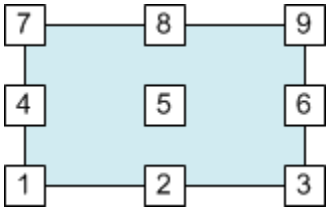
This option affects the color of the text. It can be set to any value between 0 - 255. These values correspond to the AutoCAD Color Index values. The first eight values in the series are:

Value	Color
0	Black
1	Red
2	Yellow
3	Green
4	Cyan
5	Blue
6	Mauve
7	White

Note: This system variable is not currently in use.

TEXT_PROFILE_INSERTION

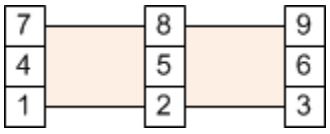
This option affects where the planogram profile information is positioned relative to the fixture. There are nine options.



For example, specifying option 5 will result in the profile information being located in the centre of the fixture.

TEXT_PROFILE_JUSTIFICATION

This option affects how the text is justified. There are 9 options.



For example, specifying option will 5 result in the bay number text being justified from the centre of the text.

TEXT_BAYNUMBER_NARROWFIXTUREOFFSET

This system variable is not in use.

TEXT_PROFILE_OPTIONS

This system variable holds a bitwise variable governing what and how the profile text is displayed. The bitwise values are:

1 - Turn profile text on.

2 - Scale size: this option turns on scaling for profile text. It currently has no effect in ISSC.

4 - Scale offset: this option turns on scaling for the X and Y offsets for profile text. It currently has no effect in ISSC.

8 - Reduce text size to fit. This option currently has no effect in ISSC.

16 - Reduce text width to fit. This option currently has no effect in ISSC.

32 - Change text to multiline to fit. This option currently has no effect in ISSC.

64 - Narrow Fixture Check. This option currently has no effect in ISSC.

256 - Separate. This option will result in separate annotation for each bay of a multi-bay planogram if the information being displayed is common to all bays. For example, if the Separate option is selected, the Assortment code will display once per bay. If the Separate option is not on, the Assortment Code will display once per planogram.

128 - Include Planogram number (POG_ID from the AVTTB_PLANO table).

256 - Include planogram number. This option currently has no effect in ISSC although it will result in a '1' appearing in front of each bay.

512 - Include segment profile. This option currently has no effect in ISSC although it will result in a '1' appearing in front of each bay.

1024 - Not used.

2048 - Not used.

4096 - Include assortment code.

8192 - Include product count. This option currently has no effect in ISSC although it will result in a single digit number appearing in front of each fixture.

16384 - Include bay sequence number.

> **Note**: failure to add a valid bitwise value will cause the product text to default to a basic option.

TEXT_PROFILE_ORDER

This system variable holds a comma separated list specifying the order items of data will appear.

1 = Layout Group.

2 = Assortment Code.

3 = Profile Segment.

4 = Product Count.

5 = Bay Sequence Number.

6 = Planogram Number.

TEXT_PROFILE_SEPARATOR

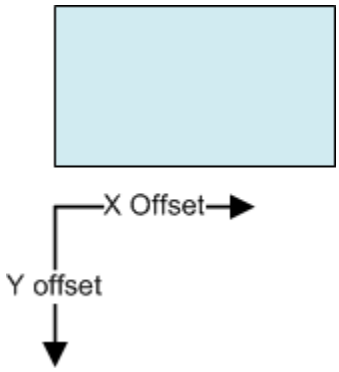
This system variable contains the character used to separate multiple items of data. An example would be a backslash **/** or a hyphen **-**.

TEXT_PROFILE_WIDTHFACTOR

This system variable is not in use.

TEXT_PROFILE_X_OFFSET

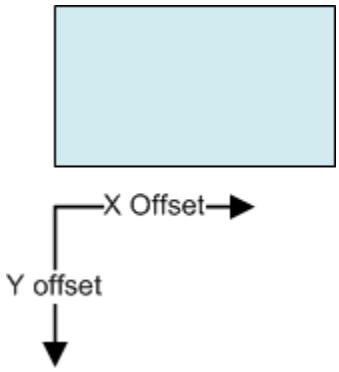
The X offset is used to 'fine-tune' the position of the profile annotation.



Positive values of X move the text to the right, negative values to the left.

TEXT_PROFILE_Y_OFFSET

The X offset is used to 'fine-tune' the position of the profile annotation.



Positive values of Y move the text up, negative values of Y move the text down.

TEXT_PROFILE_TEXTFONT

The TEXT_PROFILE_TEXTFONT system variable controls the font used for profile annotation. It can be set to any font supported by Windows. If the font does not exist on a user's computer, the font will default to Arial.

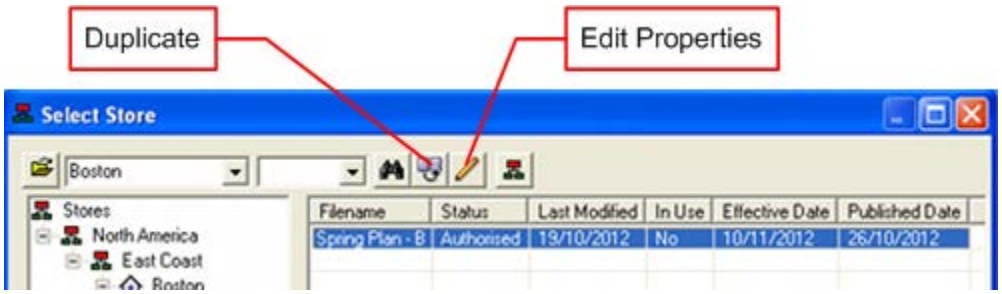
TEXT_PROFILE_TEXTSIZE

The TEXT_PROFILE_TEXTSIZE system variable controls the size of the annotation used for planogram profile information in In-Store Space Collaboration. The value is in inches for imperial databases and millimeters for metric ones. This enables administrators to set the profile text size to any pertinent value.

Copying Floor Plans

DUPLICATE_FLOOR_PLAN_STAUTUS_LEVEL

The DUPLICATE_FLOOR_PLAN_STATUS_LEVEL system variable determines what the default status for a floor plan will be if it is copied using the Duplicate button on the Select Store dialog box. The value of the system variable must correspond to a Status Level ID (STL_ID) in the AVTTB_STATUS_LEVEL table in the database.



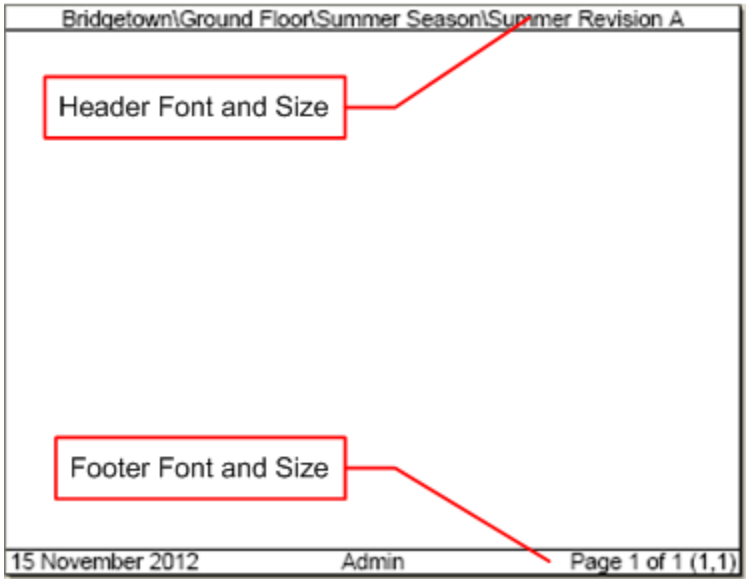
This STL_ID cannot be that corresponding to Authorised (STL_ID = 4), Published (STL_ID = 5), Current (STL_ID = 5) or Historical (STL_ID = 3).

> **Note**: The resulting default status can be edited after a specific floor plan has been copied. This is done using the Edit Properties option.

Controlling Report and KPI Text

Controlling ISSC Report Font and Size

The font and font size for the header and footer in reports printed from ISSC can be controlled by means of four system variables.



OPTIONS_FOOTER_FONT

This system variable specifies the font to be used in the report footer. The Administrator may choose any font in the Windows Collection. If a font name is misspelled, or the font is not available, ISSC will default to a standard font.

OPTIONS_FOOTER_FONTSIZE

This system variable sets the size used for the font in the footer in all printed reports.

OPTIONS_HEADER_FONT

This system variable specifies the font to be used in the report header. The Administrator may choose any font in the Windows Collection. If a font name is misspelled, or the font is not available, ISSC will default to a standard font.

OPTIONS_HEADER_FONTSIZE

This system variable sets the size used for the font in the footer in all printed reports.

Controlling KPI Legend Font and Size

The font and font size for the header and footer in the ISSC KPI Legend using on screen and in printed reports can be controlled by means of two system variables.



OPTIONS_LEGEND_FONT

This system variable specifies the font to be used. The Administrator may choose any font in the Windows Collection. If a font name is misspelled, or the font is not available, ISSC will default to a standard font.

> **Note**: This system variable is currently not functional.

OPTIONS_LEGEND_FONTSIZE

This system variable sets the size used for the font.

> **Note**: This system variable is currently not functional.

KPI Tab

IN-STORE_ENABLE_KPI_BLOCK_SELECTION

The IN-STORE_ENABLE_KPI_BLOCK_SELECTION system variable controls whether objects in the floor plan can be selected while the user has selected the KPI option in an ISSC floor plan.

0 = No objects can be selected.

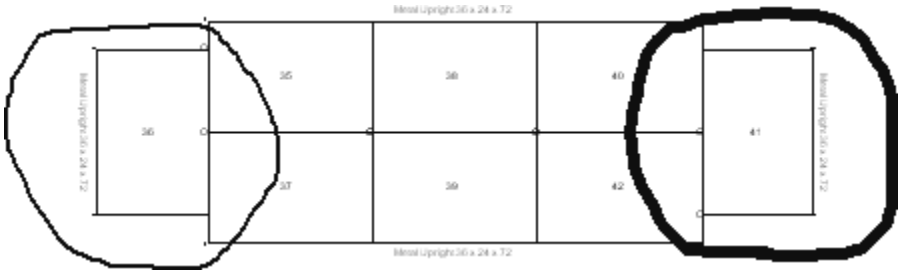
1 = Objects can be selected.

Dimensions, Mark-ups and Notes

ISSC Markups

Markups

Markups are freehand lines in In-Store Space Collaboration. There are two possible line weights, each controlled by a system variable.

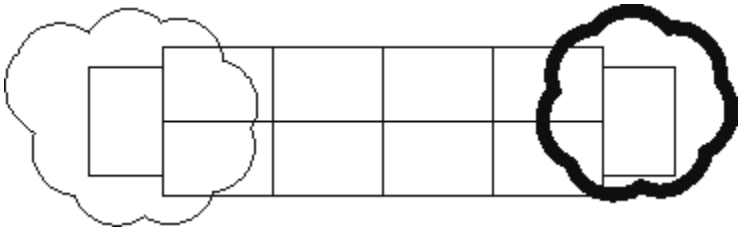


The **IN-STORE_MARKUP_LINEWIDTHMIN** System Variable is used to specify the line weight for the thinner line.

The **IN-STORE_MARKUP_LINEWIDTHMAX** System Variable is used to specify the line weight for the thicker line.

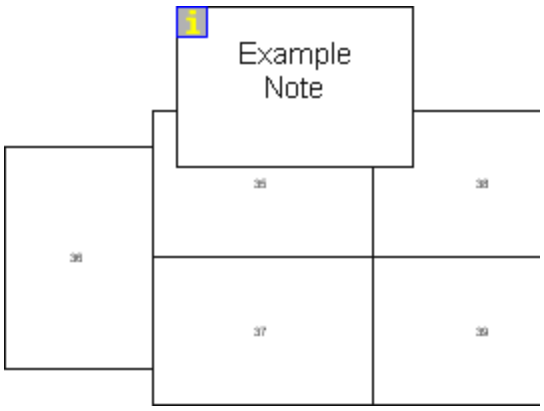
Revision Clouds

The **REVISION_CLOUD_ARC_DISTANCE** System Variable is used to specify the length of the arc used to draw the revision arc.



ISSC Notes

Notes can be added to zones or fixtures. Their appearance is controlled by two system variables.

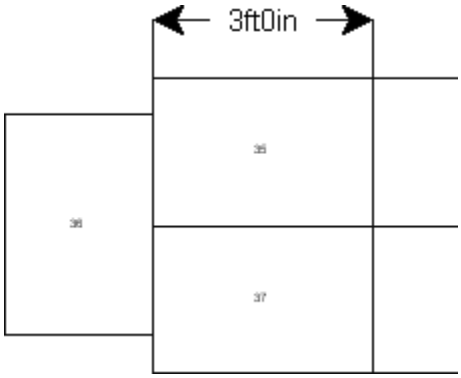


The **NOTE_FONT** system variable determines the font used for notes. If a font name is misspelled, or the font is not available, ISSC will default to a suitable font.

The **NOTE_FONT_SIZE** system variable determines the size of the font used for notes.

ISSC Dimensions

Dimensions can be used to annotate ISSC floor plans with physical distances. The appearance of these dimensions is controlled by three system variables.



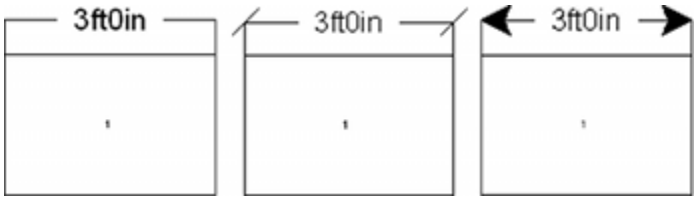
Dimension Text Font and Size

The **IN-STORE_MARKUP_TEXT_FACE** System Variable allows users to select the Font Type used for annotating dimensions. If a font name is misspelled, or the font is not available, In-Store Space Collaboration will default to a suitable font.

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.

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).

Merchandise Options

MERCH_MULTI_PROFILE

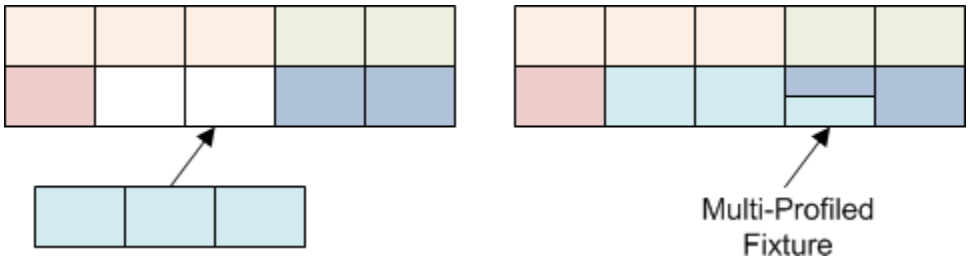
The MERCH_MULTI_PROFILE system variable determines how fixtures populate with products or planograms.

There are three options:

SV Value	Description	Comment
0	Allow fixtures to be multi-profiled	This option allows fixtures to be multi-populated. A fixture is allowed to contain more than one planogram or product placeholder.
1	Don't allow fixtures to be multi-profiled	This option will only allow fixtures to be populated if there is sufficient room for the new merchandise.
2	Replace Merchandise on fixture	This option will allow fixtures to be populated if there is insufficient room by removing preexisting merchandise from the fixtures.

System Variable = 0: Multi-Profiling Allowed

In the example below, a 3 bay planogram is to be inserted into a space where only two fixtures are available.



In this instance, one fixture will be multi-profiled with two planograms being present on the fixture.

System Variable = 1: No Multi-Profiling Allowed

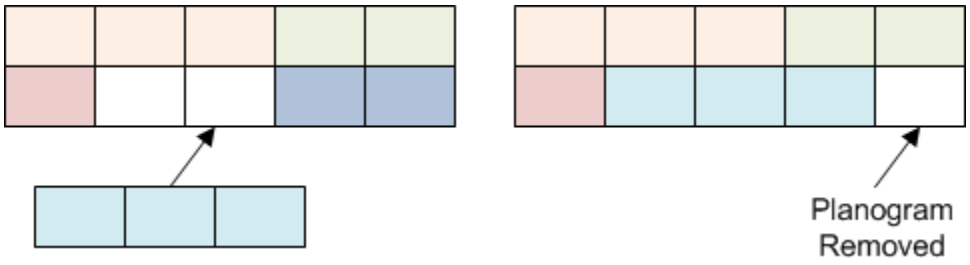
In the example below, a 3 bay planogram is to be inserted into a space where only two fixtures are available.



In this instance, the three bay planogram cannot be placed.

System Variable = 2: Replace Merchandise

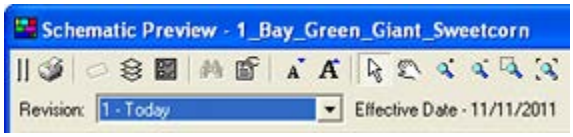
In the example below, a 3 bay planogram is to be inserted into a space where only two fixtures are available.



In this instance, an existing planogram will be removed to make room for the three bay planogram being placed.

IN-STORE_PREVIEW_POG_REVISIONS

The IN-STORE__PREVIEW_POG_REVISIONS system variable controls whether the option to view different revisions for a specific planogram is available in Schematic Preview.

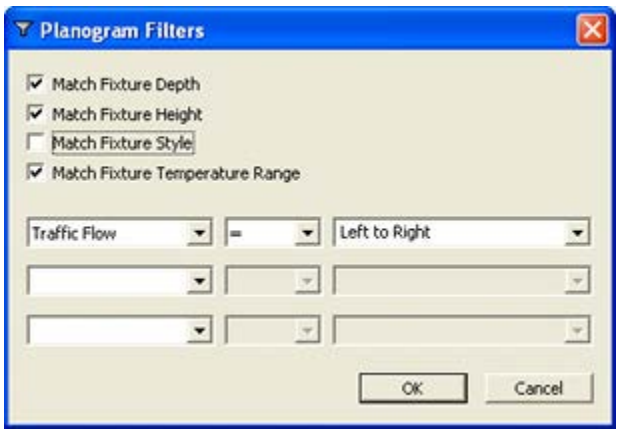


0 = Not available.

1 = Available.

IN-STORE_DEFAULT_POG_FILTERS

This system variable controls the default settings in the Planogram Filters dialog box. Data is stored as a bitwise variable.



Setting	Bitwise Value
Match Fixture Depth	1
Match Fixture Height	2

Setting	Bitwise Value
Match Fixture style	4
Match Fixture Temperature Range	8

7

Macro Space Management System Variables

Adjacency Calculations

Overview of Adjacency Calculations

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

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

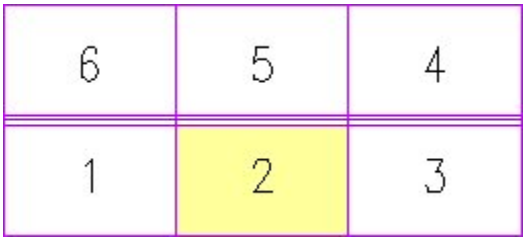
In each instance, the same functionality is called and the results written back to a common table in the database.

> **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.



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.

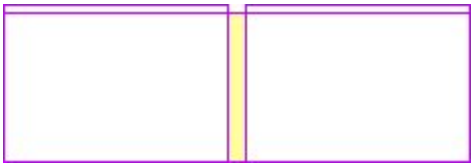
Fixture 5 is adjacent behind fixture 2.

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

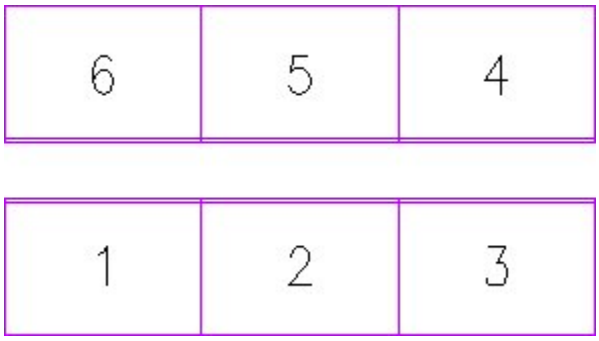
The **ADJACENCY_FIXTURESIZE** System Variable is used to filter out fixtures below a certain size for the purpose of Fixture Adjacency calculations.



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 then to be regarded as adjacent behind a specific fixture.

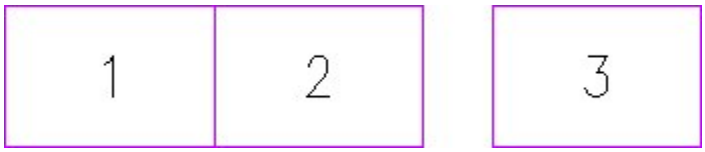


In the example above, fixture 2 is separated by a gap from fixture5. If this gap is below the value specified in ADJACENCY_FRONTBACK, fixture 5 will be regarded as adjacent (behind) fixture 2. If the gap is above the value specified in ADJACENCY_FRONTBACK, fixture 3 will not be regarded as adjacent.

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.



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.

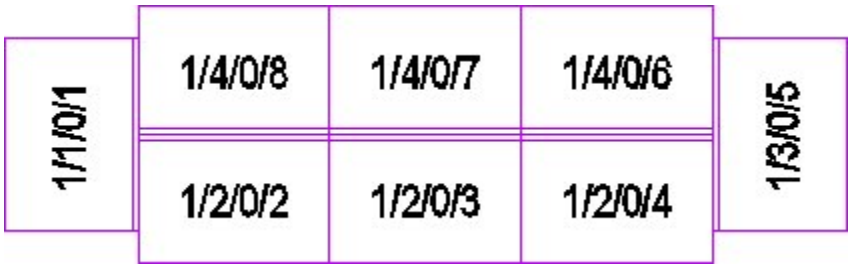
ADJACENCY_MAX_ANGLE

The **ADJACENCY_MAX_ANGLE** System Variable is used for gondolas.

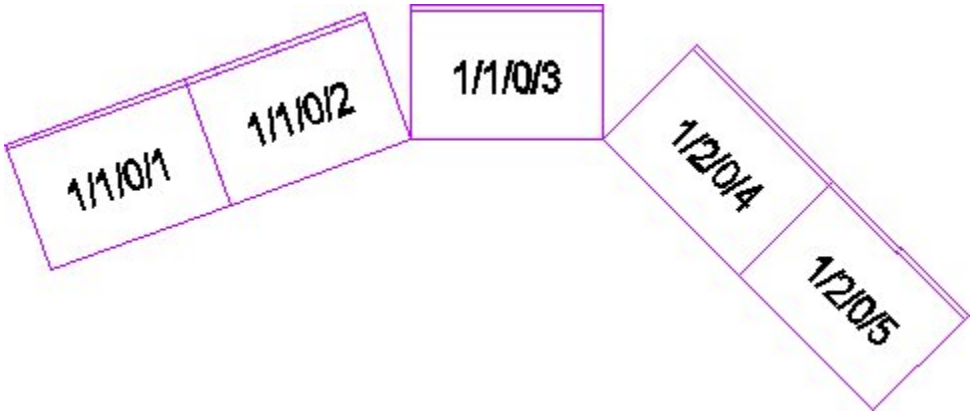
If the angle between adjacent fixtures is less than the ADJACENCY_MAX_ANGLE System Variable, the fixtures will be regarded as belonging to the same side. If the angle

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.



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

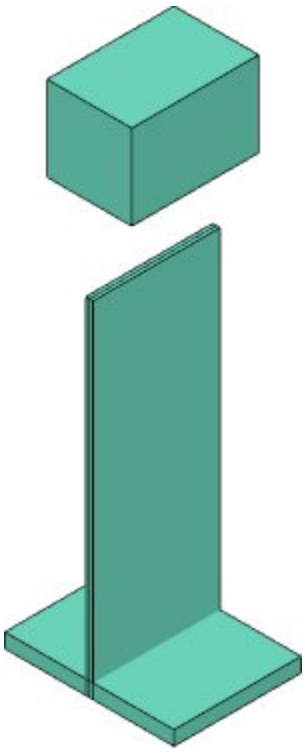
The **ADJACENCY_SEARCH** system variable is not presently in use.

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.

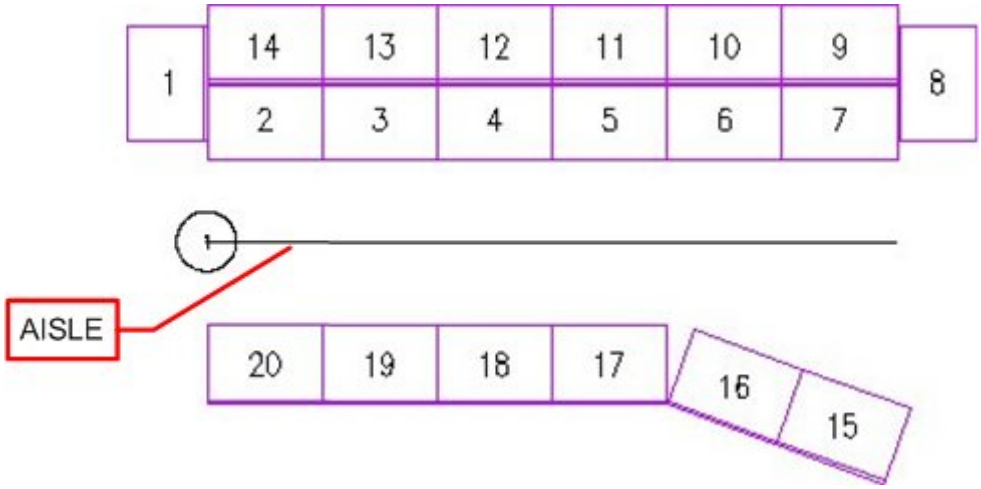


In the example above, one fixture is above another. If the vertical gap between the fixtures is less than the ADJACENCY_VERTICALGAP System Variable, the top fixture will be regarded as adjacent above the lower fixture. If the vertical gap between the fixtures is more than the ADJACENCY_VERTICALGAP System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



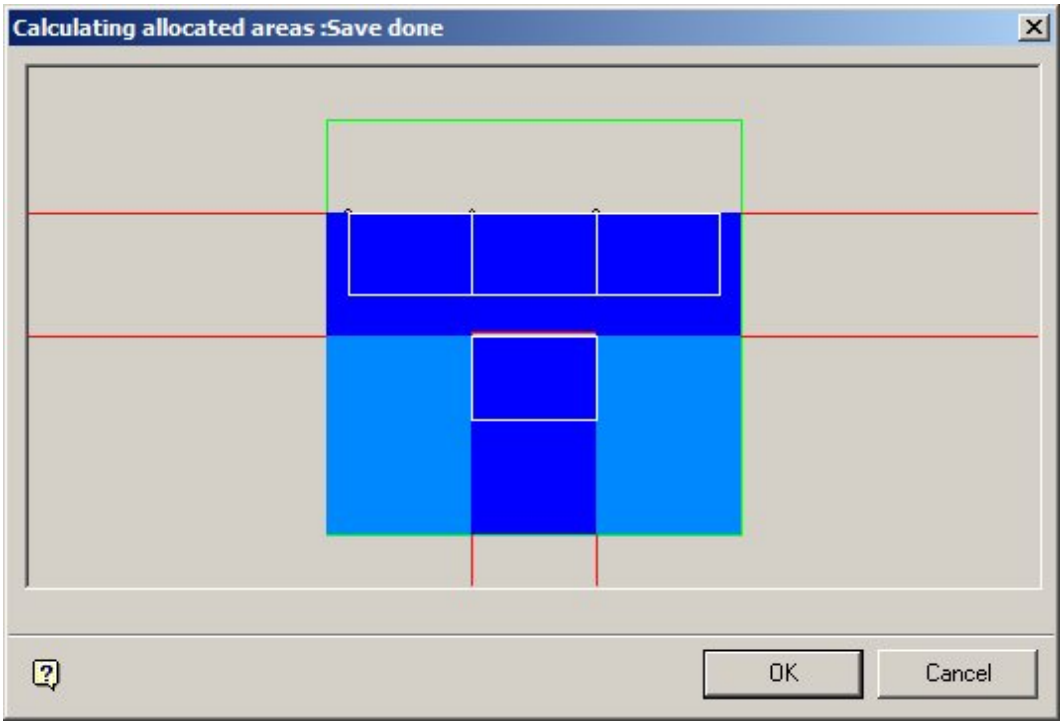
Depending on the setting of the ADJACENCY_AISLESIZE system variable, Fixtures 15 and 16 may or may not be regarded as adjacent to the Aisle. It is then possible to determine which products are on the fixtures adjacent to the aisle, and hence which products share the aisle.

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

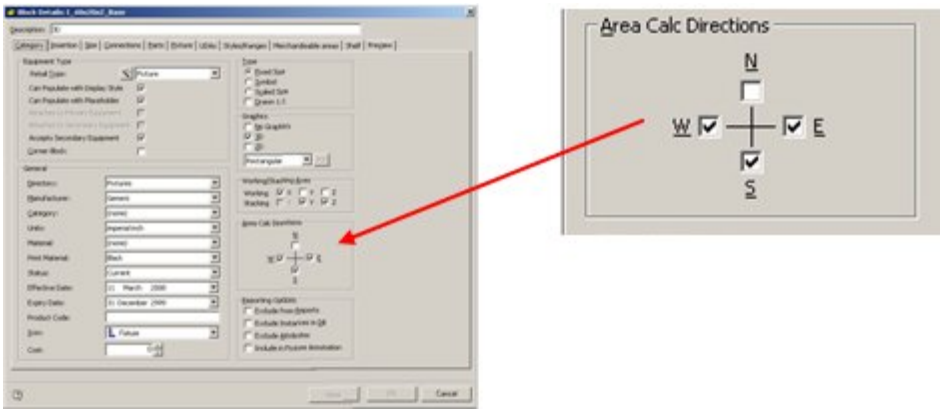
Overview of Area Calculations

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.



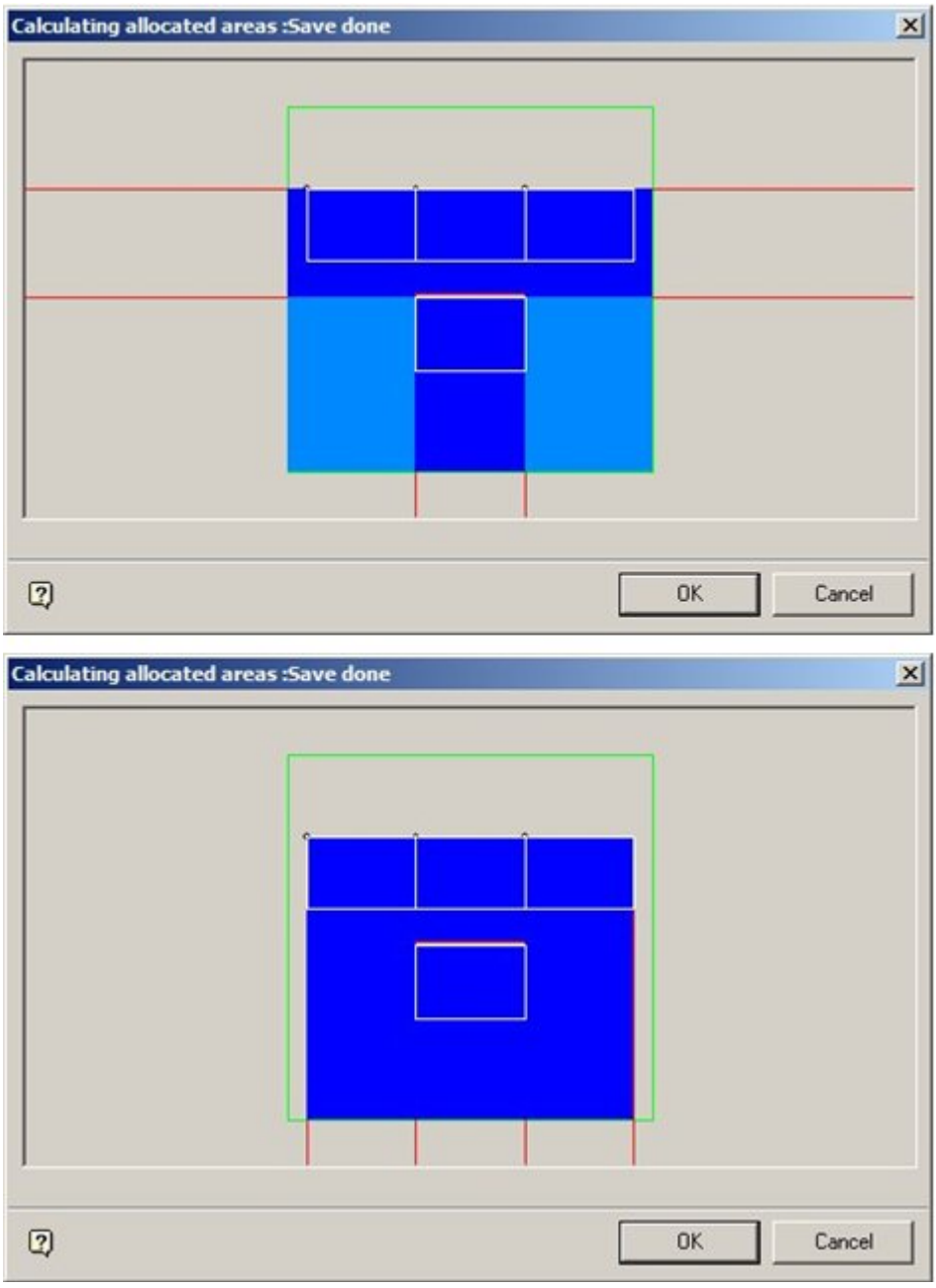
This shows the area allocated to specific fixtures - lighter shades of blue indicating that areas shared by two or more fixtures.

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 are calculations below. The top image shows an area calculation based on fixtures set for West East and South Directions.

The bottom image shows and area calculation based on South Direction only.



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

Theory of Area Calculations

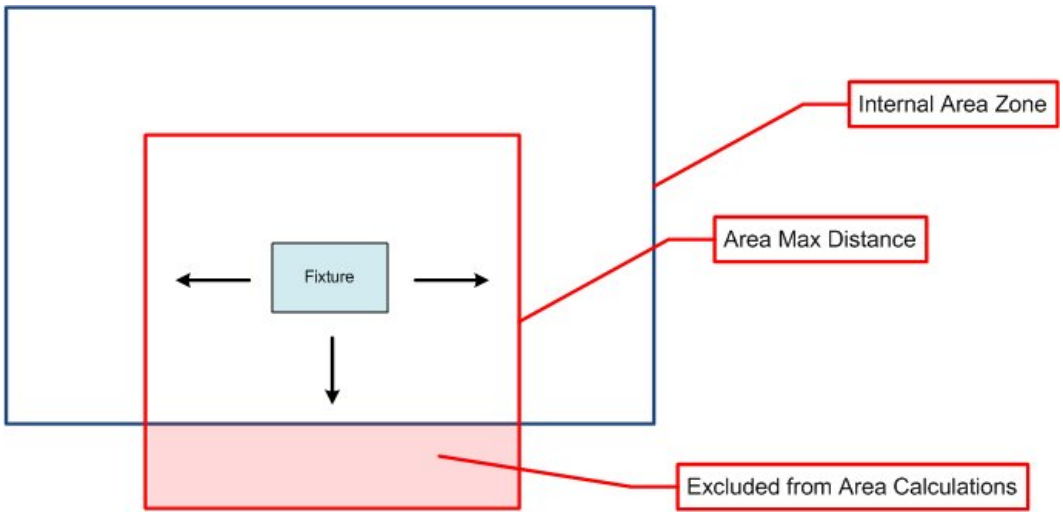
Area Calculations are used to apportion areas to all fixtures that are within the Internal Area zone.

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.

1. If an Internal Area zone is present, no fixture can be allocated any area that is outside of the zone boundary.
2. The maximum distance a fixture can be allocated area within is determined by the AREA_BOUNDARY_DISTANCE System variable.



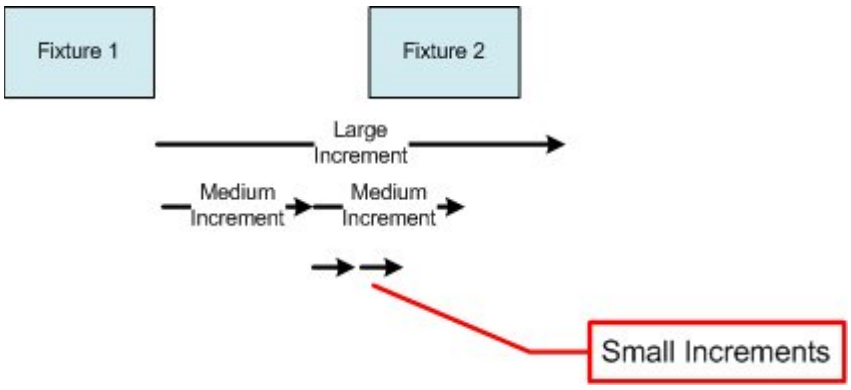
In the above example, the maximum distance the fixture can be allocated area within is determined by the AREA_BOUNDARY_DISTANCE System variable (red box). The fixture can therefore only be allocated part of the area within the Internal Area Zone (blue box). However, at one point the Internal Area Zone boundary is closer that 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 lies 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.

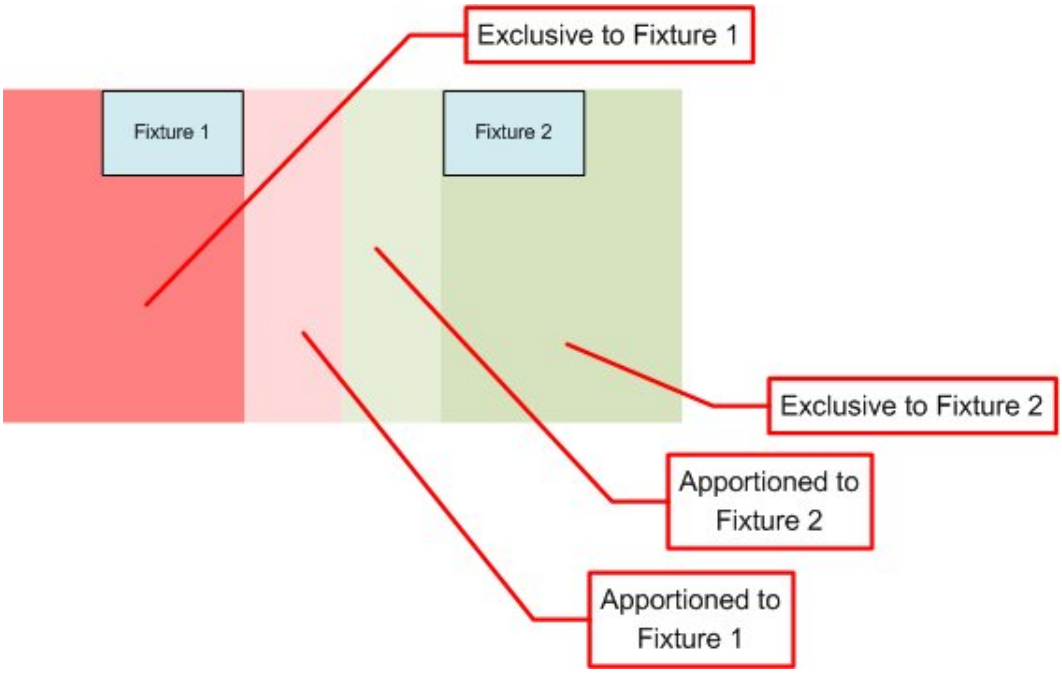
Once another fixture had been detected using large increment, the software starts using the Medium Increment distance to get a more precise 'range'. It keeps feeling out using 'medium increment' using as a starting point the last 'large increment' distance that did not find a fixture in that direction. 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.



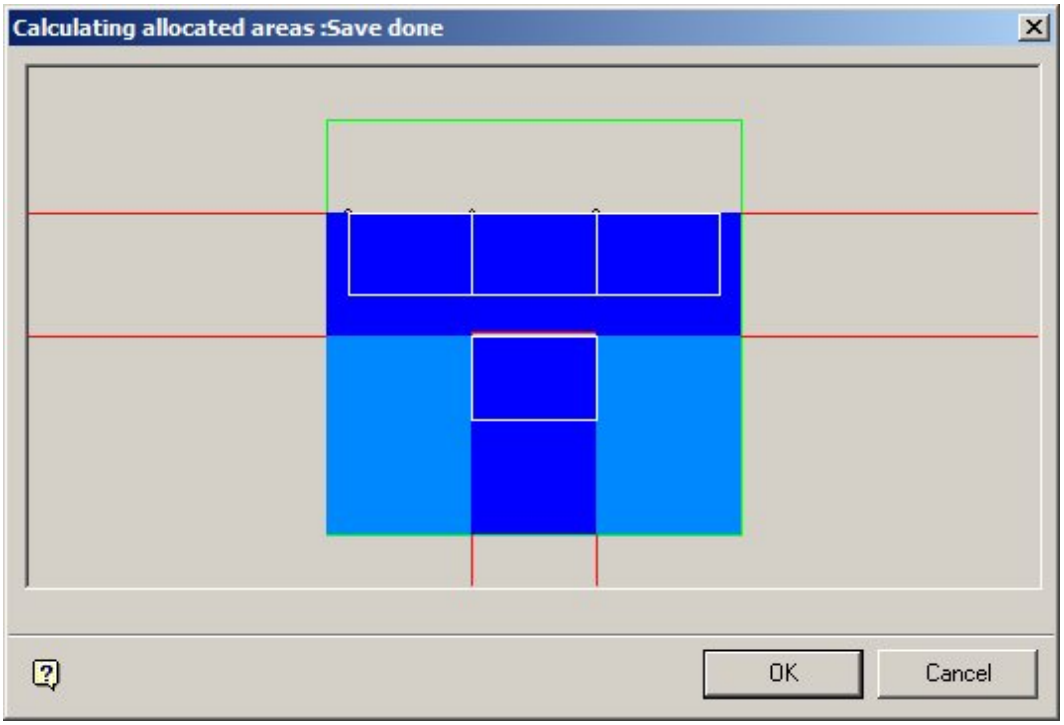
The process can be seen in the above example. Fixture 1 starts feeling out with large 'increment' (500 inches) and detects that there is a fixture within that distance. It then starts feeling out with 'medium increment' (50 inches). It detects there is no fixture within 50 inches, but there is one within 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 then. 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 is 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

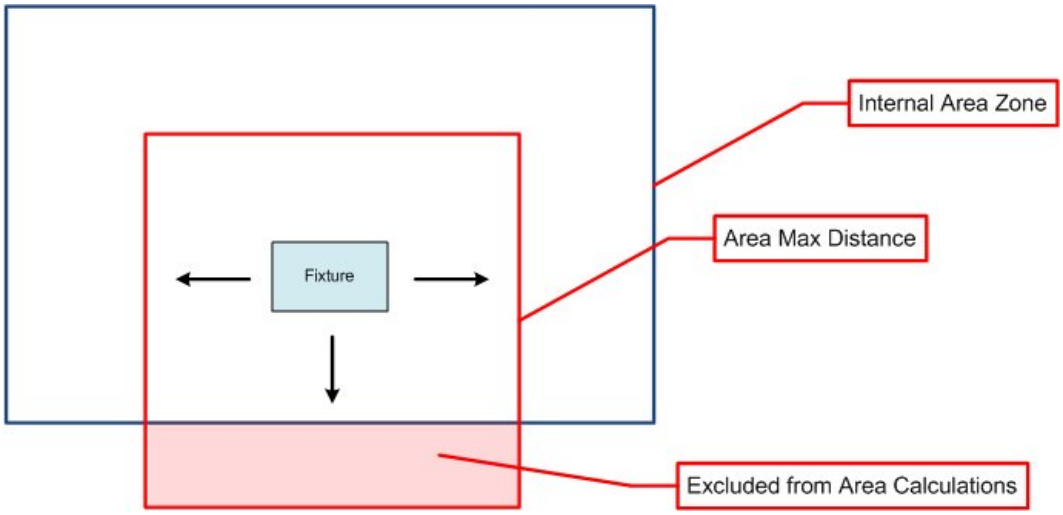
AREA_LARGE_INCREMENT is one of three system variables affecting the logic of how the Area calculation is carried out, the other two being AREA_MEDIUM_INCREMENT and AREA_SMALL_INCREMENT.

The three work in conjunction, the software 'feeling out' from the fixture using AREA_LARGE_INCREMENT setting until a fixture is encountered. The software then successively 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 then successively 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.

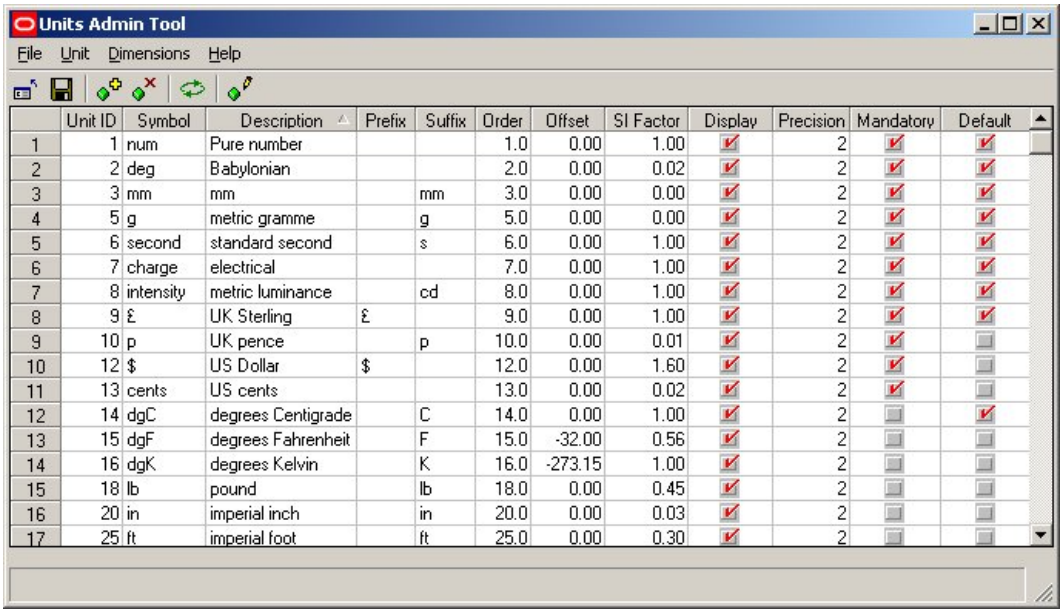
The three work in conjunction, the software 'feeling out' from the fixture using AREA_LARGE_INCREMENT setting until a fixture is encountered. The software then successively uses AREA_MEDIUM_INCREMENT and AREA_SMALL_INCREMENT to establish a progressively more accurate distance between fixtures.

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.

Important note: the AREA_SMALL_INCREMENT system variable must also be set with reference to the smallest dimension on a fixture. Fixtures that have dimensions less than the AREA_SMALL_INCREMENT value will not be included in the calculations, but will be included in the results. This can lead to significant errors. For example, if a slat wall has a thickness of one inch, but the AREA_SMALL_INCREMENT system variable is set to two inches, the slat walls will be excluded from the area calculations. Because the slat walls will be included in the results, the results will not be accurate.

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	☑	2	☑	☑
2	2	deg	Babylonian			2.0	0.00	0.02	☑	2	☑	☑
3	3	mm	mm		mm	3.0	0.00	0.00	☑	2	☑	☑
4	5	g	metric gramme		g	5.0	0.00	0.00	☑	2	☑	☑
5	6	second	standard second		s	6.0	0.00	1.00	☑	2	☑	☑
6	7	charge	electrical			7.0	0.00	1.00	☑	2	☑	☑
7	8	intensity	metric luminance		cd	8.0	0.00	1.00	☑	2	☑	☑
8	9	£	UK Sterling	£		9.0	0.00	1.00	☑	2	☑	☑
9	10	p	UK pence		p	10.0	0.00	0.01	☑	2	☑	☐
10	12	$	US Dollar	$		12.0	0.00	1.60	☑	2	☑	☐
11	13	cents	US cents			13.0	0.00	0.02	☑	2	☑	☐
12	14	dgC	degrees Centigrade		C	14.0	0.00	1.00	☑	2	☐	☑
13	15	dgF	degrees Fahrenheit		F	15.0	-32.00	0.56	☑	2	☐	☐
14	16	dgK	degrees Kelvin		K	16.0	-273.15	1.00	☑	2	☐	☐
15	18	lb	pound		lb	18.0	0.00	0.45	☑	2	☐	☐
16	20	in	imperial inch		in	20.0	0.00	0.03	☑	2	☐	☐
17	25	ft	imperial foot		ft	25.0	0.00	0.30	☑	2	☐	☐

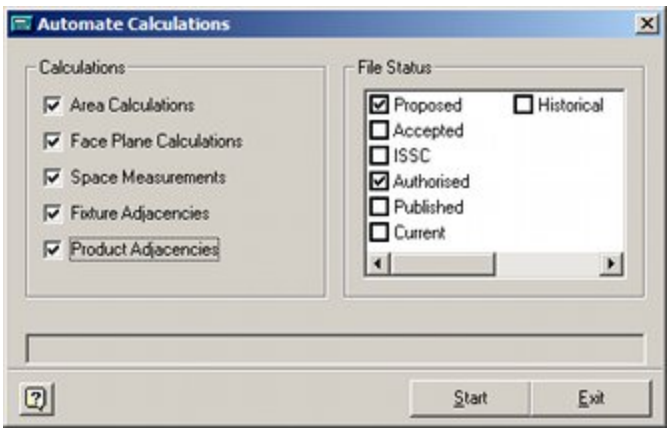
For example, if the results are wanted in Square Feet, Unit ID 31 would be selected, if the results were wanted in Square Metres, Unit ID 32 would be selected.

Note: This functionality is not yet fully implemented.

Automated Calculations

AUTOMATION_CALCS

The **AUTOMATION_CALCS** System Variable holds information on the types of Automated Calculations selected.

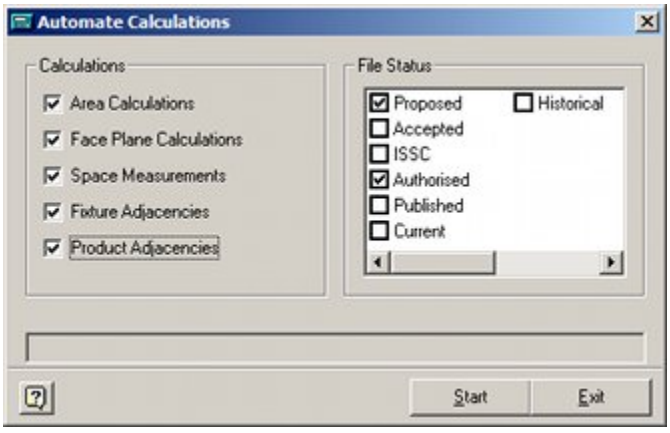


It is a bitwise system variable:

Value	Calculation
0	No selection
1	Area Calculations
2	Face Plane Calculations
4	Space Measurements
8	Fixture Adjacencies
16	Product Adjacencies

AUTOMATION_CALC_STATUS

The AUTOMATION_CALC_STATUS System Variable holds information on the types of Status selected for Automated Calculations.



The statuses are stored as pipe delimited STA_ID's from the AVTTB_STATUS table: for example 23 | 25 | 27.

General

BATCH_USE_UTC

The BATCH_USE_UTC System Variable is used to specify whether the Batchrunner.exe file (used for batch operations) in the C:\Program Files\Oracle Retail\MSM\Apps directory uses local or UTC time.

0 = Local tome

1 = UTC time

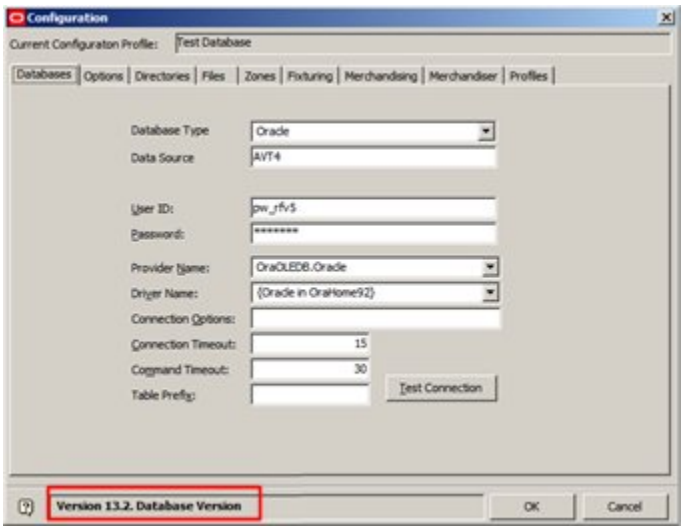
DBSCHEMADATE

The **DBSCHEMADATE** System Variable holds the date the schema was last updated by means of an upgrade script. (The upgrade script must be set to update the date).

The information is purely held in the database.

DBVERSION

The DBSCHEMADATE System Variable holds the information on the version the schema has been updated to by an upgrade script. It is used in the status bar of the configuration module. (The upgrade script must be set to update the version).



MERCH_TREE_EFFECTIVE_DATE

The MERCH_TREE_EFFECTIVE_DATE system variable controls the graying out rules for products and planograms in the Object Browser. If this functionality is turned on, all products and planograms that have an Effective date after the Active Date of the currently active floor plan will be grayed out and unavailable for selection from the object browser.

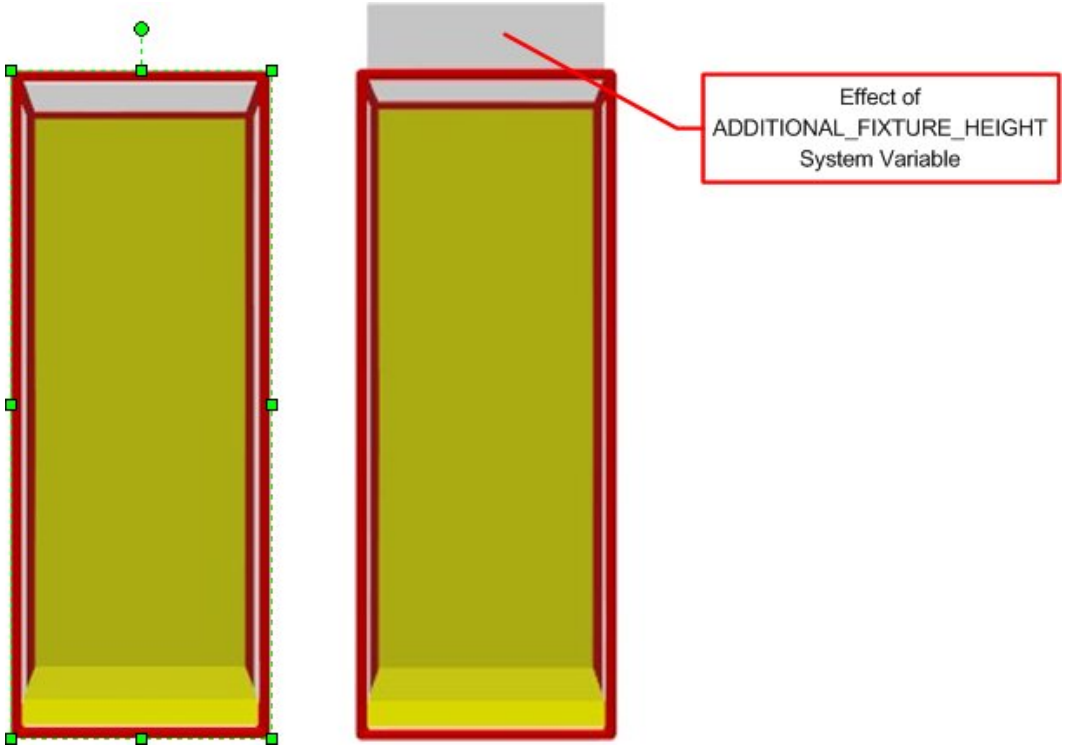
0 = Turn graying out off.

1 = Turn graying out on.

Merchandiser

ADDITIONAL_FIXTURE_HEIGHT

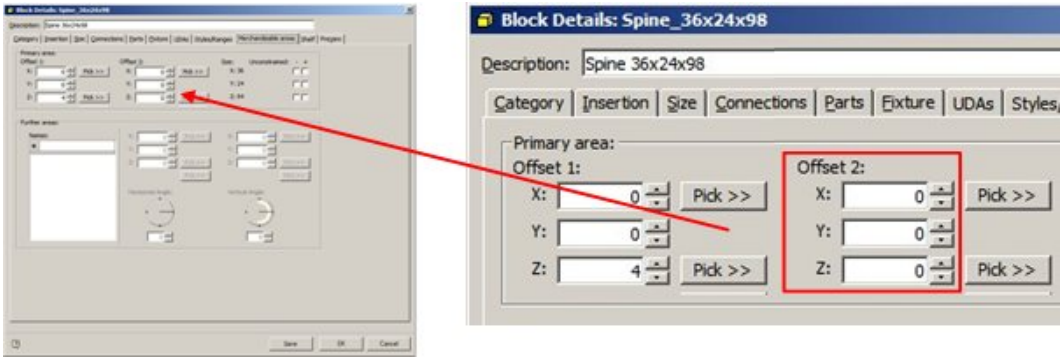
The **ADDITIONAL_FIXTURE_HEIGHT** system variable is used to increase the height of the merchandisable area for all fixtures in the Merchandiser module beyond that set in the Merchandisable Areas Tab of the Block Details dialogue box in Fixture Studio.



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).



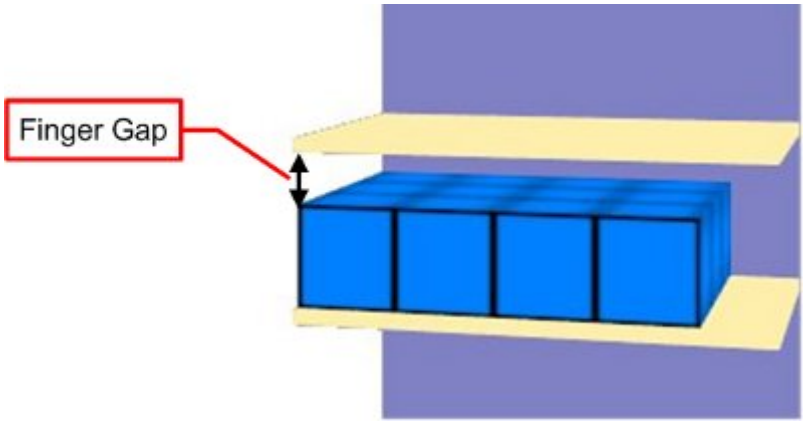
Merchandiser Module

There will be two effects in the Merchandiser module.

1. The AutoFill command (Standard toolbar) will fill to a volume that includes the ADDITIONAL_FIXTURE_HEIGHT setting.
2. 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.

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.

Object Grid

OBJECT_GRID_DATALIMIT

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

Planogram Importer

About Planogram Import

Planogram Import can be carried out using Oracle Data Integrator from third party planograming tools like Apollo, Galleria and ProSpace.

When planograms are imported, they need to be matched to suitable fixtures and shelves in the Macro Space Planning 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 Planning 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_FIXURE_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 Planning 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

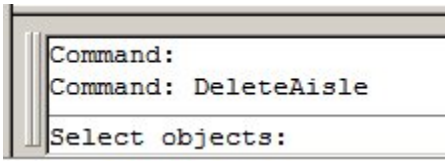
The **DEFAULT_IMPORT_BLOCK_ID** system variable is used for Planogram import. The value should correspond to the ID of a suitable default product block in the table of Block Details. This default product block will be associated with the imported planogram if no more suitable match exists in the Macro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



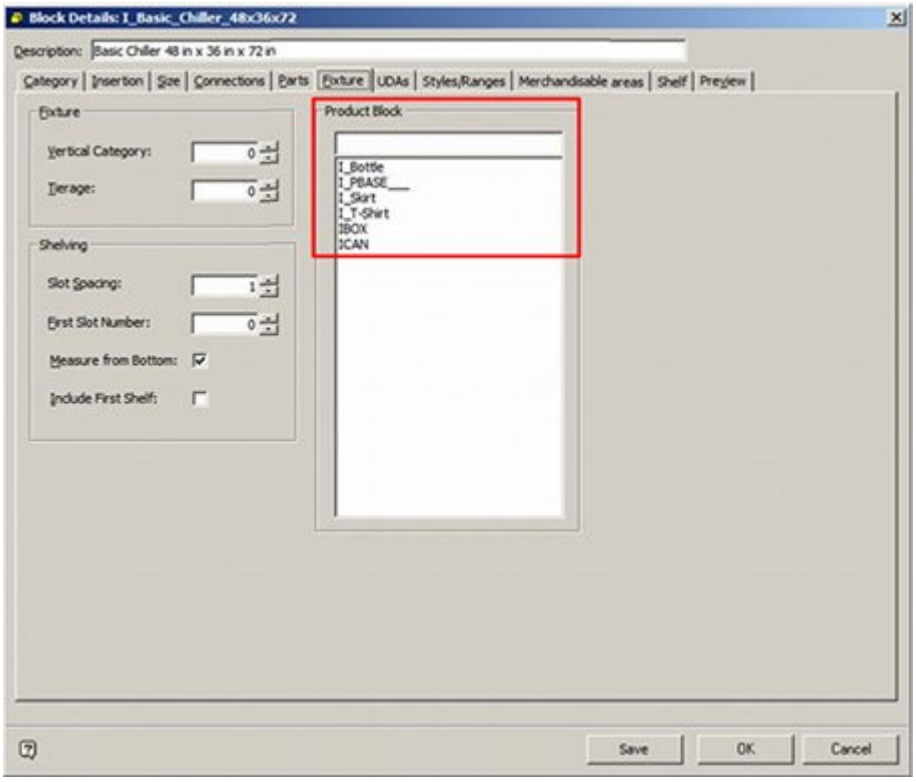
0 = suppress showing some AutoCAD commands in the command line

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.

DEFAULT_MERCH_BLOCK

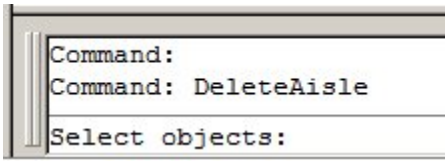
The DEFAULT_MERCH_BLOCK system variable holds the name of the default product block to be used in Planner if no product block has been defined in the Product Block frame of the Fixture tab of the Block Details dialog box in Fixture Studio.



This ensures that a generic product placeholder will be displayed if no specialized product block has been defined.

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	MSM
2	BS1192/ISO13567

There are two default standards:

1. MSM (Macro Space Management) which contains information on layers specific for Macro Space Management

2. BS1192/ISO13567 which contains information on the ISO13567 International standard

> **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.

Only one layer standard can be used at any one time. Accordingly, it is normally configured during the implementation of the software and then left unchanged.

Planogram Substitution

PLANOGRAM_SUBSTITUTION_COPY_FILE

The **PLANOGRAM_SUBSTITUTION_COPY_FILE** system variable is used to determine whether planogram substitutions can be made in files of Current status.

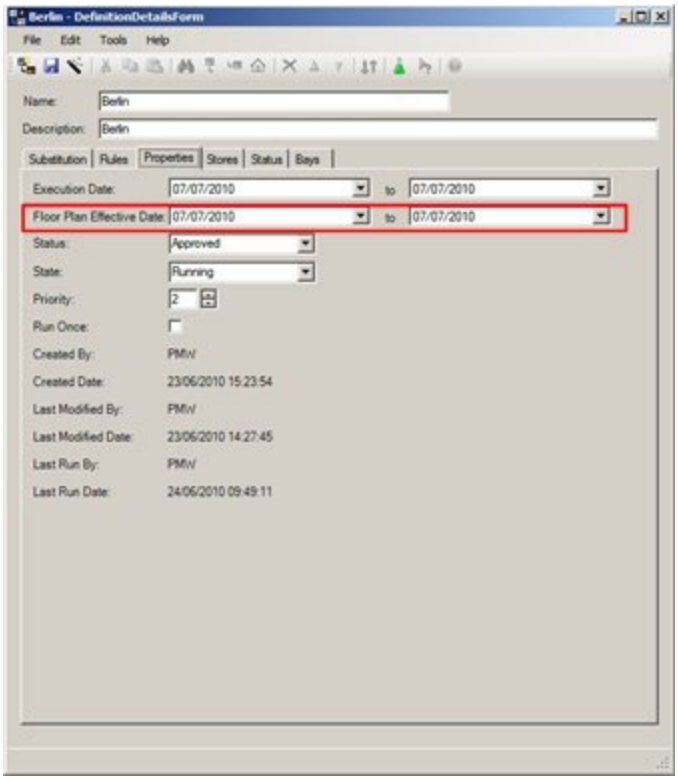
0 = Off

1 = On

If set of 0 (Off) Current status will not be available for selection in the Planogram Substitution Definition dialog box and the Planogram Substitution Assistant. If set to 1 (On) current status will be available for selection and planogram substitutions can be carried out based on files of Current status.

Because files of Current status are set to 'read only' status the actual substitutions cannot be made in the current file. Instead, they will be made in an Authorized file belonging to the floor the Current file is associated with. This authorized file could already exist, or it could be created by the Planogram Substitution Process (cloning).

What Authorized file is used depends on the Floor Plan Effective Date set in the Properties Tab of the Planogram Substitution Definition dialog box.



If an existing Authorized file exists in the same floor with an Effective Date that falls within the range set in the Floor Plan Effective Date, substitutions will be made in that file.

If no existing Authorized file exists in the same floor with an Effective Date that falls within the range set in the Floor Plan Effective Date, an Authorized file will be created in the same Revision holding the Current file. This Authorized file will have its Effective Date set to the earliest date in the Floor Plan Effective Date.

PLANOGRAM_SUBSTITUTION_LOG_EXPLODED

This system variable has been superseded and is no longer in use.

PLANOGRAM_SUBSTITUTION_RUN_CALCS

The **PLANOGRAM_SUBSTITUTION_RUN_CALCS** system variable determines whether Product Adjacency calculation are automatically run on a drawing immediately prior to carrying out a planogram substitution.

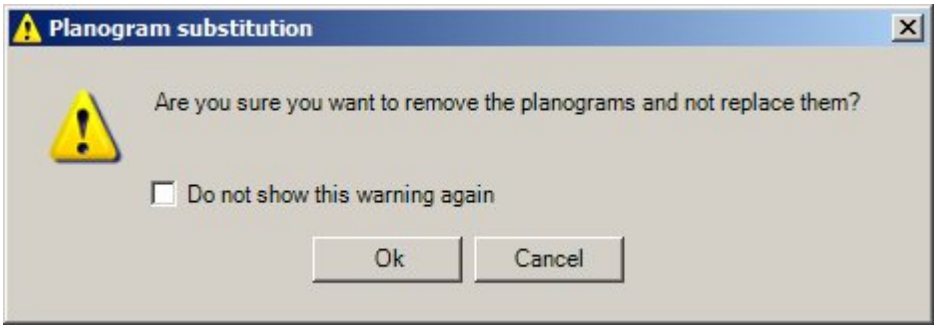
0 = Do not run Product Adjacency calculation.

1 = Run Product Adjacency calculation.

Whether this system variable is set to on of off depends on whether planogram substitutions are being run as a batch process or not. If (for example) Automated calculations are run immediately prior to planogram substitution, there is no need to re-run Product Adjacency. If Automated Calculations are not being run, there is merit in using the PLANOGRAM_SUBSTITUTION_RUN_CALCS system variable to force an automatic run of Product Adjacency prior to making substitutions.

PLANOGRAM_SUBSTITUTION_WARNING_SHOW

The **PLANOGRAM_SUBSTITUTION_WARNING_SHOW** system variable determines whether an individual user has chosen to suppress display of the warning dialog for removing planograms without replacement when specifying Planogram Substitutions.



0 = Individual user has suppressed warning

1 = Warning will be displayed for individual user

The results are stored referenced by User ID (USR_ID) in the AVTTB_USER_VARIABLE table.

PLANOGRAM_SUBSTITUTION_PROCESS_EXPLODED

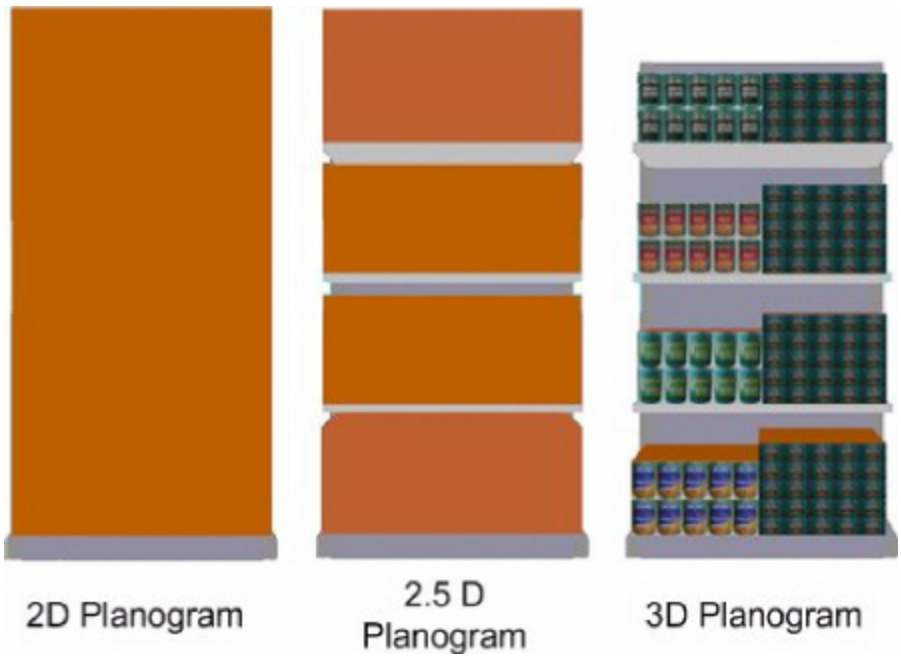
The **PLANOGRAM_SUBSTITUTION_PROCESS_EXPLODED** system variable has a significant impact on the way planogram substitutions are carried out. It can be set to 0, 1, 2, 3 or 4.

Planogram Form

There are three forms planograms can be placed in the merchandiser module.

- 2D Planogram (Placeholder)
- 3D planogram (called 2.5 D in the Merchandiser Module).
- 3D with Product Items (Full Detail).

These appear in the Merchandiser module as follows:



A 2D planogram is purely a placeholder. A 3D planogram (2.5 D in Merchandiser) shows the shelves and a simple product block to show the shelves are occupied. A 3D planogram with Product items shows the shelves, together with full details of the products.

> **Note:** Planograms are only represented in placeholder (2D) form in the Planner module and in Top Graphical View in In-Store Space Collaboration.

Once placed in the Merchandiser module planograms can be manually toggled between 2D and 3D mode by means of the Implode or Explode options on the toolbar. Merchandiser floor plans can therefore contain planograms in a variety of states. The PLANOGRAM_SUBSTITUTION_PROCESS_EXPLODED system variable determines how planogram substitution caters for the different cases.

System Variable Values

System Variable	Description
0	Only planograms in 2D form will be substituted - with planograms in 3D form being ignored. The substituted planograms will be placed in 2D form. No information on the planograms that have been ignored for substitution will be written to the Planogram Substitution Log.
1	Only planograms in 2D form will be substituted - with planograms in 3D form being ignored. The substituted planograms will be placed in 2D form. Information on the planograms in 3D form that have been ignored for substitution will be written to the Planogram Substitution Log.
2	Planograms in 2D form will be substituted with planograms also in 2D form. Planograms in 3D and 2.5D form will be placed in 2D form when substituted.

System Variable	Description
3	3D and 2.5D planograms will be substituted by 2D planograms. A warning will be written to the Planogram Substitution Log identifying the 3D and 2.5 D planograms that were placed in 2D form during the substitution.
4	Planograms in 3D form will be substituted with planograms also in 3D form. Planograms in 2D form will be placed in 3D form when substituted. Planograms in 2.5D form will be replaced by a 2.5D form if that is the way the planogram design has been defined. Alternatively, it will be replaced by a 3D form if the planogram design is in 3D format.

Revision Substitution

The PLANOGRAM_SUBSTITUTION_PROCESS_EXPLODED system variable has no effect on Revision Substitution (the changing of a planogram for a later version of that design.

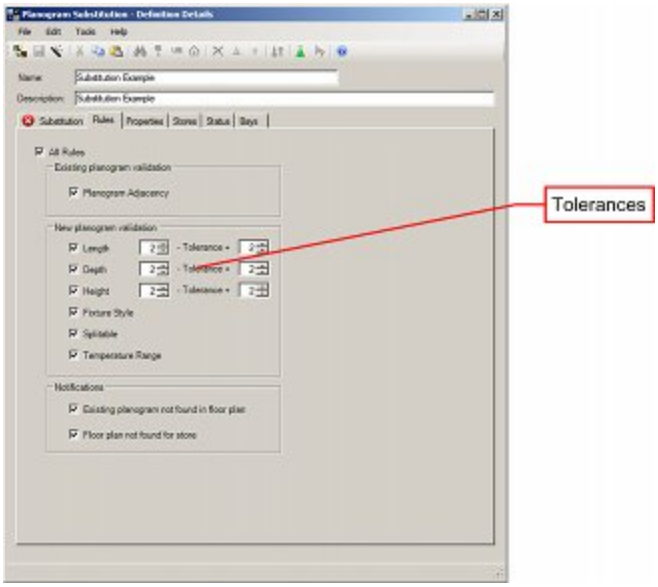
Impact on Reporting Accuracy

Whether planograms are in 2D, 2.5D or 3D form affects the form of information held in the database. For example, a planogram in 2D form will only contain 'header' information with no entries for individual products of shelf objects. This impacts on reporting accuracy.

For example, if planograms are in 2D mode, this needs to be taken into account when generating a bill of materials for the equipment in the floor plan as shelf information will not be stored in the AVTTB_SHELF table.

PLANOGRAM_SUBSTITUTION_LENGTH_TOLERANCE

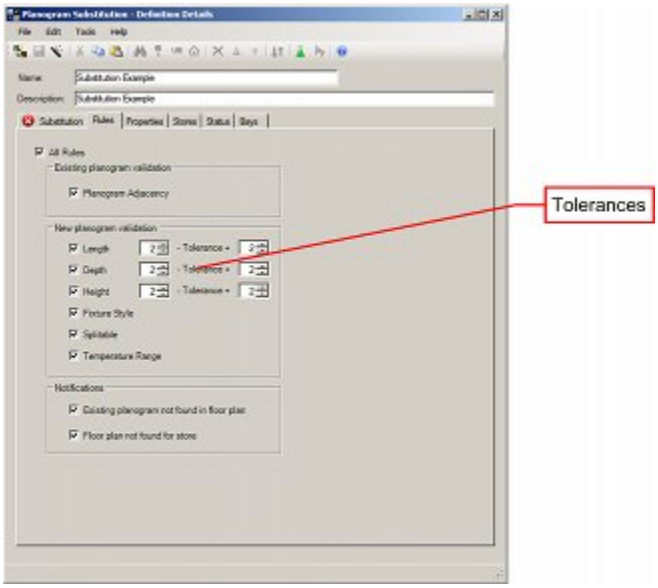
The **PLANOGRAM_SUBSTITUTION_LENGTH_TOLERANCE** system variable sets the default values for the plus and minus tolerance for planogram length that appear in the Rules Tab of the Planogram Substitution Definition dialog box called from the Planogram Substitution dialog box in the Admin Module.



These default values can be over-ridden in the Planogram Substitution Definition dialog box by the user when setting up individual definitions.

PLANOGRAM_SUBSTITUTION_HEIGHT_TOLERANCE

The **PLANOGRAM_SUBSTITUTION_HEIGHT_TOLERANCE** system variable sets the default values for the plus and minus tolerance for planogram height that appear in the Rules Tab of the Planogram Substitution Definition dialog box called from the Planogram Substitution dialog box in the Admin Module.

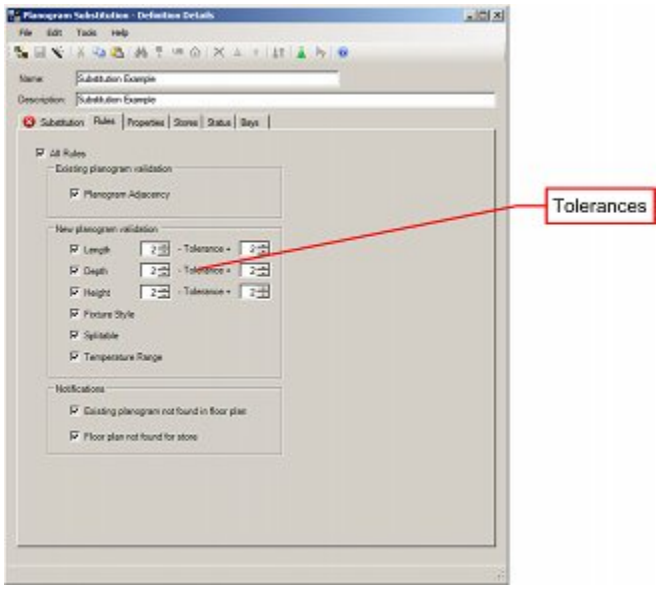


These default values can be over-ridden in the Planogram Substitution Definition dialog box by the user when setting up individual definitions.

PLANOGRAM_SUBSTITUTION_DEPTH_TOLERANCE

The **PLANOGRAM_SUBSTITUTION_DEPTH_TOLERANCE** system variable sets the default values for the plus and minus tolerance for planogram depth that appear in the

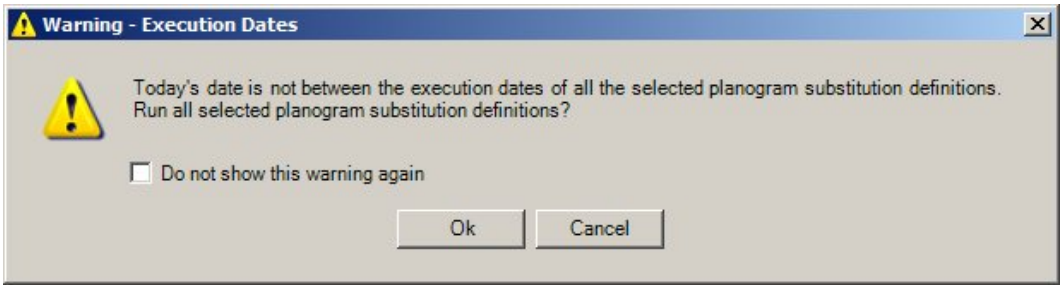
Rules Tab of the Planogram Substitution Definition dialog box called from the Planogram Substitution dialog box in the Admin Module.



These default values can be over-ridden in the Planogram Substitution Definition dialog box by the user when setting up individual definitions.

PLANO_SUBS_WARNING_DATES

The **PLANO_SUBS_WARNING_DATES** system variable determines whether an individual user has chosen to suppress display of the warning dialog for manually running Planogram Substitutions when the current date is outside of the date range the selected planogram substitutions are valid for.



0 = Individual user has suppressed warning

1 = Warning will be displayed for individual user

The results are stored referenced by User ID (USR_ID) in the AVTTB_USER_VARIABLE table.

Product Studio

DEFAULT_TRANPARENCY_COLOUR

The DEFAULT_TRANSPARENCY_COLOUR system variable holds the value of an RGB value that will be colored transparent when displaying a product image in the Merchandiser module. An example can be seen below:



If the area of an image that is to be made transparent is colored with that specific RGB value, the image will appear transparent when displayed.



In the example above, the television on the left has had a transparency applied; the one on the right has not.

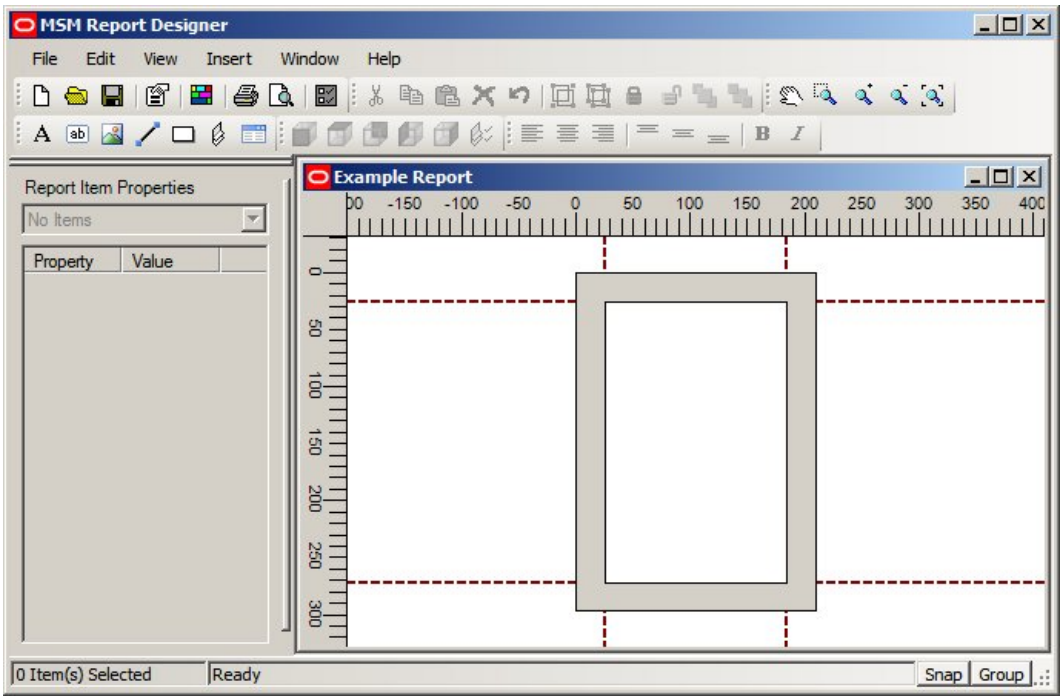
> **Note:** See Product Studio help for detailed information on how to use transparencies.

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.

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

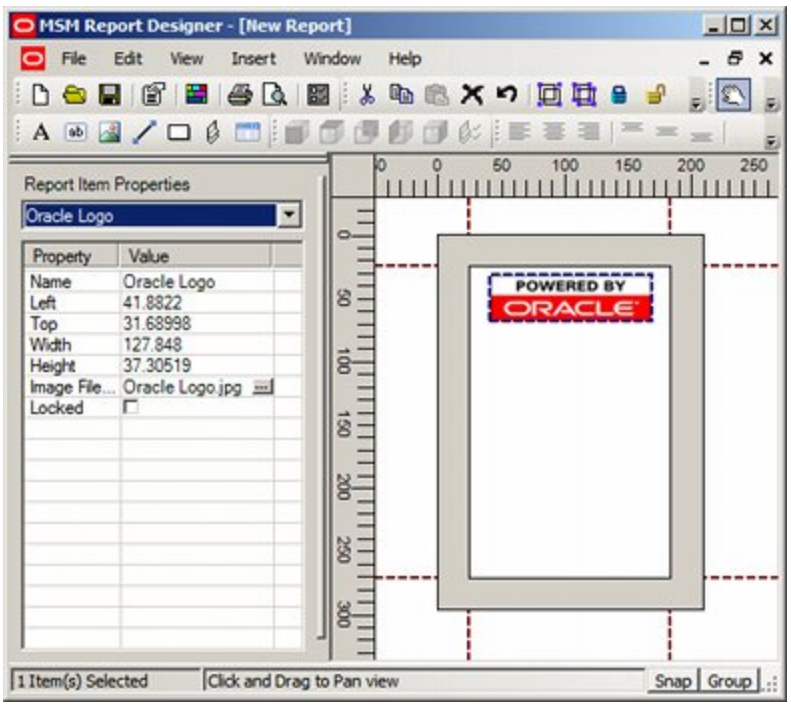
RPTDSG_TESTPOGID

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

RPTDSG_IMAGEBASE

The RPTDSG _IMAGE_BASE System variable holds the identify of the mapped drive or UNC path to a directory where any images associated with the report are held. These images can then be incorporated into the report - for example as a logo.



Because these images are going to be used by all users of the report, the folder holding them should be on a server or some other centrally available resource.

RPTDSG_MAXUNDO

The RPTDSG_MAXUNDO system variable holds an integer specifying the maximum number of undo actions that can be carried out in Report Designer.

Space Calculations

Overview of Space Calculations

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

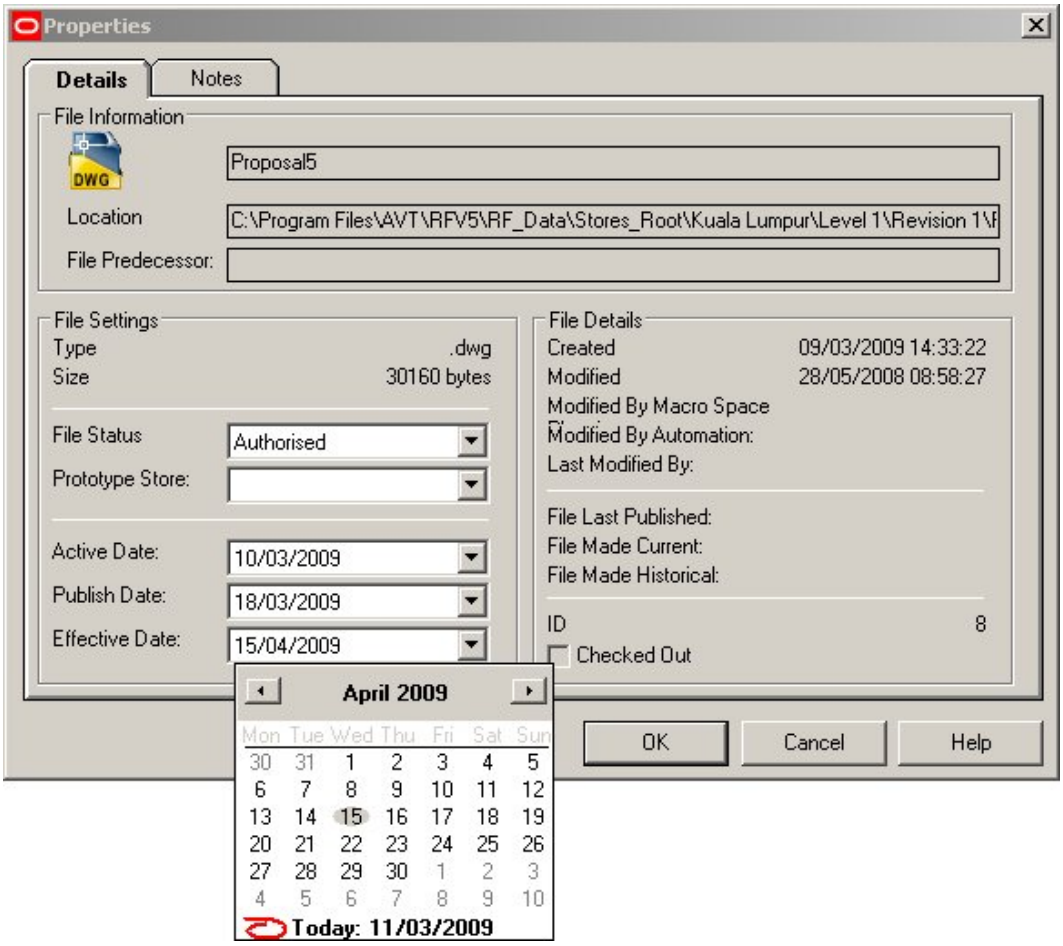
PUBLISH_DATE_LEAD_PERIOD

The **PUBLISH_DATE_LEAD_PERIOD** system variable was used in Store Manager. It affected the file Properties dialogue box. This system variable has now been replaced by

the **System Publishing Lead Period** setting in the Floor Plan Publishing Configuration dialog box accessed from the File menu in the Administration module.

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 Authorized status, the previously grayed out Publish and Effective dates become active. The Publish Date is set to the current date plus the time interval specified in the **System Publishing Lead Period** setting in the Floor Plan Publishing Configuration dialog box accessed from the File menu in the Administration module.

The Effective Date is then set to the Publish date plus the number of days set in the EFFECTIVE_DATE_LEAD_PERIOD system variable.

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.

Synchronisation

Overview of Synchronisation

Synchronisation is used in the Planner module to ensure the AutoCAD floor plan contains the same information as the Macro Space Planning (MSP) database. This information could differ because:

- Changes have been made in the Planner module using AutoCAD tools and this information has not been registered in the database.
- Changes have been made in to a floor plan in the Merchandiser module. This will write information to the database but will not update the AutoCAD floor plan.
- Changes have been made in to a floor plan in In-Store Space Collaboration. This will write information to the database but will not update the AutoCAD floor plan.
- Changes have been to a floor plan using batch tools like Planogram Synchronisation. Again, this will write information to the database but will not update the AutoCAD floor plan.

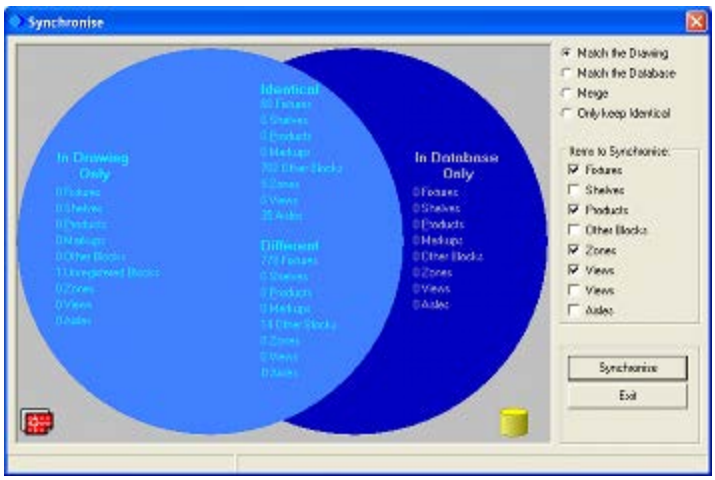
There are two forms of synchronisation:

- Automatic

This is done as the floor plan is opened in the Planner module. The date the AutoCAD floor plan was last modified is compared with information in the database. If necessary, modifications are made either to the floor plan or database.

- Manual

This can be done manually by the users once the floor plan has been opened. This is done in the Synchronisation dialog box accessed from the **File** menu or **Retail** toolbar in the Planner module.



The following system variables affect synchronisation:

- AUTOSYNC
- SYNC_SETTINGS
- SYNC_OBJECTS
- SYC_DIRECTION

These are described in more detail in the following topics.

AUTOSYNC

The **AUTOSYNC** system variable is used to specify whether a floor plan in the process of opening in the Planner module will be automatically synchronised to ensure the information in the AutoCAD floor plan matches the information in the MSP database. The possible values are:

0 - Do not Auto-Synchronize.

1 - Prompt when Auto-Synchronisation is required.

2 - Auto-Synchronize automatically when the floor plan is opened.

If the 'Prompt when Auto-Synchronisation is required' option is selected, a confirmation dialog box will come up



Note: See Store Planning Help for more information on how the Auto-Synchronize functionality works.

DYNAMIC_SYNC

The DYNAMIC_SYNC system variable allows users to dynamically synchronize changes made in a Planner floor plan using AutoCAD tools back to the database at the time the changes are made.

0 = Off

1 = On

This affects equipment and merchandise. Other types of objects such as zones are not affected by dynamic synchronisation and have to be manually synchronised by the user if required.

SYNC_SETTINGS

The **SYNC_SETTINGS** System Variable determines whether to use default options for the Synchronisation options, or whether to save user specific options.

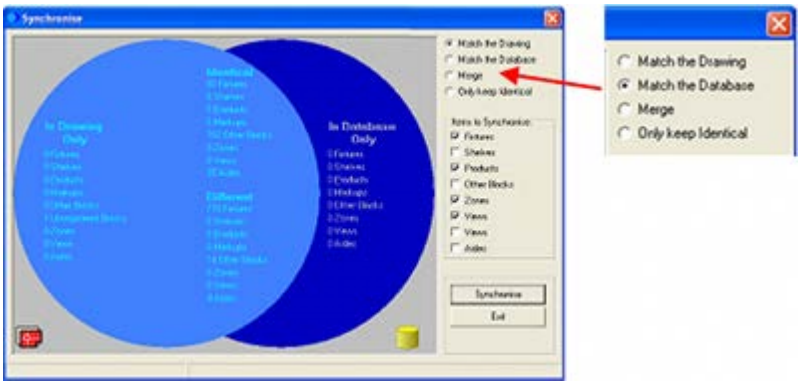
0 = Use Default Options

1 = Save User Specific Options

If **Use Default Options** is selected, the default settings will be read from the SYNC_DIRECTION and SYNC_OBJECTS system variables from the AVTTB_SYSTEM_VARIABLE table. If **Save User Specific Options** is selected, the current Synchronize Options and Synchronize Objects will be written back as User Specific Variables to the AVTTB_USER_VARIABLE table.

SYNC_DIRECTION

The SYNC_DIRECTION System Variable holds the default value for the direction synchronisation is set to occur.



The possible values of the system variable as follows:

0 = Match the Drawing

1 = Match the Database

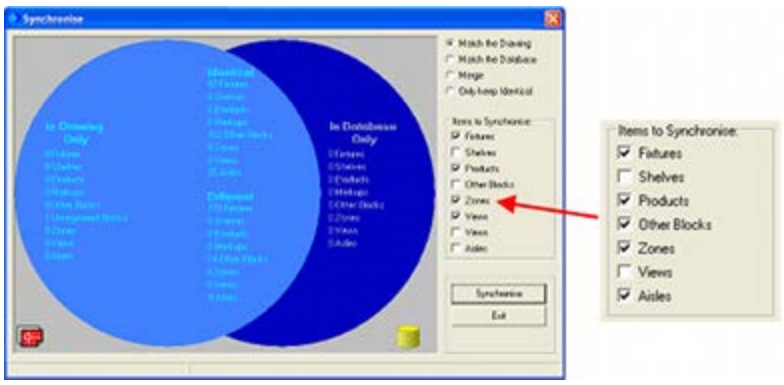
2 = Merge

3 = Keep Identical

> **Note:** See Store Planning Help for more information on how the Synchronize direction functionality works.

SYNC_OBJECTS

The SYNC_OBJECTS System Variable specifies which options are to be present as defaults when the Synchronisation dialog box opens.



The defaults are stored as a bitwise value with:

0 = No defaults

1 = Synchronize Fixtures

2 = Synchronize Shelves

4 = Synchronize Products

8 = Synchronize Other Blocks

16 = Synchronize Zones

32 = Synchronize Views

64 = Synchronize Lights [not currently in use]

128 = Synchronize Notes/Markups [not currently in use]

256 = Synchronize Aisles

Note: See Store Planning Help for more information on how the Synchronize functionality works.

8

Admin Planning

Hatch Styles

About Hatch styles

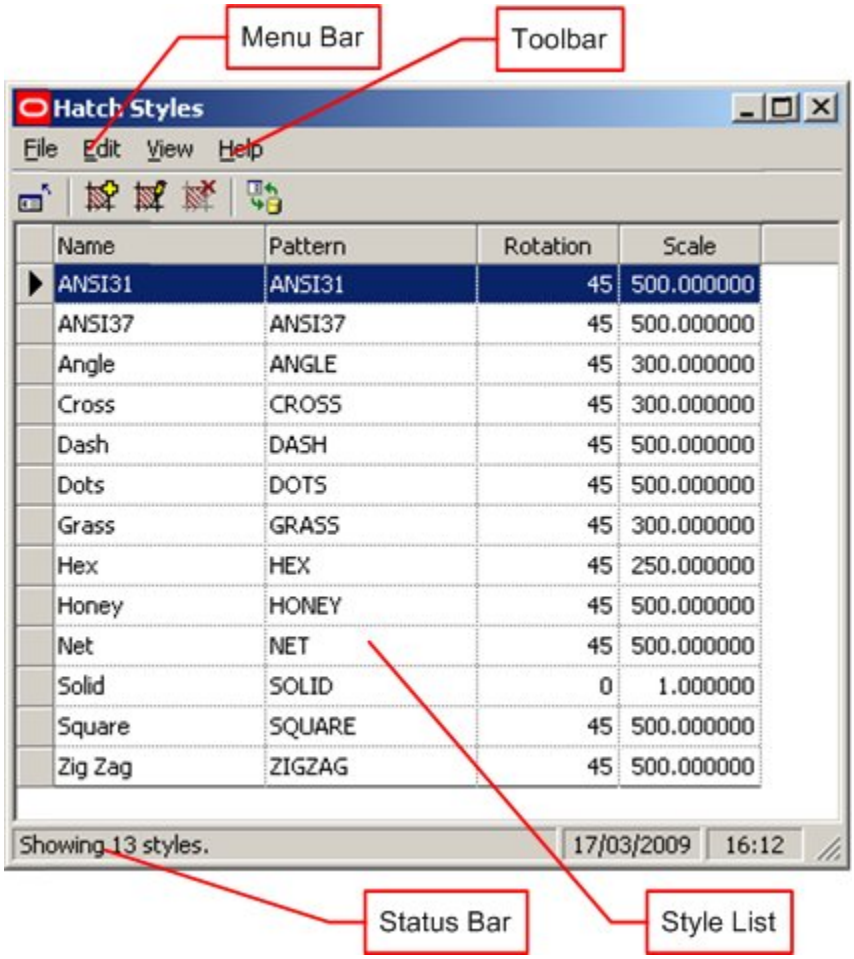
The **Hatch Styles** Option allows users to set up Hatch Styles to indicate the dimensions of Zones, and so on.

These hatch styles can be customized in the Admin Module and are used in both the MSM Merchandiser Module and In-Store Space Collaboration.

Hatch Styles in the Planner Module is 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.



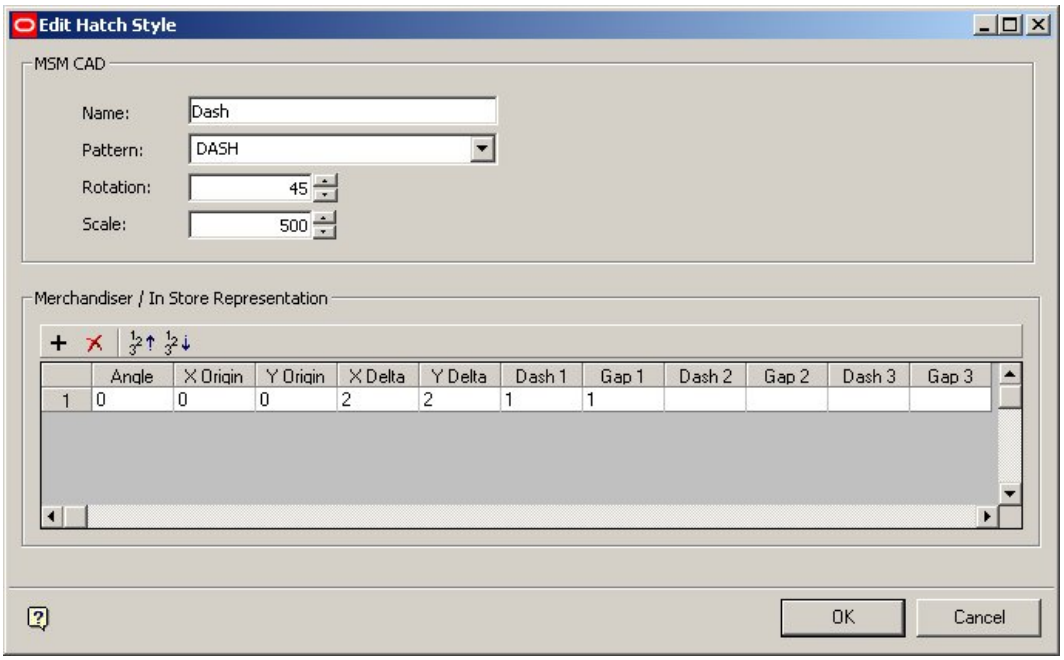
The **Menu Bar** gives access to the drop down menus.

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.

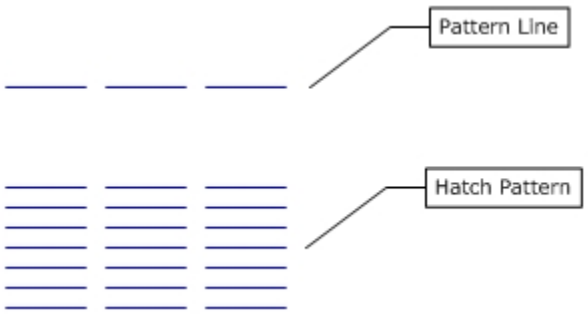


This allows users to specify the pattern details to be used in Merchandiser and In-Store Space Collaboration.

Overview of Configuring Hatch Styles for Merchandiser/In-Store Space Collaboration

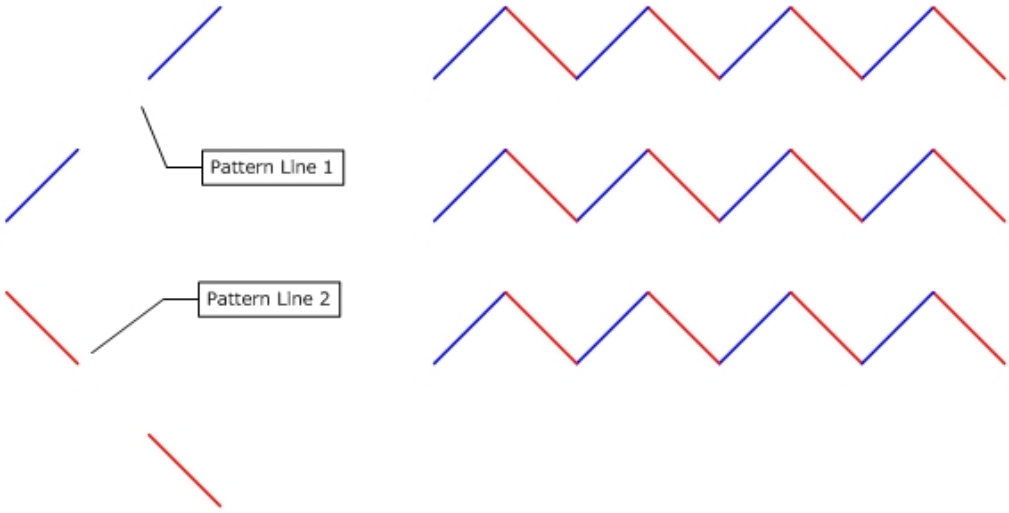
The data structure for a hatch pattern is very similar to an AutoCAD hatch pattern file (*.PAT):

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.

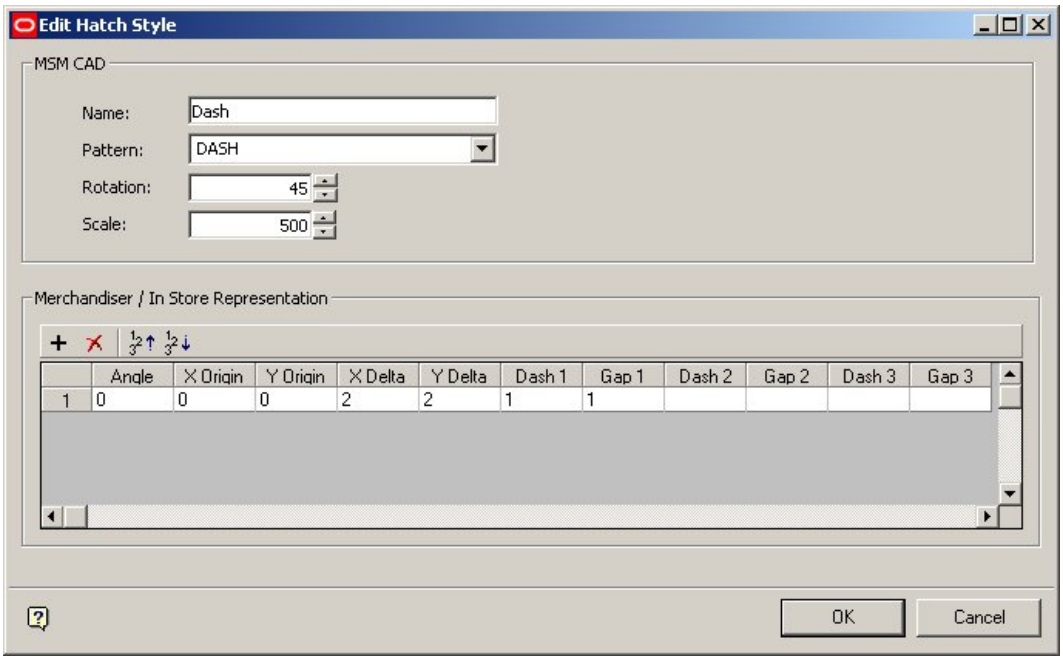


Configuring Hatch Styles for Merchandiser and In-Store Space Collaboration

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.



Angle should be a numeric value between 0 and 360°.

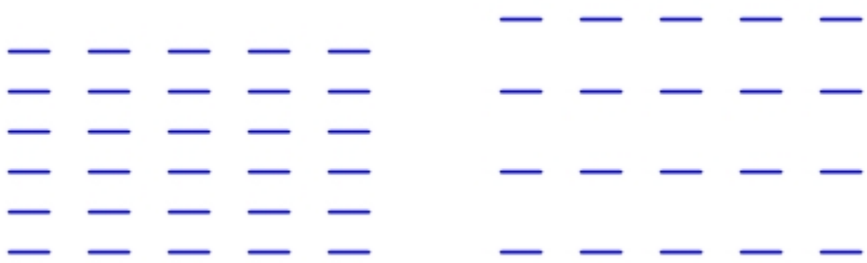
X Origin and Y Origin values can be positive or negative decimal numbers. They specify the offset relative to the 0,0 datum the Zone is drawn from.

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 affects 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 colored in blue, and the second in red.

The dash and gap lengths are as follows:

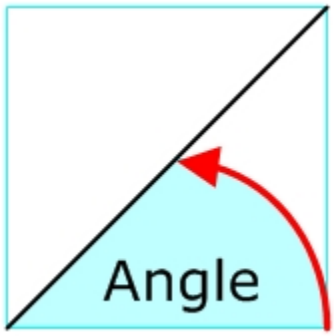
Dash 1	Gap 1	Dash 2	Gap 2	Dash 3	Gap 3
1	1	2	0.5	1.5	0.5

If the first dash and gap are not defined, then a continuous line will be drawn.

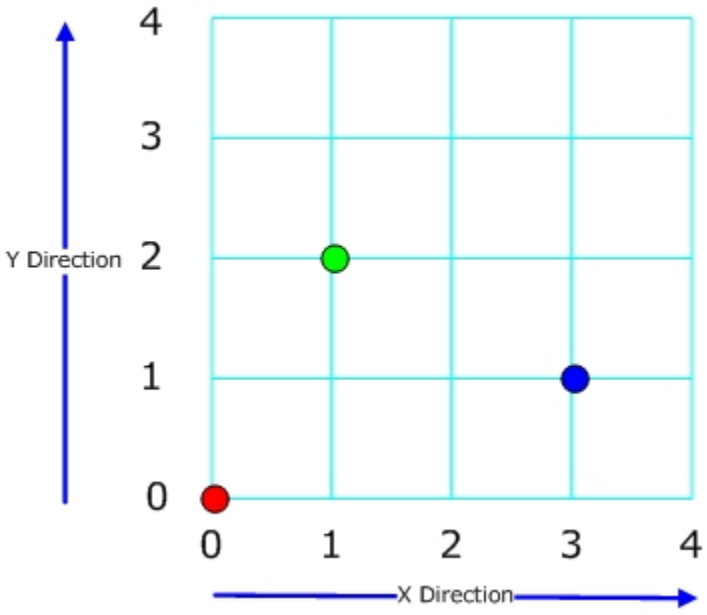
Dash 2 and Gap 2 cannot be defined until Dash 1 and Gap 1 have been entered.

Dash 3 and Gap 3 cannot be defined until Dash 2 and Gap 2 have been entered.

Detail of Hatch Style Parameters for Merchandiser/In-Store Space Collaboration

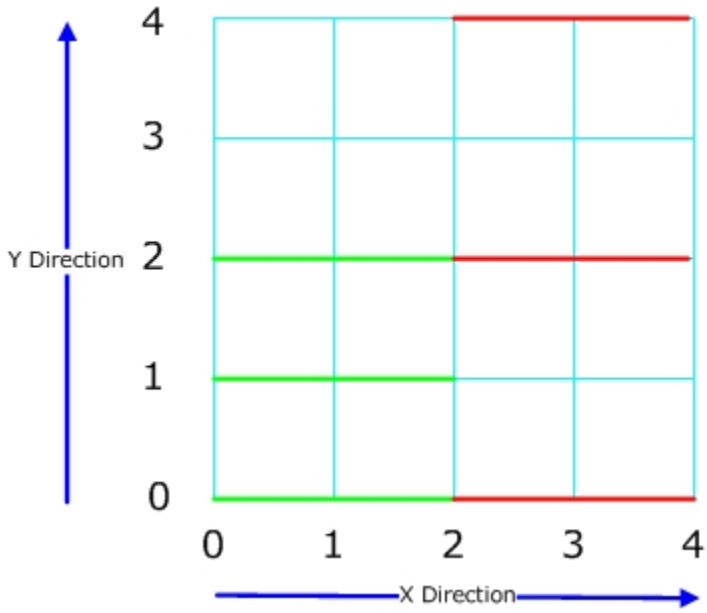


The Angle of the line is the angle measured anticlockwise from horizontal. Angles can take up any value between 0 and 360 degrees.



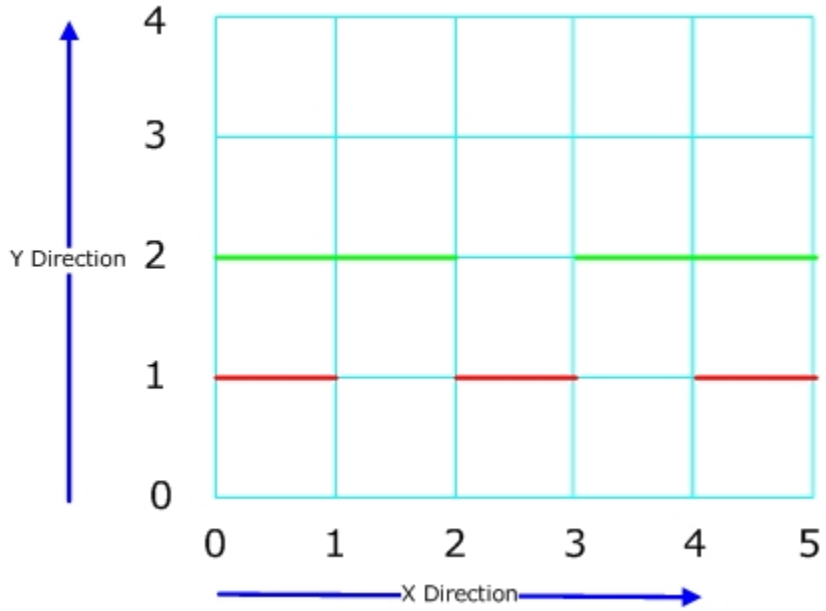
The X and Y origins are specified in terms of Cartesian coordinates.

- The Red dot has an X origin of 0 and a Y origin of 0.
- The Green dot has an X origin of 1 and a Y origin of 2.
- 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.

- The Green lines have a Y offset of 1.
- 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 to the next part of the line.

- The Green Line has a Dash of 2 and a gap of 1.

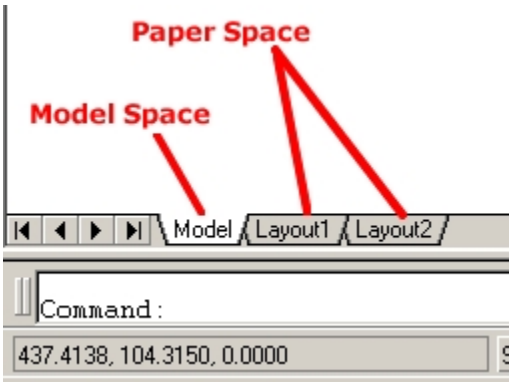
- The Red Line has a Dash of 1 and a Gap of 1.

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

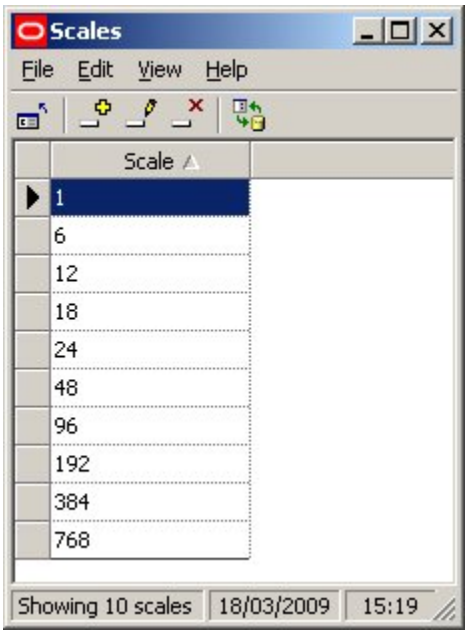
paper space, they will effectively be drawn at a 1:1 size because the scaling up in model space will exactly counteract the scaling down in paper space.

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 to10 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 metre

Configuring Objects to be Scaled

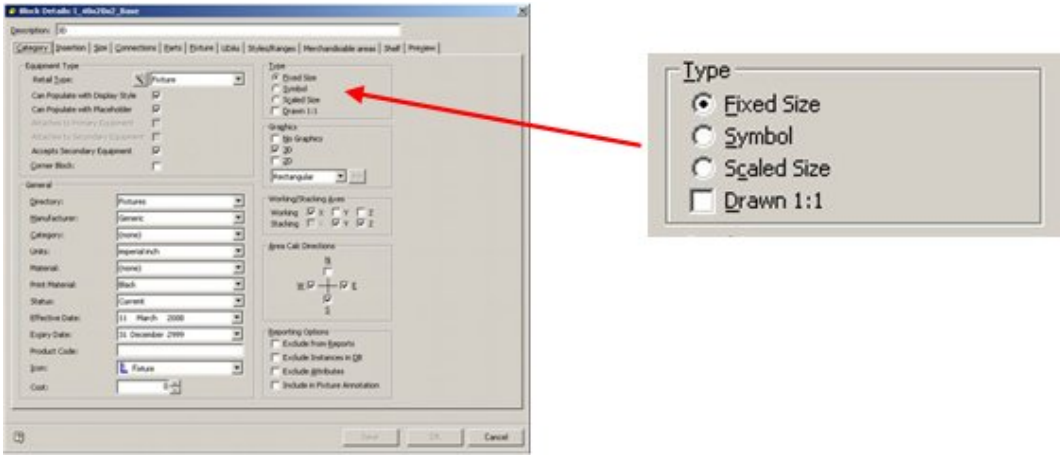
Scaling is applied to two types of objects:

- Symbols
- 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.



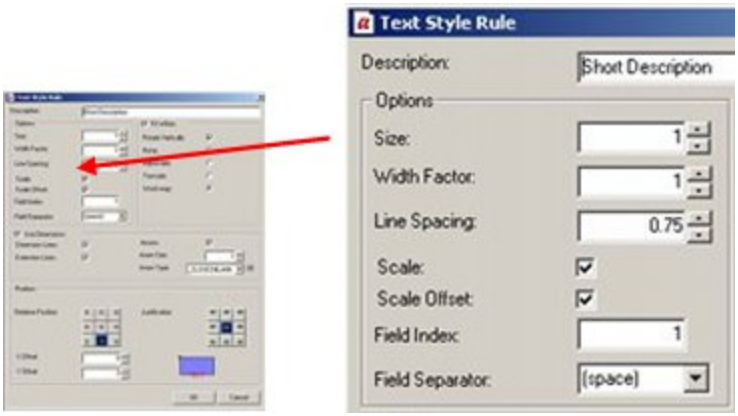
In order to designate an AutoCAD block as a symbol, the Symbol radio button must be selected in the Categories Tab of the Block Details dialogue box in Fixture Studio. Once an object has been designated as a Symbol, the Drawn 1:1 checkbox also has an effect:

- If left unchecked, the symbol will be drawn at 1:50 scale
- 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.



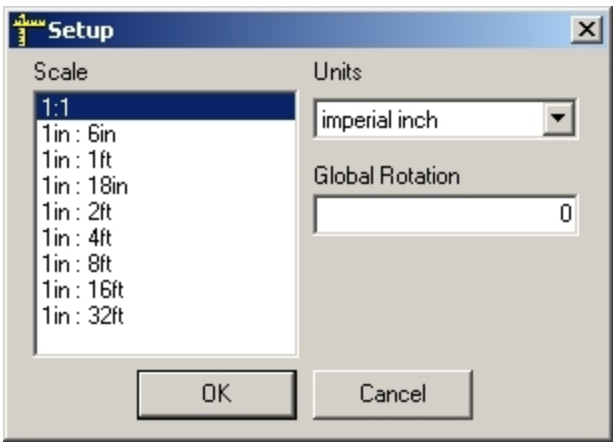
- If Scale (and Scale Offset) are left unchecked, the Text Style will be drawn at a 1:1 scale
- If Scale (and Scale Offset) is checked, the Text Style will be drawn at the scale set in the Set Up dialogue box in the Planner module.

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.

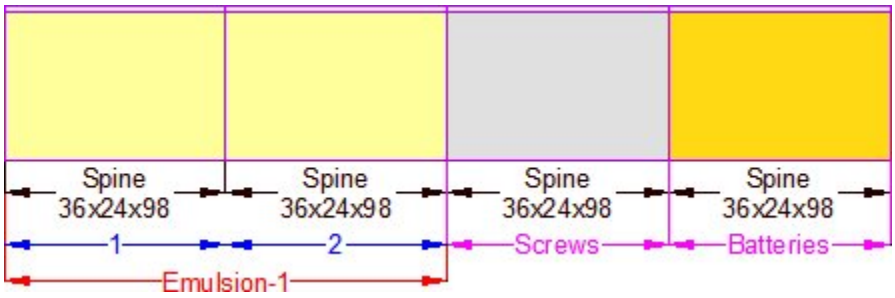


Symbols and specified Text Styles will then be scaled up by a factor of 192:1 when placed in model space, and scaled down by 1:192 when plotted at 1 in: 16ft in paper space. This enables the specified objects to be visible in the printed store plan.

Overview of Text Styles

Overview of Text Styles

Text Styles are used to annotate objects in the Planner environment. Different Text Styles can be defined and assigned to 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 (Other)

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).

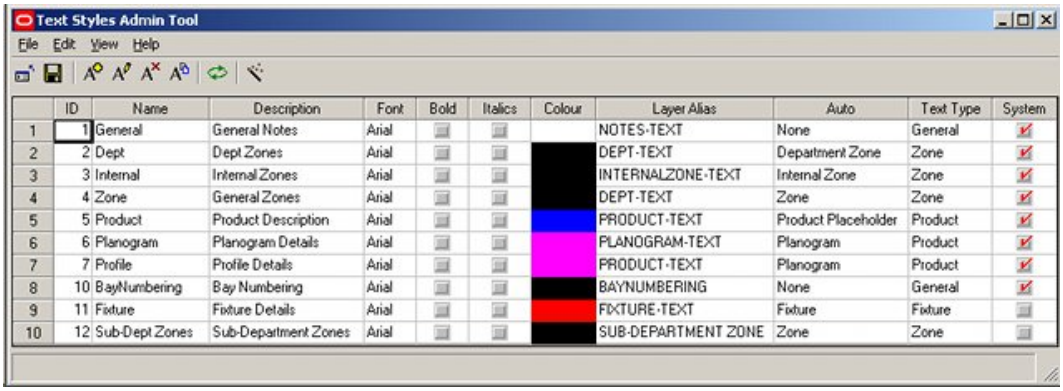
Text styles can be set to draw automatically when an object is placed in the drawing. Alternatively, text styles can be set so that they will only annotate specific objects in the drawing that have been selected by a user.

> **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.



	ID	Name	Description	Font	Bold	Italics	Colour	Layer Alias	Auto	Text Type	System
1	1	General	General Notes	Arial				NOTES-TEXT	None	General	☑
2	2	Dept	Dept Zones	Arial				DEPT-TEXT	Department Zone	Zone	☑
3	3	Internal	Internal Zones	Arial				INTERNALZONE-TEXT	Internal Zone	Zone	☑
4	4	Zone	General Zones	Arial				DEPT-TEXT	Zone	Zone	☑
5	5	Product	Product Description	Arial				PRODUCT-TEXT	Product Placeholder	Product	☑
6	6	Planogram	Planogram Details	Arial				PLANOGRAM-TEXT	Planogram	Product	☑
7	7	Profile	Profile Details	Arial				PRODUCT-TEXT	Planogram	Product	☑
8	10	BayNumbering	Bay Numbering	Arial				BAYNUMBERING	None	General	☑
9	11	Fixture	Fixture Details	Arial				FIXTURE-TEXT	Fixture	Fixture	☐
10	12	Sub-Dept Zones	Sub-Department Zones	Arial				SUB-DEPARTMENT ZONE	Zone	Zone	☐

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

> **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 greyed 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.

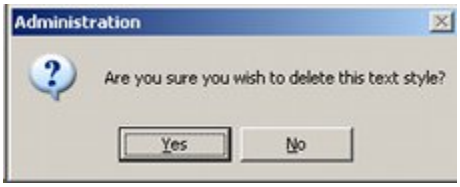
Editing an Existing Text Style

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.

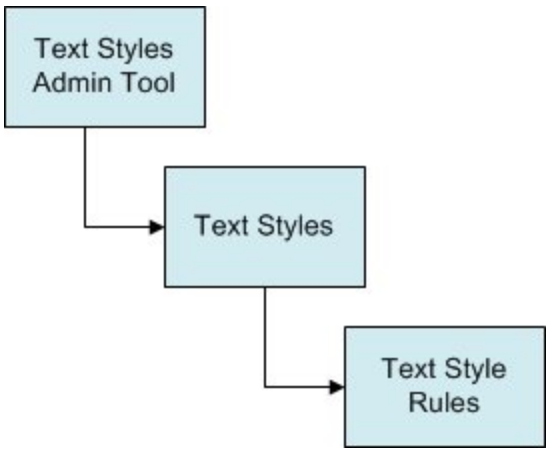


Text Style Wizard

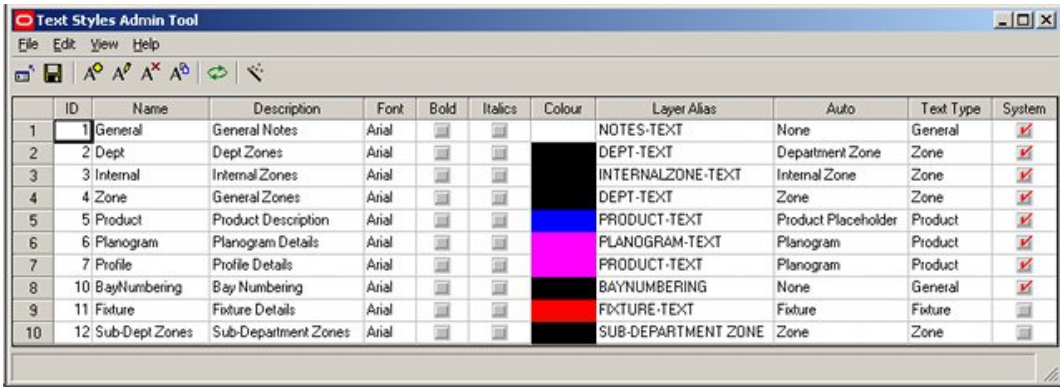
The Text Style Wizard provides an alternative to manually configuring a text style. Four screens take users through creating a text style and automatically create the SQL required to extract information from the database.

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.

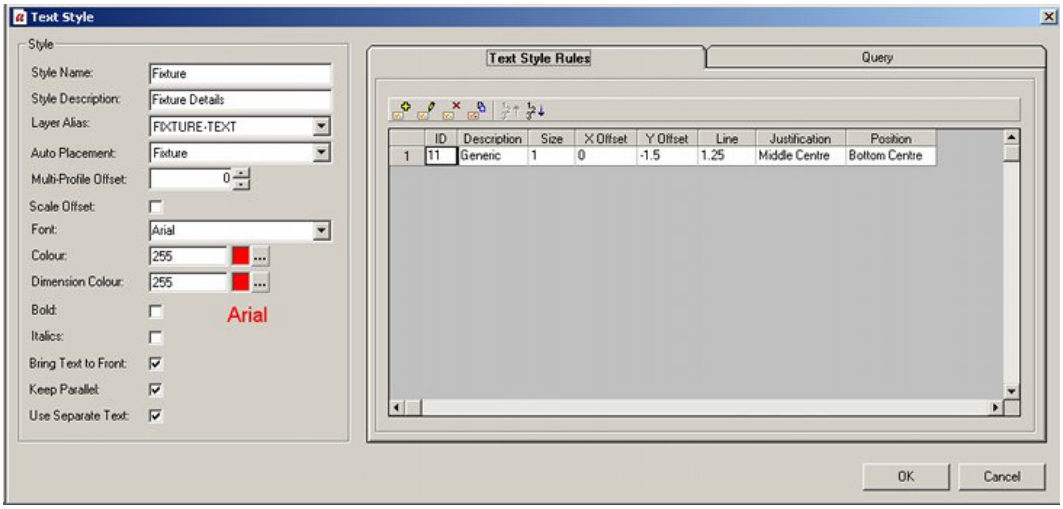


	ID	Name	Description	Font	Bold	Italics	Colour	Layer Alias	Auto	Text Type	System
1	1	General	General Notes	Arial				NOTES-TEXT	None	General	
2	2	Dept	Dept Zones	Arial				DEPT-TEXT	Department Zone	Zone	
3	3	Internal	Internal Zones	Arial				INTERNALZONE-TEXT	Internal Zone	Zone	
4	4	Zone	General Zones	Arial				DEPT-TEXT	Zone	Zone	
5	5	Product	Product Description	Arial				PRODUCT-TEXT	Product Placeholder	Product	
6	6	Planogram	Planogram Details	Arial				PLANOGRAM-TEXT	Planogram	Product	
7	7	Profile	Profile Details	Arial				PRODUCT-TEXT	Planogram	Product	
8	10	BayNumbering	Bay Numbering	Arial				BAYNUMBERING	None	General	
9	11	Fixture	Fixture Details	Arial				FIXTURE-TEXT	Fixture	Fixture	
10	12	Sub-Dept Zones	Sub-Department Zones	Arial				SUB-DEPARTMENT ZONE	Zone	Zone	

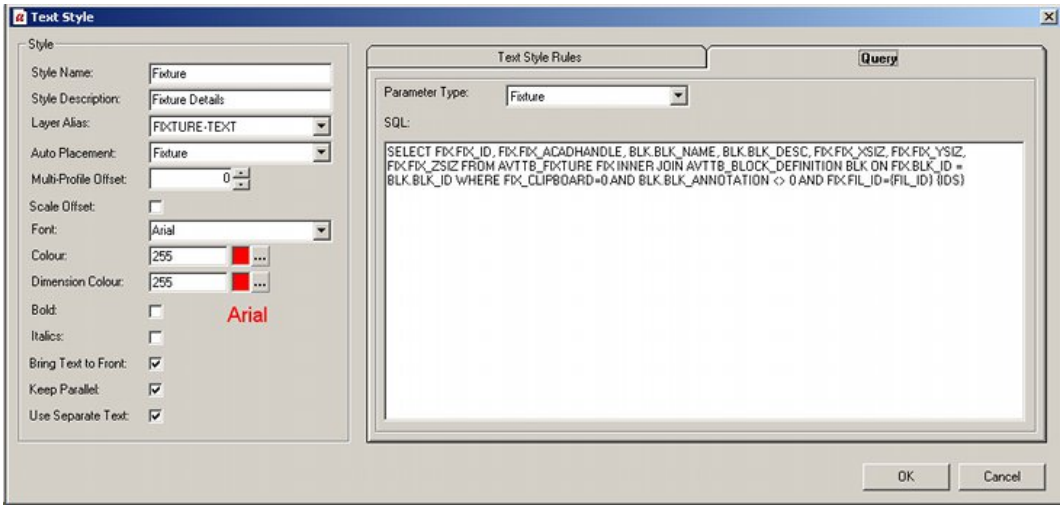
The list of text styles can be added to, selected for editing or deleted. In addition, a Text Style Wizard can be used to simplify creating text styles.

The **Text Styles** dialogue box allows the broad details of a text style to be configured. This includes the font type and color, AutoCAD layer, type of object the text is to be associated with, and so on.

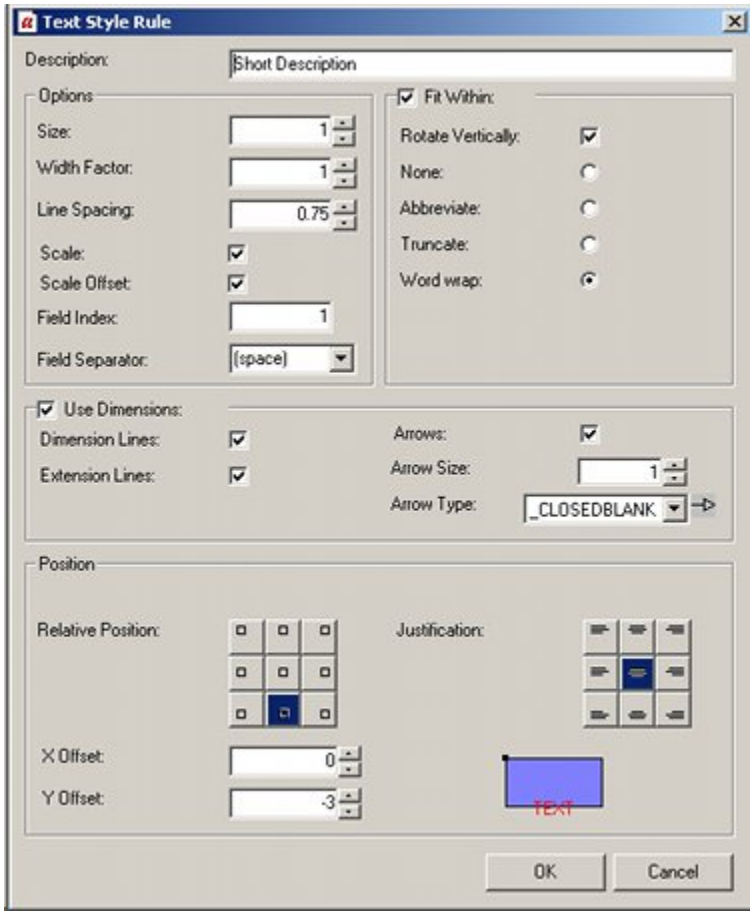
The Text Style Rules tab allows the user to set up a series of rules governing the annotation - each rule will be tested in turn until one meets the requirements of the fixture being annotated.



The Query tab shows the custom SQL that extracts the information from the database used for the annotation. This custom SQL is user customisable.



The **Text Style Rules** dialogue box is used to configure the details of a specific text style.

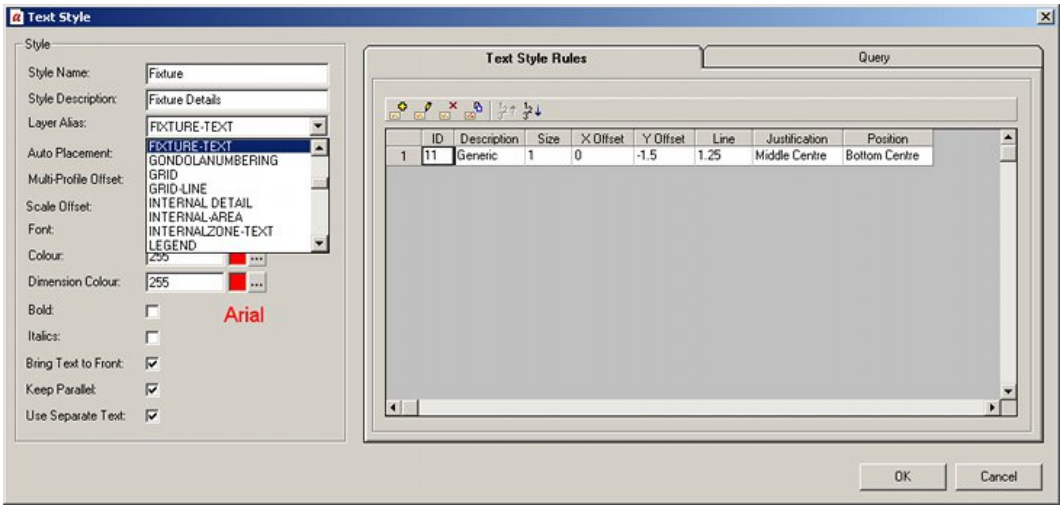


It is possible to have multiple text style rules for a specific text style. When the annotation is drawn, each text style is 'tested' in sequence. The first text style that meets the requirements is used. For example text styles might be configured with text sizes of 6

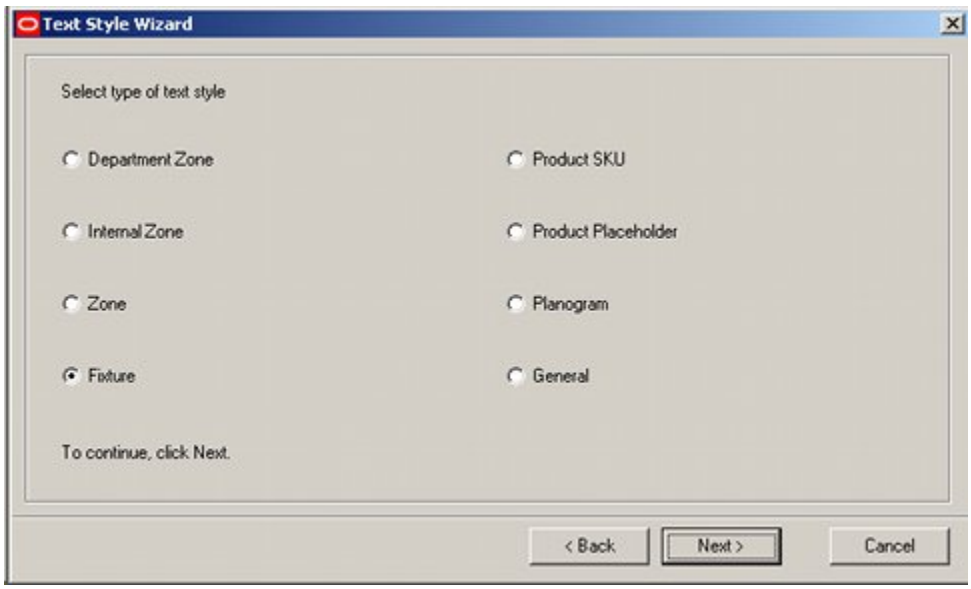
inches, 4 inches and 3 inches. Each text style will be tested in turn, until the largest text size that will allow all the text to be displayed is identified.

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 retail 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.

> **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.

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

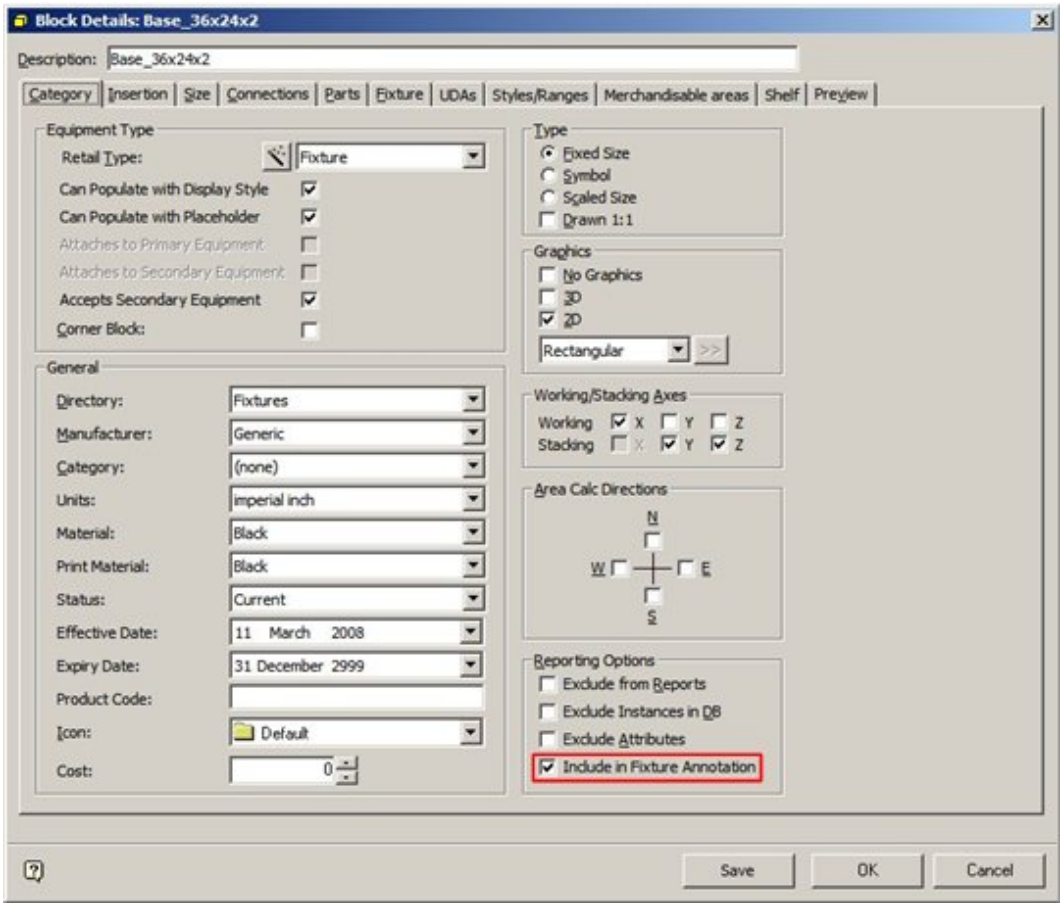
This text style is used to annotate planograms. Planogram information can sometimes include profile annotation - information on specific bays within a multi-bay planogram.

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.



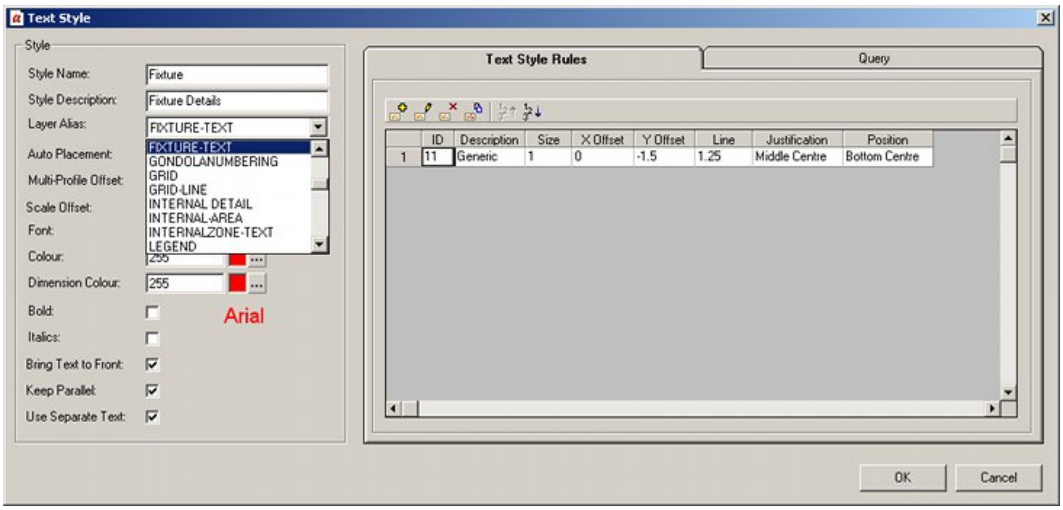
For a specific fixture to annotate in Planner, the Include in Fixture Annotation option must be checked.

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.

Annotation in Planner

Annotation in Planner is first determined by the Auto Placement settings in the Text Styles dialogue box in the Admin Module.



- 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.
- 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



- Annotate Fixtures will cause fixture annotation to be drawn according to the text style rules currently active in Planner
- Annotate Products will cause product and planogram annotation to be drawn according to the text style rules currently active in Planner
- 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.

> **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.

Annotate Fixtures

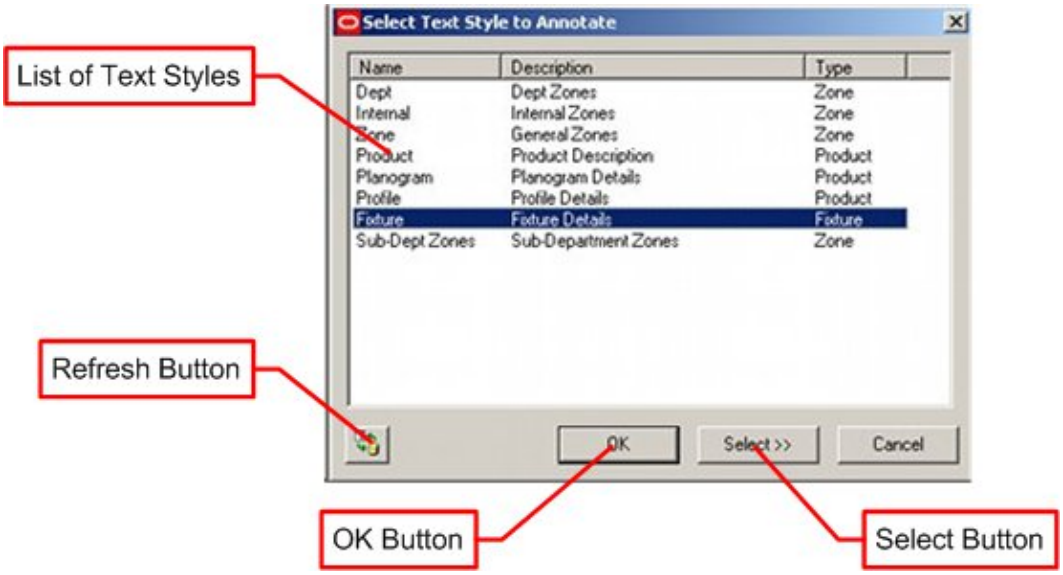
If the Auto Placement option is set to 'Fixtures', fixtures will be re-annotated with the currently active text style(s).

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.

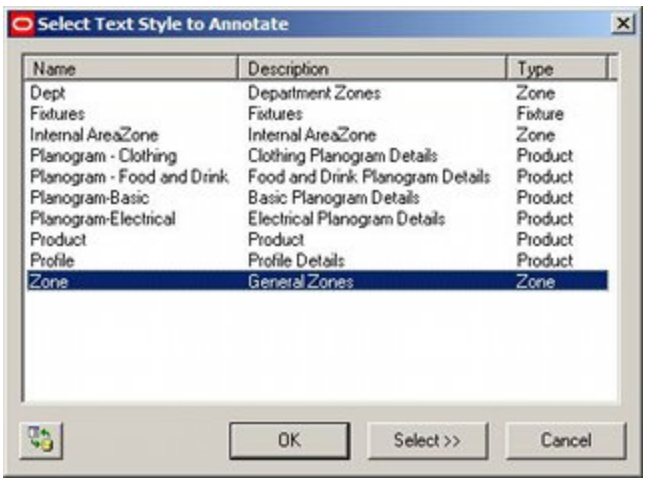
> **Note:** this would be applicable if an Administrator is updating text styles in the Administration Module and simultaneously testing the effects of the changes in the Planner Module.

The Annotation dialogue box contains a list of text styles. Any individual text style can be selected by highlighting it.

- If the **OK** button is clicked, all instances of annotation associated with that text style in the drawing will be updated.
- 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.



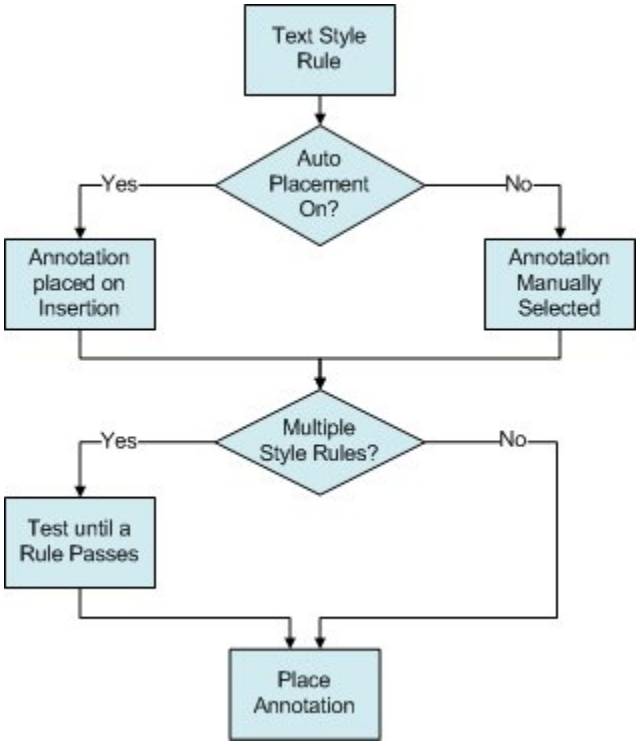
In the above example of the Annotation dialogue box there are four text styles for planograms:

- Basic Planogram Details
- Clothing Planogram Details
- Electrical Planogram Details
- 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

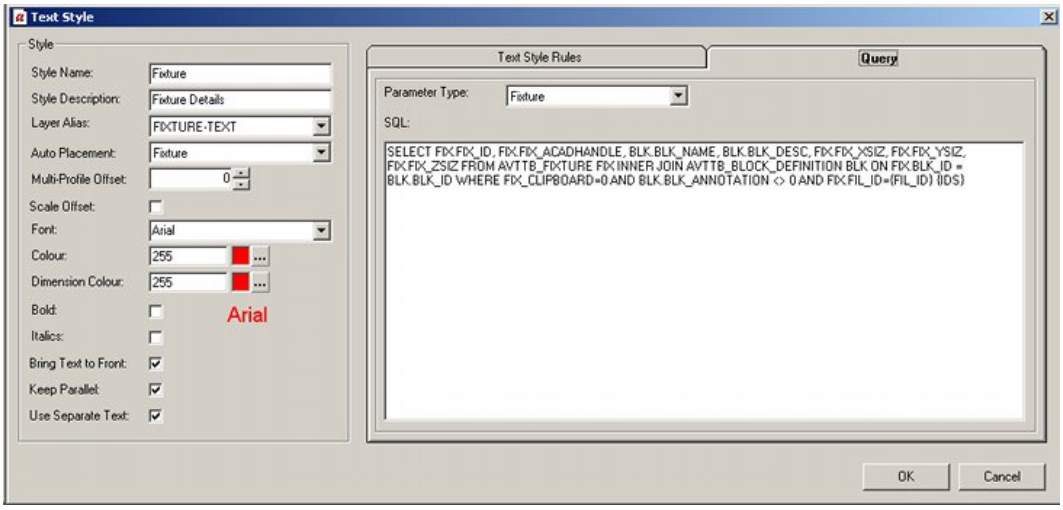
The **Logic of Text Style placement** is as follows:



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 Query tab of the Text Style dialogue box.



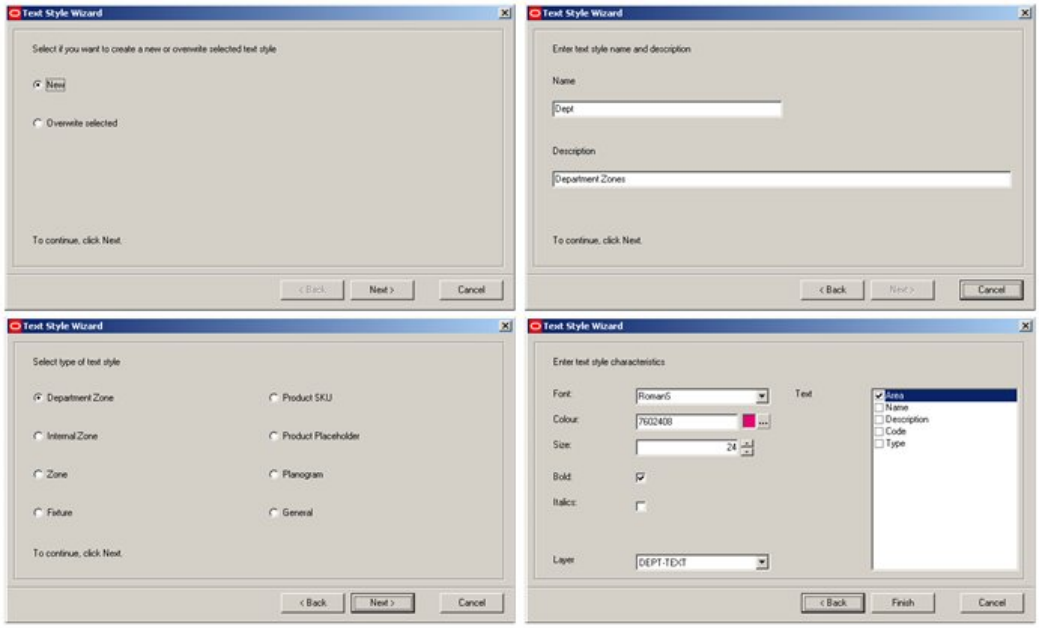
It is possible to modify this Custom SQL statement to customize the annotation for each type of object being annotated. For example fixtures that are children of the 'Racking' node in the Fixture Hierarchy could have different annotation from fixtures that are children of the 'Fittings' node in the Fixture 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 of the Text Style Wizard

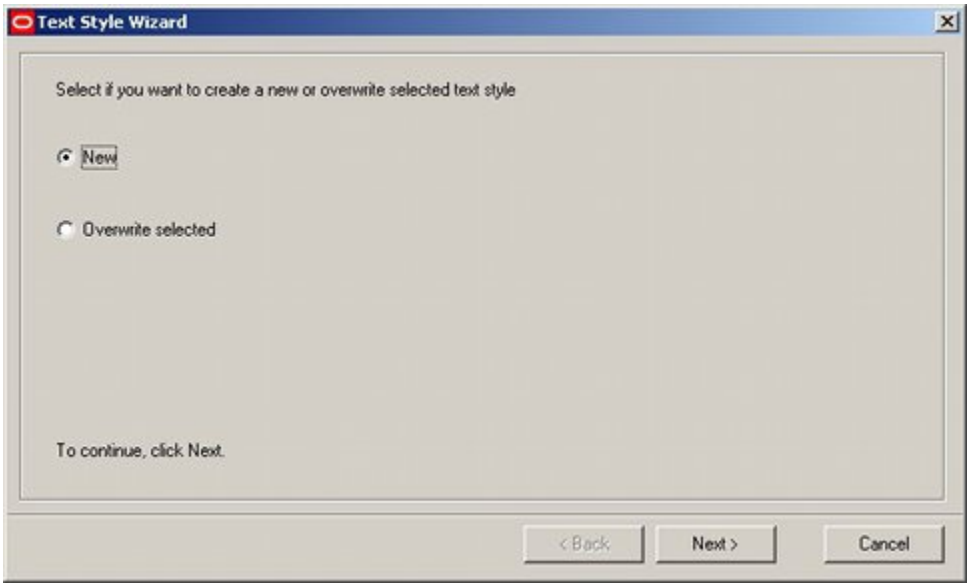
The Text Style Wizard provides an alternative way to manually configuring a text style. It consists of a series of four screens that the user moves through in sequence.



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.

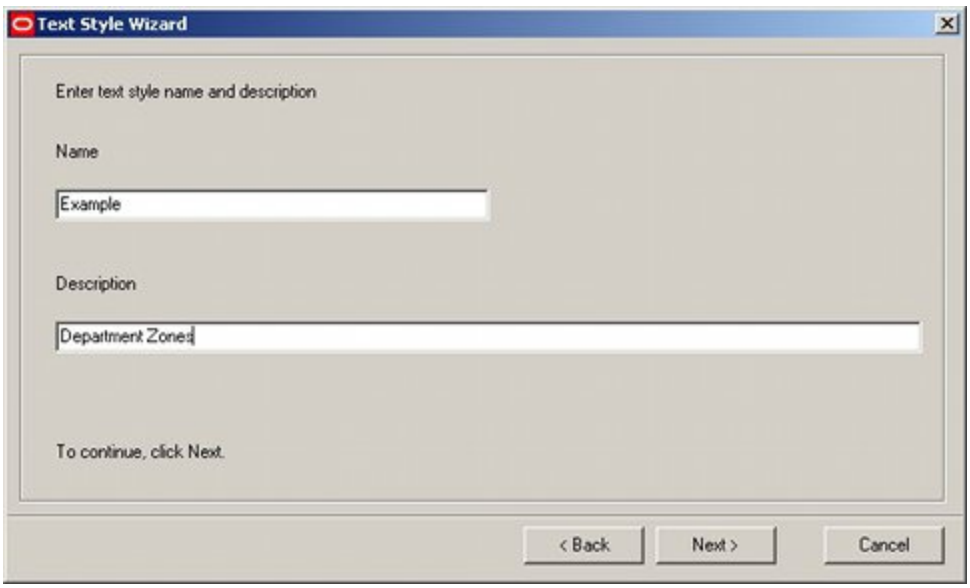


To overwrite an existing rule it must be highlighted in the main Text Styles Admin Tool Window before the Wizard is invoked.

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.

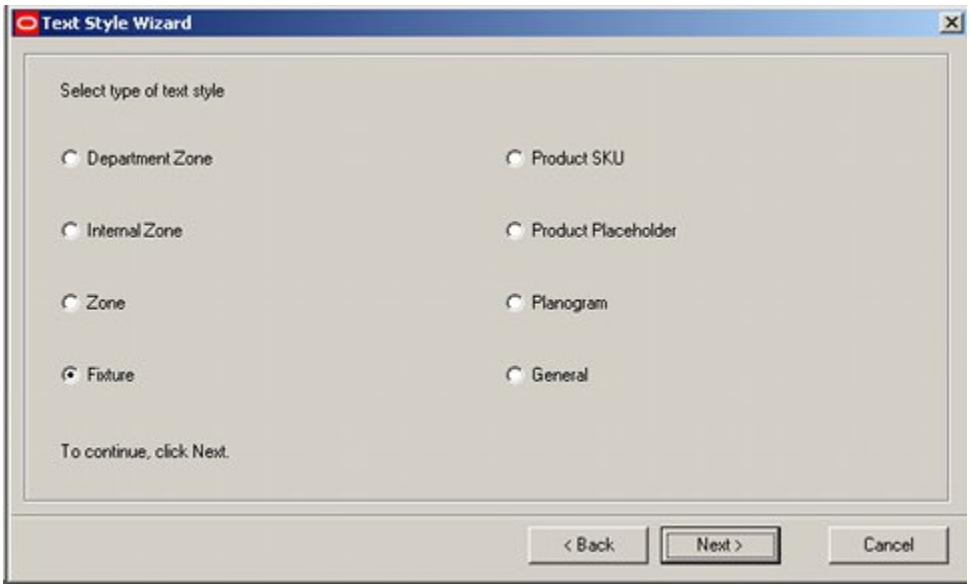


Enter the Text Style Name and Description as required.

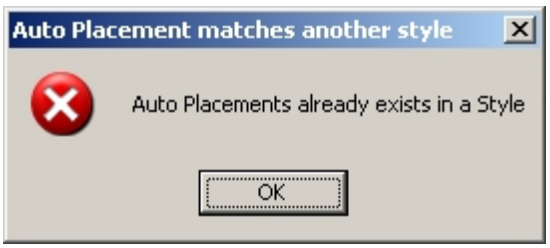
Click on Next > to move to the next stage.

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.

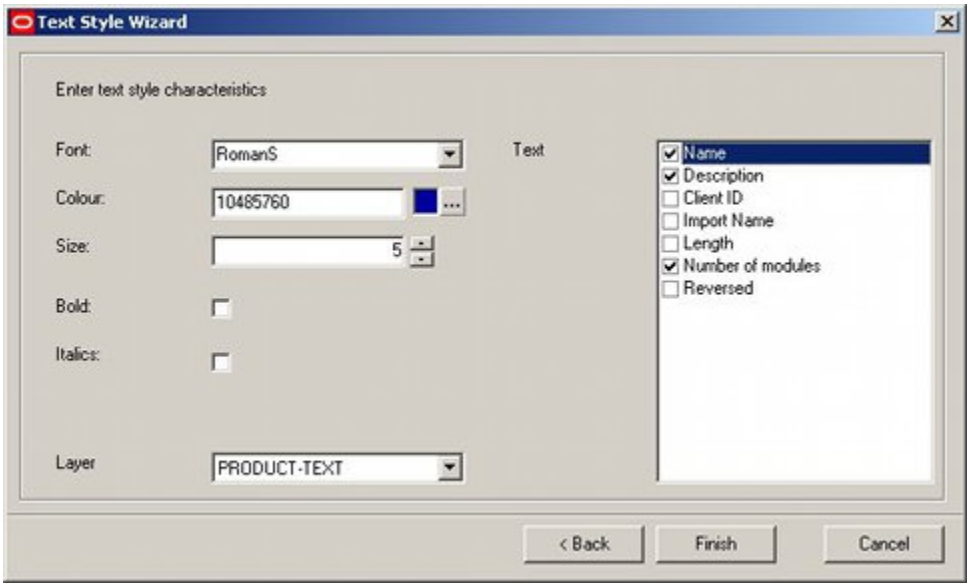


It is not possible to have a second version of the same Text Style, so if it is desired to change this Text style it must be edited.

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.

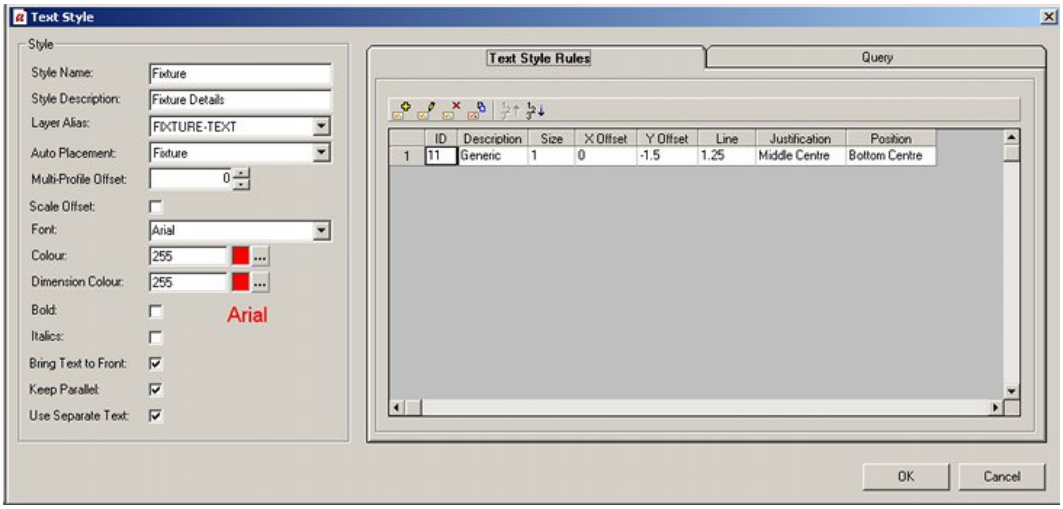
> **Note**: Checking the list of items in the Text Box causes a custom SQL statement to be generated. This extracts information from the central **Macro Space Management** database and annotates Zones, Fixtures or Merchandise accordingly.

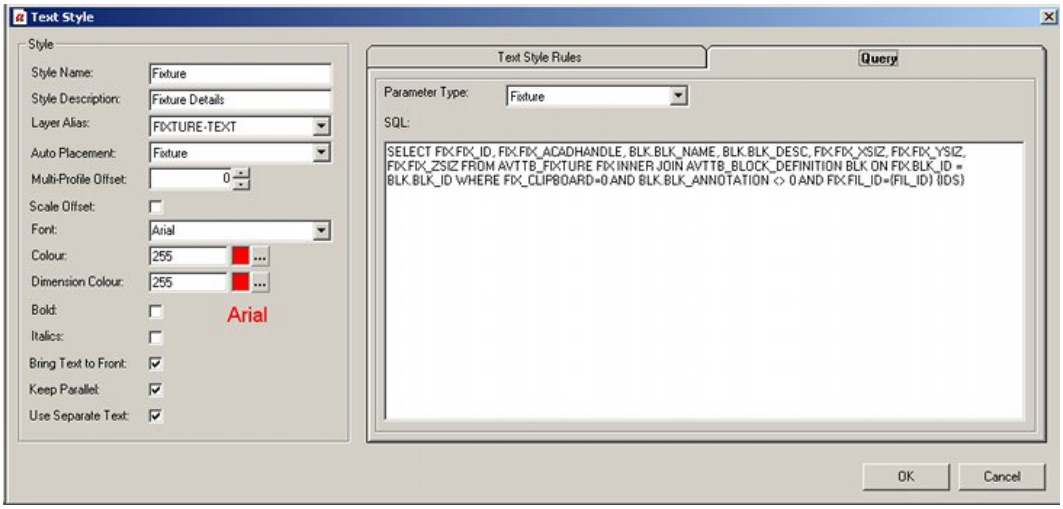
Click on Finish to add the Text style to those available.

The Text Styles Dialogue Box

The Text Styles Dialogue Box

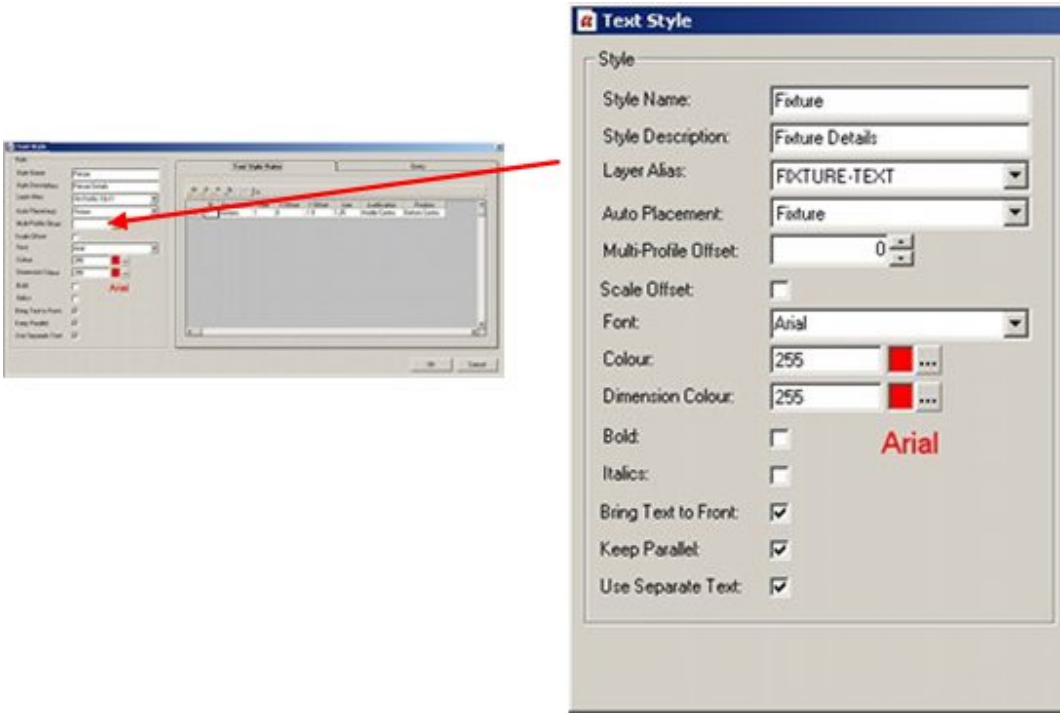
The **Text Styles** dialogue box allows the basic rules of Text Styles to be configured. The Text Style Rules tab gives a list of the available Text Style rules for that Text Style. The Query Tab shows the Custom SQL used to extract information from the database to be used in the text styles. This Custom SQL can be modified by a user if it is desired to change the information displayed.





The Style Options Frame

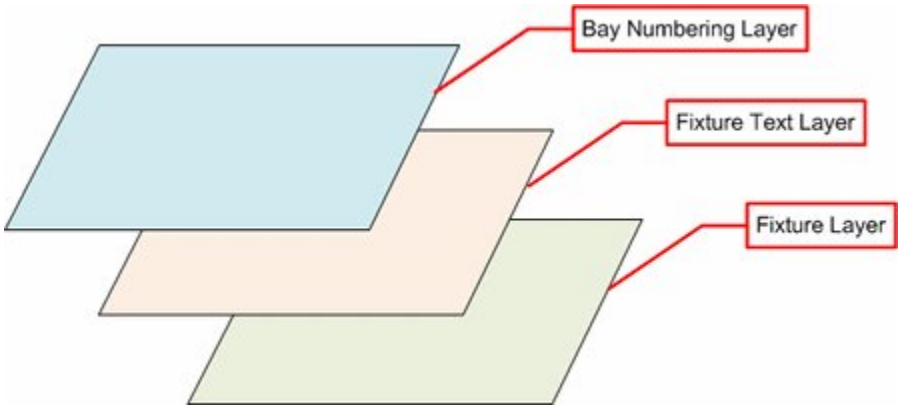
The **Style Options** frame allows users to configure the appearance of the text used for the Text Style.



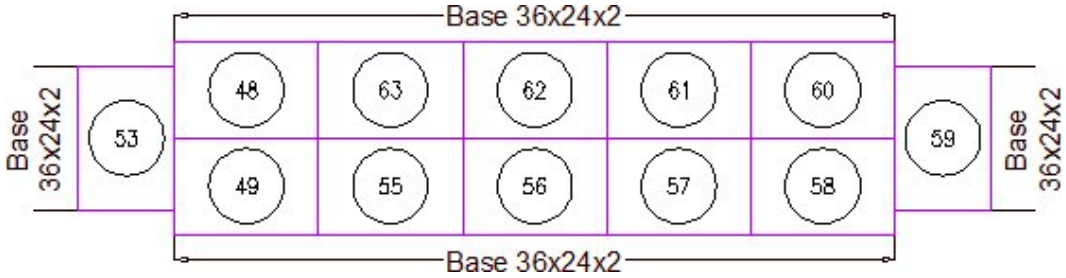
Style Name is the name assigned to a text style.

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 regards 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.

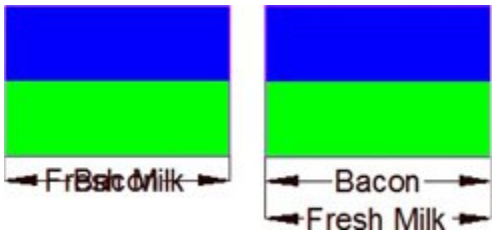


So, although the above example looks like a single entity, it is made up of three separate layers.

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.
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, a 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: This 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.

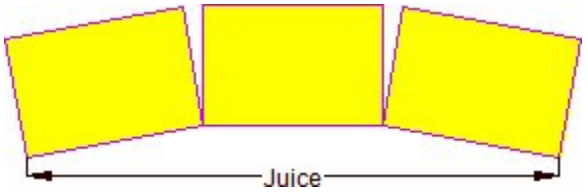
Color refers to the color of any text. It can be selected from a standard color pallet.

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.

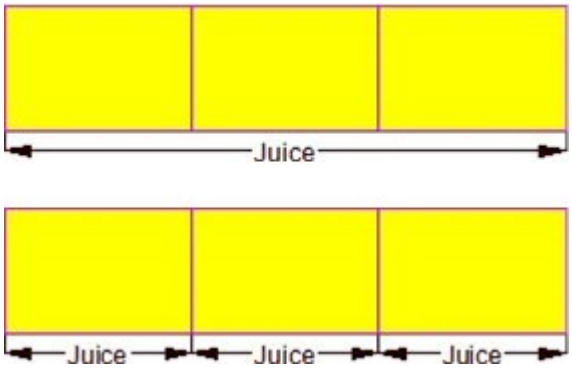
Bring Text to Front results in the text overwriting any objects that are present in the drawing. For example, it there is a fixture present where the text is to be written, the annotation will be placed on top of the fixture. (If Bring Text to Font is not selected, the text might be obscured by the fixture).

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.

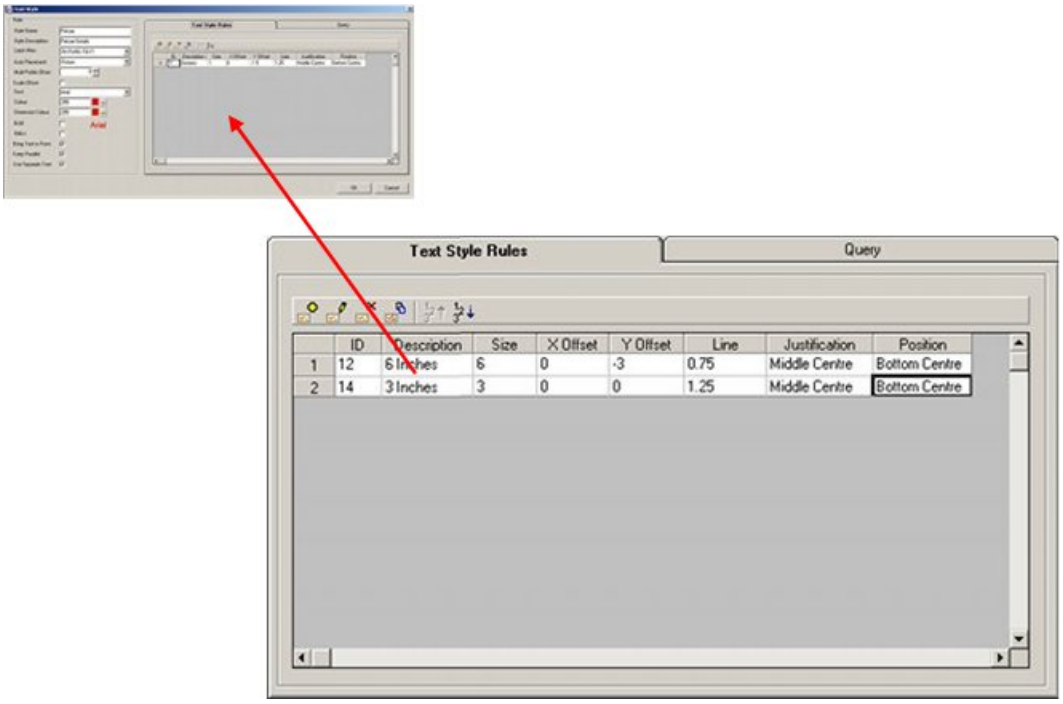
Keep Separate Text is used when a run of adjacent objects are similar. An example would be if three adjacent fixtures contain identical products.



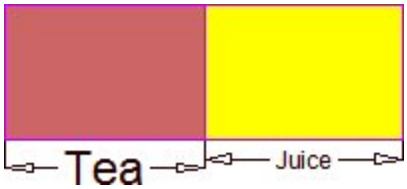
In the above examples, if Keep Separate Text is not checked, objects that are similar and adjacent will be annotated as a single item. If Keep Separate Text is checked, then each item will be annotated separately, even if they are adjacent.

The Text Style Rules Tab

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).

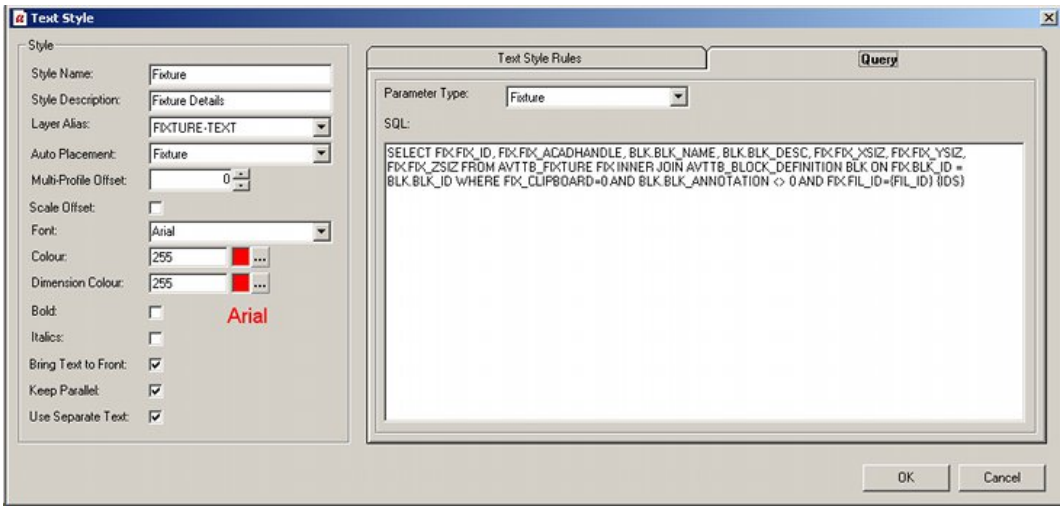
The toolbar options are as follows:

Option	Description
	Add Text Style Rule
	Edit Text style Rule

Option	Description
	Delete Text Style Rule
	Copy Text Style Rule
	Move selected item up in list
	Move selected item down in list

The Query Tab

The **Query Tab** contains the Custom SQL used to retrieve the required information for the annotation from the Macro Space Planning database.

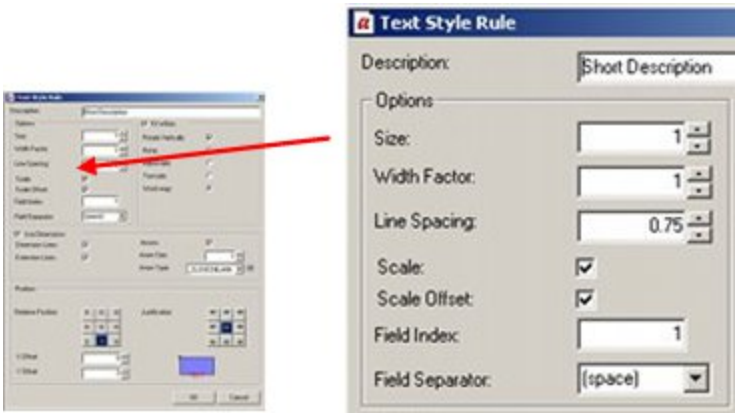


The SQL can be derived from one of two sources:

- It can be produced using the Wizard.
- 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}.

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 **Field Index** specifies the items of data required.

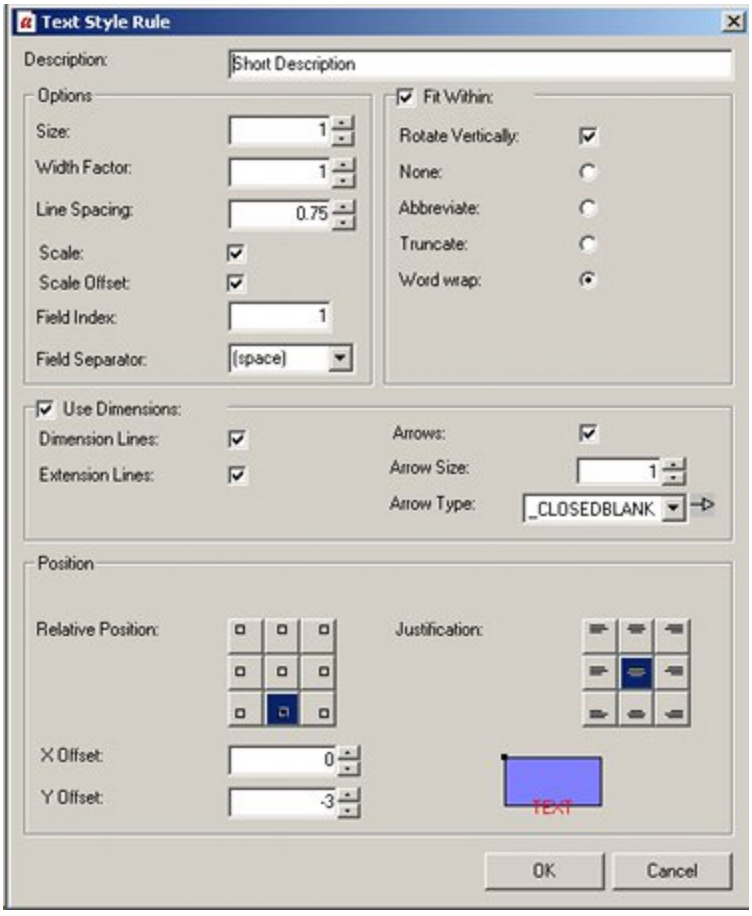
The **Field Separator** determines the character use to separate items of data.

> **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

The Text Style Rules Dialogue Box

The **Text Style Rules** dialogue box is used to configure the details of specific Text Style rules.



The **Options** frame allows users to specify the appearance of the text that appears.

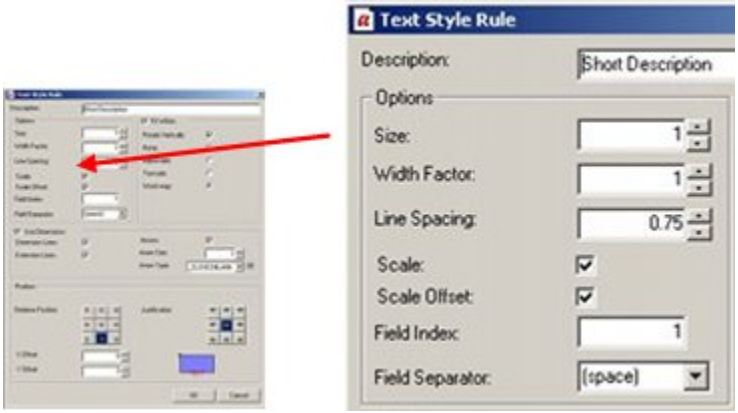
The **Fit Within** frame allows users to specify what happens if the text is too long relative to the length of the fixture.

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.

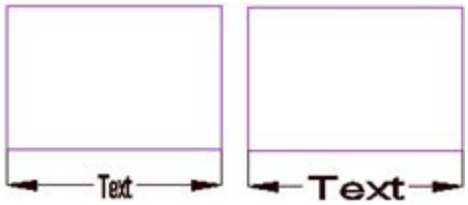
The Options Frame

The **Options** frame is used to specify the size of the text and what fields from the database will be displayed.



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 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.

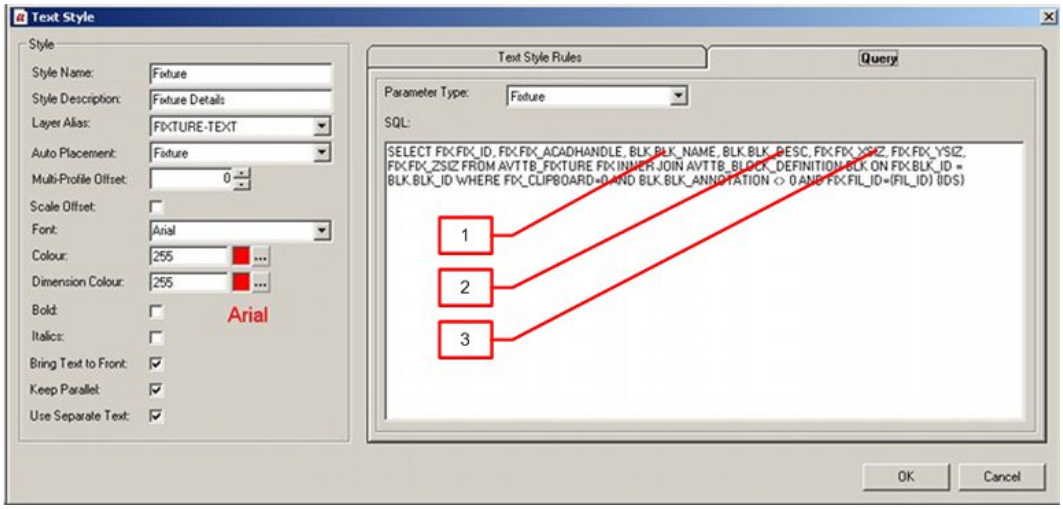
Scale and **Scale Offset** are used when an AutoCAD drawing has been given a scale via the Format > Drawing Set Up option in the Planner module.

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.

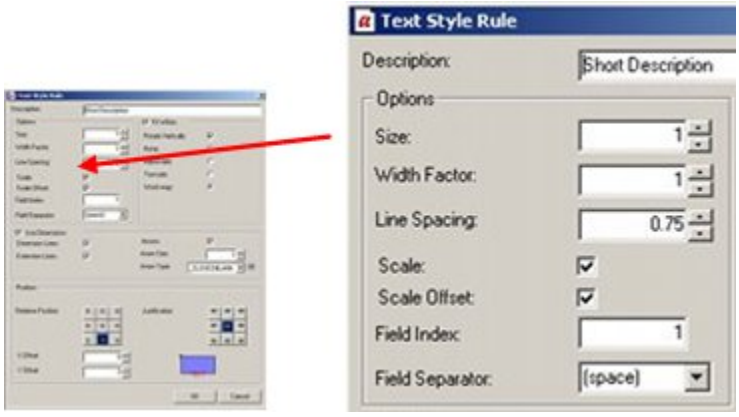
Note: scaling does not fully work at present.

Field Index 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.



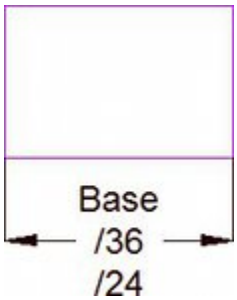
The SQL is revealed by highlighting a text style, and selecting CTRL + A. The SQL statement is in the form of a 'Select' statement that identifies specific items of data from the database. The first two items in the statement are the ID of the object in the MSM database and the AutoCAD handle (ID). Any 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 width have been selected.



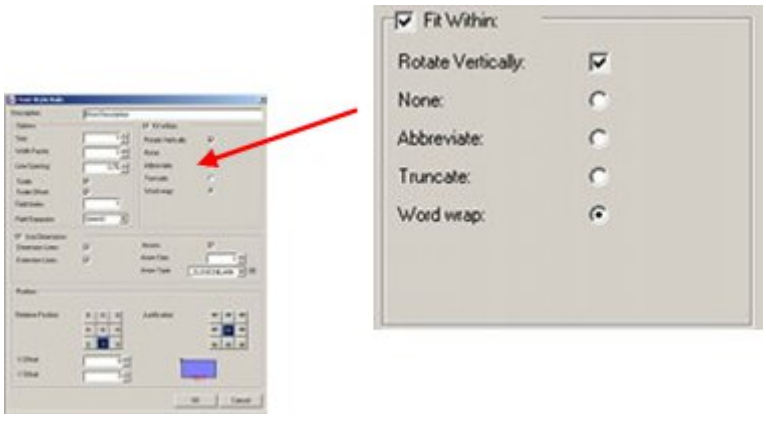
The **Field Separator** can be selected by means of a drop down list.

In the example below, the block description, length and depth have been selected and 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.



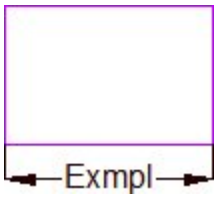
Rotate Vertically allows text too long to be written horizontally relative to the fixture to be rotated through 90 º so that it can be written vertically relative to the fixture.

> Note: Rotate Vertically is not functioning correctly at present.

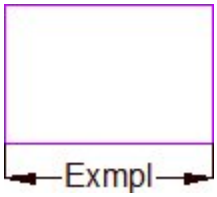
Selecting **None** results in no text being displayed if the text is too long for the available space.

> Note: None is not functioning correctly at present.

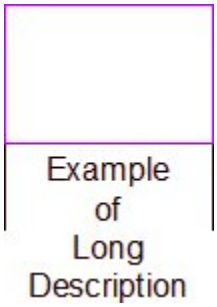
Selecting **Abbreviate** results in a shortened version of the text string being displayed.



Selecting **Truncate** results in the text string being truncated to fit

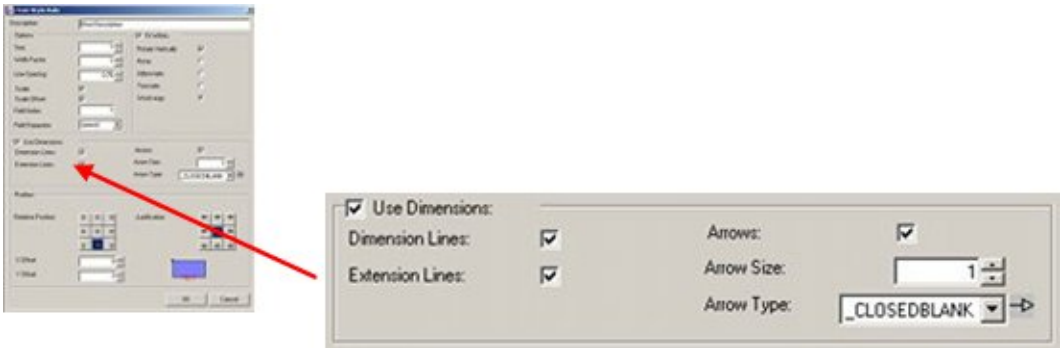


Selecting **Word Wrap** results in the description being wrapped onto several lines.

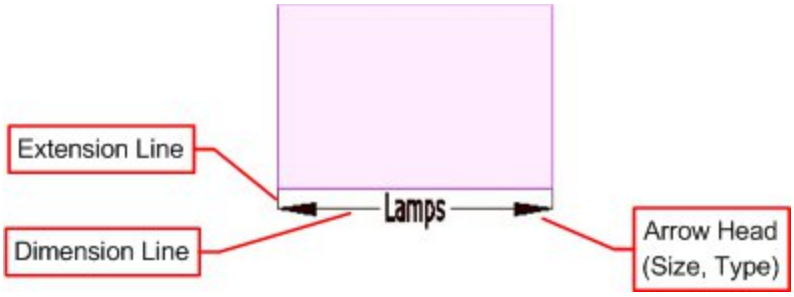


The Dimensions Frame

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.

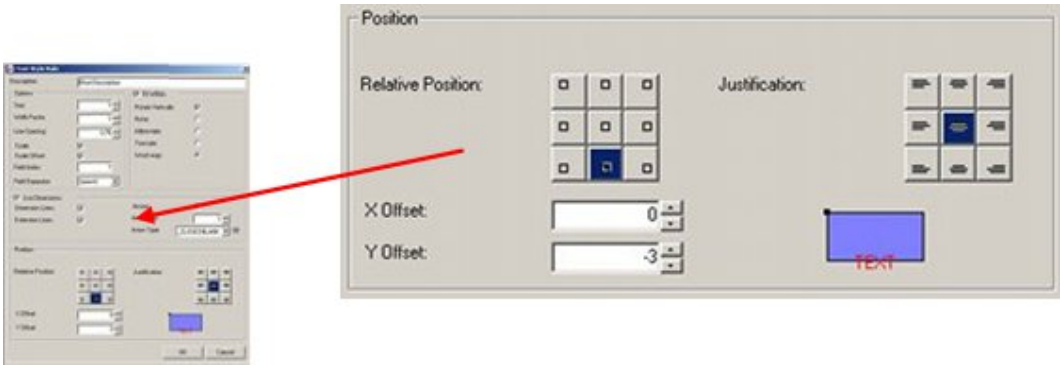
The **Arrows** checkbox will toggle the arrow head display on or off.

The **Arrow Size** can be set by means of the spin control.

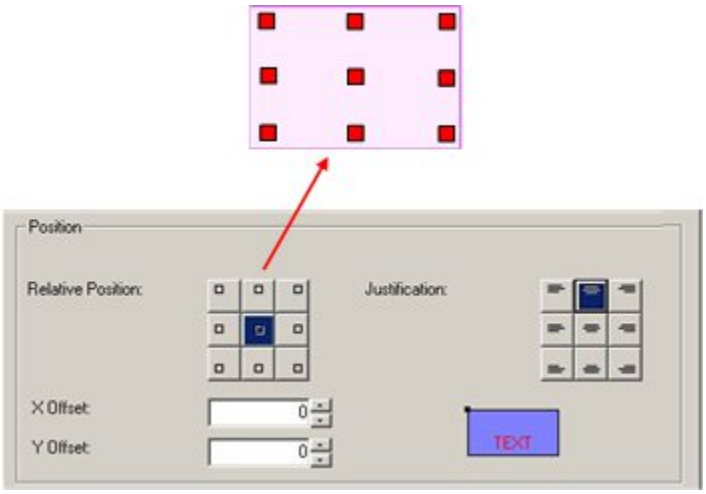
The **Arrow Type** can be selected from the drop down list.

The Position Frame

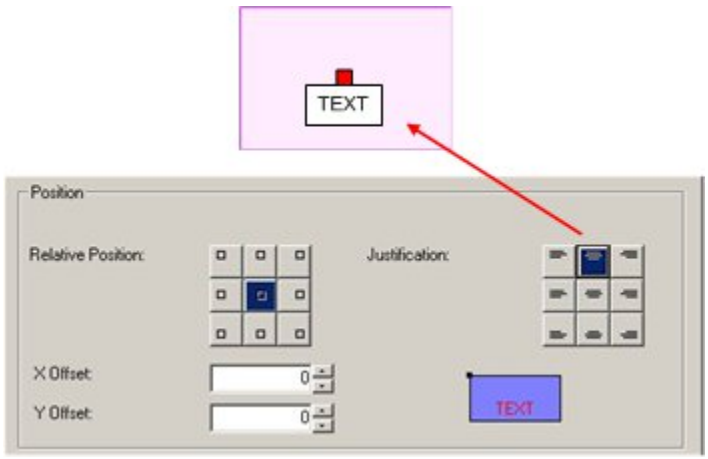
The **Position Frame** determines how text places relative to the fixture.



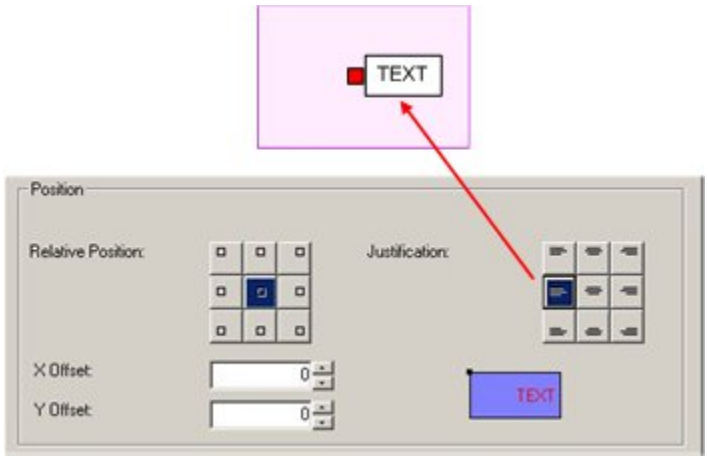
Relative Position determines where the text starts within the fixture - each button in the position frame corresponds to a specific point within a fixture.



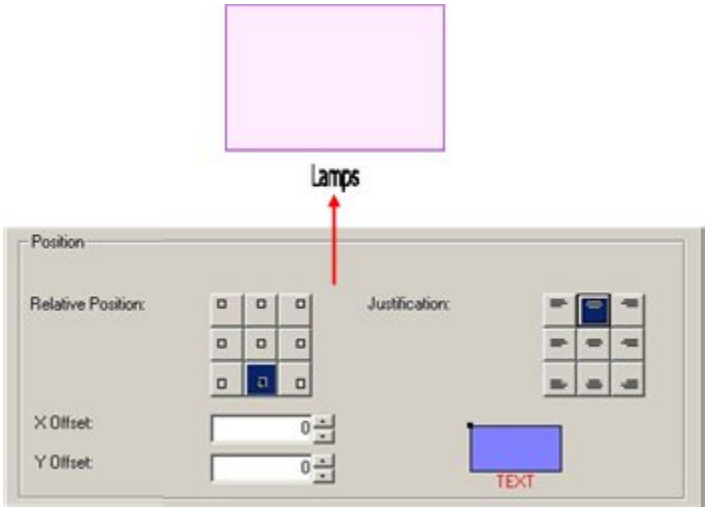
Justification determines how the text positions in relation to the Relative Position. It is designed to operate in a similar way to the equivalent AutoCAD functionality. In the example below, the text is top justified in relation to the Relative Position.



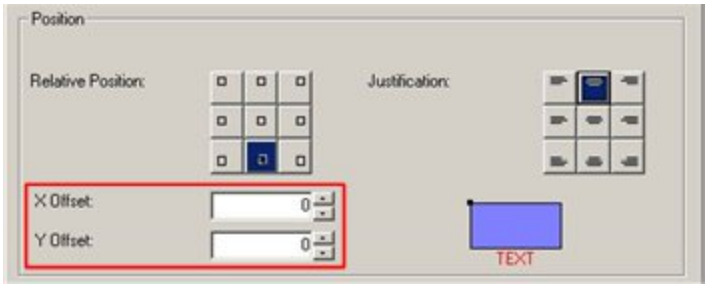
In the example below, the text is left justified in relation to the Relative Position.

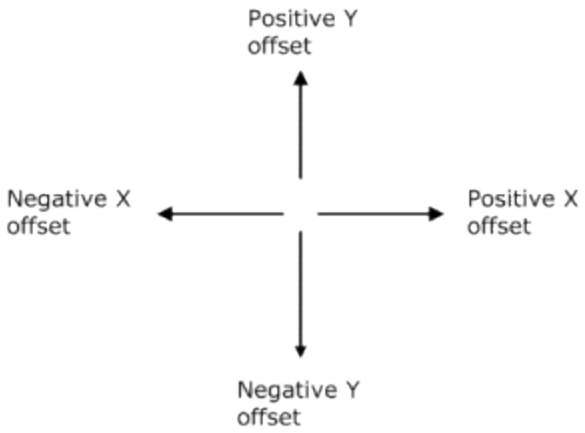


The advantage of this means of operation is that it is possible to position text outside of the parent object.



Finally, it is possible to use the X and Y Offsets to fine tune the position of the text.



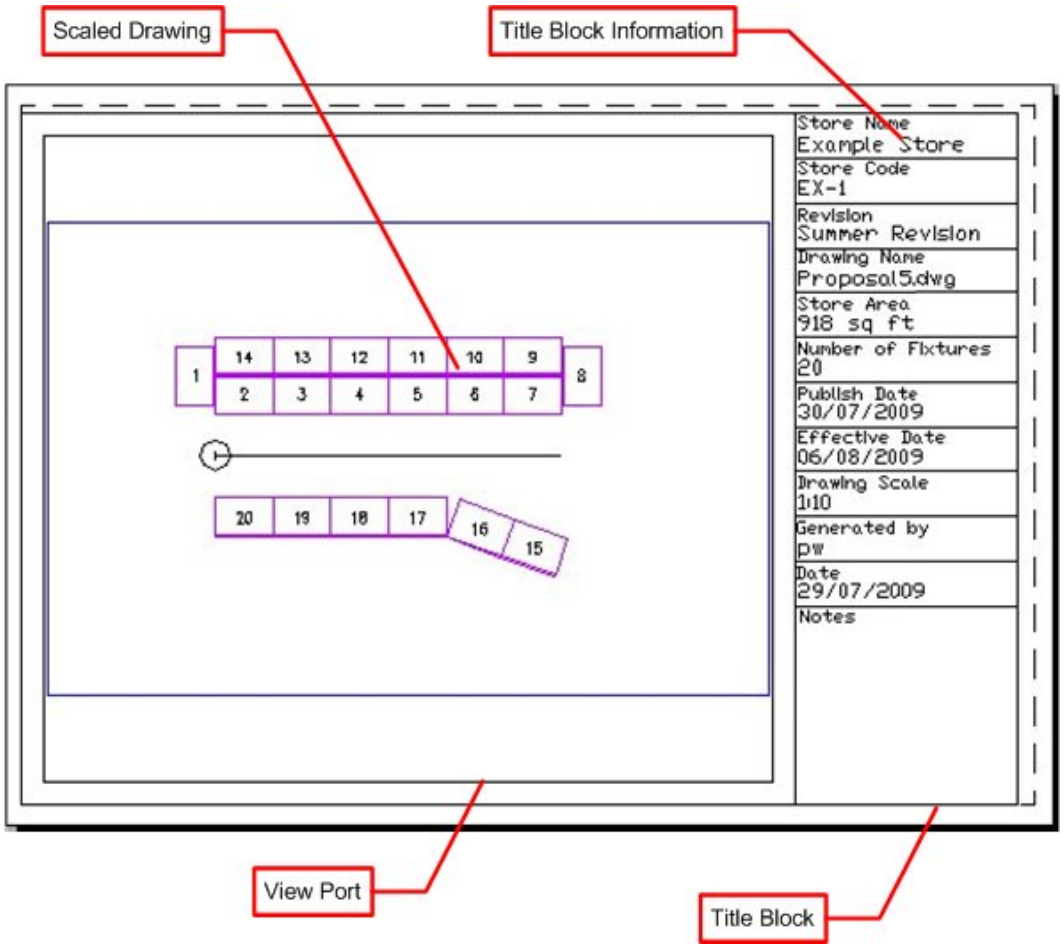


For example if different offsets are specified for fixture and product information, it will be possible to avoid these two types of annotation overwriting each other.

Title Blocks

Overview of Title Blocks

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.

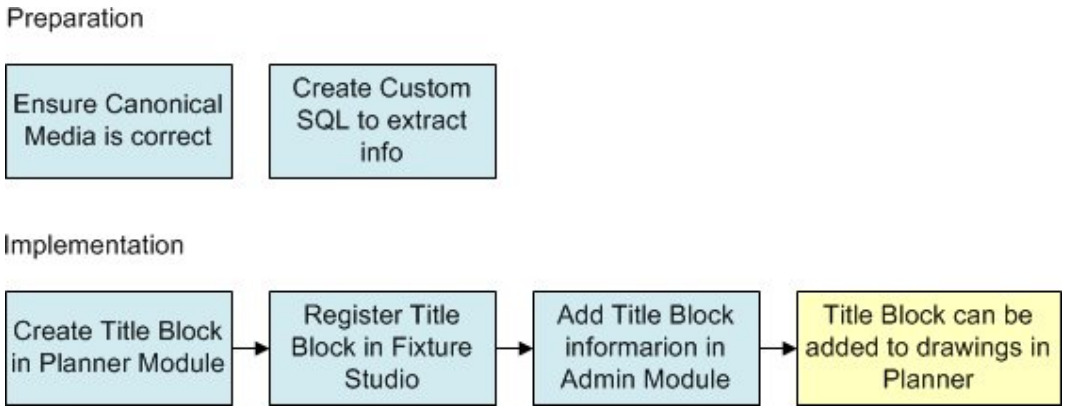
The **Title Block Information** is a specific part of the Title Block. It contains fields that populate with data about the drawing. In the above example the fields include the store name and store code. The data to populate these fields is read from two sources:

- From information imbedded into the drawing by the software
- 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 and 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 be 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, and so on.

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, and so on.

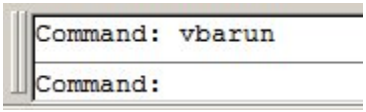
Use

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.

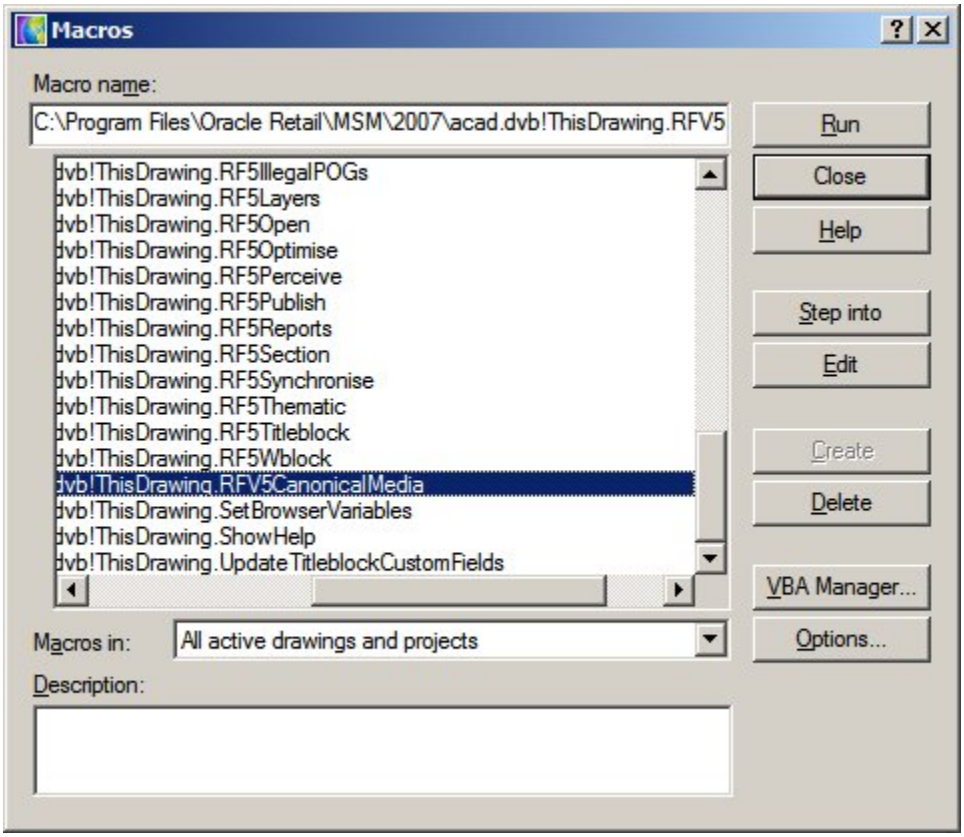
Canonical Media

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:

- Qualifying the Select Statement
- Use of Column Alias
- 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.

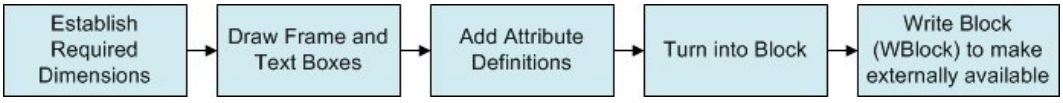
Markers

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.

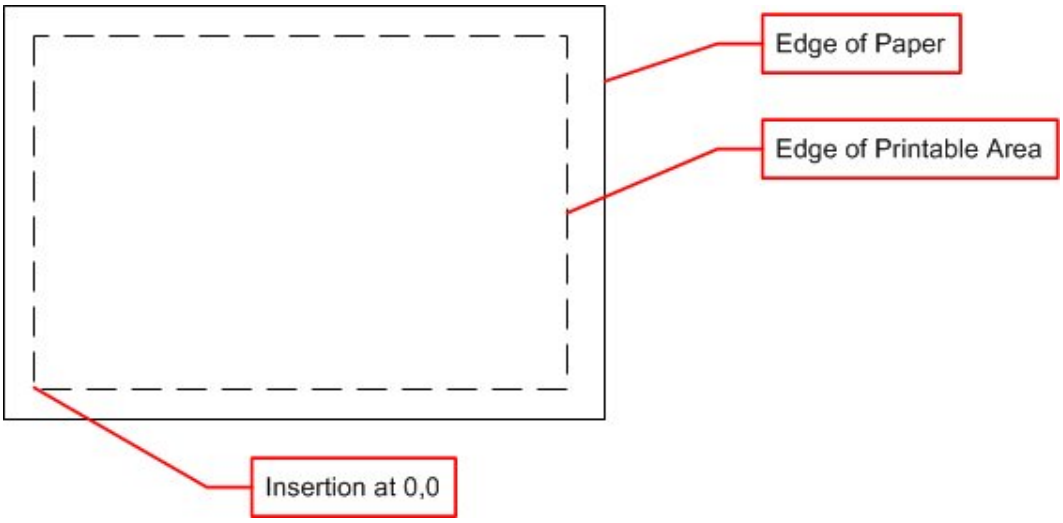
Creating the Title Block in Planner

Creating the Title Block in the Planner Module requires a series of actions to be carried out.



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.

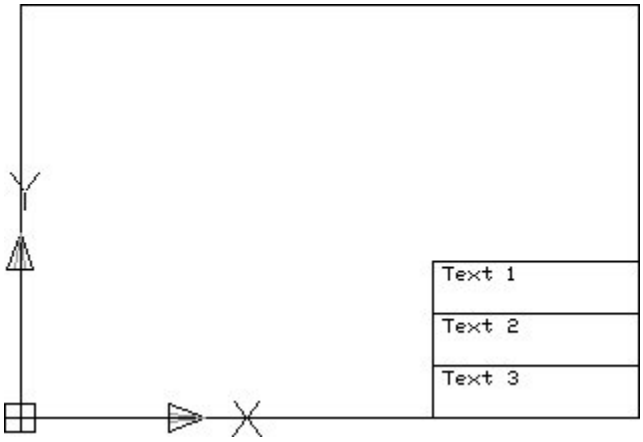


The size of the title block needs to take into account the non-printable area. For example, if A3 paper is used, and the non-printable area is 6 mm wide, then the title block needs to be drawn at 285 x 408 mm to fit exactly into the printable area of the paper. The insertion point of the title block 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.

Draw Frame and Text Boxes

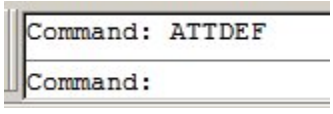
After the size has been established a frame can be drawn in planner, and text boxes added.



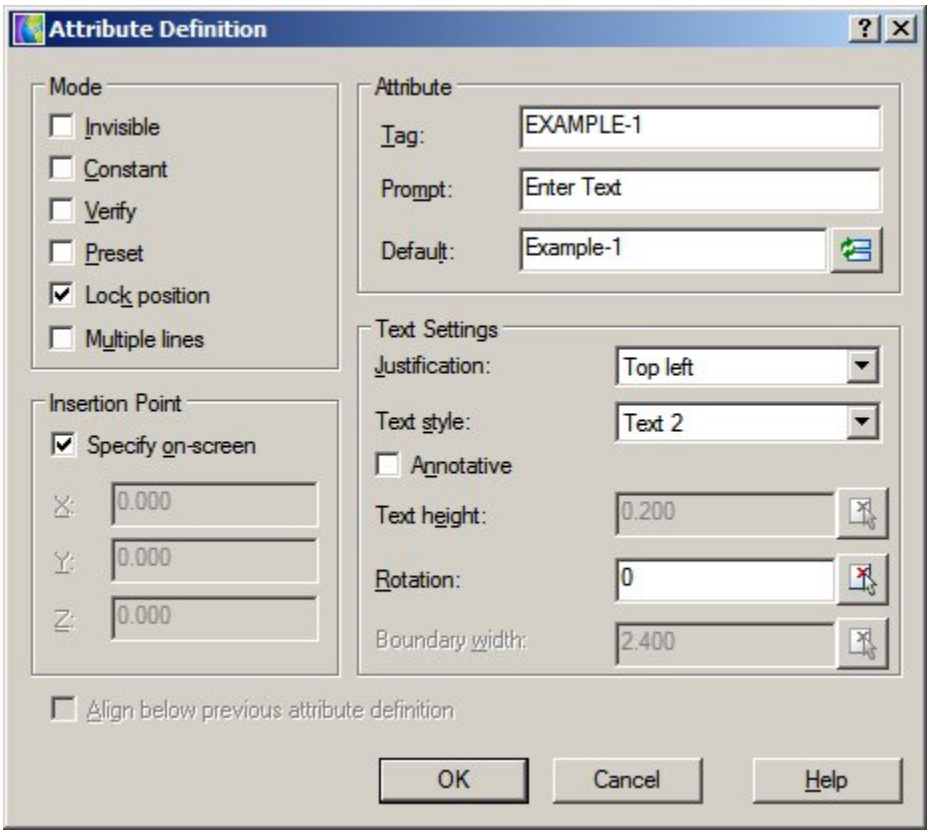
The Title block is usually drawn with the origin at 0,0.

Add Attribute Definitions

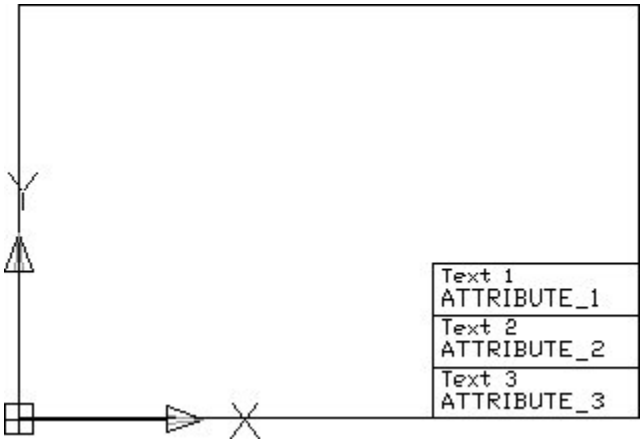
Attribute Definitions are used to set up the 'template' Attributes for the text boxes. They are invoked by typing the ATTDEF command into the AutoCAD command line in Planner.



This will bring up the Attribute Definition dialogue box.



The Attribute Definitions can then be put into the drawing.

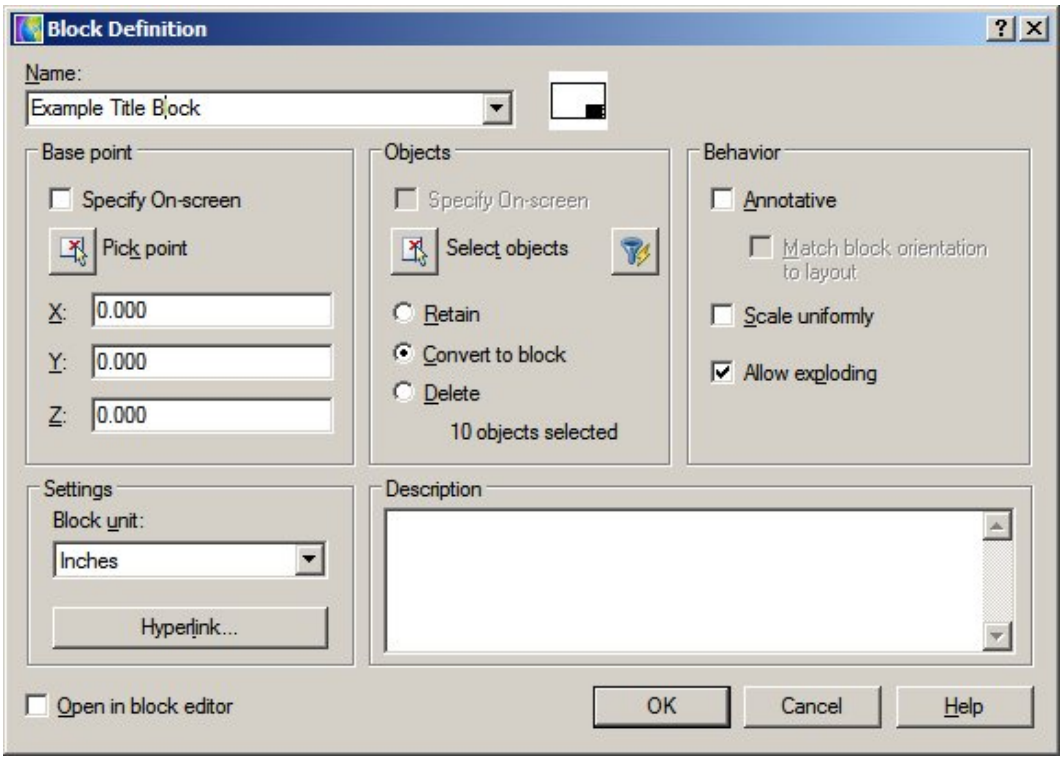


Attribute Tags should always be continuous text. If necessary, join two words with an underscore: WORD1_WORD2.

The Attribute Tags should either match the names of the data 'stamped' into the drawing or the Column Aliases in the Custom SQL.

Turn into Block

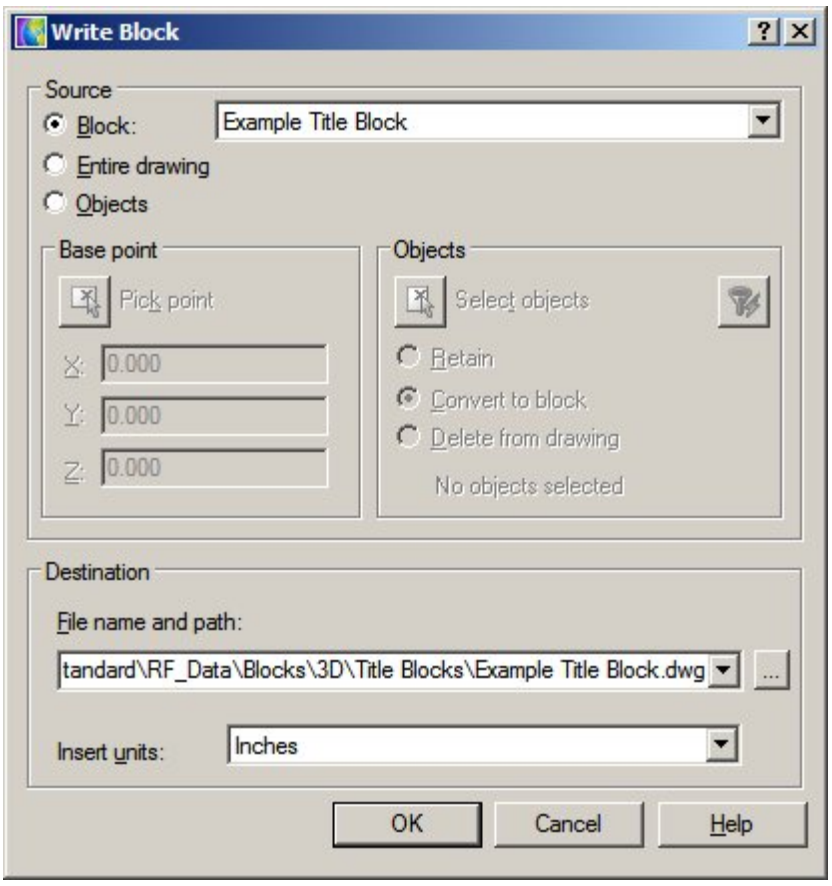
The Title Block can then be turned into a block with the 'block' command. This can either be initiated from the Draw toolbar, or from the command line.



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.

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.



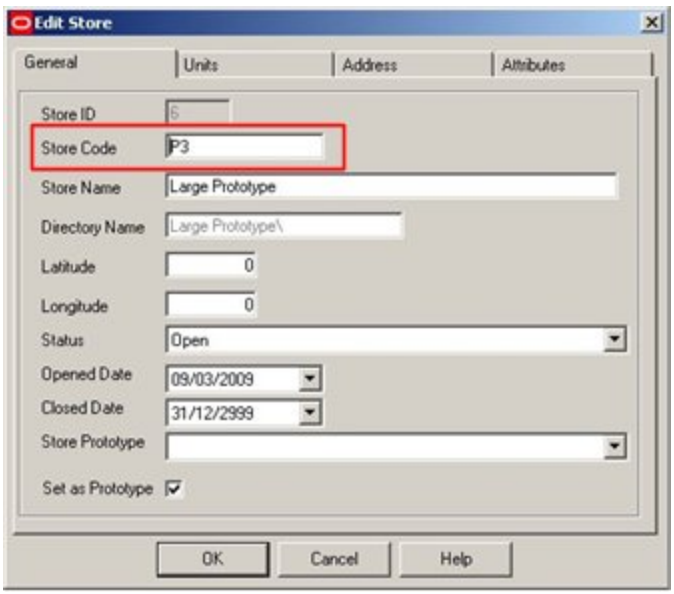
The destination should be a directory specified in the Directories Tab of the Configuration Module.

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.

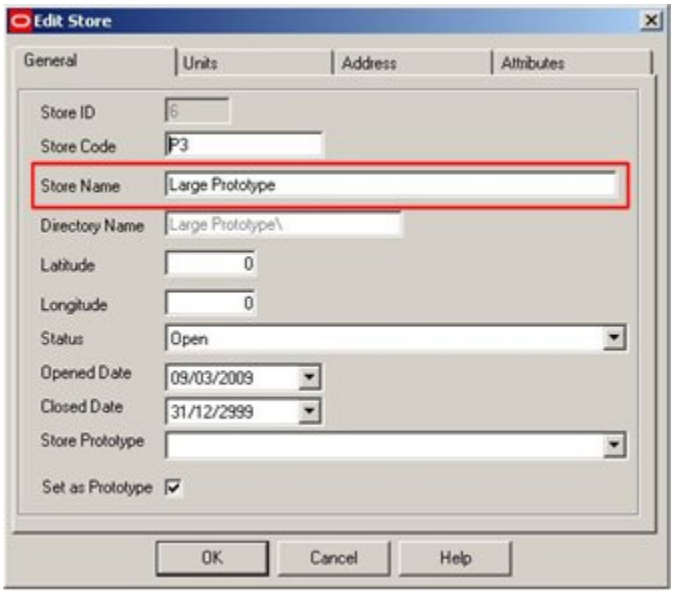
STORECODE

Store Code brings in the Store Code specified in the Add/Edit Store dialogue box in Store Manager.



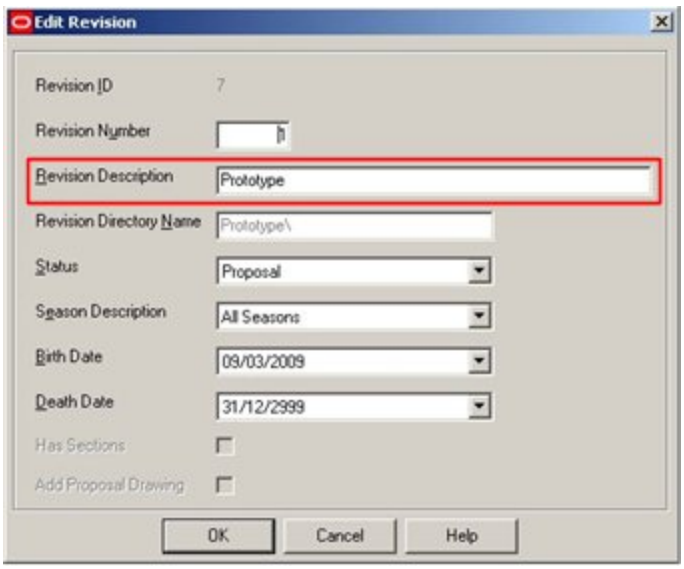
STORE

Store brings in the Store Name specified in the Add/Edit Store dialogue box in Store Manager.



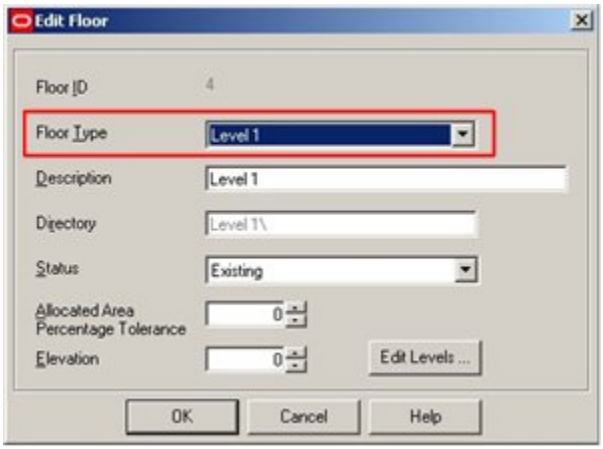
REVISION

Revision brings in the Revision Description specified in the Add/Edit Revision dialogue box in Store Manager.



FLOORCODE

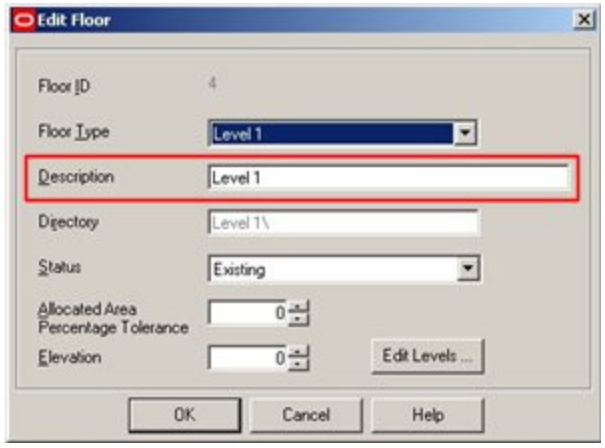
Floor Code brings in the FLT_NAME (a numerical value) from the AVTTB_FLOORTYPE table that is associated with the corresponding Floor Type specified in the Add/Edit Floor dialogue box in Store Manager.



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

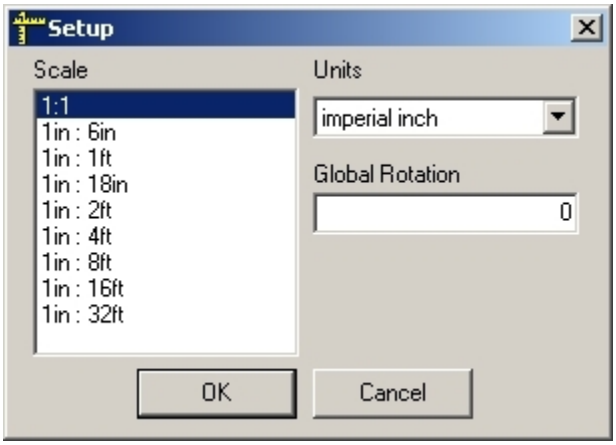
Floor brings in the Revision Description specified in the Add/Edit Floor dialogue box in Store Manager.



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.

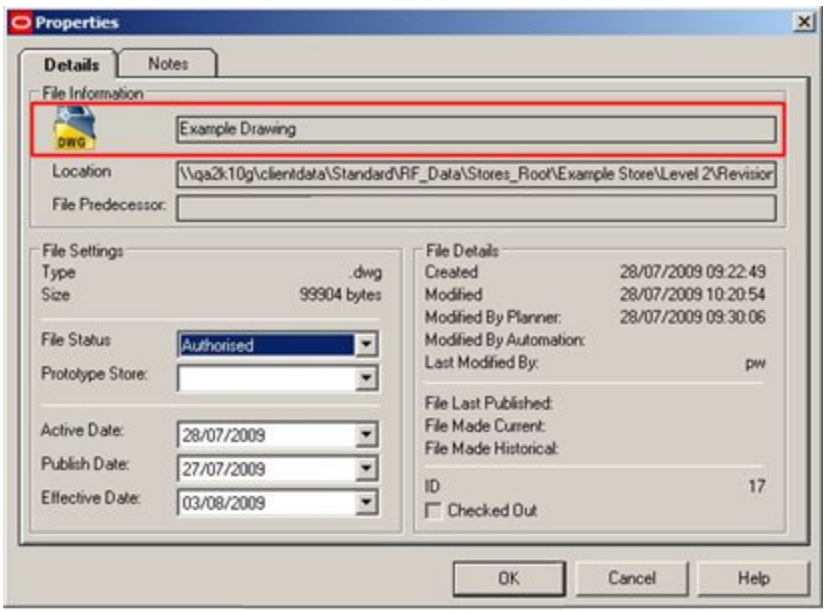


DATE

Date brings in the date that the title block was generated or updated on.

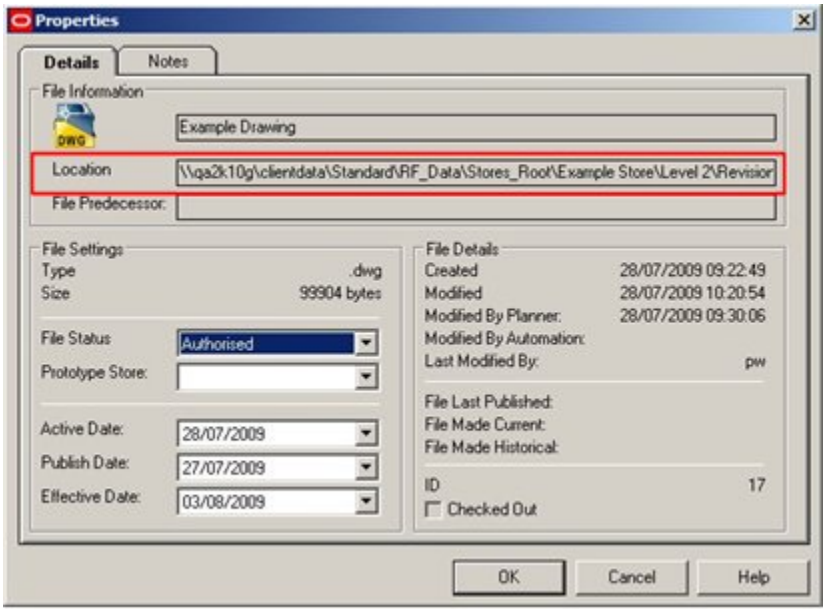
DWGNAME

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.



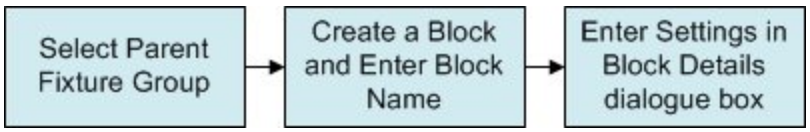
The full file name can be long; for example:

\\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.

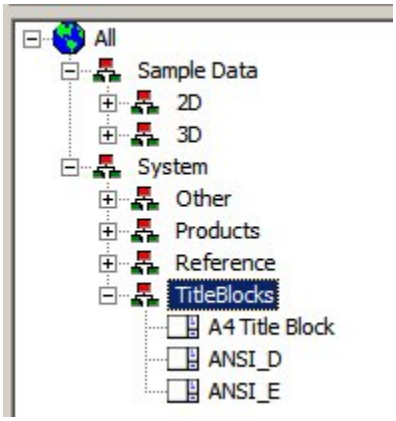
Registering the Title Block in Fixture Studio

Registering the Title Block in Fixture Studio requires the following steps.



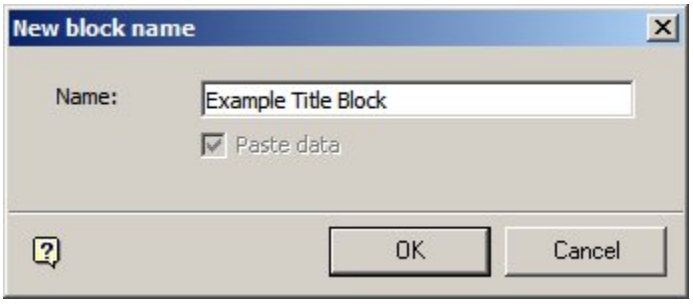
Selecting the Parent Fixture Group

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.



Create a Block and Enter the Block Name

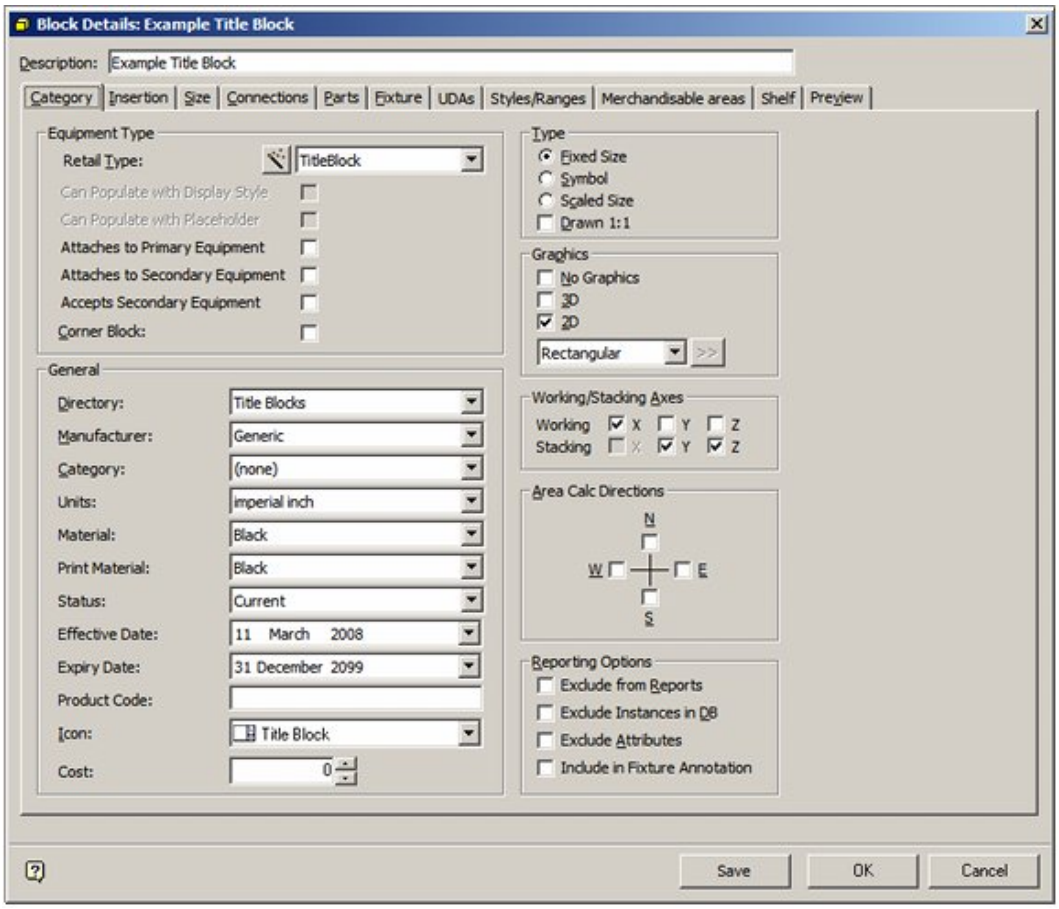
Create a block by invoking the Add Block option from the Edit menu or the toolbar. This will bring up the New block name dialogue box.



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.

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

- Set the Retail Type to Title Block.
- Set the Directory to match that specified in the WBlock command when the block was saved in Planner.
- Set the Units as appropriate.
- Set the Icon to Title Block.

Insertion Tab

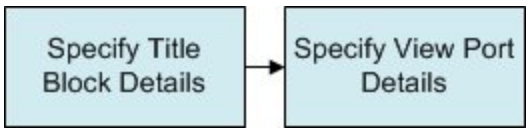
- Set the Layer to Other > TITLEBLOCK.
- Level can be left as 'Undefined'.

Size Tab

- The Sizes should be set as appropriate.
- Height can be left as 0.00001 - this nominal value is to avoid 'divide by zero' errors in the code.

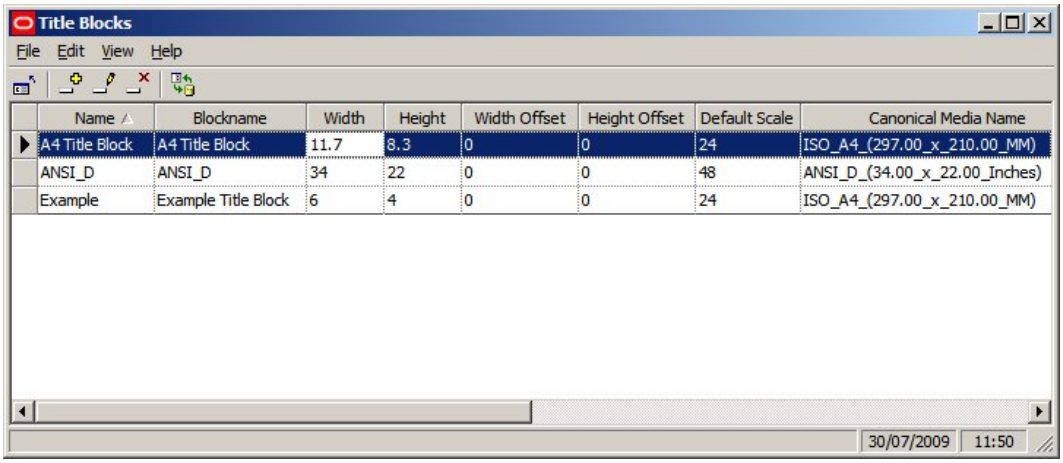
Adding Title Block Information in the Admin Module

Adding Title Block Information in the Admin Module is in two stages:



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 with 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.

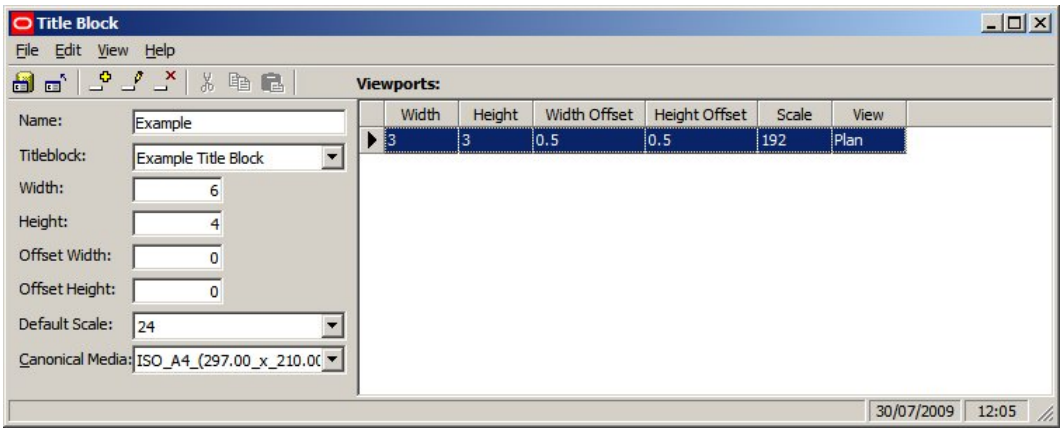
Canonical Media is selected from a drop down list. It should be set to the size of paper the title block is designed for.

> **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.

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:



Delete Title Block Definition from Admin Module

To delete the Title Block definition from the Admin Module:

1. Select the Title Block in the Title Blocks dialogue box.
2. Highlight the required Title Block and select Edit. This will open the Title Block dialogue box.
3. Delete any ViewPorts associated with the Title Block.
4. Close the Title Block dialogue box.
5. Delete the Title block from the Title Blocks dialogue box.

Delete Title Block from Fixture Studio

To mark the Title Block for deletion from Fixture Studio:

1. Highlight the Title Block in the Fixture Hierarchy.
2. Select Delete Block from the right click menu - the block name will change from black text to grey.
3. 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.

Purge Title Block in the Admin Module

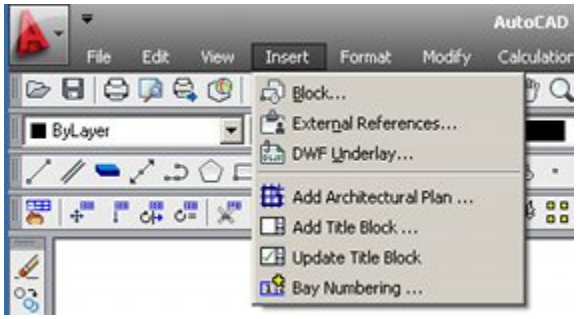
To permanently delete the Title block from the MSM database:

1. Select the Purge option from the Tools menu.
2. Select the Fixtures checkbox and click OK.

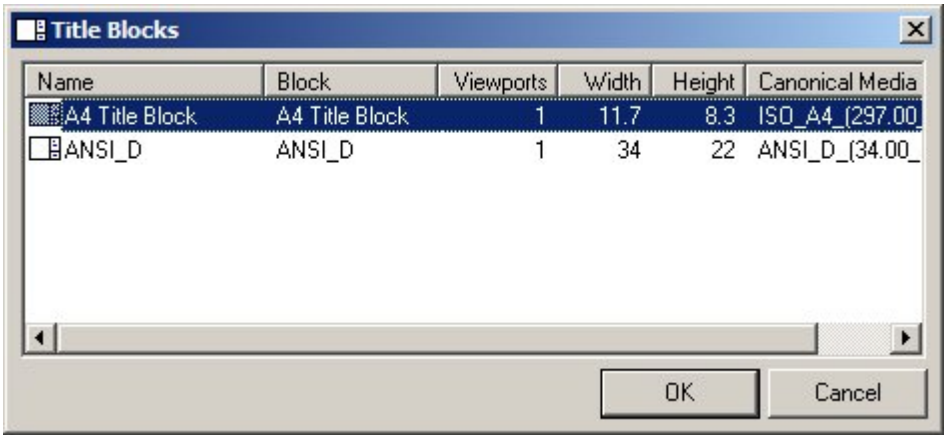
> **Note:** this will delete the information from the database. However, the block will not be deleted from the directory it is stored in. This is because the block might be referenced by other software.

Placing Title Blocks in Planner

To **place Title Blocks** in Planner, select the Add Title Blocks option from the Insert menu.

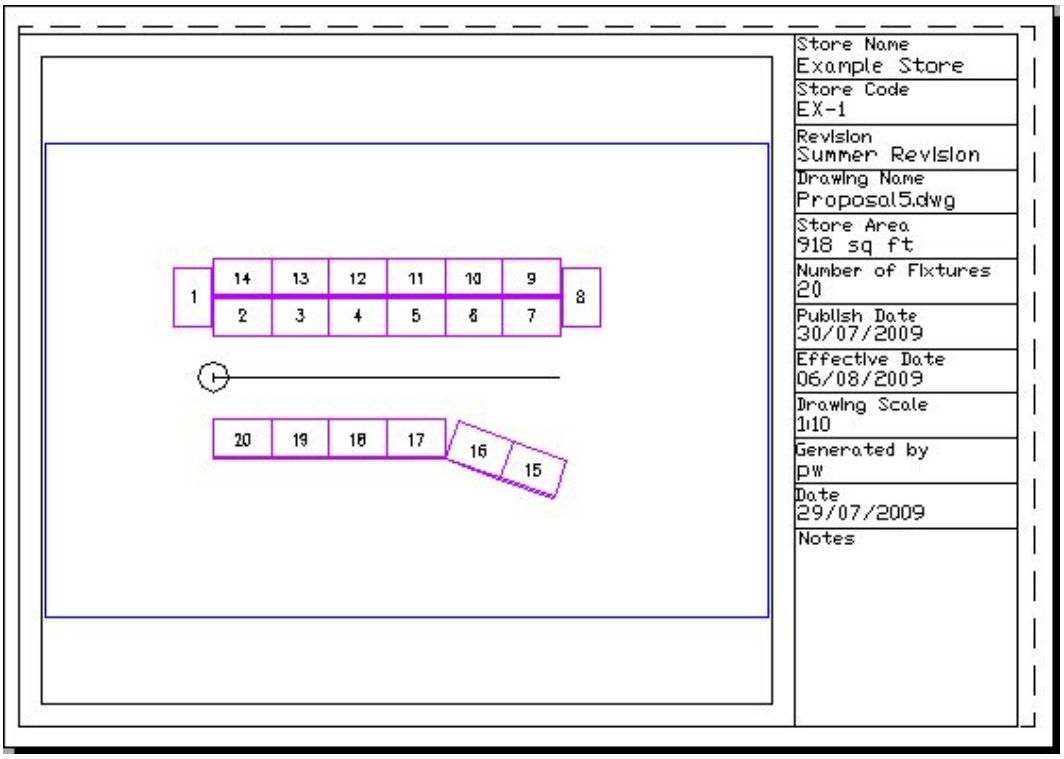


This will bring up the Title Blocks dialogue box.



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

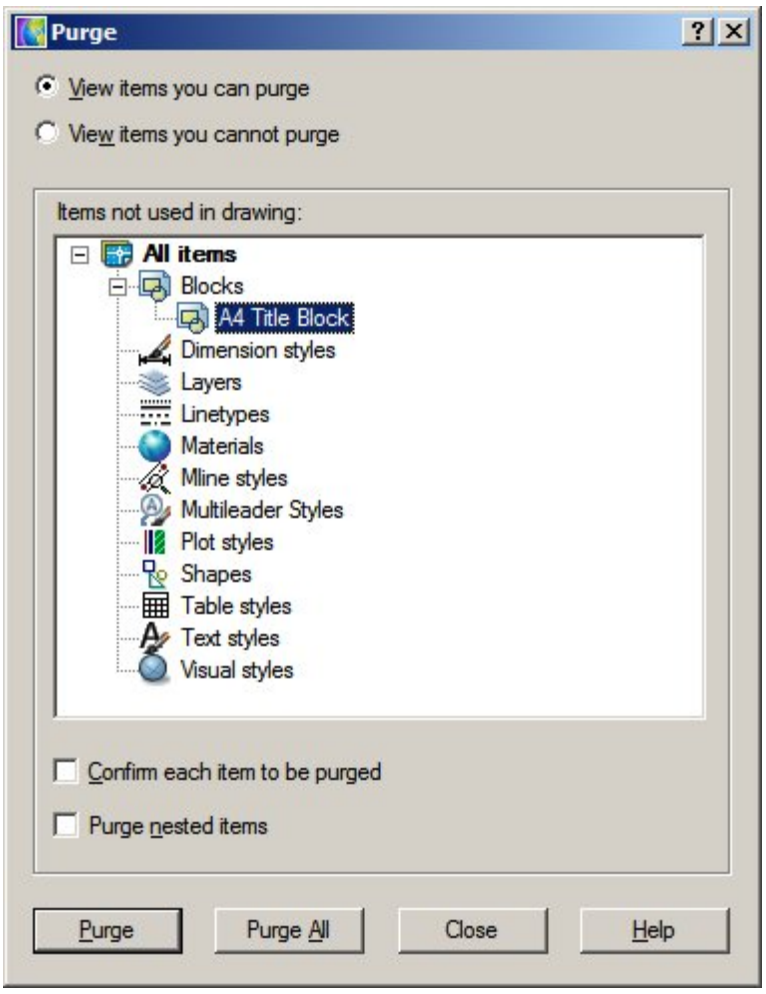
When **designing a Title Block**, it is sometimes necessary to place the Title Block in a Planner drawing and subsequently modify it so correct minor flaws in the design. Once the modified Title Block DWG file has been saved, actions are necessary in Planner to ensure that the modified Title Block displays - 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

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.

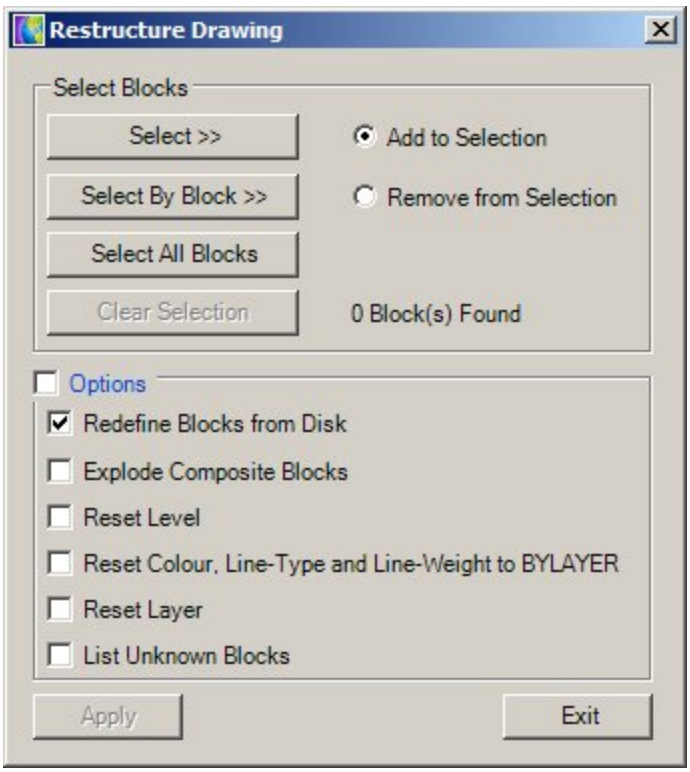
Purging is necessary if a title block that has previously been used in a specific drawing in the Planner Module. AutoCAD stores a copy of the block definition in the drawing when the block definition is first used. All subsequent insertions of that block will be copies of the stored block definition. 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 have 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.

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.

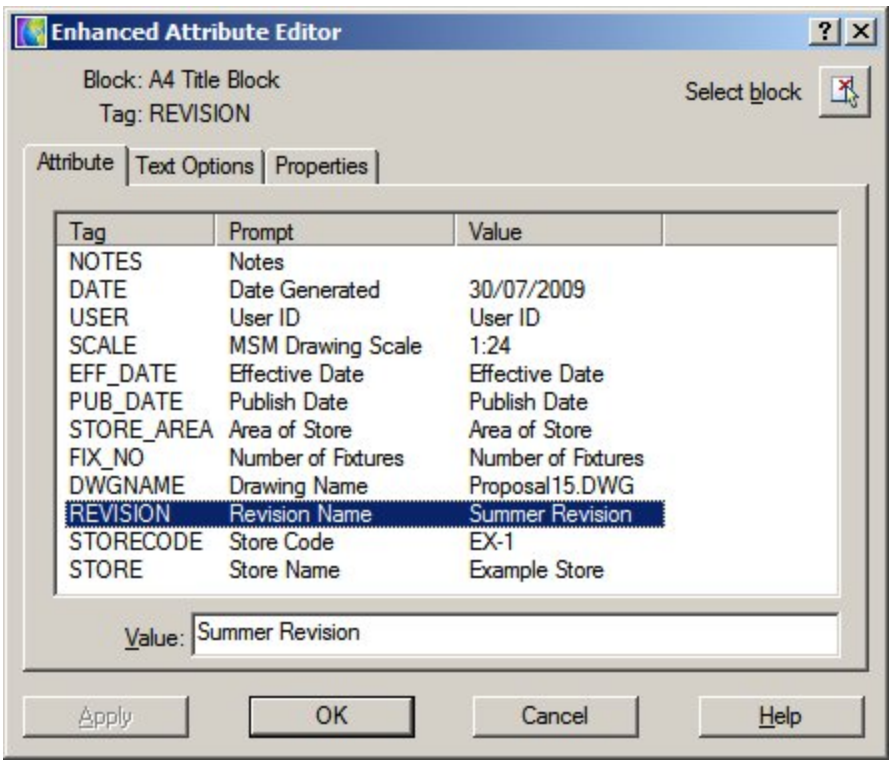


Selecting Redefine blocks from Disc will result in the DWG file specifying the title block being update (providing it has first been selected). Using the Select by Block option and selecting the title block will ensure that only the title block is updated.

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 doubler clicking on the frame of the Title Block. This will bring up the Enhanced Attribute Editor.



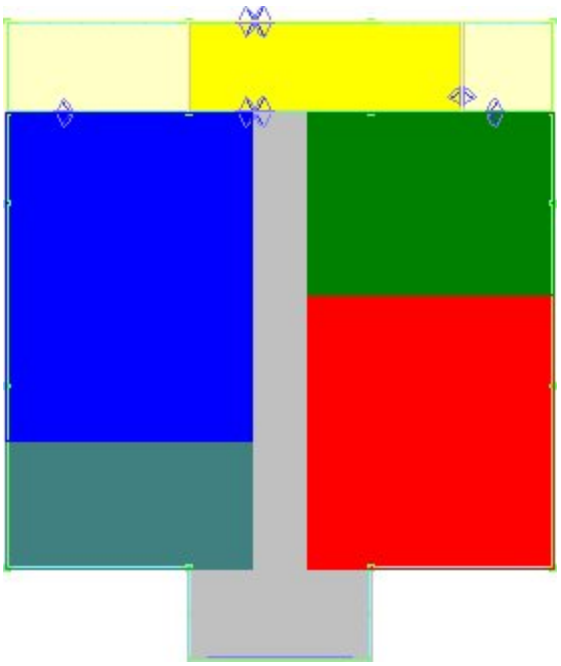
This allows any of the Attribute values to be edited.

Overview of Zone Types & Definitions

Purposes of Zones

Zones are ways of dividing up a store into areas of specific purpose.

> **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:

- **Gross Area** - the area of the zone without taking into account any obstructions
- **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 metre.

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.

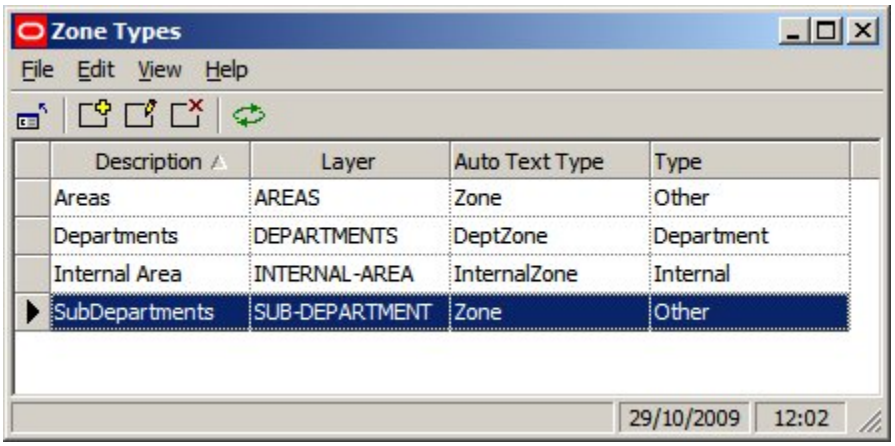
Filtering

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.

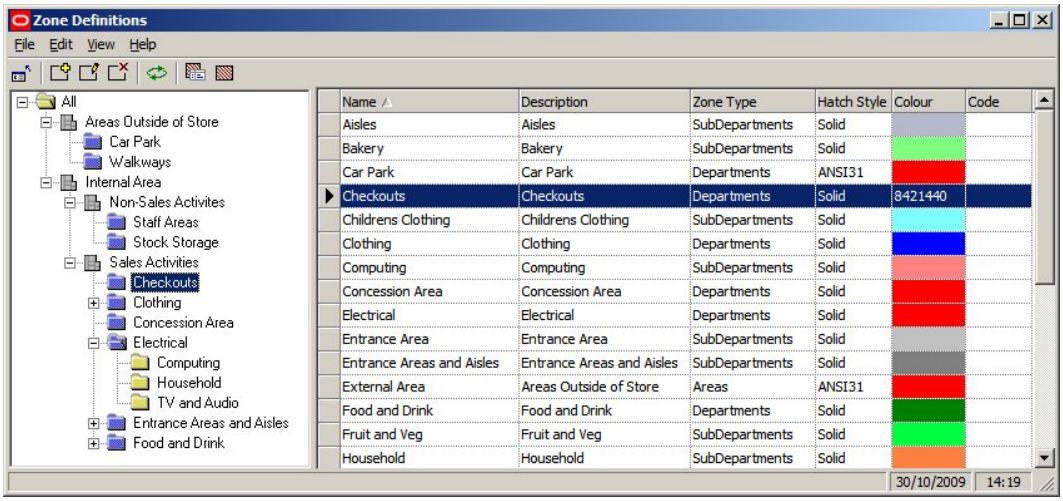
Zone Types



Zone Types is used to set broad properties that can be assigned to a specific Zone Description.

- Description is the name given to the group of properties
- Layer is the AutoCAD layer the zone will be drawn on
- Auto Text Type describes the Text Style to use (Planning Menu in the Admin Module)
- Type describes the category the Zone Type will be assigned to - either Internal Area, Department Zone or Other Zone

Zone Definitions



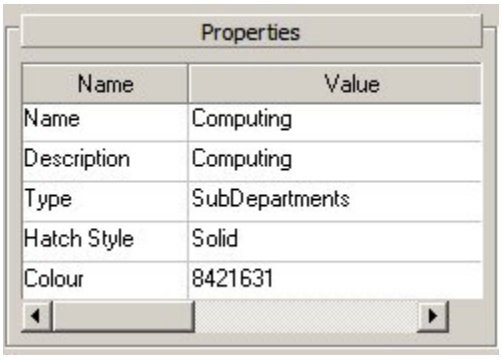
Zone Definitions is used to create the Zone Hierarchy. This zone hierarchy will also appear in the Zone Tab of the Object Browser in the Planner and Merchandiser Modules.

- Name is the Name of the Zone
- Description expands on the Name of the Zone
- Zone Type puts the Zone into one of the classes described in the Zone Type dialog box
- Hatch Style selects a hatch style from those defined in the Hatch Styles option on the Planning menu in the Administration Module

- Color is the color the boundary of the zone (and any hatching) will be in the Planner and Merchandiser Modules
- 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.



Criteria for Arranging Zone Types and Descriptions

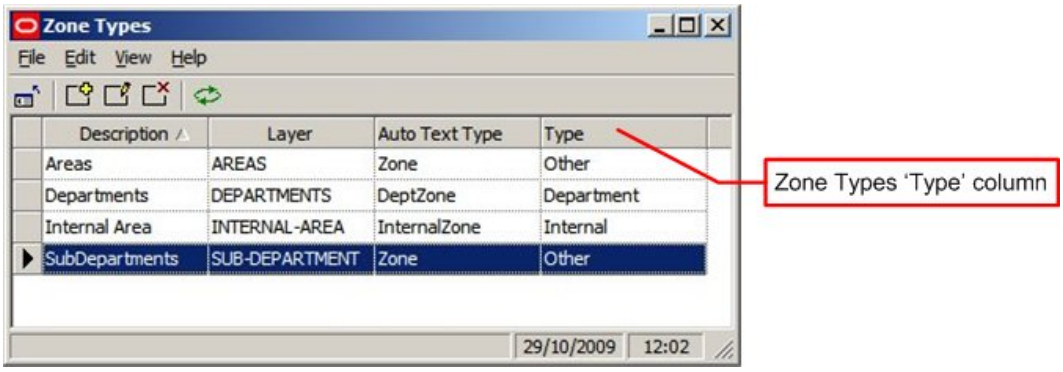
Some broad criteria have to be obeyed when designing a zone hierarchy

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 has particular properties.



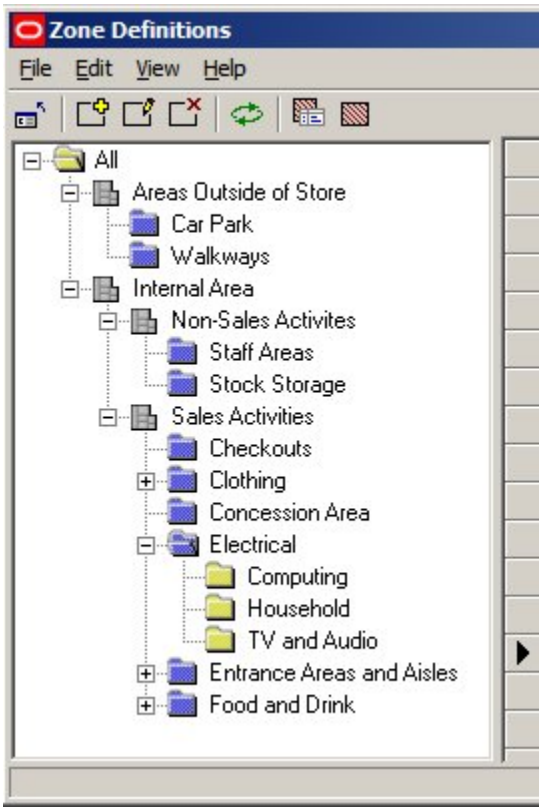
- Fixtures are allocated to Zones of Type Department for calculation and reporting purposes when placed in a store plan.
- Because products are associated with specific fixtures, products are indirectly associated with Zones Types of Type Department for reporting purposes when placed in a store plan
- 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.

- This is necessary for reporting purposes, for example associating Fixtures with zones
- 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, the must be drawn on

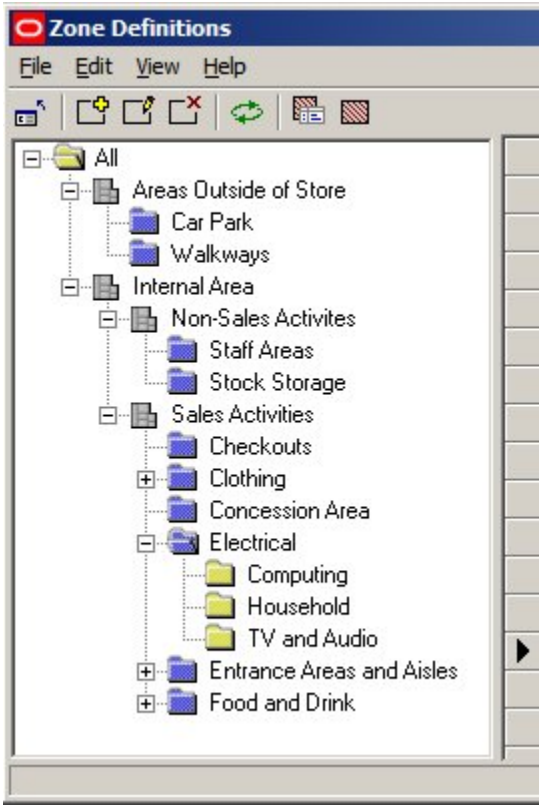
different layers so that the child zones do not clash with the parent. For example the 'Clothing' zone should be drawn on one AutoCAD layer and its children (Children's Clothing, Men's Clothing and Women's Clothing) drawn on another. This allows the 'Child' zones to be superimposed on the parent.

Strategies for Zone Types and Descriptions

There are two broad strategies for creating a zone hierarchy.

- Have only one level in the hierarchy of Zone Types 'Type' department
- 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



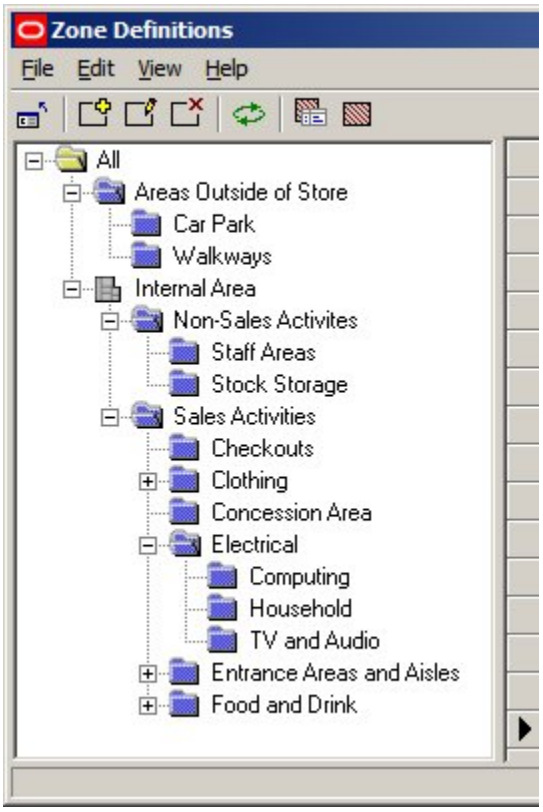
Here, the 'Department' type zones are represented by the blue folders ('Staff Areas' and 'Food and Drink''). These, (together with the Internal Area zone) are placed as a minimum in the hierarchy, with other Zone Descriptions (of Zone Types Type 'Other') added to give more options for reporting purposes.

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).

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 an '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).

Overview of Clash Detection

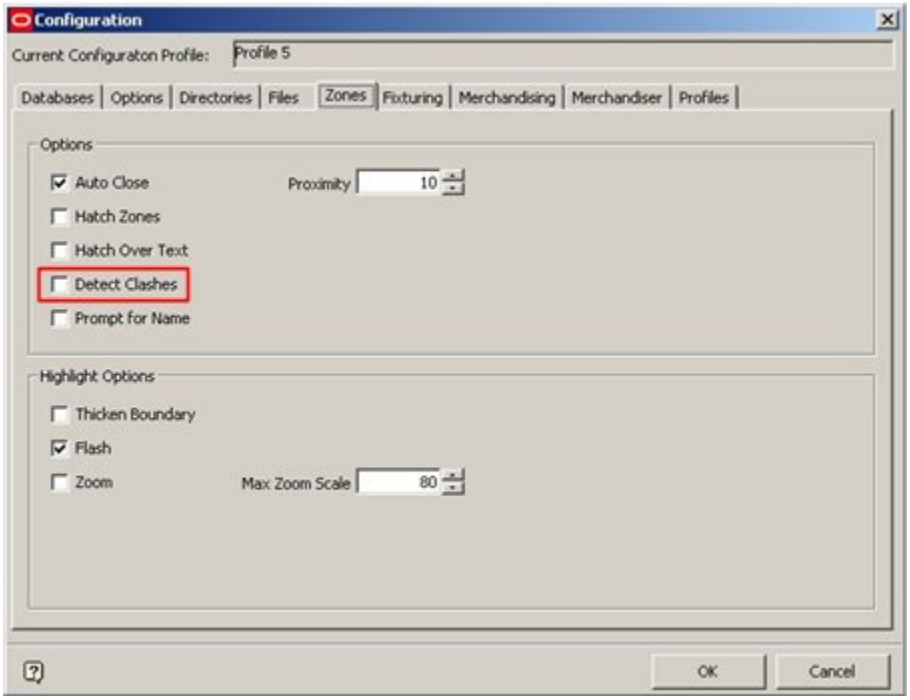
Clash Detection is used to identify where zones sharing the same AutoCAD layer are overlapping. It can be invoked in one of two ways:

- From the Configuration Module
- 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.

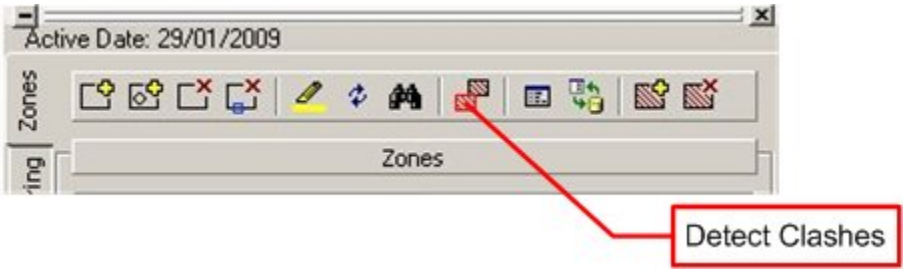
From the Configuration Module

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

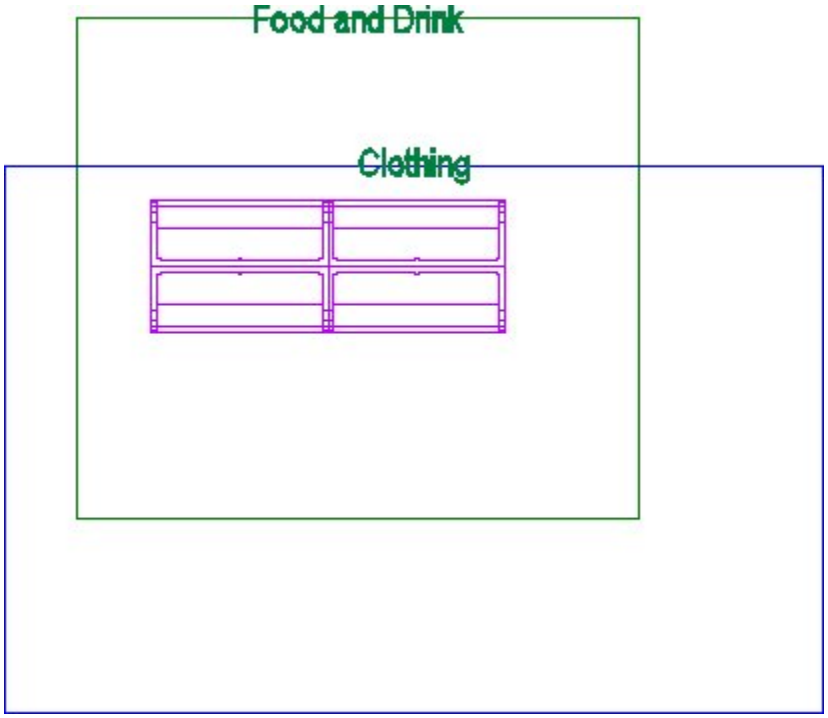
If the Detect Clashes button is clicked, this will cause the currently active store plan to be checked for any overlapping (clashing) zones sharing the same AutoCAD layer.



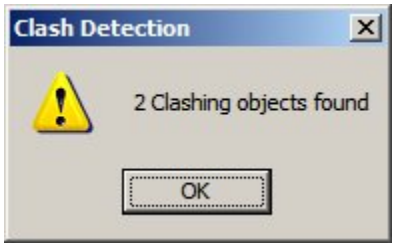
Why Clash Detection is Needed

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.

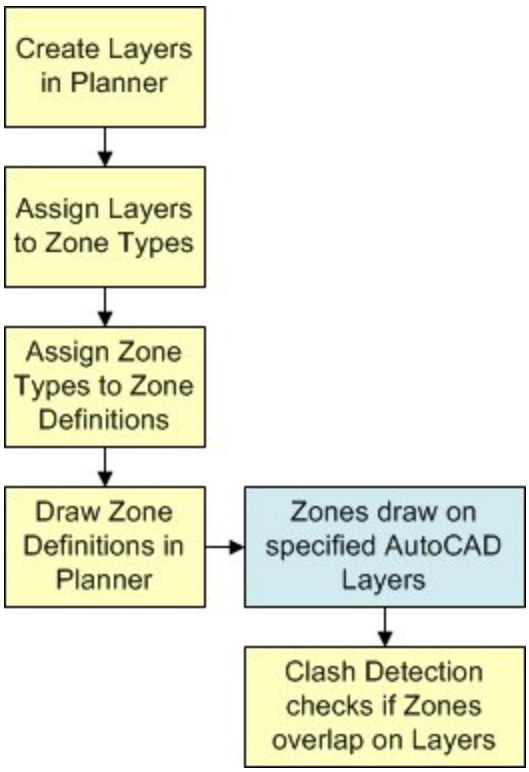


In the above example, fixtures have been paced in two overlapping Department Type Zones. This means the fixtures may be allocated to the wrong zone for reporting purposes. For example, it may have been intended to put the fixtures in the Food and Drink zone, but they may have been assigned to the clothing 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:



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.

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, and so on.

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.

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.

Clash Detection

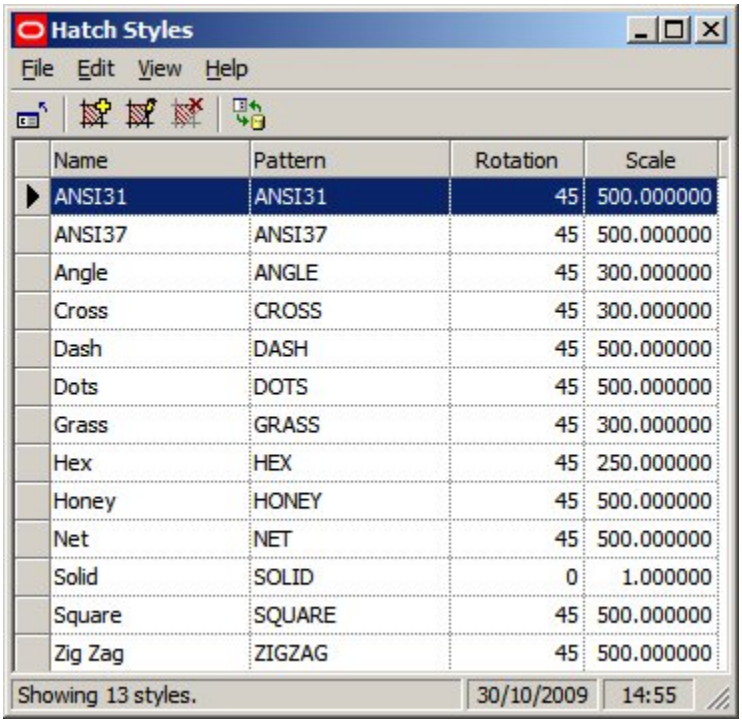
After the Zone Definition is drawn, when Clash Detection is selected, the software will examine all Zone Definitions drawn on the same Planner Layer. If the boundaries of any Zone Definitions are shown to be overlapping (clashing) a warning will be generated.

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.

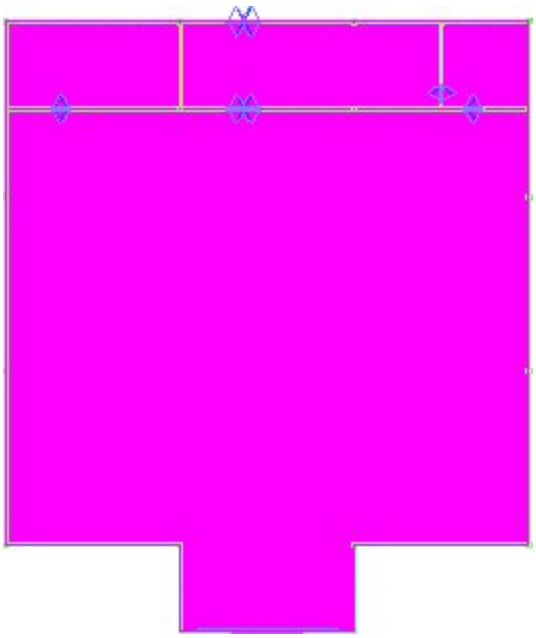


These Hatch Styles are pre-loaded into AutoCAD, but have to be defined for the Merchandiser Module.

Building Up Zones

Internal Area Zone

The Internal Area zone is used to specify the maximum area available for retail purposes.

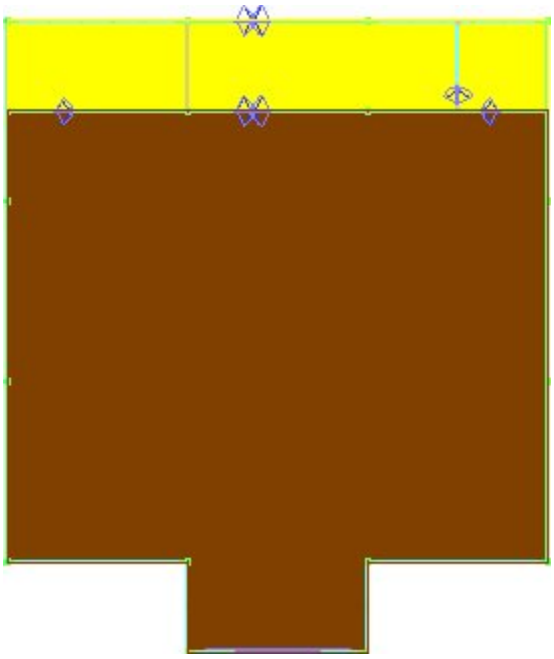


In the example above, it is confined to the boundaries of the store. Equally, it could be confined to the area accessible to customers, or include areas outside of the store - for example those used to display and sell garden plants.

The Internal Area Zone is also used to set the boundary for Area Calculations.

Sales Area and Non Sales Area Zones

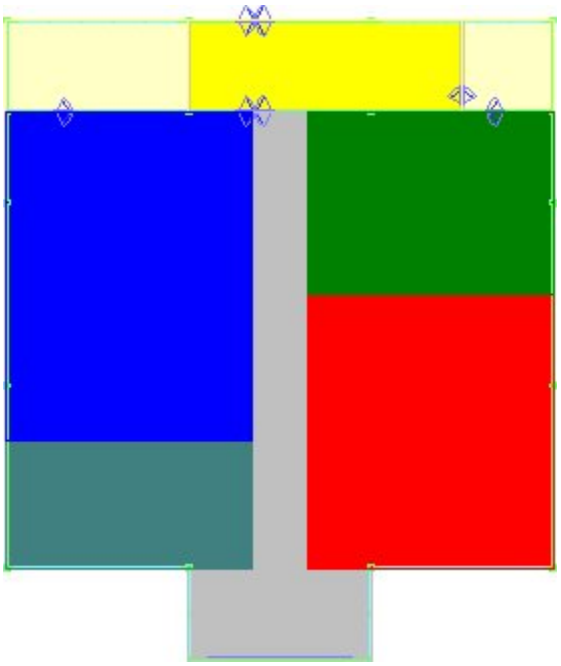
Sales Area and Non Sales Area Zones can be used to divide the store into areas used for sales activities (i.e. accessible to the public) and areas used for support functions - offices, stockrooms, and so on.



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.

- AVTTB_FIXTURE Table
- 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:

- Equipment take-offs do not show fixtures in multiple zones, resulting in inaccurate orders for equipment when building or refurbishing stores
- 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.

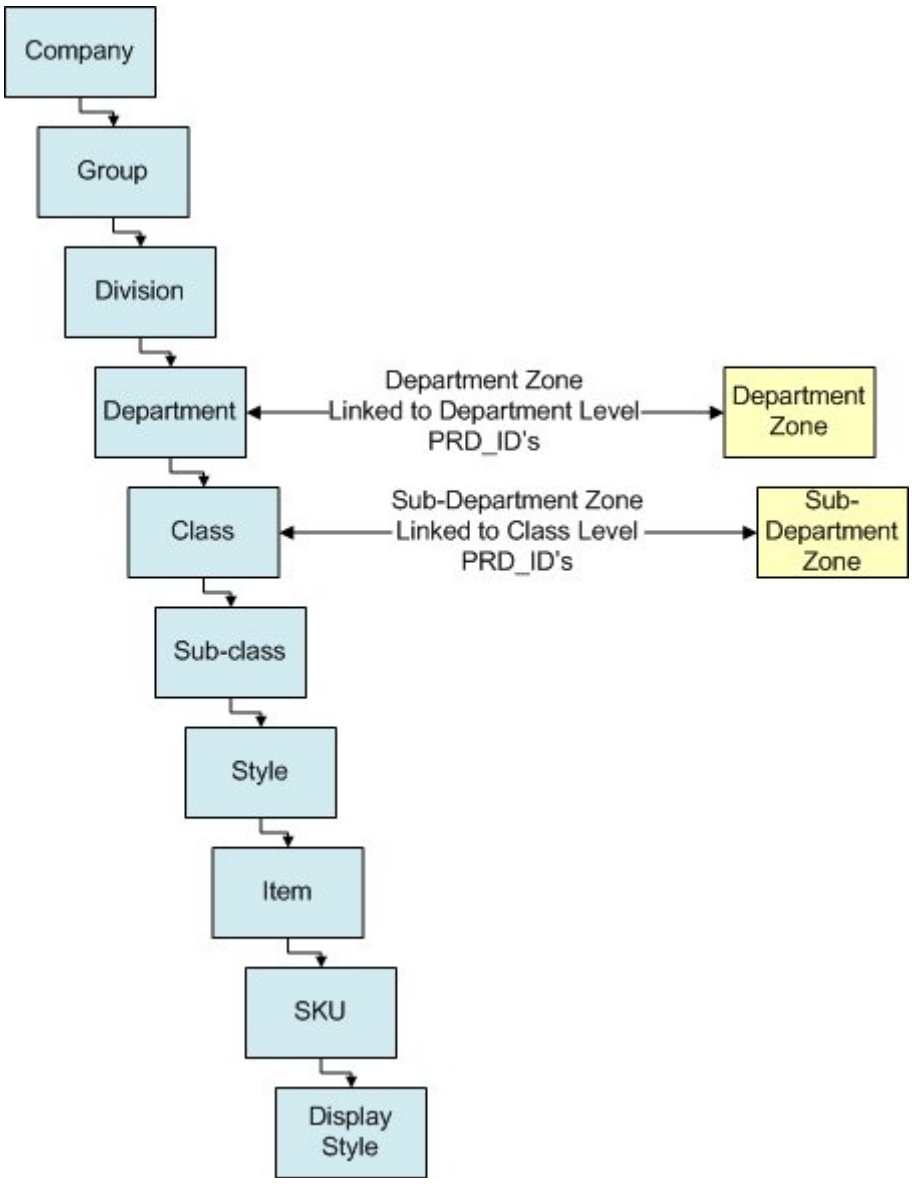
Overview of Zone - Product and Zone - Planogram Links

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.



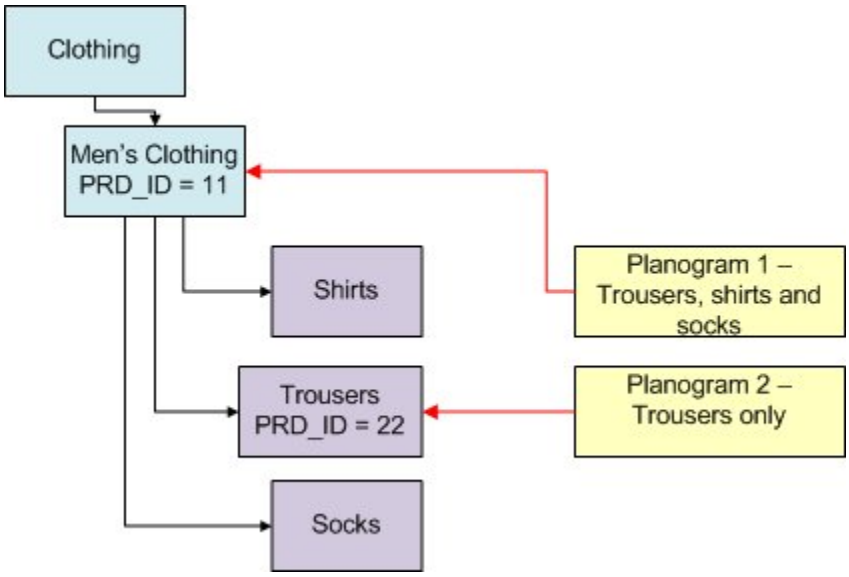
In the above example, Department level zones have been linked to the equivalent nodes in the products hierarchy and similarly Sub-department zones have been linked to nodes at Department level.

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.

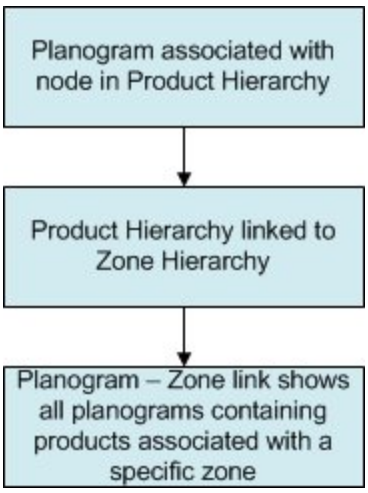


For example, Planogram 1 contains trousers, shorts and socks. The lowest common link between these products is the node above them in the product hierarchy - "Men's Clothing". Planogram 1 will therefore be assigned the Product ID of that node (PRD_ID = 11 in this example). Planogram 2 only contains trousers, 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.

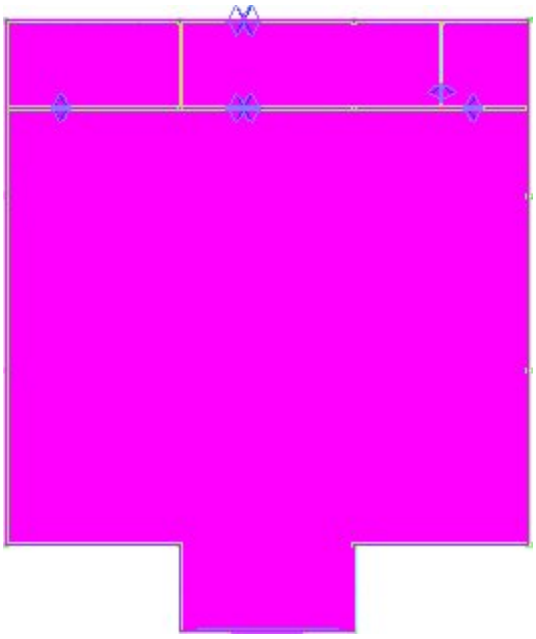
POG_ID	POG_NAME	POG_DESC	PRD_ID
1	1BayRice	1 Bay Rice Plangram: Fixture 36 x 24 x 72	5761
2	1BayTinnedVegetables	1 Bay Tinned Vegetables: Fixture 36 x 24 x 72	5760
3	1BayWhiteWine	1 Bay White Wine Planogram: Fixture 36 x 24 x 72	5762
4	1BayRedWine	1 Bay Red Wine Planogram: Fixture 36 x 24 x 72	5762
5	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.

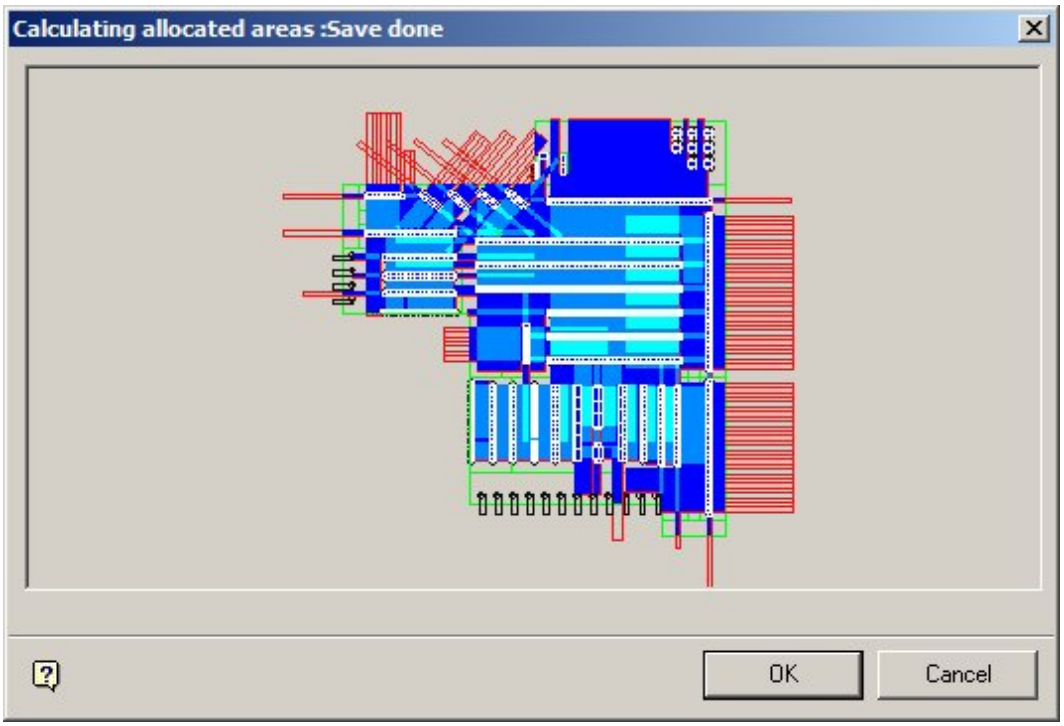


The Internal Area Zone

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.

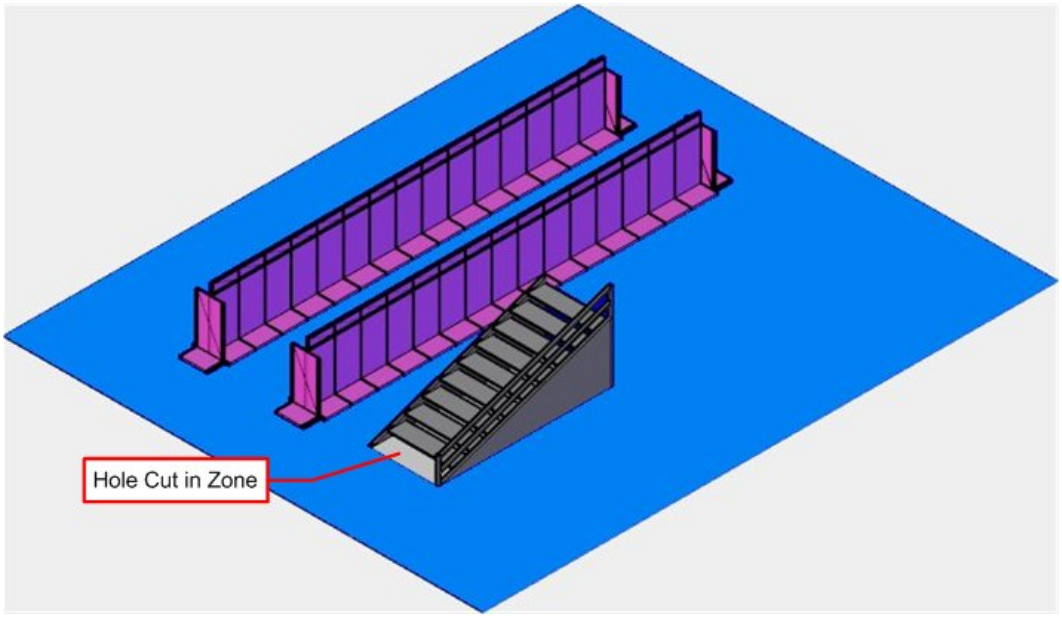


Individual retail organizations decide what to encompass in the Internal Area zone: some include non sales areas (like stock rooms and staff canteens, some do not. The area encompassed within the Internal Area will impact on reporting: an internal area that did not include non-sales areas would show a different 'profit per square meter' value than one that did.

> **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.

Cutting Holes in Zones

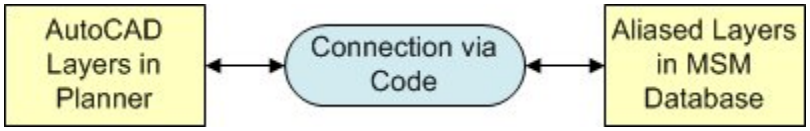
Cutting Holes in Zones is used to allow for the effects of obstructions, and so on. In the simple example below, a zone contains some gondola runs and a staircase. The staircase reduces the area available in the zone for retailing purchases. The 'Cut Holes' option allows the user to remove the area used 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

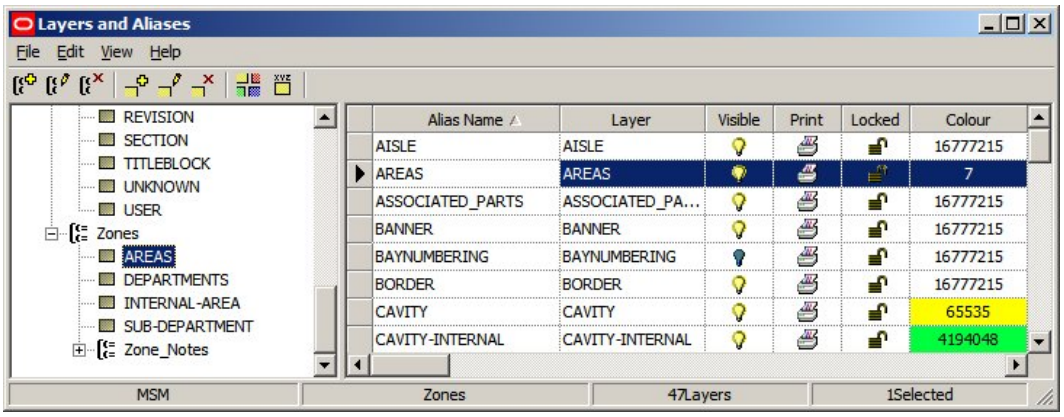
Aliased Layers are a way for the functionality in the Planner Module of Macro Space Management to communicate with that in AutoCAD.



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).

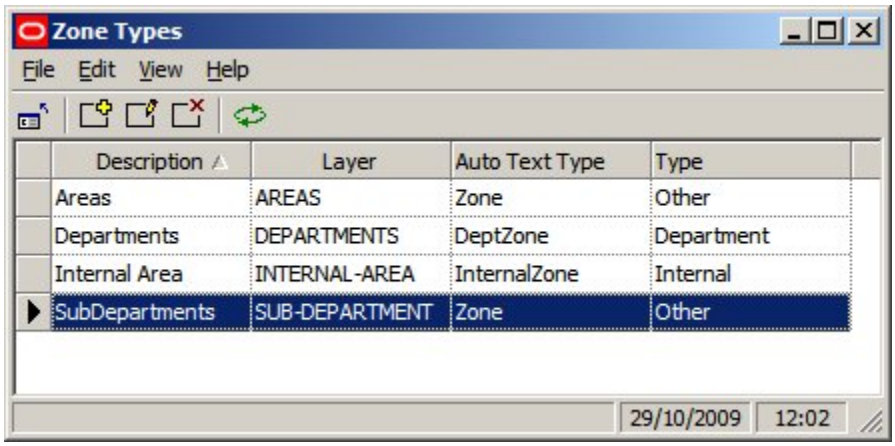


The Alias Name is the name of the Layer held in the MSM database and the Layer is the name of the layer in the AutoCAD (Planner) drawing.

Zone Types

Overview of Zone Types

Zone Types are a way of assigning broad properties to specific Zone Descriptions.

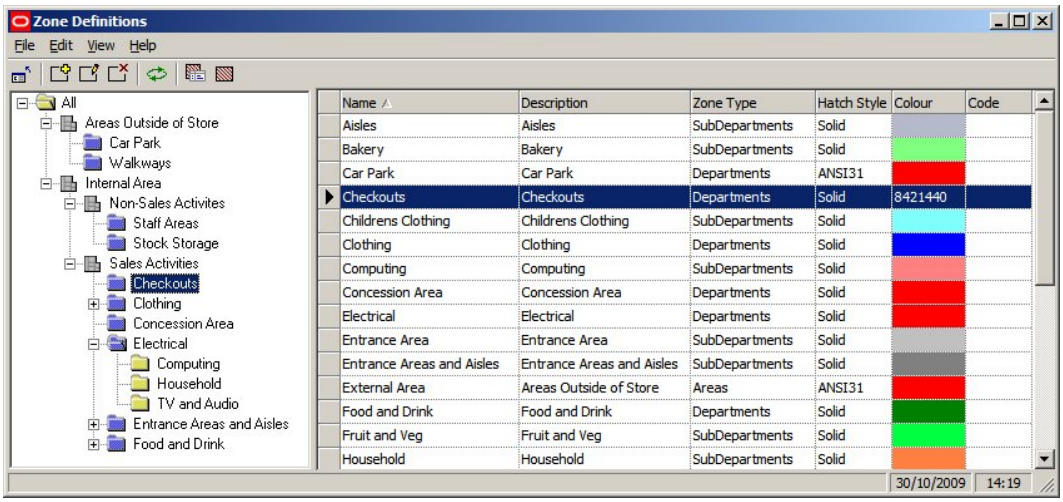


Zone Types is used to set broad properties that can be assigned to a specific Zone Description.

- 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

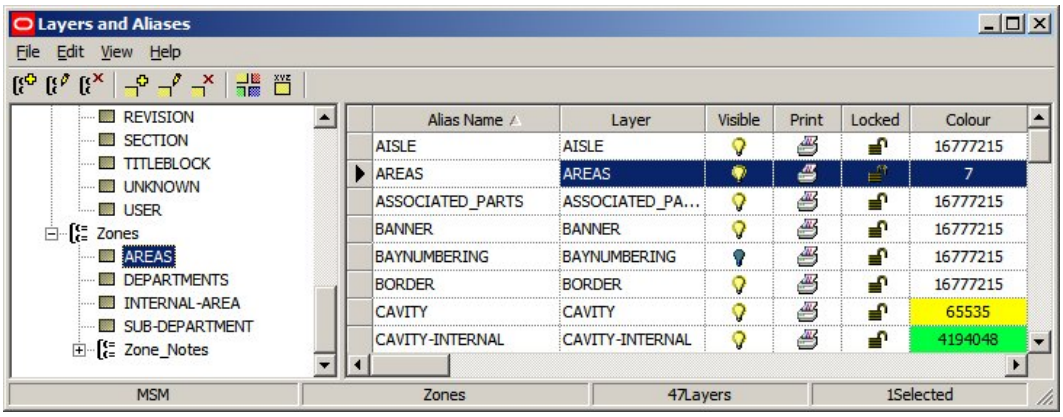
Description

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.

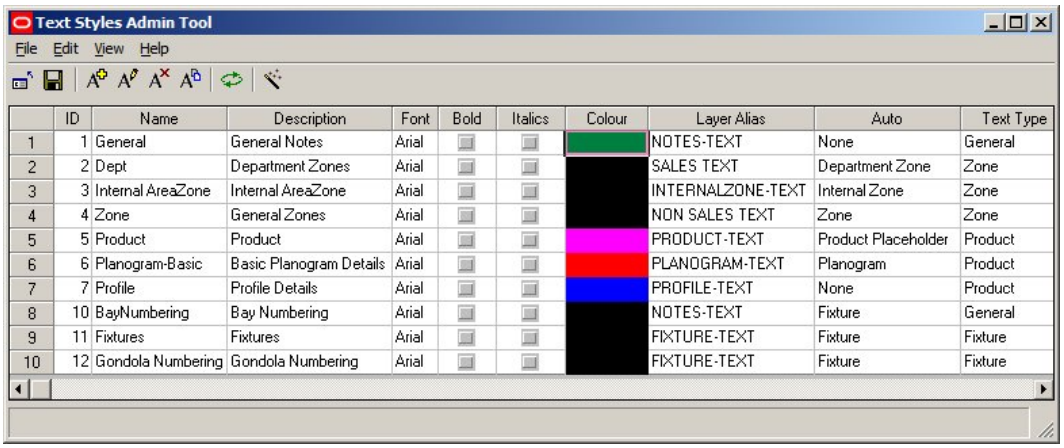
However, if a Zone Description of Type Sub-Department is drawn overlapping a Zone Description of Type Department, it will be drawn on a different layer and will not be shown as clashing.

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				NOTES-TEXT	None	General
2	2	Dept	Department Zones	Arial				SALES TEXT	Department Zone	Zone
3	3	Internal AreaZone	Internal AreaZone	Arial				INTERNALZONE-TEXT	Internal Zone	Zone
4	4	Zone	General Zones	Arial				NON SALES TEXT	Zone	Zone
5	5	Product	Product	Arial				PRODUCT-TEXT	Product Placeholder	Product
6	6	Planogram-Basic	Basic Planogram Details	Arial				PLANOGRAM-TEXT	Planogram	Product
7	7	Profile	Profile Details	Arial				PROFILE-TEXT	None	Product
8	10	BayNumbering	Bay Numbering	Arial				NOTES-TEXT	Fixture	General
9	11	Fixtures	Fixtures	Arial				FIXTURE-TEXT	Fixture	Fixture
10	12	Gondola Numbering	Gondola Numbering	Arial				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.

- 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
- Department Zones can be used for reporting purposes - they give the most accurate reports
- 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.

- Decide on the Strategy for the Zone Hierarchy
- Decide on the Number of Levels in the Zone Hierarchy
- Decide on the Layer Aliases required
- Decide on the Text Styles Required
- 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.

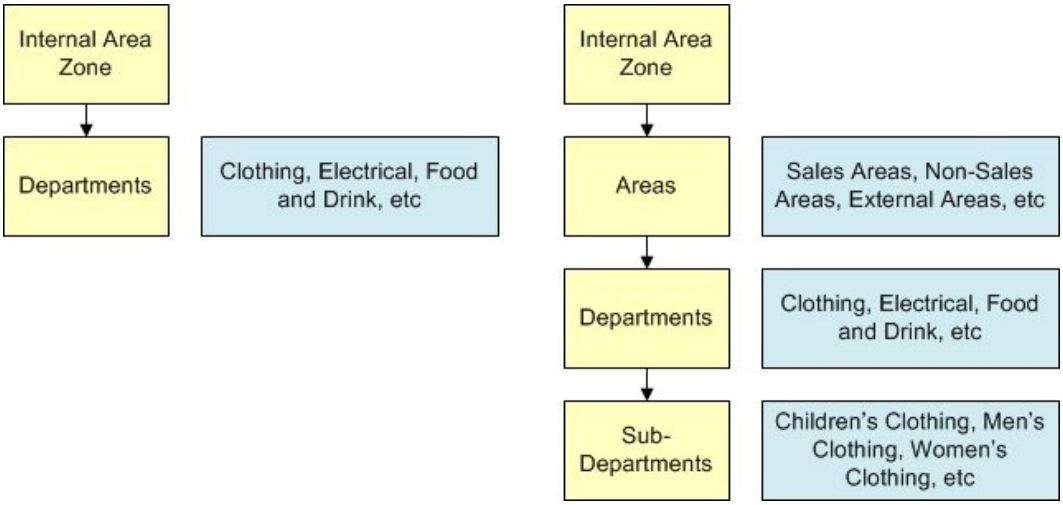
- Have only one level in the hierarchy of Zone Types 'Type' Department

- 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 of 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 be used to group together zones of a comon type.

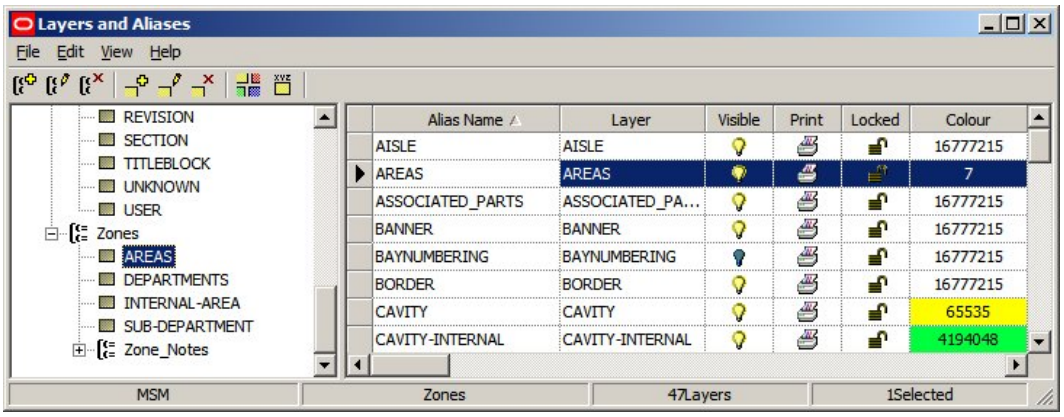
Decide on the Layer Aliases Required

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 detected as clashing.

- Zones that should not clash (overlap) should be placed on the same Layer
- 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 the 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.



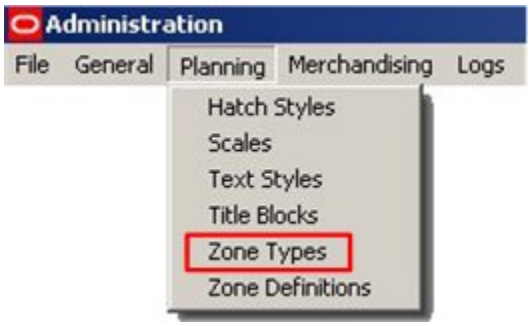
Decide on the Text Styles Required

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.

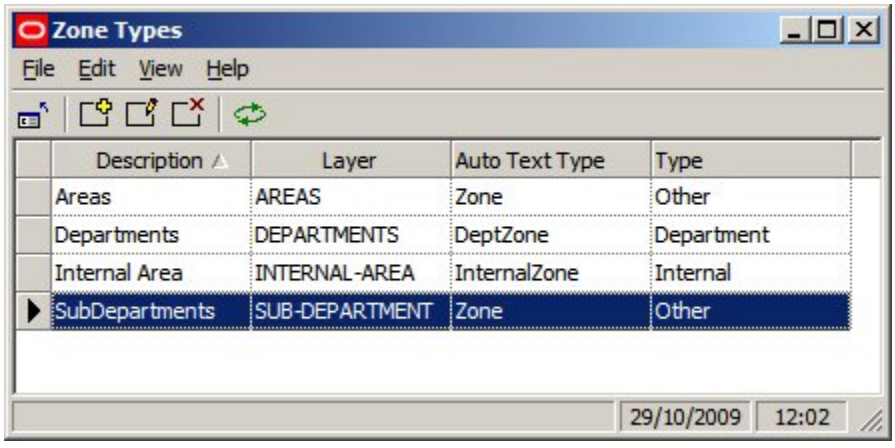
> **Note:** Text Styles are configured by selecting the Text Styles option from the Planning menu in the Admin Module.

Adding, Editing and Deleting Zone Types

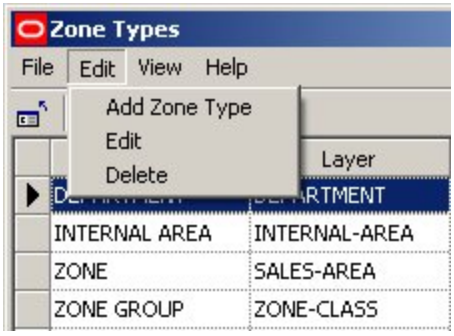
Zone Types can be accessed from the Edit Menu in the Administration Module.



This will bring up the Zone Types dialog box.



Options can be selected from the Edit pull down menu.

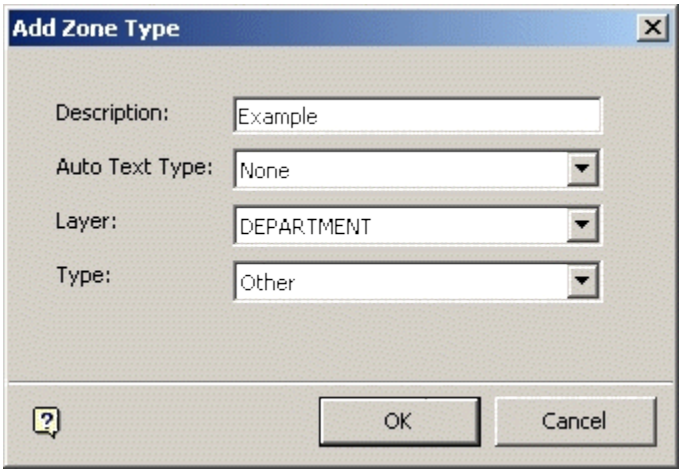


Alternatively, they can be selected from the toolbar.

Icon	Meaning
	Exit
	Add Zone Type
	Edit Zone Type
	Delete Zone Type
	Refresh from Database

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.

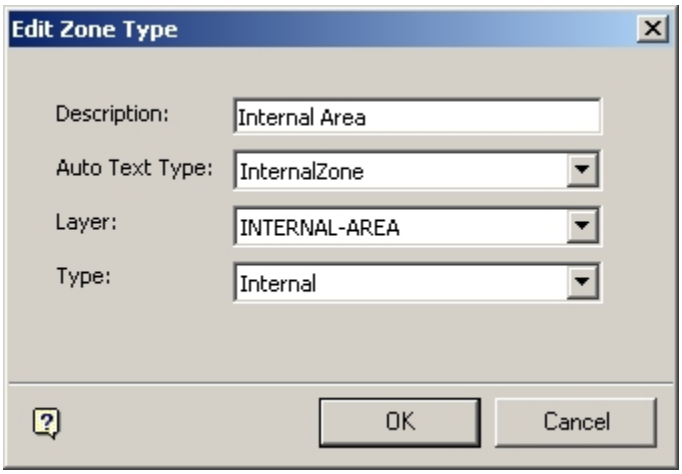
> **Note**: Clashes can only be detected between Zones on the same layer alias: (Layer Type in the above dialogue box). The Type can also be selected from a drop down list.

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.

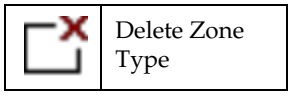
> **Note**: Clashes can only be detected between Zones on the same layer alias (Layer Type in the above dialogue box).

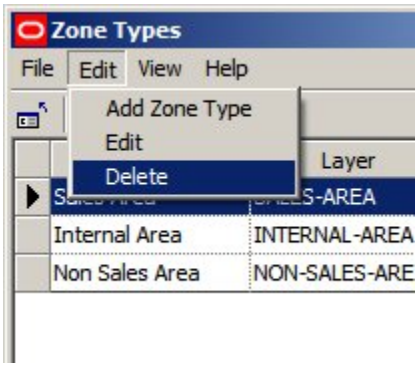
The Type can also be edited from a drop down list.



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.



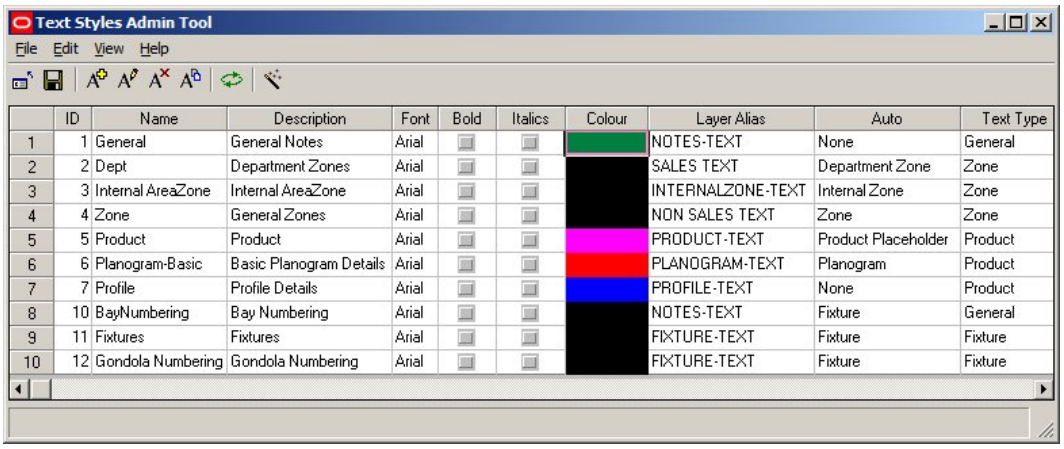


> **Note**: Zone Types cannot be deleted if there is a Zone Definition associated with it – the associated Zone Definitions must be deleted or assigned to another category first.

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.



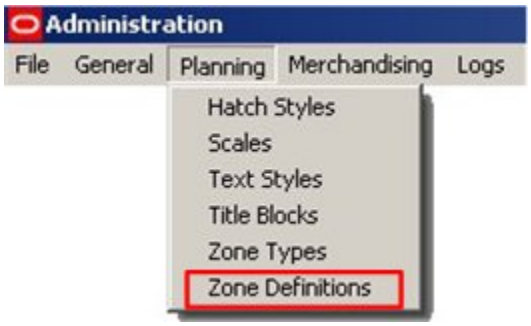
	ID	Name	Description	Font	Bold	Italics	Colour	Layer Alias	Auto	Text Type
1	1	General	General Notes	Arial				NOTES-TEXT	None	General
2	2	Dept	Department Zones	Arial				SALES TEXT	Department Zone	Zone
3	3	Internal AreaZone	Internal AreaZone	Arial				INTERNALZONE-TEXT	Internal Zone	Zone
4	4	Zone	General Zones	Arial				NON SALES TEXT	Zone	Zone
5	5	Product	Product	Arial				PRODUCT-TEXT	Product Placeholder	Product
6	6	Planogram-Basic	Basic Planogram Details	Arial				PLANOGRAM-TEXT	Planogram	Product
7	7	Profile	Profile Details	Arial				PROFILE-TEXT	None	Product
8	10	BayNumbering	Bay Numbering	Arial				NOTES-TEXT	Fixture	General
9	11	Fixtures	Fixtures	Arial				FIXTURE-TEXT	Fixture	Fixture
10	12	Gondola Numbering	Gondola Numbering	Arial				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 Definitions

Accessing Zone Definition Options

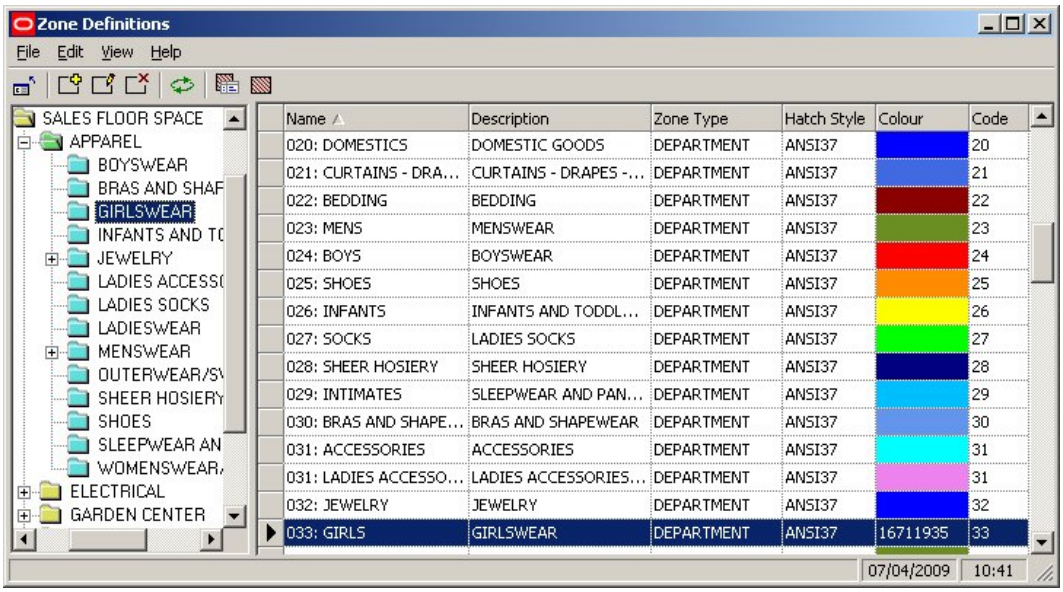
Zone Definitions can be accessed from the Edit Menu in the Administration Module.



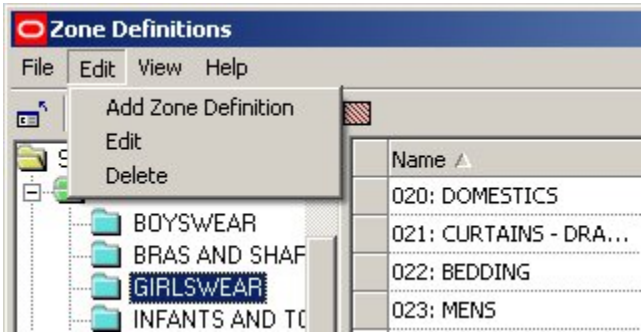
Note: changes made to Zone Definitions in the Configuration Module only take effect the next time the Planner Module is restarted.

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.

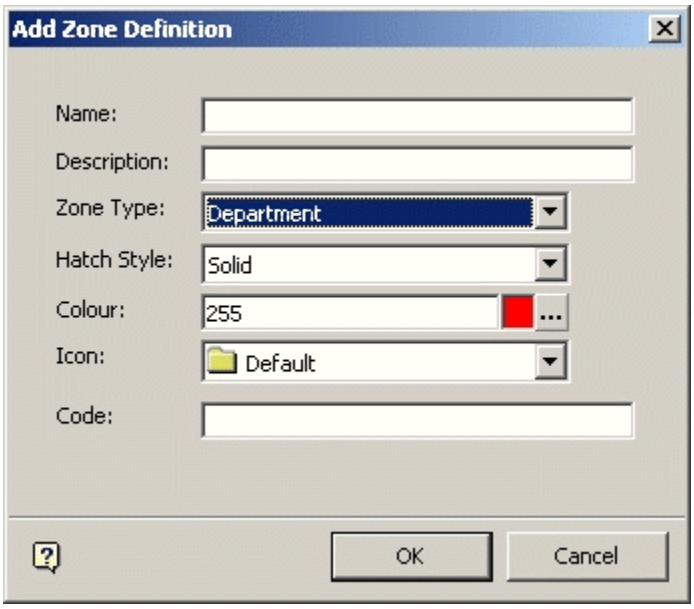


Alternatively, they can be selected from the toolbar.

Icon	Meaning
	Exit
	Add Zone Definition
	Edit Zone Definition
	Delete Zone Definition
	Refresh View
	View Zone Types
	View Hatch Types

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 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.



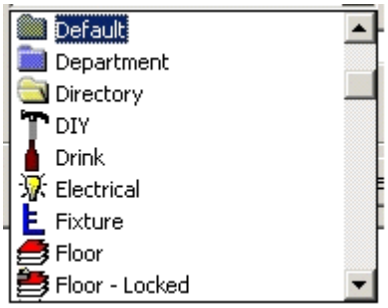
This will determine how the Zones appear when colored on the drawing of the floor plan.

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.

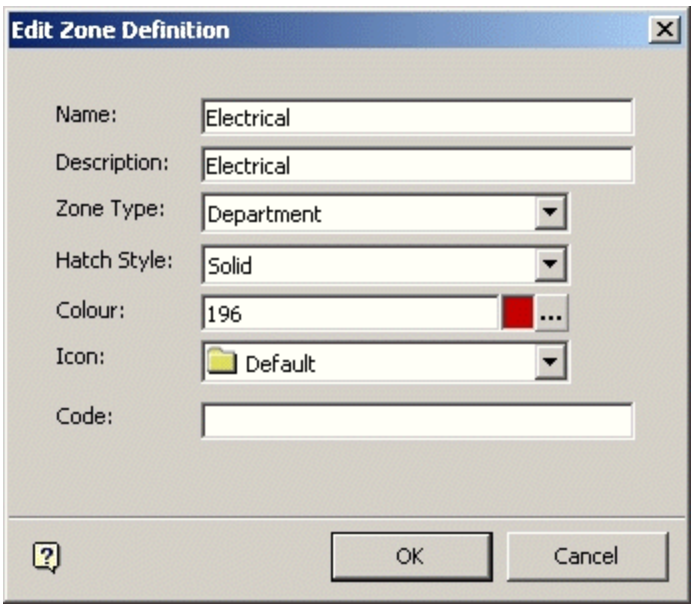
The Zone Description Icon can also be edited from a drop down list.



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.



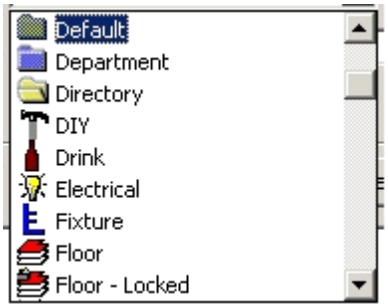
This will determine how the Zones appear when colored on the drawing of the floor plan.

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.

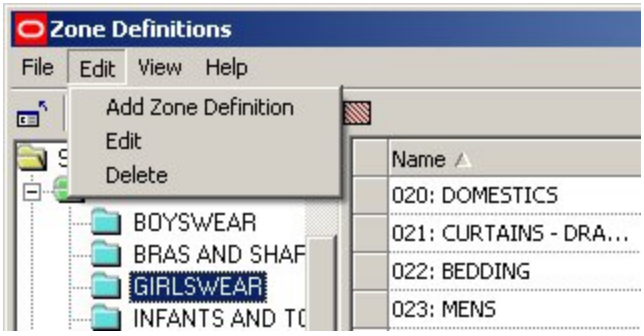


Finally a user defined Code can be typed into the Code window.

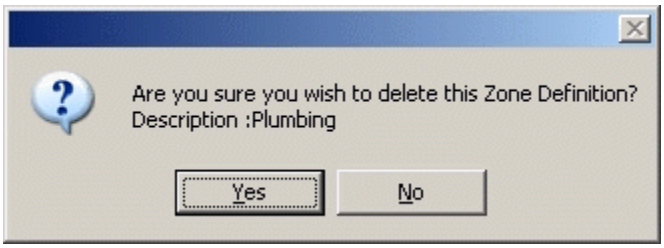
Deleting Zone Definitions

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.

	Delete Zone Definition



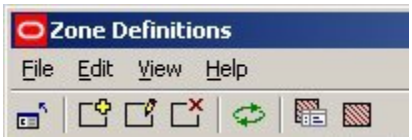
A confirmation dialogue box will appear.



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.



Icon	Meaning
	View Zone Types
	View Hatch Types

Clicking on either button will bring up the appropriate window

> **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 minimized before the new windows can be seen.

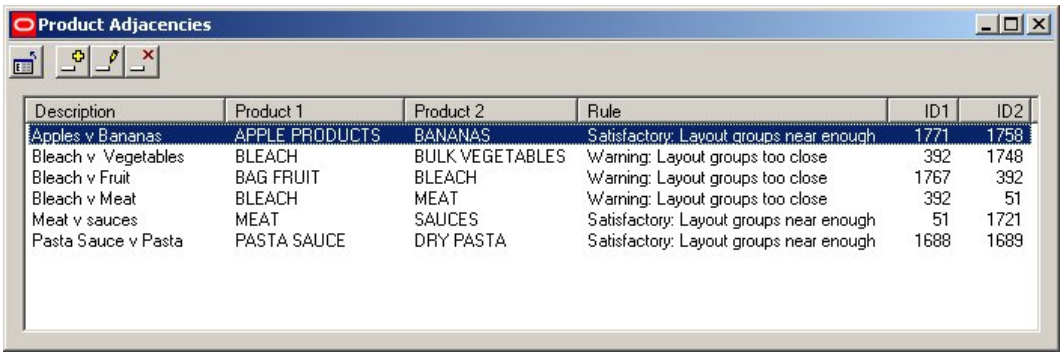
9

Admin Merchandising

Adjacency Rules

Overview of 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 is placed next to pasta.



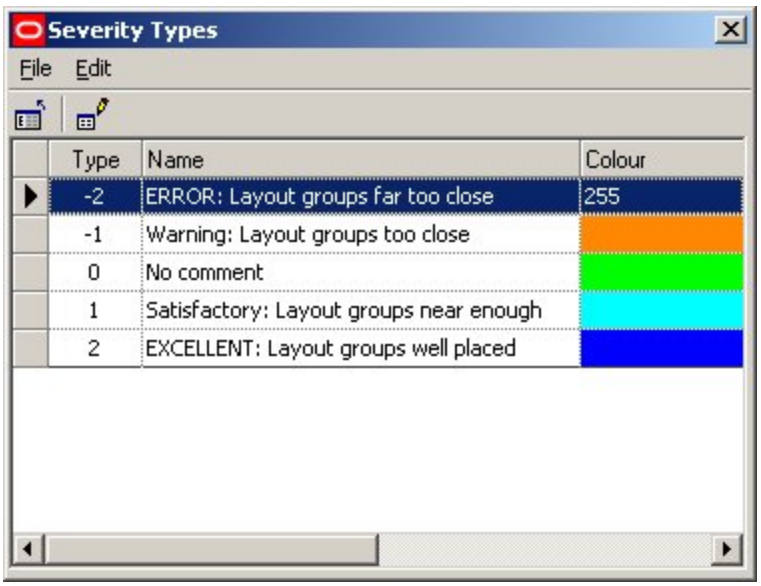
Description	Product 1	Product 2	Rule	ID1	ID2
Apples v Bananas	APPLE PRODUCTS	BANANAS	Satisfactory: Layout groups near enough	1771	1758
Bleach v Vegetables	BLEACH	BULK VEGETABLES	Warning: Layout groups too close	392	1748
Bleach v Fruit	BAG FRUIT	BLEACH	Warning: Layout groups too close	1767	392
Bleach 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

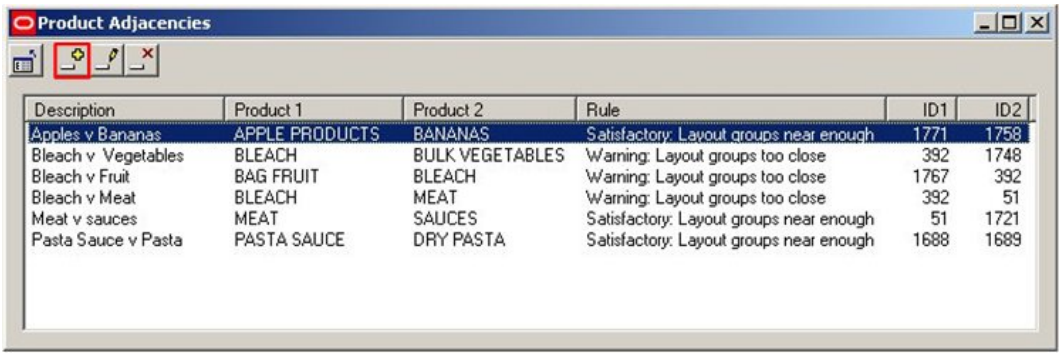
The **Severity Types** (rules) for the Adjacency Rules are set up using the Severity Types option from the Merchandising menu of the Admin Module.



Note: User can only alter the text and color for the Severity types via the dialog box. Altering the number of available Severity Types can 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.

Keeping Adjacency Rules Updated

Adjacency rules are set up at Department, Class (Category) or Sub-Class (Sub-Category) level in the Product Hierarchy.



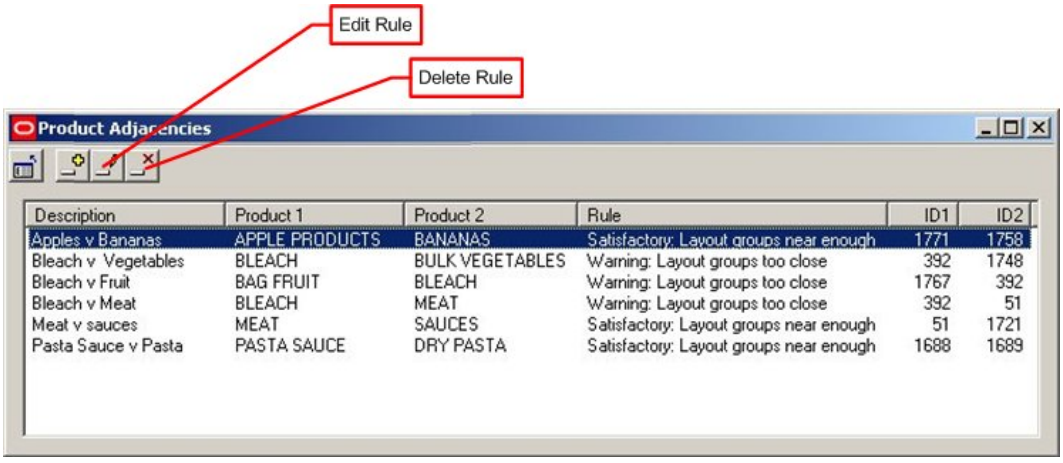
Products are generally subject to regular change at Style, Item and SKU levels in the Product Hierarchy. Department, Class (Category) or Sub-Class (Sub-Category) levels do not change very often, so once Adjacency Rules are set up, they should remain valid for extended periods of time.

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.



Editing Rules

Editing rules only allows the user to change the Severity Type.



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 and 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:

- Product Adjacencies
- Aisle Adjacencies

> **Note**: it is also possible to base the results on distances.

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

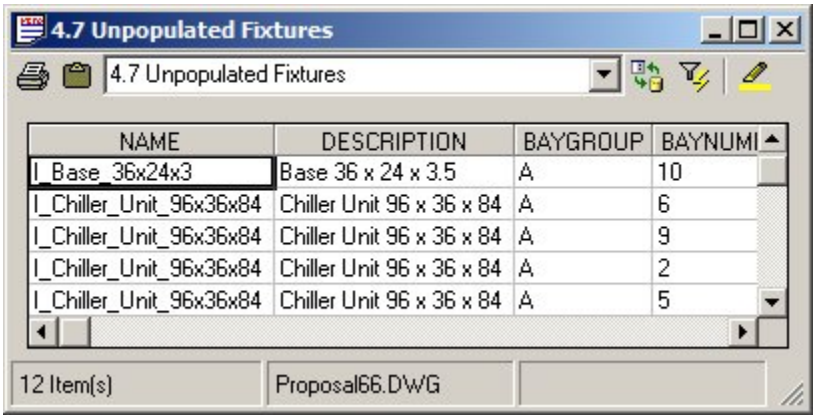
Generally, in order to make use of the Adjacency Rules, it is necessary to use SQL statements to link information from tables in the MSM database into an output that shows the results of the Adjacency rules.

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

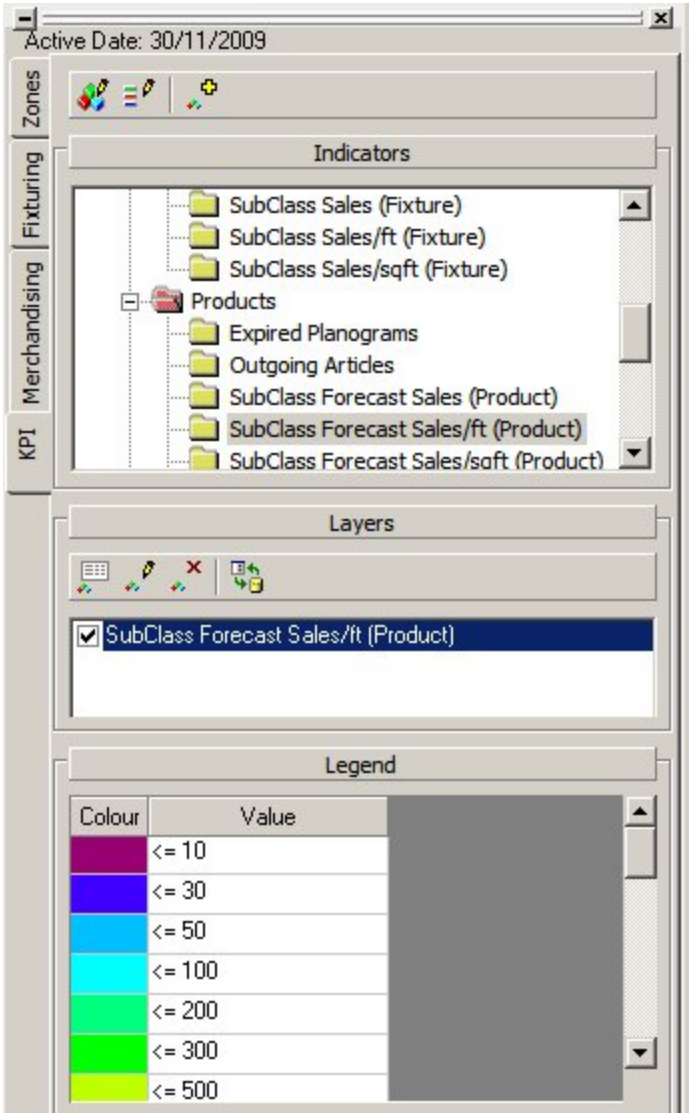
Quick Reports are available in both the Planner and Merchandiser Modules. It would be able to produce a Quick Report that shows all the products in a drawing and the results of any Adjacency Rule calculations.



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.

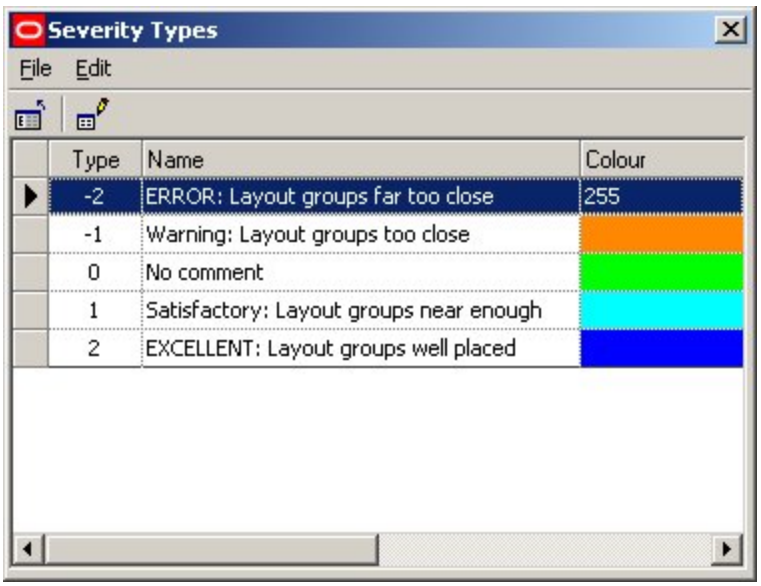
Column Name	ID	Pk	Null?	Data Type	Default
FIL_ID	1	1	N	NUMBER (10)	
FIX_ID	2	2	N	NUMBER (10)	
BLK_ID	3		N	NUMBER (10)	
ZON_ID	4		Y	NUMBER (10)	
FIX_ACADHANDLE	5		N	VARCHAR2 (20 Byte)	
FIX_XPOS	6		N	FLOAT	
FIX_YPOS	7		N	FLOAT	
FIX_ZPOS	8		N	FLOAT	
FIX_XSIZ	9		N	FLOAT	
FIX_YSIZ	10		N	FLOAT	
FIX_ZSIZ	11		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

About Severity Types

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.



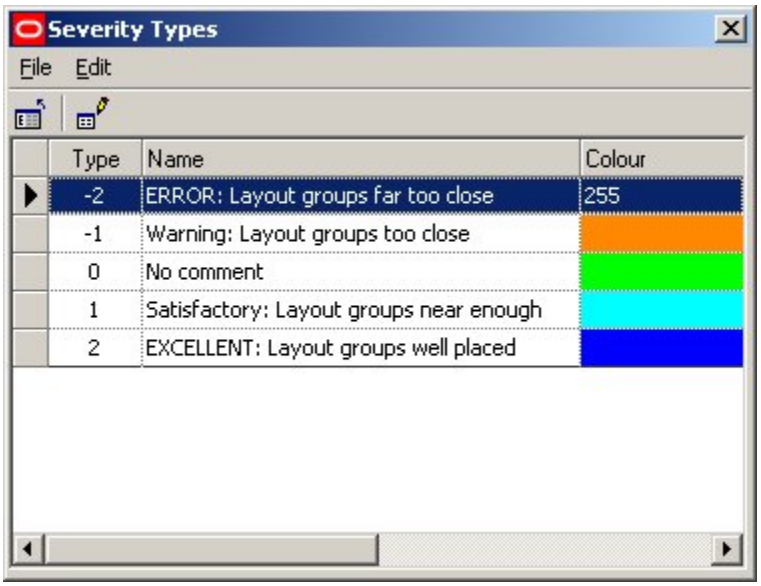
There are five default severity types: These range from badly placed to well placed.

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.

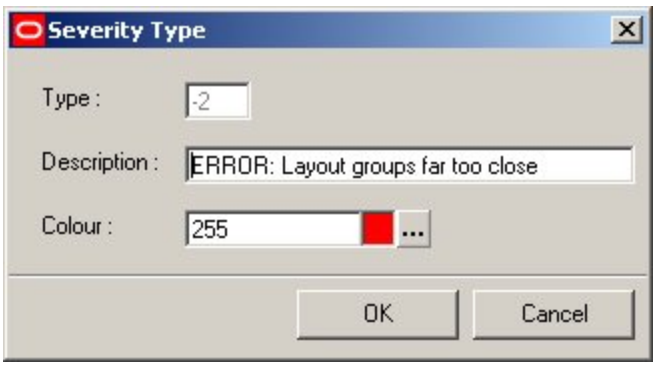
Similarly, a Product Adjacency Rule might state that pasta sauces have to be displayed within 2 meters of pasta. If this was achieved during merchandising, then the Product Adjacency Report might flag up: EXCELLENT: Layout groups well placed.

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.

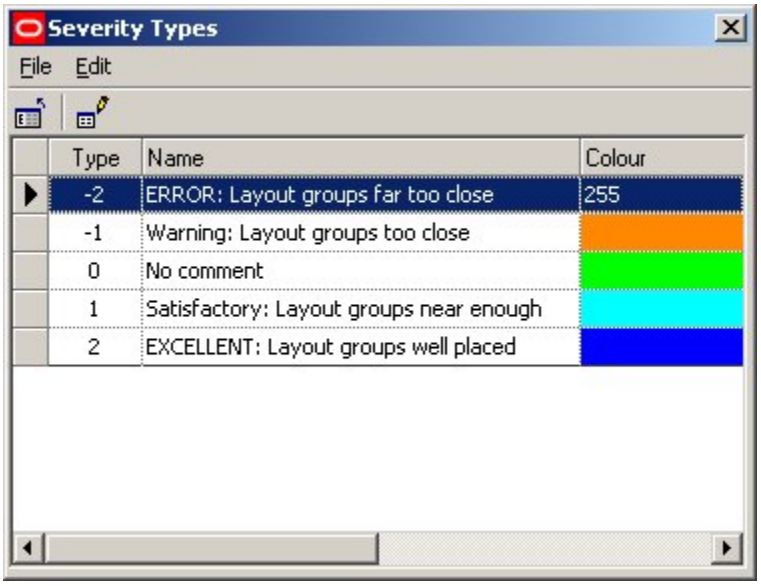


The description and color can be customized to user requirements.

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.



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.

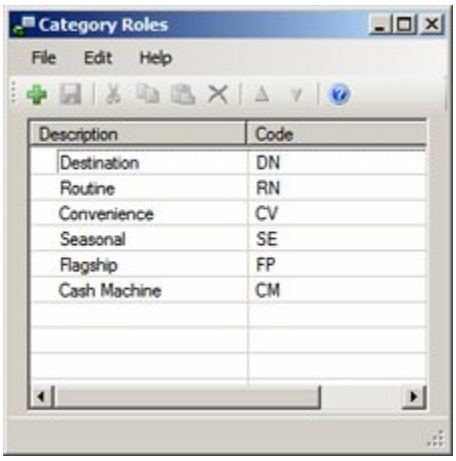
AST_ID	AST_DESC	AST_COLOUR
-2	ERROR: Layout groups far too close	255
-1	Warning: Layout groups too close	35071
0	No comment	65280
1	Satisfactory: Layout groups near enough	16776960
2	EXCELLENT: Layout groups well placed	16711680

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.

Category Roles

Overview of Category Roles

The Category Roles dialog box is accessed from the Merchandising menu of the Administration module. It is used to assign Category Roles to varying levels in the product hierarchy. These Category Roles are then used in Category Management - software complementary to Macro Space Planning used to determine the range of products optimum for a floor plan.

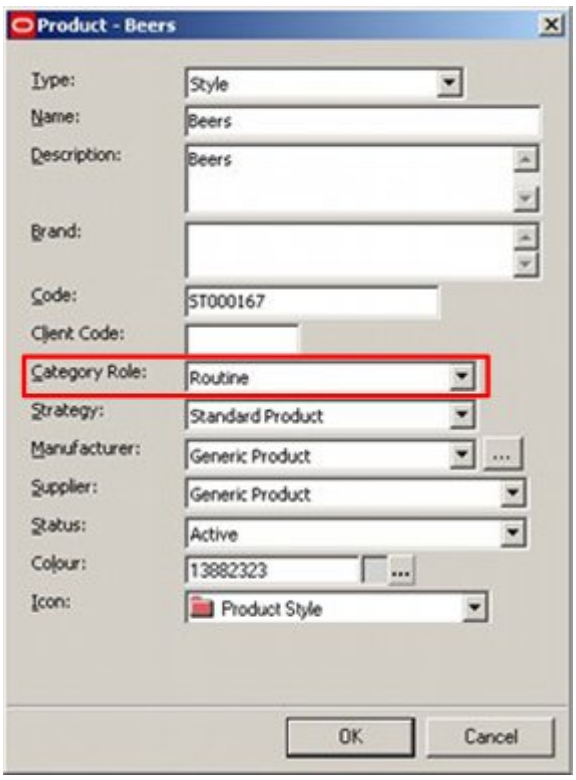


Category Roles are used to define the purpose the category serves for the retailer. In the above example, a retailer has six customer roles it can assign to products:

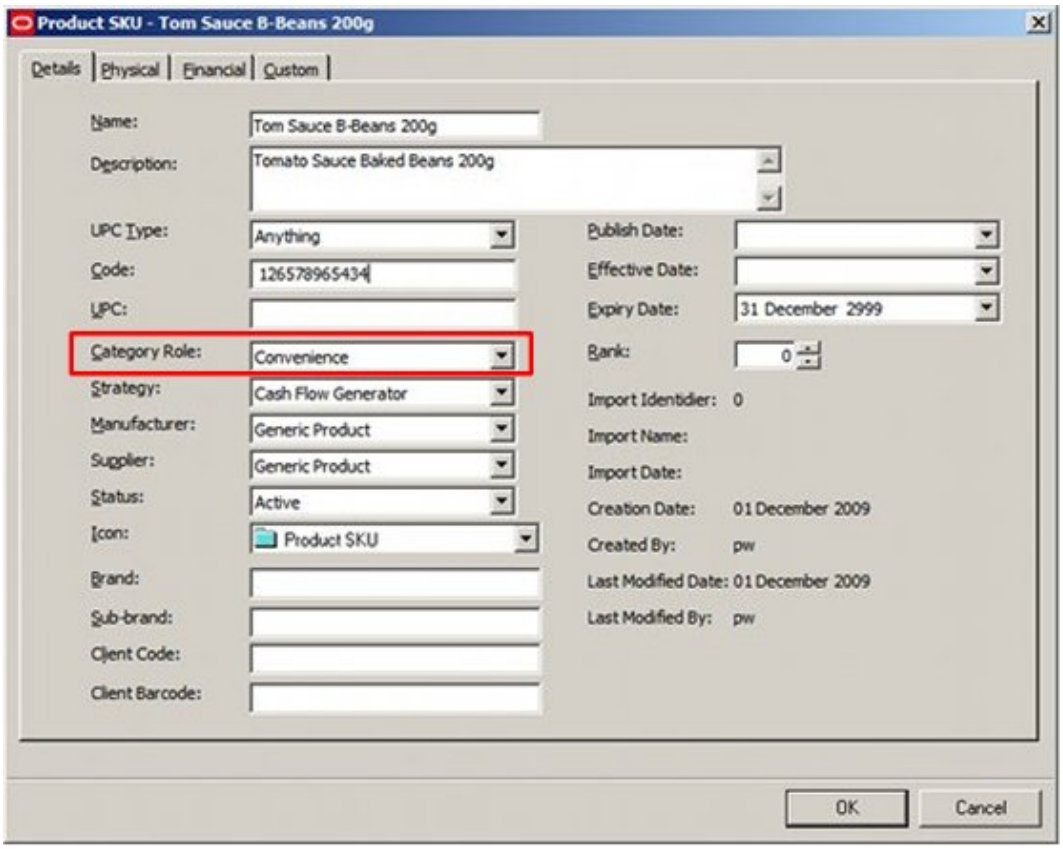
- Destination - a category used to define the retailers position in the market in the mind of the customer. For example televisions might be a destination category for an electrical retailer.
- Routine - regular merchandise purchased as a matter of routine - for example washing up liquid or other cleaning products
- Convenience - items brought by customers as impulse buys. A good example would be batteries.
- Seasonal - merchandise that is only on sale at specific times of the year - an example might be Easter Eggs.
- Flagship - a category used to improve the status of a retail chain. An example would be a category containing the latest consumer electronics.
- Cash Machine - a category used to generate high profit margins.

Although Category Roles can be assigned manually to products in Product Studio, it is more likely that they will be imported. Accordingly, the Category Roles entered in the Administration module should be similar to any that exist in the third party software used to maintain product information at a retail chain.

Category Roles can be assigned to products at all levels from Sub-class to SKU level in the Product hierarchy. From Sub-Class to Item level it is assigned in the following dialog box:



At SKU level it is assigned in the Details Tab of the SKU dialog box.



Category Roles Menus and Toolbar

The **File Menu** allows users to add new Category Roles, save the changes and exit the dialog box.



The **Edit Menu** allows users to cut copy and paste information, and to delete Category Roles.



The Help Menu allows users to call this Help File.



The following options are available on the toolbar:

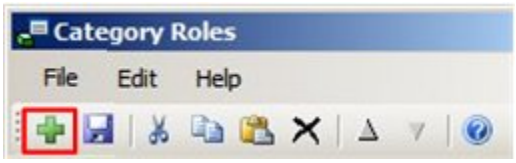
Icon	Option
	Add a new Category Role
	Save the contents of the dialog box
	Cut
	Copy
	Paste
	Delete
	Move up in List
	Move Down in List
	Help

Using the Category Roles Dialog Box

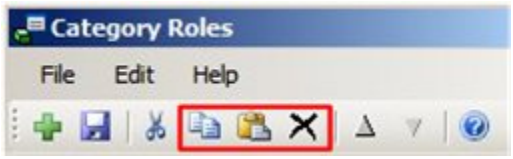
The Category Roles dialog box can be used to Add, Edit and Delete Category Roles from the list of those available for use within at SKU level product hierarchy.

Adding a Category Role

Adding a Category Role can be done by clicking the **Add** button on the toolbar (or the File menu) to create a new line in the list of Strategies.



Once the line has been created, data can be entered by typing it in, or by using the copy and paste options on the toolbar.



Editing a Category Role

Category Roles can be edited by typing the required changes in, or by using the copy and paste options on the toolbar (or the edit menu).

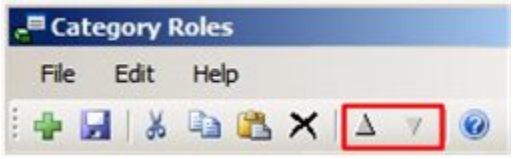
Deleting a Category Role

Deleting one or more Category Roles can be achieved by highlighting the ones it is desired to delete in the list of Category Roles and clicking the Delete option on the toolbar (or the edit menu).



Promoting or Deleting Category Roles in the List of Category Roles

Category Roles can be promoted or demoted in the sequence Category roles are displayed in by using the Up and down icons in the toolbar.



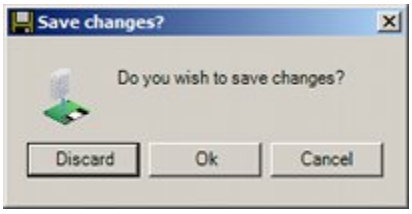
This will affect how the drop down lists display in the dialog box used to set Category roles in Product Studio.

Saving Changes

Changes can be saved by clicking the Save icon on the toolbar (or the file menu).



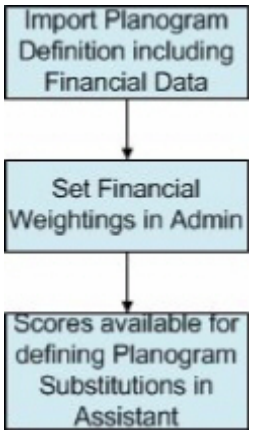
If users attempt to exit the dialog box without saving changes, they will be prompted as to whether they wish to do so.



Planogram Financial Weighting

Planogram Financial Weighting

The Financial Weighting Dialog Box is used to assign a ranking score to planograms. This enables users to weigh the relative merits of alternative planograms when defining a planogram substitution in the Planogram Substitution Assistant.



The process works as follows:

1. When a planogram definition is imported, the imported information will include financial data. (Imported into the AVTTB_PLANO_FINANCE table).
2. Financial Weightings are set in the Administration module using the Planogram Financial Weighting dialog box.
3. When planogram substitutions are being defined, the ranking scores (calculated from the imported financial data and the financial weightings) are displayed in the Planogram Substitution Assistant.

The Financial Weighting Settings are universal - once set in the Administration module, they apply to all planograms until the settings are changed. The new settings will then be applied universally.

It is therefore important to develop a single, agreed set of financial weightings for planogram substitution creators to use.

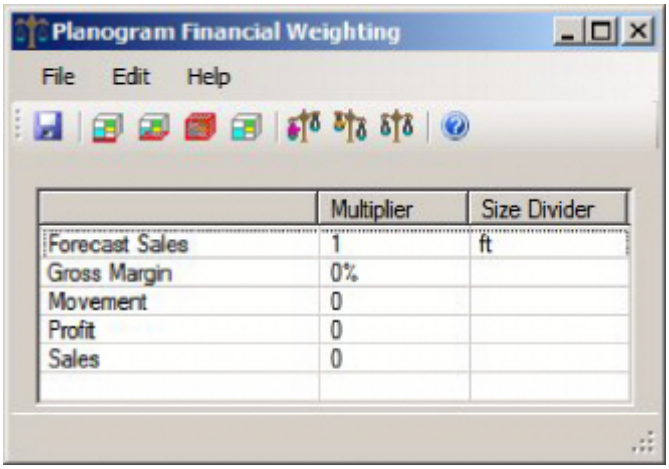
Importing Information for Planogram Financial Weighting

As part of the implementation process, arrangements have to be made to import planogram design information into the database. There, financial data will be stored in AVTTB_PLANO_FINANCE table. Financial information can be brought in for new planogram designs and refreshed for existing ones.

This information can then be used in conjunction with the financial weighting information to assign a ranking score to each planograms. This ranking score is displayed in the New Planograms page of the Planogram Substitution Assistant as an aid to planogram selection.

Planogram Financial Weighting Dialog Box

The Planogram Financial Weighting dialog box is accessed from the Merchandising menu in the Administration Module.



It holds five items of data that can be used to assign a ranking score:

1. Forecast Sales
2. Gross Margin
3. Movement
4. Profit
5. Sales

The precise nature of the data for each of these items may depend on the software package used to produce the planogram design.

Menus and Toolbars

Menu Options

Menu	Option	Shortcut Key
File	Save	Ctrl + S
	Exit	Alt + F4
Edit	Reset Multiplier	
	Clear Size Divider	

The other menu options are:

- Save
- Weight by Length

- Weight by Area
- Weight by Volume
- Clear Size Weightings
- Increase Multiplier by 1
- Decrease Multiplier by 1
- Reset Multiplier by 0.
- Help

Financial Weighting Calculation

The following data can be used in the weighting calculations: Forecast Sales, Gross Margin, Movement, Profit, Sales.

This data is imported as part of the planogram definition. It will not be updated unless it is done via a data import, or a new revision of the planogram is imported.

The Size Divider

The Size Divider allows users to take into account the physical size of the planogram when calculating a ranking.

- If no Size Divider is set, the data will be the 'raw' data for the planogram.
- If the Length Size Divider is set, the data will be the raw data for the planogram, divided by the length of the planogram.
- If the Area Size Divider is set, the data will be the raw data for the planogram, divided by the floor area (length x depth) of the planogram.
- If the Volume Size Divider is set, the data will be the raw data for the planogram, divided by the volume (length x depth x height) of the planogram

The Multiplier

The multiplier is a scaling factor to use to weight the 'raw' data in the calculation.

- Multipliers can only be zero or positive integer values.
- If set to 0, that particular factor will not be used in the calculation
- If set to 1, the 'raw' data for that particular factor will be used in the calculation.
- If set to valuer greater than 1, the raw data will be scaled accordingly.

The Calculation

The planogram weighting is based on the sum of the scaled factors.

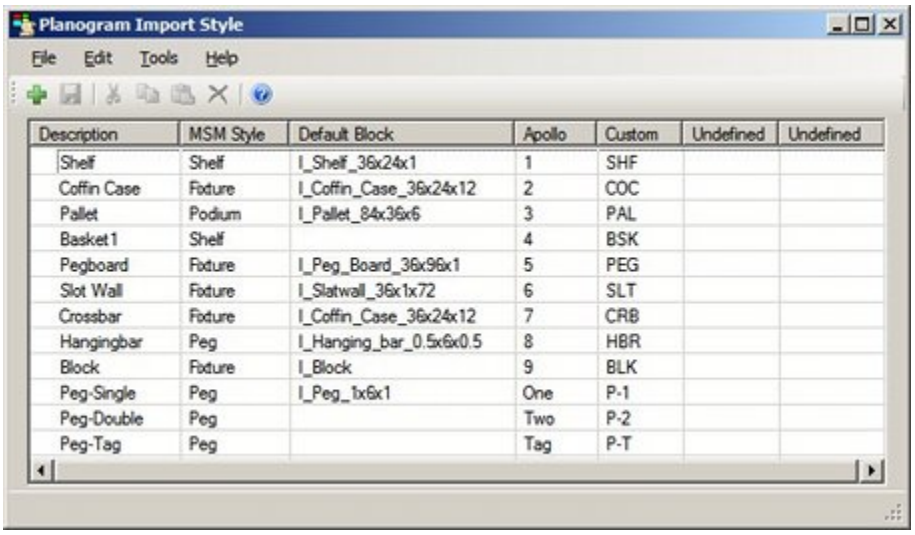
Item	Value	Multiplier	Size Divider	Result
Forecast Sales	10,000	1	Ft	10,000
Gross Margin	3,000	0		
Movement	3,000	0		
Profit	5,000	3		15,000
Sales	7,000	0		
Total:				25,000

The resulting ranking of 25,000 provides a basis to compare this planogram with other planograms with ranking calculated using exactly the same formula.

Planogram Import Styles

Overview of Planogram Import Styles

Planogram Import Styles are used when planogram designs are imported.



Description	MSM Style	Default Block	Apollo	Custom	Undefined	Undefined
Shelf	Shelf	I_Shelf_36x24x1	1	SHF		
Coffin Case	Fixture	I_Coffin_Case_36x24x12	2	COC		
Pallet	Podium	I_Pallet_84x36x6	3	PAL		
Basket1	Shelf		4	BSK		
Pegboard	Fixture	I_Peg_Board_36x96x1	5	PEG		
Slot Wall	Fixture	I_Slatwall_36x1x72	6	SLT		
Crossbar	Fixture	I_Coffin_Case_36x24x12	7	CRB		
Hangingbar	Peg	I_Hanging_bar_0.5x6x0.5	8	HBR		
Block	Fixture	I_Block	9	BLK		
Peg-Single	Peg	I_Peg_1x6x1	One	P-1		
Peg-Double	Peg		Two	P-2		
Peg-Tag	Peg		Tag	P-T		

The purpose is to map the fixture and shelf styles used by a third party planograming tool to the fixture and shelf styles used by Macro Space Management. This means MSM can use the style relationships from the third party planograming tool to validate the placement of the shelf objects when they are placed onto the parent fixtures.

The functionality also has the ability to specify a default block for each MSM style. When fixture and shelf object information is imported from the third party planograming tool, the import tool will try and match the imported fixture or shelf object with their equivalent in the MSM database. If no match can be made, the specified default block will be used (stretched to the dimensions required by the planogram design.

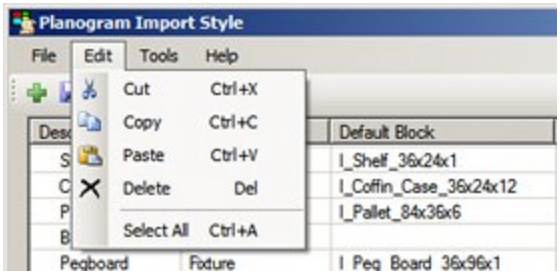
The dialog box allows users to specify the codes used by up to four third party planograming tools. This enables a Macro Space Management user to import planogram designs from up to four third party planograming tools.

Planogram Import style Menus and Toolbar

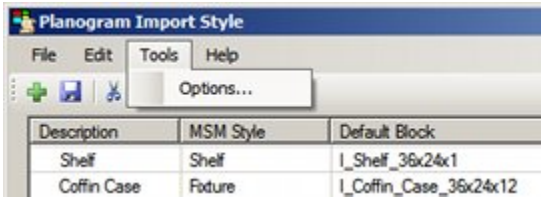
The **File Menu** allows users to configure a new import style, save the contents of the dialog box and exit the dialog box.



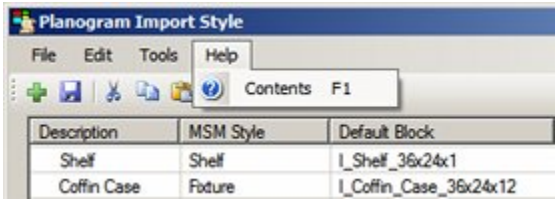
The **Edit Menu** allows users to cut, copy and paste information. They can also delete single or multiple planogram import style definitions.



The **Tools Menu** allows users so select the names for the third party planogram design software data is being imported from.



The **Help Menu** calls this help file.

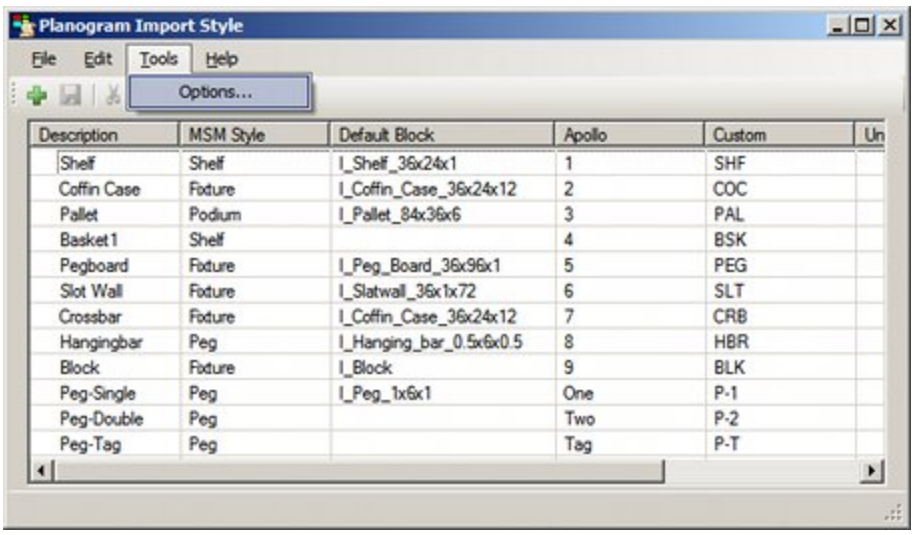


The following options are available on the toolbar:

Icon	Option
	Add a new Import Style
	Save the contents of the dialog box
	Cut
	Copy
	Paste
	Delete
	Help

Configuring Sources of Planogram Imports

The sources of planogram imports can be configured using the Options dialog box selected from the Tools menu.



This will bring up the Options dialog box.



This enables users to select up to four sources of planogram imports from the drop down lists.

Using the Planogram Import Style Dialog Box

The Strategies dialog box can be used to Add, Edit and Delete strategies from the list of those available for use within the product hierarchy.

Adding a Planogram Import Style

Adding a Planogram Import Style can be done by clicking the Add button on the toolbar (or the File menu) to create a new line in the list of Strategies.



Once the line has been created, data can be entered by typing it in, or by using the copy and paste options on the toolbar.

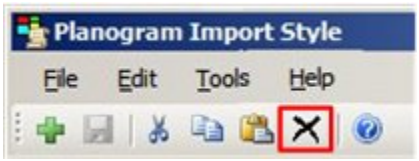


Editing a Planogram Import Style

Planogram Import Styles can be edited by typing the required changes in, or by using the copy and paste options on the toolbar (or the edit menu).

Deleting a Planogram Import Style

Deleting one or more Planogram Import Styles can be achieved by highlighting the Planogram Import Styles it is desired to delete in the list of Planogram Import Styles and clicking the Delete option on the toolbar (or the edit menu).

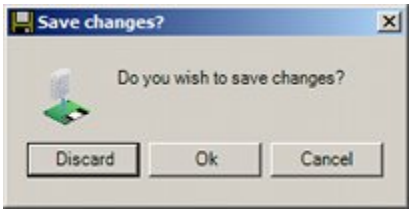


Saving Changes

Changes can be saved by clicking the Save icon on the toolbar (or the file menu).



If users attempt to exit the dialog box without saving changes, they will be prompted as to whether they wish to do so.

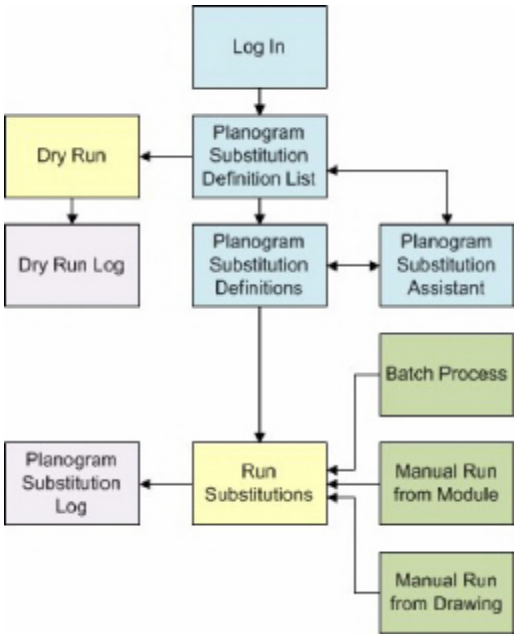


Introduction to Planogram Substitution

Introduction to Planogram Substitution

This section of the Planogram Substitution User Guide provides an introduction to the Planogram Substitution functionality.

Overview of Functionality



1. Logging in validates that a user has been assigned privileges to access the functionality. These privileges can be one of three types:
   - Admin User - giving full access to the functionality, including specifying who can access it and who can't.
   - Merchandise Manager - who can set up and run planogram substitutions, but who does not control access to the functionality.
   - Normal User - restricted to running predefined substitutions in the currently open drawing in the Planner or Merchandiser modules.

   > **Note:** Normal Users only have limited access to Planogram Substitution functionality - the majority can only be accessed by users with Merchandise Manager or Admin Privileges.

2. The Planogram Substitution dialog box is the first dialog box that opens. It allows users to select planogram substitutions for adding, editing or deleting via the Planogram Substitution Definition dialog box. It also allows users to open the Planogram Substitution Assistant dialog box - a tool that helps users to create planogram substitutions. The Planogram Substitution dialog box also allows users to manually run multiple substitutions.
3. The Planogram Substitution Definition dialog box enables users to manually set up the details of a specific planogram substitution.
4. The Planogram Substitution Assistant aids users with the details of planning a specific planogram substitution by allowing them to select information from pre-populated lists. It can be used in conjunction with the Planogram Substitution Definition dialog box.
5. Once Planogram substitutions have been defined, the Dry Run option allows users to test whether the substitutions will execute as intended. The results can be seen in the Dry Run Log.
6. Any defined planogram substitutions can either be run as a batch process or manually. If run manually:

- Users with Admin privileges can run multiple substitutions from within the Planogram Substitution module.
- Users with normal privileges can run predefined substitutions in the currently open drawing in the Planner or Merchandiser modules

7. The results of any substitutions that have been carried out can be seen in the Planogram Substitution Log

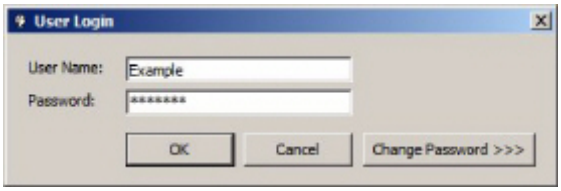
> Note: As well as actual planogram substitution (swapping planogram A for B), the functionality will also carry out Revision Substitution - swapping an earlier version of a planogram design for a later one.

Dialog Boxes

This section gives an overview of the primary dialog boxes in the functionality.

Log In Dialog Box

The Log in dialog box is used to control access to the functionality.



The exact privileges depend on settings within the Administration module:

Administrator Level

Users with Administrator's access have access to all aspects of planogram studio functionality:

- They can configure the access to the planogram substitution functionality. This involves setting up user groups and assigning users to the appropriate ones.
- Administrators can also define and bulk run planogram substitutions.
- Administrators can also set up and control batch processes.

Merchandise Manager Level

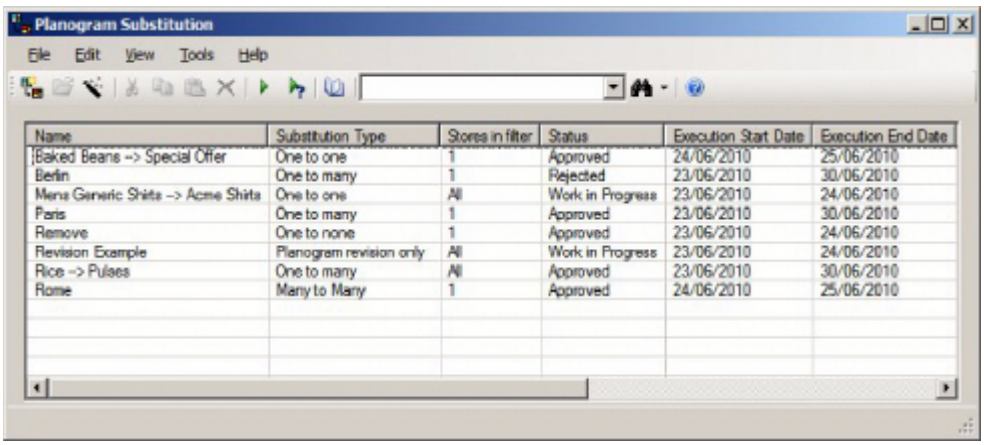
Users with Merchandise Manager privileges have access to the planogram substitution module, but not to the Administration module. This enables them to define and manually bulk run planogram substitutions but not to control access to planogram substitution, or to control batch processes.

Normal Users

Users with normal privileges have the ability to run substitutions on individual active store plans in the Planner and Merchandiser modules. They do not have the privileges to define planogram substitutions or run them in bulk.

Planogram Substitution Dialog Box

The Planogram Substitution dialog box is the initial dialog box to appear. It allows users to control different aspects of the planogram substitution process:

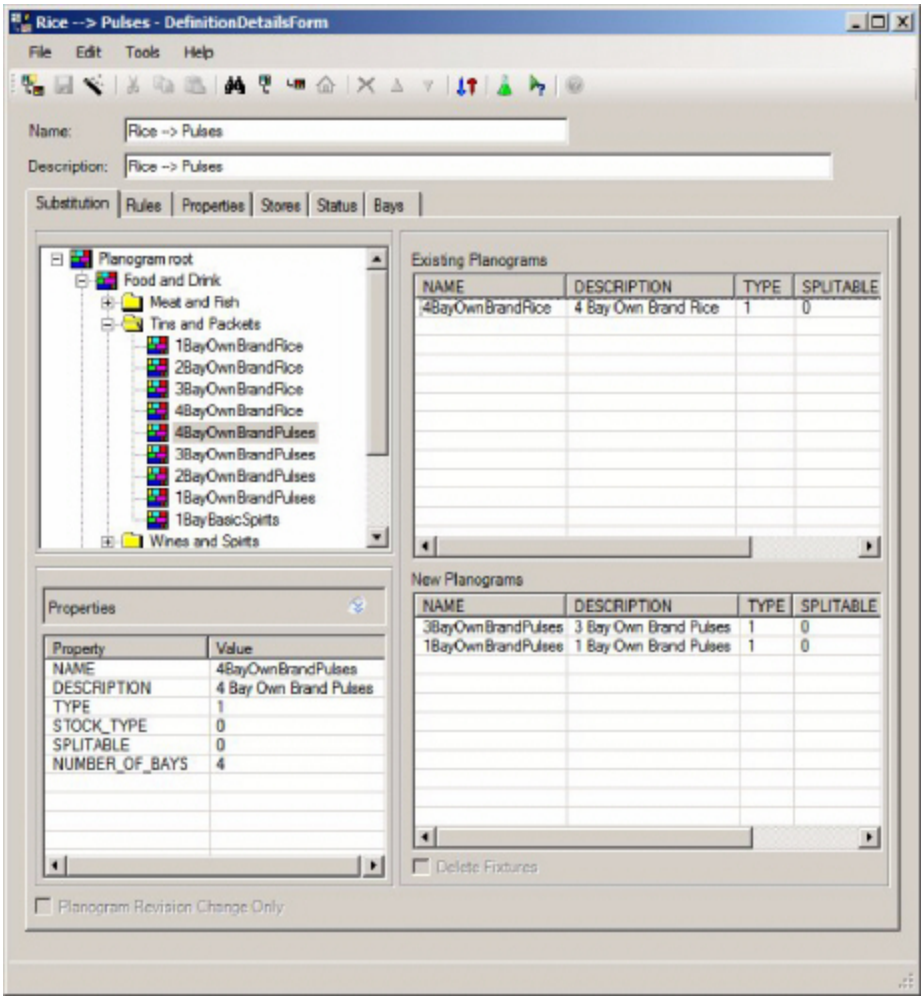


Users can:

- Add new planogram substitution definitions via the Planogram Definition dialog box or the Planogram Substitution Assistant.
- Edit existing planogram substitution definitions via the Planogram Definition dialog box.
- Delete planogram substitution definitions.
- Manually carry out Dry Runs to test that the substitutions will run without problems.
- View the Dry Run Log to see the results of the test.
- Manually carry out planogram substitutions.
- View the process log to see the results of planogram substitutions.

Planogram Substitution Definition Dialog Box

This dialog box can be invoked from the Planogram Substitution dialog box. It allows users to manually configure the details of a specific planogram substitution.



This dialog box has six tabs:

Substitution Tab

The Substitution tab allows users to select the planograms to be substituted and the planograms that are to be their replacements.

The Rules Tab

The Rules tab allows users to select the validation rules that will apply to the planogram substitution.

The Properties Tab

The Properties tab allows users to define the criteria for when a planogram substitution will be carried out.

Stores Tab

The Stores Tab allows users to specify if planogram substitutions should only be carried out in specific stores.

Status Tab

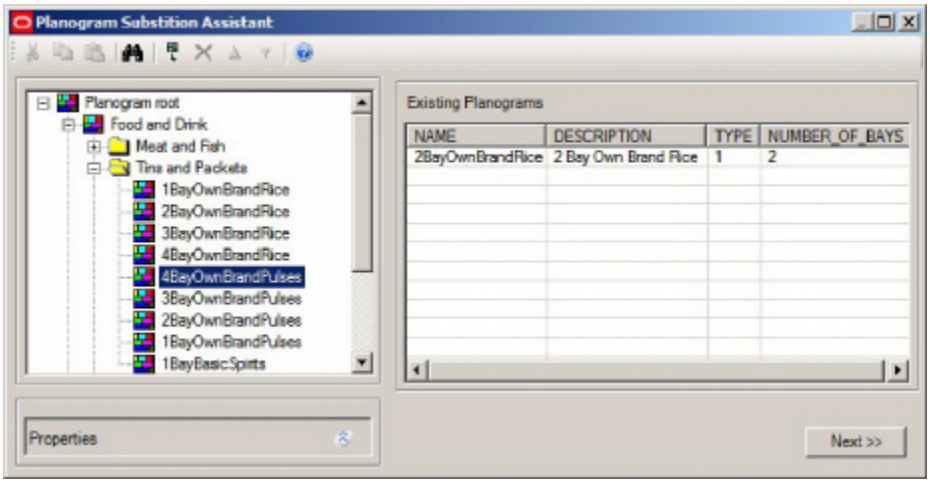
The Status tab allows users to specify the file statuses of the floor plans that will be subject to planogram substitution operations.

Bays Tab

The Bays tab allows users to limit planogram substitutions to specific numbered bays.

Planogram Substitution Assistant

The Planogram Substitution Assistant is a tool to help users set up a planogram substitution. It can be invoked from both the Planogram Substitution and the Planogram Substitution Definition dialog boxes.



Initial Stage

The initial page allows the user to select the existing planogram it is intended to substitute.

Second Stage

The second stage allows users to specify the floor plan statuses the planogram substitution will apply to.

Third Stage

The third stage allows users to extend the selection of planograms for substitution by selecting planograms that are adjacent to the originally selected planogram. These additional planograms can be to the left, right or sharing the same fixture.

Fourth Stage

The fourth stage allows the user to specify any stores the planogram substitution is to be excluded from.

Final Stage

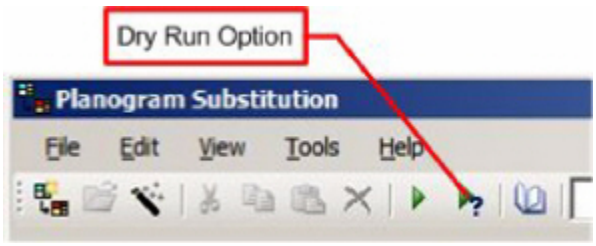
The final stage allows the user to specify the planograms to be substituted for the originally selected planograms.

On clicking the Finish button, users will be taken to the Planogram Substitution Definition dialog box, which will have been populated with information from the Planogram Substitution Assistant. Additional information can then be added to complete the Planogram Substitution definition.

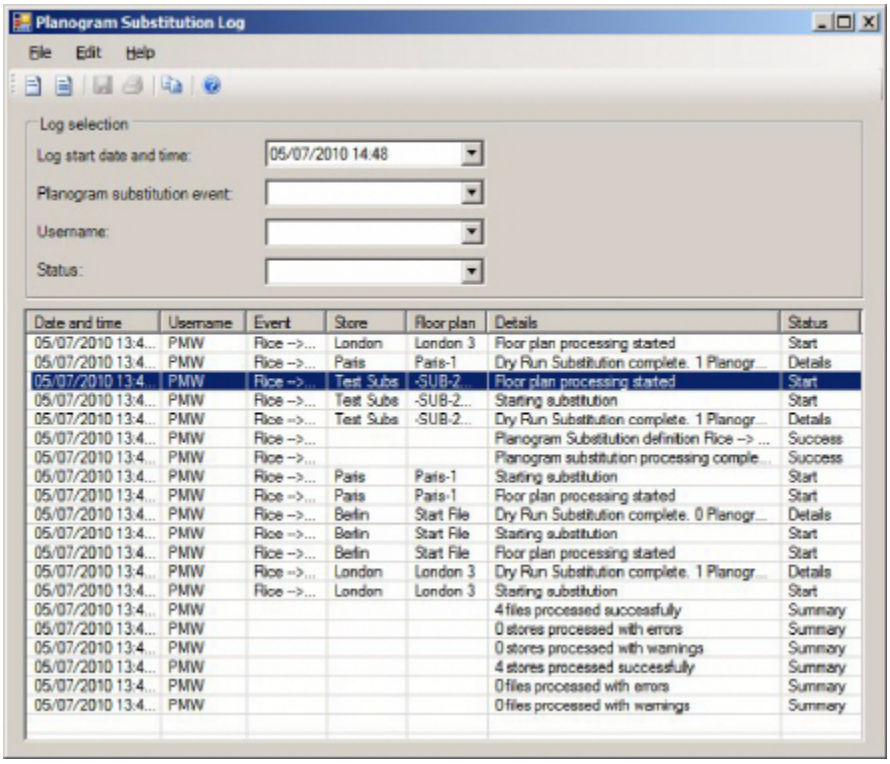
Dry Run Log

The Dry Run facility enables Administrators or users who have been assigned an 'Admin role' to test any Planogram Substitutions they have created. Each substitution is

simulated using data in the database and the results logged. Dry Runs are invoked using the Dry Run option on the toolbar (or from the Tools menu) in the Planogram Substitution dialog box.



Dry Runs can be carried out for single or multiple substitutions by highlighting the required substitutions in the Planogram Substitution or Planogram Substitution Definition dialog boxes, then carrying out a Dry Run. Once the Dry Run has been completed, the Dry Run log will appear.



This contains the results of all the selected dry runs and enables an Administrator to identify problems with substitutions before they are carried out.

Running Planogram Substitutions

There are three ways of running planogram substitutions:

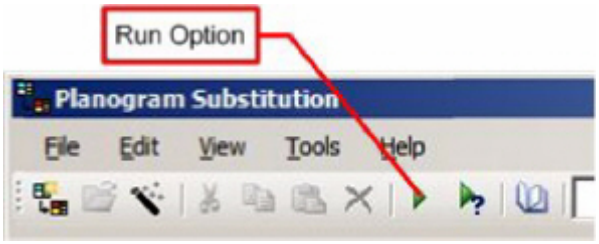
As a Batch Process

Planogram Substitutions can be run as a batch process. This would normally be set up by System Administrators and will not be discussed further in this section.

Manually from within the Planogram Substitution Module

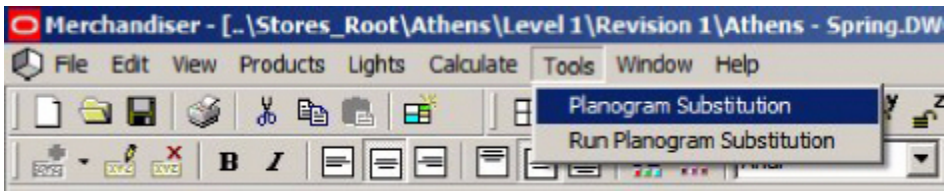
Single or multiple planogram substitutions can be run by highlighting them in the Planogram Substitution dialog box and then invoking the Run option from the toolbar

(or from the Tools menu). If no substitutions are highlighted, all valid substitutions will be run.



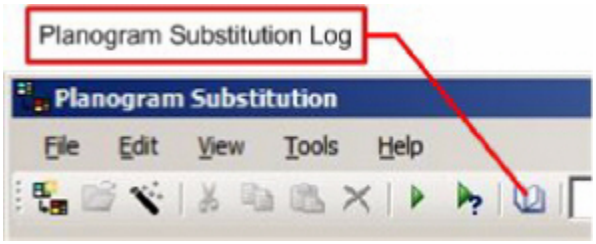
Manually from within the Planner and Merchandiser Modules

Planogram substitutions can be run from within the currently open drawing by invoking the Run Planogram Substitution option from the Tools menu. This will run all currently active substitutions for that drawing.

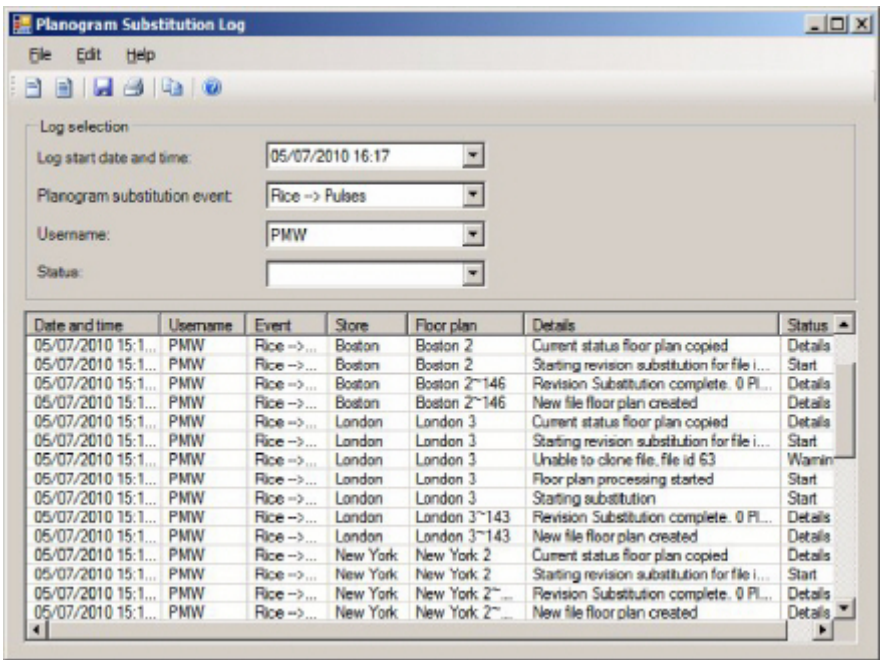


Planogram Substitution Log

The Planogram Substitution Log can be called from the toolbar (or Tools menu) in the Planogram Substitution dialog box.



This will show results from any planogram substitutions that have been run. It enables Administrators to identify planogram substitutions that have been successfully executed and planogram substitutions that have failed.

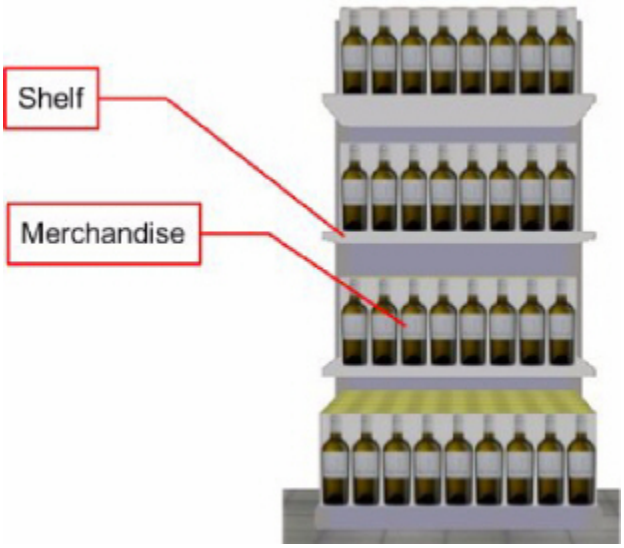


Planogram Substitution Technicalities

Definition of Terms

Planogram Design

A planogram design is an arrangement of equipment (shelves) and merchandise (products).



When an instance of that planogram design is placed in the drawing, the shelves and products can be represented in varying levels of detail. Only planograms at the lowest level of detail (2D) can currently be substituted.

Planogram Substitution

A planogram substitution is the automated changing of one or more planogram designs for other planogram designs. These substitutions can be run manually for a single drawing, manually for multiple stores if the user has Administrators rights or automatically as a batch process for multiple stores in the database.

Revision Substitution

Revision Substitution occurs when an updated version of a planogram design is available. It results in the older version of a planogram in one or more store plans being changed for the more recent version.

For example, a planogram containing different brands of baked beans might be adjusted so that curried beans take up fractionally more space than in the earlier version of the planograms.

When Revision Substitution is carried out in a store plan, information in the database is changed to show that the planogram design has been changed from the old to the new.

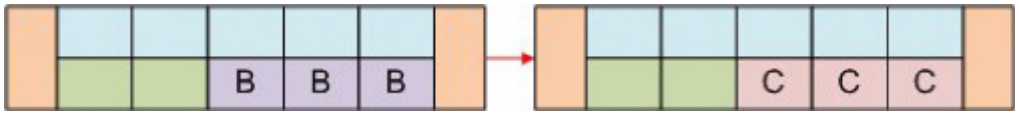
Examples of Planogram Substitution

Planogram Substitution can come in many forms. This allows users complete flexibility in selecting planograms to be substituted and defining the planograms that are to be inserted as their replacements.

> **Note:** A number of examples are given below - in practice the validity of each substitution will be determined by rules selected on the rules tab of the Planogram Substitution Definition dialog box. For example, if the 'Length' rule is off, lengths will not be validated and planograms of unequal lengths can be substituted.

One to One

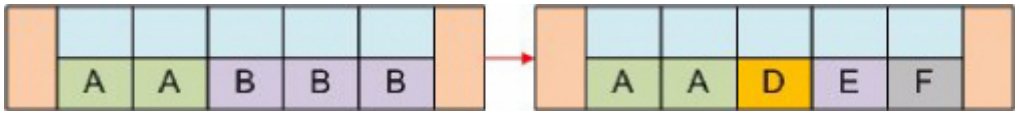
The simplest form of planogram substitution is a 'one to one' substitution. One planogram of a specified length is replaced by another planogram of equal length.



In the above example, the 12 foot planogram 'B' has been replaced with another 12 foot planogram 'C'.

One to Many

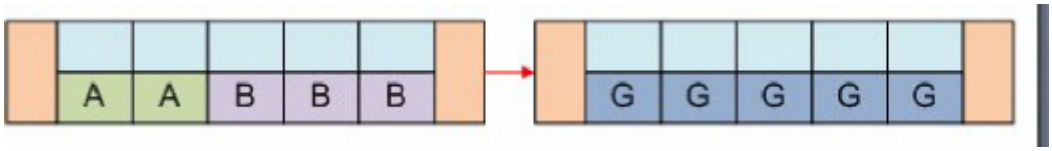
Another form of planogram substitution is a 'one to many' substitution. One planogram of a specified length is replaced by two or more planograms whose combined lengths are the same as that of the planogram they are replacing.



In the above example the 12 foot planogram 'B' has been replaced by the 4 foot planograms 'D', 'E' and 'F'.

Many to One

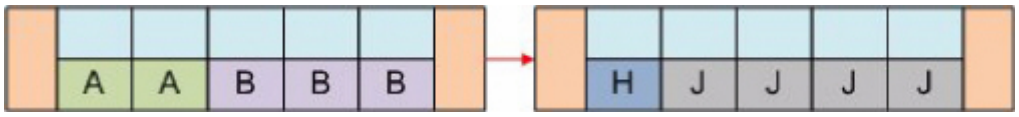
In Many to One planogram substitutions, several planograms are selected and replaced by a single planogram equal in length to the sum of the lengths of the planograms it is replacing.



In the above example, the 8 foot planogram 'A' and the 12 foot planogram 'B' are to be replaced by the single 20 foot planogram 'G'.

Many to Many

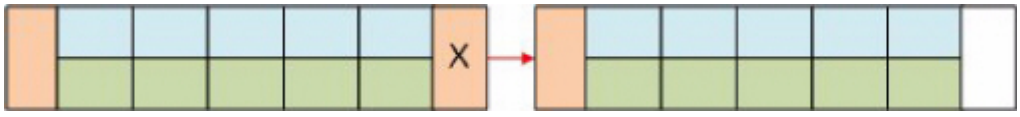
A 'Many to Many' planogram substitution occurs when multiple planograms are selected for replacement and are substituted for by multiple planograms occupying the same length as the planograms they are replacing.



In the above example, the 8 foot planogram 'A' and the 12 foot planogram 'B' are to be replaced by the 4 foot planogram 'H' and the 16 foot planogram 'J'.

One to None

It is possible to carry out a One to None Substitution - the removal of a planogram without specifying a replacement. This might be called for when a planogram has to be removed for legal reasons, and so on, but no replacement has been decided on.

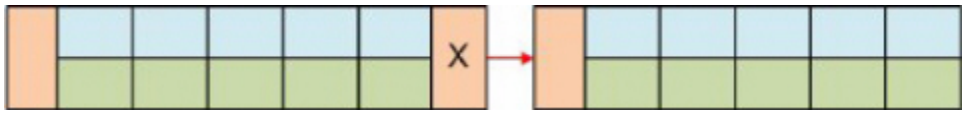


In the above example the planogram 'X' on the end cap of the gondola is to be removed without a replacement being specified.

> **Note:** it is also possible to carry out 'Many to None' substitutions.

One to None with Fixture Removal

As well as a One to None substitution, it is also possible to remove the parent fixture. This might be because parts of a store are being assigned to a different purpose and the fixturing is changing as well as the planograms.



In the above example the planogram 'X' on the end cap of the gondola is to be removed along with its parent fixture.

Revision Substitution

If no existing planograms have been selected for substitution, it is still possible to carry out Revision Substitution. Revision Substitution is when slight changes have been made

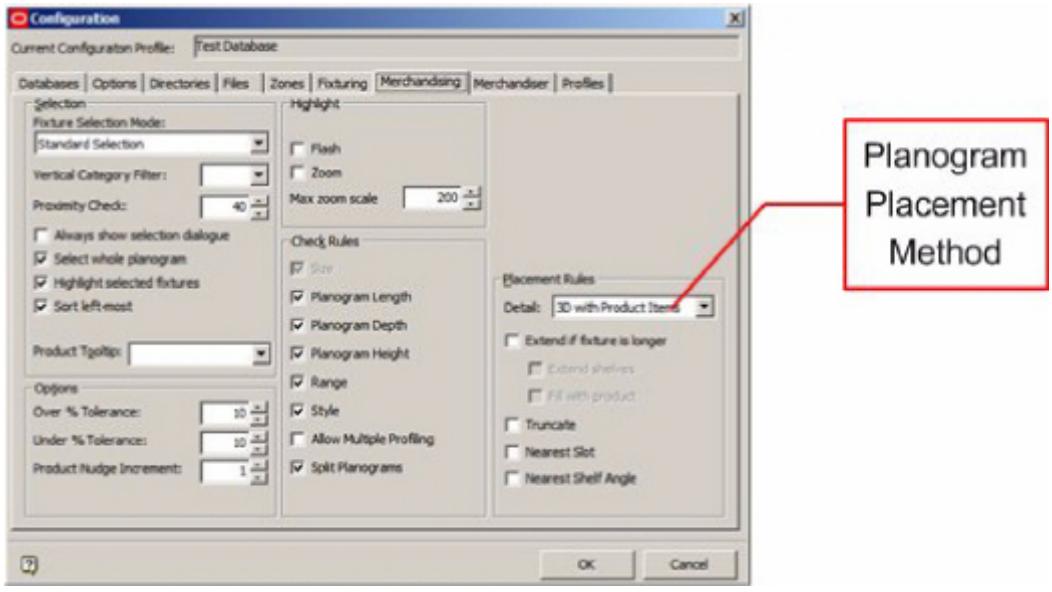
to a planogram design and it has been saved as a new version rather than a new design. When planogram substitution is carried out, all other planograms in the store will be automatically be updated to the latest revision providing the Effective Date of the revision is less than the Active Date of the floor plan the Revision Substitution is being carried out in.

Forms of Planogram Representation

Planograms can be placed in both the Planner and Merchandiser modules and in In-Store Space Collaboration. In the Planner module and in In-Store Space Collaboration planograms are represented as placeholders - that is to say they are shown as occupying the fixture without any additional detail. In the Merchandiser module, planograms can be represented at three different levels of detail.

How planograms are represented in Merchandiser

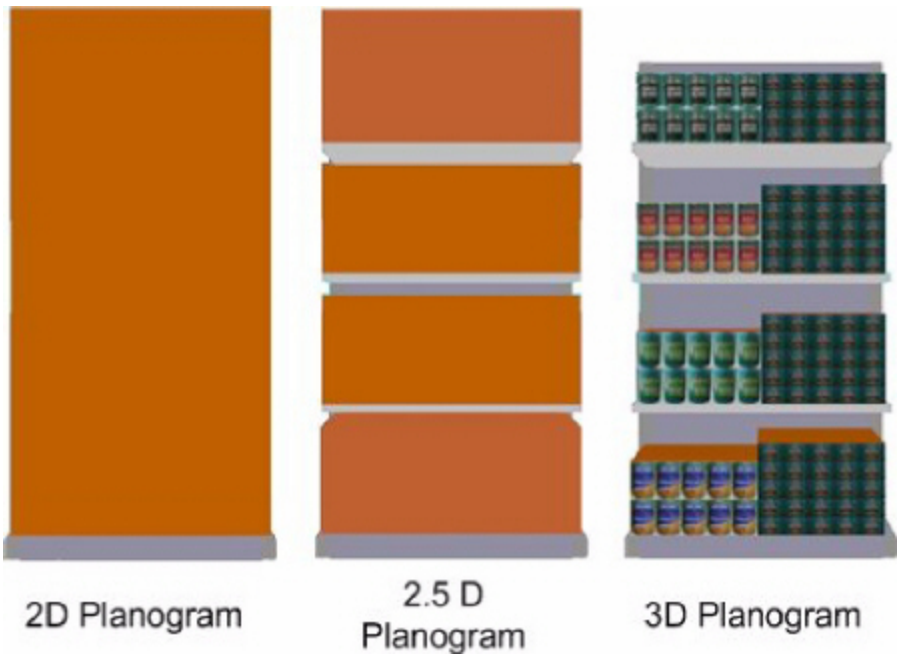
Planograms can be displayed at different levels of detail in the Merchandiser module. The default for how planograms are represented is set on a user by user basis using the Details drop down list in the Merchandising tab of the Configuration module.



The user has three options:

- 2D Planogram (Placeholder)
- 3D planogram (called 2.5 D in the Merchandiser Module).
- 3D with Product Items (Full Detail).

These appear in the Merchandiser module as follows:



A 2D planogram is purely a placeholder. A 3D planogram (2.5 D in Merchandiser) shows the shelves and a simple product block to show the shelves are occupied. A 3D planogram with Product items shows the shelves, together with full details of the products.

How the Planogram display form is changed in Merchandiser

If planograms are first placed in the Planner Module, or in In-Store Space Collaboration, when initially viewed in Merchandiser, they will appear in 2D form (placeholders).

If planograms were first placed in the Merchandiser module, how they appear is determined by the settings individual users chose in the Configuration module (see above).

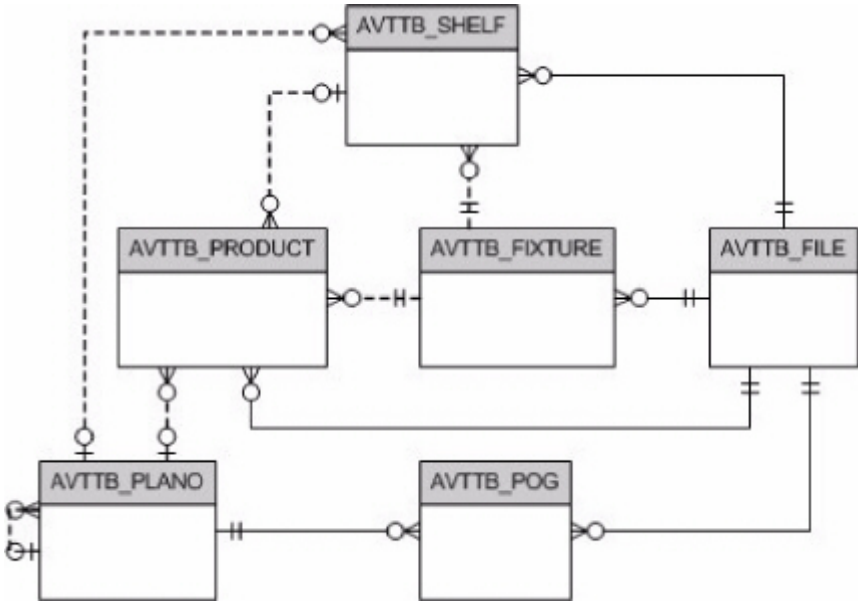
Once in merchandiser, users have the option of toggling planogram display from 2D to 3D with Product Items and back again. This is controlled by the Explode and Implode options on the View Toolbar.



This version of planogram substitution is only designed to operate when the planograms are in 2D format, with no entries in the AVTTB_SHELF table for the planograms, and only a single entry in the AVTTB_PRODUCT table for the product block acting as a placeholder. Because of this, each drawing it is desired to run planogram substitution on will have to be manually set to 2D format before the planogram substitution can be carried out.

How Planograms are stored in the Database

Depending on whether planograms are in 2D, 2.5D or 3D form, different information is stored in the database.



- The AVTTB_FILE table specifies the file in use
- The AVTTB_FIXTURE table holds a list of fixtures placed in the drawing
- The AVTTB_SHELF table holds a list of shelves placed in the drawing
- The AVTTB_PLANO table holds information on planogram designs
- The AVTTB_POG table holds information on which planograms have been placed in the drawing
- The AVTTB_PRODUCT table holds information on which products have been placed in the drawing; either directly or in planograms.

When planograms are in 2D format, the AVTTB_POG table will hold details of the planograms placed. The AVTTB_SHELF table will not have any information on shelves and the AVTTB_PRODUCT table will only have a single entry for the product block acting as the placeholder for the planogram.

When planograms are placed in 2.5D and 3D format, the AVTTB_POG table will hold details of the planograms placed. The AVTTB_SHELF table will have details of the shelves and the AVTTB_PRODUCT table will have multiple entries for the products on each shelf. These entries could be product blocks acting as placeholders for the products on each shelf (2.5D format), or product blocks representing products at display style level.

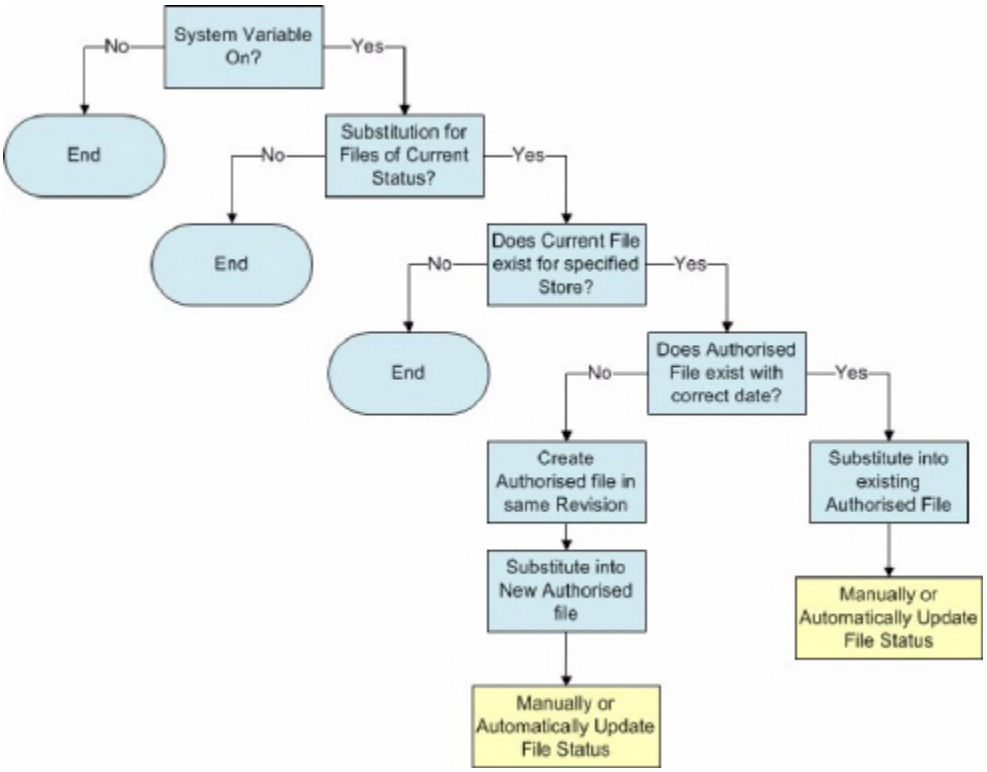
The PLANOGRAM_SUBSTITUTION_PROCESS_EXPLODED system variable is used to determine how planograms are processed when the form of the planogram in the floor plan does not match the form of the planogram that will be substituted for it. For example, if the planogram in the floor plan is in 2D form and the planogram being substituted for it is in 3D form, the setting for the PLANOGRAM_SUBSTITUTION_PROCESS_EXPLODED system variable will determine the form the replacement planogram is displayed in.

When Planogram Substitutions will be Carried Out

Planogram Substitutions will only be carried out if the drawing is checked in and not in use.

Cloned Drawings

It is possible to set up planogram substitutions for files of current status. As files of current status are set to 'read only', the substitutions are carried out into 'cloned' files.

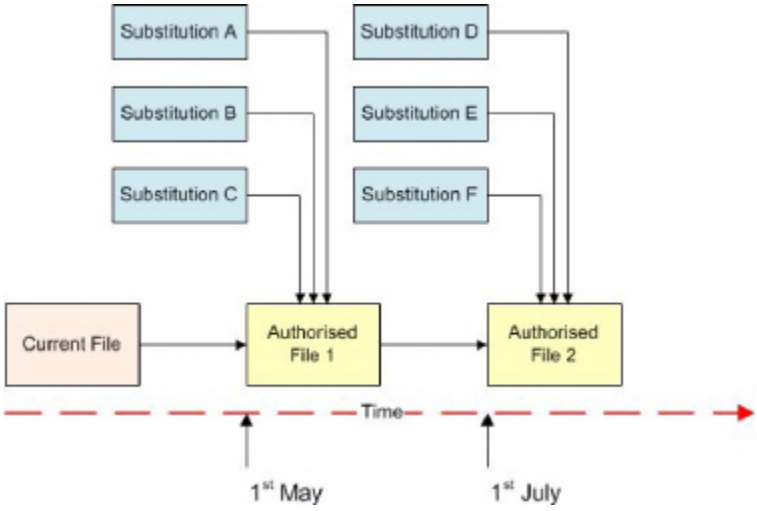


1. Planogram Substitutions can only be carried out if the PLANOGRAM_SUBSTITUTION_COPY_FILE system variable is set to On (1). (If this system variable is set to Off, Current cannot be selected as a file status for substitutions).
2. A Status of Current must have been selected in the status tab of the Planogram Substitution Definition dialog box. If Current status is not selected, cloning will not take place.
3. Cloning will only be carried out for a specific store if a floor within that store has an existing file of current status.
4. All revisions in the floor will be checked for Authorized files with an effective date falling within the date range set in the Floor Plan Effective Date option in the Properties tab of the Planogram Substitution Definition dialog box. If such a file exists (even in a different revision), then the substitutions specified for the Current file will be carried out in that file.
5. If an Authorized file with an effective date falling within the date range set in the Floor Plan Effective Date option in the Properties tab of the Planogram Substitution Definition dialog box does not exist, a new Authorized revision will be created in the same revision as the Current file. The effective date for the Authorized file will be set to the earliest date on the Floor Plan Effective Date range.

6. When all possible substitutions have been run, the user will be able to change the status of the Authorized file to Current at the required time - either manually, or via Update Status.

Cloning with Different Floor Plan Effective Dates

It is possible to set up a range of planogram substitutions effective for files of current status with differing Floor Plan Effective Dates.

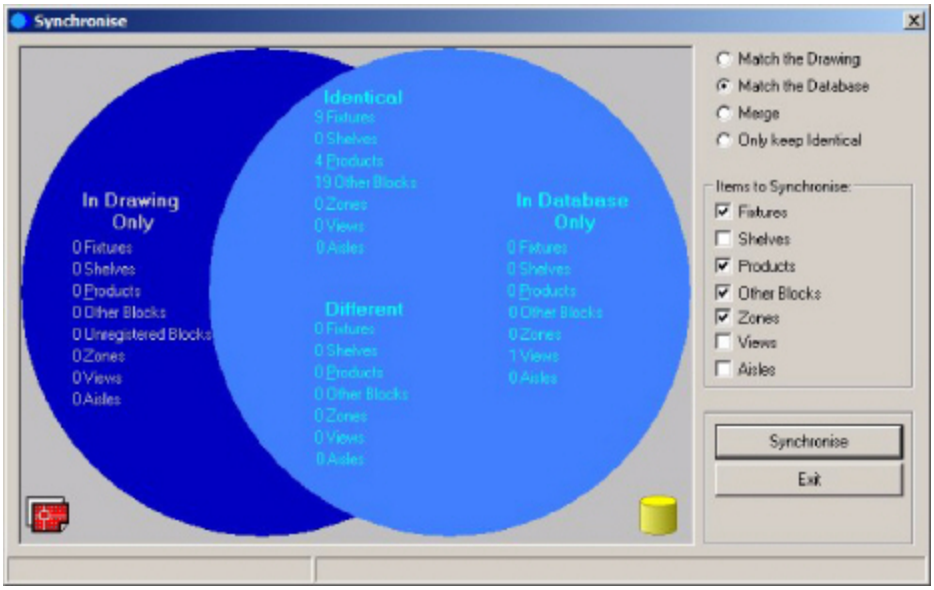


In the above example a range of substitutions have been set up for files of current status; some with Floor Plan Effective Dates of 1st May and some for 1st July. This has resulted in the creation of two new Authorized files in the Revision containing the Current file. These Authorized revisions are accordingly set to become current on 1st May and one on 1st July.

Synchronization

Planogram substitutions are carried out by making changes directly in the database. The Merchandiser Module and In-Store Space Collaboration read data directly from the database, so will show the changes directly the drawing is next opened.
The Planner Module also stores information in an AutoCAD DWG drawing. After planogram substitutions have been made and the information in the database changed, the information in the DWG drawing has to be brought into line.

This is done by means of the Synchronization dialog box.



Synchronizing 'Match the Database' will update the DWG drawing with the changes made in the database.

The PLANOGRAM_SUBSTITUTION_PROCESS_EXPLODED System Variable

The **PLANOGRAM_SUBSTITUTION_PROCESS_EXPLODED** system variable has a significant impact on the way planogram substitutions are carried out. It can be set to 0, 1, 2, 3 or 4.

Planogram Form

There are three forms planograms can be placed in the merchandiser module.

- 2D Planogram (Placeholder)
- 3D planogram (called 2.5 D in the Merchandiser Module).
- 3D with Product Items (Full Detail).

The **PLANOGRAM_SUBSTITUTION_PROCESS_EXPLODED** system variable has a significant impact on the way planogram substitutions are carried out. It can be set to 0, 1, 2, 3 or 4.

Once placed in the Merchandiser module planograms can be manually toggled between 2D and 3D mode by means of the Implode or Explode options on the toolbar. Merchandiser floor plans can therefore contain planograms in a variety of states. The PLANOGRAM_SUBSTITUTION_PROCESS_EXPLODED system variable determines how planogram substitution caters for the different cases.

System Variable Values

System Variable	Description
0	Only planograms in 2D form will be substituted - with planograms in 3D form being ignored. The substituted planograms will be placed in 2D form. No information on the planograms that have been ignored for substitution will be written to the Planogram Substitution Log.

System Variable	Description
1	Only planograms in 2D form will be substituted - with planograms in 3D form being ignored. The substituted planograms will be placed in 2D form. Information on the planograms in 3D form that have been ignored for substitution will be written to the Planogram Substitution Log.
2	Planograms in 2D form will be substituted with planograms also in 2D form. Planograms in 3D and 2.5D form will be placed in 2D form when substituted.
3	3D and 2.5D planograms will be substituted by 2D planograms. A warning will be written to the Planogram Substitution Log identifying the 3D and 2.5 D planograms that were placed in 2D form during the substitution.
4	Planograms in 3D form will be substituted with planograms also in 3D form. Planograms in 2D form will be placed in 3D form when substituted. Planograms in 2.5D form will be replaced by a 2D form if that is the way the planogram design has been defined. It will be replaced by a 3D form if the planogram design is in 3D format.

Business Processes and the PLANOGRAM_SUBSTITUTION_PROCESS_EXPLODED System Variable

The PLANOGRAM_SUBSTITUTION_PROCESS_EXPLODED system variable has a significant effect on the business processes used by a customer. The setting for this system variable needs to be considered carefully during the implementation of the software. If a decision is taken to change the system variable during the lifetime of the Macro Space Planning application this needs be considered carefully as well.

Consistency of Form

The initial form of planogram placement for individual users is controlled by the Planogram Rules setting in the Merchandising tab of the Configuration Module. The PLANOGRAM_SUBSTITUTION_PROCESS_EXPLODED system variable should be set as to achieve consistency with the setting users have been instructed to set in the Configuration module.

Impact on Reporting Accuracy

Whether planograms are in 2D, 2.5D or 3D form affects the form of information held in the database. For example, a planogram in 2D form will only contain 'header' information with no entries for individual products of shelf objects. This impacts on reporting accuracy.

For example, if planograms are in 2D mode, this needs to be taken into account when generating a bill of materials for the equipment in the floor plan as shelf information will not be stored in the AVTTB_SHELF table. Once placed in the Merchandiser module planograms can be manually toggled between 2D and 3D mode by means of the Implode or Explode options on the toolbar. Merchandiser floor plans can therefore contain planograms in a variety of states. The PLANOGRAM_SUBSTITUTION_PROCESS_EXPLODED system variable determines how planogram substitution caters for the different cases.

For maximum reporting accuracy, the system variable should be set to 4. The planograms that are substituted will be placed in 3D form. If the other (existing) planograms in the drawing are in 2d or 2.5D form, they will be replaced with planograms in 3D form.

Accessing the Functionality

Overview of how Privileges Work

There are three broad types of access to the Planogram Substitution functionality.

Administrator Level

Users with Administrator's access can control all aspects of planogram substitution functionality:

- They can configure the access to the planogram substitution functionality. This involves setting up user groups and assigning users to the appropriate ones.
- Administrators can also define and bulk run planogram substitutions.
- Administrators can also set up and control batch processes.

Merchandise Manager Level

Users with Merchandise Manager privileges have access to the planogram substitution module, but not to the Administration module. This enables them to define and bulk run planogram substitutions but not to control access to planogram substitution, or to control batch processes.

Normal Users

Users with normal privileges have the ability to run substitutions on individual active store plans in the Planner and Merchandiser modules. They do not have the privileges to define planogram substitutions or run them in bulk.

Setting up Access to Planogram Substitution Functionality

Access to the Planogram Substitution functionality is configured in the Administration Module using the Functionality Security and Data Security options. Functional Security controls the access to the Planogram Substitution functionality, and Data Security controls which planograms can be selected to define substitutions. This is discussed in more detail in the next section.

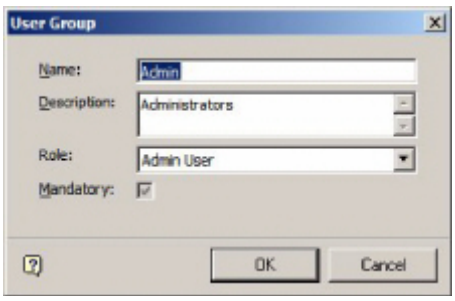
Configuring User Privileges

What privileges a user has depends on settings in Functional Security and Data Security in the Administration Module. This configuration is carried out by Administrators with access to the Administration Module.

Functional Security

Within Functional Security, Users can be assigned to User Groups. The User Groups that Users belong to determine the type of access to the Planogram Substitution functionality.

User Groups are set up using the Add (or Edit) User Group dialog box in Functional Security.



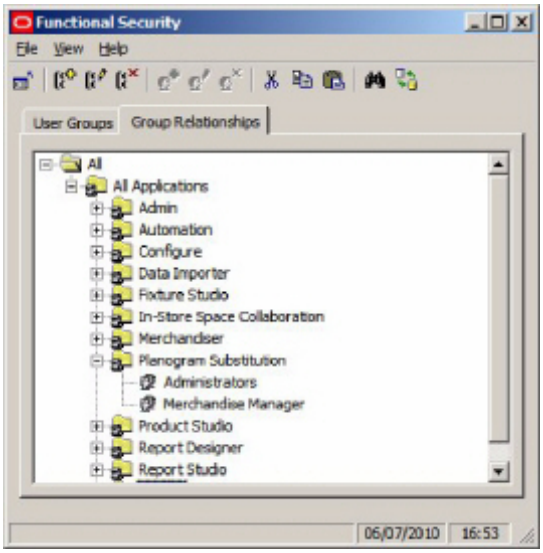
The Role assigned to the User Group is important.

- If the User Group has a Role set to Admin User, members of that User Group will be able to run bulk planogram substitutions, either from by using the 'Run' control
in the Planogram Substitution dialog box or via batch processes.
- If the User Group does not have the Role set to Admin User, members of that User Group will be able to run substitutions within open store plans, but will not be
able to run bulk planogram substitutions.

Any User Group associated with the Planogram Substitution Command Group will have access to the planogram substitution functionality. Depending on the Role assigned to the User Group, members of that group may or may not be able to run bulk substitutions.

Giving access to the Functionality

Once a User Group has been created, it can be assigned to the Planogram Substitution User Group on the Group Relationships tab of the Functional Security dialog box.

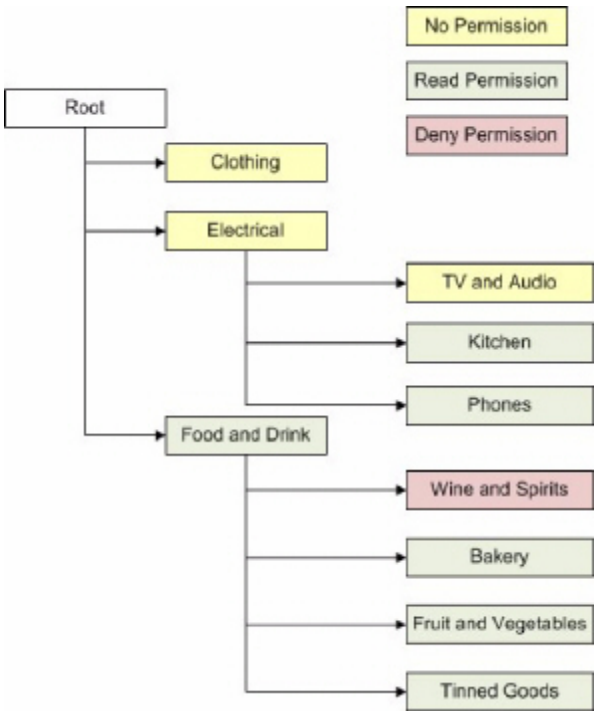


Data Security

Within the Data Security dialog box, the Planogram tab allows Administrators to specify what parts of the planogram hierarchy can be accessed by specific users within the Planogram Substitution functionality. The following rules apply:

1. A User must belong to at least one User Group with 'Read' permissions to access planograms within the Planogram Hierarchy.
2. 'Deny' permissions take precedence over 'Read' permissions.

3. If a User belongs to a User Group with 'Read' permissions for a branch of the Planogram hierarchy they will be able to read all child branches of that part of the planogram hierarchy unless a 'deny' permission is encountered.



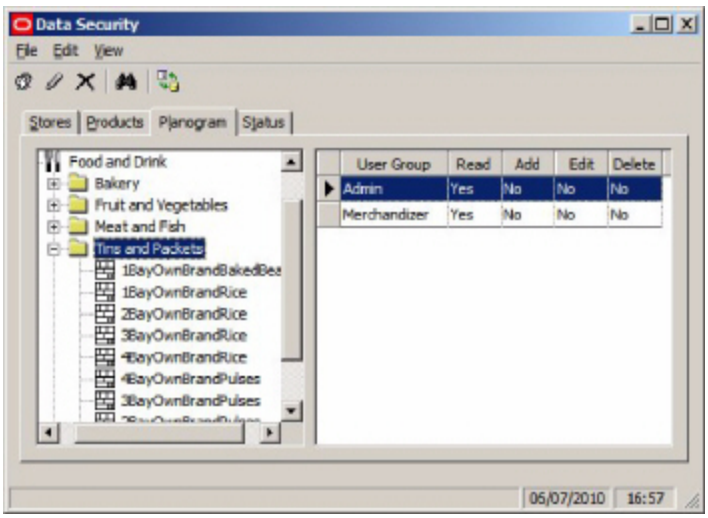
In the above example for a single User Group:

- The 'Clothing' Planogram Group has been given no permissions, so no member of the User Group can access any planograms related to clothing.
- The 'Electrical' Planogram Groups has not been given 'Read' permission, but two of its child Planograms Groups has. Members of the User Group can access planograms belonging to the 'Kitchen' and 'Phone' child Planogram Groups, but not planograms belonging directly to the 'Electrical' Planogram Group, or planograms belonging to the 'TV and Audio' child Planogram Group.
- The 'Food and Drink' Planogram Group has been given a 'Read' permission, with one of its child Planogram Groups being given a 'Deny' permission. Members of the User Group will be able to see planograms belonging directly to the 'Food and Drink' Planogram Group and to its 'Bakery', Fruit and Vegetables' and 'Tinned
  Goods' child Planogram Groups. They will not be able to see planograms belonging to the 'Wines and Spirits' child Planogram Group.

Configuring Access to the Planogram Hierarchy

Configuring access to the planogram hierarchy is configured in two stages:

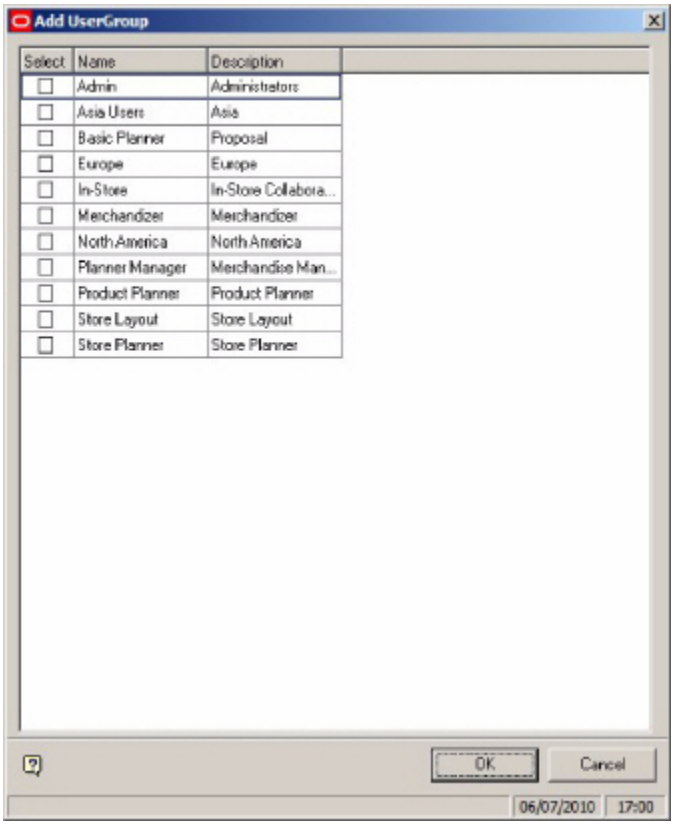
- A User Group is assigned to a branch of the Planogram Hierarchy
- 'Read' or 'Deny' permissions are assigned.



Assigning a User Group

To assign a User Group to a Planogram Group:

1. Highlight the Planogram Group in the Planogram hierarchy.
2. Select the Add User Group option from the Toolbar or the Edit menu.
3. The Add User Group dialog box will appear.

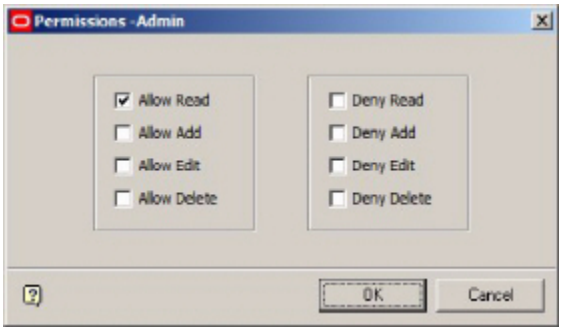


4. Check the required User Groups and click OK.
5. It is now possible to assign 'Read' or Deny' permissions to those nodes in the Planogram Hierarchy.

Setting 'Read' or Deny' Permissions

To Set 'Read' or 'Deny' permissions:

1. Highlight the required Planogram Group in the Left Hand pane of the Planogram Tab of the Data Security dialog box.
2. Highlight the associated User Group in the Right Hand pane of the Planogram Tab of the Data Security dialog box
3. Right click to bring up the Permissions dialog box.



4. Select either 'Allow Read' or Deny Read' to specify whether members of the user group can or cannot access the planograms in that Planogram Group and its Children.

Controlling Access with Multiple User Groups

It is possible to use multiple user groups to control access to the Planogram Substitution functionality. This would be done by MSM users with access to the Administration Module and allows users to be given very specific access to the functionality.

User Group Types for access to the Planogram Substitution Functionality

There are two basic types of User Groups that determine the actions that a user can carry out within the Admin Module: groups with Roles set to Admin User and Groups with Roles that are not set to Admin User. The former can carry out bulk planogram substitutions; the latter cannot. These are configured in Functional Security.

User Group Types for access to the Planogram Hierarchy

Other User Groups can be created to control access to different parts of the planogram hierarchy. For example, User Groups could be created to control access to (a) Food and Drink, (b) Electrical and (c) Clothing planograms. Putting Users into specific User Groups controls their access to the hierarchy. This is configured in Data Security.

Controlling Access

Access is controlled by the cumulative privileges that the User inherits from the User Groups they belong to. It would be possible to set up two types of user groups to control access:

- User groups to control access to the software.
- User groups to control access to the planogram hierarchy.

As an example, an Administrator might go into the User Groups tab in Functional Security and create the following two User groups:

- Merchandise Manager - of User Group Type 'Admin User'
- Merchandiser - of User Group Type 'Merchandiser User'

Members of the first User Group can carry out bulk planogram substitutions; members of the second cannot. The administrator would then assign those two User Groups to Planogram Substitution in the Group Relationships tab.

Similarly, an Administrator might go into the User Groups tab in Functional Security and create the following User groups:

- Merchandiser - Food and Drink
- Merchandiser - Electrical
- Merchandiser - Clothing

Membership of specific User Groups would confer access to planograms of that type. Having configured the User Groups in Functional Security, the Administrator would go to the Data Security module and assign 'read' permissions to the appropriate nodes in the planogram hierarchy - for example the 'Electrical' User Group would be assigned 'read' permissions to all nodes in the planogram hierarchy containing Planograms with electrical products.

The Administrator can then put Users into the appropriate User Groups.

	Jane Doe	John Smith	William Brown	Susan Green
Merchandiser Manager	X			
Merchandiser		X	X	X
Merchandiser - Food and Drink	X	X	X	
Merchandiser - Electrical	X	X		X
Merchandiser - Clothing	X	X		

The Users will then have different privileges:

- Jane Doe can define substitutions for all types of planograms and can run those substitutions either individually or in bulk.
- John Smith can define substitutions for all types of planograms, but can only run those substitutions in opened store plans (i.e. individually).
- William Brown can only define planogram substitutions for 'Food and Drink' planograms and can only run those substitutions in opened store plans.
- Susan Green can only define planogram substitutions for 'Electrical' planograms and can only run those substitutions in opened store plans.

Logging into Planogram Substitution

This section describes how Users Log In to Planogram Substitution.

Security Server

Security Server is a background executable file (.exe) that starts and runs in the background when MSM is opened by a user. It holds details of the privileges that user has been granted in the Administration module.

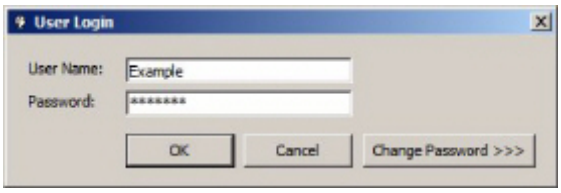
> **Note:** Security Server can be seen in the Applications tab of the Windows Task Manager dialog box when Macro Space Management is running.

If the User has already accessed another MSM module, then tries to access Planogram Substitution, the application will query Security Server to see if that specific User has permission to access the Planogram Substitution module.

Logging In

Planogram Substitution can be started from the Windows start menu, Windows desktop and from the Tools menu in MSM Planner and Merchandiser modules.

- If another MSM application is running, the application will query Security server to see the User has the appropriate permissions to access Planogram Substitution.
- If the User is opening Planogram Substitution as their initial MSM application, the Log In dialog box will appear.

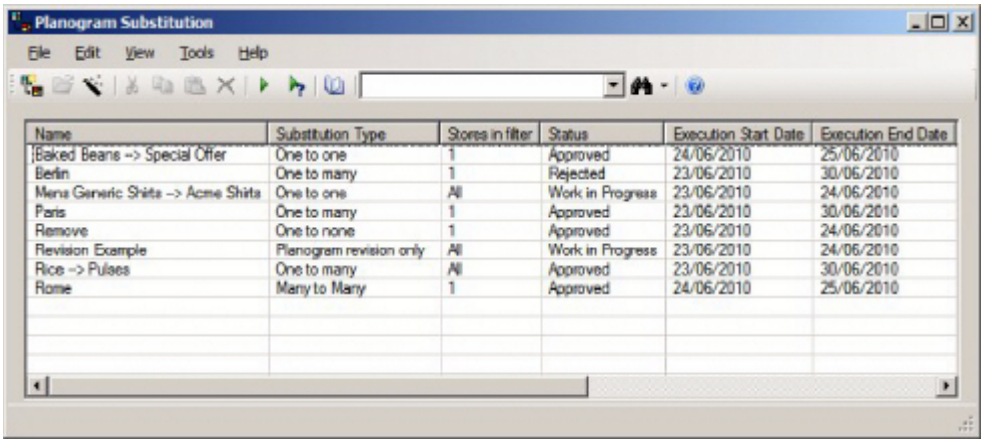


- After the User has entered his User Name and Password and clicked OK, an instance of Security Server will open in the background and the Users permissions will be validated.

Planogram Substitution Dialog Box

Overview of Planogram Substitution Dialog Box

The Planogram Substitution dialog allows users to manually control the planogram substitution process.



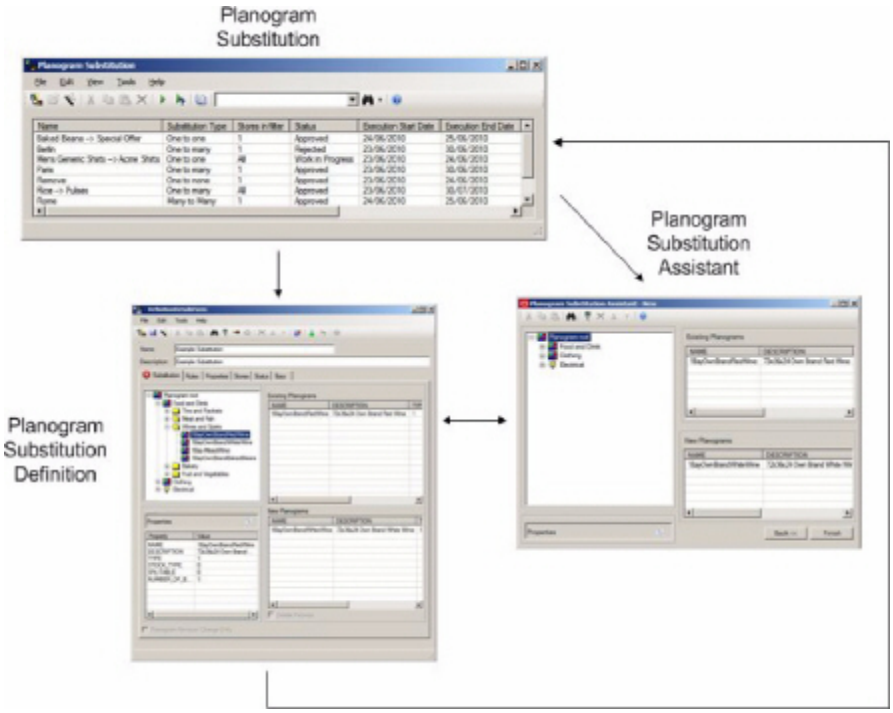
Users can:

- Add new planogram substitution definitions via the Planogram Definition dialog box or the Planogram Definition Assistant.
- Edit existing planogram substitution definitions via the Planogram Definition dialog box.

- Delete planogram substitution definitions.
- Manually carry out 'dry runs' to test that the substitutions will run without problems.
- View the 'dry run' log to see the results of the test.
- Manually carry out planogram substitutions.
- View the process log to see the results of planogram substitutions.

> **Note:** In order to manually bulk run planogram substitutions members must belong to a User Group with the User Group Role set to Admin User.

The Planogram Substitution dialog box interacts with the Planogram Substitution Definition and Planogram Substitution Assistant dialog boxes as per the diagram below:



1. The Planogram Substitution Definition dialog box can be opened from the Planogram Substitution dialog box, either to add or to edit Planogram Substitutions.
2. The Planogram Substitution Assistant dialog box can be opened from the Planogram Substitution dialog box as an aid to creating a new planogram substitution. On saving a Planogram Definition created in the Assistant, the data will be transferred to the Planogram Substitution Definition dialog box.
3. The Planogram Substitution Assistant dialog box can also be opened from the Planogram Substitution Definition dialog box. The tab the Planogram Substitution Assistant opens in is dependent on where the user is within Planogram Substitution Definition dialog box. On saving a Planogram Definition edited in the Assistant, the data will be transferred to the Planogram Substitution Definition dialog box.
4. On saving a planogram substitution that has been defined in the Planogram Substitution Definition dialog box, the summary information will be added or updated in the Planogram Substitution dialog box.

Menus and Toolbars

Menu Options

Menu	Option	Icon	Shortcut Key
File	New		Ctrl + N
	Open		Ctrl + O
	Exit		Alt + F4
Edit	Cut		Ctrl + X
	Copy		Ctrl + C
	Paste		Ctrl + V
	Delete		Del
	Select All		Ctrl + A
	Find Next		F3
View	Dry Run Log...		
	Substitution Log...		
	Refresh		Ctrl + F5
Tools	Substitution Assistant...		
	Run		
	Dry Run		
Help	Contents		F1

Toolbar Options

Option	Icon	Short Cut Key
New		Ctrl + N
Open		Ctrl + O
Assistant		Alt + F4
Cut		Ctrl + X

Option	Icon	Short Cut Key
Copy		Ctrl + C
Paste		Ctrl + V
Delete		Del
Run		
Dry Run		
Substitution Log...		
Help		F1

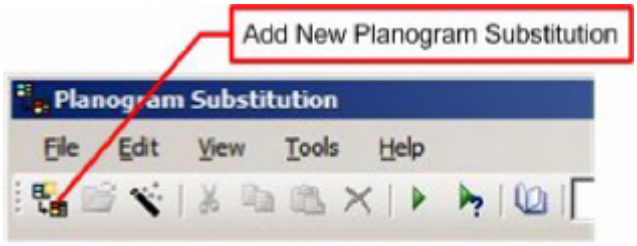
Adding, Editing and Deleting Planogram Substitution Definitions

Adding Planogram Substitution definitions can be done in one of two different ways:

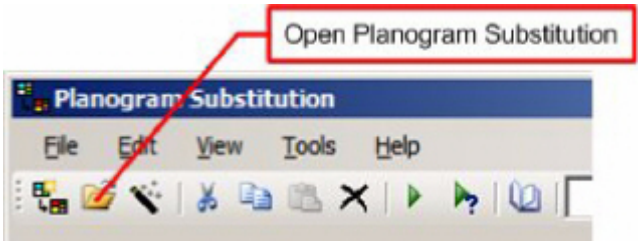
- By using the Planogram Substitution Definition dialog box
- By using the Planogram Substitution Assistant

Editing existing planogram substitutions can be carried out by using the Open option.

Invoking the Planogram Substitution Definition dialog box



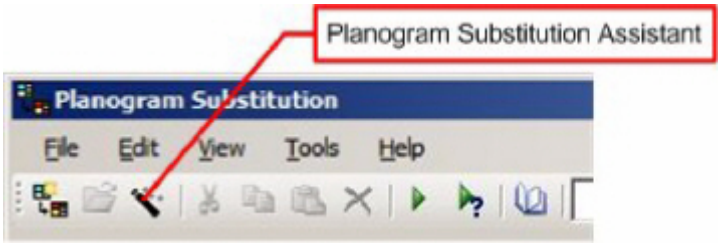
Clicking the Add New Planogram Substitution Icon will open a blank Planogram Substitution Definition dialog box. Alternatively, users can select the New option from the File menu.



Highlighting one or more planogram substitutions and clicking the Open Planogram Substitution icon will open those substitutions. Alternatively (after highlighting the required substitutions), users can select the Open option on the File menu.

Note: If multiple planogram are selected for editing all tabs but the Substitution tab can be edited. The selected settings become common to all the planograms being edited.

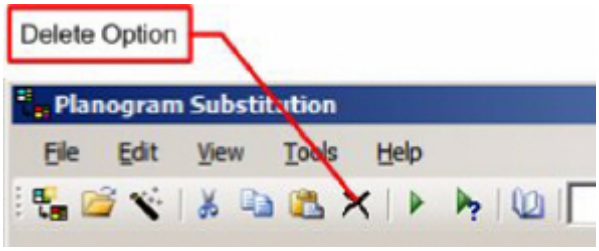
Calling the Planogram Substitution Assistant



Clicking the Planogram Substitution Assistant icon (or using the Assistant option on the Tools menu) will open a blank Assistant. This can then be used to define many parts of a new planogram Substitution. On saving a Planogram Definition created in the Assistant, the data will be transferred to the Planogram Substitution Definition dialog box.

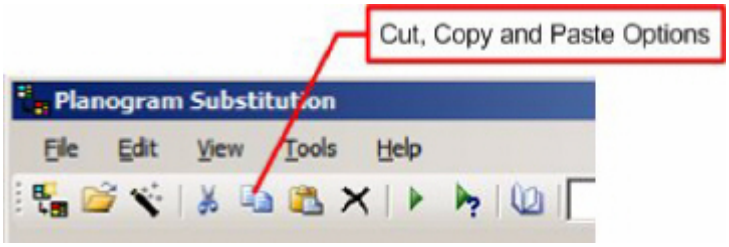
Deleting Planogram Substitutions

Deleting Planogram Substitutions is carried out by highlighting them in the Planogram Substitution dialog box and then clicking the Delete option. Alternatively, the delete option can be used from the Edit menu.



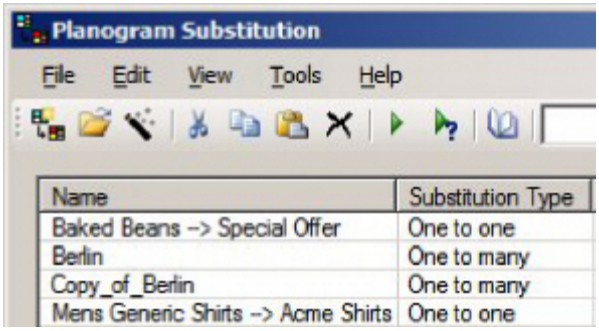
Cut, Copy and Paste Options

The Cut, Copy and Paste options are used to delete planograms or to copy and paste a copy of a planogram. The Cut, Copy and Paste icons are on the toolbar:



- Cut will delete any highlighted items while storing the information on the clipboard
- Copy will place a copy of the information on the clipboard.
- Paste places a copy of the information on the clipboard into the Planogram Substitution dialog box.

The most common use of the copy and paste option is to create copies of existing planogram substitutions. The copies can then be edited as a quick way of producing alternative planogram substitutions.



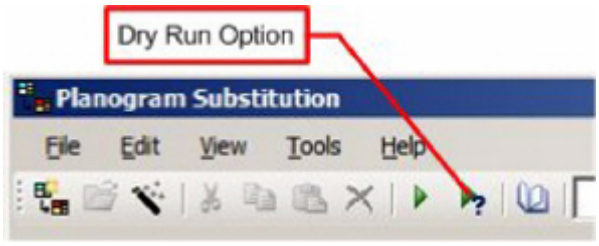
In the above example, a copy has been created of the Berlin planogram substitution.

Other Options

There are several other options available to the user in the Planogram Substitution dialog box.

Dry Run Option

The Dry Run option can be invoked from the toolbar, or from the Tools menu.

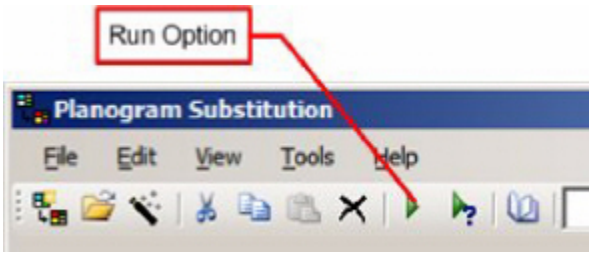


Dry Runs (and the associated Dry Run Log) can be used to validate any planogram substitutions that have been defined before they are run.

> **Note:** for more information see the chapter on the Planogram Substitution and the Dry Run Logs.

Run Option

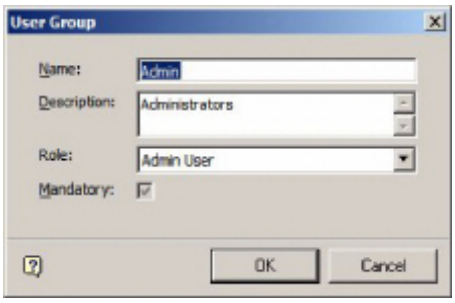
The Run option allows Administrators to manually run single or multiple planogram substitutions.



After a single or multiple planogram substitutions have been highlighted in the Planogram Substitution dialog box, clicking the Run option will cause these substitutions to be executed in the database.

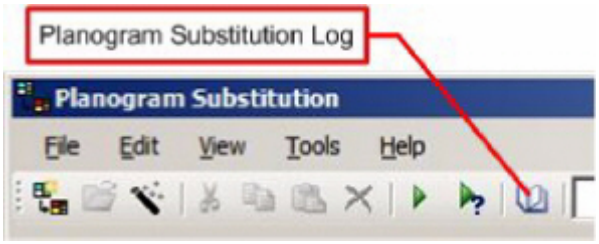
This provides an alternative to running planograms via a batch process.

Note: In order to use the Run option, Users must belong to a User Group that has been assigned to the Admin User role in the Role drop down list.



Planogram Substitution Log

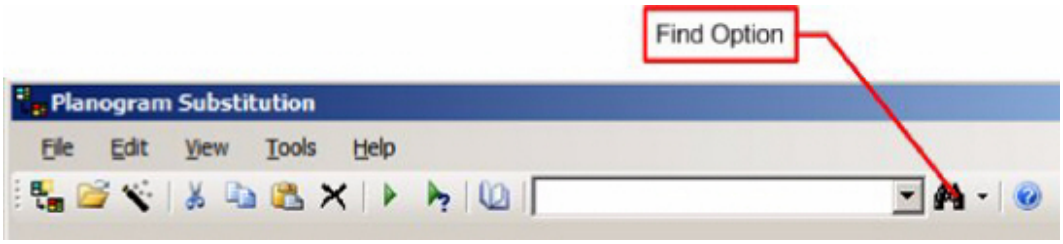
The Planogram Substitution Log gives the results of all planogram substitutions that have been executed. It is opened by clicking the Planogram Substitution Log option on the toolbar. Alternatively, it can be opened from the View menu.



Note: for more information see the chapter on the Planogram Substitution and the Dry Run Logs.

Find dialog box

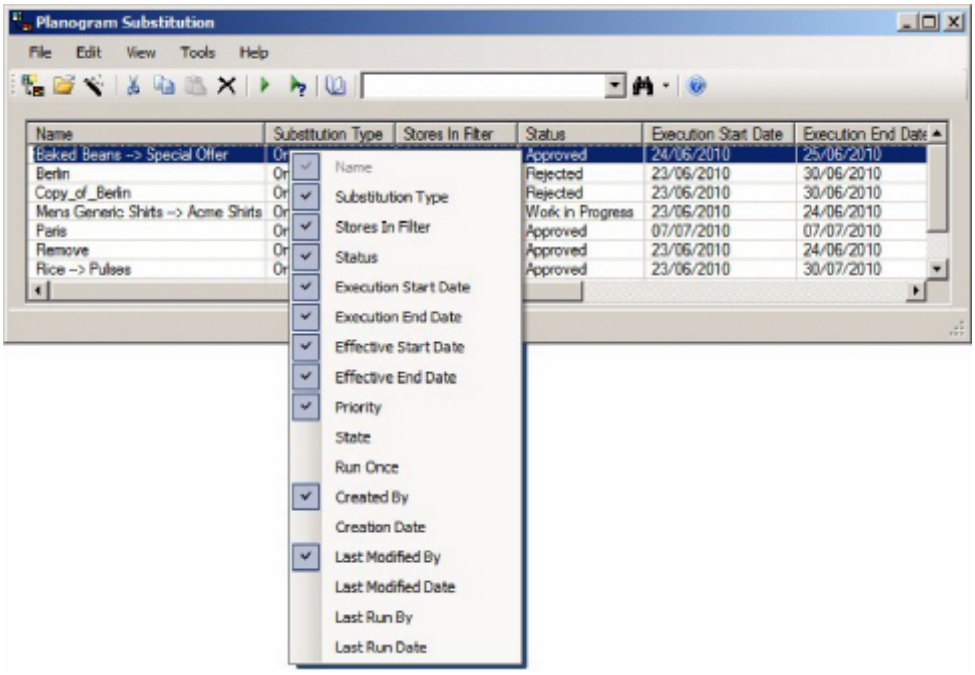
The find dialog box enables users to search for Planogram Substitutions using different filter criteria. It is opened by clicking the Find option on the toolbar.



Note: for more information see the chapter on the Find dialog box.

Selecting columns to display

It is possible to select the columns to be displayed. To do this, right click in the list of planograms to bring up the right click menu. The columns to display can then be selected by checking or unchecking the required columns.



Planogram Substitution Definition Dialog Box

Overview of Planogram Substitution Definition Dialog Box

This section gives a brief overview of the Planogram Substitution Definition dialog box. The dialog box contains six tabs.

- Substitution Tab
- Rules Tab
- Properties Tab
- Stores Tab
- Status Tab
- Bays Tab

These tabs can be used in any sequence, the results being saved back to the database by clicking the Save button.

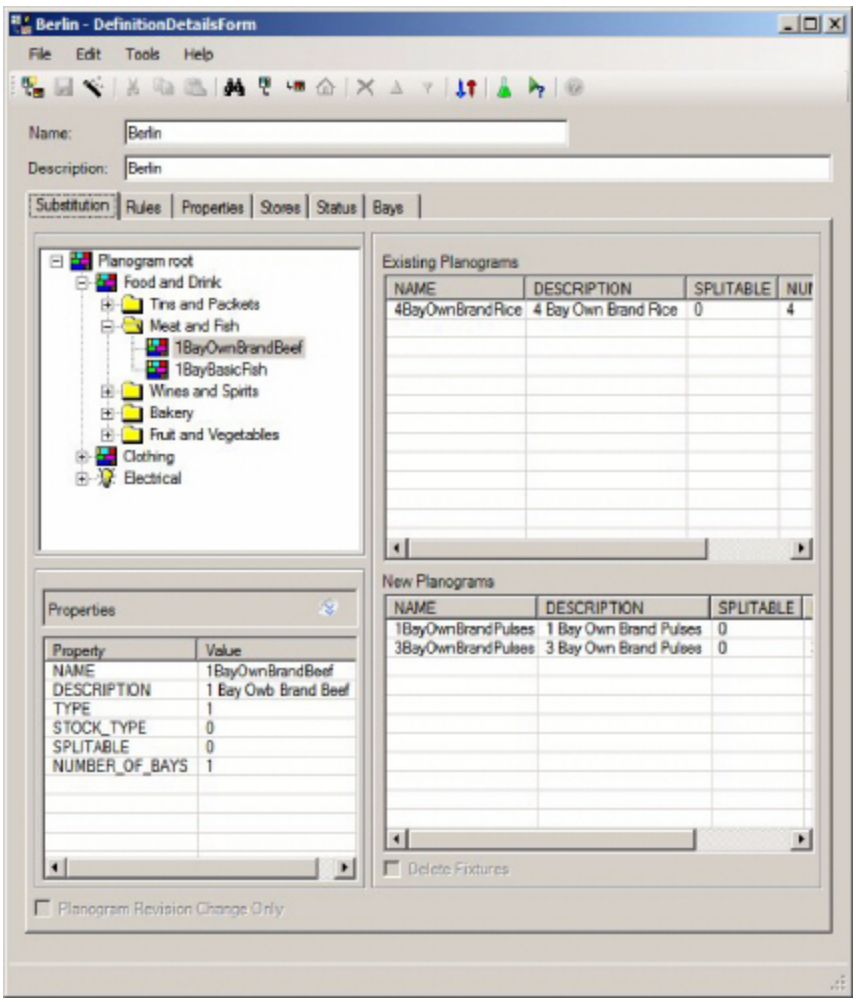
> **Note:** The Substitution, Stores and Statuses tabs can be populated with the aid of the Planogram Substitution Assistant.

Planogram Substitution Definition Dialog Box Pages

There are six tabs within the Planogram Substitution dialog box. The purpose of each is briefly described in this section.

The Substitution Tab

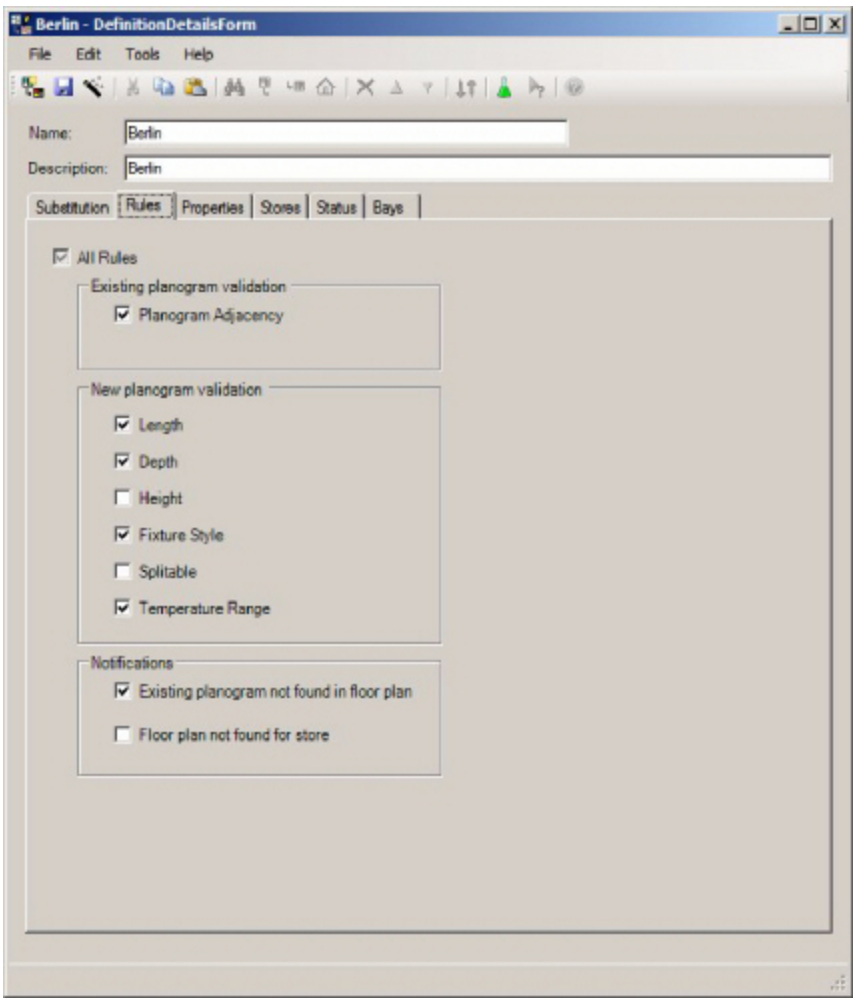
The Substitution Tab holds details of the planograms that are to be removed (substituted) and their replacements.



Planograms to be substituted are specified in the top right hand pane, while the replacement planograms are specified in the bottom right hand pane.

Rules Tab

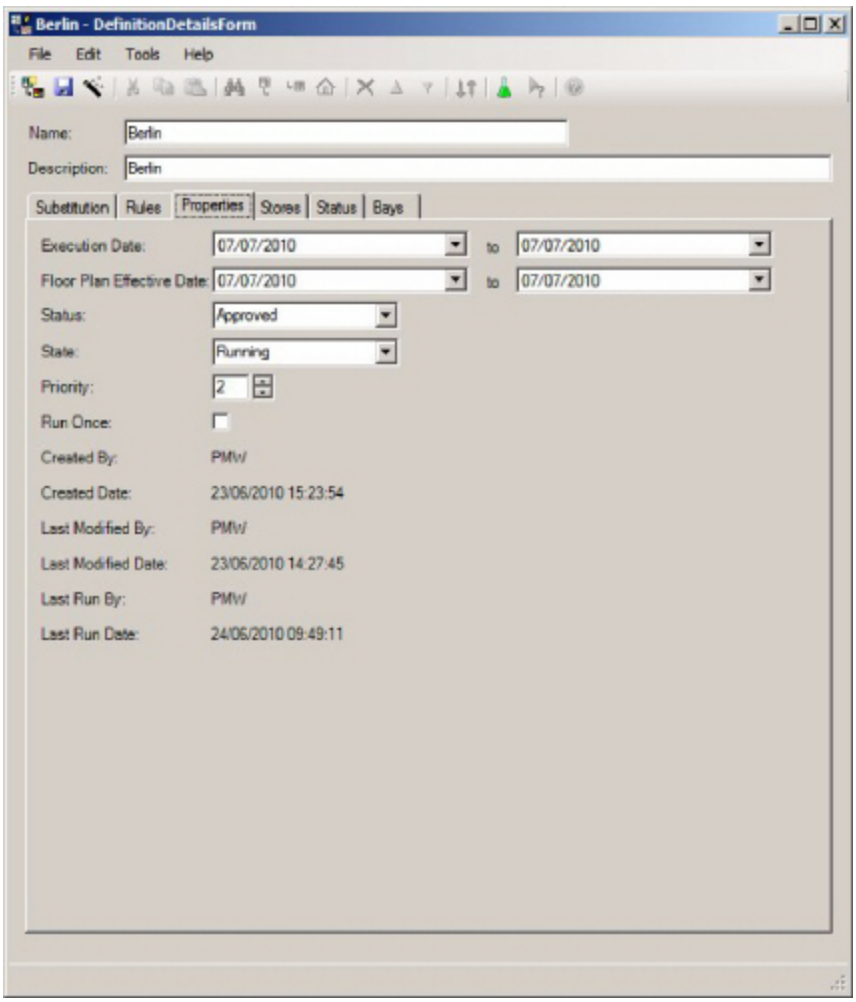
The rules tab specifies the validation rules that will apply when carrying out the planogram substitution.



As well as validation rules, the user can also specify some of the notifications to be written to the Planogram Substitution error log when substitutions are being carried out.

Properties Tab

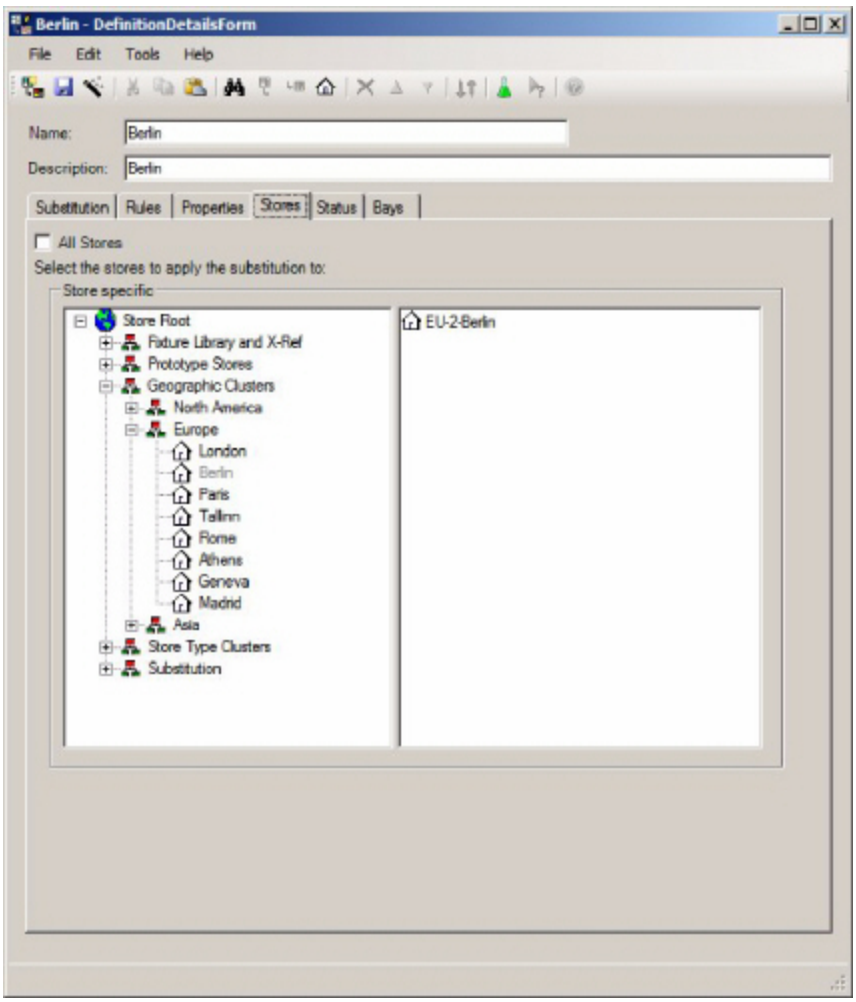
The Properties tab has details of the dates the substitution is valid for.



As well as enabling the user to set the dates, the user can also set the Status and State of the planogram substitution. This tab also contains read only information on who created, modified and last ran the substitution.

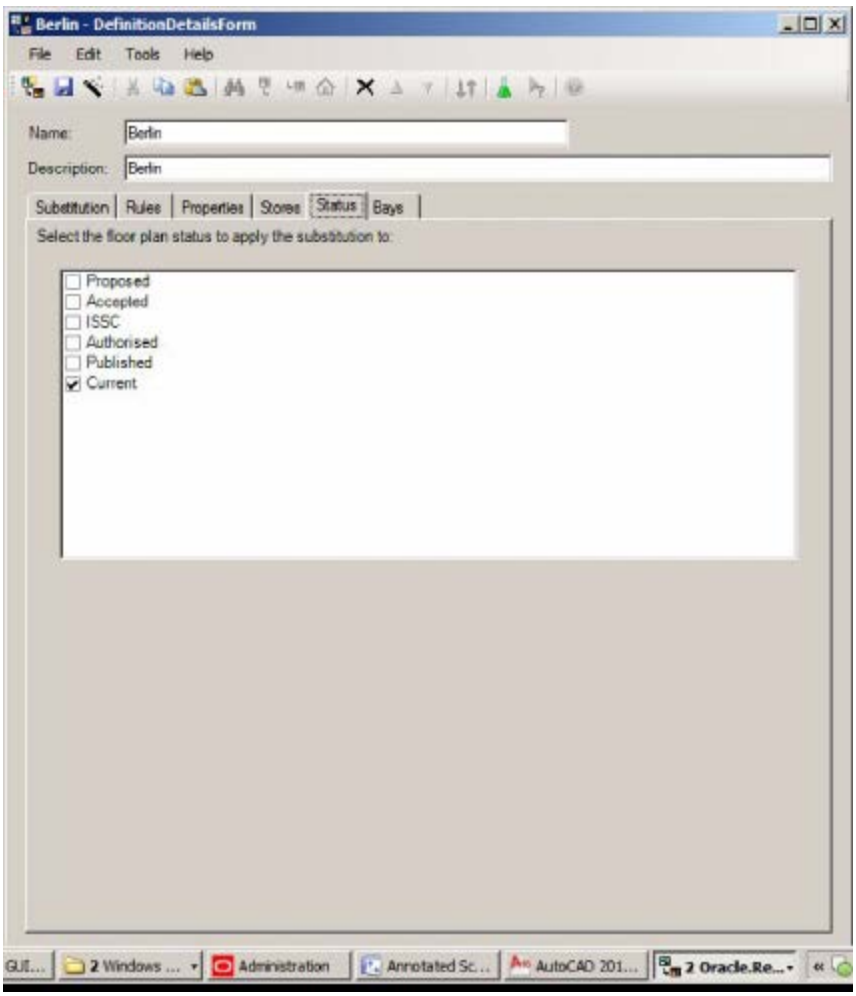
Stores Tab

The Stores Tab enables users to restrict the list of stores that the planogram will be carried out in.



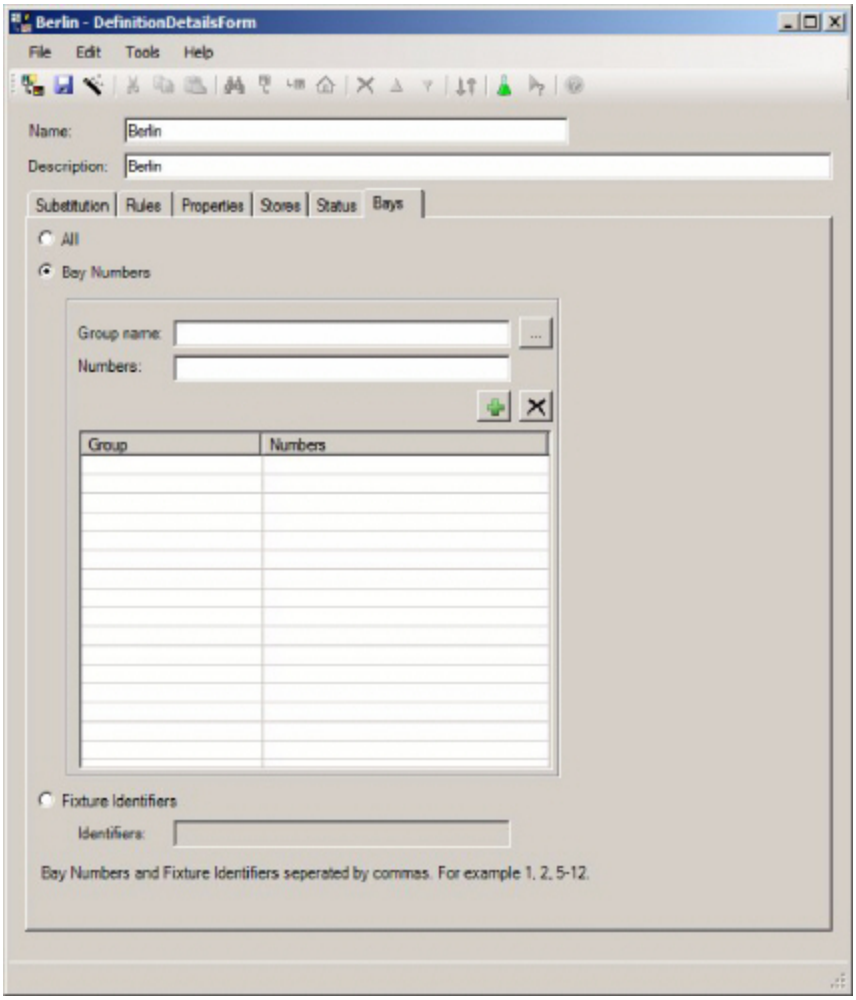
Status Tab

The Status tab enables users to specify what statuses floor plans must be at for a planogram substitution to take place.



Bays Tab

The Bays Tab enables users to restrict the planogram substitution to specific bay numbers within floor plans.



The Planogram Substitution Assistant

Some of the data in the Planogram Substitution Definition dialog box can be filled in with the aid of the Planogram substitution assistant. The Planogram Substitution Assistant can be used in one of two ways:

- The Assistant can be invoked directly from the Planogram Substitution dialog box. When the Planogram Substitution Assistant is closed, the defined data will be transferred to the Planogram Substitution Definition dialog box.
- The Assistant can also be invoked from the Planogram Substitution Definition dialog box. Data can then be refined in the Assistant with the data transferred to the Planogram Substitution Definition dialog box when the Assistant is closed.

The following tabs in the Planogram Substitution Definition dialog box can be populated with data from the Planogram Substitution Assistant pages:

Planogram Substitution Definition Tab	Planogram Substitution Assistant Page
Substitution tab	Can be populated by the results of the Existing Planogram page, the Adjacent Planograms tab on the Adjacent Planograms page and the New Planograms page.

Planogram Substitution Definition Tab	Planogram Substitution Assistant Page
Status tab	Can be populated by the results of the Status tab on the Adjacent Planograms page.
Stores tab	Can be populated by the results of the stores tab on the Adjacent Planograms page.

Menus and Toolbar

The following Menu and Toolbar options are available:

Menu Options

The following options are available from the menus.

Menu	Option	Icon	Shortcut Key
File	New		Ctrl + N
	Save		Ctrl + S
	Save As		
	Exit		Alt + F4
Edit	Cut		Ctrl + X
	Copy		Ctrl + C
	Paste		Ctrl + V
	Delete		Del
	Select All		Ctrl + A
	Find		
Tools	Substitution Assistant...		
	Add Existing		
	Add New		
	Reverse Substitution.		Ctrl + R
	Substitution Rule Test		
	Dry Run		
Help	Contents		F1

Toolbar Options

The following options are available from the toolbar.

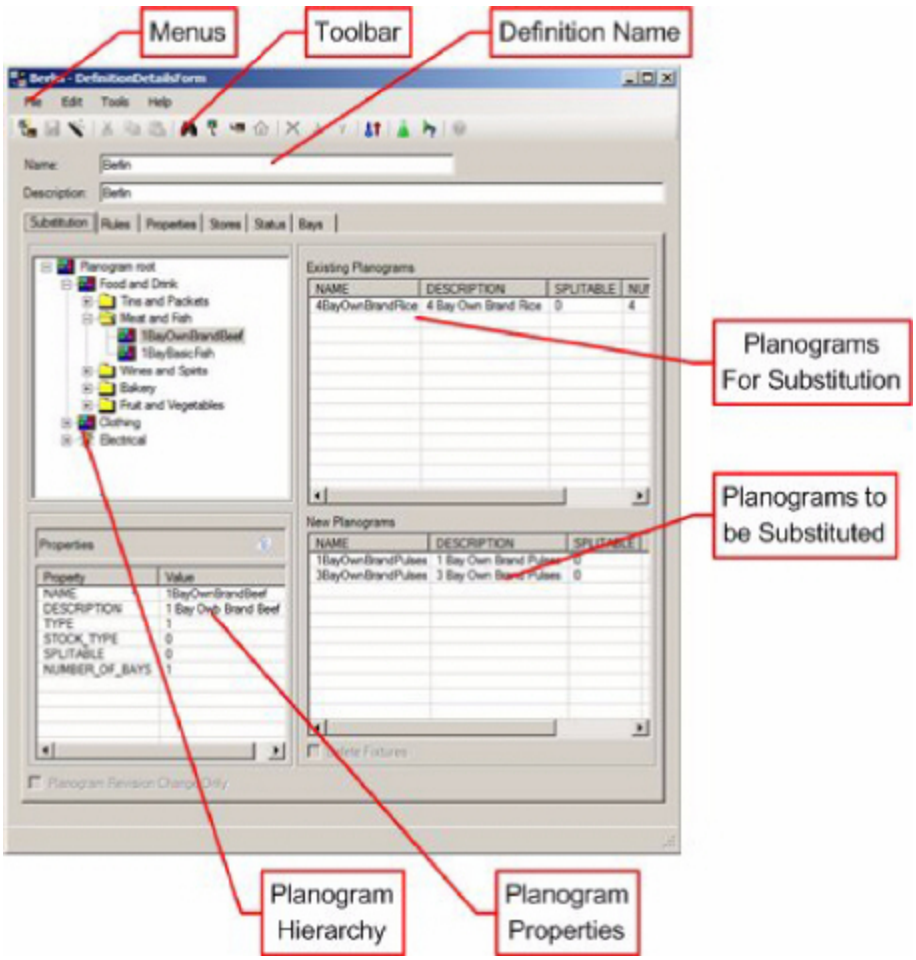
Option	Icon	Short Cut Key
New Definition		Ctrl + N
Save Definition		Ctrl + S
Planogram Substitution Assistant		
Cut		Ctrl + X
Copy		Ctrl + C
Paste		Ctrl + V
Find		
Add Existing Planogram		
Add New Planogram		
Add Store		
Delete		
Move planogram up in list		
Move planogram down in list		
Reverse planogram		
Validate substitution rules		
Dry Run		
Help Contents		

Substitution Tab

The Substitution Tab is used to specify the planograms to be substituted (removed) and the planograms that will be used as their replacement.

Description of the Substitution Tab

The Substitution Tab has the following parts:



- The Menus contain a list of all actions available to the user.
- The toolbar contains a more restricted list of actions available to the user.
- The Definition Details gives the name and description of the current planogram substitution.
- The Planogram Hierarchy contains the list of planograms available to the user.
- The Planogram Properties contain details of a specific planogram.
- The planograms that will be substituted (removed) are specified in the top right pane.
- The planograms that will be their replacement are specified in the bottom right plane

Using the Substitution Tab

Planogram Hierarchy

Two factors need to be taken into account when using the Planogram Hierarchy:

- The Planogram Hierarchy will only contain the latest revision of a planogram for any given planogram lineage.
- Which planograms are visible to a specific User will be governed by which User Groups they have been assigned to and what branches of the planogram hierarchy those User Groups have access to.

Note: if the user has not been assigned access to any Planogram Groups in the Data Security dialog box (Security menu), then they will not be able to access any planograms when defining substitutions.

Adding and Deleting Planograms

Planograms can be added or removed from the pane specifying the planograms to be substituted (removed) and the planograms that are to be their replacement. Whether planograms are to be substituted or added as replacements will depend on which pane they are added to.

There are several ways planograms can be added or deleted:

- Planograms can be selected by dragging a planogram or a planogram group from the hierarchy and dropping it to the appropriate pane.
- Planograms can be added to the appropriate pane by highlighting an item in the hierarchy and selecting the Add Existing Planogram option from the toolbar or Tools menu.
- Planograms can be added to the appropriate pane by using the Find… option on the toolbar or Edit menu.
- Planograms can be added to the appropriate pane by using the paste option to paste in a planogram name or planogram code. The rest of the row of data will populate automatically.

If a planogram group is selected from the hierarchy then all of the planograms that are direct descendants of the group will be added to the selection set.

Reordering Planograms

The list of planograms can be reordered by means of the up or down arrows on the toolbar.

- The up and down toolbar options will be enabled when one or more consecutive rows are selected in the existing planograms list. They will be grayed out if the selected rows are not consecutive or no rows are selected.
- Using the up or down arrows will promote or demote the selected rows in the sequence that planograms are substituted. The planogram at the top of the list will be substituted first, the next in the list second, and so on....

Cut Copy and Paste Functionality

The cut, copy and paste functionality has two main functions:

1. To edit the list of Existing Planogram Substitutions.
2. To transfer data to and from external applications.

The list of existing planograms can be edited as follows:

- Planograms can be added to the appropriate plane by using the paste option to paste in a planogram name or planogram code. The rest of the row of data will populate automatically.
- Planograms can be removed from the list of planograms by highlighting rows and using the Cut option.

Data can be transferred to and from external programs (for example a spreadsheet) by:

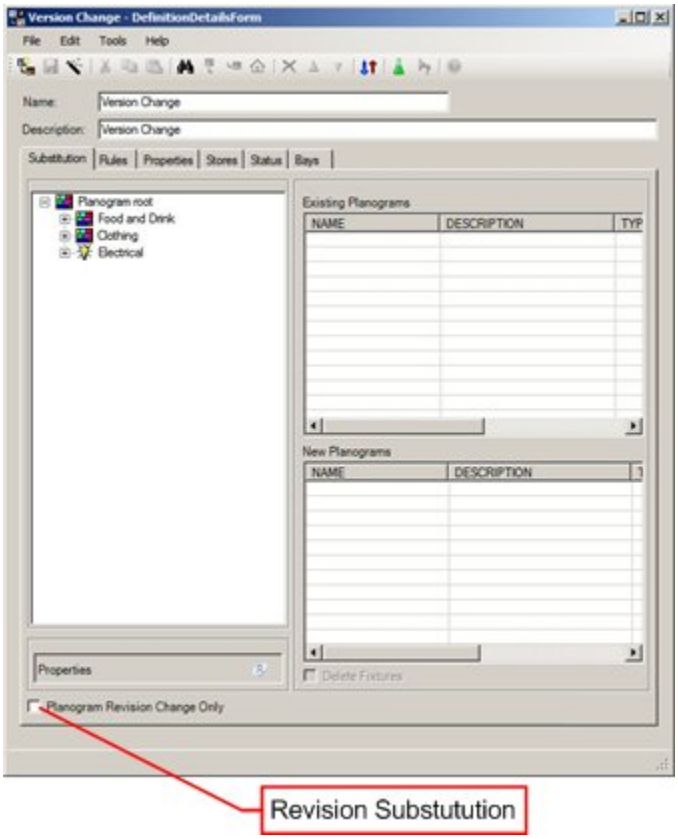
- Highlighting data in the Planogram Hierarchy, Properties Window or list of selected Planograms. Data can then be transferred to the Clipboard by means of

the Copy command. Once the external program (for example a spreadsheet) is open, the Paste command can be used within that program to enter the data.

- Highlighting data in an external program (for example a report) and using the Copy command to transfer it to the Clipboard. Once in the Planogram Substitution
  Assistant, the Paste command can be used to add Planogram Names or Planogram Codes to the list of selected planograms.

Revision Substitution

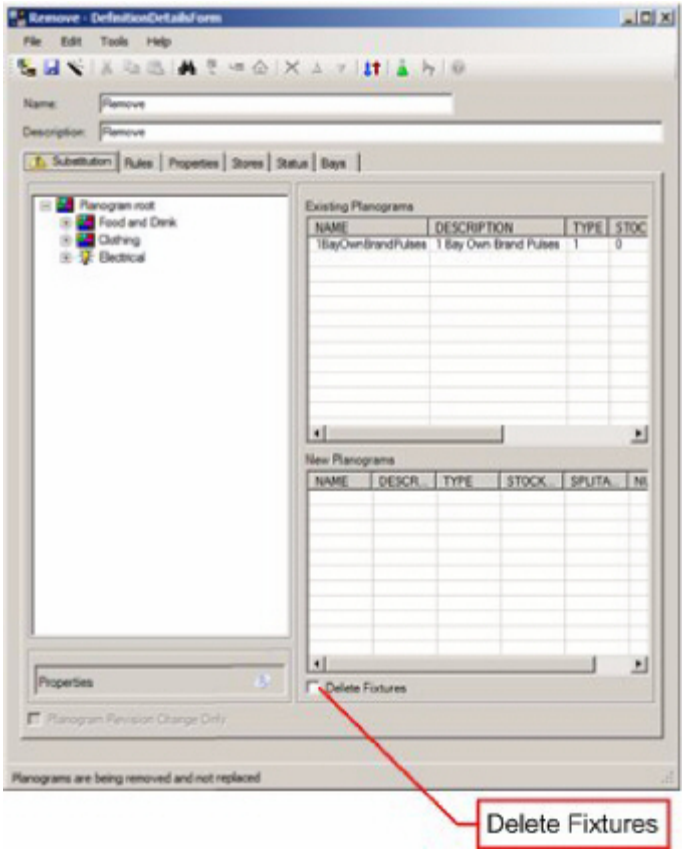
If it is desired to just carry out Revision Changes (update planogram designs, not change them) then it is possible to define a substitution without any planograms, but with the Revision Change check box checked.



Note: If a planogram substitution has been defined, then Revision Substitution will automatically be carried out for all planograms in the selected stores. This is in addition to any substitutions that have been defined.

Deleting Fixtures

If a planogram is being removed because no replacement planogram is being substituted in, it is possible to delete the parent fixture(s) as well as the planogram. This is done by checking the Delete Fixtures check box.



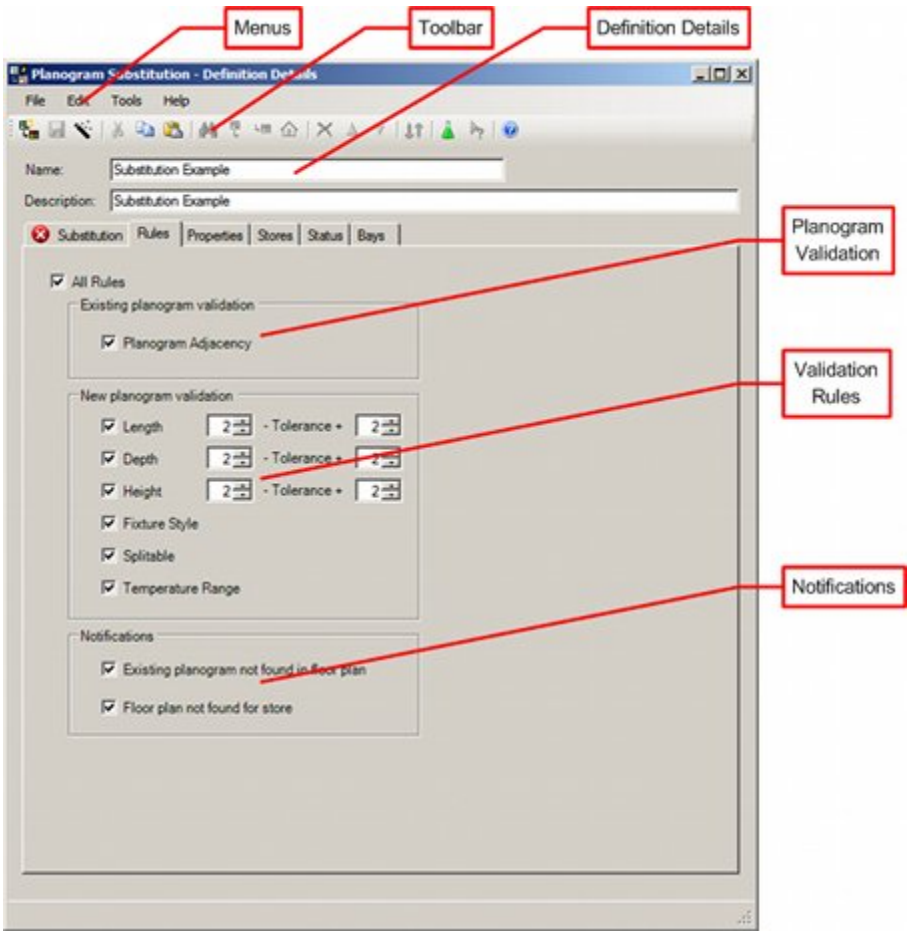
Rules Tab

The Rules tab is used to set criteria used to validate the substitution. The rules are used twice for this purpose:

- On exiting the Planogram Substitution Definition dialog box, the rules will be used to validate the substitution is valid.
- On running the Planogram Substitution, the rules will be used to validate each successive substitution within a store plan.

Description of the Rules Tab

The Rules tab has the following parts:



- The menus contain all options available to the User.
- The toolbars contain a more restricted list of options available to the User.
- The Definition Details give the Name and Description of the Planogram Substitution Definition.
- The Existing Planogram Validation specified whether adjacent planograms to those being substituted should be verified.
- The Validation Rules enable the user to set how the planogram substitution is to be tested when it is saved and when it is carried out.
- The Notifications give the options for writing messages to the error log.

Description of Rules and Notifications

This section describes the purpose of each rule or notification. Each rule functions as follows:

Planogram Adjacency (Existing Planograms)

The existing planogram adjacency rule validates if all the existing planograms in the floor plan are calculated to be adjacent to the left or right.

Length Rule (New Planograms)

The length rule validates if the merchandisable length of the fixtures containing each successive profile (bay) in the existing planograms in the floor plan matches the

individual lengths for each successive profile of the new planograms as defined in the MSM planogram library.

The length rule may be assigned a plus and minus tolerance by means of the spin controls. If a tolerance has been assigned, the planogram will place if the length defined for each successive bay of the planogram falls within the length range defined by the tolerances.

> **Note**: The default length tolerance is set by the PLANOGRAM_SUBSTITUTION_LENGTH_TOLERANCE system variable in the System Variable dialog box accessed from the General Menu in the Admin Module.

Depth Rule (New Planograms)

The depth rule validates if the merchandisable depth of the fixtures containing each successive profile (bay) in the existing planograms in the floor plan matches the individual depth for each successive profile of the new planograms as defined in the MSM planogram library.

The depth rule may be assigned a plus and minus tolerance by means of the spin controls. If a tolerance has been assigned, the planogram will place if the depth defined for each successive bay of the planogram falls within the length range defined by the tolerances.

> **Note**: The default length tolerance is set by the PLANOGRAM_SUBSTITUTION_DEPTH_TOLERANCE system variable in the System Variable dialog box accessed from the General Menu in the Admin Module.

Height Rule (New Planograms)

The height rule validates if the merchandisable depth of the fixtures containing each successive profile (bay) in the existing planograms in the floor plan matches the individual height for each successive profile of the new planograms as defined in the MSM planogram library.

The height rule may be assigned a plus and minus tolerance by means of the spin controls. If a tolerance has been assigned, the planogram will place if the height defined for each successive bay of the planogram falls within the length range defined by the tolerances.

> **Note**: The default height tolerance is set by the PLANOGRAM_SUBSTITUTION_DEPTH_TOLERANCE system variable in the System Variable dialog box accessed from the General Menu in the Admin Module.
>
> **Note:** The Height rule does not currently take into account the effect of the ADDITIONAL_FIXTURE_HEIGHT system variable.

If no offsets have been set for the merchandisable area for the fixture (Merchandisable Areas tab of the block Details dialog box) in Fixture Studio, the length, depth and height of the merchandisable area will match those of the fixture. If offsets have been used, the length, depth and height of the merchandisable area will differ from the fixture dimensions.

Fixture Style (New Planograms)

The fixture style rule validates if the styles assigned to the fixtures containing each successive profile (bay) in the existing planograms in the floor plan match the fixture styles for each successive profile of the new planograms as defined in the MSM planogram library.

Splittable Rule (New Planograms)

The splittable rule deals with two cases:

- If a planogram that is being substituted into the drawing is not defined as splittable, the software will validate that all the fixtures containing the existing planogram(s) in the store plan that are to be substituted by the new planogram are adjacent to the left or right of each other and are co-linear.
- If a planogram that is being substituted into the drawing is defined as splittable, the software will allow it to be placed on non-adjacent fixtures.

> **Note:** For the splittable rule to be validated correctly, the Fixture Adjacency Calculations must be up to date for the store plan that the planogram substitution is to be carried out in. There are two ways of achieving this: By running the Fixture Adjacency Calculation manually within a specific store plan or by running the Fixture Adjacency Calculation throughout the entire database via a batch process.

Temperature Range (New Planograms)

The temperature range rule validates if each temperature ranges of the fixtures containing the existing planograms in the floor plan that are to contain a whole new planograms overlap the temperature range of the new planogram as defined in the MSM planogram library.

The validation options are used when the planogram substitution is run. They specify the warning messages that will be written to the error log. They will only be used if the 'All Stores' check box has been unchecked on the Stores tab.

Existing Planogram not found in Floor Plan

The existing planogram rule will log a warning if all the existing planograms are not in the floor plan and the 'All Stores' check box has been unchecked on the Stores tab.

Floor Plan not found in Store

The floor plan rule will log a warning if at least one floor plan was not found for each store and the 'All Stores' check box has been unchecked on the Stores tab.

> **Note:** If the All Stores check box is checked on the Stores Tab, no warnings will be generated.

Settings in the rules tab determine how detailed a validation the planogram substitution will be subjected to.

The 'All Rules' Check Box

The All Rules check box has three states:

1. Checked

   Checking the All Rules tick box will check all the rules tick boxes and so enable all the rules. The All Rules tick box will also automatically change to checked when all the individual rules tick boxes have been checked.

2. Unchecked

   Unchecking the All Rules tick box will uncheck all the rules tick boxes and so disable all the rules. The All Rules tick box will also automatically change to unchecked when all the individual rules tick boxes have been unchecked.

3. Indeterminate

   The All Rules tick box will be set to indeterminate when some of the individual rules tick boxes are checked and some are unchecked.

   Individual rules can be set or deselected by ticking the individual check boxes. The state of the All Rules check box will be changed automatically depending on whether all, no or some rules are selected.

Copy and Paste Options

The copy and paste options provide an easy way to transfer a set of rules from one Planogram Substitution Definition to another.

- Selecting the copy option on the toolbar, Edit menu or using the Ctrl+C shortcut key will copy the details of the checked rules to the Windows clipboard.
- Selecting the paste option on the toolbar, Edit menu or using the Ctrl+V shortcut key will copy the rules currently copied to the windows clipboard and check the settings in the Rules tab accordingly.

Exiting the Rules Tab

On leaving the Rules tab, the software will test if any rules have been selected. If no rules are selected, two warnings will be given:

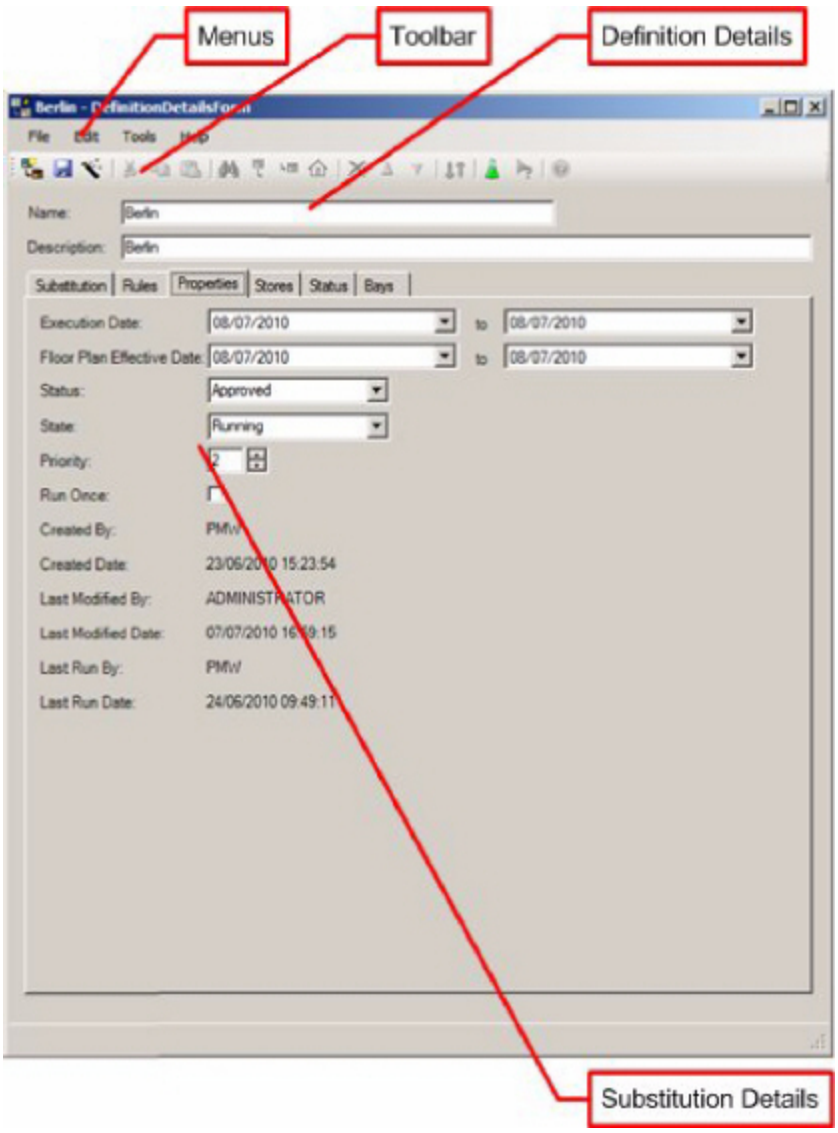
- A Warning Icon will be displayed on the Rules tab itself.
- The message "No rules selected" will be displayed on the status bar.

Properties Tab

The Properties tab holds information on the dates the planogram substitution definition is valid for, together with its Status and State.

Description of the Properties Tab

The Properties tab has the following parts:



- The menus contain all options available to the User.
- The toolbars contain a more restricted list of options available to the User.
- The Definition Details give the Name and Description of the Planogram Substitution Definition.
- The Substitution details enable the user to set dates the planogram substitution is valid between.

Using the Properties Tab

Settings in the **Properties** tab determine when and how the planogram substitution will run.

Execution Date

The Execution Dates can be set using the date time picker to any date equal to the current date or to a date in the future. The definition will be able to be run during the inclusive period set by the execution dates, i.e. when the current date is equal to or less than the first execution date and the current date is equal to or less than the execution date.

Floor Plan Effective Date

The Floor Plan Effective dates can be set using the date time picker to any date equal to the current date or to a date in the future. They are used in two circumstances:

- When planogram substitutions are being made into files of Authorized status.
- When planogram substitutions are being made into files of Current status and files are being cloned.

When planogram substitutions are made into files of Authorized status, the Effective Date of the file must fall within the range of dates specified in the Floor Plan Effective Date or no substitutions will be made.

For planogram substitutions to be carried out on files of Current status, the PLANOGRAN_SUBSTITUTION_COPY_FILE system variable must be set to On (1). The substitutions will then be carried out in an existing file of Authorized status if the Effective Date of the file falls within the range of dates specified in the Floor Plan Effective Date. If no such Authorized file exists, then one will be created in the same revision as the Current file with an Effective date matching the earliest date in the Floor Plan Effective Date.

Status

The Planogram Substitution Status drop down list enables users to show where the Planogram Substitution Definition is in the business work flow.

> **Note:** Statuses are configurable in the Administration module. This section of the help file describes the default statuses supplied with the application.

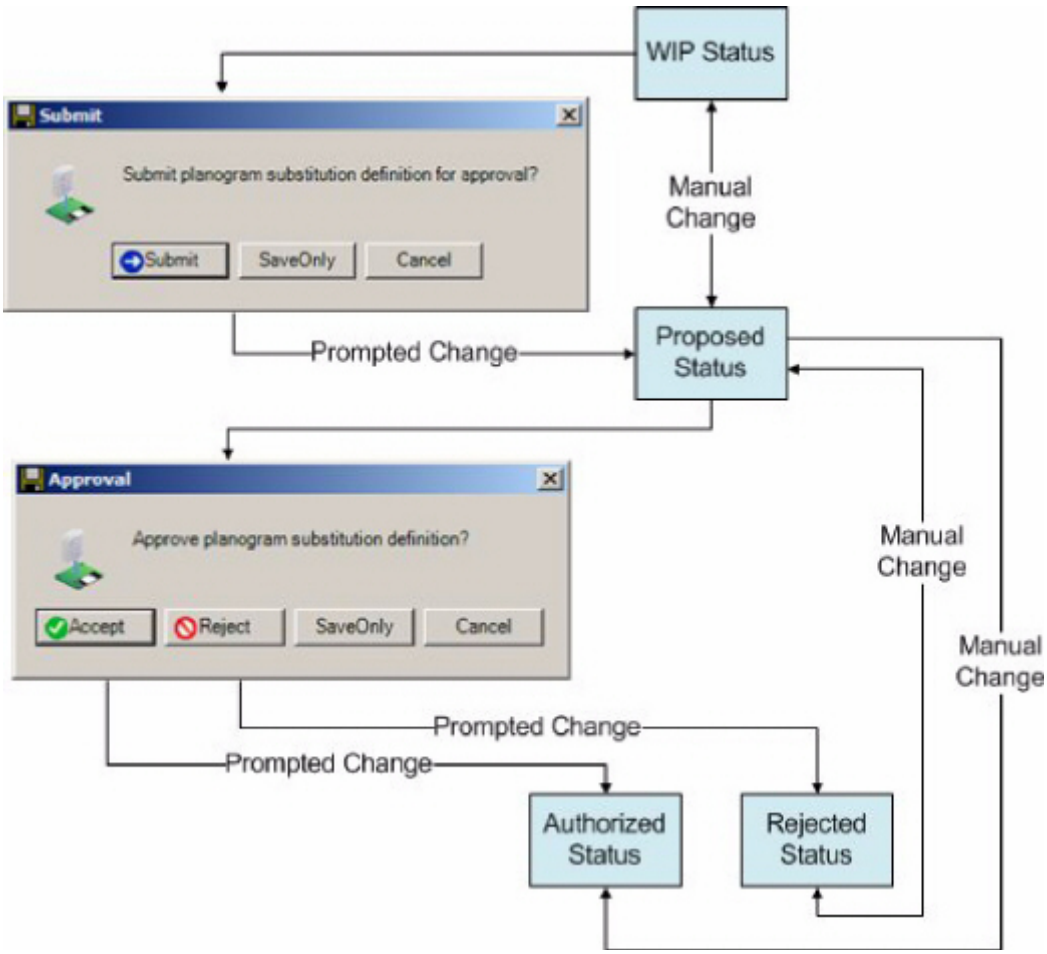
The default statuses set up with the application are:

Status	Comment
WIP (Work in Progress)	Planogram Substitution Definition being developed
Proposed	Planogram Substitution Definition ready for approval
Authorized	Approved Planogram Substitution Definition - when this status is reached the Planogram Substitution Definition will be set to 'Read Only' and no further changes will be possible.
Rejected	Rejected Planogram Substitution Definition

Statuses can be changed in one of two ways:

- Manually, by changing the status using the drop down list in the Status Tab. In this case, only the statuses before and after the currently set status will be available for selection.
- Via a dialog box that appears when exiting the tab.

If a User manually changes the status before exiting the tab, they will be allowed to exit the tab without the Submit or Approval dialog boxes appearing. If the User has not manually changed the status, the Submit or Approval dialog box will appear depending on the currently set status for the Planogram Substitution.



Priority

The priority spin control can be used to set priorities for executing Planogram Substitutions when being run as a batch process. The priority will determine which definition is run first if more than one definition is to be executed on the same date. Priority 1 will run first, followed by Priority 2, and so on. Each priority must be unique. If the execution priority is set to the same value as another definition then the existing priorities will be incremented by one to ensure they remain unique.

For example if the Priority is set to 3 and there is an existing Priority 3, the existing priority will be changed to 4.

Run Once

The Run Once flag enables user to specify whether the planogram substitution will run once only, or will run all the time the Execution Date is valid. Checking the tick box ensures the substitution will only be executed once.

The information below is displayed 'Read only' depending on the current information in the database.

State

The State List shows the current condition of the planogram substitution.

State	Comment
Ready	The Planogram Substitution is ready to execute.
Running	The Planogram Substitution is currently executing
Stopping	The Planogram Substitution is currently running but a manual or batch command has been issued to stop/terminate the substitutions.
Stopped	The Planogram Substitution was running but was stopped by means of a manual or batch command.
Pausing	The Planogram Substitution is currently running but a manual or batch command has been issued to pause the substitutions.
Paused	The Planogram Substitution was running but was paused by means of a manual or batch command.
Finished	The Planogram Substitution has been run to completion.

The state can only be changed by users with Admin privileges and indicates whether the substitution definition has been run or is in the process of being run.

Created By

This field shows the name of the MSM User that first saved the planogram substitution definition.

Created Date

This field shows the date and time when the planogram substitution definition was first saved.

Last Modified By

This field shows the name of the MSM User that last saved the planogram substitution definition.

Last Modified Date

This field shows the date and time when the planogram substitution definition was last saved.

Last Run By

This field shows the name of the MSM User that last ran the planogram substitution definition. This could be a User running a substitution from within a store plan, an Administrator manually running an entire batch of substitutions, or an Administrator running substitutions via a batch process.

Last Run Date

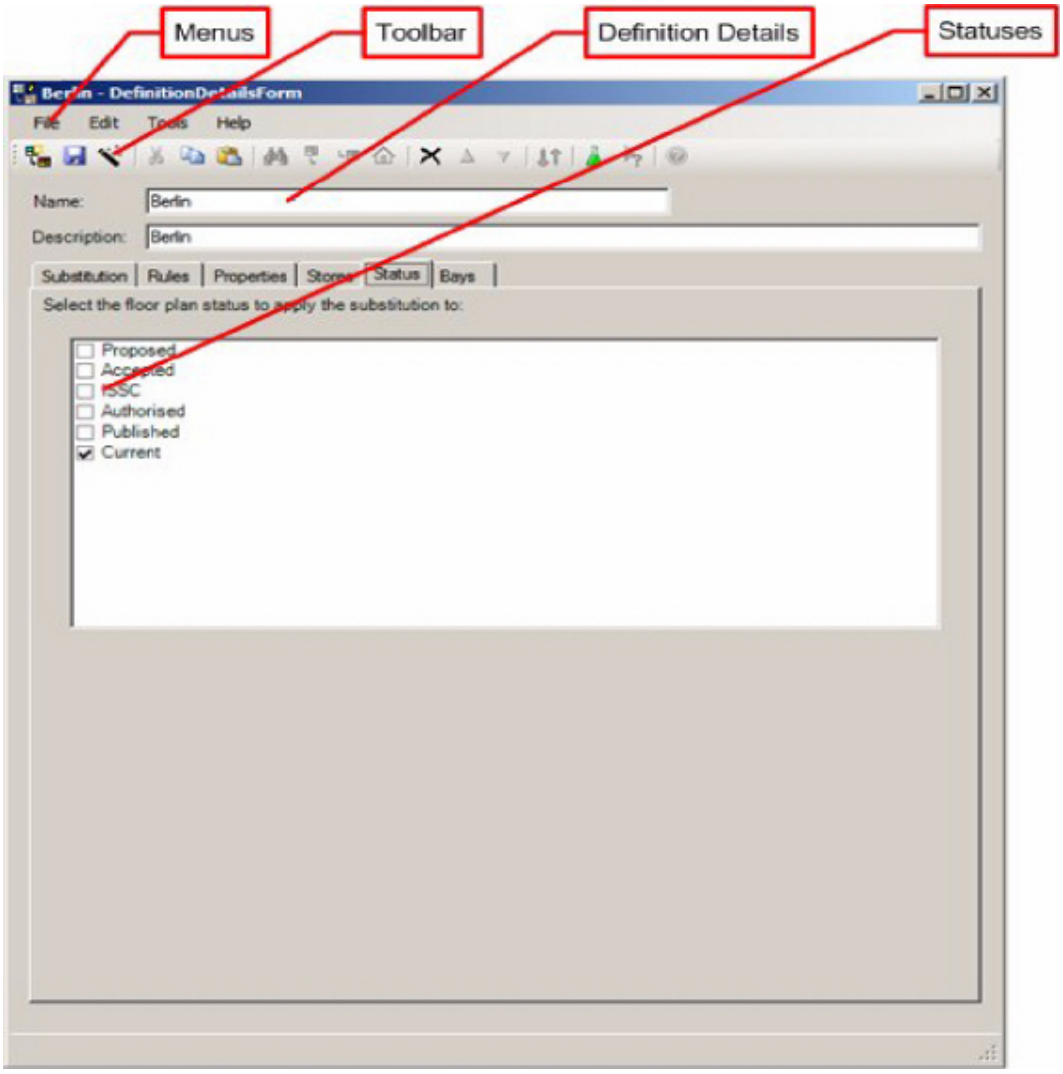
This field shows the date and time when the planogram substitution definition was last run.

Status Tab

The **Status** tab is used to select File Statuses that floor plans must be at in order for planograms to be substituted.

Description of the Status Tab

The Status tab is used to select the statuses of the floor plans that will have planogram substitutions carried out on them.



- The menus contain all options available to the User.
- The toolbars contain a more restricted list of options available to the User.
- The Definition Details give the Name and Description of the Planogram Substitution Definition.
- The Status check boxes enable the user to specify the statuses for floor plans the planogram substitution is to be carried out in.

Using the Status Tab

The Status tab contains a list of statuses for files. These are read from the database and may be different for specific implementations of Macro Space Management.

- Historical Status is not shown as this represents store plans that have been taken out of service.
- Authorized Status will be checked by default.
- Current status will only be visible if the PLANOGRAM_SUBSTITUTION_COPY_FILE System Variable is set to on. If this system variable is set to On, files will be cloned as required.

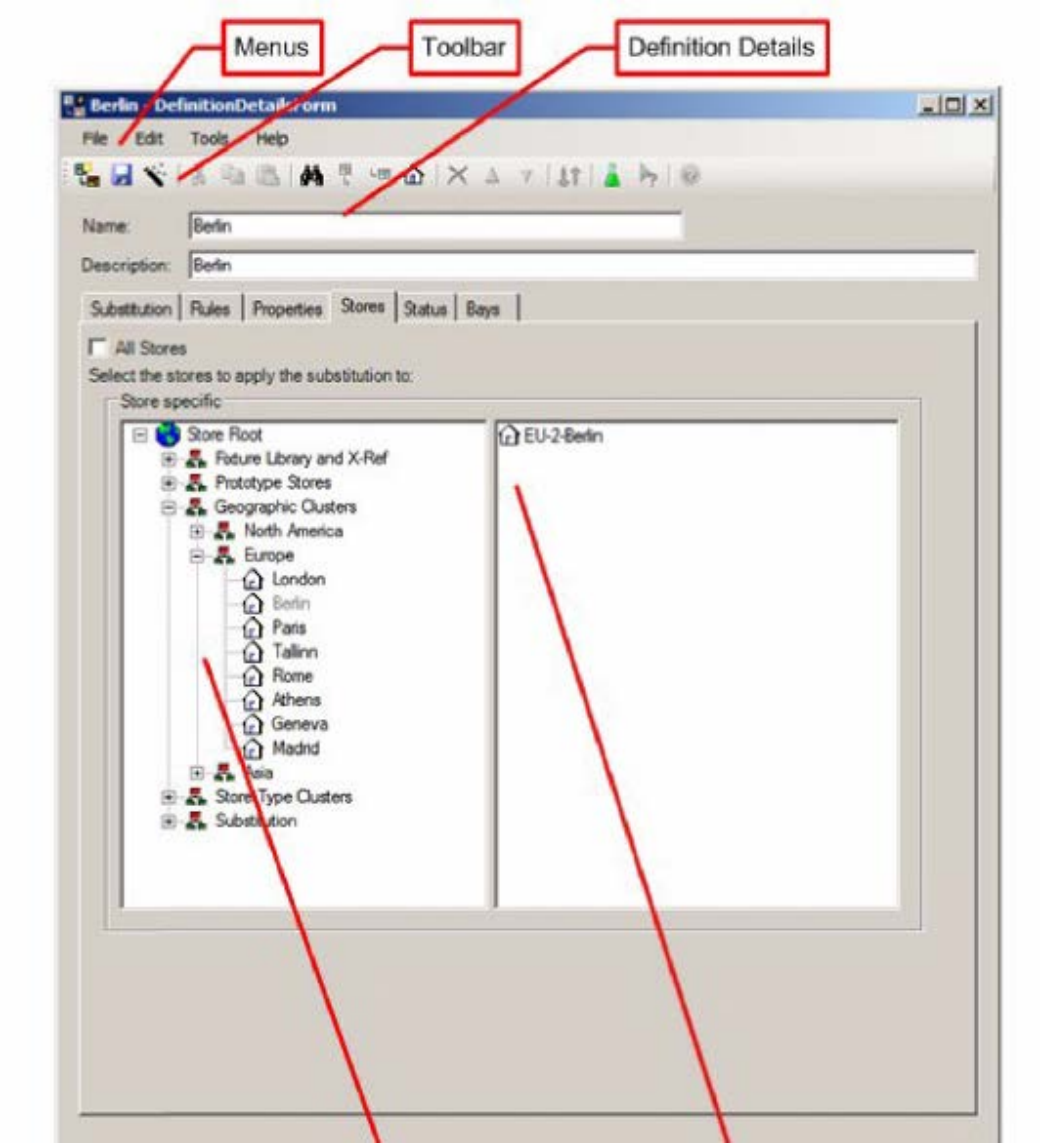
Statuses can be selected by means of the check boxes. A minimum of one status must be selected.

Stores Tab

The Stores Tab can be used to refine the list of stores that the substitution will be carried out in.

Description of the Stores Tab

The Stores tab contains two panes. On the left is the store hierarchy showing all possible stores that the substitution can take place in. On the right are the stores that have been excluded from the substitution.



- The menus contain all options available to the User.
- The toolbars contain a more restricted list of options available to the User.
- The Definition Details give the Name and Description of the Planogram
- The Validation Rules enable the user to set how the planogram substitution is to be tested when it is saved and when it is carried out.
- The Notifications give the options for writing messages to the error log.

Using the Stores Tab

The Stores tab initially populates with a list of all stores that the planogram substitutions are to be carried out in. This list is determined by the settings in the Status Tab. It may be necessary to make the Planogram Substitution store specific. This is because not all stores have the same arrangement of planograms. When the tab is opened, the 'All stores' check box can be checked to ensure that the planogram substitution is carried out in all selected stores.

Alternatively, the checkbox can be unchecked, allowing users to make the planogram substitution store specific. Initially all stores are selected and are in the hierarchy on the

left. Moving stores to the pane on the right deselects them from the list of stores the substitution will be carried out in. There are several ways of achieving this:

- Stores can be deselected by dragging a store or a cluster from the hierarchy and dropping it to the list view on the right-hand side of the store specific group. When a cluster is selected from the hierarchy then all of the stores that are descendants of the cluster will be deselected.
- Stores can be deselected by highlighting an item in the hierarchy and pressing the store toolbar button. When a cluster is selected from the hierarchy then all of the stores that are descendants of the cluster will be deselected.
- Using the Find option to deselect stores.

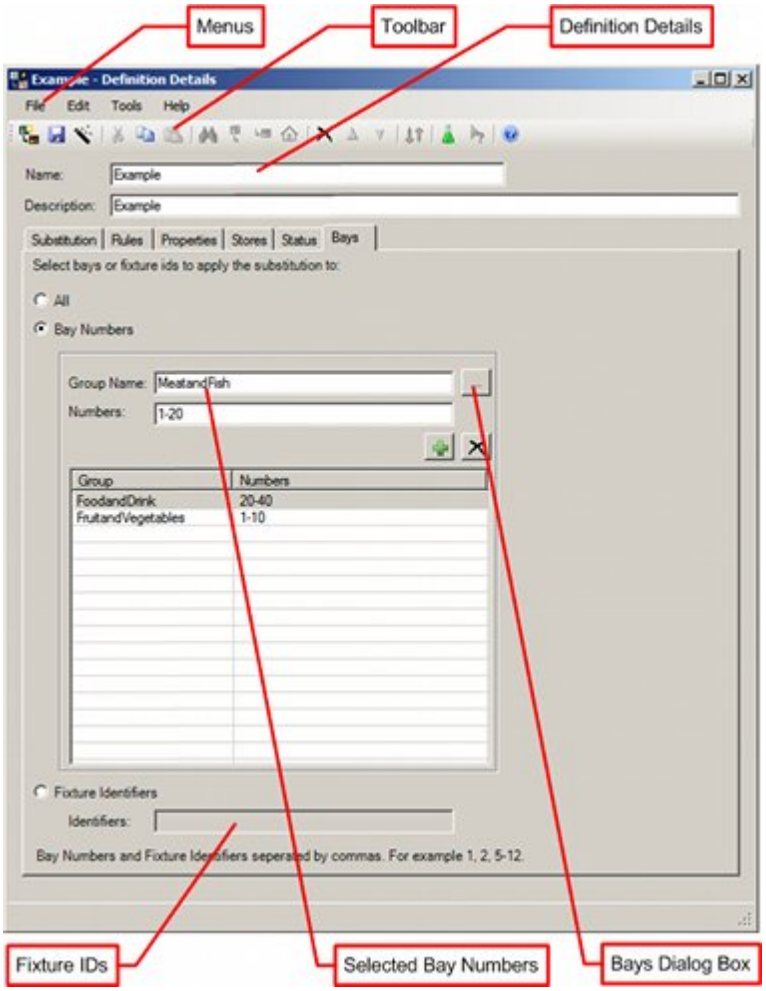
Bays Tab

The Bay Numbers tab allows Users to specify bay numbers as a further filter for planogram substitutions.

> **Note:** Bay Numbers can be assigned to fixtures in the Planner Module.

Description of the Bays Tab

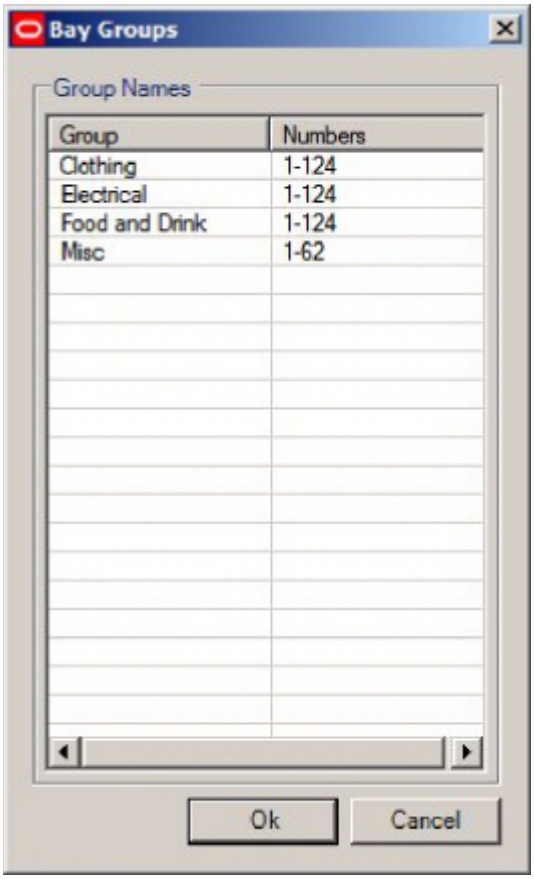
The Bays Tab consists of the tab itself, and the Bays dialog box that can be called from it.



- The menus contain all options available to the User.
- The toolbars contain a more restricted list of options available to the User.
- The Definition Details give the Name and Description of the Planogram Substitution Definition.
- The Bays dialog box enables users to call the Bays dialog box.
- The selected Bay Numbers is a list of bay numbers that the planogram must occupy.

Bays Dialog Box

The Bays dialog box enables users to select from the list of available bays.



Note: Users should be aware that bay numbers may differ from drawing to drawing. Depending on how Bay Numbering has been implemented, Bay A1 in one drawing may not be in the same location in another drawing.

Using the Bays Tab

How the Bays tab operates will depend on the setting of the All/Bay Numbers/Fixture Identifier radio button. Only one method can be used within a specific planogram definition.

1. If the Radio Button is set to All, planograms will be substituted irrelevant of which bay they are placed on in a floor plan.

2. If the Bay Numbers radio button has been selected then existing planograms will only be substituted if they are placed on an appropriately bay numbered fixture in a floor plan.
3. If the Fixture Identifier radio button has been selected then existing planograms will only be substituted if they are placed on an appropriately numbered fixture in a floor plan.

> **Note:** Fixture Numbers can be seen in the Merchandiser module, or in In-Store Space collaboration. Alternatively they could be identified from a report.

All Bays

If the All Bays radio button is selected, the Bay Numbers and Fixture Identifier options will be greyed out and unavailable.

Bay Numbering

If the Bay Numbers radio button is selected, the Fixture Identifier option will be greyed out and unavailable, while the Bay Numbers option will be available. There are two ways to add Bay Numbers to the list of bay numbers:

1. By typing in the required Group Name and Numbers into the Group Name and Number text boxes and clicking the Add icon. (Numbers can be entered as a range separated by a hyphen: for example 5-23).
2. By clicking on the button with ellipses to open the Bays dialog box, highlighting a row and clicking the OK button.

Fixture Identifiers

If the Fixture Identifier radio button is selected, the Bay Numbers option will be greyed out and unavailable, while the Fixture Identifiers option will be available. Fixture identifiers must be added manually - the identifiers text box will accept a list of comma separated numbers and number ranges where number ranges are connected by a hyphen, for example. 5012-5211.

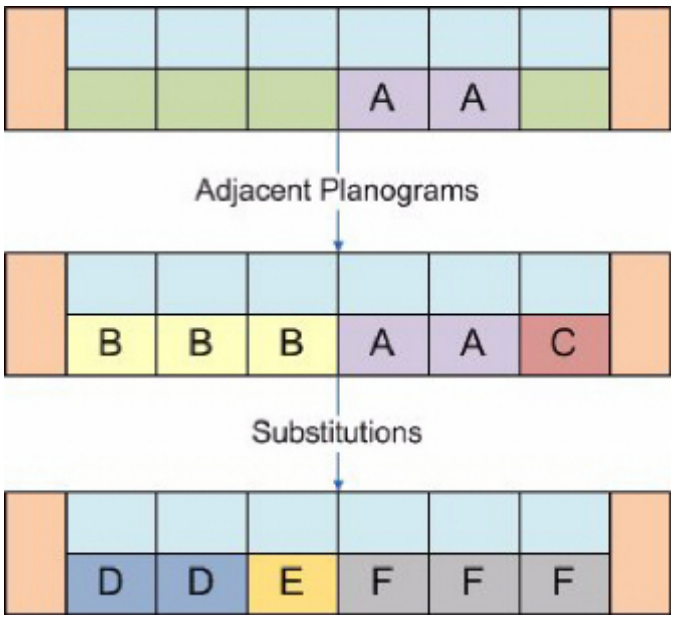
Planogram Substitution Assistant

Overview of Planogram Substitution Assistant

The Planogram Substitution Assistant aids users to set up Planogram Substitution Definitions. It can be accessed from:

- The Substitution Assistant option on the tools menu or the toolbar of the Planogram Substitution dialog box. If selected in this manner, the Assistant will be blank and all information will have to be entered.
- The Substitution Assistant option on the tools menu or the toolbar of the Planogram Substitution Definition dialog box. If selected in this manner, the Assistant may be partially populated with data.

The Planogram Substitution Assistant works in three broad stages.



1. The initial stage is to select a planogram (or planogram) as the basis for the substitution. This is done using the Existing Planograms page of the Assistant.

   In the above example, the 8 foot planogram 'A' has been selected.

2. The second stage is to select any adjacent planograms it is desired to include in the substitution. This is done using the Adjacent Planograms page of the Assistant. In the above example, the 12 foot planogram 'B' and the 4 foot planogram C have been selected as suitable for replacement and adjacent to planogram 'A'. The purpose of this is to allow the user to expand the area available to substitute planograms in. If adjacent planograms have a low Planogram Financial Weighting score, it may be sensible to include those in the list of planograms to be substituted.

3. The final stage is to select the replacement planograms. This is done using the New Planograms page of the Assistant.

   In the above example the 8 foot planogram 'D', the 4 foot planogram 'E' and the 12 foot planogram 'F' have been selected to replace the original planograms 'A', 'B' and 'C'.

> **Note:** The Assistant also enables users to select the floor plan statuses and stores the substitutions will be valid for.

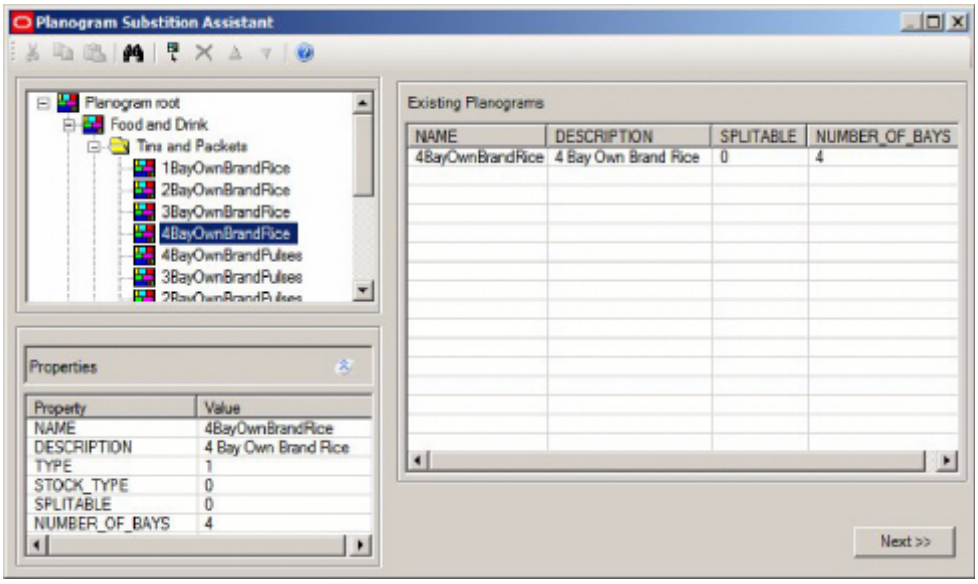
On completion of the steps within the Planogram Substitution Assistant the user will be taken to the Planogram Substitution Definition dialog box, which will have been populated with information from the Planogram Substitution Assistant.

Planogram Substitution Assistant Pages

The Planogram Substitution assistant consists of three pages. Users can move through these pages using the next or back buttons in the lower right corner. Each successive page assists users with one or more aspects of defining a planogram substitution.

First Page - Existing Planograms

The Existing Planogram page allows users to manually select the planograms that will substituted.

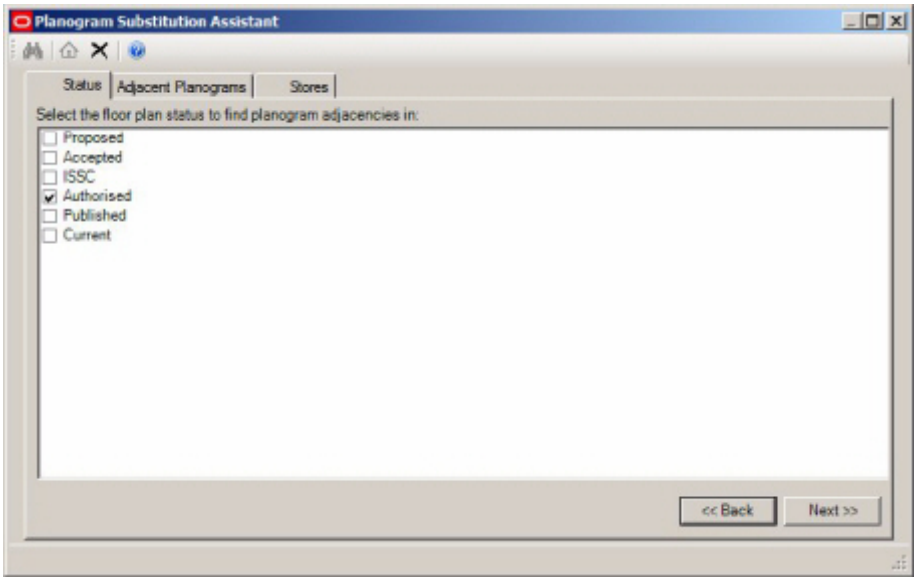


Users can select or deselect planograms for substitution and change the order in which they will be substituted.

Clicking the Next button takes users onto the next page where the Assistant will open in the Status tab.

Second Page - Status Tab

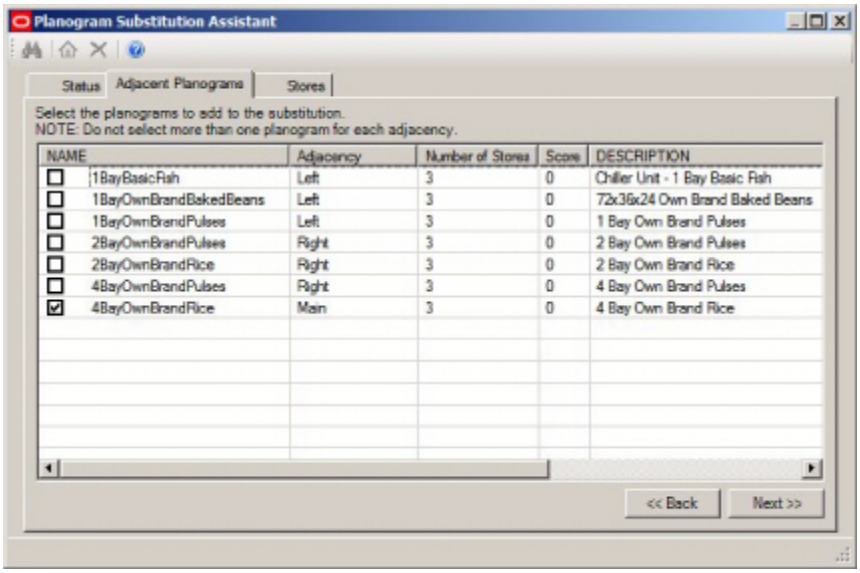
The Status Tab enables the user to select the file statuses that the planogram substitution will operate on. Current status will only be visible if the PLANOGRAM_ SUBSTITUTION_COPY_FILE System Variable is set to On.



Clicking the Next button will take the user onto the Adjacent Planograms tab.

Second Page - Adjacent Planogram Tab

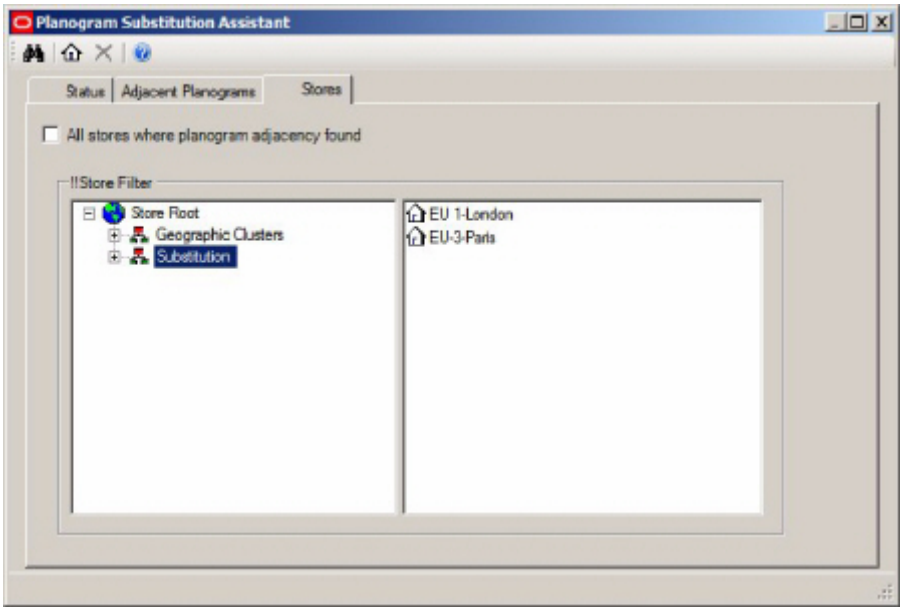
The Adjacent Planogram page enables users to select planograms that are to the left, right or sharing the same fixture as the planograms selected in the Existing Planogram page.



Clicking the next button will take the user onto the New Planogram page - to so to the stores tab, click manually on it.

Second Page - Stores Tab

The stores tab enables users to select the stores that the planogram substitutions will be carried out in.

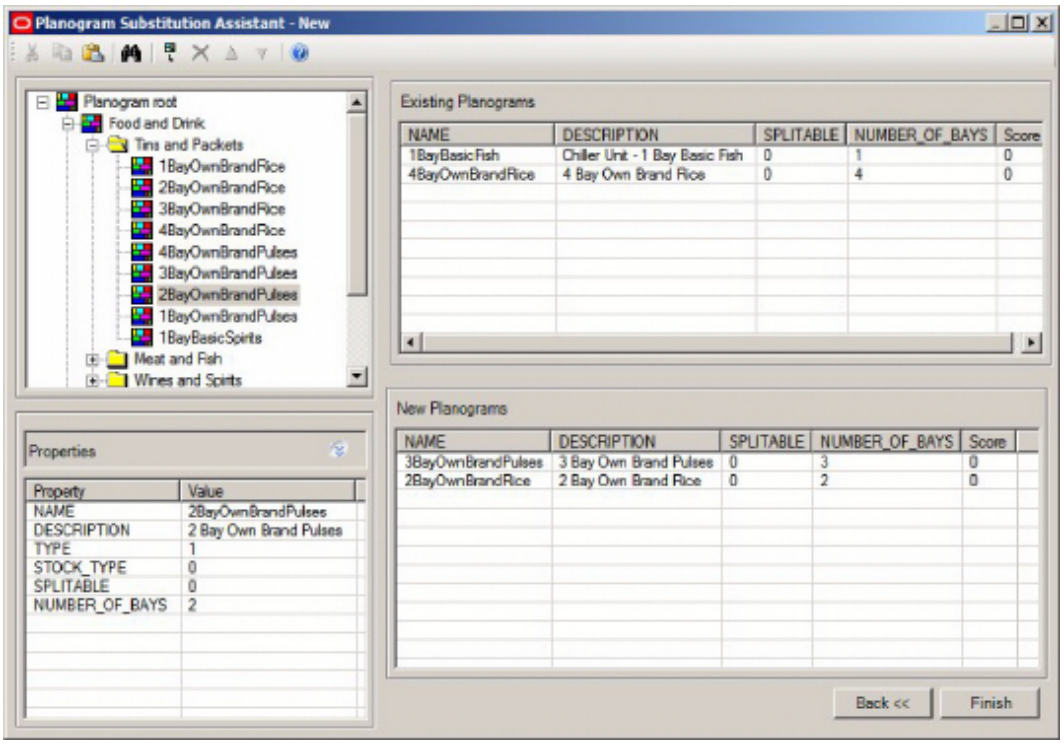


> **Note:** This dialog box works in the reverse sense from the Planogram Substitution Definition dialog box. The stores the planogram substitution will be carried out are in the left hand pane.

Click manually on the Adjacent Planograms tab, and then click the Next button to go to the New Planograms page.

New Planogram Page

The New Planogram page enables the user to select the planograms that will be replace the planograms to be substituted.



After the required new planograms have been selected, clicking the Finish button will take the user to the Planogram Substitution Definition dialog box.

Opening Status of Planogram Substitution Assistant

The Planogram Substitution Assistant can be opened from either the Planogram Substitution dialog box or the Planogram Substitution Definition dialog box. Which page the Assistant opens in will be determined by the information already defined in the Planogram Substitution.

1. If no existing planograms have been selected then the Existing Planograms window will be displayed.
2. If existing planograms have been set but no new planograms have been defined then the adjacent planograms window will be displayed.
3. If both existing planograms and new planograms have been set then the new planograms window will be displayed.

Adjacency Calculations

Prior to using the Planogram Substitution Assistant, two forms of Adjacency calculation should have been run:

1. Fixture Adjacencies
2. Product Adjacencies

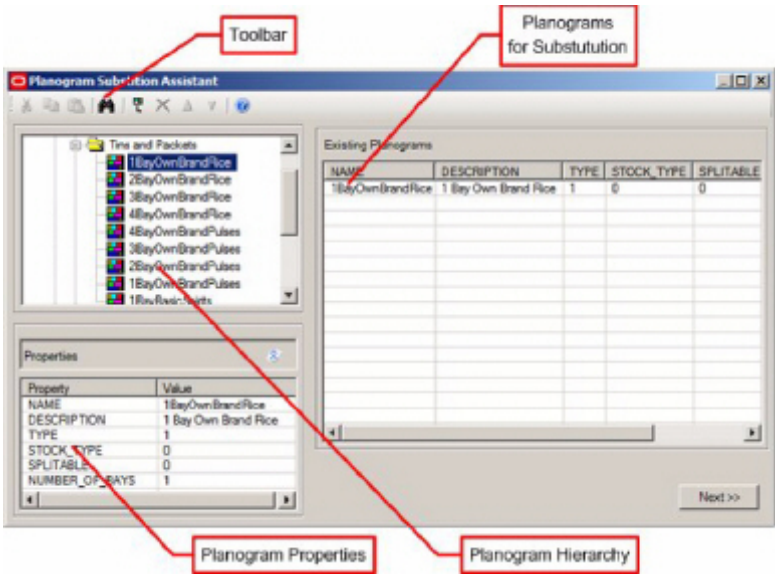
If planogram substitutions are only to be carried out in a few drawings, Fixture and Product Adjacencies can be run manually using the options from the Calculation menu or toolbar.

If a large number of drawings are to have planogram substitutions made, then running the Fixture and Product Adjacencies as a batch process may be the most effective may of preparing to use the Planogram Substitution Assistant.

> **Note:** If Fixture and Product Adjacencies are not run, the results displayed in the Adjacent Planograms tab of the Planogram Substitution Assistant may not be accurate.

Existing Planogram Page

The Existing Planogram enables users to add or remove planograms from the list of those to be substituted.



Description of the Existing Planogram Page

The New Planogram Page consists of a number of parts.

- The Toolbar contains the options available to the User
- The Planogram Hierarchy contains the list of planograms available for selection for substitution
- The Planogram Properties window shows properties for the planogram currently highlighted in the Planogram Hierarchy.
- The Planograms for Substitution contains the list of planograms that will be substituted for by fresh planograms when a planogram substitution is run.

The toolbar contains the following options:

Icon	Option
	Cut
	Copy
	Paste
	Find

Icon	Option
	Add Planogram to List
	Delete Planogram from List
	Promote Planogram in List
	Demote Planogram in List
	Help

Using the Existing Planogram Page

Opening status of the Existing Planogram Page

The Planogram Substitution Assistant will open in the Existing Planogram page if no planograms have been defined as suitable for substitution.

Planogram Hierarchy

Two factors need to be taken into account when using the Planogram Hierarchy:

- The Planogram Hierarchy will only contain the latest revision of a planogram for any given planogram lineage.
- Which planograms are visible to a specific User will be governed by which User Groups they have been assigned to and what branches of the planogram hierarchy those User Groups have access to. (This is configured in the Administration module).

Adding and Deleting Planograms

There are several ways planograms can be added or deleted:

- Planograms can be selected by dragging a planogram or a planogram group from the hierarchy and dropping it to the existing planograms list on the right-hand side of the existing planograms window.
- Planograms can be added to the existing planograms list by highlighting an item in the hierarchy and selecting the Add Existing Planogram option from the toolbar.
- Planograms can be added to the existing planograms by using the Find… option on the toolbar.
- Planograms can be added to the existing planograms by using the paste option to paste in a planogram name or planogram code. The rest of the row of data will populate automatically.

If a planogram group is selected from the hierarchy then all of the planograms that are direct descendants of the group will be added to the selection set.

Reordering Planograms

The list of planograms can be reordered by means of the up or down arrows on the toolbar.

- The up and down toolbar options will be enabled when one or more consecutive rows are selected in the existing planograms list. They will be grayed out if the selected rows are not consecutive or no rows are selected.
- Using the up or down arrows will promote or demote the selected rows in the sequence that planograms are substituted. The planogram at the top of the list will be substituted first, the next in the list second, and so on....

Cut Copy and Paste Functionality

The cut, copy and paste functionality has two main functions:

- To edit the list of Existing Planogram Substitutions.
- To transfer data to and from external applications.

Editing the list of Existing Planograms

The list of existing planograms can be edited as follows:

- Planograms can be added to the existing planograms by using the paste option to paste in a planogram name or planogram code. The rest of the row of data will populate automatically.
- Planograms can be removed from the list of existing planograms by highlighting rows and using the Cut option.

Transferring Data to and from External Programs

Data can be transferred to and from external programs (for example a spreadsheet) by:

- Highlighting data in the Planogram Hierarchy, Properties Window or list of existing Planograms. Data can then be transferred to the Clipboard by means of the Copy command. Once the external program (for example a spreadsheet) is open, the Paste command can be used within that program to enter the data.
- Highlighting data in an external program (for example a report) and using the Copy command to transfer it to the Clipboard. Once in the Planogram Substitution Assistant, the Paste command can be used to add Planogram Names or Planogram Codes to the list of existing planograms.

The Next Button

The Next button will not be enabled until there is at least one planogram in the existing planograms list.
Once the Next button is enabled, clicking it will take the User to the Adjacent Planograms Page - the next stage in the Planogram Substitution Assistant.

Adjacent Planogram Page

The adjacent Planogram page is used to expand the selection of planograms. Examples of why the selection might need to be extended are:

- A specific planogram is performing well and it has been decided to expand the amount of fixturing allocated to that type of merchandise.
- A specific planogram is performing poorly and it has been decided to replace that planogram and any adjacent planograms with alternative merchandise that will generate more profit.
- The store is being reorganized and it has been decided to replace one form of merchandise with another.

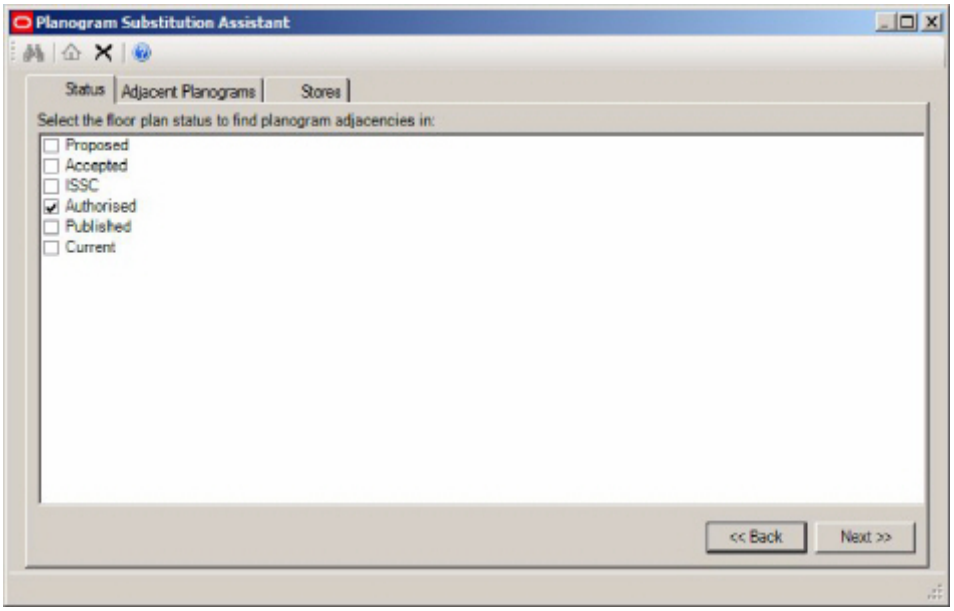
Description of the Adjacent Planogram Page

The Adjacent Planograms page has three tabs. These are intended to be used in sequence:

1. Statuses - select the store plan statuses that adjacencies will be found in
2. Adjacent Planograms - list adjacent planograms and allow the user to select them
3. Stores - select the store plans that adjacencies may exist in.

The Statuses Tab

The Status tab is used as a filter to determine which statuses floor plans will be checked for planograms that are adjacent to the existing planograms selected for substitution.



The Status tab contains a list of statuses for files. These are read from the database and may be different for specific implementations of Macro Space Management.

- Historical Status is not shown as this represent store plans that have been taken out of service.
- Authorized Status will be checked by default.

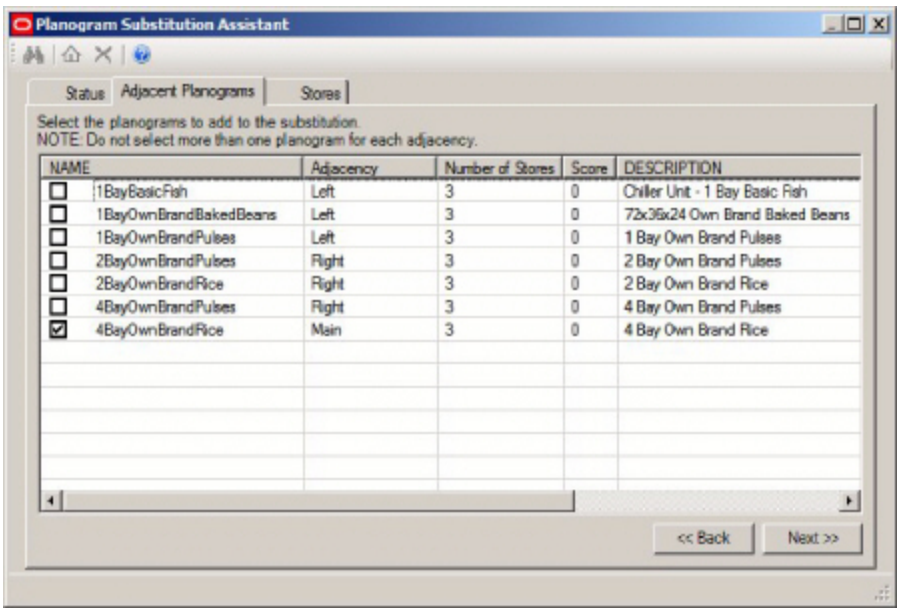
For example, if the user has selected Authorized status, only planogram adjacencies in store plans of that status will be reported.

> **Note:** Current status will only be visible if the PLANOGRAM_SUBSTITUTION_COPY_FILE system variable is set to On (1).

Statuses can be selected by means of the check boxes. A minimum of one status must be selected before the Next button is enabled and the User can move on to the Adjacent Planograms page. When the Next button is pressed, the list of Adjacent Planograms will be populated in the Adjacent Planograms page using the selected statuses as a filter for which store plans are to be checked.

The Adjacent Planograms Tab

The Adjacent Planograms tab allows users to select additional planograms bordering the original planogram(s) selected for substitution. Adjacencies will be established for all store plans with file statuses selected in the Status tab.

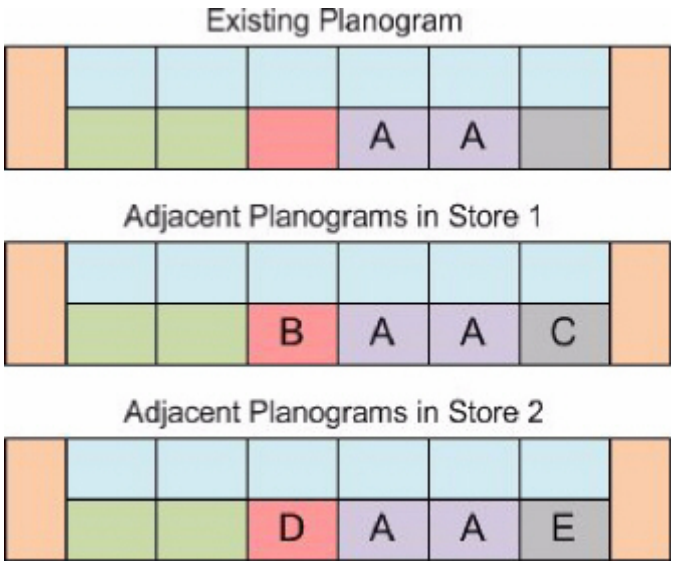


Planograms are selected for substitution by means of the check boxes.

- The Main planogram is the original planogram selected for substitution.
- A planogram with an adjacency of Left is to the left of the main planogram.
- A planogram with an adjacency of Right is to the right of the main planogram.
- A planogram with an adjacency of Same shares the same fixture as the main planogram.

Selecting Adjacent planograms for substitution allows users to expand the area that planograms will be substituted into. A good way of determining whether it is appropriate to expand the selection is the Score (Planogram Substitution financial weighting). A low score indicates the products on the adjacent planograms are not selling well, a high score the converse.

Care needs to be taken in understanding how adjacent planograms are generated.



In the above example, the existing planogram is A. In store 1, planograms B and C are adjacent to it. In store 2, planograms D and E are adjacent to it. The Adjacent Planograms

tab will show Planogram A (the main planogram) as having Planograms B, C, D and E adjacent to it.

Two separate Planogram Substitution definitions will be required to substitute these planograms:

- Planogram A, with its adjacent Planograms B and C will require one definition
- Planogram A, with its adjacent Planograms B and C will require another.

Determining which adjacent planograms are valid to add for a substitution may require inspection of the data.

- If only a single 'Existing Planogram' is selected, if all planograms are the same in all selected store plans, there will only be one planogram adjacent to the left and one to the right. (With possibly another planogram with 'Same' adjacency). More than this number of adjacent planograms suggests that the planograms adjacent to the 'Existing Planogram' may vary from store plan to store plan.
- If multiple 'Adjacent Planograms' exist, inspection of the number of stores plans that a planogram is in will give information on how frequently that adjacency occurs.

There are two ways further information can be obtained:

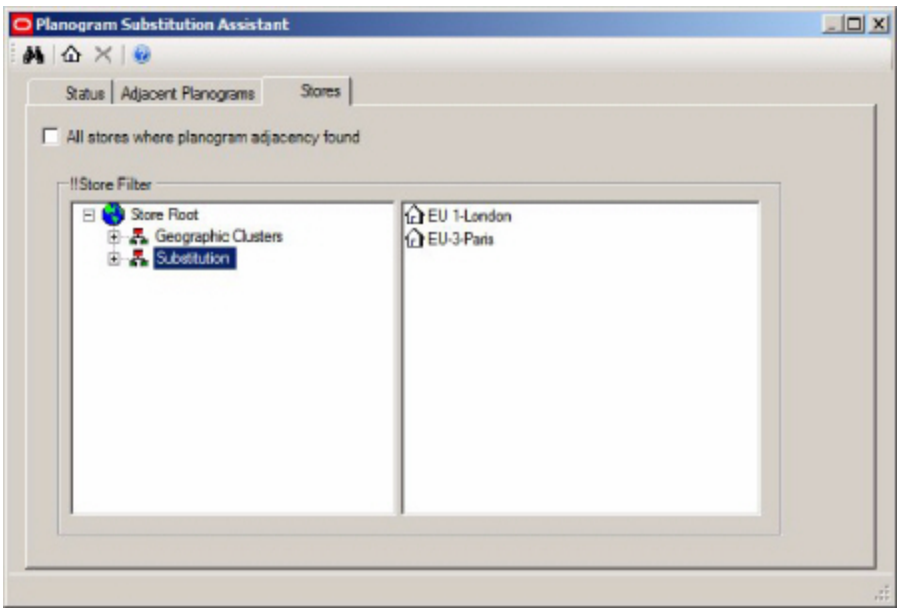
- On completing the Planogram Substitution Assistant, the User will be taken to the Planogram Substitution Definition dialog box. Clicking the Dry Run option will produce a report showing which substitutions are successful and which were not. This will allow specific store plans in which this Planogram Substitution is valid to be identified.
- Alternatively, the User can complete the Planogram Substitution Assistant, save the resulting Planogram Substitution Definition, and then go to the Planogram Substitution dialog box. Clicking the Dry Run option will produce a global report showing which substitutions are successful and which were not. This will allow Planogram Substitutions to be refined by being made more store specific.

Once the required adjacent planograms have been selected, the User has two options:

- If the User clicks the Stores tab they will be taken to the stores tab to restrict the Planogram Substitutions to specific stores.
- If the User clicks the Next button they will be taken to the New Planograms page.

Stores Tab

The Stores tab is used to further restrict which stores planograms will be substituted in.



Stores can be deselected by dragging and dropping them from the Store hierarchy to the right hand pane. After the list of stores that substitutions will be carried out in has been modified, Users should return to the Adjacent Planograms tab to see that the selected planograms are still available for substitution.

> **Note:** This dialog box works in the reverse sense from the Planogram Substitution Definition dialog box. The stores the planogram substitution will be carried out in are in the left hand pane.

The Stores tab initially populates with a list of all stores that the planogram substitutions are to be carried out in. This list is determined by the settings in the Status Tab. After any required adjacent planograms have been defined in the Adjacent Planogram tab, it may be necessary to make the Planogram Substitution store specific. This is because not all stores have the same arrangement of planograms.

Adjacent Planogram Page

When the tab is opened, the 'All stores where planogram adjacency found' check box can be checked to ensure that the planogram substitution is carried out in all selected stores.

Alternatively, the checkbox can be unchecked, allowing users to make the planogram substitution store specific. Initially all stores are selected and are in the hierarchy on the left. Moving stores to the pane on the right deselects them from the list of stores the substitution will be carried out in. There are several ways of achieving this:

- Stores can be deselected by dragging a store or a cluster from the hierarchy and dropping it to the list view on the right-hand side of the store specific group. When a cluster is selected from the hierarchy then all of the stores that are descendants of the cluster will be deselected.
- Stores can be deselected by highlighting an item in the hierarchy and pressing the store toolbar button. When a cluster is selected from the hierarchy then all of the stores that are descendants of the cluster will be deselected.
- Using the Find option to deselect stores.

Stores that have been added to the selection set will be grayed out in the hierarchy. If the stores that have been deselected contain all examples of a particular type of adjacent

planogram, that planogram will no longer show as adjacent when the user reverts to the Adjacent Planogram tab.

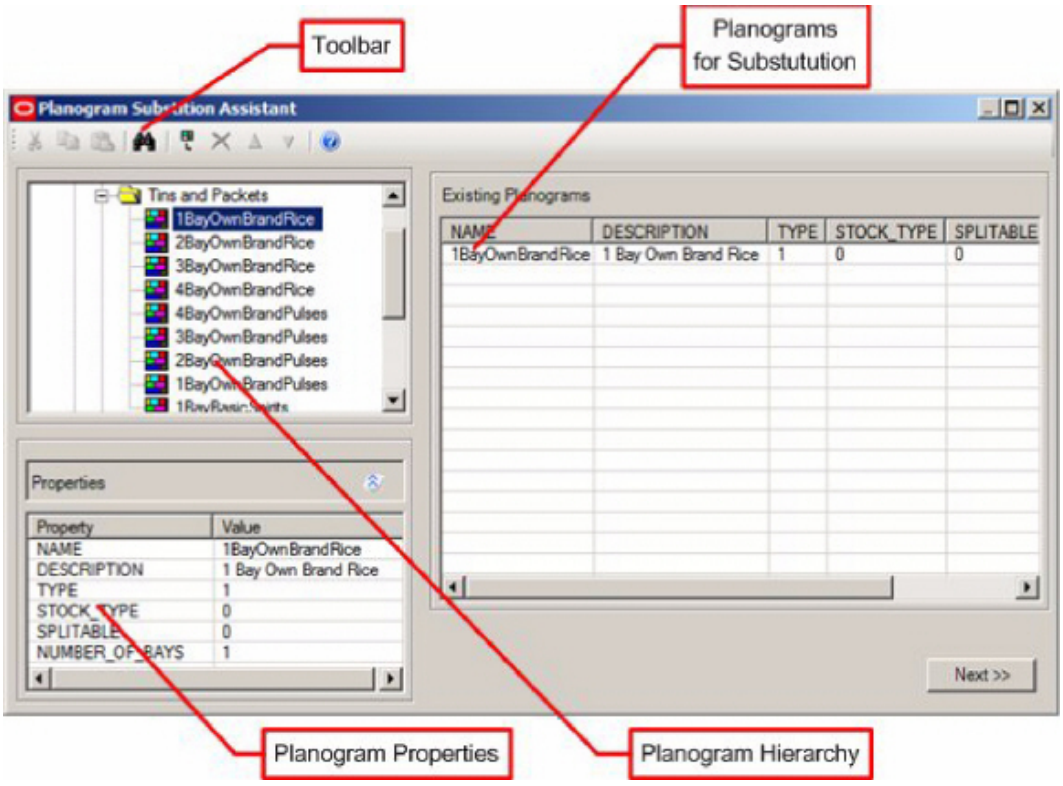
When the store hierarchy has been modified as required, the user must return to the Planogram Adjacencies tab, where clicking the Next button will take them to the New Planograms tab.

New Planograms Page

The New Planograms Page allows Users to select the planograms that will be the replacement for the planograms that have been selected for substitution.

Description of the New Planograms Page

The New Planograms page is used to specify the planograms that will replace those selected for substitution.



- The Toolbar contains the options available to the User
- The Planogram Hierarchy contains the list of planograms available for selection for substitution
- The Planogram Properties window shows properties for the planogram currently highlighted in the Planogram Hierarchy.
- The Planograms for Substitution contains the list of planograms that will be substituted for by fresh planograms when a planogram substitution is run.
- The Planograms to Be Added contains a list of the planograms that will replace the substituted planograms.

The toolbar contains the following options:

Icon	Option
	Cut
	Copy
	Paste
	Find
	Add Planogram to List
	Delete Planogram from List
	Promote Planogram in List
	Demote Planogram in List
	Help

Using the New Planogram Page

Opening status of the New Planogram Page

The Planogram Substitution Assistant will show in the New Planogram page existing planograms that have been designated for substitution and any associated adjacent planograms.

Planogram Hierarchy

Two factors need to be taken into account when using the Planogram Hierarchy:

- The Planogram Hierarchy will only contain the latest revision of a planogram for any given planogram lineage.
- Which planograms are visible to a specific User will be governed by which User Groups they have been assigned to and what branches of the planogram hierarchy those User Groups have access to.

Adding and Deleting New Planograms

> ***Note:*** Only New Planograms can be added or deleted in this page. To change the list of Existing Planograms, Users must go back to the Existing Planograms tab.

There are several ways planograms can be added or deleted:

- Planograms can be selected by dragging a planogram or a planogram group from the hierarchy and dropping it to the new planograms list on the right-hand side of the existing planograms window.
- Planograms can be added to the new planograms list by highlighting an item in the hierarchy and selecting the Add Existing Planogram option from the toolbar or Tools menu.

- Planograms can be added to the new planograms by using the Find… option on the toolbar or Edit menu.
- Planograms can be added to the new planograms by using the paste option to paste in a planogram name or planogram code. The rest of the row of data will populate automatically.

If a planogram group is selected from the hierarchy then all of the planograms that are direct descendants of the group will be added to the selection set.

Reordering New Planograms

The list of new planograms can be reordered by means of the up or down arrows on the toolbar.

- The up and down toolbar options will be enabled when one or more consecutive rows are selected in the existing planograms list. They will be grayed out if the selected rows are not consecutive or no rows are selected.
- Using the up or down arrows will promote or demote the selected rows in the sequence that planograms are substituted. The planogram at the top of the list will be substituted first, the next in the list second, and so on....

Cut, Copy and Paste Functionality

The cut, copy and paste functionality has two main functions:

- To edit the list of New Planograms.
- To transfer data to and from external applications.

Editing the list of Existing Planograms

The list of existing planograms can be edited as follows:

- Planograms can be added to the new planograms by using the paste option to paste in a planogram name or planogram code. The rest of the row of data will populate automatically.
- Planograms can be removed from the list of new planograms by highlighting rows and using the Cut option.

Transferring Data to and from External Programs

Data can be transferred to and from external programs (for example a spreadsheet) by:

- Highlighting data in the Planogram Hierarchy, Properties Window or list of new Planograms. Data can then be transferred to the Clipboard by means of the Copy command. Once the external program (for example a spreadsheet) is open, the Paste command can be used within that program to enter the data.
- Highlighting data in an external program (for example a report) and using the Copy command to transfer it to the Clipboard. Once in the Planogram Substitution Assistant, the Paste command can be used to add Planogram Names or Planogram Codes to the list of new planograms.

The Finish Button

The Finish button will not be enabled until there is at least one planogram in the new planograms list.

Once the Finish button is enabled, clicking it will take the User to the Adjacent Planograms Page - the next stage in the Planogram Substitution Assistant.

Planogram Substitution Find Dialog Box

Introduction to Find Dialog Box

This section of the User Guide describes the Find dialog box. There are two variants:

- Find dialog box in the Planogram Substitution dialog box allowing users to identify specific planogram substitutions.
- Find dialog box on the Planogram Substitution Definition and Planogram Substitution Wizard dialog boxes enabling users to identify stores and planograms.

In addition Administrators have the option of using a Custom SQL statement to set up a customized search.

> **Note:** These dialog boxes are essentially the same. When called in the Planogram Substitution dialog box, there is no results tab because results are highlighted in the list of available planogram substitutions. When called in the Planogram Substitution Definition and Planogram Substitution Wizard dialog boxes, a results tab allows users to manually select from within a result set.

Find Dialog Box - Planogram Substitution Dialog Box

The Find functionality in the Planogram Substitution dialog box consists of a text box for the search text, a Find icon to initiate the search and a Find Options drop down option to set the filters for the find operation.



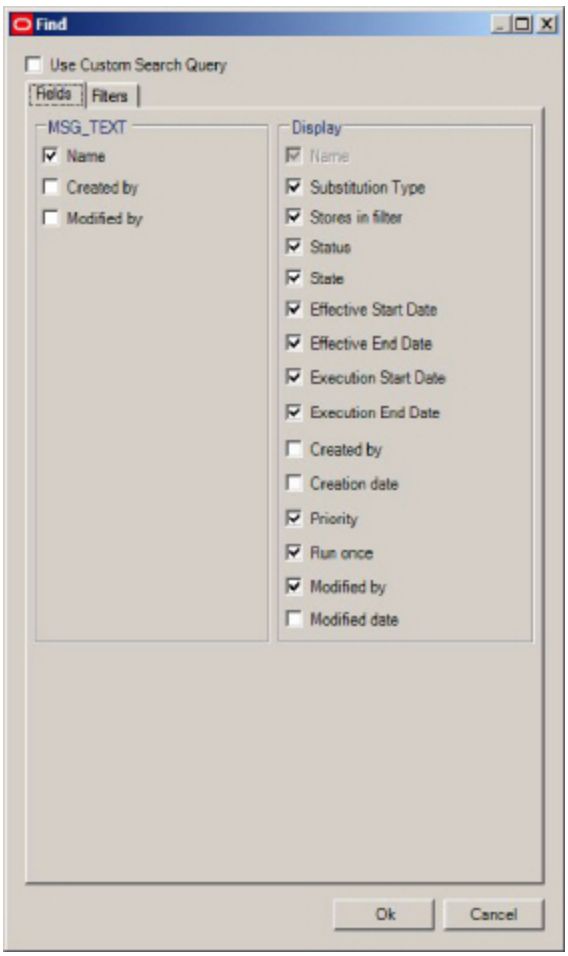
The sequence of operations is:

1. Set the Filters in the Find dialog box (Find Options)
2. Enter the text string in the Search text box
3. Click the find icon
4. The first matching result in the list of planogram substitutions will be highlighted.
5. Successive clicks of the Find icon will step through the other matching results.

Find Options (Filters)

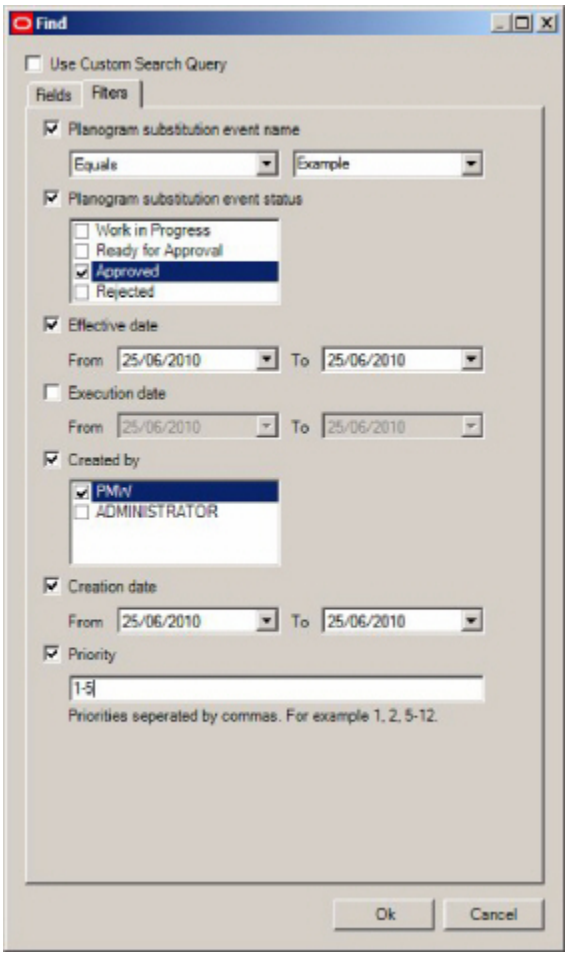
The Find Options allow the user to set filters by which to filter results obtained. There are two tabs:

- Search tab - where the fields to search in and the columns to display are specified.
- Filters tab - where the filters for the results can be set



- The check boxes in the Search frame specify whether the search should be carried out on the Name, Created by (User Name) or Modified by (User Name).
- The check boxes in the display frame specify the columns that will be displayed in the results.

Find Options - Filters Tab



This tab allows the user to set filters for:

- Planogram Substitution Name
- Planogram Substitution Status
- Effective and Execution Dates
- Created by (User Name)
- Creation Date
- Priority

Find dialog box - Planogram Substitution Definitions and Assistant

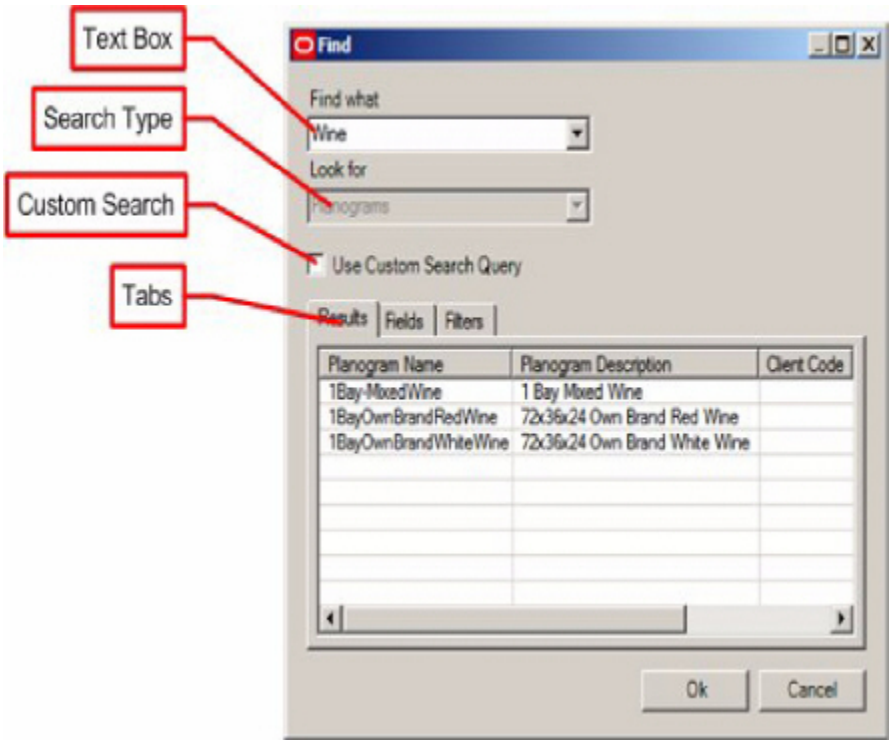
The Find dialog box that is called from the Planogram Substitution Definition and Planogram Substitution Assistant dialog boxes operates in a similar manner to that called from the Planogram Substitution dialog box. The primary difference is that these dialog boxes have a Results tab that is used instead of populating the results into the main dialog boxes.

Depending on the tab in the Planogram Substitution Definition and Planogram Substitution Assistant dialog boxes, the Find dialog box will automatically be set to search for either Stores or Planograms.

It has four main parts:

- The Text Box - for entering a search string.

- The Search Type drop down list - this is automatically set to the appropriate type of object to search for.
- A check box allows the user to use a custom search
- Tabs allow users to look at the Results, or set the required Fields or Filters. The fields and filters will vary depending on whether the search is for Stores or Planograms.



To use the results tab:

1. Enter text into the text box and press [Return].
2. Highlight the required result in the list of results and click OK.
3. The check boxes in the Search frame specify whether the search should be carried out on the Planogram Name, Description, and so on.
4. The check boxes in the display frame specify the columns that will be displayed in the results.

Using the Find Dialog Box

The find dialog box has three tabs: Results, Fields and Filters. The Fields and Filters tabs will vary according to the type of object being searched for.

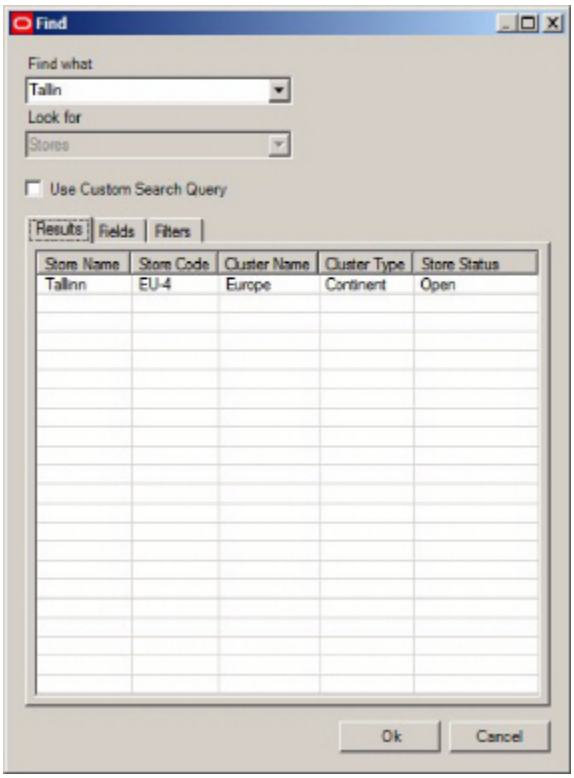
Searching for Stores

Users can search for stores when in a tab in the Planogram Substitution definition or Planogram Substitution Assistant dialog boxes that requires the selection of stores. In this case 'Stores' is pre-selected in the Look For' drop down list. The Find dialog has three tabs.

Results Tab

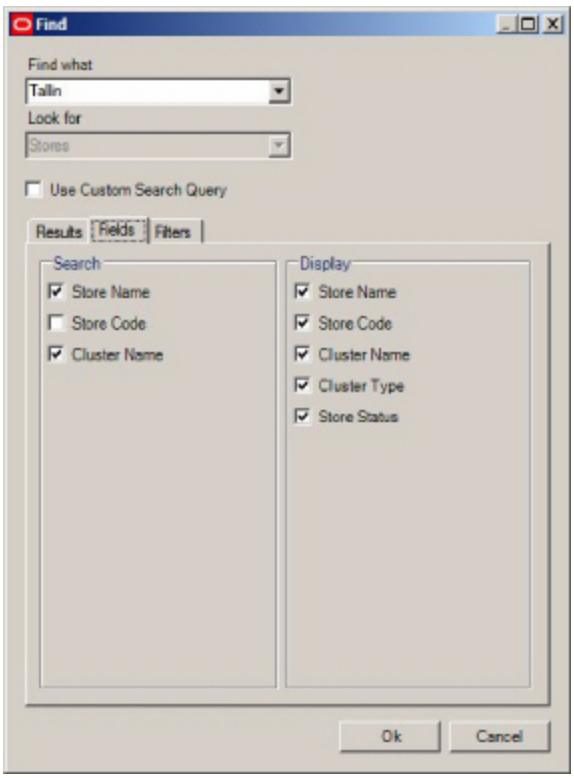
The Results tab will contain the results from the text string in the 'Find What' text box modified by the settings in the Fields and Filters tab. To search:

1. Enter text into the text box and press {Return].
2. Highlight the required results in the Results pane and click OK. The highlighted results will be added to the list of stores the substitution will be carried out in.



Fields Tab

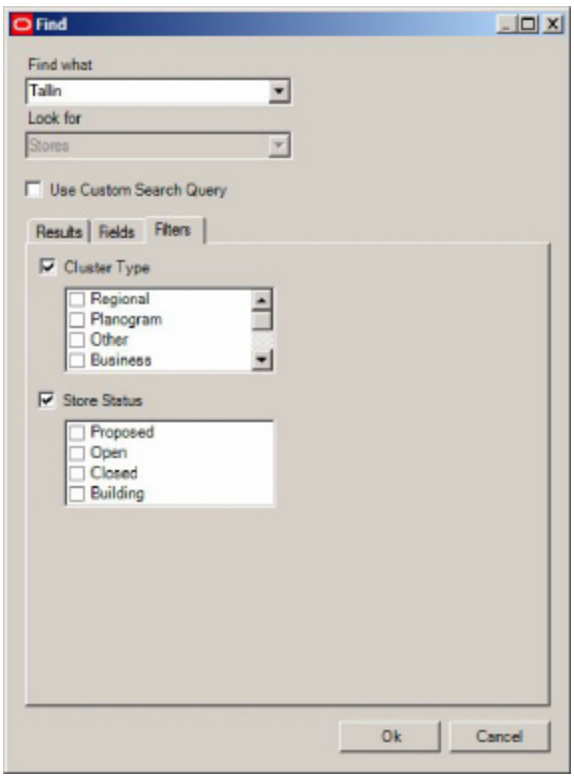
The Fields tab allows users to select the fields that the text string in the Find What text box will be checked against.



- The check boxes in the Search frame specify whether the search should be carried out on the Store Name, Store Code or Parent Cluster.
- The check boxes in the display frame specify the columns that will be displayed in
the results.

The Filters Tab

The Fields tab allows users to filter the fields that the text string in the Find What text box will be checked against.



- If the Cluster type check box is checked Users, can filter the results to restrict them to stores belonging to specific types of clusters in the Store Manager module.
- If the Store Status check box is checked, Users can filter the results to restrict them to stores belonging to specific store statuses (assigned in the store manager module).

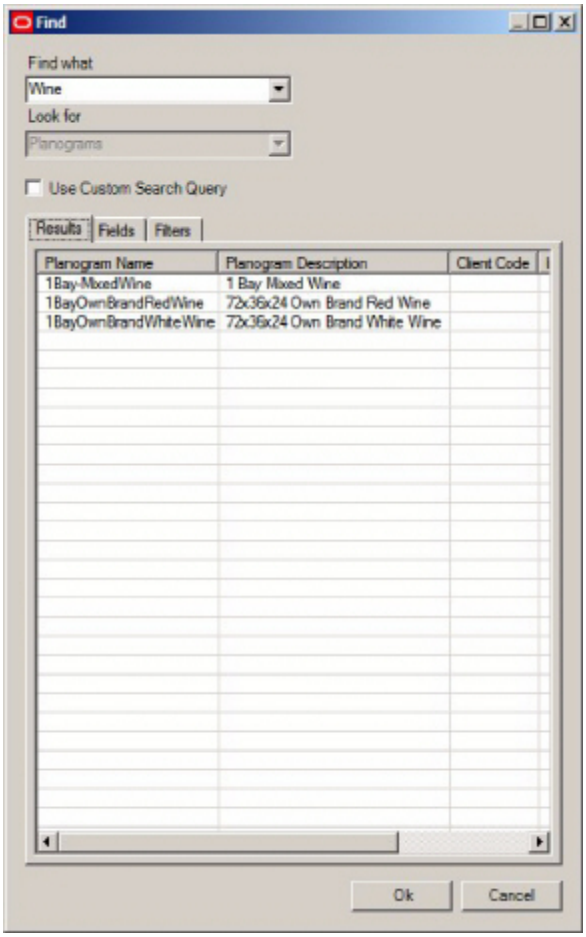
Searching for Planograms

Users can search for planograms when in a tab in the Planogram Substitution definition or Planogram Substitution Assistant dialog boxes that requires the selection of planograms. In this case 'Planograms' is pre-selected in the Look For' drop down list. The Find dialog has three tabs.

Results Tab

The Results tab will contain the results from the text string in the 'Find What' text box modified by the settings in the Fields and Filters tab. To search:

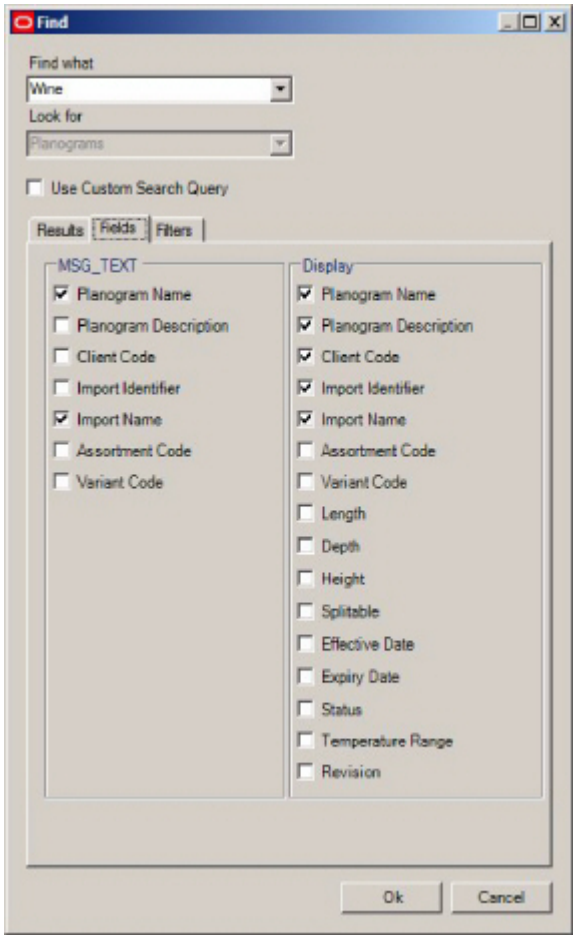
1. Enter text into the text box and press {Return].
2. Highlight the required results in the Results pane and click OK. The highlighted results will be added to the list of stores the substitution will be carried out in.



Fields Tab

The Fields tab allows users to select the fields that the text string in the Find What text box will be checked against.

Any checked option will be tested against the text string and any matching results populated into the Results tab.

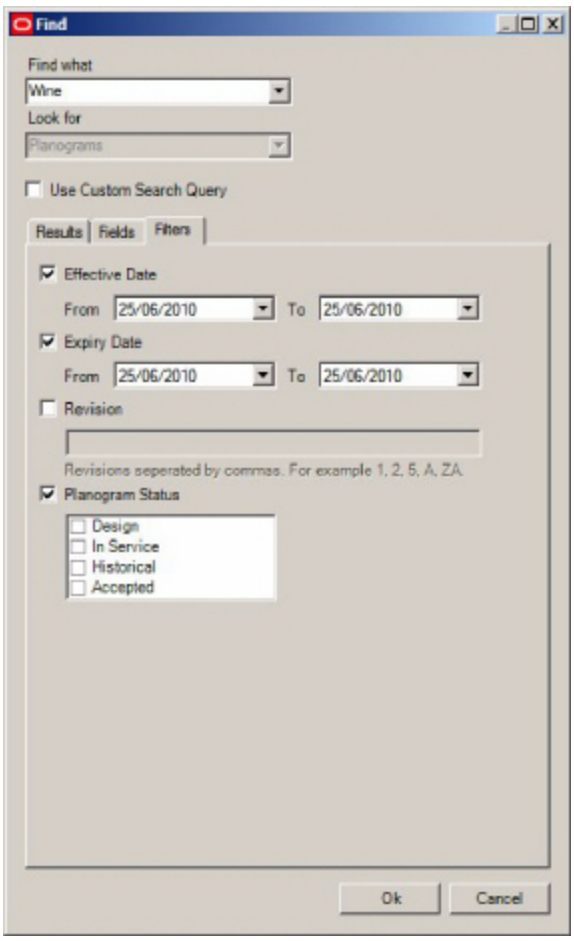


- The check boxes in the Search frame specify whether the search should be carried out on the Planogram Name, Planogram Description, and so on.
- The check boxes in the display frame specify the columns that will be displayed in the results.

> **Note:** Some of the fields that can be searched depend on the information being brought in during imports of planograms. Depending on how this import is configured, it is possible for one or more of these fields to contain null values.

The Filters Tab

The Filters tab allows users to filter the fields that the text string in the Find What text box will be checked against.



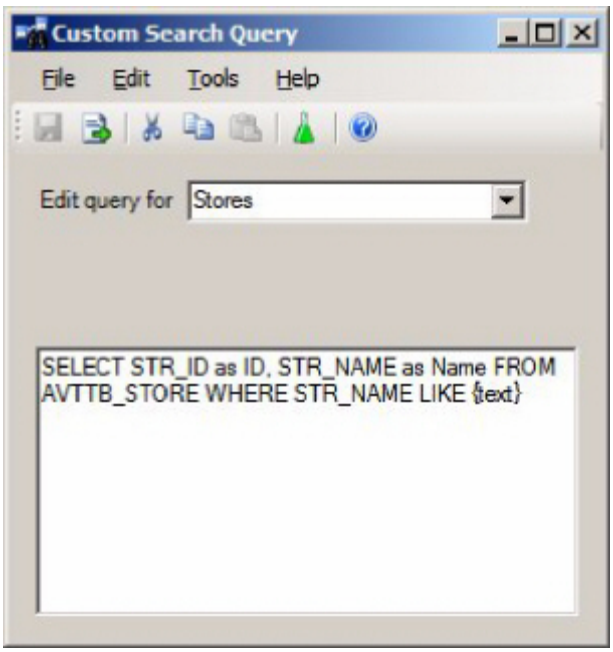
- If the Effective date check box is checked Users can filter the results to restrict them to planograms with effective dates between the specific dates.
- If the Expiry date check box is checked Users can filter the results to restrict them to planograms with expiry dates between the specific dates.
- If the revision check box is checked, users can enter revision numbers. Multiple revision numbers can be entered if separated by a comma.
- If the planogram status check box is checked, users can filter the results to planograms of those selected statuses.

Searching Using Custom Queries

It is also possible to set up Custom Queries. These allow Implementors or Administrators to set up a search specific to a client's requirements.

Setting up Custom Queries

Custom Queries are set up using the Custom Query dialog box available from the General menu in the Admin module.



Implementers or Administrators can write custom search queries for:

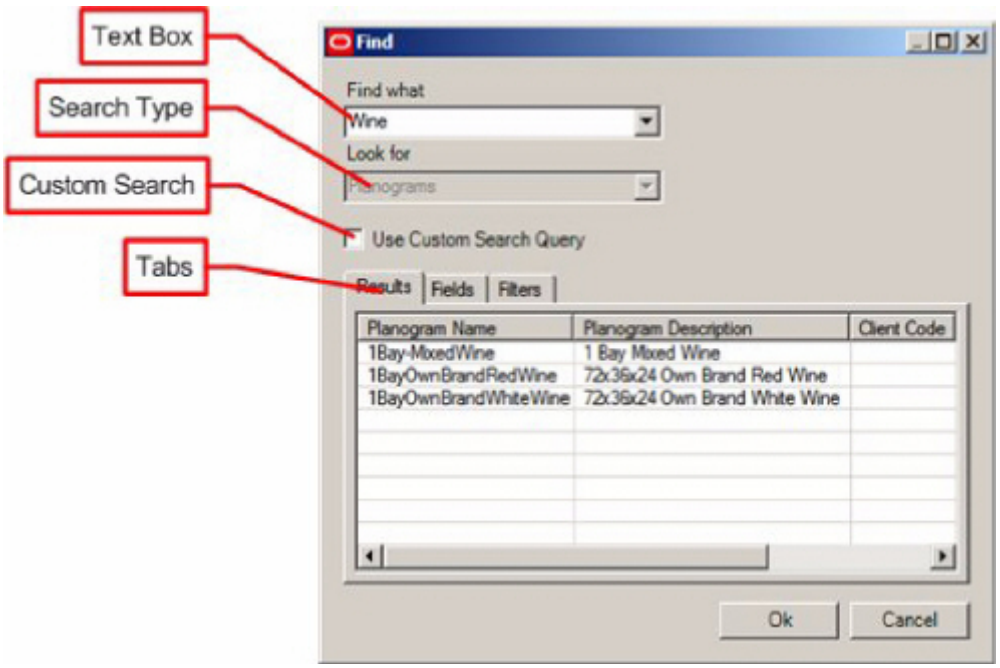
- Planograms
- Planogram Substitution Definitions
- Stores

The query takes the form of a SQL Statement modified to allow for additional functionality added in Macro Space Management. This functionality is the {text} field in the 'Where' clause. The code will select the text entered into the Search String Text box in the Find dialog box and substitute the values into the {text} fields in the 'Where ' clause in the Custom SQL statement.

For example, if the user entered a Store Code of ABC-123 into the Search String Text box the 'Where' clause would be converted to WHERE STN_NAME = 'ABC-123' OR STR_CODE = 'ABC-123'. The results tab of the Find dialog box would then populate with all results matching Store Code Search String Text box ABC-123.

Using the Find Dialog Box with Custom SQL

The Find dialog box behaves slightly differently if the Custom Search Query check box is selected.



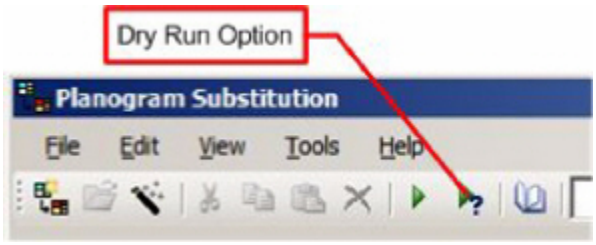
The selection made in the Search type drop down list will determine the type of Custom SQL statement used. The data entered into the Text Box will then be substituted into the 'Where' clause of the custom SQL statement. Any matches will be displayed in the results tab.

Only the Results tab will be active with the Fields and Filters tabs disabled. The columns in the Results tab will be determined by the fields specified in the 'Select' statement of the Custom SQL statement.

Planogram Substitution Logs and Dry Runs

Dry Run Log

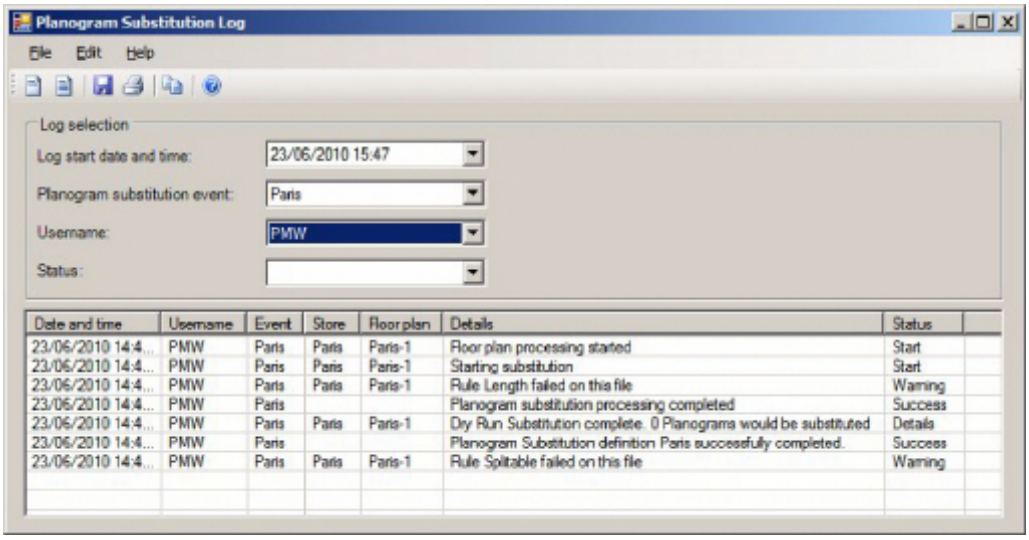
Dry Runs test defined planogram substitutions by reading the data from the database, then determining if the defined substitutions would be successful. The results enable administrators to determine which substitutions will error when run. Any substitutions that error during a dry run can be corrected prior to being run for real. The Dry Run functionality can be invoked from the toolbar in the Planogram Substitution dialog box.



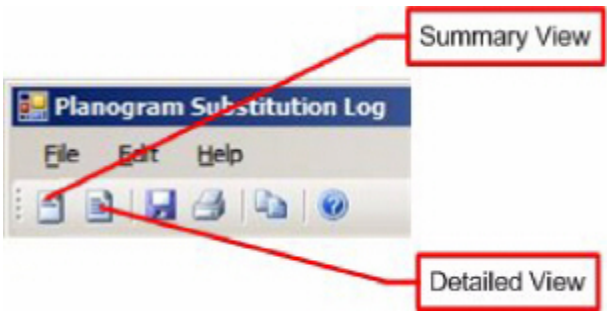
Alternatively, it can be called from the tools menu.

If specific planogram substitutions have been highlighted in the Planogram Substitution dialog box, the dry run will be restricted to those planogram substitutions. If no substitutions have been highlighted all the results appear in the Dry Run Log. This will appear automatically at the end of a Dry Run. Alternatively, it can be called from the View menu. Within the log Users can filter by:

- Log Start Date and Time
- Planogram Substitution Event (Name)
- User Name of person carrying out dry run
- Status of warnings



Two levels of detail can be obtained in the Dry Run Log:



Summary View

This option gives a summary of the planogram substitutions specified in the filters, reporting on the total number of files and stores processed normally, with warnings and with errors.

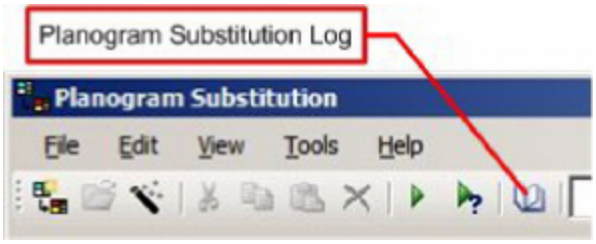
Detailed View

This option gives a detailed view of the individual planogram substitutions that meet the criteria specified in the filters. Information includes:

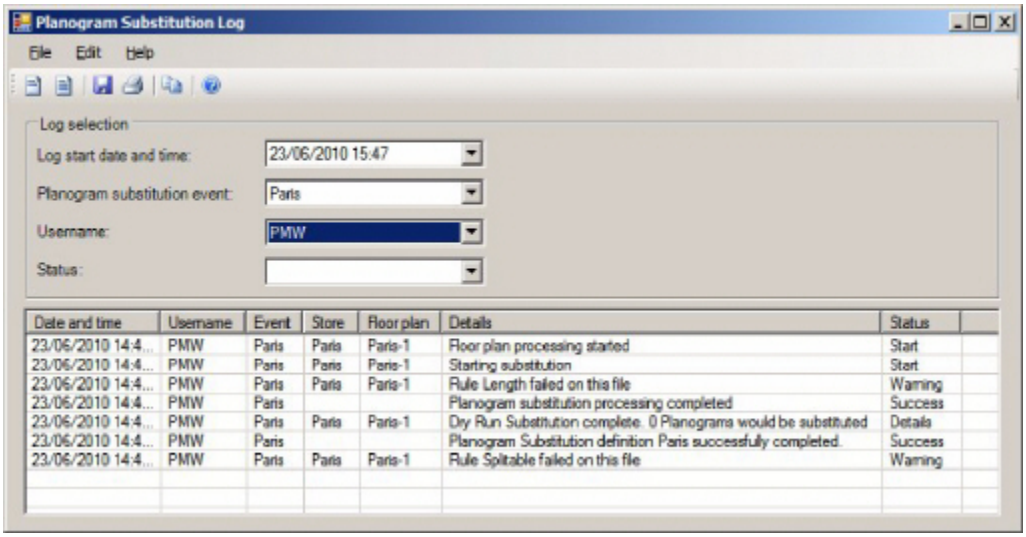
- Stores processed successfully, or with warnings or errors.
- Floor plans processed successfully or with warnings or errors.
- Number of planograms that would be substituted.

Planogram Substitution Log

The Planogram Substitution Log gives the results of planogram substitutions. The Log can be called from the Toolbar or the View menu.



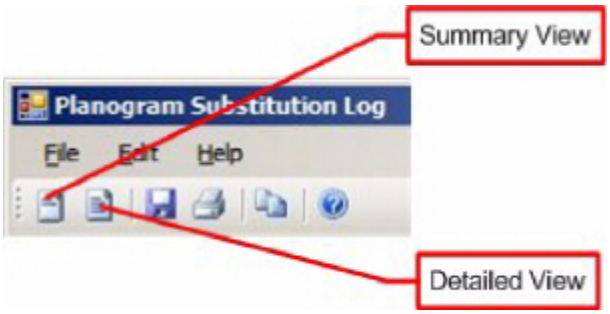
This will bring up the Planogram Substitution Log:



Within the log Users can filter by:

- Log Start Date and Time
- Planogram Substitution Event (Name)
- User Name of person carrying out dry run
- Status of warnings

Two levels of detail can be obtained in the Planogram Substitution Log:



Summary View

This option gives a summary of the planogram substitutions specified in the filters, reporting on the total number of files and stores processed normally, with warnings and with errors.

Detailed View

This option gives a detailed view of the individual planogram substitutions that meet the criteria specified in the filters. Information includes:

- Number of planograms substituted.
- Whether revision (version) change has been carried out.
- Results of substitutions and revision change.

Planogram Substitution Batch Operations

Batch Operations

Capabilities of Batch Scheduling Tool

The full capability of some of the command line switches (for example /t and /p) can only be used by a sophisticated batch scheduling tool. A simpler batch scheduling tool may have fewer capabilities.

Syntax for Batch Operations

The Syntax for Batch Operations will be of the format:

BatchRunner /substitution user name/password [/t] [/p] [/e definition_name_1, definition_name_2, …, definition_name_n] [/c code_1,code_2, …,code_n] [/s id_1, id_2, …, id_n]

Switches are not case sensitive: /t and /T will have the same effect.

1. Batch Runner will identify the batch scheduling too used to run the batch processes.
2. The /Substitution switch is a compulsory switch to identify the process to be run as planogram substitution.
3. The username/password is mandatory. They will be validated against user information defined in the Functional Security option in the Administration module.
4. The /t switch is an optional switch and allows the external program invoking planogram substitution to terminate execution of any running planogram substitution definitions rather than waiting for the full list of substitutions to complete.
5. The /p switch will be an optional switch and allows the external program invoking planogram substitution to pause execution of any running planogram substitution definitions.
6. The /e switch will be an optional switch and will identify the planogram substitution definitions that are to be run.
7. The /c switch will be an optional switch and will identify the stores filter that is to be applied to the planogram substitution process.
8. The /s switch will be an optional switch and will identify the status filter that is to be applied to the planogram substitution process.

Details of Syntax

This section details the specific Syntax required for each option in the batch files used to call the planogram substitution functionality.....

User Name/Password

The user name/password is mandatory. They must meet the following criteria:

- The User must be a member of a User Group with a User Group Type of 'Admin User'.
- The User must be a member of a User Group with permissions to use planogram substitution.

- The user name and password must be included within double quotes if they contain a space or forward slash character.

If validation fails, then planogram substitution will terminate with the following entries written to the error log:

- "Date and time when invalid username or password was supplied.
- "The machine name used to send the invalid username or password.

The /t Switch

The /t switch allows the external program invoking planogram substitution to terminate execution of any running planogram substitution definitions. This might be because there in only a three hour period available to run planogram substitutions in and the process has to be terminated at a specific time. The time period planogram substitution will run for has to be set in the external program running planogram substitution as part of a batch process; the /t switch merely allows the possibility of stopping the planogram substitutions before they have all executed.

If the external program terminates planogram substitution, the following entries will be written to the process log:

- Date and time when definition stopped.
- Name of definition stopped
- User name used to send terminate message.

The /p Switch

The /p switch allows the external program invoking planogram substitution to pause execution of any running planogram substitution definitions. This might allow planogram substitution to be paused while another batch process is executed.

The time period planogram substitution will be paused at has to be set in the external program running planogram substitution as part of a batch process; the /p switch merely allows the possibility of stopping the planogram substitutions. If planogram substitution is paused, the application will ensure that the store plans are
in a valid state. If necessary, they will be checked in. The process will remain active and wait until the process is resumed again.

If a planogram substitution is paused the following entries will be written to the process log:

- Date and time when definition paused.
- Name of definition paused.
- User name used to send pause message.

If a planogram substitution is resumed the following entries will be written to the process log:

- Date and time when definition was resumed.
- Name of the resumed definition.
- User name used to resume the definition.

Pause Command while Planogram Substitutions are being manually run

The /p switch will pause all planogram substitutions currently running. As it is possible for as user to be manually running planogram substitutions in a store plan,
while others are being run automatically via a batch process, the application will allow users to manually resume their substitutions. This will be via a confirmation dialog saying "Pause received from user name via the command line. Pause processing?"

- If the User selects OK on the confirmation dialog, the dialog will close and the planogram substitution process will pause. The pause button on the planogram substitution progress dialog will be grayed out and the play and stop buttons will be enabled.
- Pressing Cancel on the confirmation dialog will close the dialog and leave the manually initiated process processing the planogram substitution definitions

The /e Switch

The /e switch is optional. It can be used to specify a list of planogram substitutions to run. It is of the format:

/e definition_name_1, definition_name_2, …, definition_name_n

The definitions will be identified by a comma separated list of definition names. The definition names must be included within double quotes if they contain a space or forward slash character.

The /c Switch

The /c switch is optional. It can be used to specify a list of store codes identifying the stores against which planogram substitutions should be run. It is of the format:

/c code_1,code_2, …,code_n

Store Codes can be found in the Store Code text box of the Edit Store dialog box in Store Manager. Alternatively, they can be identified from a report containing the STR_ CODE field in the AVTTB_STORE table.

The /s Switch

The /s switch is optional. It can be used to specify the list of file statuses against which planogram substitutions should be run. It is of the format:

/s id_1, id_2, …, id_n

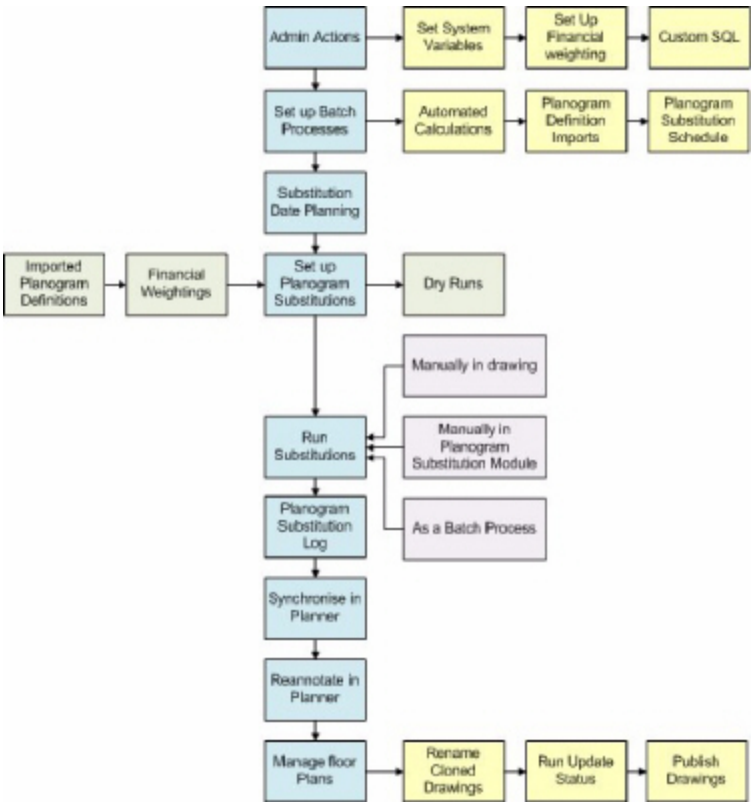
The statuses will be identified by a comma separated list of status codes. A range of status codes will be identified by two strings separated by a hyphen character. Status codes will be assumed to be in numeric and then alphabetical order allowing for possible leading zeros.

Status codes can be found in the Status dialog box accessed from the General Menu of the Administration module. Alternatively, they can be identified from a report containing the STA_CODE field from the AVTTB_STATUS table.

Planogram Substitution Business Flows

Overview of Business Flows

Planogram Substitution needs to be integrated with the wider activities within Macro Space Management. The flowchart below summarizes those activities.



Setting up within the Admin Module

The first stage for preparing for planogram substitutions is carried out within the Admin module. Three actions are required:

1. Setting up System Variables
2. Setting up Custom Queries for the Find dialog box in Planogram Substitution
3. Setting up the Planogram Financial Weighting settings

Setting Up System Variables

The first stage for setting up Planogram Substitution operations is to set the system variables that affect the functioning of planogram substitution. These have a global effect and it is recommended that once the settings have been made, they are not changed unless strictly necessary.

Three system variables have a significant impact on the way the functionality operates. Each can be set using the System Variables option on the General menu in the Admin Module.

PLANOGRAM_SUBSTITUTION_COPY_FILE

1. Current status will be available for selection in the Status tabs of the Planogram Substitution Definition dialog box and the Planogram Substitution Assistant.
2. Files of Current status are Read Only. If planogram substitutions are carried out in them the functionality will first attempt to make the planogram substitutions in an Authorized file on the same floor if one exists with a matching Effective Date. If a suitable Authorized file does not exist, the functionality will create one in the same Revision as the Current file - a process called Cloning.

This system variable determines whether files of Current status can be used as the basis for planogram substitutions. If set to 1 (On) then:
If set to 0 (Off) then it will not be possible to select floor plans of current status for planogram substitution - and hence no cloning of files will take place.

PLANOGRAM_SUBSTITUTION_RUN_CALCS

This system variable (0 = Off, 1 = On) determines whether the Product Adjacency calculation will be run prior to carrying out planogram substitutions. This enables the functionality to ensure that planograms required to be adjacent in the Planogram Substitution definition are still adjacent in the drawing. Running the product adjacency calculation increases the accuracy of planogram substitution, but will increase the overall time required.

> **Note:** This situation could occur if the planogram substitution was defined some time before it was run, and planograms have been manually moved in a floor plan since that date.

Whether this system variable should be set to On or Off also depends on the batch processes in use. If Automated Calculations are being run immediately before planogram substitution, then there will not be a need for the PLANOGRAM_SUBSTITUTION_RUN_CALCS system variable to be set to On.

PLANOGRAM_SUBSTITUTION_LOG_EXPLODED

This system variable is not currently in use.

PLANOGRAM_SUBSTITUTION_LENGTH_TOLERANCE

This system variable sets the default length tolerance that appears in the Rules tab of the Planogram Substitution Definition dialog box.

PLANOGRAM_SUBSTITUTION_DEPTH_TOLERANCE

This system variable sets the default depth tolerance that appears in the Rules tab of the Planogram Substitution Definition dialog box.

PLANOGRAM_SUBSTITUTION_HEIGHT_TOLERANCE

This system variable sets the default height tolerance that appears in the Rules tab of the Planogram Substitution Definition dialog box.

PLANOGRAM_SUBSTITUTION_PROCESS_EXPLODED

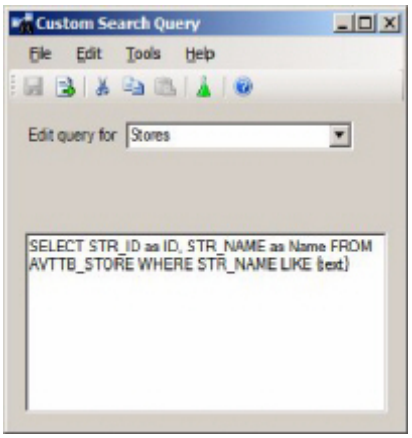
This system variable determined how planograms in a different form (2D, 2.5D or 3D) to the planogram being brought in as a replacement are processed during the substitution process.

> **Note:** this system variable will have a significant impact on a number of important aspects of functionality. The setting of this system variable should be considered carefully.

Setting up Custom SQL for the Find Dialog Box

The find dialog box used in the Planogram Substitution, Planogram Substitution Definition and Planogram Substitution Assistant dialog boxes has the facility to carry out client specified searches based on Custom SQL. This Custom SQL can be configured in

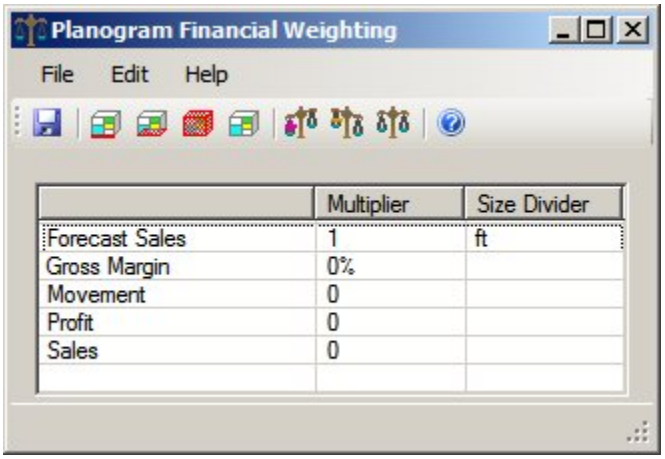
the Admin module using the Custom Query option on the General Menu in the Admin Module.



Note: For more information on using Custom Queries, see the chapter on the Find dialog box.

Setting up Planogram Financial Weightings

The Planogram Financial Weighting dialog box is available from the Merchandising module in the Admin Module.



Settings in this dialog box can be used in conjunction with financial data imported with the planogram designs to give a score that can be used to decide between alternative planograms in the Planogram Substitution Assistant (New Planograms page).

The financial weighting settings should be set up prior to beginning to set up planogram substitution definitions. The weightings should not be changed unless there is a clear case to do so, as repeatedly changing the weightings will not give a clear strategy for choosing one planogram over another.

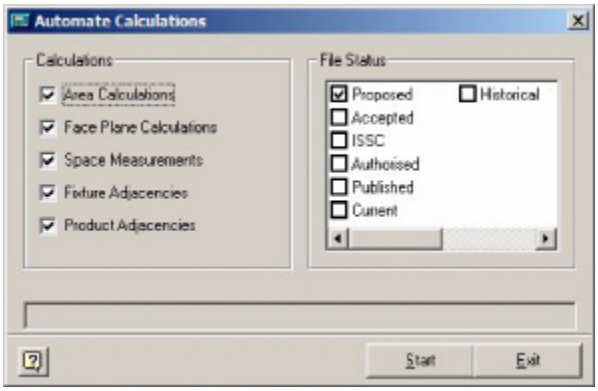
Batch Processes

Three potential batch processes impact on the operation of planogram substitutions. These are:

- Automated Calculations
- Planogram Definition Imports
- Planogram Substitution Schedule

Automated Calculations

Automated Calculations can be run as a batch process using the AVT5AutomatedCalcs.exe file installed in the C:\Program Files\Oracle Retail\MSM\Apps directory.



One of the options for Automated Calculations is Product Adjacency. If this is run immediately prior to running Planogram Substitutions as a batch process, then the PLANOGRAM_SUBSTITUTION_RUN_CALCS system variable can be set to Off (0).

Planogram Design Imports

Planogram Designs are often imported as part of a batch process. The import can be used for several purposes:

- To import new planogram designs
- To import updated versions of existing planograms (revisions)
- To import updated financial information for planograms

This import schedule should be borne in mind when designing planogram substitutions and deciding on the schedule to run the substitutions on.

Planogram Substitution Schedule

Planogram Substitutions can be run as a batch process. The timing of this needs to take into account a retail organizations merchandising strategy - and hence how often planogram substitutions will be run as a batch process.

Planogram Substitutions

Substitution Date Planning

Planogram substitution is used as part of an overall business process in order to update the merchandise offered for sales within a retail organization. As such planogram substitutions should be carried out to an agreed schedule - thus resulting in a fully updated set of floor plans suitable for publishing to the pertinent stores for implementation.

Preparing for Planogram Substitutions

Before planogram substitutions are defined, two actions ensure that the substitutions will be based on the latest information:

Planogram Design Imports

The latest planogram information should have been imported. This information includes both new planogram designs and revisions of existing designs. Planogram design Imports will also include the latest financial information, enabling the financial weightings used to chose between alternative planograms in the Planogram Substitution Assistant are fully up to date.

Planogram Financial Weightings

Planogram financial weightings are used to choose between alternative planograms in the Planogram Substitution Assistant. Frequent imports of Planogram data ensure they are fully up to date.

Planogram Substitutions

The planogram substitutions can then be set up. This can be accomplished by means of the Planogram Substitution Definition dialog box or the Planogram Substitution Assistant. The dates these planogram substitutions are scheduled to come into effect should be dovetailed with the retails organizations merchandising objectives.

Dry Runs

Dry runs are used to confirm that the designated planogram substitutions will run without problems when executed. They can be used in two different circumstances:

On completing defining a planogram substitution

Dry runs would be used to confirm that the recently completed planogram substitution will work effectively. They provide a way of confirming that the planogram substitution has been correctly specified by its designer.

Prior to running planogram substitutions in a batch process

It is possible that many planogram substitutions will have been defined some days or weeks before they are run as a batch process. It is possible to carry out a dry run a day prior to the batch process. This allows administrators to identify checked out drawings, drawing with exploded planograms, and so on, and correct them before the batch process executes.

Running Planogram Substitutions

Planogram substitutions can be run if they match the following criteria:

1. The planogram substitution has a status set to approved
2. Floor plans must have a status assigned that matches the status set in the Status tab. Floor plans of Proposed and Published status (and any custom statuses that have been created) will be updated irrespective of any dates assigned to them.

   Note: If planogram substitutions are run against floor plans of Published status, it may be necessary to republish the floor plan to the store.

3. For floor plans with a status of Authorized, the Effective date must fall within the range of dates set in the Floor Plan Effective date in the Properties tab of the Planogram Substitution Definition dialog box.
4. For floor plans of current status, they will only be cloned if the PLANOGRAM_ SUBSTITUTION_COPY_FILE system variable is set to On (1).

> **Note:** Current Files opened Read Only in the Planner or Merchandiser Modules will also be cloned if substitutions are manually run and valid substitutions exist.

5. For open files, the Active date (if set) must fall within the range of dates set in the Floor Plan Effective date in the Properties tab of the Planogram Substitution Definition dialog box.

Planogram substitutions can be run in one of three ways.

1. Manually from within the Planner and Merchandiser modules on the current open store plan.
2. Manually from within the Planogram Substitution module for single or multiple planogram substitutions.
3. As a batch process.

Planogram Substitution Log

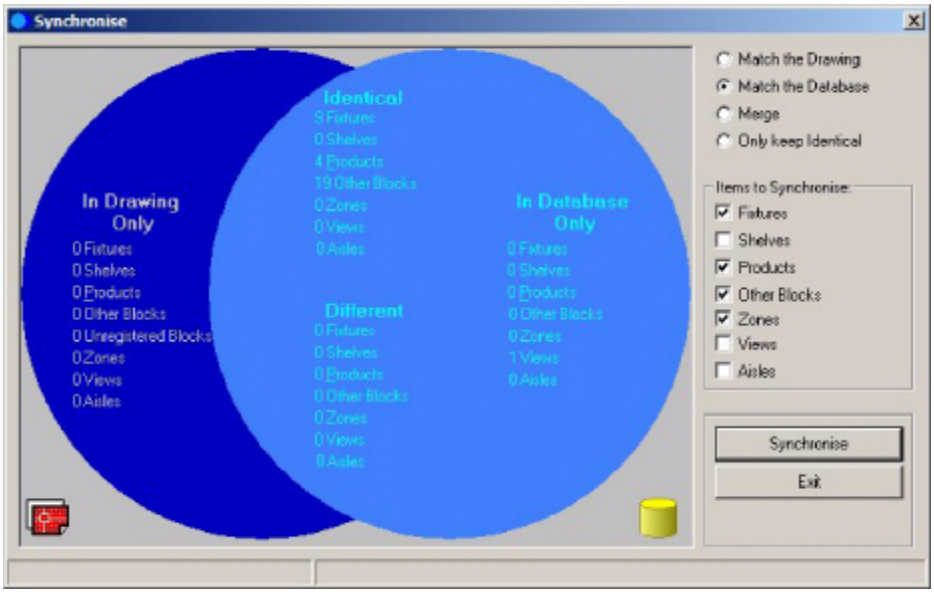
The Planogram Substitution Log (accessed from the Planogram Substitution dialog box) enables Administrators to determine the success of each planogram substitution. Unsuccessful substitutions can also be identified, corrected and re-run.

Post Substitution Operations

Synchronization in the Planner Module

Planogram substitutions are carried out by making changes directly in the database. For example if the database tables show Fixture 1 as containing Planogram A before the substitution, they will show it as containing planogram B after the substitution. The Merchandiser Module and In-Store Space Collaboration read data directly from the database, so will show the changes directly the drawing is next opened. The Planner Module stores information in an AutoCAD DWG drawing. After planogram substitutions have been made and the information in the database changed, the information in the DWG drawing has to be brought into line.

This is done by means of the Synchronization dialog box.



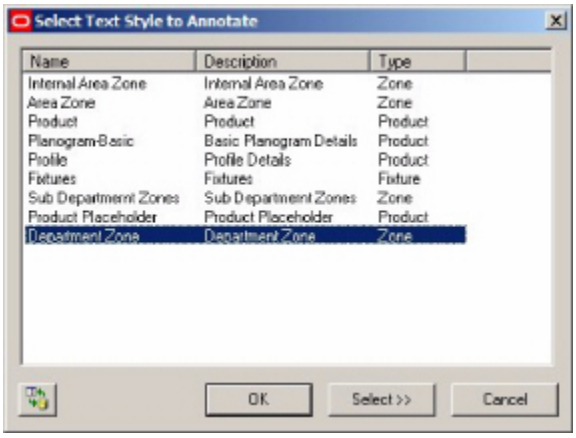
Synchronizing 'Match the Database' will update the DWG drawing with the changes made in the database.

Annotation in the Planner Module

After the drawing has been synchronized in the Planner Module, the drawing needs to be re-annotated so that each planogram has the correct text associated with it. This is done by selecting the Annotation option from the Retail toolbar in the Planner module.



This will bring up the Annotation dialog box.



This dialog box can be used to re-annotate the appropriate text for planograms. Typically this will be:

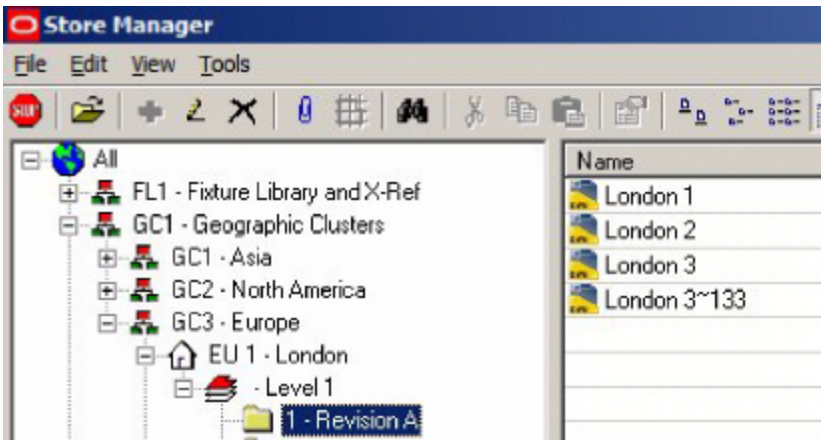
- Planogram text - identifying the planograms themselves
- Profile text - showing information on individual bays within planograms

Managing Floor Plans

Once the substitutions have been carried out and the floor plans synchronized and annotated, they need to be managed. There are three stages to this:

Renaming Cloned Drawings

If drawings of current status are cloned (PLANOGRAM_SUBSTITUTION_COPY_ FILE system variable set to On) then their names will be an autogenerated version of the original file name.



In the above example the London 3 file has been cloned - with the clone being called London 3~133. It may be necessary to rename the cloned file to a more logical name - for example London 4.

Running Update Status

Update Status (installed in the C:\Program Files\Oracle Retail\MSM\Apps folder) can be used to change the status of files. When Publish or effective dates are exceeded, Authorized files will be set to either Published or Current status as appropriate. As an example, cloned files (at authorized status) will have their Effective Dates set to the earliest date in the Floor Plan Effective Date in the Properties tab of the Planogram substitution definition dialog box. When Update Status is run, if the current date matches of exceeds the Effective Date set for the floor plan, the file status will be set to Current - showing the cloned file is now in service.

Publishing the Drawings

After the drawings have reached a suitable status, they need to be published so that merchandise can be ordered and stores begin planning for the changes.

Publishing can be done by sending an electronic or hard copy version of the floor plan together with electronic or hard copy forms of the requisite planogram designs to the stores that will be implementing the changes.

Product Code Types

Product Code Types

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) was 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

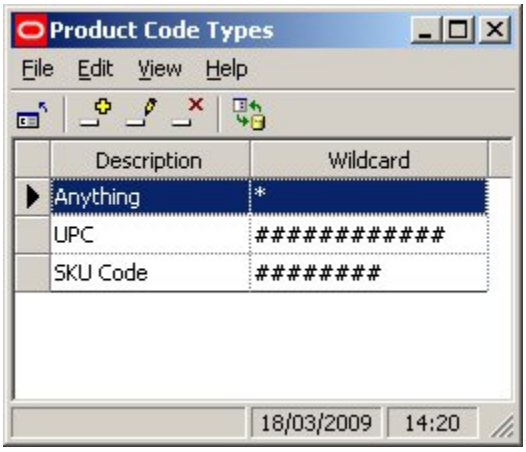
JAN (Japanese Article Numbers) is the same as EAN codes.

GTIN Codes

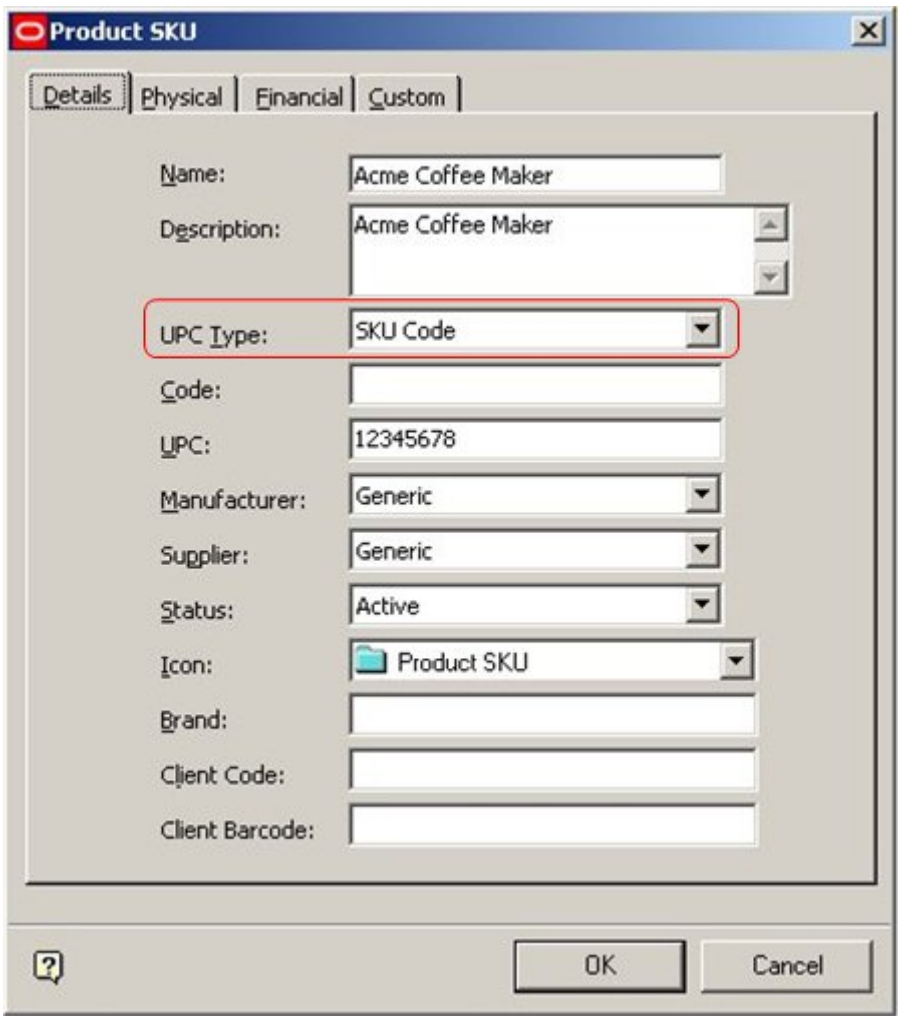
GTIN (Global Trade Item Numbers) are a family of codes that consolidate codes in the UPC, EAN and JAN systems. GTINs may be 8, 12, 13 or 14 digits long. They can be constructed using any of four numbering structures, depending upon the exact application.

- 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.



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:

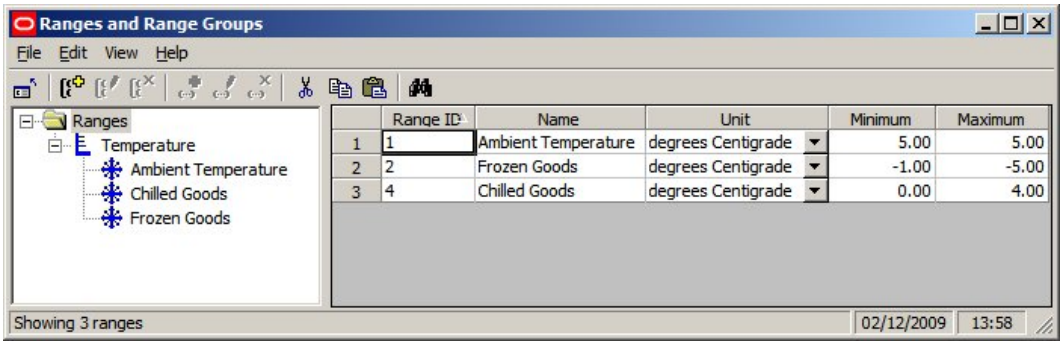
12345678-123

12345123-456

Ranges

About Ranges and Range Groups

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.

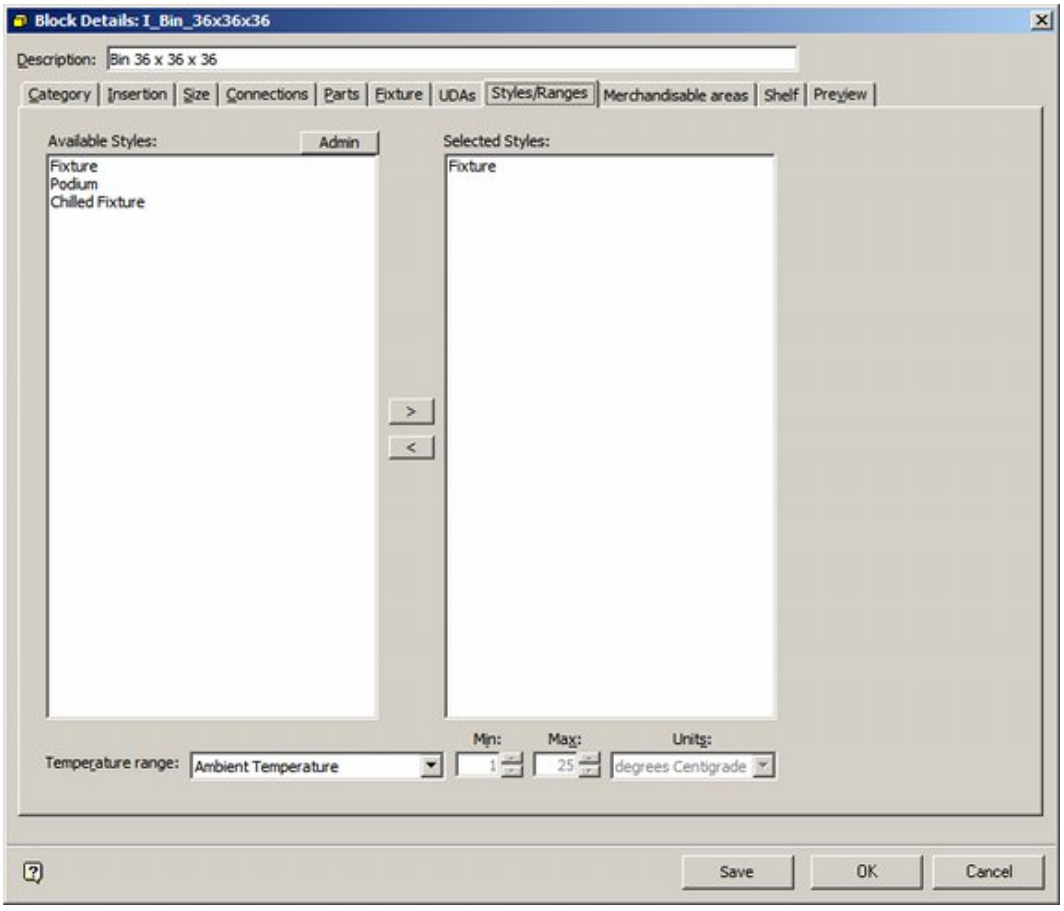
Currently only temperature ranges can be used. They can be assigned to Fixtures, Shelf Object and Products.

Where Ranges are Assigned

Ranges can be assigned to fixtures, shelves and products.

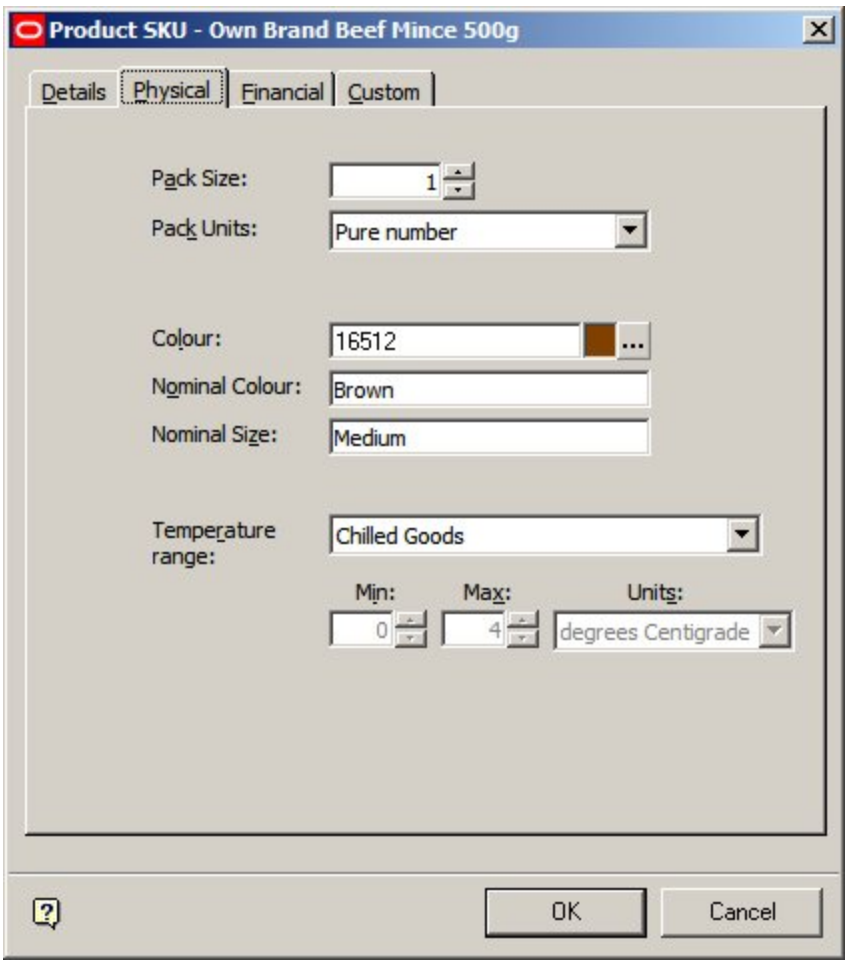
Fixtures and Shelves

Fixtures and Shelf Objects are assigned ranges in the Styles/Ranges tab of the Block Details dialog box in Fixture Studio.



Products

Products are assigned Ranges at SKU level using the **Physica**l tab.



Where Ranges are Used

Ranges are used as follows:

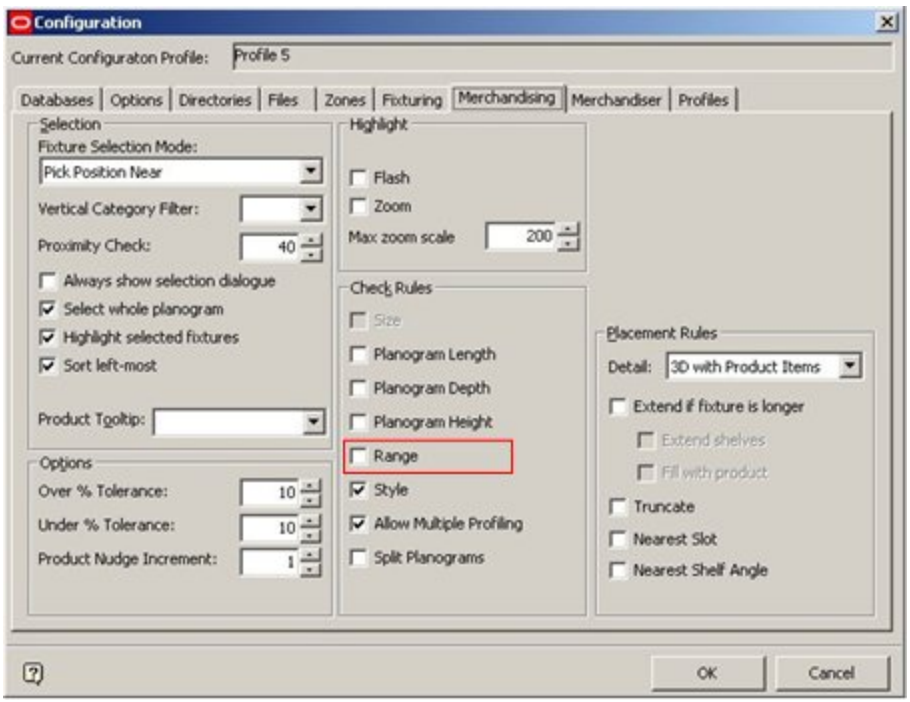
Products and Equipment

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.

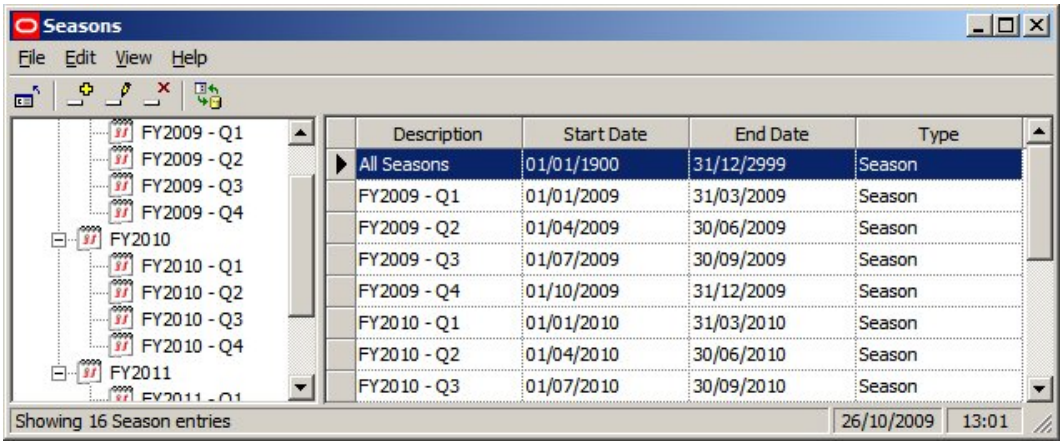
Example

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.

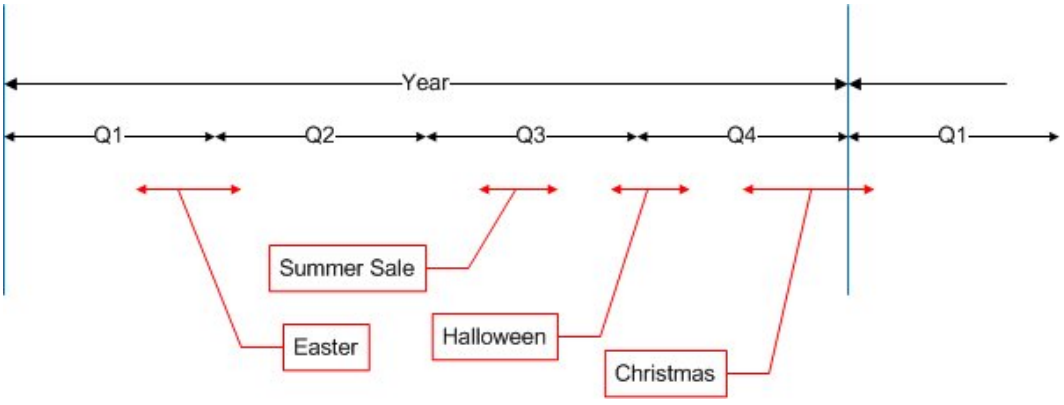
Seasons

About Seasons

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.



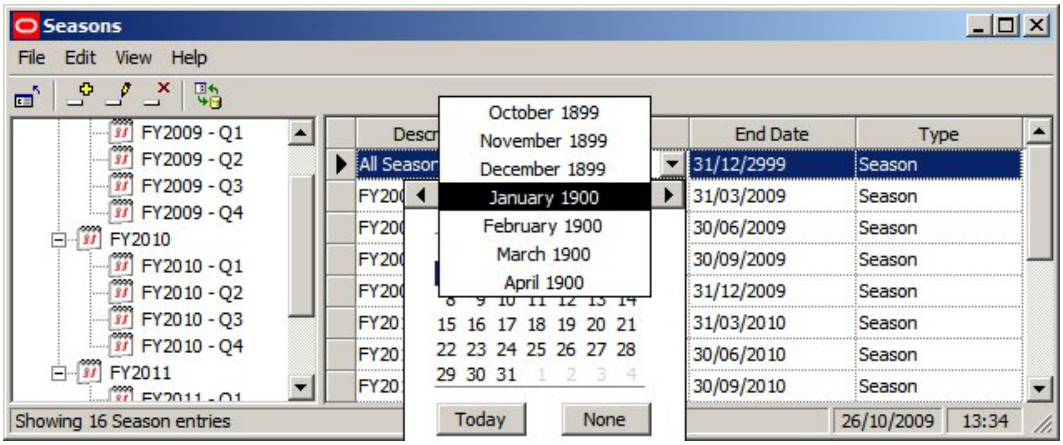
Seasons are arranged in a hierarchy and must have a start and a finish date. Unlike Calendars, seasons can have overlapping date ranges.



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

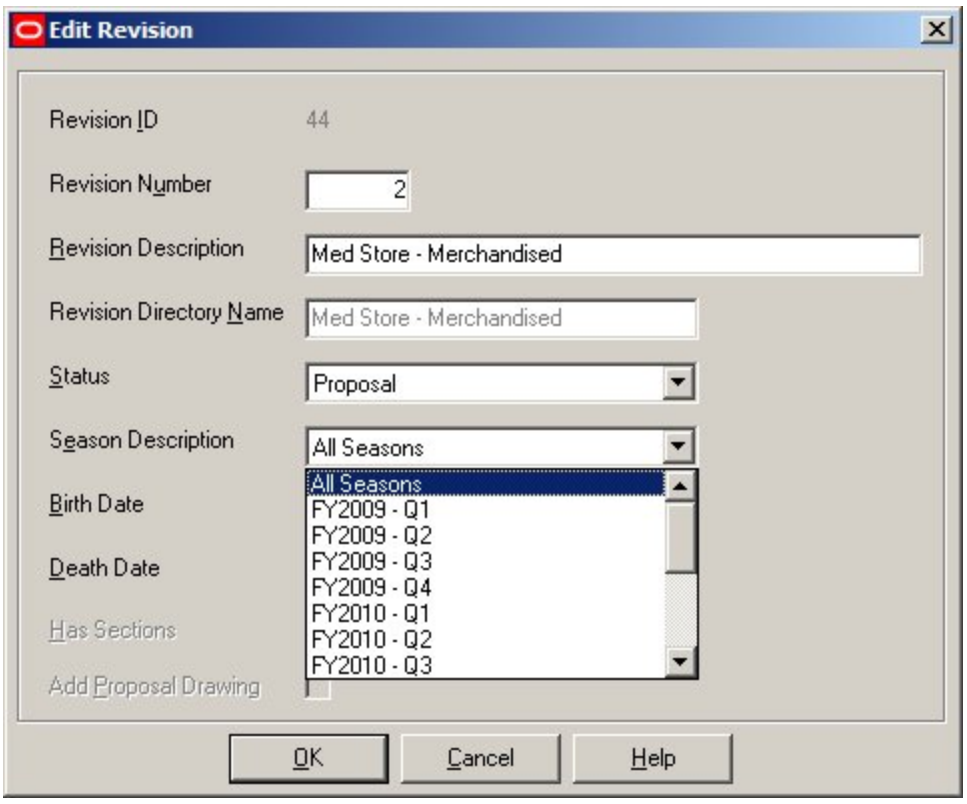
Type is selected from the drop down list. These are two options: Season and Phase. These are purely for user convenience and do not have any effect within the software. One way of using then option is to use 'Seasons' to designate regular time intervals (for example Months or Quarters). 'Phases' can then be used to designate irregular time intervals - for example the Christmas Phase might run between1st 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. There 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



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

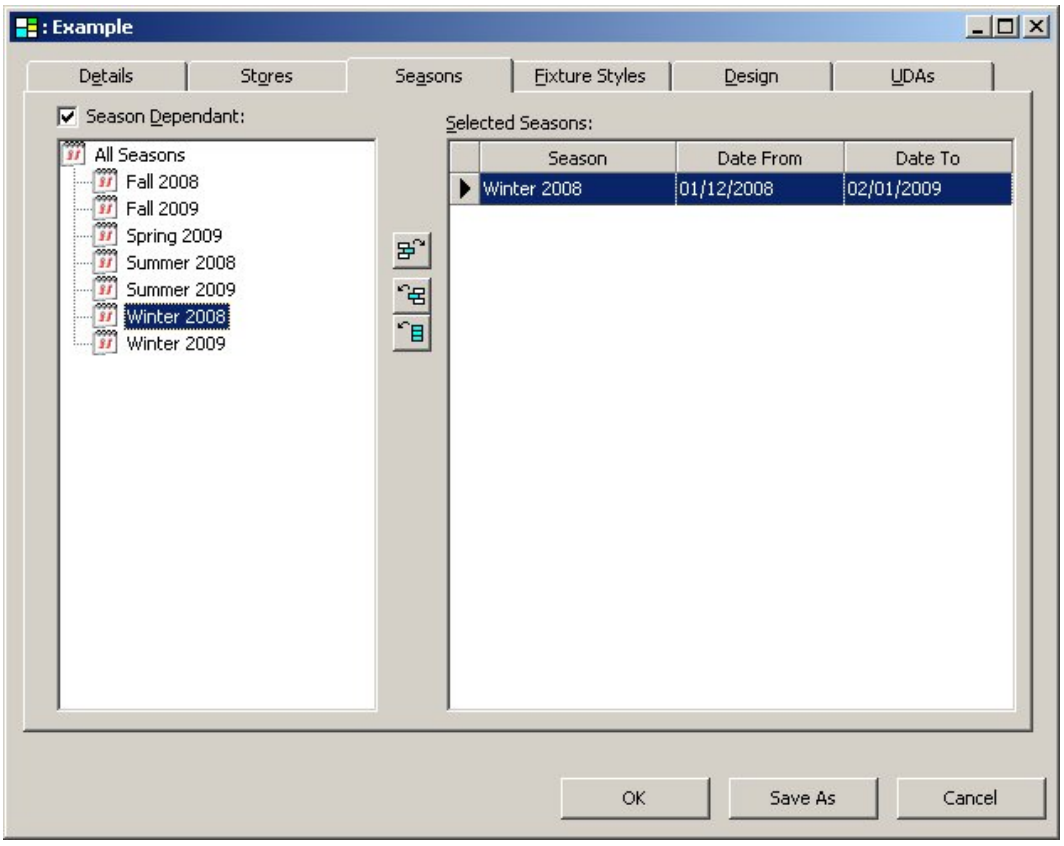
Products can only be assigned a season directly in the database, using during data import. Values are added to the AVTTB_PRODUCT_SEASON_LINK table. This links product data in the AVTTB_PRODUCT_DEF table with the information in seasons in the AVTTB_SEASON table.

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:

- Color coding data that appears in the Object Browser
- Filtering Data that appears in the Object Grid
- Classifying Data that is used in KPI's
- 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.

1. Pre-filtering

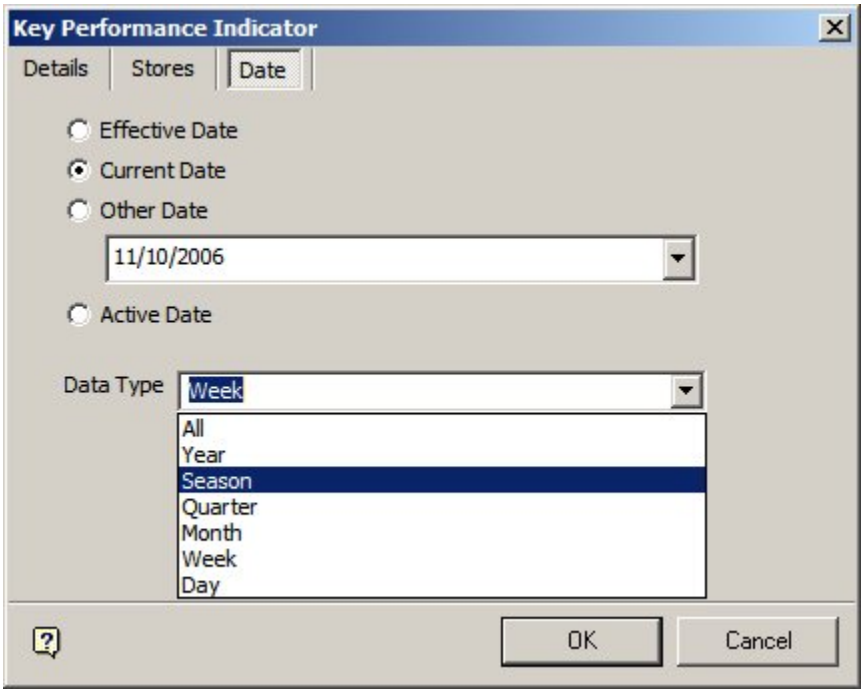
   If the revision that is acting as a parent for the current store plan has had a season assigned, it is possible to use the custom SQL to pre-filter the data that appears in the Object Grid so that it only populates with products and planograms that have seasons that are compatible with the season set in the parent revision.

2. 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.



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

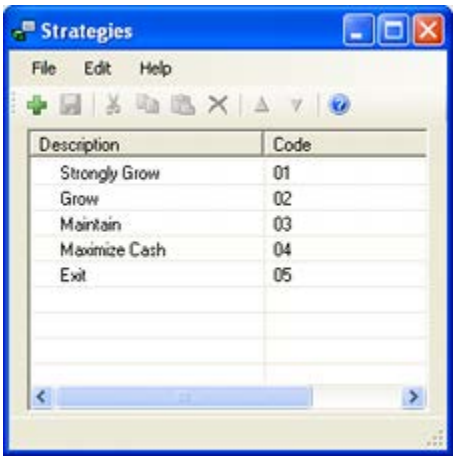
This table can be populated by using the Data Importer module as an alternative to entering data manually via the Admin Module.

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).

Strategies

Overview of Strategies

The Strategies dialog box is accessed from the Merchandising menu of the Administration module. It is used to assigned strategies to varying levels in the product hierarchy. These Strategies are then used in Category Management - software complementary to Macro Space Planning used to determine the range of products optimum for a floor plan.

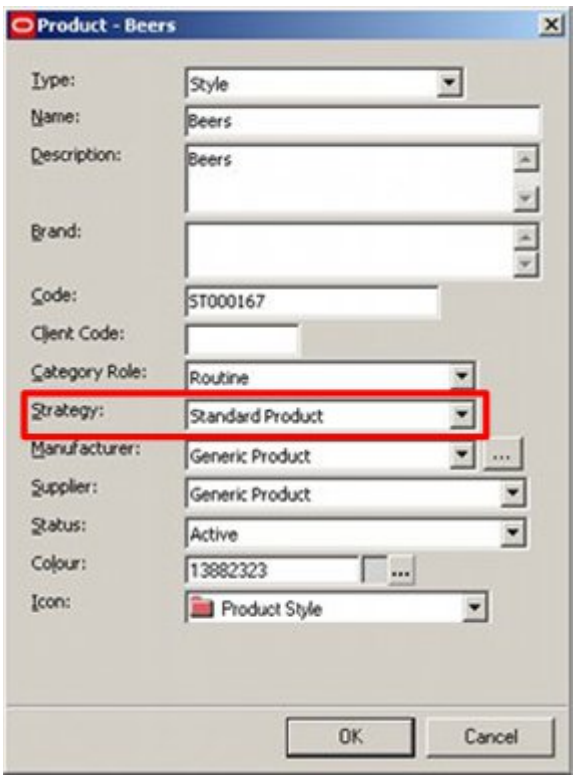


Strategies are used to specify how the retailer intends to treat the category. In the above example, a retailer has five strategies it can assign to products:

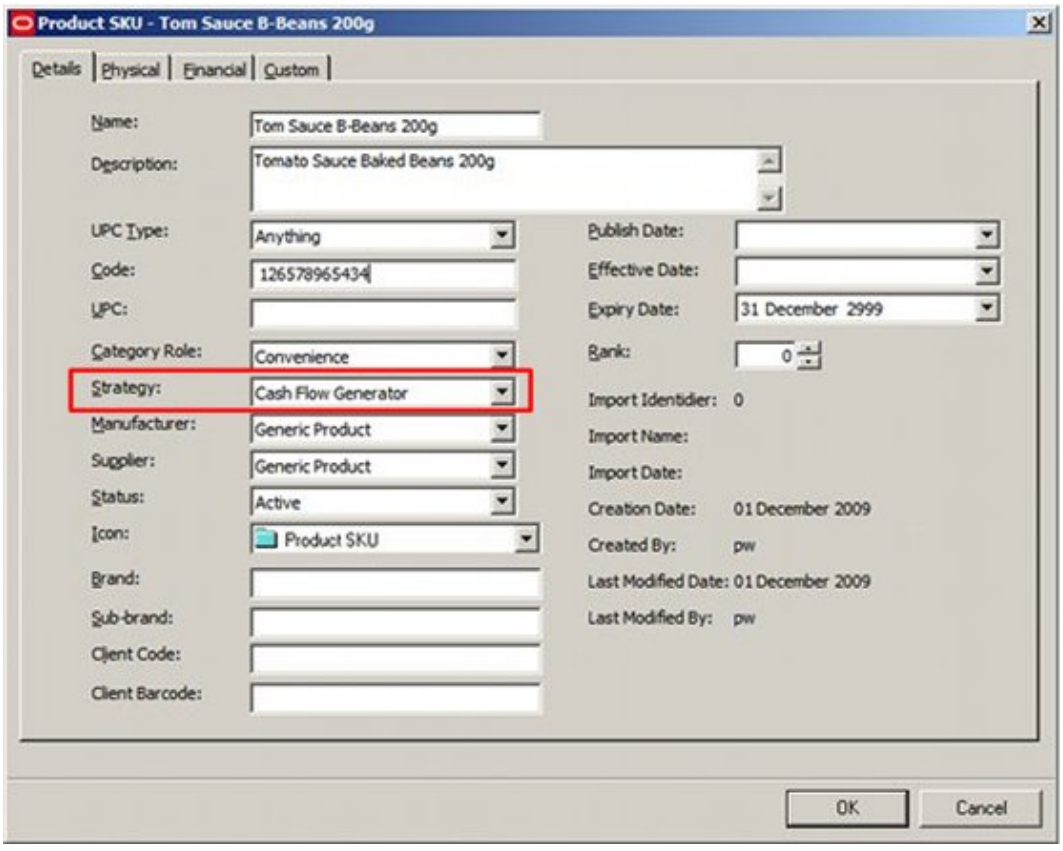
- **Strongly Grow**: a category that has good potential for the future and which should be strongly promoted and marketed.
- **Grow**: a category that is important for the future and which should be given reasonable resources for promotions and marketing.
- **Maintain**: a category that only requires sufficient resources to hold its position in the market.
- **Maximise Cash**: a category that is in slow decline and which the retailer will eventually exit. Only enough resources will be allocated to maximise the profit in the remaining time available to the category.
- **Exit**: a category in strong decline and which the retailer is in the process of de-listing.

Although Strategies can be assigned manually to products in Product Studio, it is more likely that they will be imported. Accordingly, the Strategies entered in the Administration module should be similar to any that exist in the third party software used to maintain product information at a retail chain.

Strategies can be assigned to products at all levels from Sub-class to SKU level in the Product hierarchy. From Sub-Class to Item level it is assigned in the following dialog box:



At SKU level it is assigned in the Details Tab of the SKU dialog box.

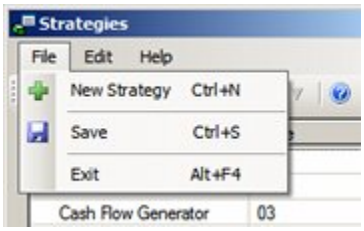


Once Strategies have been assigned to a product, they can be used as filters for products being displayed in the Object Grid.

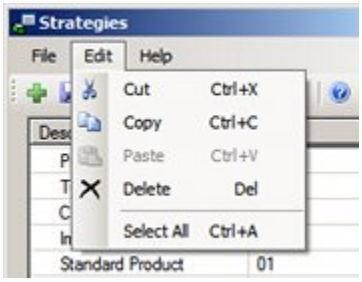
> **Note:** what appears in the Data Tab of the Object Grid is controlled by the Custom SQL in the AVTTB_CUSTOM_SQL table.

Strategy Menus and Toolbar

The **File Menu** allows users to add new strategies, save the changes and exit the dialog box.



The **Edit Menu** allows users to cut copy and paste information, and to delete strategies.



The Help Menu allows users to call this Help File.



The following options are available on the toolbar:

Icon	Option
	Add a new Import Style
	Save the contents of the dialog box
	Cut
	Copy
	Paste
	Delete

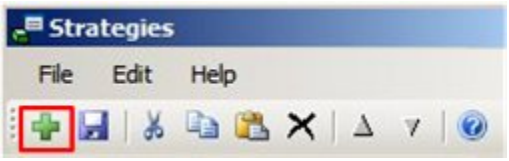
Icon	Option
	Move up in List
	Move Down in List
	Help

Using the Strategies Dialog Box

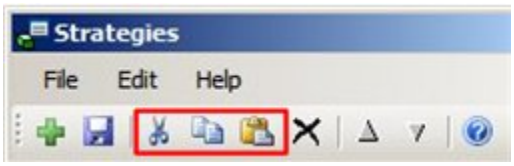
The Strategies dialog box can be used to Add, Edit and Delete strategies from the list of those available for use within the product hierarchy.

Adding a Strategy

Adding a strategy can be done by clicking the Add button on the toolbar (or the File menu) to create a new line in the list of Strategies.



Once the line has been created, data can be entered by typing it in, or by using the copy and paste options on the toolbar.

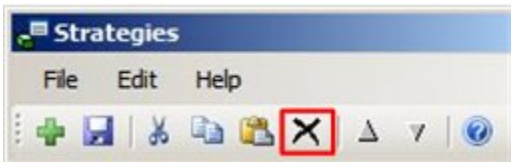


Editing a Strategy

Strategies can be edited by typing the required changes in, or by using the copy and paste options on the toolbar (or the edit menu).

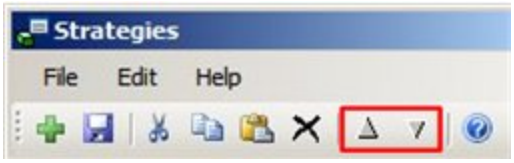
Deleting a Strategy

Deleting one or more strategies can be achieved by highlighting the strategies it is desired to delete in the list of strategies and clicking the Delete option on the toolbar (or the edit menu).



Promoting or Demoting Strategies in the List of Strategies

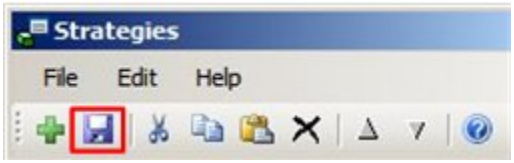
Strategies can be promoted or demoted in the sequence strategies are displayed in by using the Up and down icons in the toolbar.



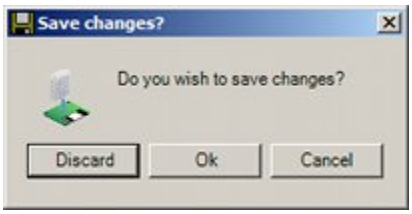
This will affect how the drop down lists display in the dialog boxes used to set strategies in Product Studio.

Saving Changes

Changes can be saved by clicking the Save icon on the toolbar (or the file menu).



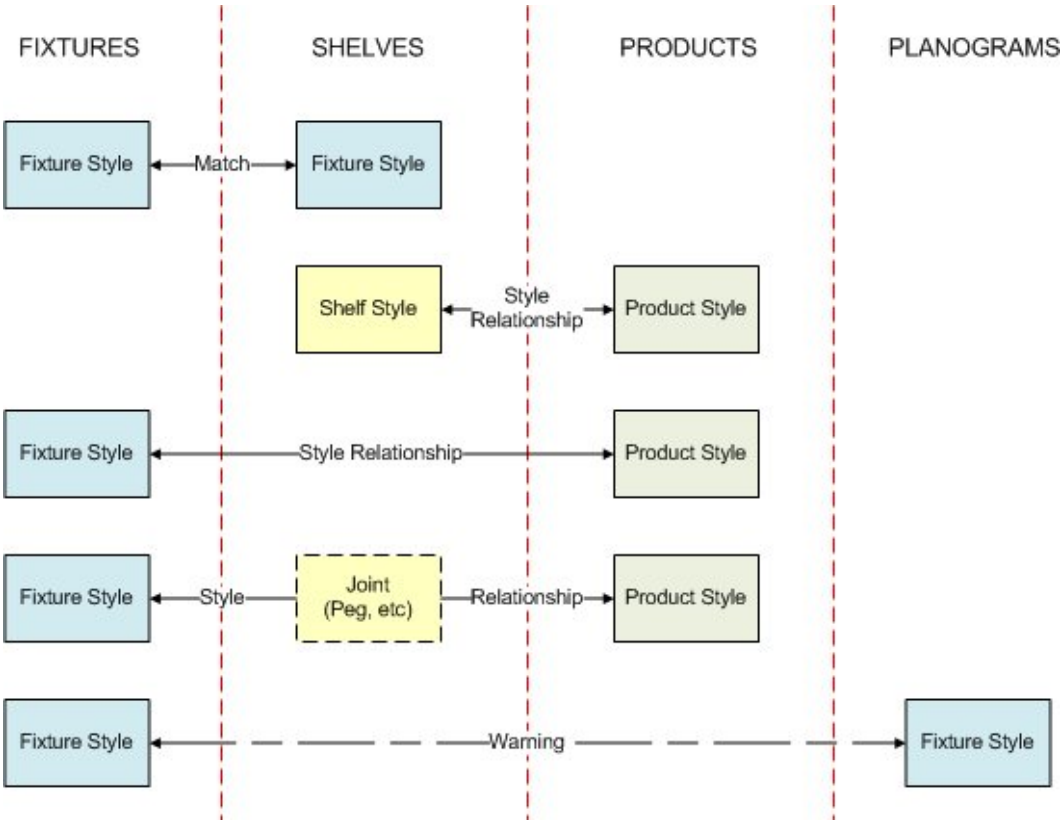
If users attempt to exit the dialog box without saving changes, they will be prompted as to whether they wish to do so.



Styles

Overview of Styles

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.

Other Modules

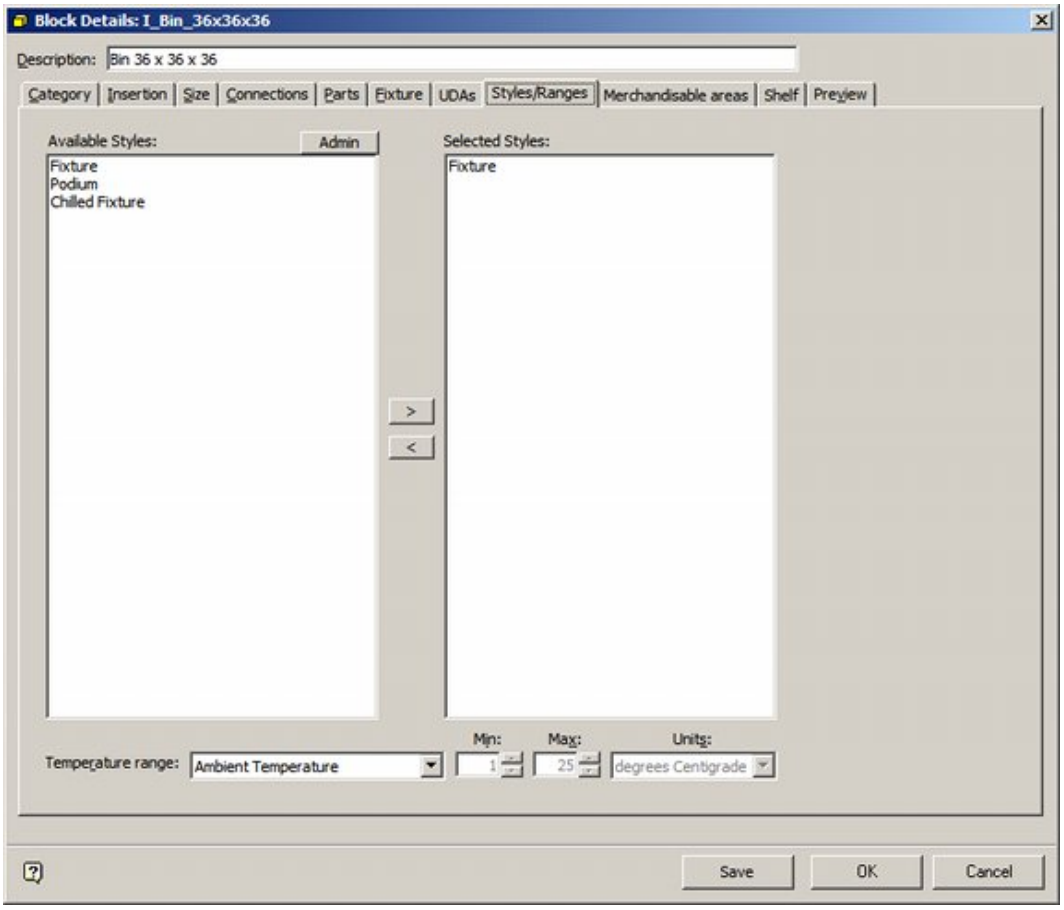
Styles and style relationships can also be configured in the Fixture Studio and Product Studio Modules.

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.

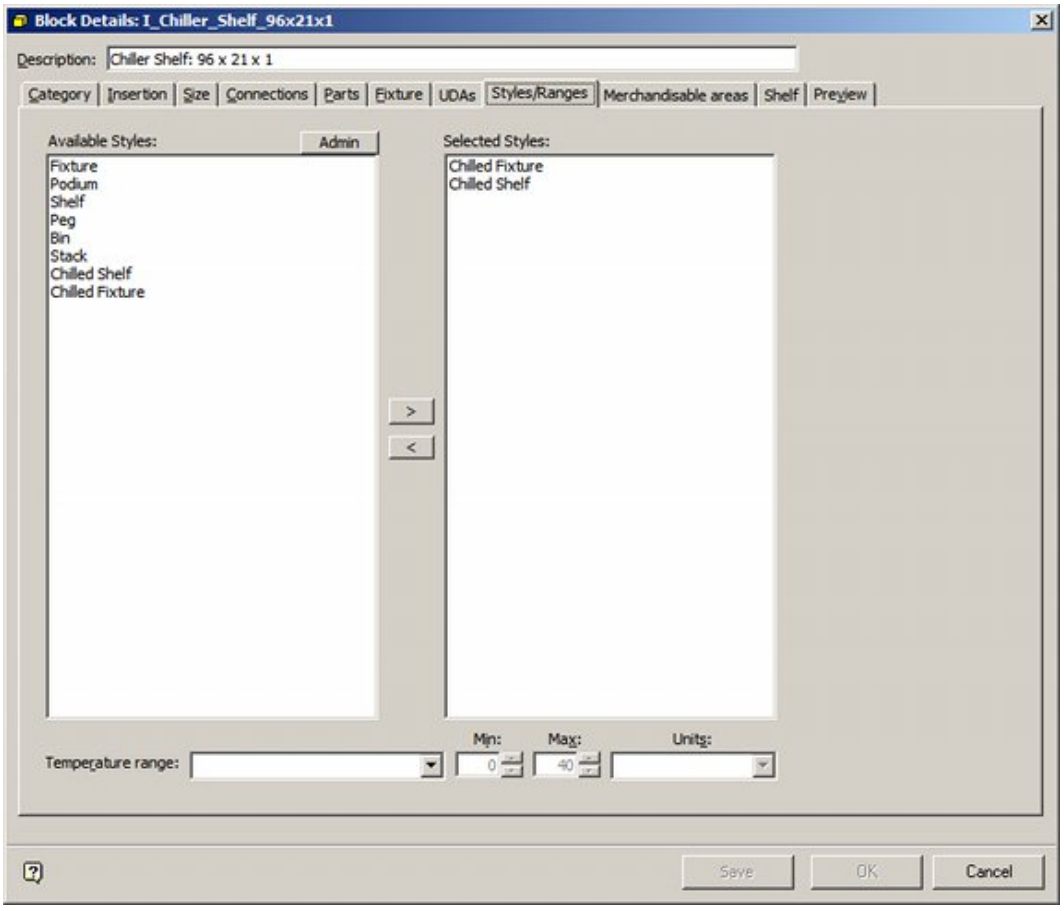


A Fixture is required to have a Fixture style assigned. Only Fixture Styles will be available for selection in the Styles/Ranges Tab.

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.

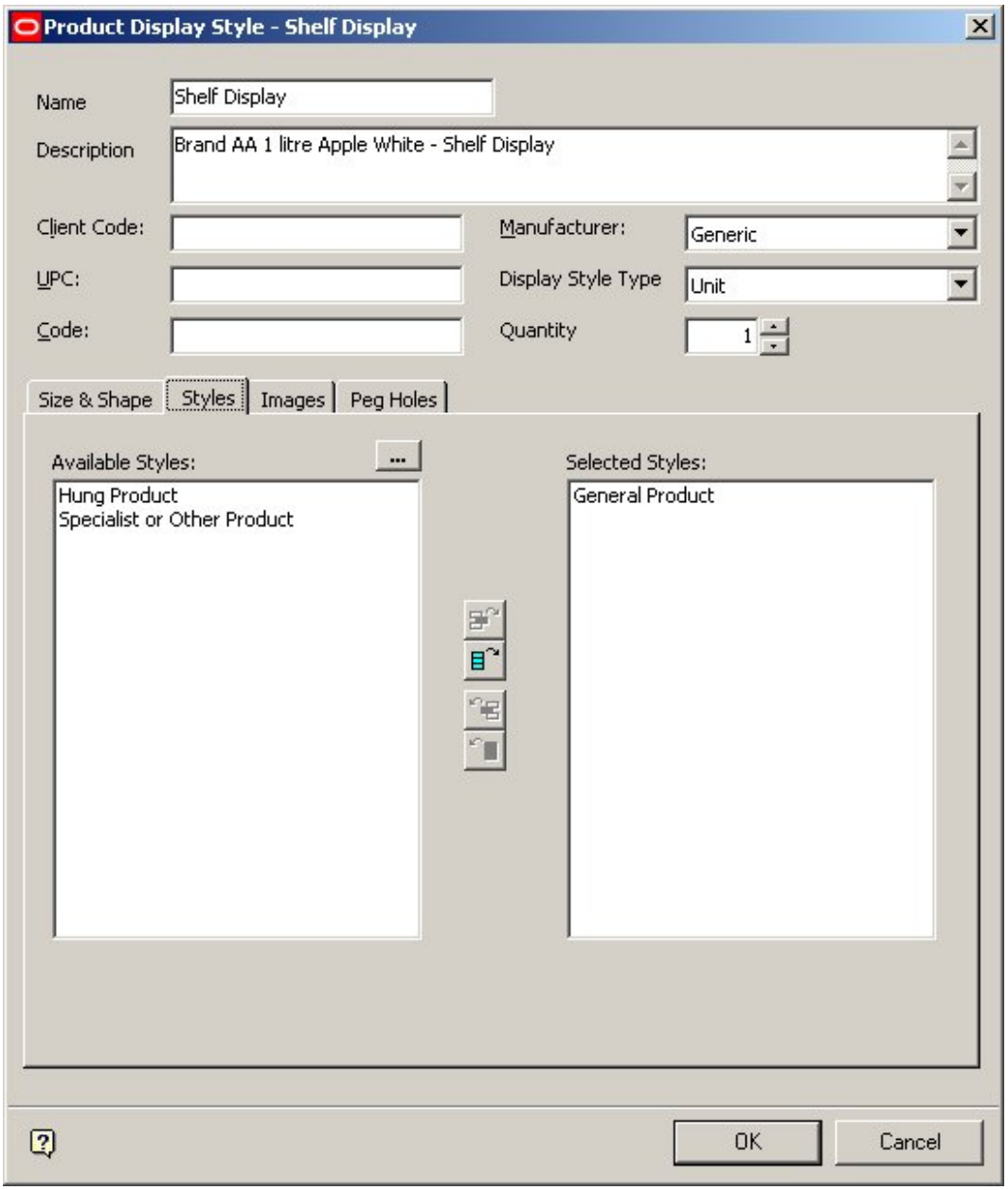


A Shelf Object is required to have both Fixture and Shelf styles assigned. Both Fixture and Shelf Styles will be available for selection in the Styles/Ranges Tab.

Note: Whether an object is designated as a Shelf Object is set in the Categories tab.

Products

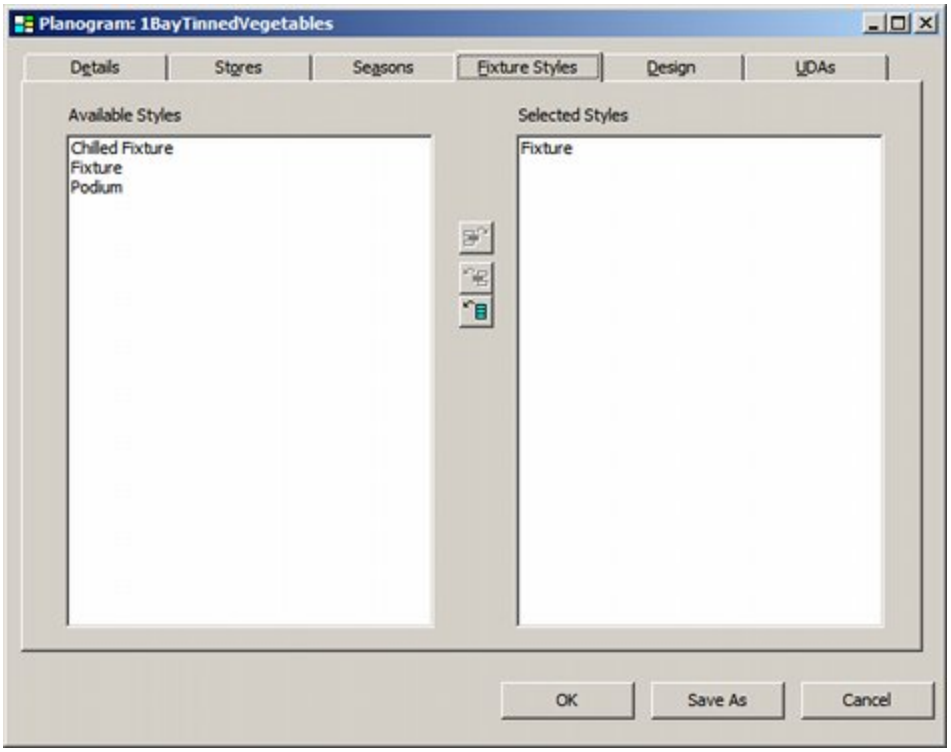
Only Products at Display Style Level can be assigned Styles. This is done in the Styles Tab of the Display Style dialog box in Product Studio



Only Product Styles will be available for Selection.

Planograms

Planograms are assigned Fixture Styles in the Planogram Design dialog box in the Merchandiser Module.

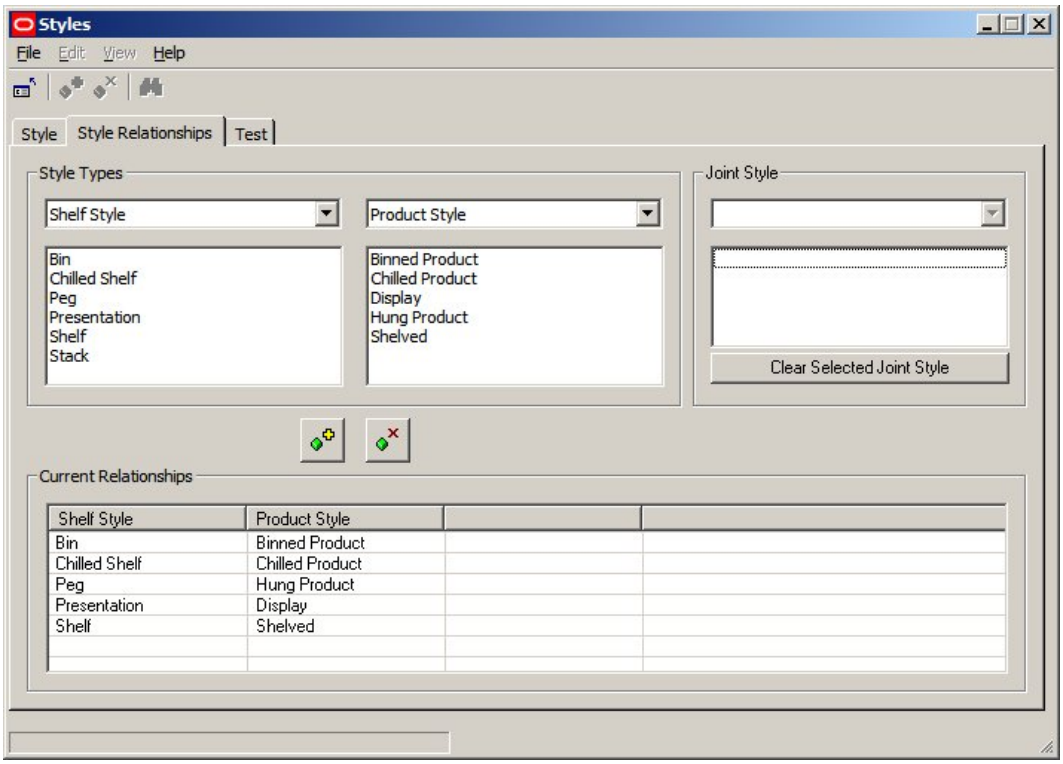


Only Fixture Styles will be displayed.

Styles and Style Relationships

Style Relationships are set up within the Styles option in the Administration module. They control:

- What products can be placed on what fixture
- What products can be placed on what shelf
- 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 an 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.

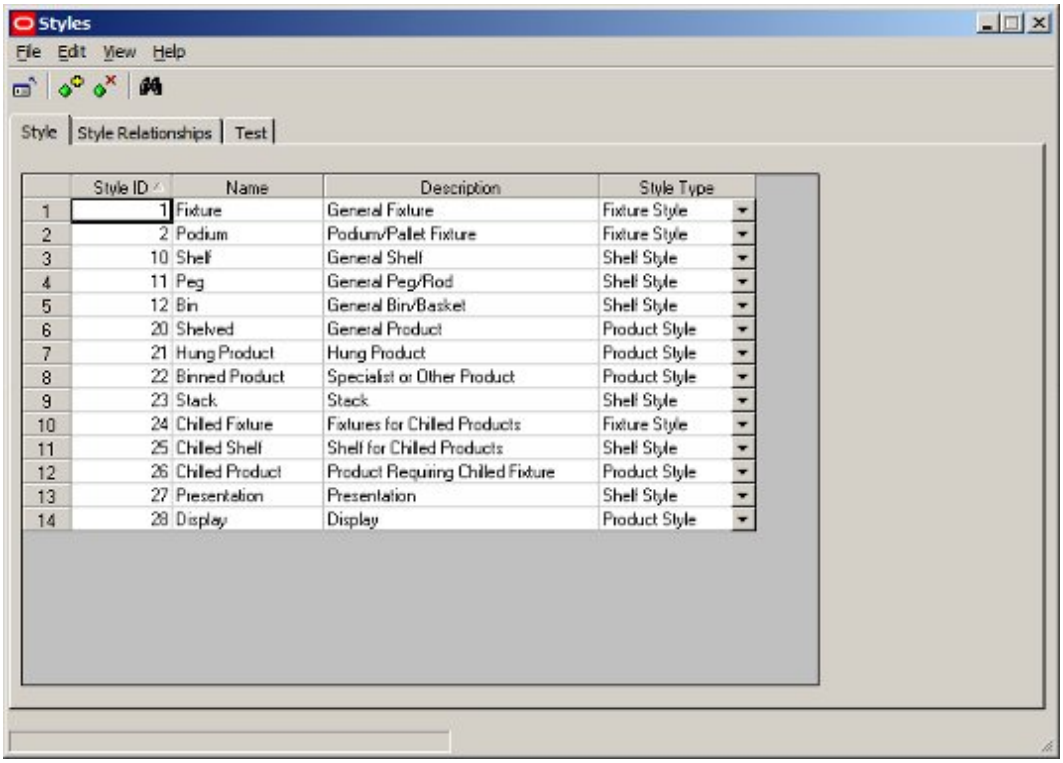
The full process for using preferred styles is:

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

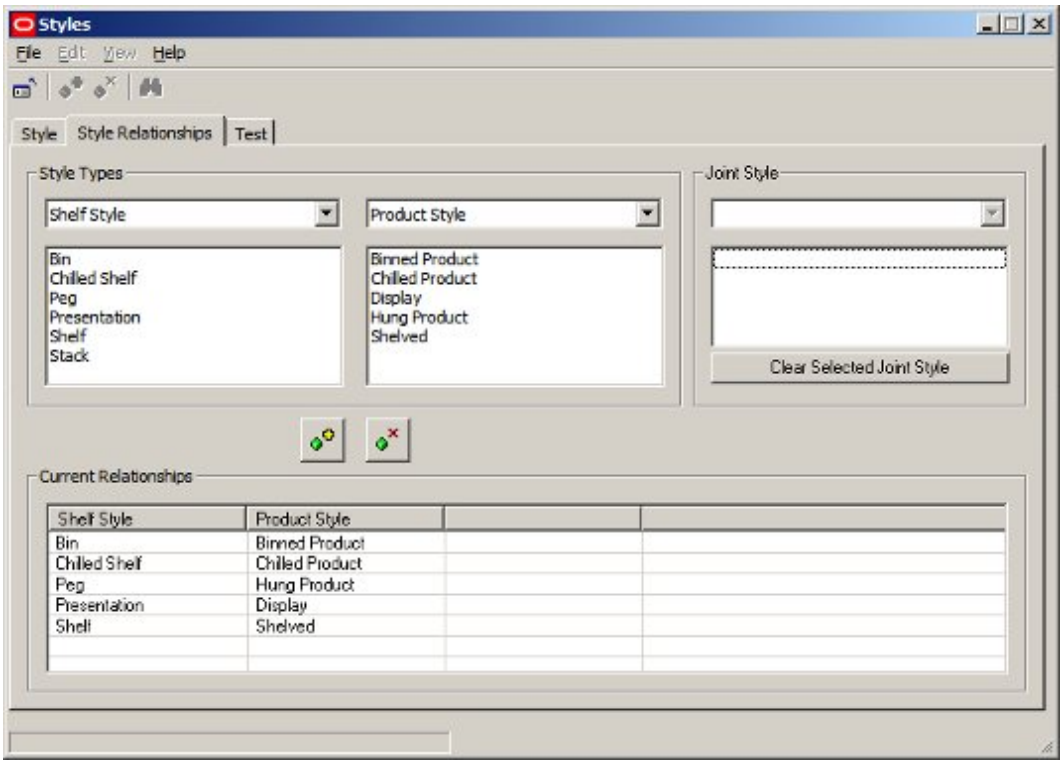
Add Appropriate Styles in Admin

The appropriate styles have to exist in the Style tab of the Styles dialog box in the Administration module



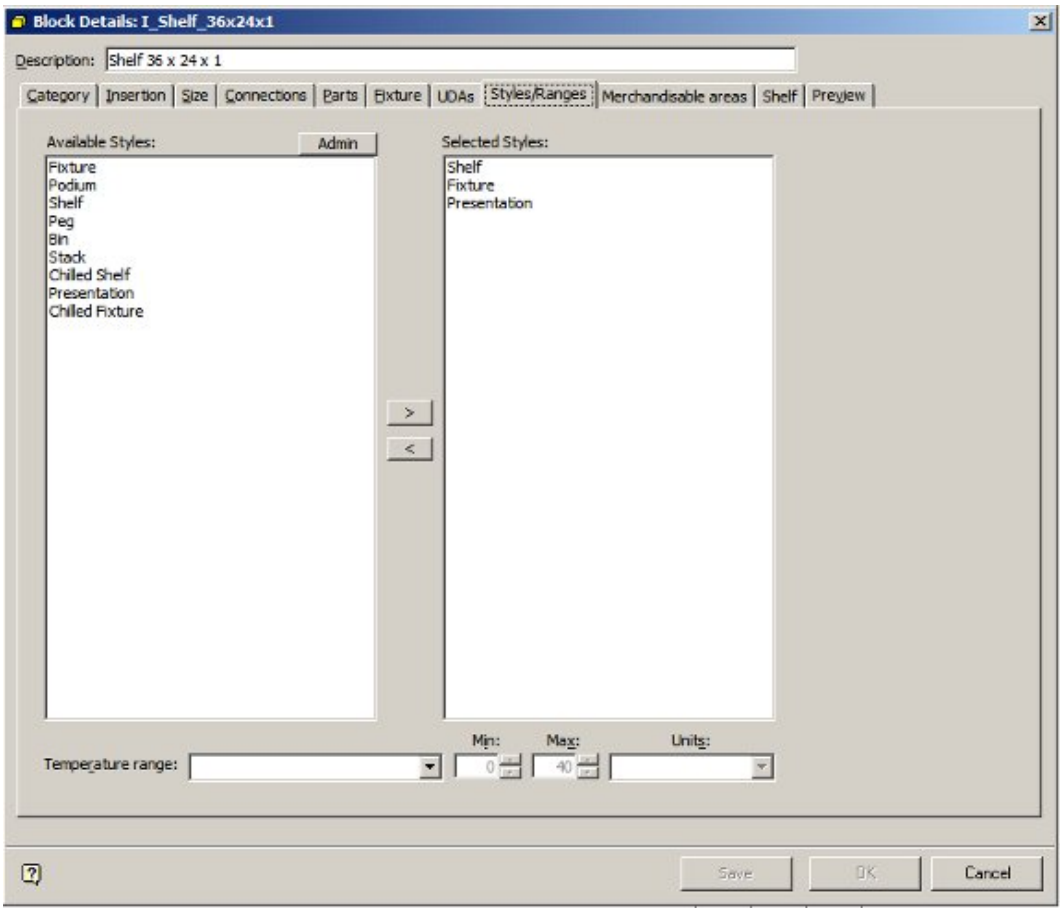
Set up Style Relationships in Admin

The appropriate style relationships have to exist in the Style Relationship tab of the Styles dialog box in the Administration module



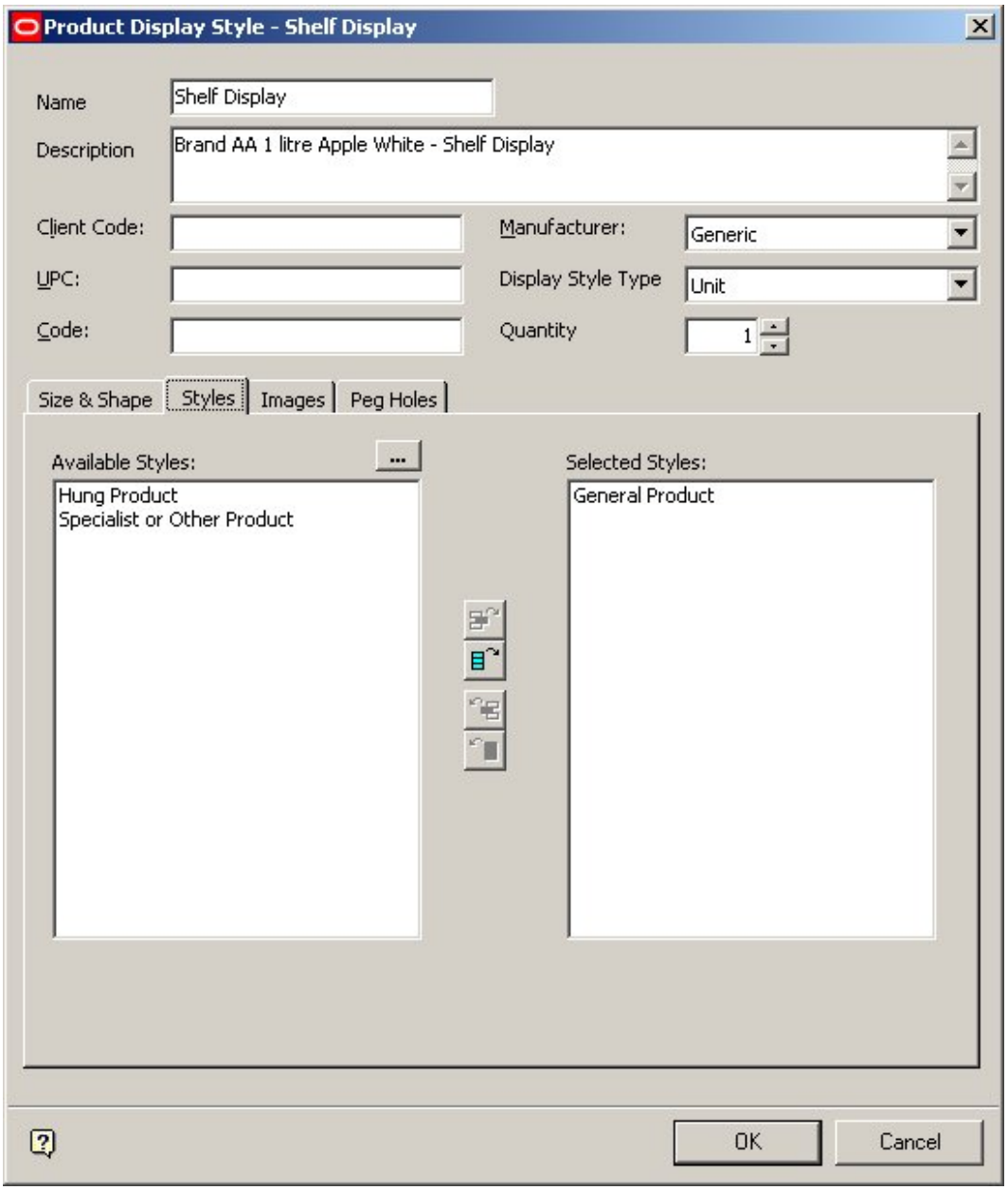
Assign Styles to Shelf Objects in Fixture Studio

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

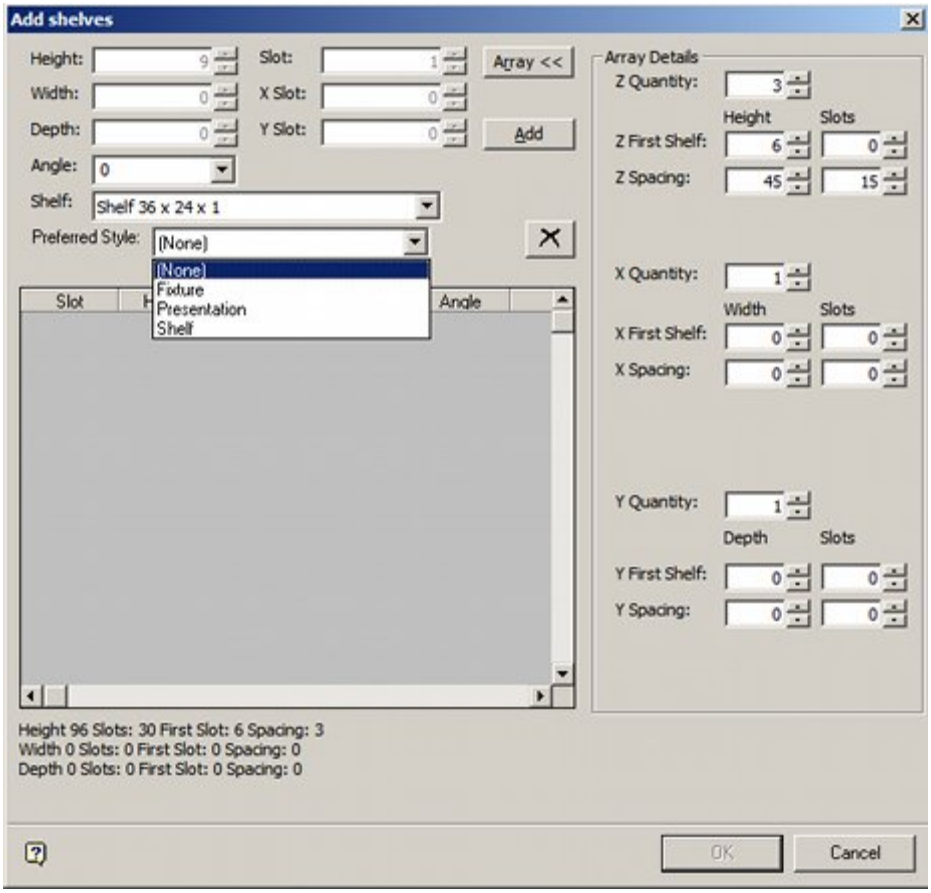
Product Styles are assigned in Styles Tab of the Product Display Style dialog box in Product Studio.



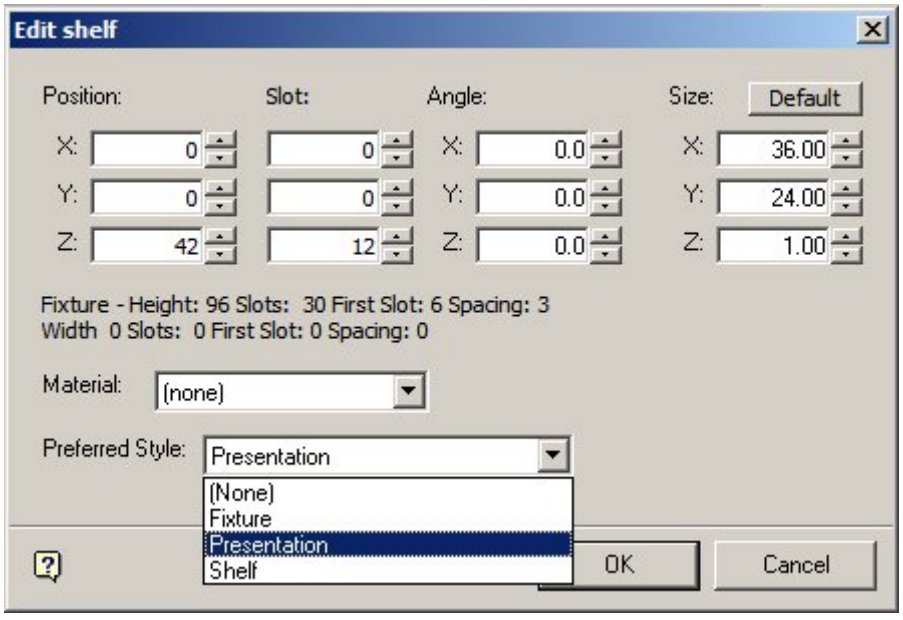
Set up Preferences for Shelves

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.

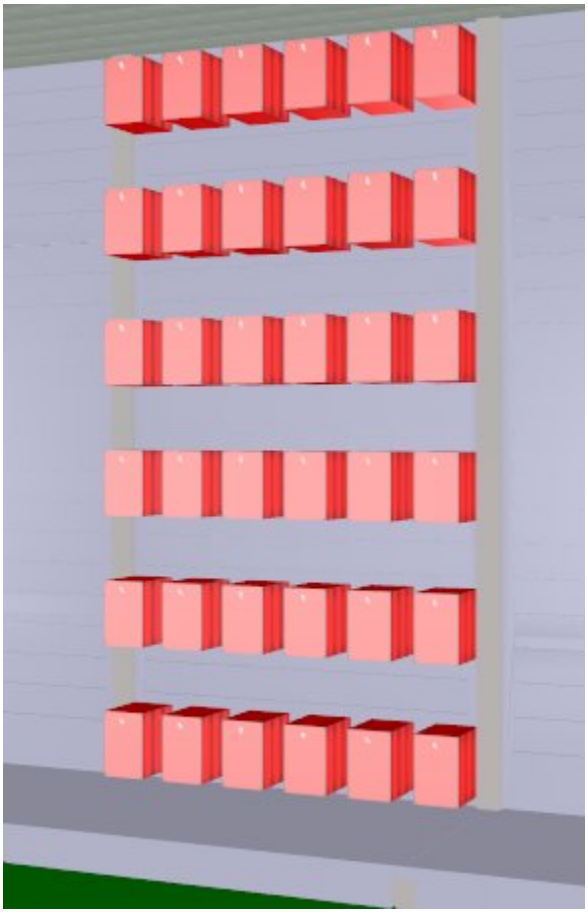


Drag and Drop Display Style products onto shelf - preferred style should be chosen if not correct

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.



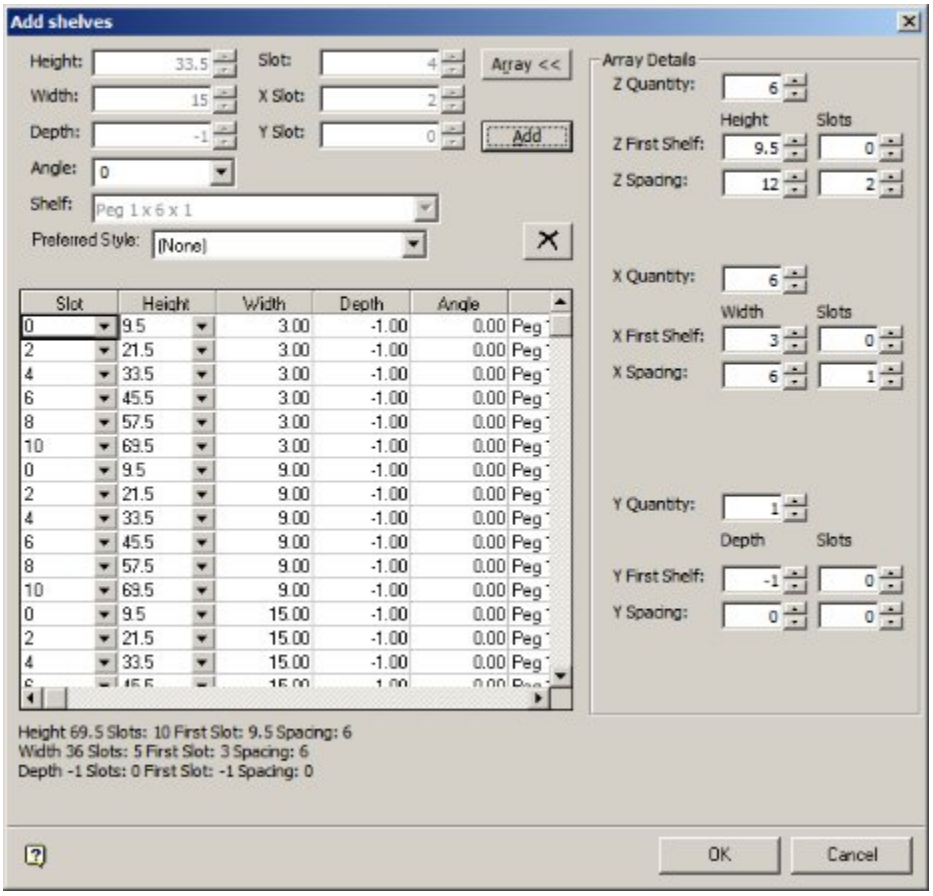
In the example above products have been directly placed into a slatwall using pegs. Without a joint, the pegs would have to have been placed first and then merchandised with product in a second operation.

Prior to products being added via joints, the following must be true:

- The Fixture that will support the shelf objects the products are being added to must have a Fixture Style assigned in Fixture Studio
- The Shelf Object the product will be added to must have a Shelf Style assigned in Fixture Studio
- The Product must have a Product Style assigned in Product Studio
- The appropriate Joint (Style Relationship) must be set up in the Styles option within the Admin Module

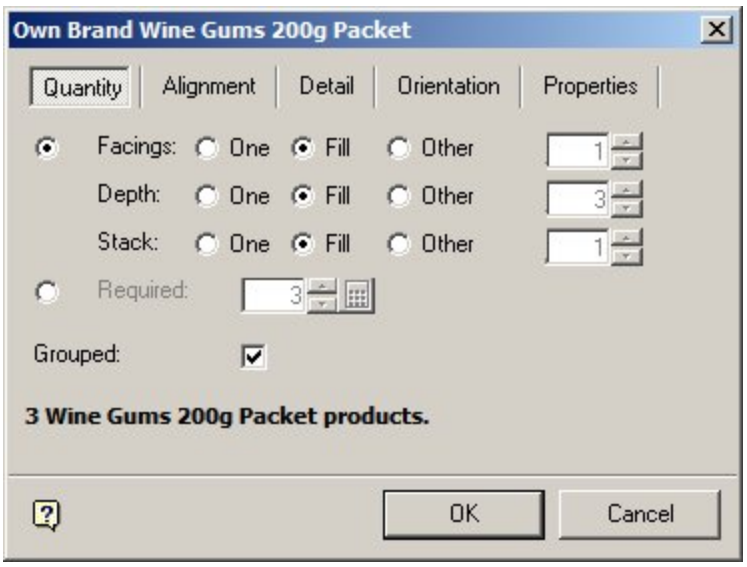
To add a product using joints requires the following steps:

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.



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.



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:

- Fixtures and Products
- 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:

- Fixtures and Products
- Shelf Objects and Products

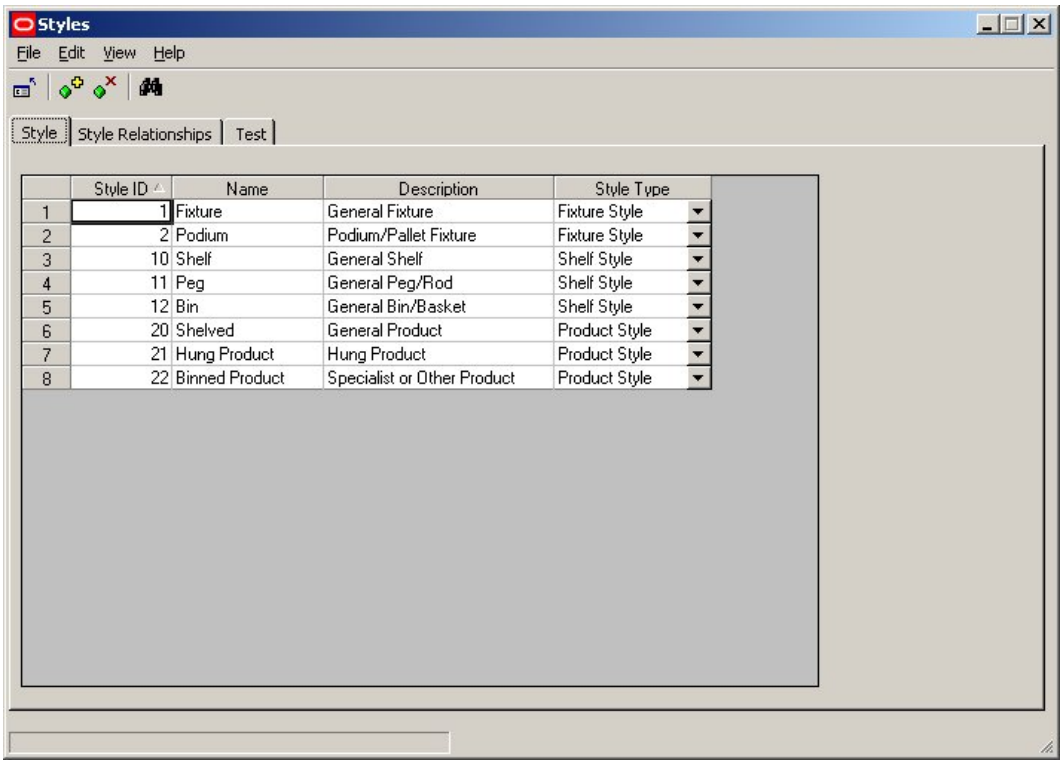
and the ranges are compatible, then they can be used to determine whether a product can be placed on either a fixture or a shelf object.

Example

- 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.
- 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.

Adding and Deleting Styles

Adding and Deleting Styles is done by using the Style tab in the Styles dialogue box.



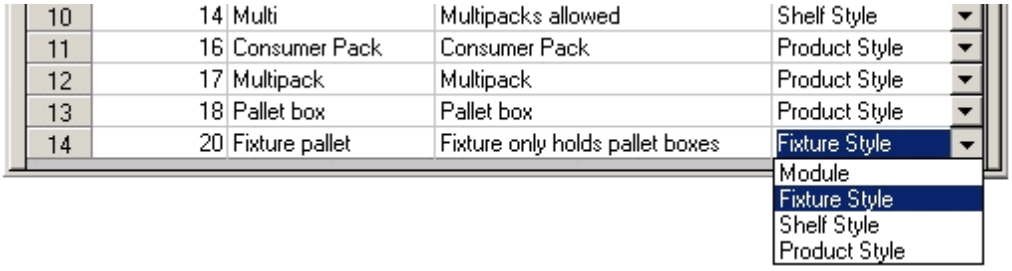
Icon	Meaning
	Add style
	Delete style

Adding a Style

To add a style, click 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.



Currently only Fixture, shelf and Product styles are active.

Deleting a Style

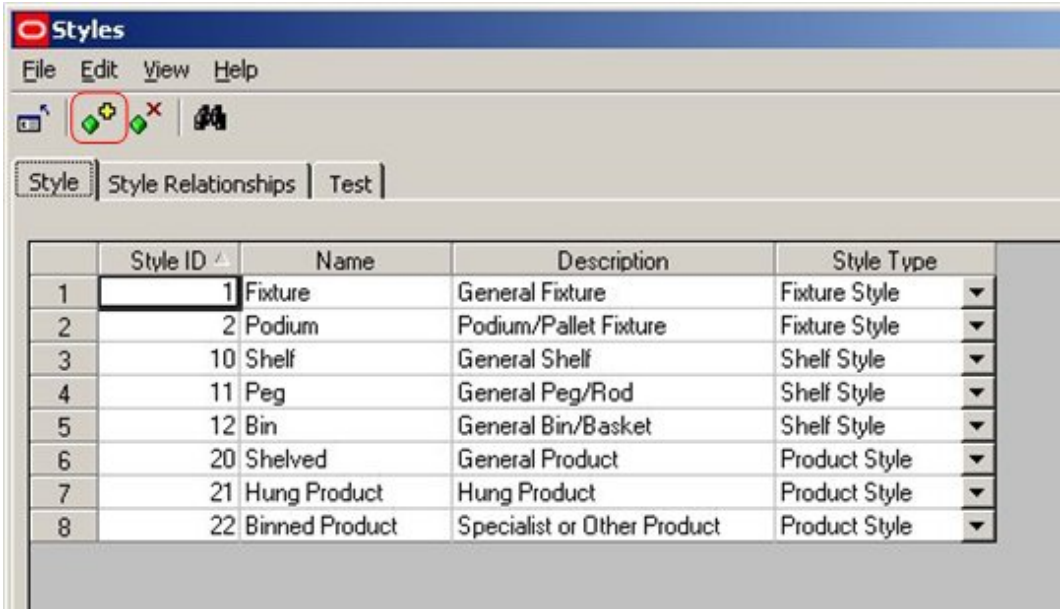
Styles can be deleted by highlighting a style and clicking on the Delete Style icon. If not in use, the style will be deleted. If in use, a warning will appear. This indicates that the style has been assigned to a fixture, shelf, product or planogram.



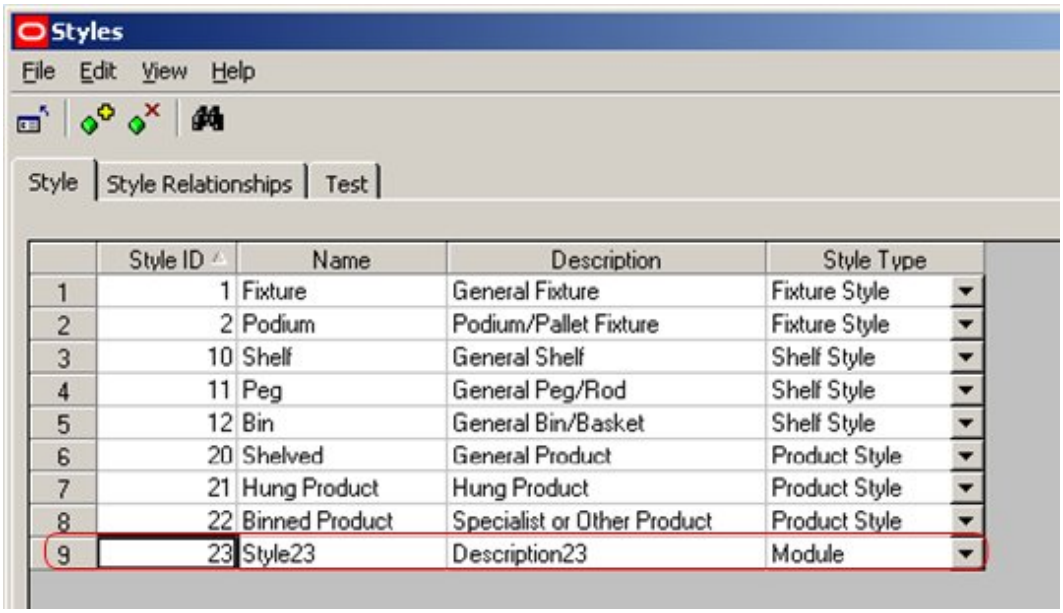
The style must then first be changed in the respective fixture, shelf, product or planogram before it can be deleted.

Example of Adding a Style

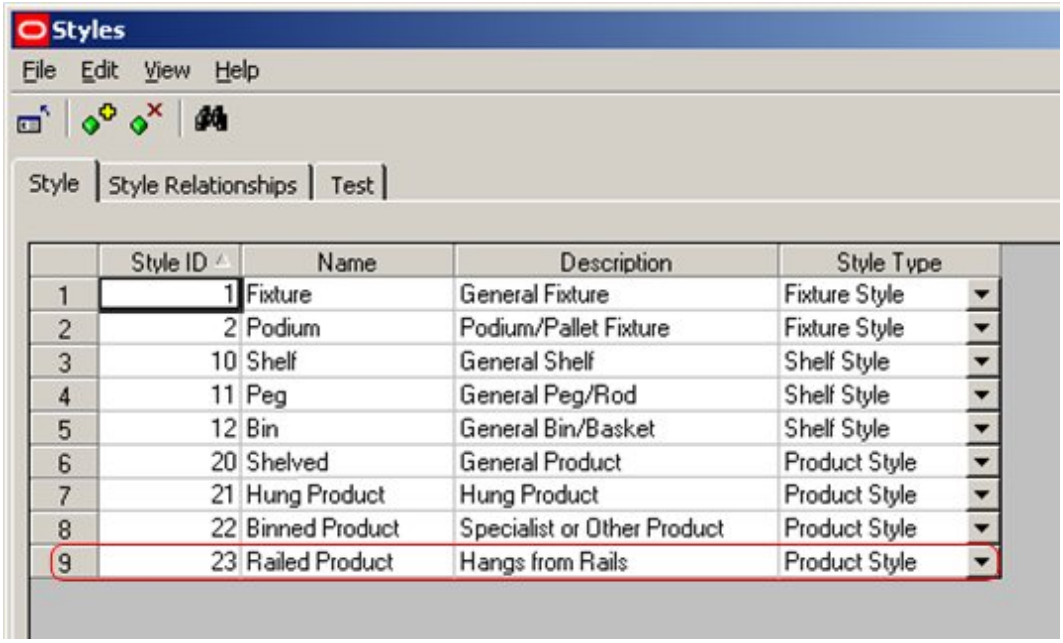
To **Add a Style** to the available list, open the Style option in the Admin Module. Use the Style Tab and click on the Add Style Icon (circled).



This will add another line to the information grid (circled).



Edit this line until it has the desired information.

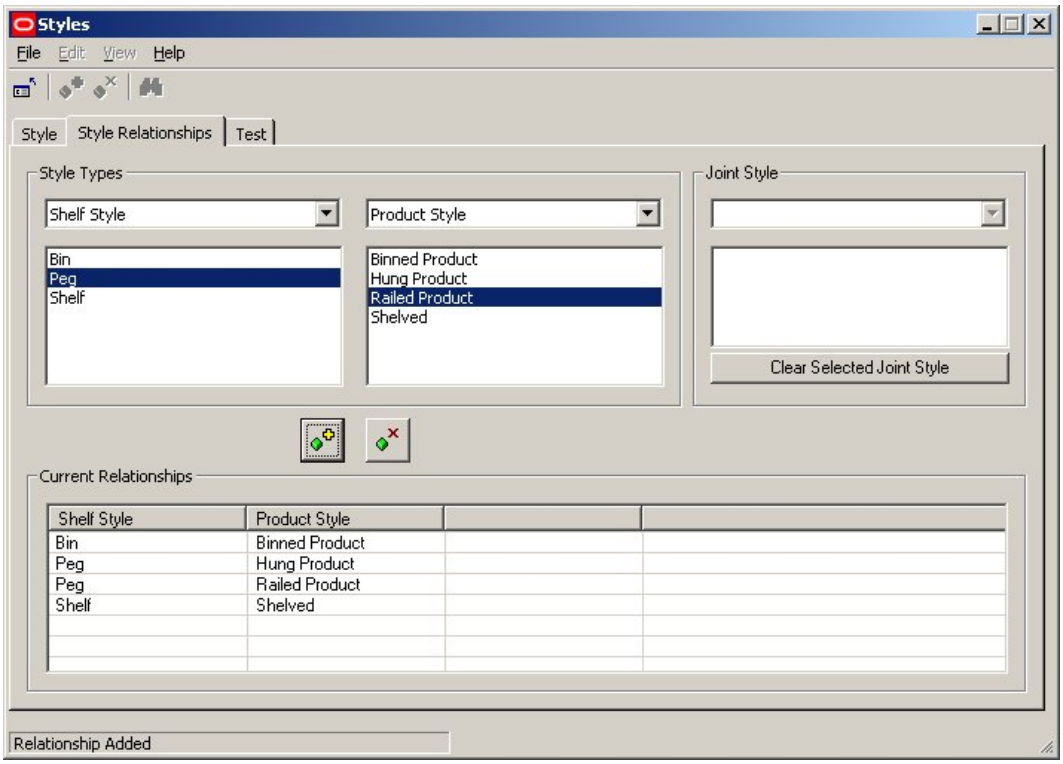


Finally, exit to save the styles.

> **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.



Icon	Meaning
	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.

Style Relationship	Comment
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.

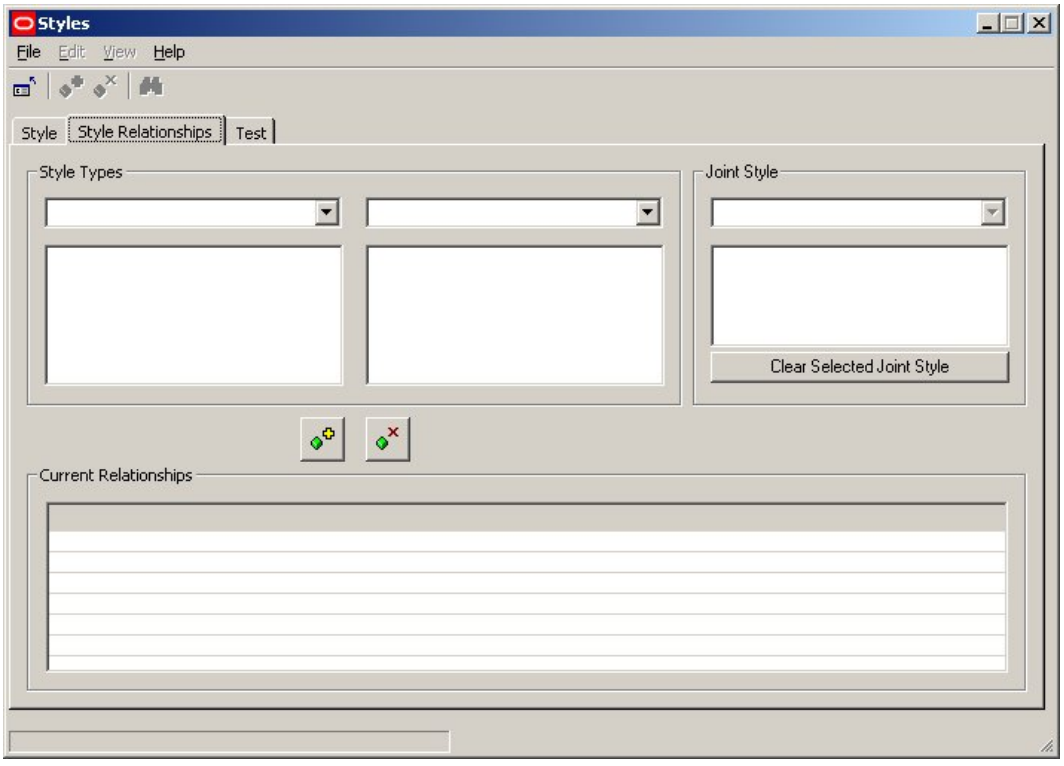
Deleting a Style Relationship

Styles relationships can be deleted by highlighting a style and clicking on the Delete Style Relationship icon.

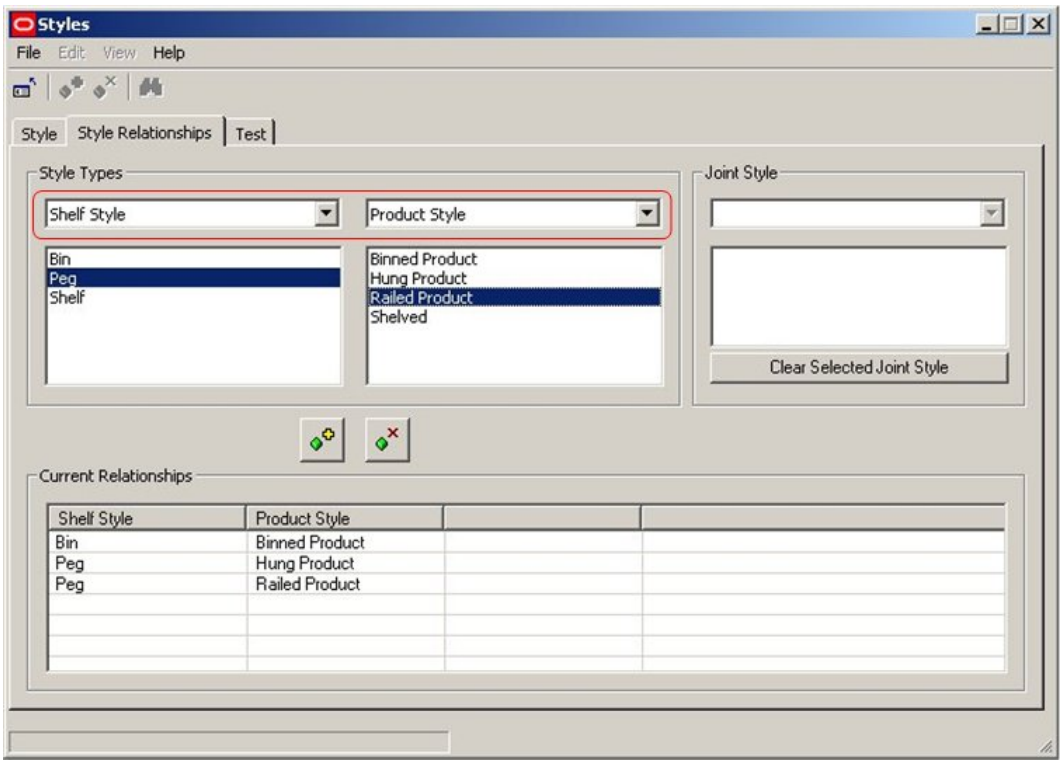
> **Note**: Style relationships in use can be deleted without any warning being given. This will not affect any objects placed before the relationship was deleted, but if further objects are to be placed using this relationship, it must be reinstated before they are.

Example of Adding a Style Relationship

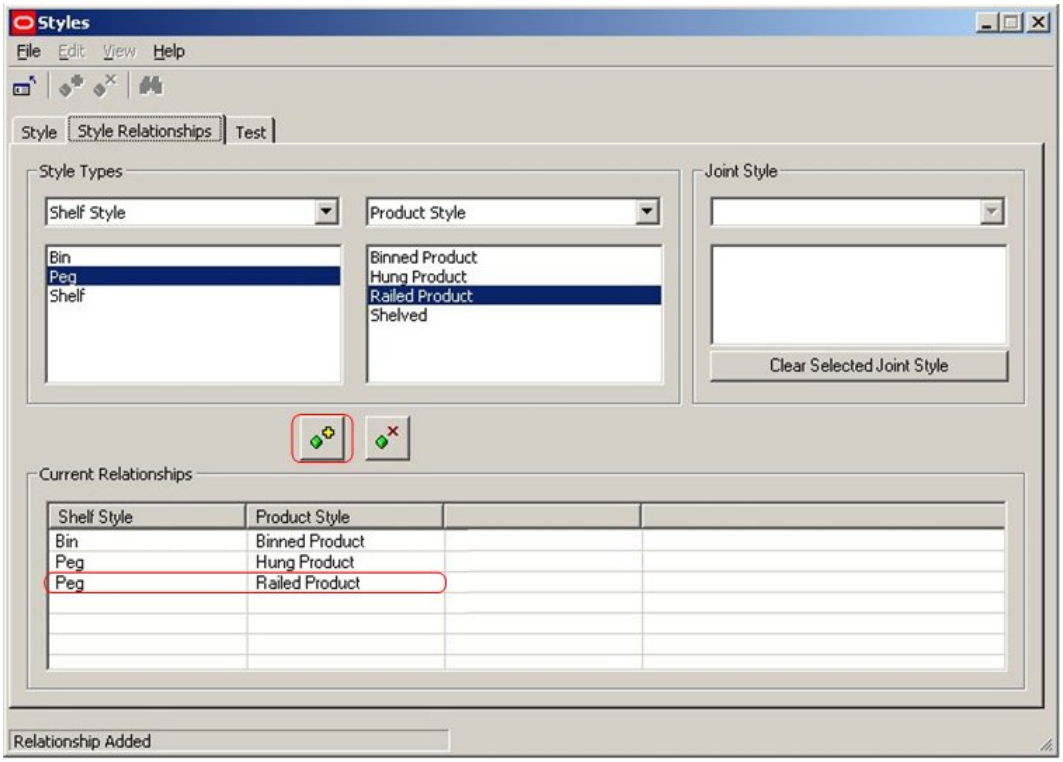
To **Add Style Relationships** to the available list, open the Styles option in the Admin Module, click on the **Style Relationship** tab.



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.



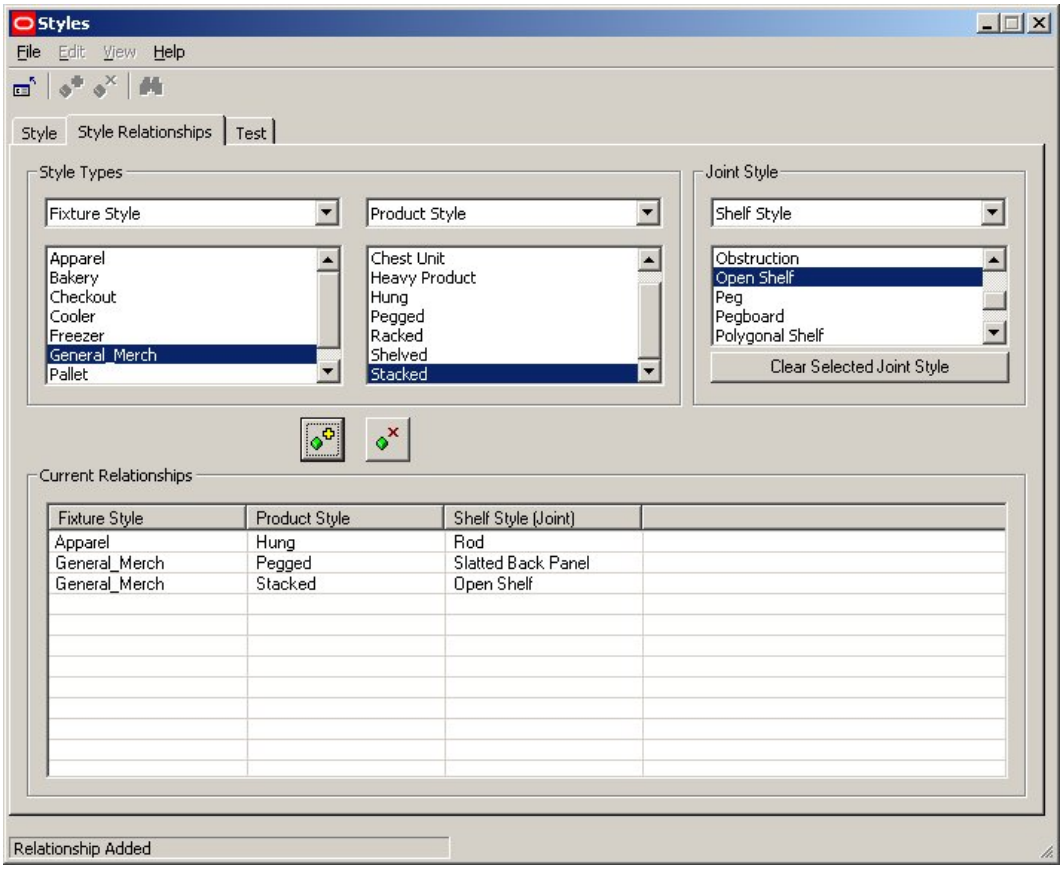
Finally, click on the Add Style Relationship icon. This will cause the Style to be added to the list of available Style relationships.



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.



Icon	Meaning
	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.

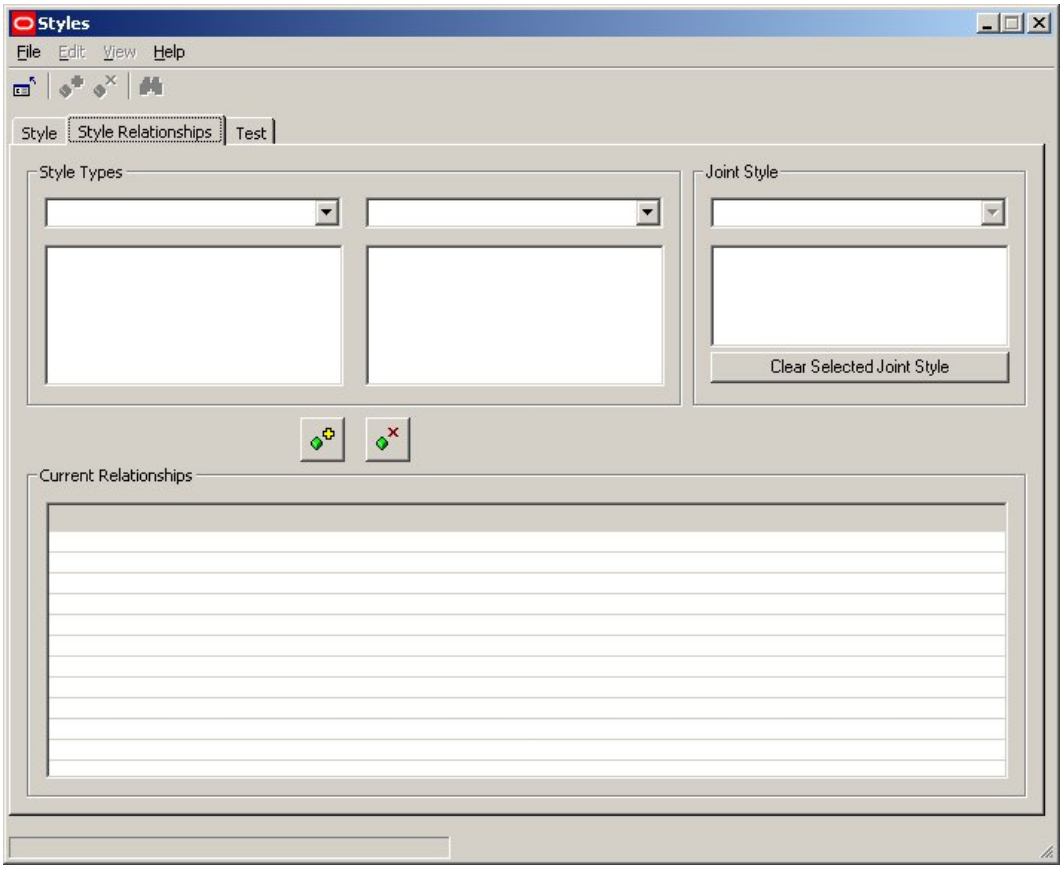
Deleting a Joint

Joints can be deleted by highlighting a style and clicking on the Delete Style Relationship icon.

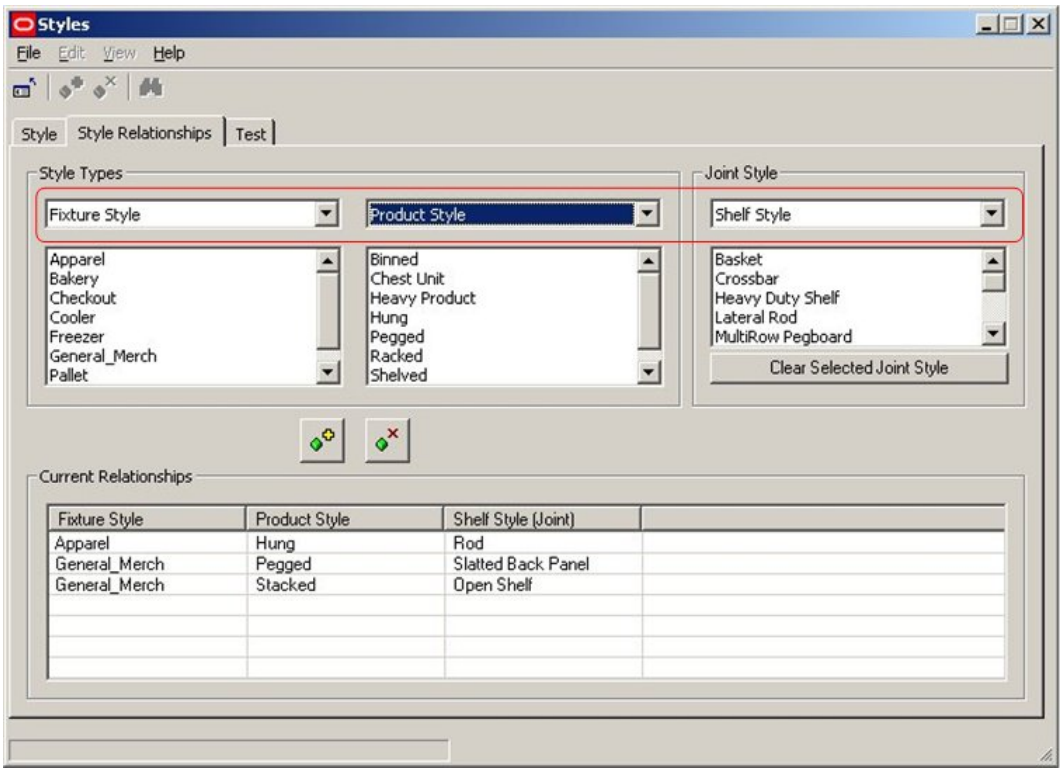
> **Note**: Joints in use can be deleted without any warning being given. This will not affect any objects placed before the relationship was deleted, but if further objects are to be placed using this relationship, it must be reinstated before they are.

Example of Adding a Joint

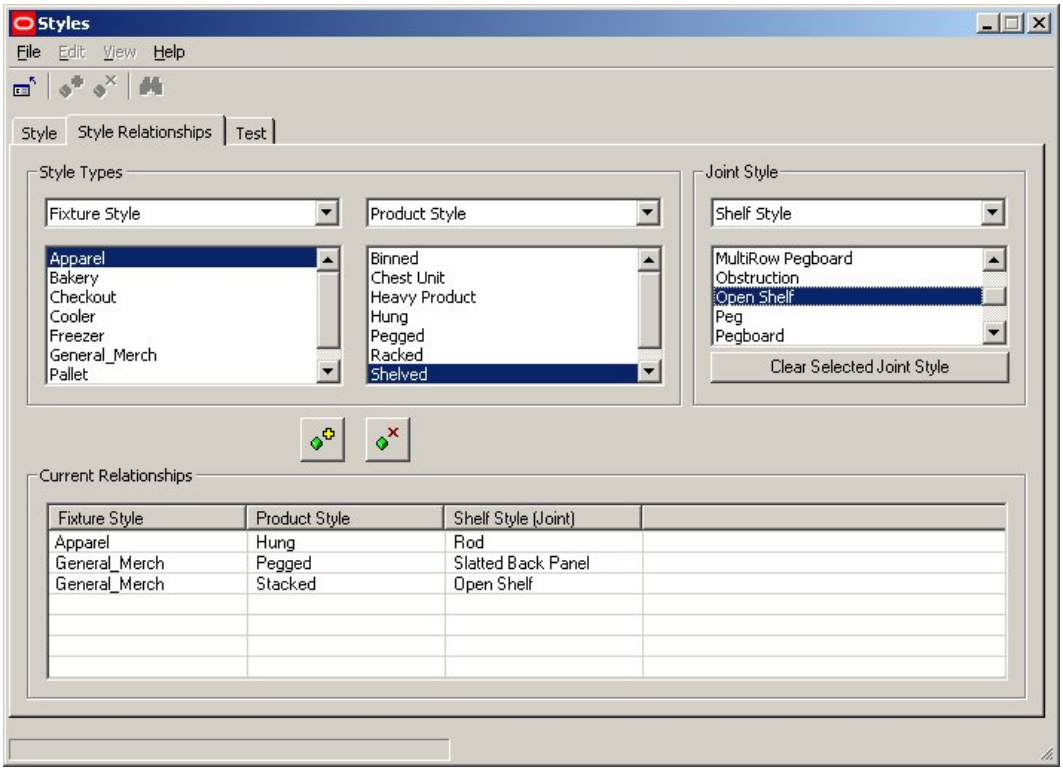
To **Add a Joint** to the available list, open the Styles option in the Admin Module. Click the **Style Relationship** Tab.



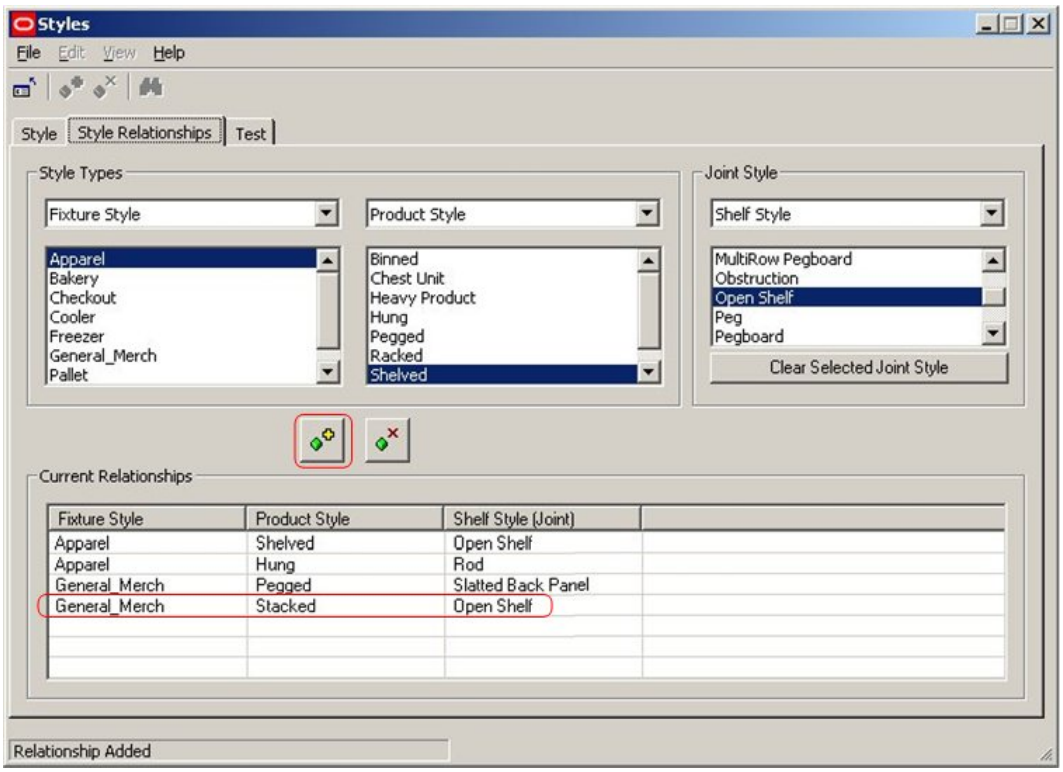
First select Fixture Style in the left hand drop down list. Next select Product Style in the central drop down list. Shelf Style will automatically appear in the right hand drop down list.



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.

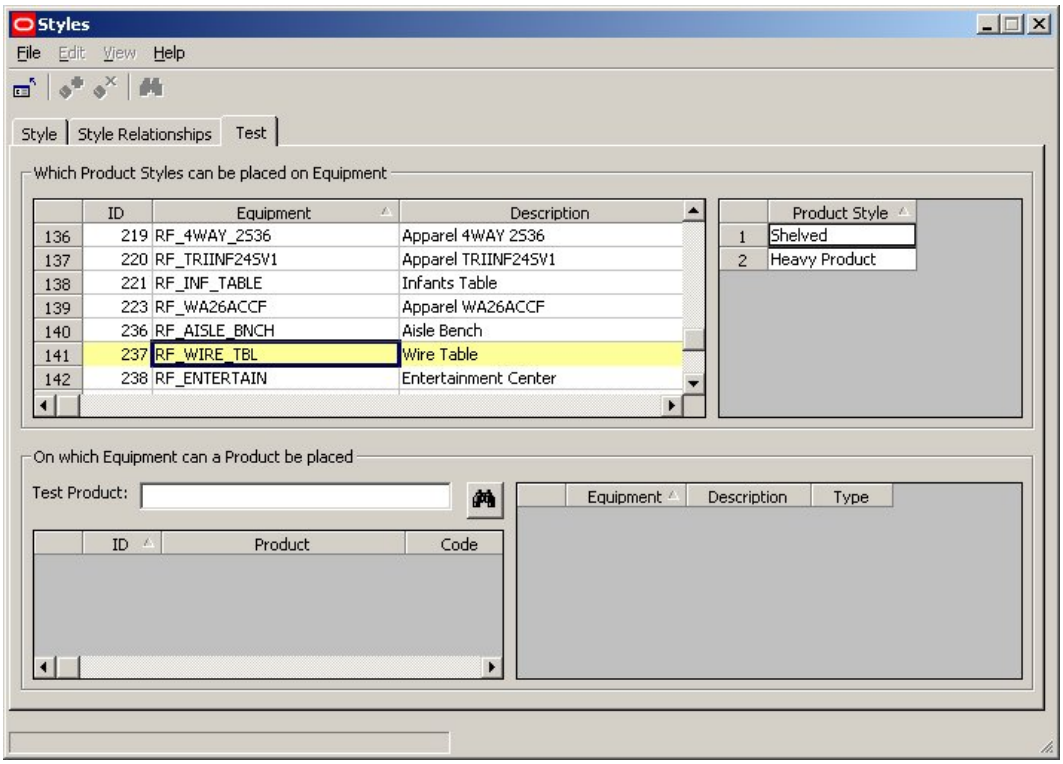


Testing Style Relationships

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.

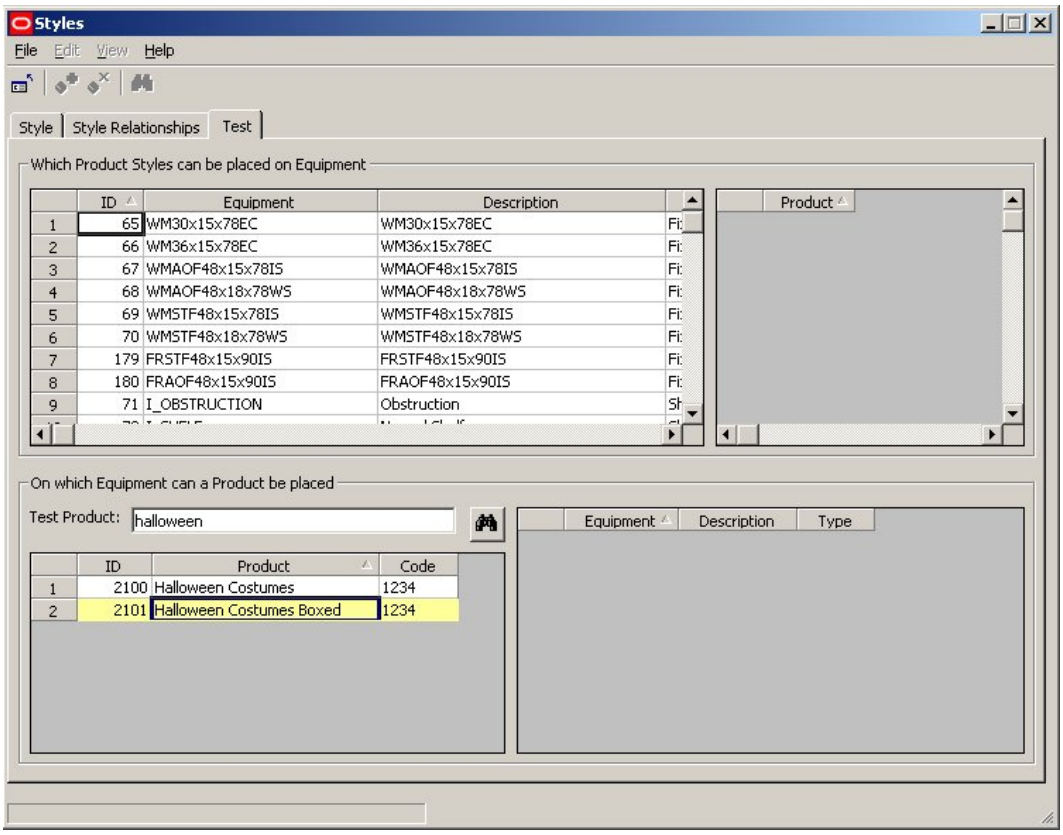


Note: The list of equipment can be sorted in ascending or descending order by clicking on the column headers.

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.

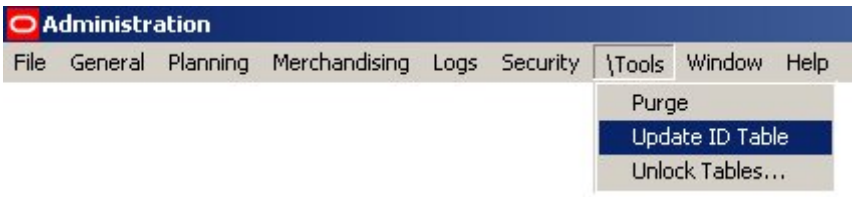
10

Tools and Logs

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 Planning 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 the 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.

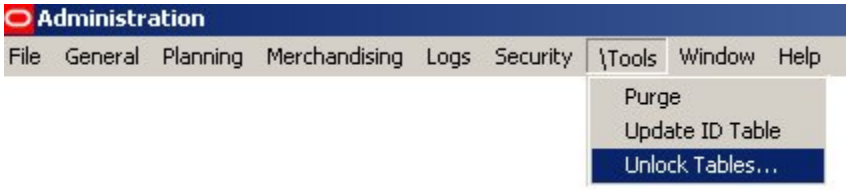
Similarly, if the database is updated by a major import of data, some of the information in the Next ID table can become outdated.

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

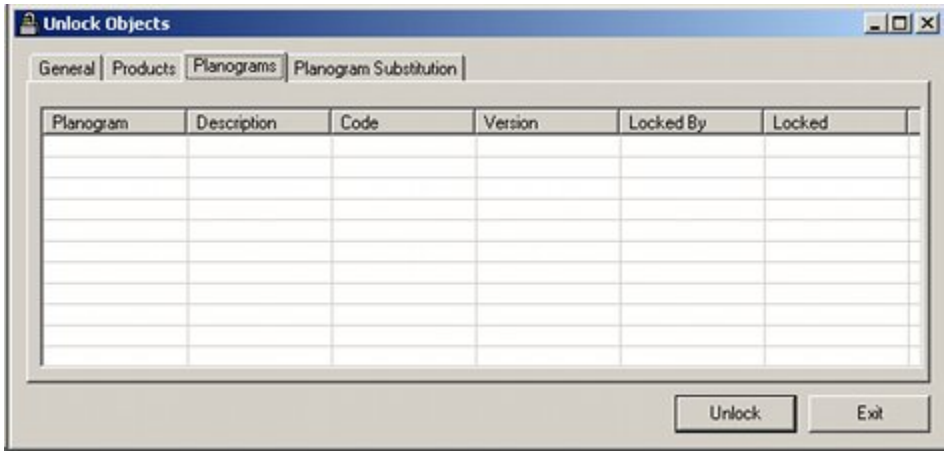
Overview of Unlock Tables Option

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.

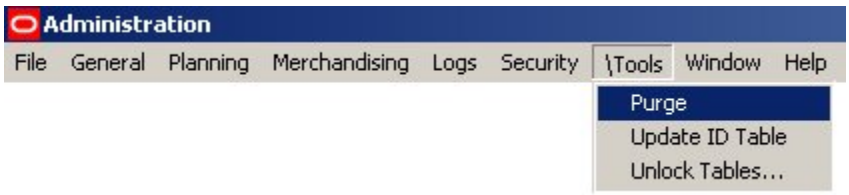


If there are objects to be checked in, this can be done by highlighting them, right clicking to bring up the pop-up menu and choosing the appropriate option.

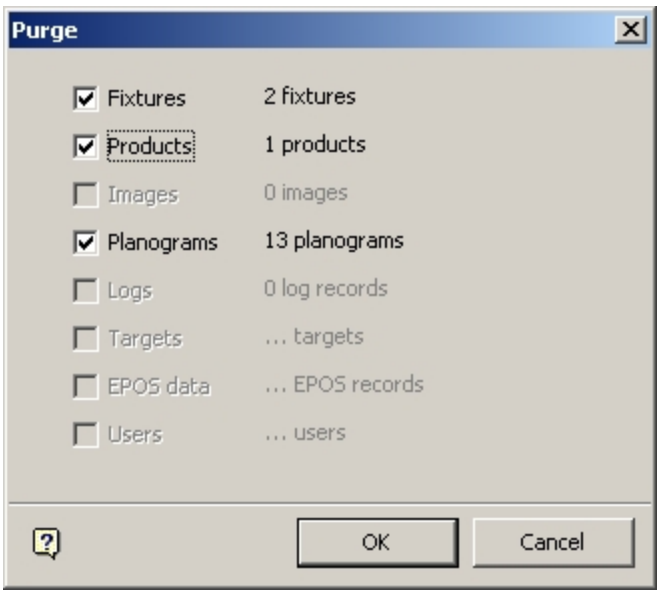
Purge

Overview of Purge Options

Purge Options are available using the Purge option on the Tools pull down menu.



This will bring up the Purge dialogue box.



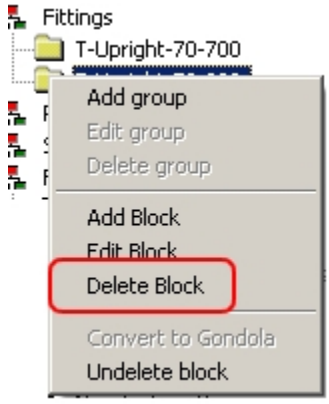
Clicking on OK will purge the selected items.

Purge Fixtures Option

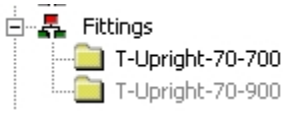
Deleting Fixtures

Fixtures are deleted in Fixture Studio.

This is done by highlighting the selected fixture and selecting Delete on the right click menu.



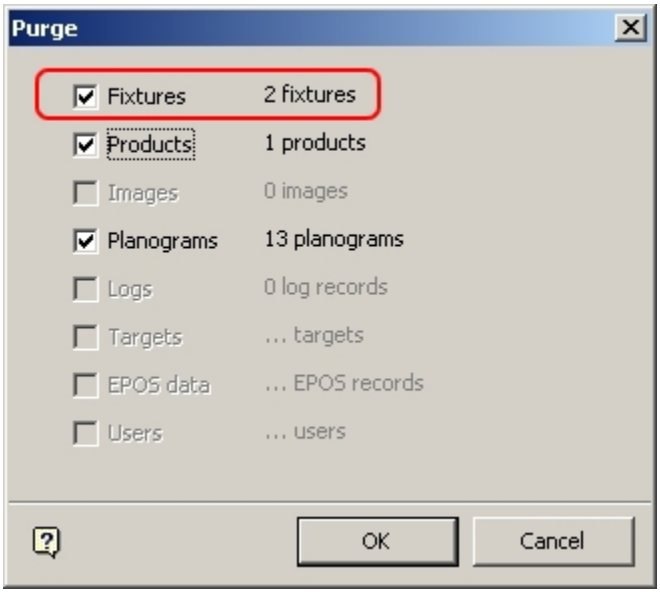
The highlighted fixture can then be marked for deletion by clicking on the Delete Block Option. Fixtures marked for deletion will appear grey rather than black in the Fixtures Hierarchy.



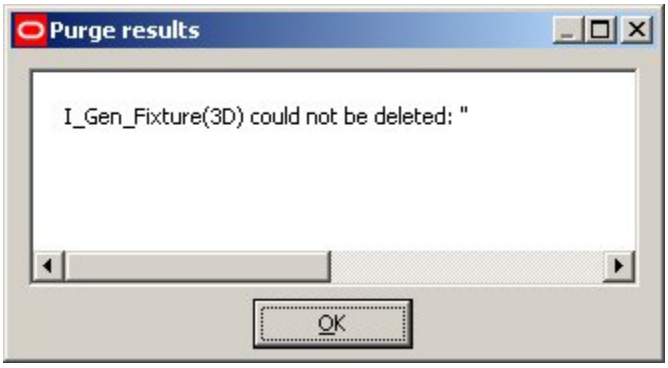
After the fixture has been marked for deletion, the information must be saved to the database using the Fixture Studio Save dialog box.

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.



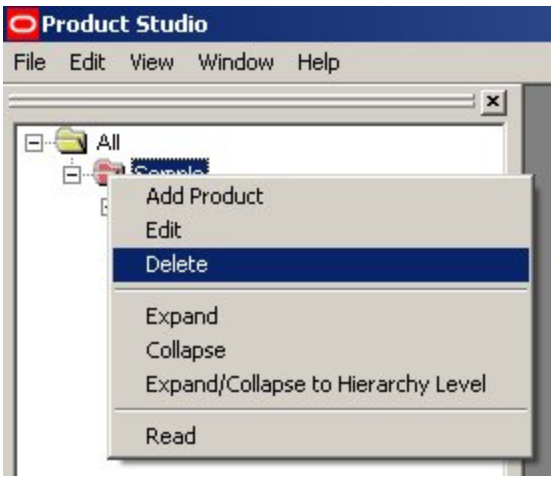
Results will be reported in the Purge Results dialogue box. If the fixture is present in any floor plans, it cannot be deleted until the fixture has been deleted from the floor plans or the floor plans themselves have been deleted.



Purge Products Option

Deleting Products

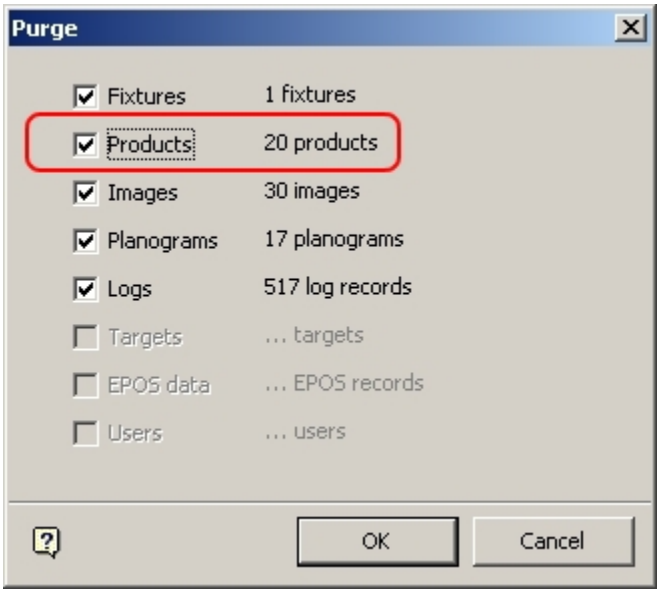
Products are deleted in Product Studio. This is done by highlighting the selected product and using <Ctrl> + right click to bring up the pop-up menu.



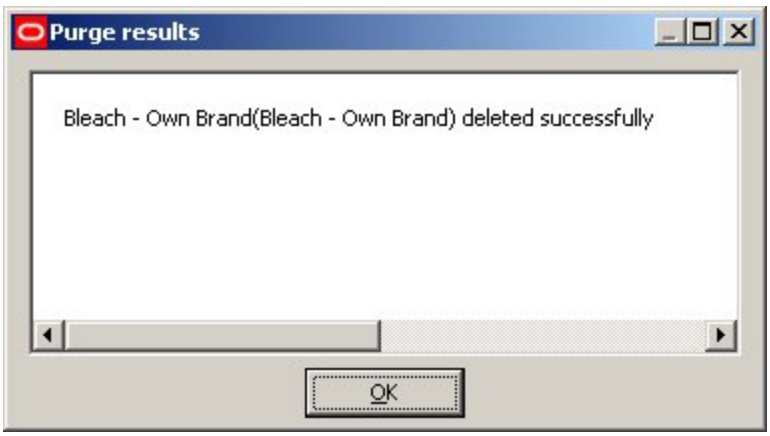
The highlighted product can then be deleted by clicking on the Delete Block Option.

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.



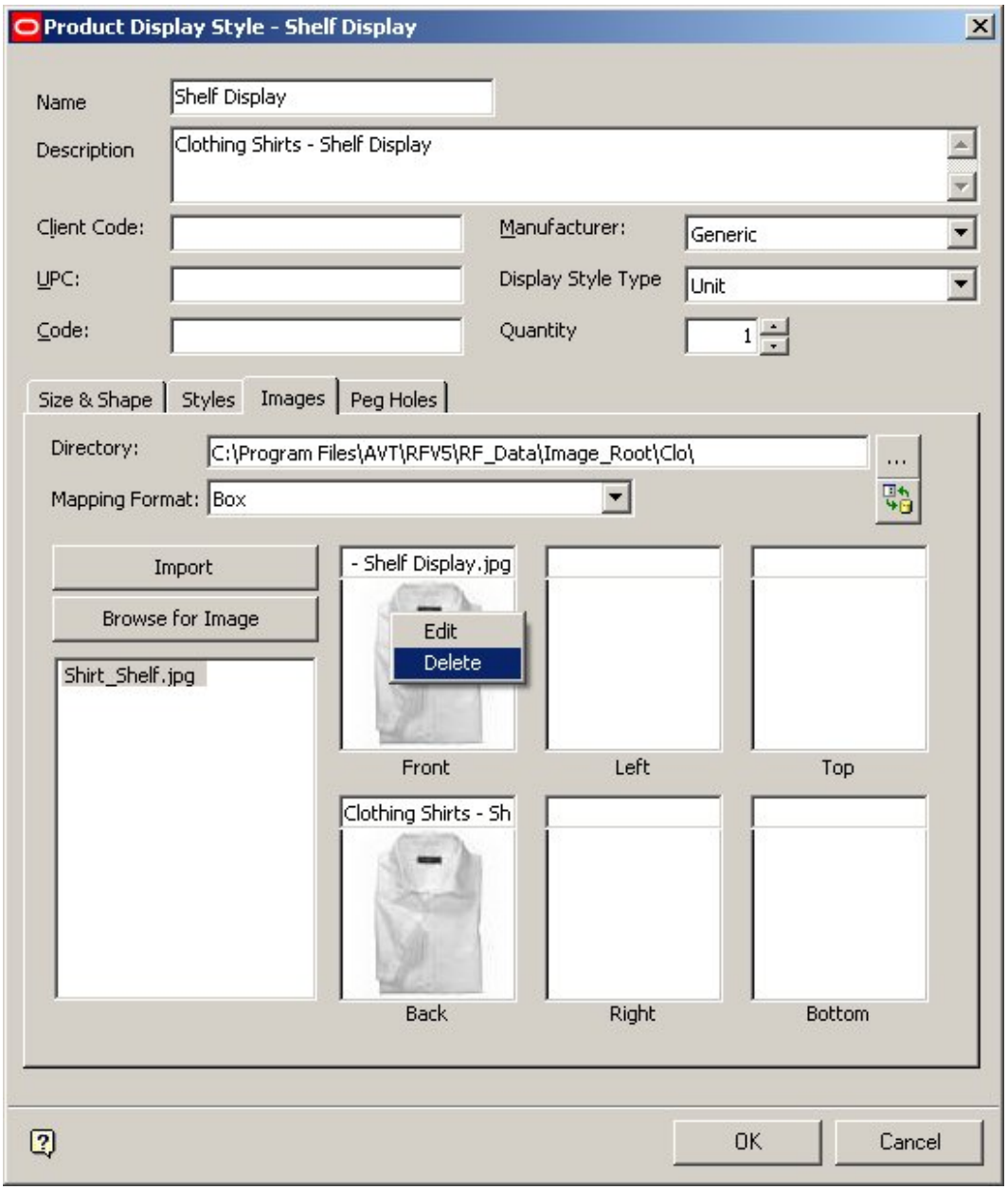
Results will be reported in the Purge Results dialogue box. If the product is present in any floor plans, it cannot be deleted until the product has been deleted from the floor plans or the floor plans themselves have been deleted. In addition, if the product is present in a planogram held in the database, it cannot be deleted until the product has been removed from the planogram.



Purge Images Option

Deleting Images

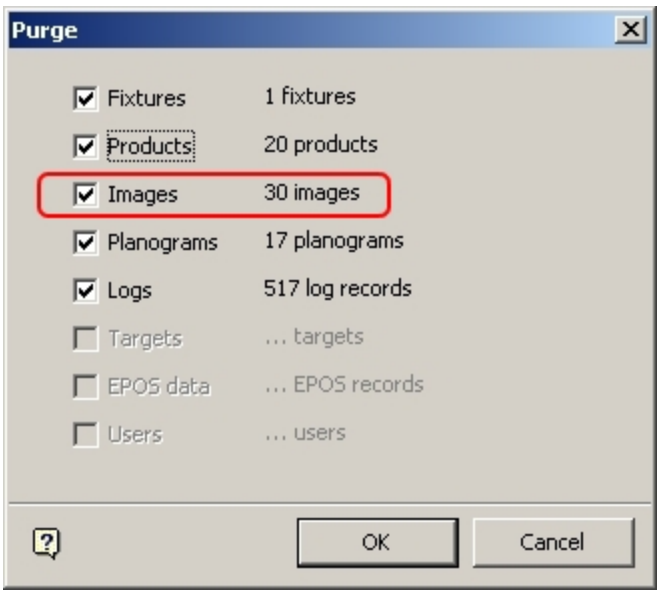
Images are deleted in Product Studio. This is done by highlighting the selected image and using <Ctrl> + right click to bring up the pop-up menu.



The highlighted image can 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.

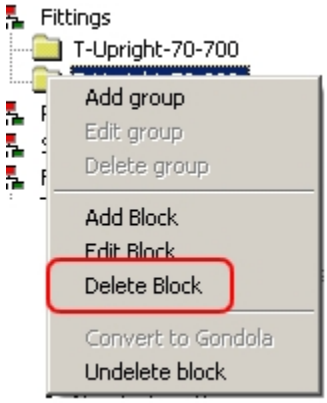


Images will then be deleted without further confirmation.

Purge Planograms Option

Deleting Planograms

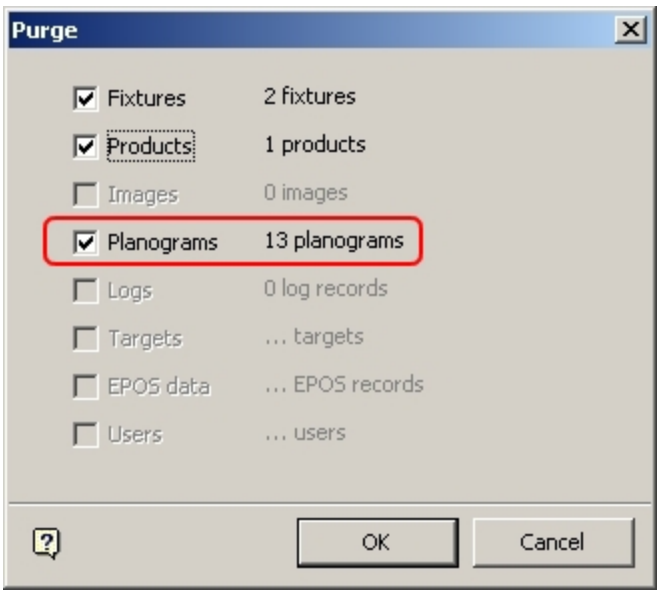
Planograms are deleted in Merchandiser. This is done by highlighting the selected planogram and using <Ctrl> + right click to bring up the pop-up menu.



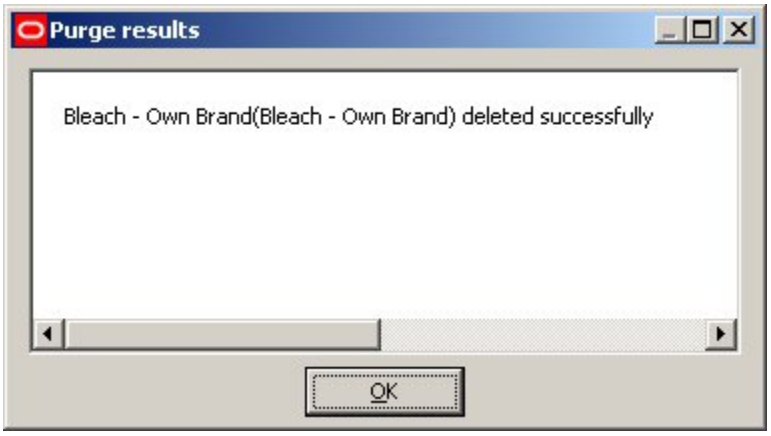
The highlighted fixture can then be marked for deletion by clicking on the Delete Block Option.

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.



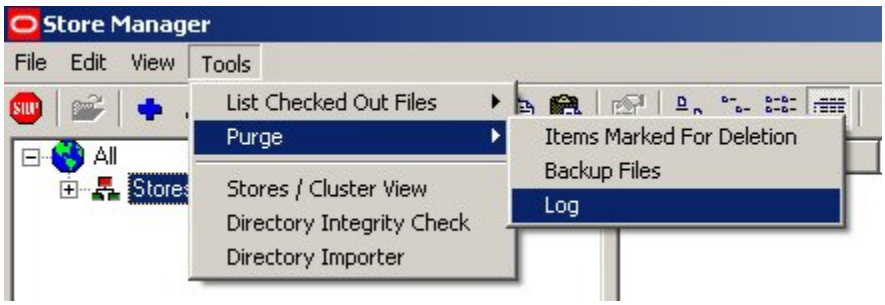
Results will be reported in the Purge Results dialogue box. If the planogram is present in any floor plans, it cannot be deleted until the planogram has been deleted from the floor plans or the floor plans themselves have been deleted.



Purge Logs Option

Deleting Logs

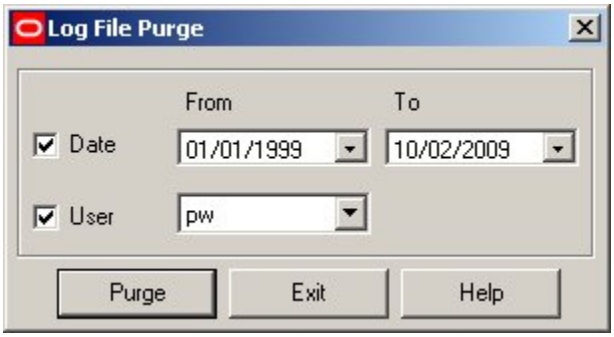
The File Log can be purged in Store Manager.



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>.

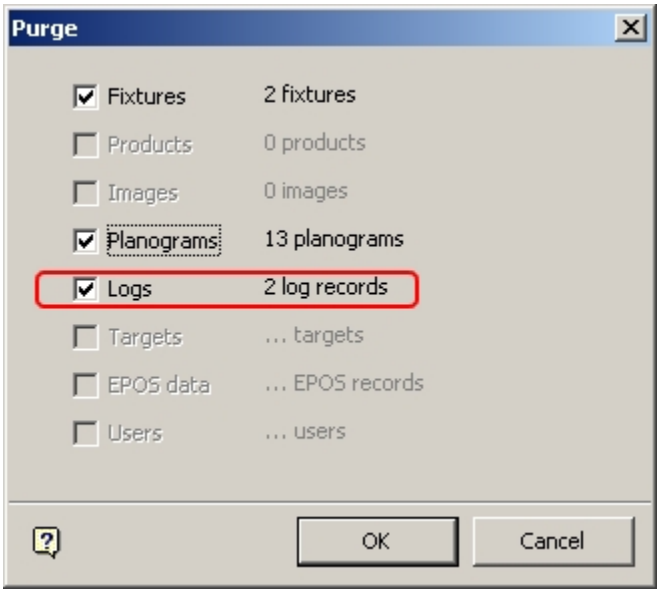
This will bring up the Log File Purge dialogue box.



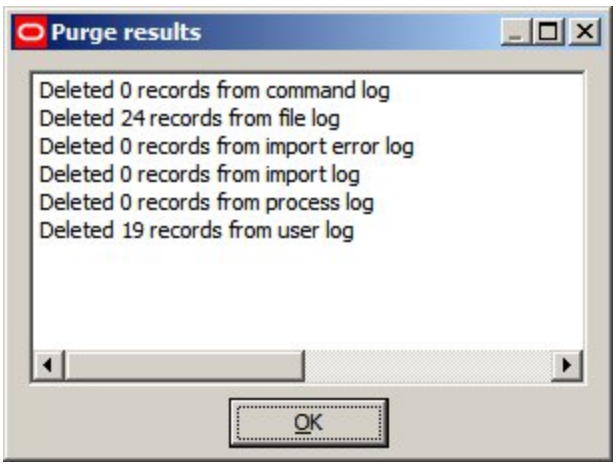
Log files can then be selected and marked for purging.

Purging Logs

The full range of logs can be purged using the Logs option in the Purge dialogue box.

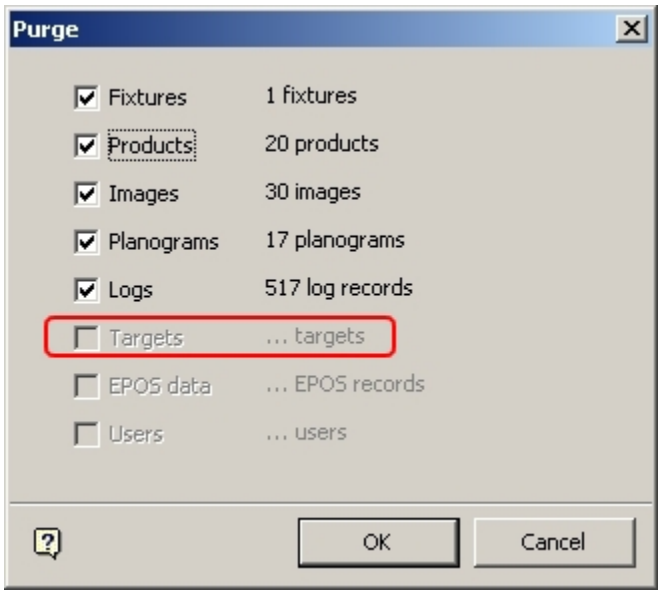


Results will be reported in the Purge Results dialogue box.



Purge Targets Option

The **Purge Targets** Option is not enabled in this release of Macro Space Management.



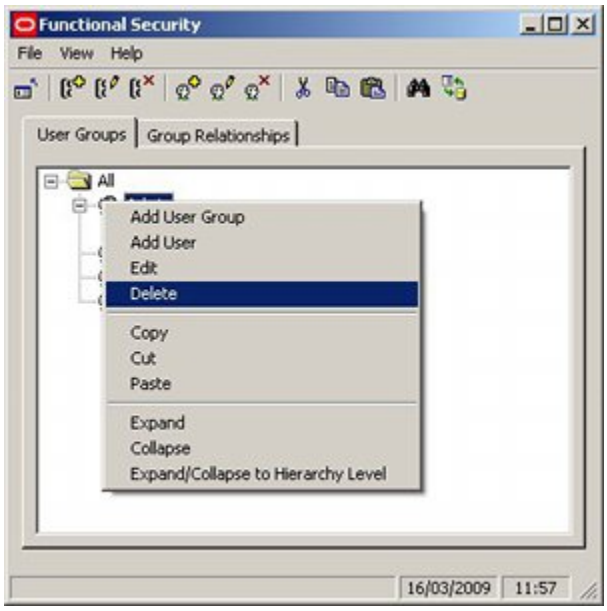
Purge EPOS Data Option

The **Purge EPOS Data** Option is not enabled in this release of Macro Space Management.

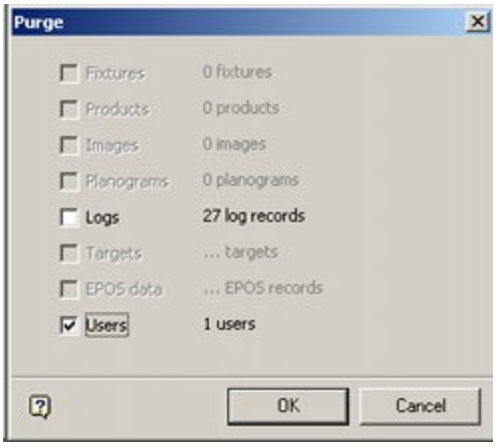


Purge Users Option

The Purge Users option can be used to remove users from the database. The first stage is to delete the user in the Functional Security dialog box.



After the user has been deleted from the Functional Security dialog box, the information still exists in the database. It can be permanently deleted by selecting the option in the Purge dialog box accessed from the Tools menu.



Logs

Overview of Logs

Logs are in two forms: Text Logs and Database Logs.

Text Logs

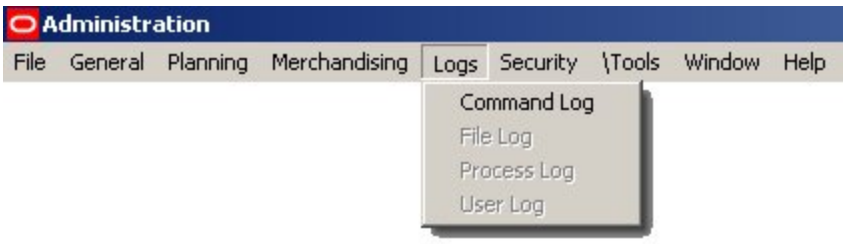
Text logs include .log, AVT5 Store Manager.log, AVT5CAD.log, AVT5Controls.log, AVT5Legacy.log, dbTreeControl.log, Macro Space Management.log, Store Manager.log. These are used mainly for debugging purposes and are not generally used in normal operations.

Database Logs

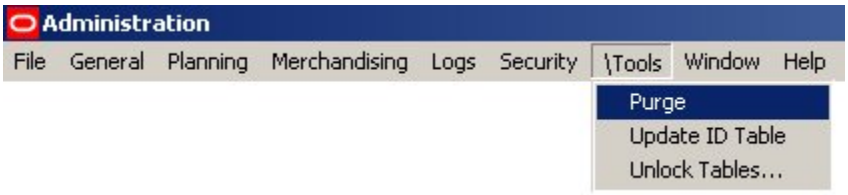
Log	Description
AVTTB_FILE_PROCESS_LOG	Identifies all files that have been subjected to batch processes
AVTTB_FILELOG	Identifies all files that have been checked in or out
AVTTB_IMPORT_ERROR_LOG	Identifies all errors during data import
AVTTB_IMPORT_LOG	Identifies all data imports
AVTTB_POG_IMPORT_LOG	Identifies all planogram imports
AVTTB_POG_SUB_LOG	Identifies all planogram substitutions
AVTTB_PROCESSLOG	Identifies all processes that have been invoked [not in use]
AVTTB_PUBLISH_POG_LOG	Identifies all planograms that have been published.
AVTTB_SECURITY_LOG	Identifies all changes to security settings.
AVTTTB_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_ERROR

The AVTTB_ERROR Table mainly holds errors generated during the operation of In-Store Space Collaboration.

COLUMN_NAME	DATA_TYPE	NULLABLE	DATA_DEFAULT	COLUMN_ID	COMMENTS
ERR_DATE	DATE	No	(null)	1	(null)
ERR_USER	VARCHAR2(500 BYTE)	Yes	(null)	2	(null)
ERR_INNER_EXCEPTION	VARCHAR2(2000 BYTE)	Yes	(null)	3	(null)
ERR_STACK_TRACE	VARCHAR2(2000 BYTE)	Yes	(null)	4	(null)
ERR_WINDOWS_USER	VARCHAR2(500 BYTE)	Yes	(null)	5	(null)
ERR_ERROR_MESSAGE	VARCHAR2(500 BYTE)	Yes	(null)	6	(null)
ERR_DOMAIN	VARCHAR2(20 BYTE)	Yes	null	7	(null)
ERR_MACHINE	VARCHAR2(20 BYTE)	Yes	null	8	(null)
ERR_TRACE	VARCHAR2(2000 BYTE)	Yes	null	9	(null)
ERR_STR_ID	NUMBER(10,0)	Yes	0	10	(null)
ERR_FIL_ID	NUMBER(10,0)	Yes	0	11	(null)

The table can only be purged directly in the database.

AVTTB_FILELOG

The AVTTB_FILELOG Table identifies the files that have been logged out and by which user.

COLUMN_NAME	DATA_TYPE	NULLABLE	DATA_DEFAULT	COLUMN_ID	COMMENTS
FLG_ID	NUMBER(10,0)	No	(null)	1	(null)
FIL_ID	NUMBER(10,0)	No	(null)	2	(null)
FLG_USER	NVARCHAR2(40 CHAR)	No	(null)	3	(null)
FLG_DOMAIN	NVARCHAR2(40 CHAR)	No	(null)	4	(null)
FLG_MACHINE	NVARCHAR2(40 CHAR)	No	(null)	5	(null)
FLG_LOGGED_OUT	DATE	No	(null)	6	(null)
FLG_LOGGED_IN	DATE	Yes	(null)	7	(null)

The AVTTB_FILELOG 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	DATA_TYPE	NULLABLE	DATA_DEFAULT	COLUMN_ID	COMMENTS
FPL_DATE	DATE	No	(null)	1	(null)
FPT_ID	NUMBER(3,0)	No	(null)	2	(null)
STR_CODE	NVARCHAR2(20 CHAR)	Yes	(null)	3	(null)
FIL_ID	NUMBER(10,0)	Yes	(null)	4	(null)
FPL_ERROR_LEVEL	NUMBER(3,0)	No	0	5	(null)
FPL_ERROR	VARCHAR2(200 BYTE)	No	(null)	6	(null)
FPL_MACHINE_NAME	VARCHAR2(50 BYTE)	No	(null)	7	(null)
FPL_USERNAME	VARCHAR2(50 BYTE)	No	(null)	8	(null)

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.

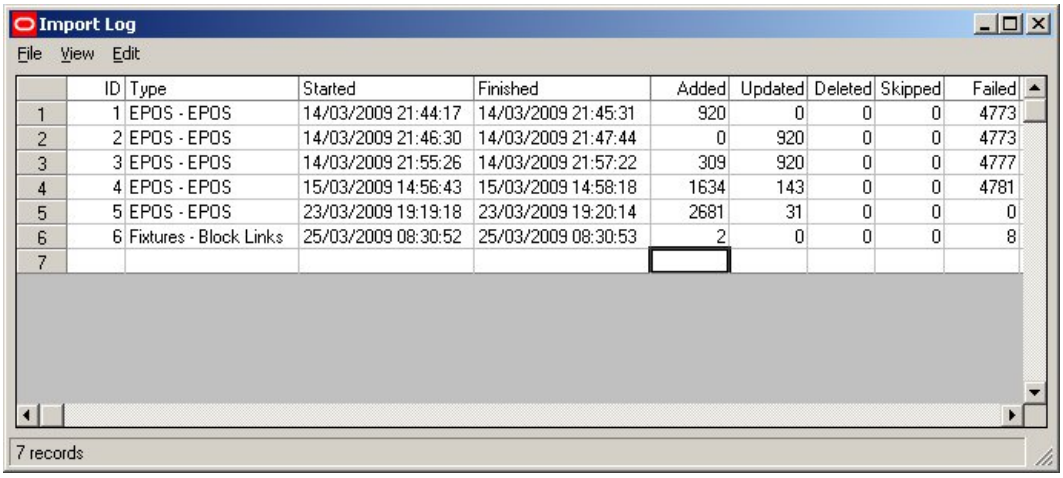
The AVTTB_FILE_PROCESS_LOG table can be purged via the Purge option in the Administration module

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	DATA_TYPE	NULLABLE	DATA_DEFAULT	COLUMN_ID	COMMENTS
IML_ID	NUMBER(10,0)	No	(null)	1	(null)
IMP_ID	NUMBER(10,0)	No	(null)	2	(null)
IML_START_DATE	DATE	No	(null)	3	(null)
IML_END_DATE	DATE	Yes	(null)	4	(null)
IML_ADDED	NUMBER(10,0)	No	0	5	(null)
IML_UPDATED	NUMBER(10,0)	No	0	6	(null)
IML_EXPIRED	NUMBER(10,0)	No	0	7	(null)
IML_SKIPPED	NUMBER(10,0)	No	0	8	(null)
IML_FAILED	NUMBER(10,0)	No	0	9	(null)
IML_MACHINENAME	NVARCHAR2(40 CHAR)	No	(null)	10	(null)
IML_USER	NVARCHAR2(40 CHAR)	Yes	(null)	11	(null)

The contents of the table are visible in the Import Log dialog box in the Data Importer module.



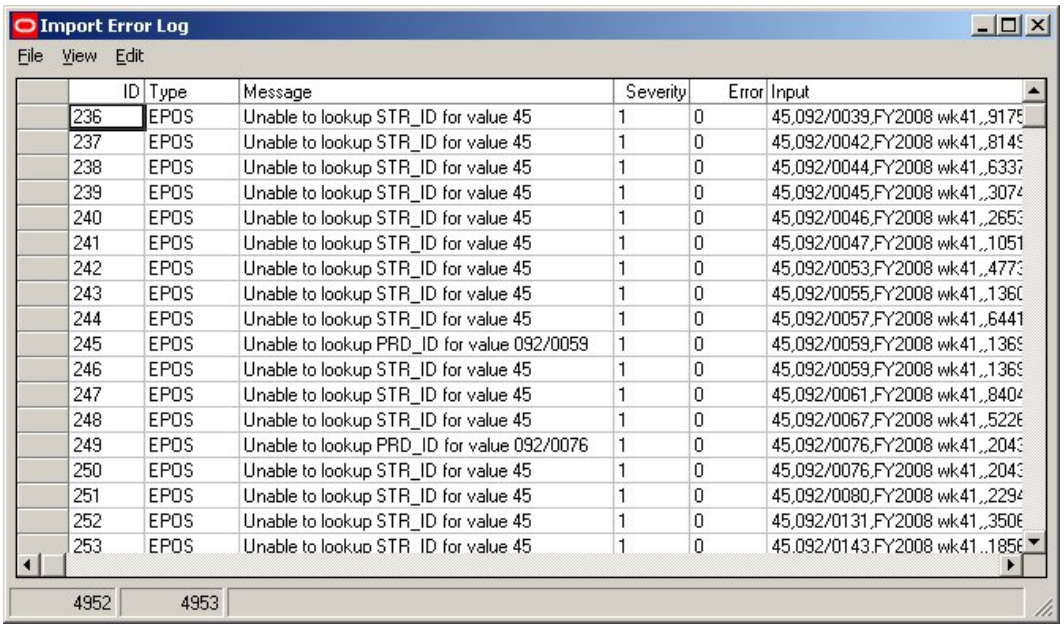
The AVTTB_IMPORT_LOG table can be purged via the Purge option in the Administration module, or via the Purge option on the Edit menu in the Import Log dialog box.

AVTTB_IMPORT_ERROR_LOG

The AVTTB_IMPORT_ERROR_LOG identifies the errors that occur during imports generated by the Data Importer Module.

COLUMN_NAME	DATA_TYPE	NULLABLE	DATA_DEFAULT	COLUMN_ID	COMMENTS
IME_ID	NUMBER(10,0)	No	(null)	1	(null)
IML_ID	NUMBER(10,0)	No	(null)	2	(null)
IME_MESSAGE	NVARCHAR2(2000 CHAR)	No	(null)	3	(null)
IME_SEVERITY	NUMBER(3,0)	No	0	4	(null)
IME_INPUT	NVARCHAR2(2000 CHAR)	Yes	(null)	5	(null)
IME_OUTPUT	NVARCHAR2(2000 CHAR)	Yes	(null)	6	(null)
IME_ERROR	NUMBER(10,0)	No	0	7	(null)

The contents of the table are visible in the Import Error Log dialog box in the Data Importer module.



The AVTTB_IMPORT_ERROR_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 Error Log dialog box.

AVTTB_PLANO_LOG

The AVTTB_PLANO_LOG table records details of all planograms that have been Added, Edited or deleted in the Merchandiser Module.

COLUMN_NAME	DATA_TYPE	NULLABLE	DATA_DEFAULT	COLUMN_ID	COMMENTS
PLG_ID	NUMBER(10,0)	No	(null)	1	(null)
POG_ID	NUMBER(10,0)	No	(null)	2	(null)
PLG_USER	NVARCHAR2(40 CHAR)	No	(null)	3	(null)
PLG_DOMAIN	NVARCHAR2(40 CHAR)	No	(null)	4	(null)
PLG_MACHINE	NVARCHAR2(40 CHAR)	No	(null)	5	(null)
PLG_LOGGED_OUT	DATE	No	(null)	6	(null)
PLG_LOGGED_IN	DATE	Yes	(null)	7	(null)

The AVTTB_PLANO_LOG table can be purged via the Purge option in the Administration 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	DATA_TYPE	NULLABLE	DATA_DEFAULT	COLUMN_ID	COMMENTS
PIL_DATETIME	DATE	Yes	(null)	1	(null)
PIL_IMPORT_NAME	VARCHAR2(250 BYTE)	No	(null)	2	(null)
PIL_SEQUENCE	NUMBER(10,0)	Yes	(null)	3	(null)
PIL_OPERATION	NUMBER(10,0)	No	(null)	4	(null)
PIL_PARTNAME	VARCHAR2(100 BYTE)	Yes	(null)	5	(null)
PIL_DEFINITION	NUMBER(10,0)	Yes	(null)	6	(null)
PIL_DESTID	NUMBER(10,0)	Yes	(null)	7	(null)
PIL_RESULT	NUMBER(10,0)	No	(null)	8	(null)
PIL_ERRDESC	VARCHAR2(250 BYTE)	Yes	(null)	9	(null)

The AVTTB_POG_IMPORT_LOG table can be purged via the Purge option in the Administration module.

AVTTB_POG_PUBLISH_LOG

The AVTTB_POG_PUBLISH_LOG table holds details of all planogram designs that have been published in preparation for implementation.

COLUMN_NAME	DATA_TYPE	NULLABLE	DATA_DEFAULT	COLUMN_ID	COMMENTS
PPL_ID	NUMBER(10,0)	No	(null)	1	(null)
PPL_PID	NUMBER(10,0)	Yes	(null)	2	(null)
POG_ID	NUMBER(10,0)	Yes	(null)	3	(null)
PPL_DATE	DATE	No	SYSDATE	4	(null)
PPL_DETAILS	VARCHAR2(256 BYTE)	Yes	(null)	5	(null)
PPL_LOGTYPE	NUMBER(5,0)	No	(null)	6	(null)
PPL_LOGIN_NAME	VARCHAR2(500 BYTE)	Yes	(null)	7	(null)
PPL_MACHINE	VARCHAR2(20 BYTE)	Yes	(null)	8	(null)
PPL_PROGRESS	NUMBER(5,0)	Yes	(null)	9	(null)

The AVTTB_POG_PUBLISH_LOG table can be purged via the Purge option in the Administration module.

AVTTB_POG_SUB_LOG

The AVTTB_POG_SUBST_LOG table holds the reports of all planogram substitutions.

COLUMN_NAME	DATA_TYPE	NULLABLE	DATA_DEFAULT	COLUMN_ID	COMMENTS
PSL_ID	NUMBER(10,0)	No	(null)	1	(null)
PSD_ID	NUMBER(10,0)	Yes	(null)	2	(null)
PSL_DETAILS	VARCHAR2(256 BYTE)	No	(null)	3	(null)
PSL_LOGTYPE	NUMBER(5,0)	No	(null)	4	(null)
PSL_LOGTIME	DATE	No	(null)	5	(null)
PSL_LOGIN_ID	NVARCHAR2(50 CHAR)	Yes	(null)	6	(null)
PSL_DRYRUN	NUMBER(1,0)	No	(null)	7	(null)
FIL_ID	NUMBER(10,0)	Yes	(null)	8	(null)
PSL_PARENT_ID	NUMBER(10,0)	Yes	(null)	9	(null)

The AVTTB_SUB_LOG table can be purged via the Purge option in the Administration module.

AVTTB_PROCESSLOG

The AVTTB_PROCESS_LOG table contains details of when files (store plans) were made Authorized or Current in Store Manager.

COLUMN_NAME	DATA_TYPE	NULLABLE	DATA_DEFAULT	COLUMN_ID	COMMENTS
FIL_ID	NUMBER(10,0)	Yes	(null)	1	(null)
PRO_ID	NUMBER(10,0)	No	(null)	2	(null)
PRL_BDATE	DATE	No	(null)	3	(null)
PRL_DDATE	DATE	Yes	(null)	4	(null)
PRL_USER	NVARCHAR2(40 CHAR)	No	(null)	5	(null)
PRL_MACHINE	NVARCHAR2(40 CHAR)	No	(null)	6	(null)
PRL_DOMAIN	NVARCHAR2(40 CHAR)	No	(null)	7	(null)
PRL_SUCCESS	NUMBER(1,0)	No	(null)	8	(null)
PRL_COMMENT	NVARCHAR2(510 CHAR)	Yes	(null)	9	(null)

The AVTTB_PROCESSLOG table can be purged via the Purge option in the Administration module.

AVTTB_SECURITY_LOG

The AVTTB_SECURITY_LOG table holds details of when settings affecting the level of security for the Macro Space Planning application were changed and which user changed them. It cannot be purged except by directly in the database.

COLUMN_NAME	DATA_TYPE	NULLABLE	DATA_DEFAULT	COLUMN_ID	COMMENTS
SLG_ID	NUMBER(10,0)	No	(null)	1	(null)
SLG_PID	NUMBER(10,0)	Yes	(null)	2	(null)
USR_ID	NUMBER(10,0)	Yes	(null)	3	(null)
SLG_DATE	DATE	No	(null)	4	(null)
SYS_ID	NUMBER(10,0)	No	(null)	5	(null)
SYS_VALUE	NVARCHAR2(1200 CHAR)	No	(null)	6	(null)

Note: Purging this table is not recommended as it shows the level of security settings selected and which user set them.

AVTTB_USER_LOG

The AVTTB_USER_LOG Table records the times users log into Macro Space Management

COLUMN_NAME	DATA_TYPE	NULLABLE	DATA_DEFAULT	COLUMN_ID	COMMENTS
ULG_LOGIN_ID	NVARCHAR2(50 CHAR)	No	(null)	1	(null)
ULG_LOGGED_IN	DATE	No	(null)	2	(null)
ULG_LOGGED_OUT	DATE	Yes	(null)	3	(null)
ULG_MACHINENAME	NVARCHAR2(50 CHAR)	No	(null)	4	(null)
ULG_FAILED	NUMBER(1,0)	No	(null)	5	(null)

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.

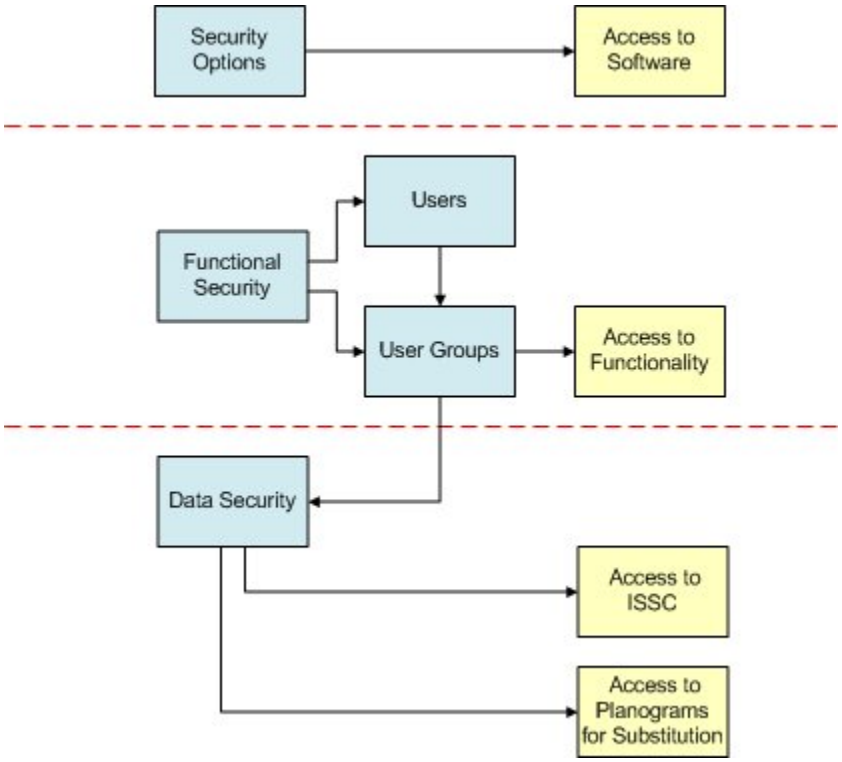
The AVTTB_USER_LOG table can be purged via the Purge option in the Administration module.

11

Security

Overview of MSM Security

MSM Security is based on three options.



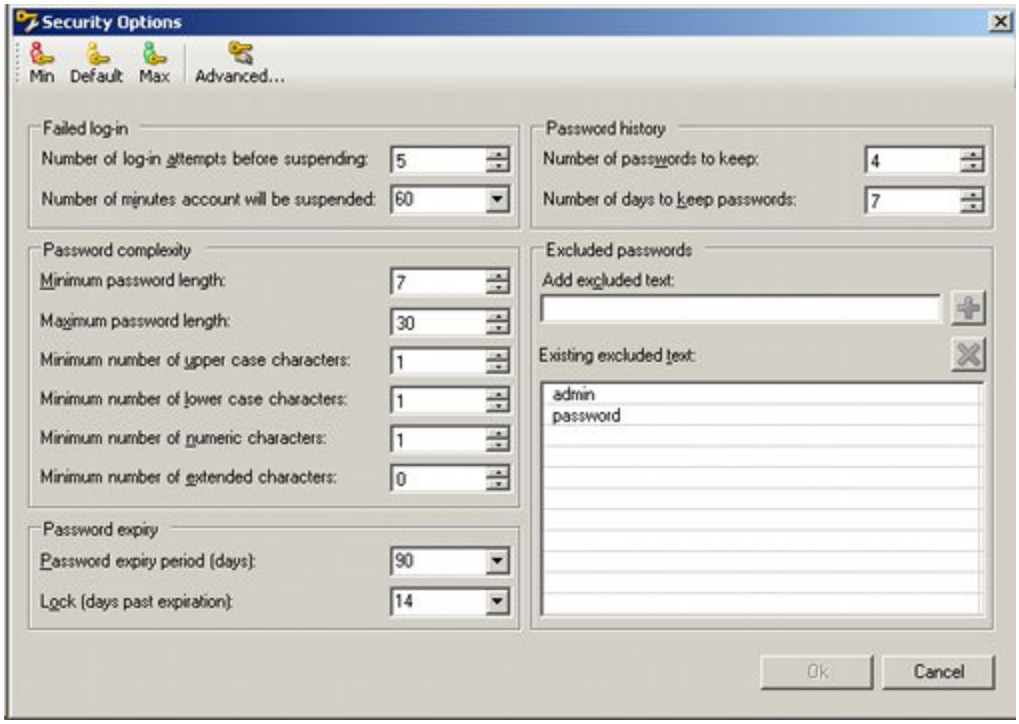
1. **Security Options** control the form that access to the software takes: password format, number of log in attempts allowed, and so on.
2. **Functional Security** controls the access to specific modules in Macro Space Management.
3. **Data Security** controls access to specific parts of the functionality
   a. What stores and file statuses are visible in In-Store Space Collaboration.
   b. What planograms are available to users for Planogram Substitution

Security Options

Overview of Security Options

Security Options allows Administrators to specify the level of security provided for Macro Space Planning. This takes two formats:

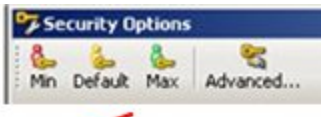
1. The strength of the password.
2. The strength of the encryption algorithm for the password.

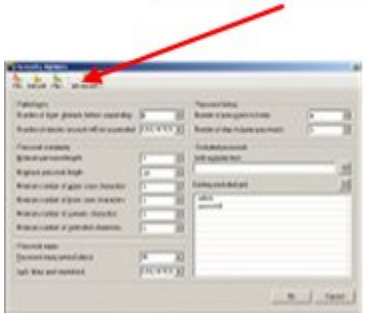


- If the strength of the password is changed all passwords will be expired, forcing users to change their password when they next log in.
- If the strength of the encryption algorithm is changed, all passwords will be nullified except for the password of the user changing the strength. That user must then manually reset all passwords within the Admin module before other users can log in again.

Default Security Options

Some default security options are provided on the toolbar.





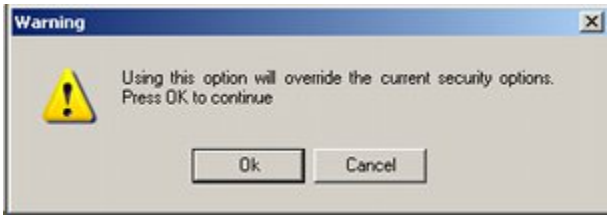
Min, Default and Max Options

The Min, Default and Max options set the log-in options to predetermined values. These are:

	Min	Default	Max
Max log-in attempts before suspending	10	5	1
Number of minutes account will be suspended	15	60	Unlimited
Minimum password length	7	7	10
Maximum password length	30	30	30
Minimum number of upper case characters	0	1	2
Minimum number of lower case characters	0	1	2
Minimum number of numeric characters	0	1	2
Minimum number of extended characters (!, @, etc)	0	1	2
Password expiry period (days)	Unlimited	90	30
Lock (days past expiration)	Unlimited	14	7
Number of passwords to keep	0	4	10
Number of days to keep passwords	0	7	360

Note: See the section on security options for a more detailed description of these options.

On clicking one of the Min, Default and Max buttons, a confirmatory dialog box will appear.



On clicking OK, the changes will be saved.

Advanced

The Advanced button allows users to change the encryption method. On clicking the Advanced button, the Advanced Security Options dialog box will appear.



Because of the consequences of changing the password encryption method, a password is required to continue. On clicking the OK button, a confirmatory dialog box will appear. In order to proceed with the change of algorithm click No.



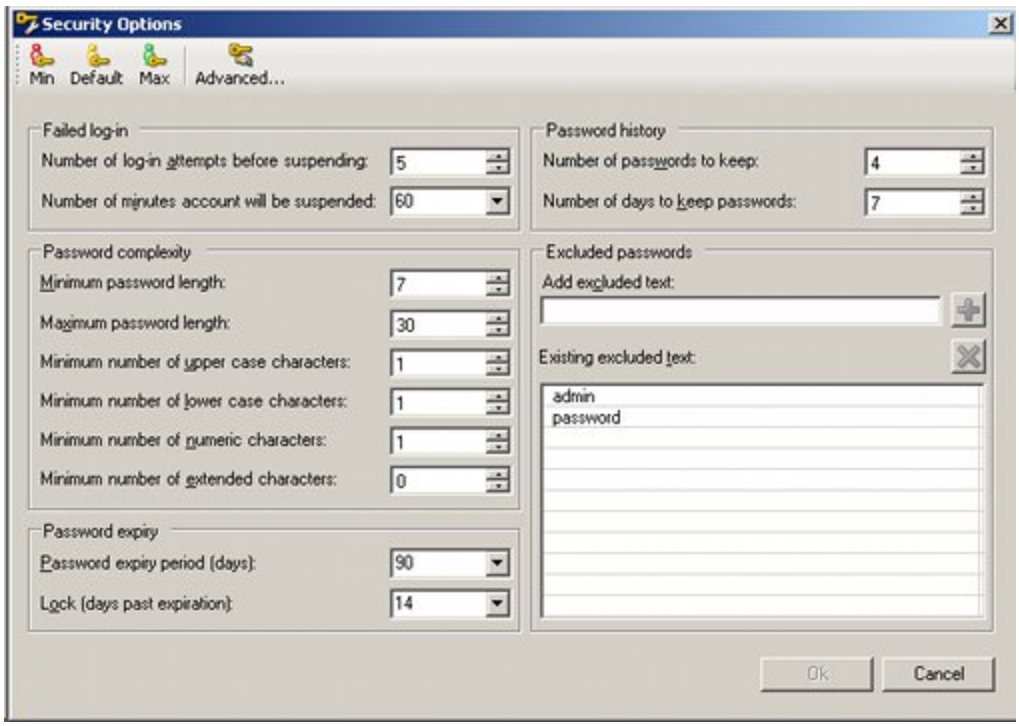
A confirmatory dialog box will appear. Click OK to clear it.



Important Note
The change to the encryption algorithm method is now made. The user who made the change is now the sole user with access to the application. That user must now manually reset all passwords for the other users in order for their accounts to be reactivated.

Security Options

The Security Options operate as follows:



Failed log-in

This section enables administrators to specify what happens in the event of failed log in attempts.

Number of log-in attempts before suspending

This option will allow an Administrator to enter a value of 1 - 10. Any number of log in attempts that exceeds this value will result in the account being suspended - either for a specified time, or until an Administrator unlocks it. Failed log in attempts will also be recorded in the Macro Space Planning database.

Number of minutes account will be suspended

This option specifies the time the user account will be suspended until further log in attempts will be allowed. It can be set to values of between 15 minutes to 7200 minutes (120 hours) by means of the drop down list. Alternatively, any value between 0 to 36000 minutes can be typed in.

If the value is set to Unlimited, the user will have their account suspended indefinitely until an Administrator resets the account.

Password Complexity

This section enables Administrators to specify how complex a password should be. Test1234? contains a minimum of one upper case, one lower case, one numeric and one extended character.

Minimum Password Length

This can be set to any whole number between 7 and 10. If the maximum password length is less than 10, the minimum password length will be restricted to this value.

Maximum Password Length

This can be set to any whole number between the minimum password length and 30.

Minimum number of upper case characters

The minimum number of upper case characters in the password can be set to any value between the sum of the lower case, numeric and extended characters and the maximum password length. For example, if the sum of the lower case, numeric and extended characters is 3 and the maximum password length is 10, the minimum number of upper case characters can be set to any value between 0 and 7.

Minimum number of lower case characters

The minimum number of upper case characters in the password can be set to any value between the sum of the upper case, numeric and extended characters and the maximum password length.

Minimum number of numeric characters

The minimum number of upper case characters in the password can be set to any value between the sum of the upper case, lower case and extended characters and the maximum password length.

Minimum number of extended characters

The minimum number of upper case characters in the password can be set to any value between the sum of the upper case, lower case and numeric characters and the maximum password length.

Password Expiry

This section enables administrators to specify when passwords should expire (and require resetting).

Password Expiry Period (Days)

This enables Administrators to specify the number of days between forced password changes. It can be set to any value from the drop down list. Alternatively, any positive whole number can be typed in. If set to UNLIMITED, passwords will never expire.

Lock (Days Past Expiration)

This enables administrators to specify the number of days before a users account is locked after their password has expired. For example, if a value of 7 is set, users have a week after their password expires to change it to a new one. If they fail to do so, within this time period, their account will be locked. The value can be set to any value from the drop down list. Alternatively, any positive whole number can be typed in. If set to UNLIMITED, passwords will never be locked after a set period.

Password History

This section specifies how far past passwords are taken into account when passwords are changed.

Number of Passwords to Keep

This may be set to any value between 0 and 10. The requisite number of past passwords will then be saved in the database. When a user changes their password with will be compared with the stored entries to verify they are not using a previously used password. This will be done in conjunction with the Number of Days to keep Passwords setting.

Number of Days to Keep Passwords

This may be set to any value between the password expiry days and 365 days. Passwords retained according to the setting in the Passwords to Keep field will be compared against new passwords unless the Number of Days to Keep Password parameter has been exceeded.

Excluded Passwords

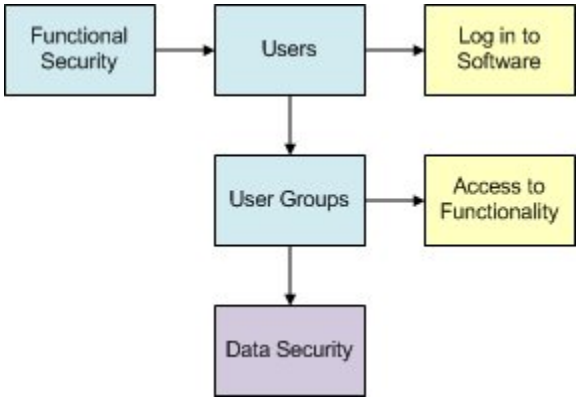
This section allows Administrators to exclude easy to guess passwords such as Admin and Password.

- To add a password, type the password in the text box and click the Add button.
- To delete a password, highlight it in the list of excluded passwords and click the Delete button.

Functional Security

About Functional Security

Functional Security is used to control access to the software, and also which parts of the software can be accessed.



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

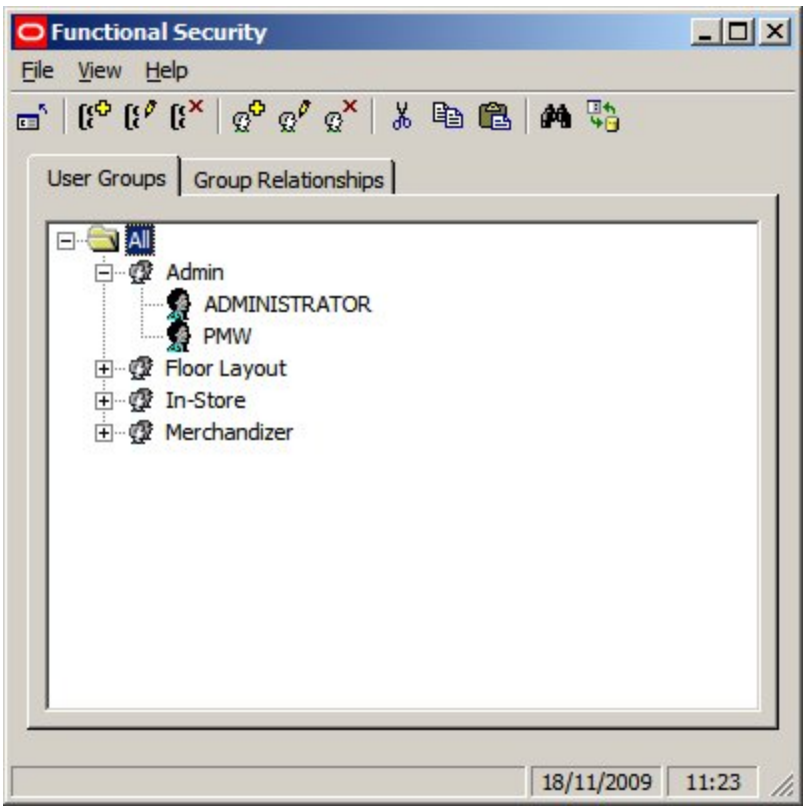
Users are put into User Groups. Membership of a User Group confers the privileges of that User Group on the User. For example the Admin User Group will typically allow the User to access all parts of the software, while membership of other User Groups will give more restricted access.

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.

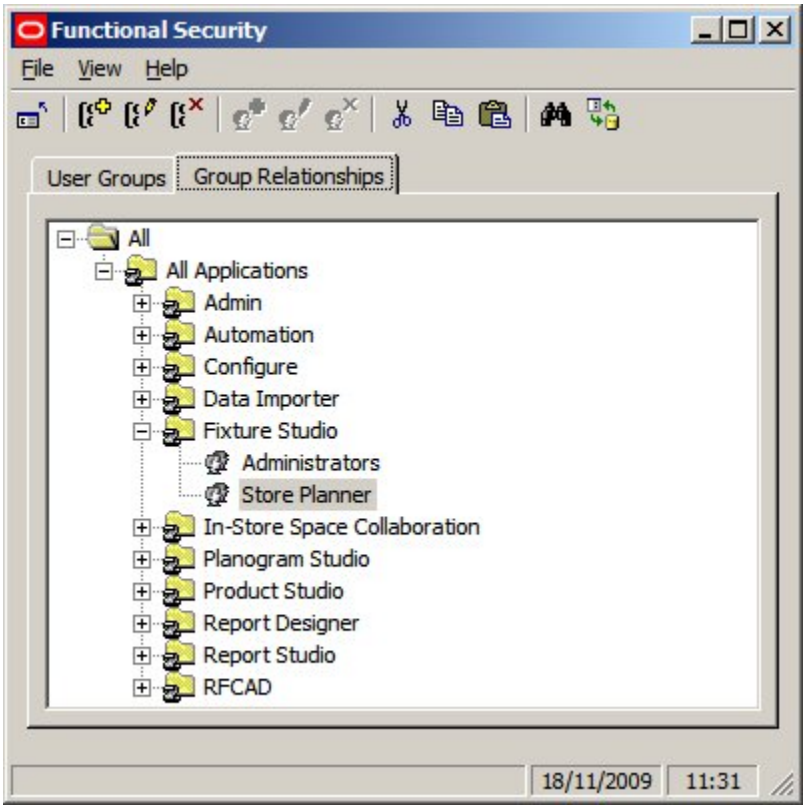
User Groups Tab



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.

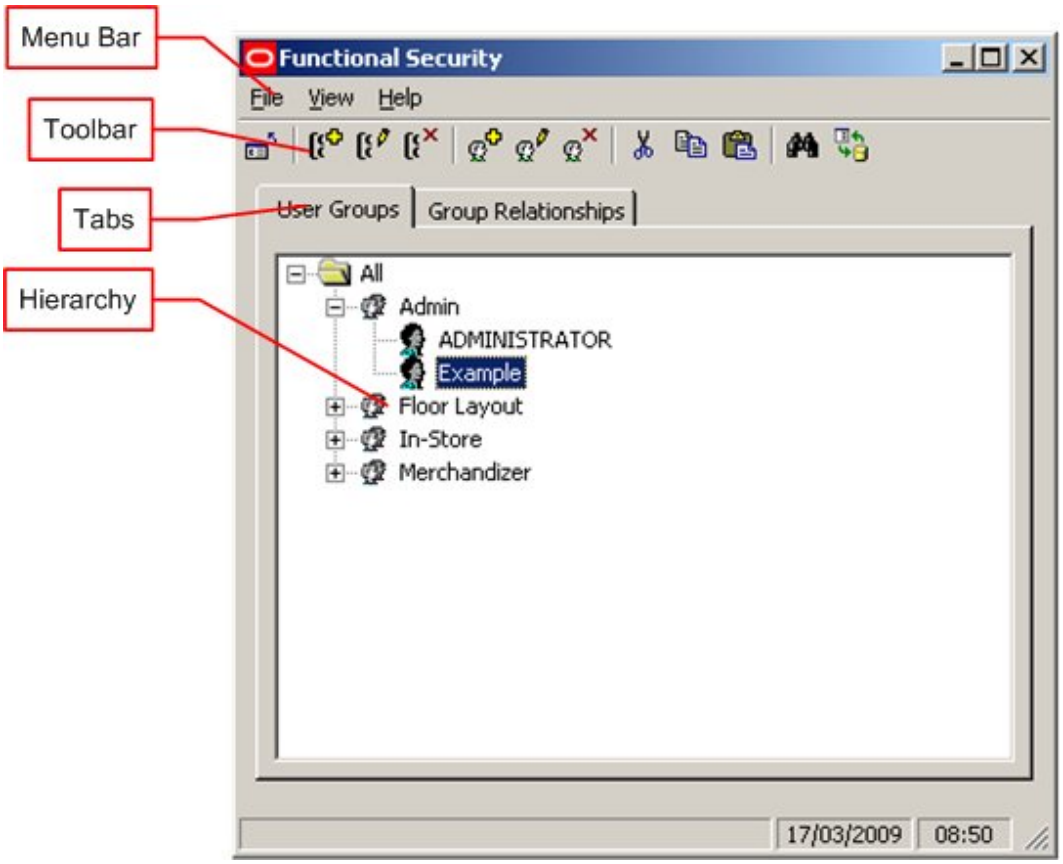
Group Relationships Tab



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.

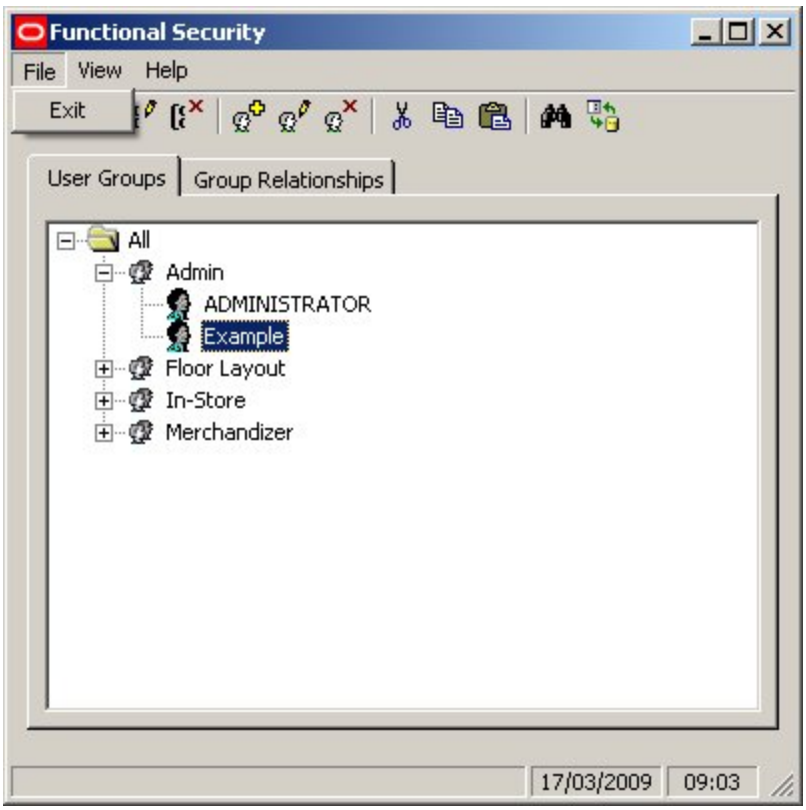
The **Toolbar** allows Administrators to access a series of options affecting User Groups and Group Relationships.

The **Tabs** allow operations to be switched between User Groups and Group Relationships.

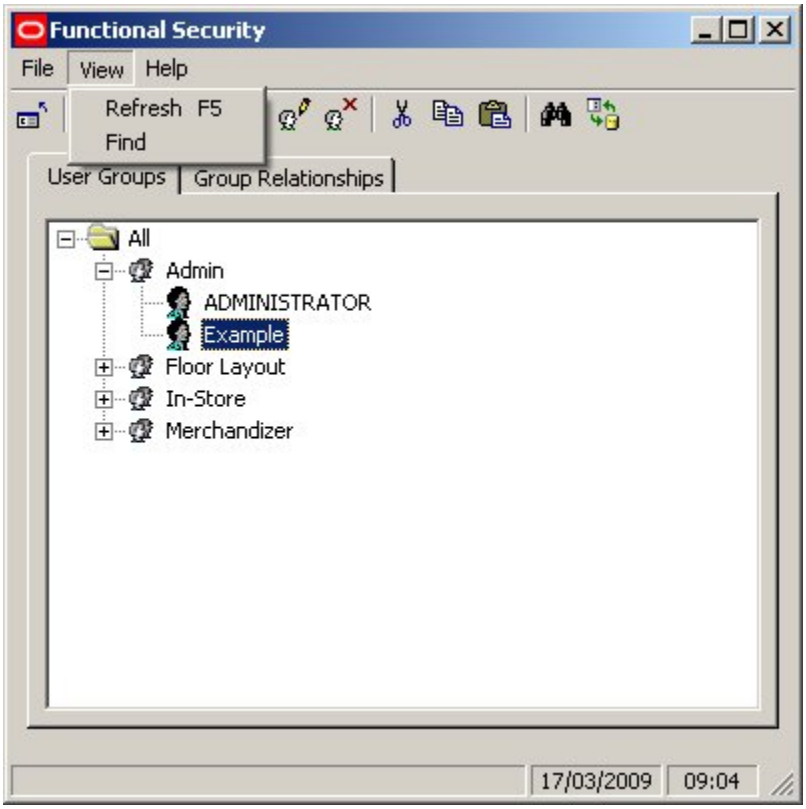
The **Hierarchy** shows the current list of User Groups or Group Relationships.

Functional Security Menus and Toolbar

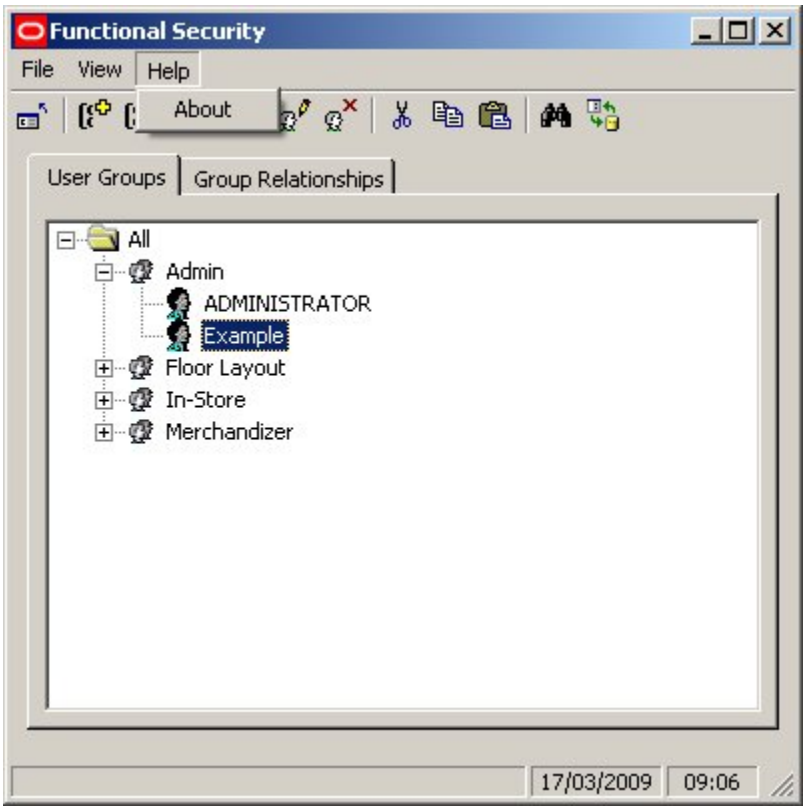
The **File pull down menu** allows users to exit this option.



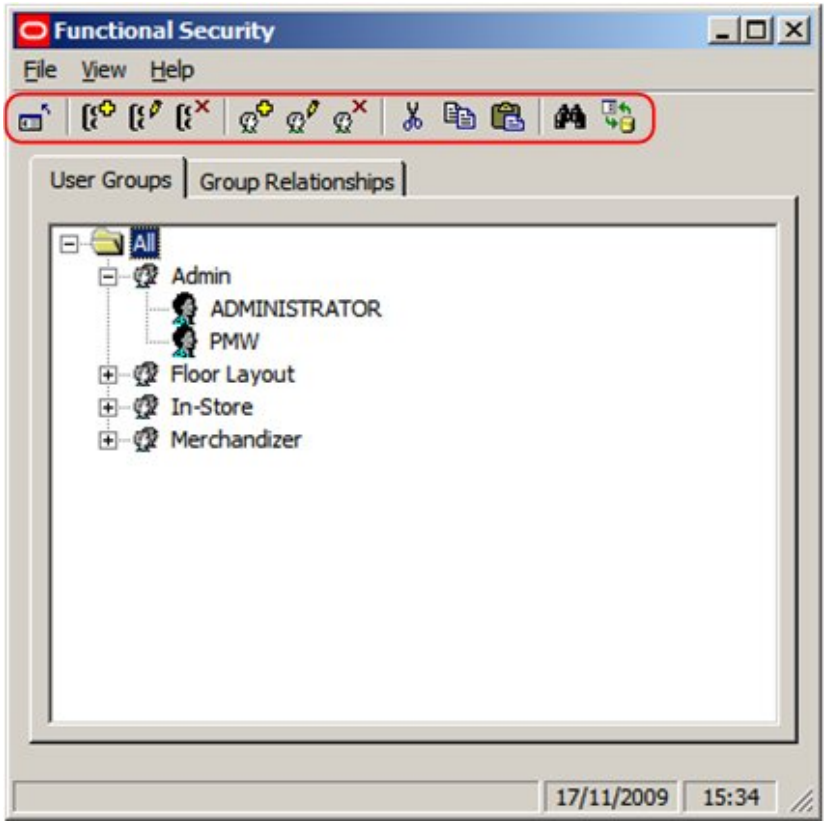
The **View pull down menu** allows users to refresh the hierarchical tree and to call the Find dialogue



The **Help pull down menu** allows users to check the version of this software.



The **Toolbar** allows users to access various Functional Security options.

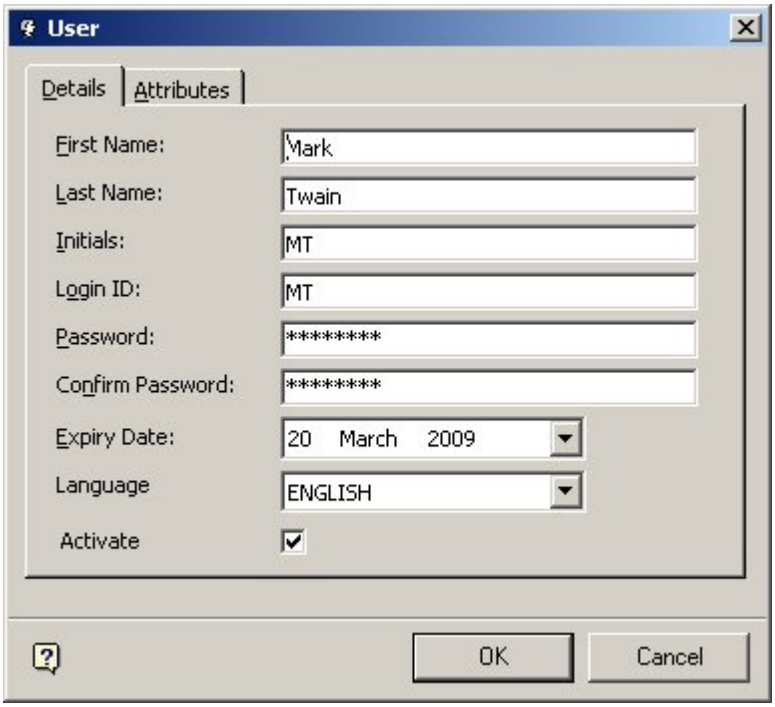


Icon	User Groups	Group Relationships
	Exit	Exit
	Add User Group	Add Command Group
	Edit User Group	Edit Command Group
	Delete User Group	Delete Command Group
	Add User	Not Available
	Edit User	Not Available
	Delete User	Not Available

Icon	User Groups	Group Relationships
	Cut	Cut
	Copy	Copy
	Paste	Paste
	Search	Search
	Refresh	Refresh

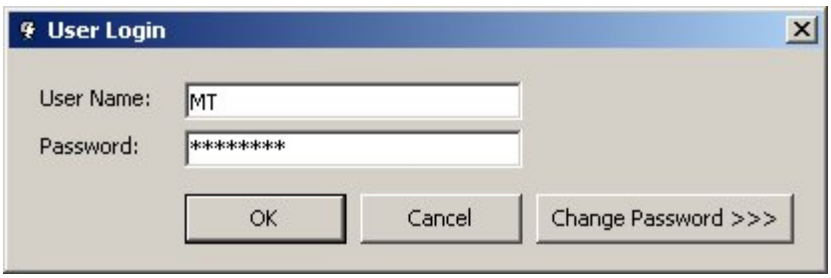
User Configuration and Logging In

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.



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.

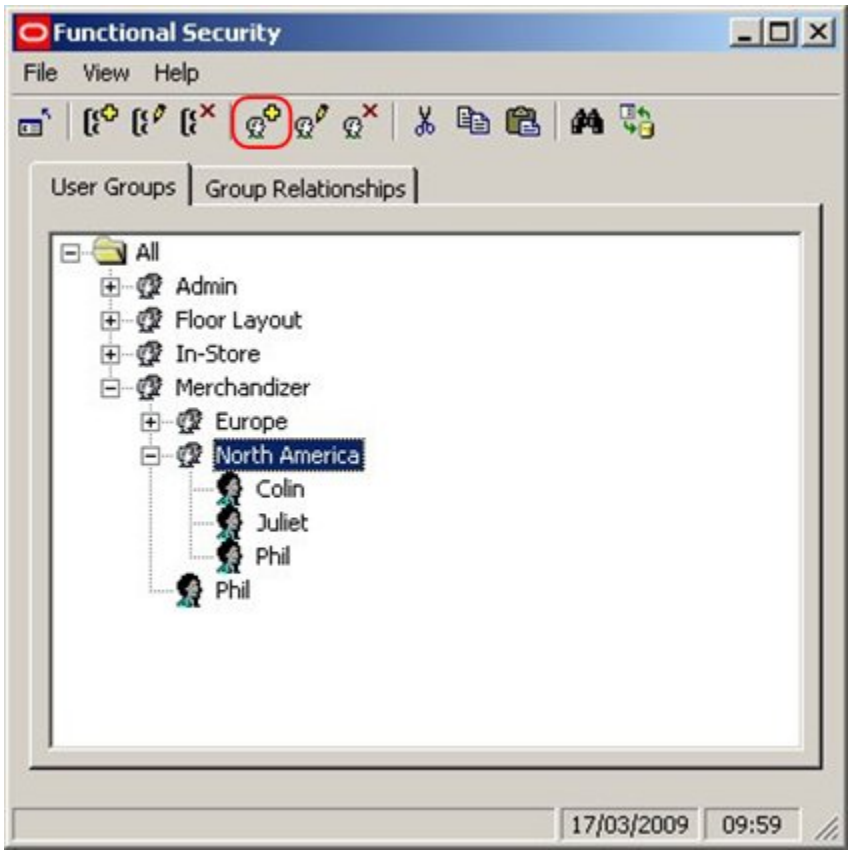
Thus, the 'Mark Twain' user has a user name of MT and a password set for their log in.



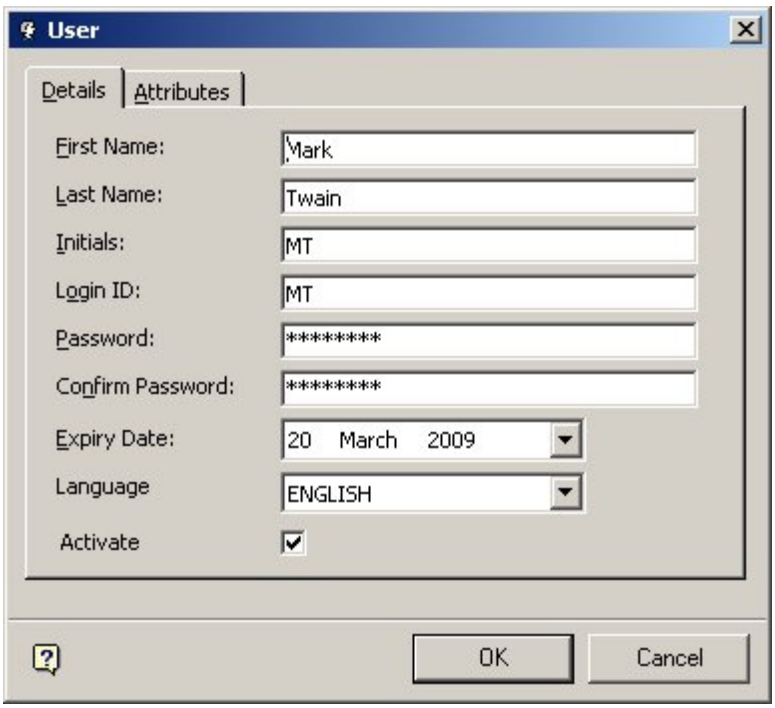
Users

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.



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.

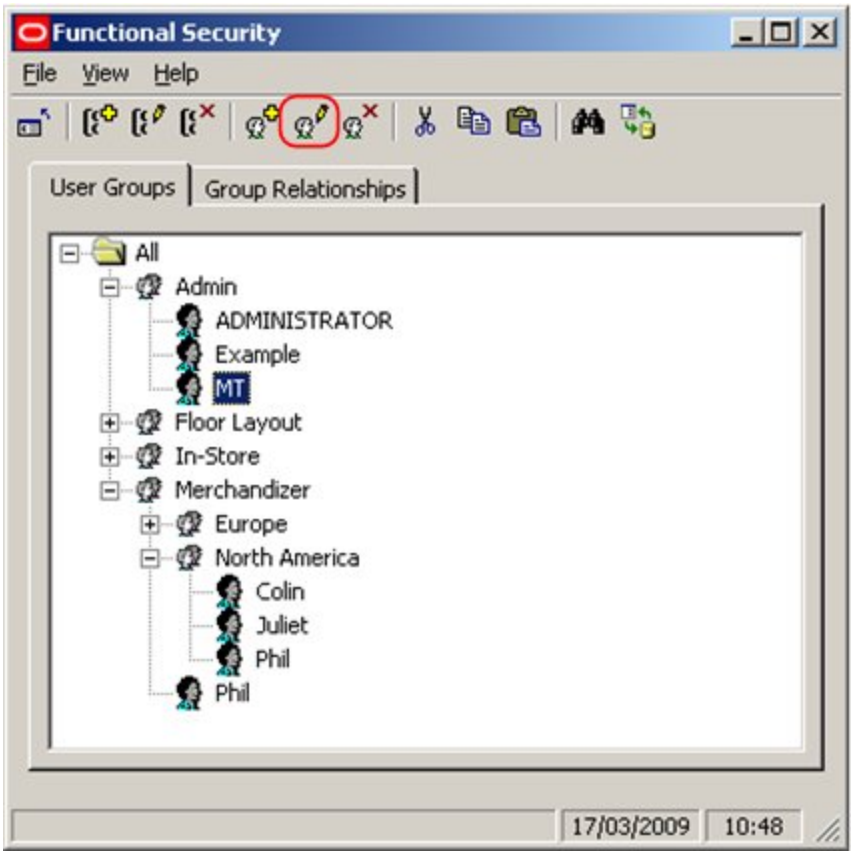
> **Note:** For any other language than English the AVTTB_MESSAGE table must first be populated with the appropriate information.

Activate is greyed out and unavailable when adding a new user. It becomes available when the user is edited.

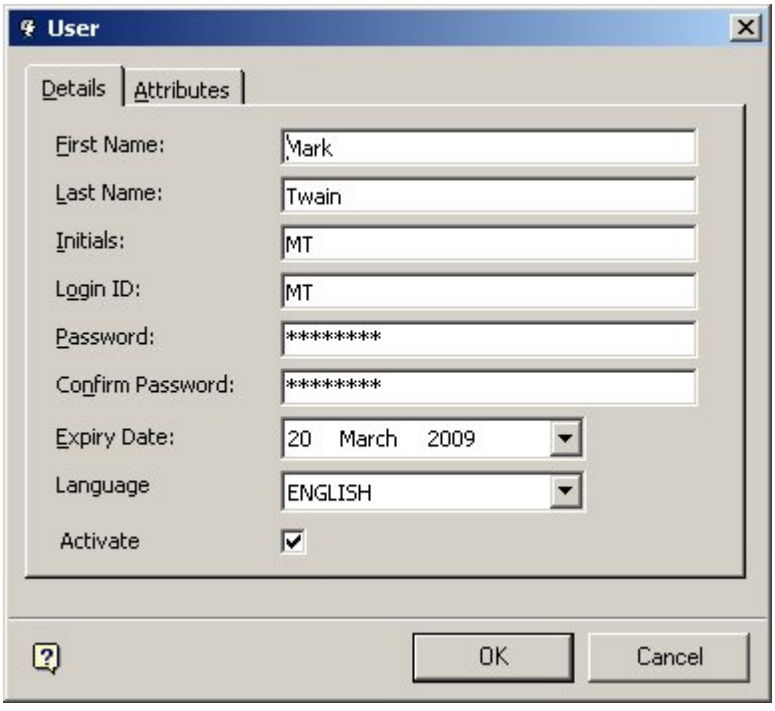
> **Note:** A User cannot be added unless a valid node has been selected in the hierarchical tree.

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.

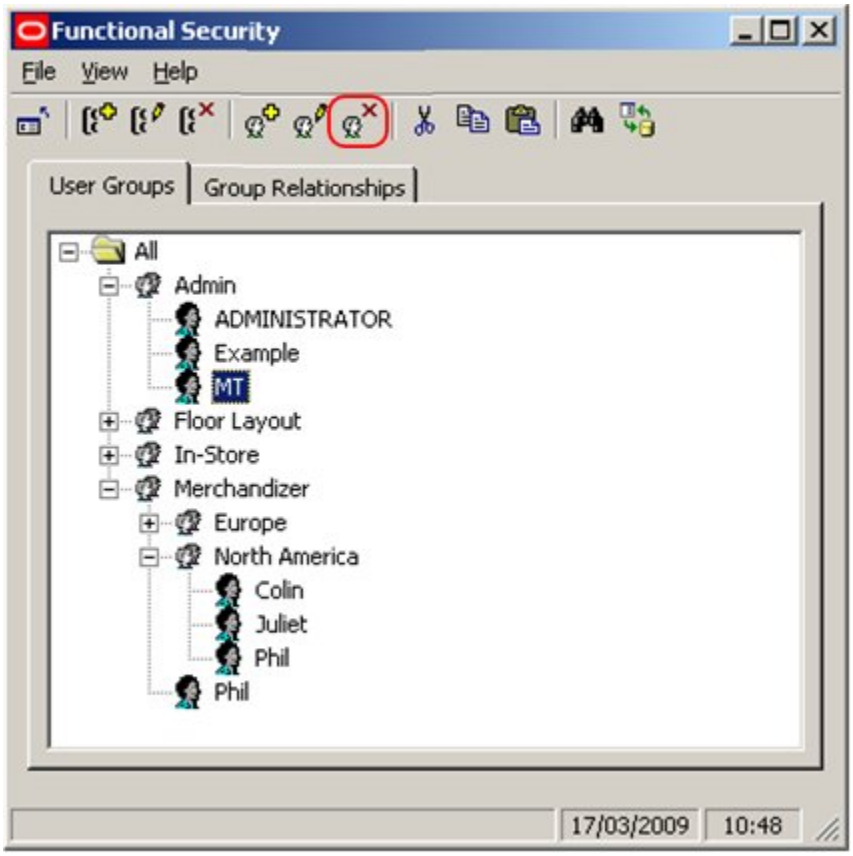


Edit the details as required and press **OK**.

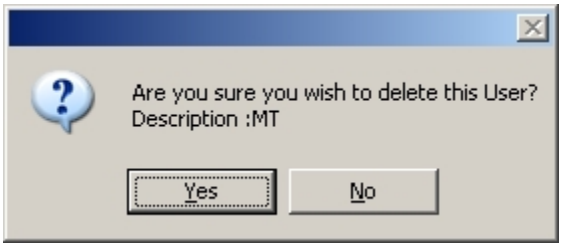
Deleting a User

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.



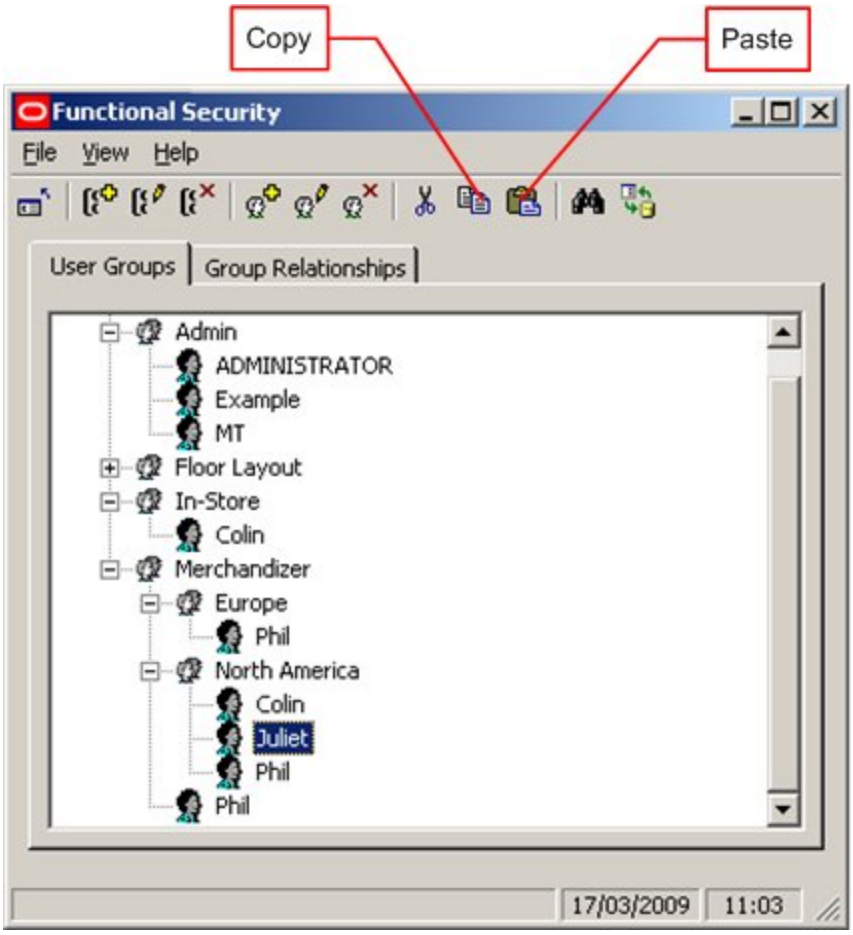
This will bring up the Delete Confirmation.



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 carried out by using the Copy and Paste options.

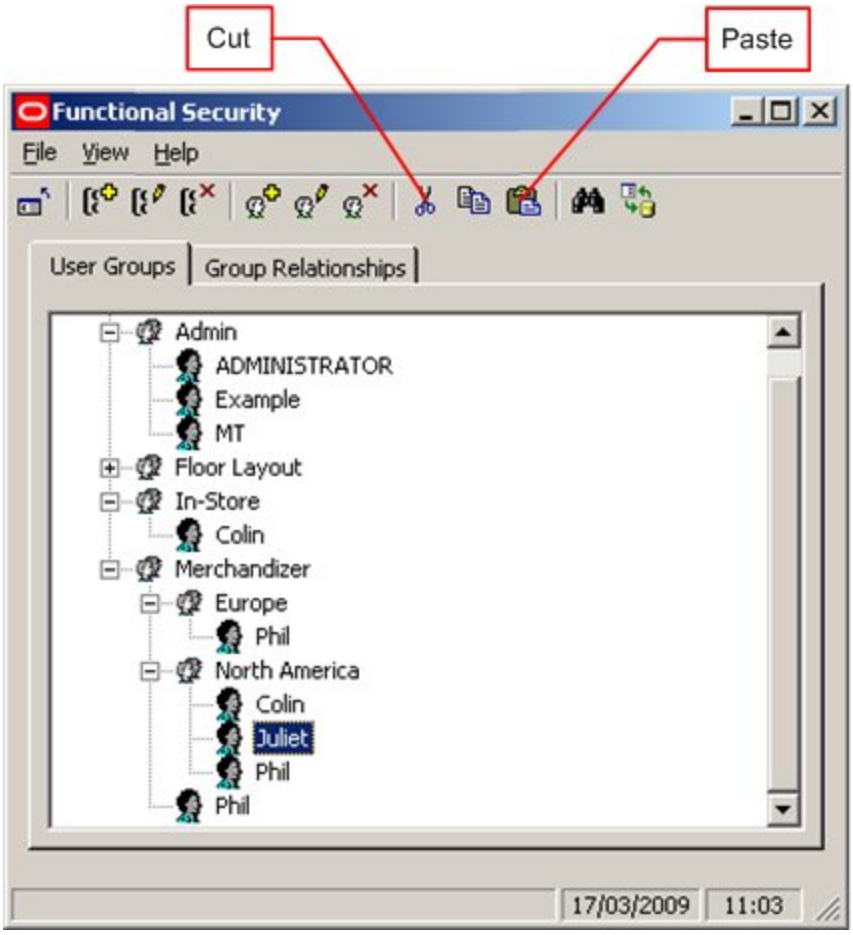


1. Open up the hierarchical tree and highlight an instance of the user you wish to copy.
2. Click on the Copy icon.
3. Highlight the User group it is desired to copy the User to.
4. Click on the Paste icon.

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.



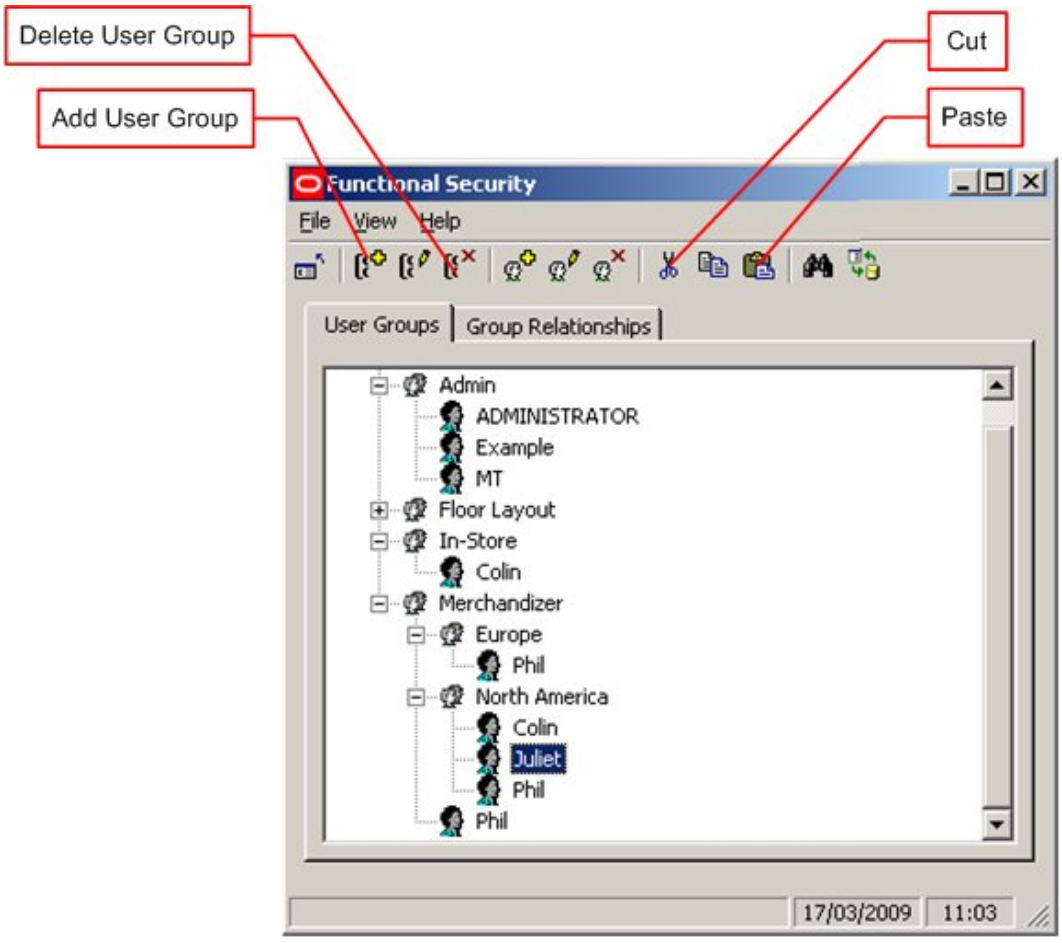
1. Open up the hierarchical tree to find and instance of the user you wish to move.
2. Click on the Cut icon.
3. Highlight the User Group it is desired to move the user to.
4. Click on the Paste icon.

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.

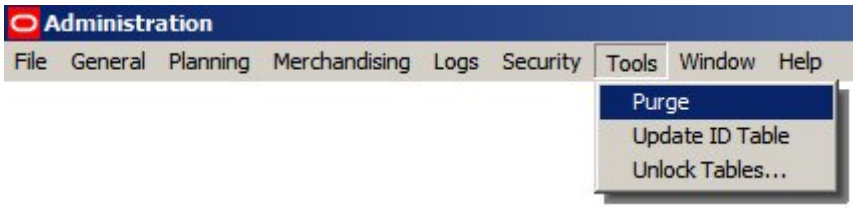


1. Click on the Add Group Icon to create a Temporary Group.
2. Name the Group Temporary or some other similar name.
3. Open the hierarchy and select the User Group and the User it is desired to remove from the Group.
4. Click on the Cut icon.
5. Highlight the Temporary User Group.
6. Click on the Paste icon.

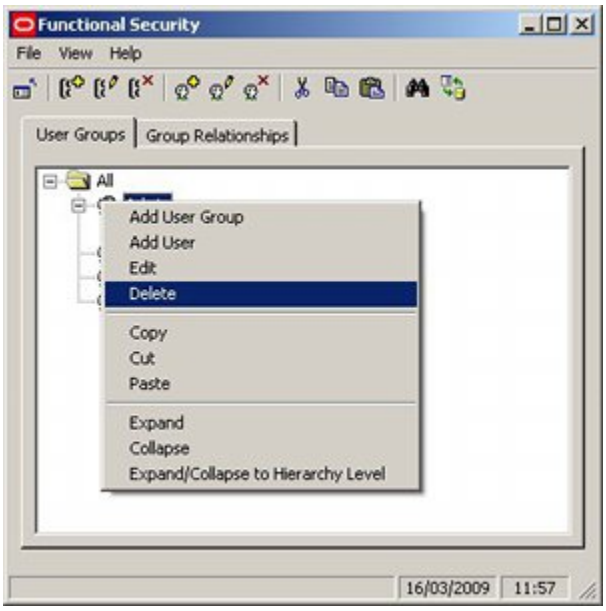
   The User will be removed from the selected User Group and copied to the Temporary User Group.
7. Delete the Temporary User Group.

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 then from accessing Macro Space Management.

User Groups

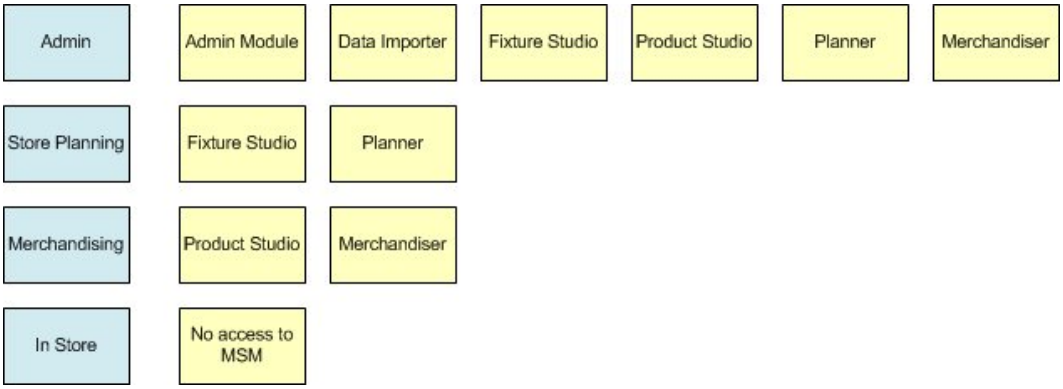
Overview of User Groups

User Groups are groups of users. User Groups can be any logical grouping of users. Examples include:

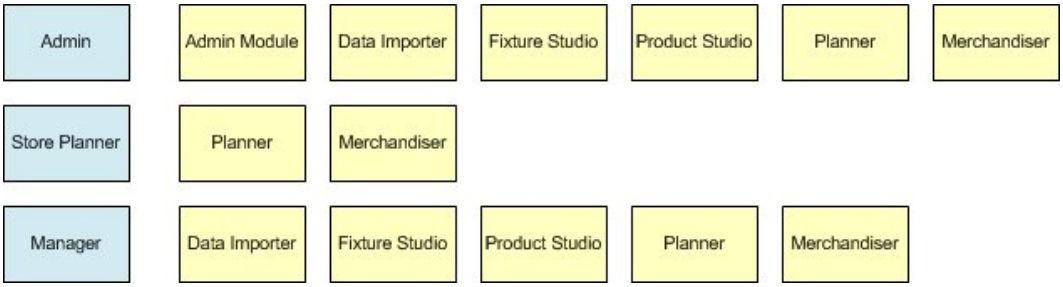
- Functional Groupings: Store Planners, Merchandisers, etc
- Responsibilities: Planners, Managers, etc
- Geographical Groupings: North America, Europe, etc

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 the program without configuring it for each individual user.

Example of 'Functional' User Groups



Example of 'Responsibility' User Groups

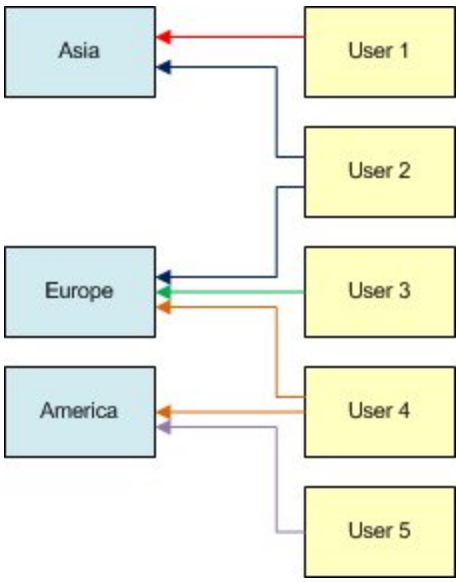


Example of 'Geographic' User Groups



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

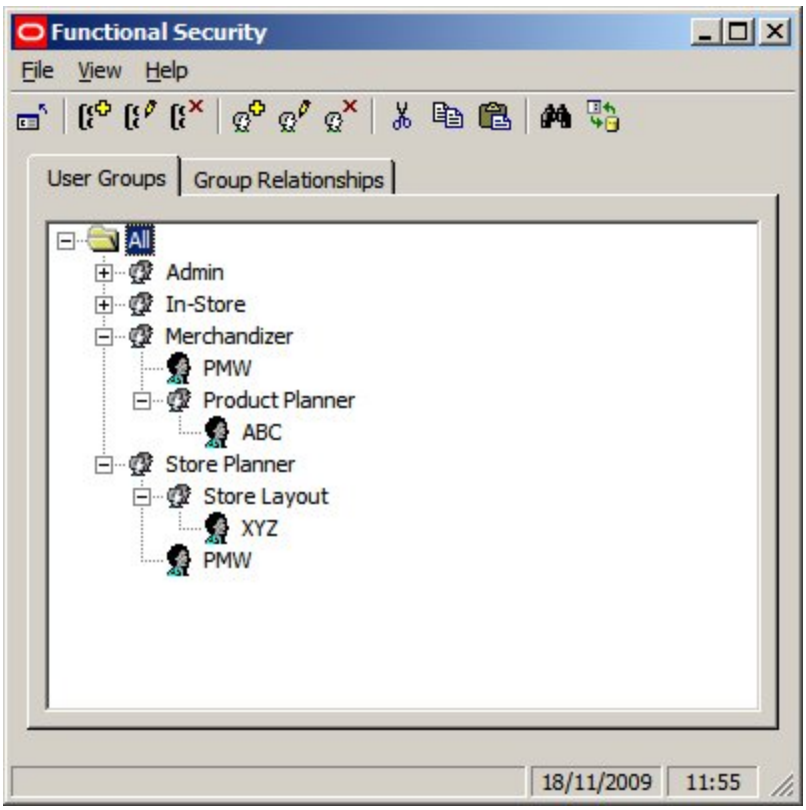
User 3 can only work in functionality assigned to the Europe User Group

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.



Icon	Meaning
	User Group
	User

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 wight only allow access to the Planner Module.

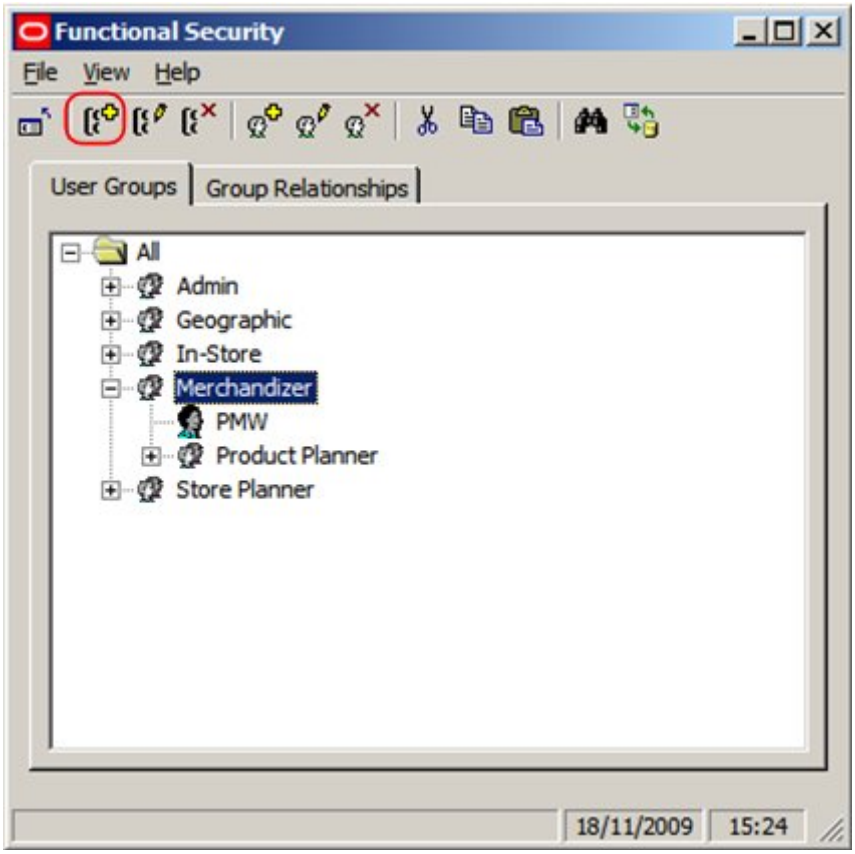
Users can be allocated to Single or Multiple User Groups.

> **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.

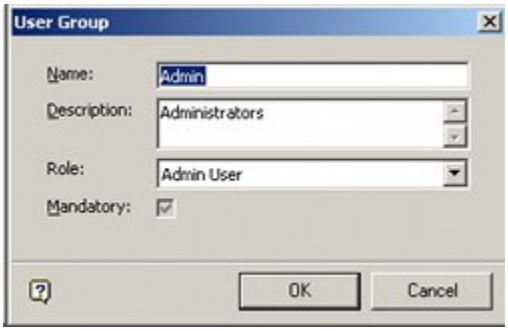
Before Adding, Editing or Deleting User Groups, Administrators should consider how access to both Macro Space Management and In-Store Space Collaboration will be controlled. User Groups can then be configured as required.

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.

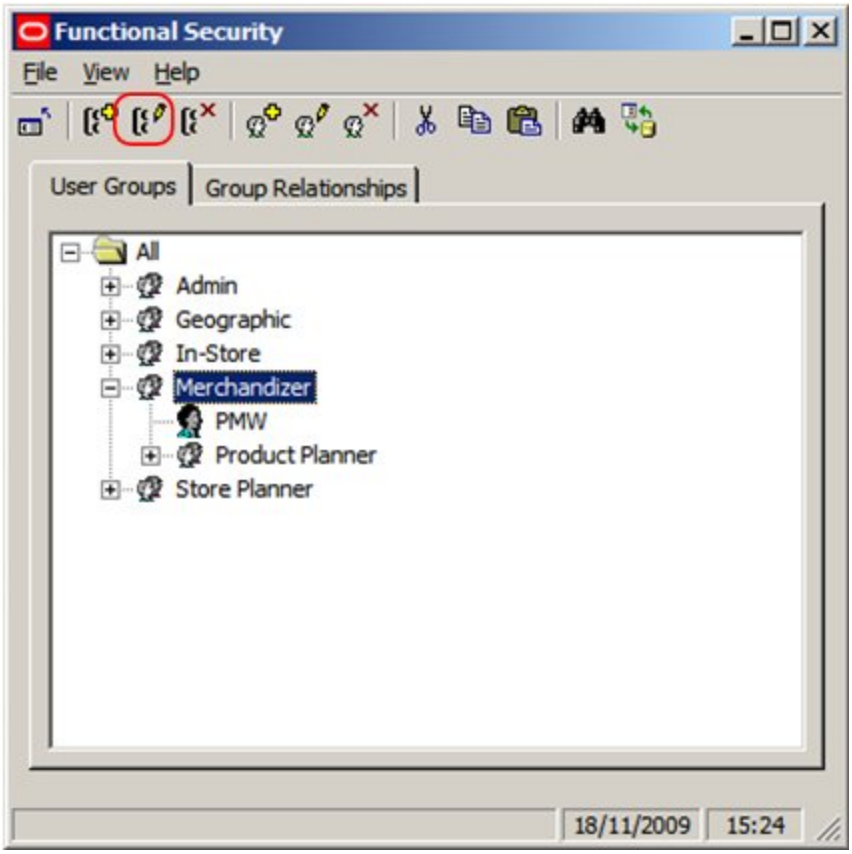


1. Enter the Name of the User Group and the Description.
2. If the mandatory check box is ticked, all new users will automatically be added to this group when they are created.
3. Enter the User Group Role - some functionality (such as planogram substitution) can only be operated with specific user roles assigned.
4. 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.



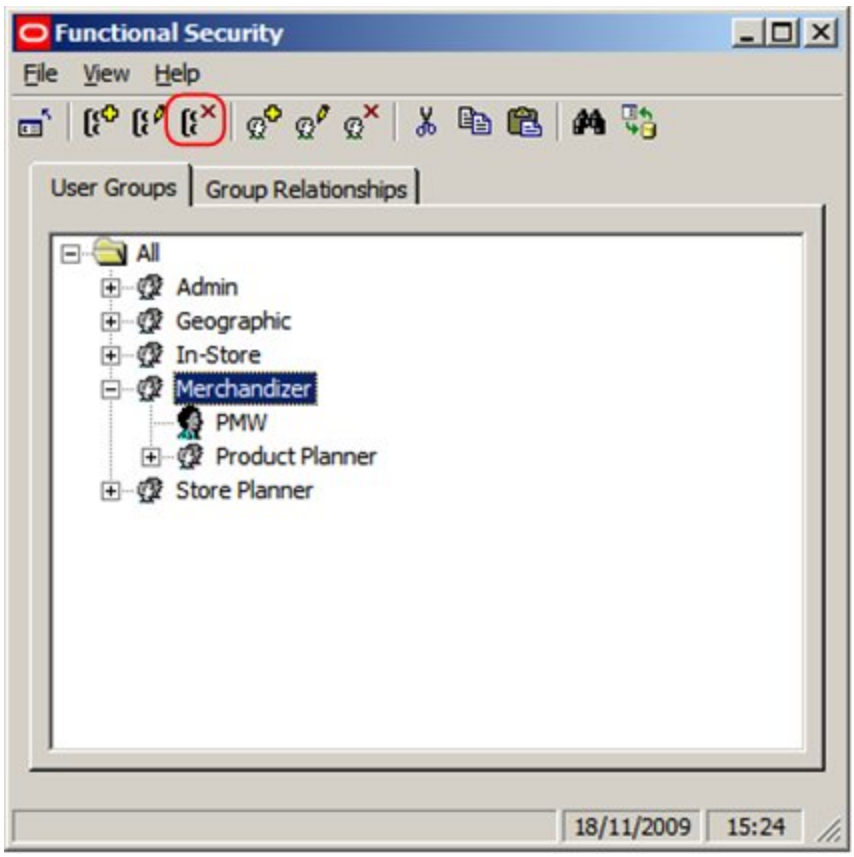
This will bring up the User Groups dialogue box.



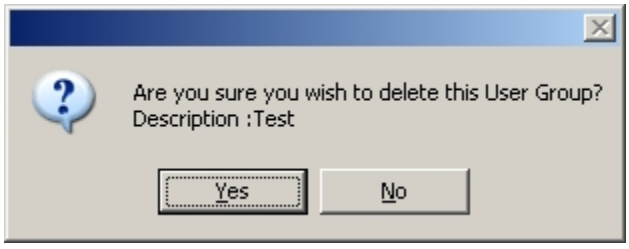
1. Change the Name of the User Group and the Description.
2. (If the mandatory check box is ticked, all new users will automatically be added to this group when they are created).
3. Click on OK and the edited User Group will appear in the hierarchy.

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.

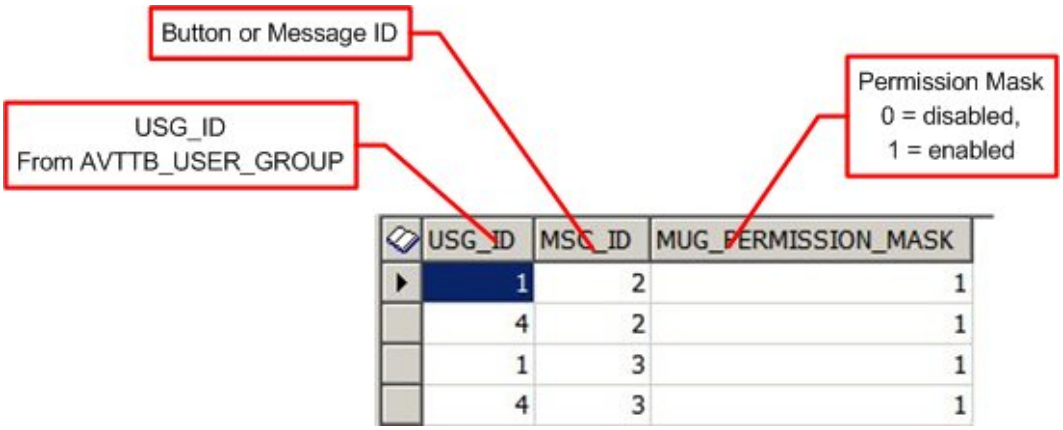


Click on Yes and the User Group will be removed.

User Groups and Functionality in ISSC

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.

This is because the buttons that are active in In-Store Space Collaboration are controlled by the AVTTB_MESSAGE_USER_GROUP_LINK table.



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 greyed 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 greyed 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

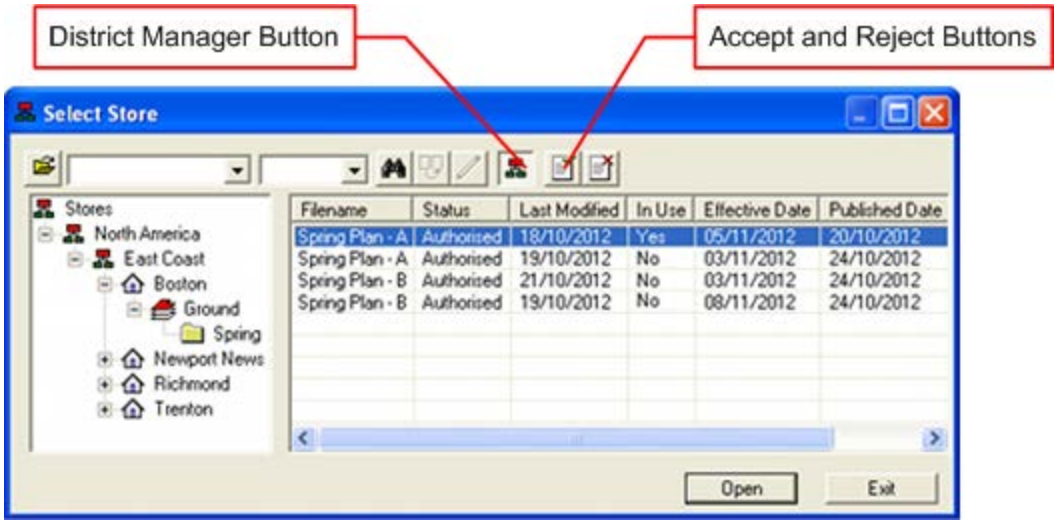
```
Insert into AVTTB_MESSAGE_USER_GROUP_LINK
select [User Group ID], MSC_ID, MUG_PERMISSION_MASK
from AVTTB_MESSAGE_USER_GROUP_LINK Where USG_ID = 1
```

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.

ISSC Select Store dialog box - District Manager Button

The AVTTB_MESSAGE_USER_GROUP_LINK table is also used to control access to the District Manager button in the Select Store dialog box in In-Store Space Collaboration - this can be used by specific users to bulk Approve or Reject floor plans submitted to them for approval.



To enable the District Manager button (MSC_ID = 7243), the MUG_PERMISSION_MASK must be set to 1 for the pertinent User Group (USG_ID).

Group Relationships

Overview of Group Relationships

Group Relationships

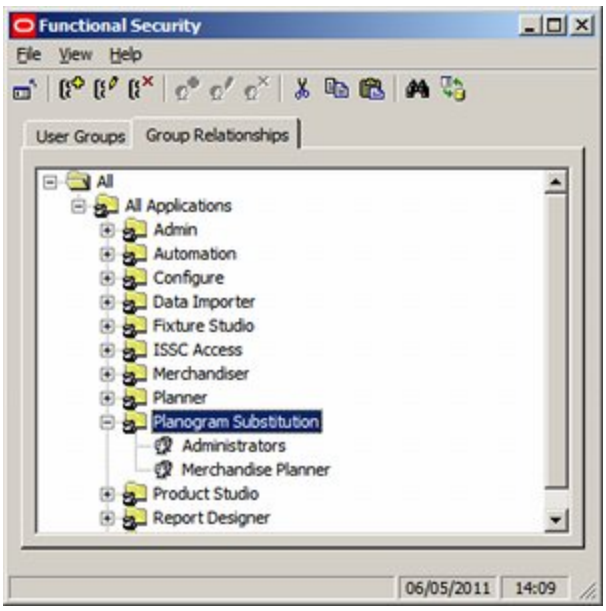
Group Relationships are used to define areas of functionality for which security can be set. These control access to the main modules of Macro Space Management - for example Fixture Studio. User Groups can then be assigned to these areas of functionality - allowing access to be controlled to the different 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

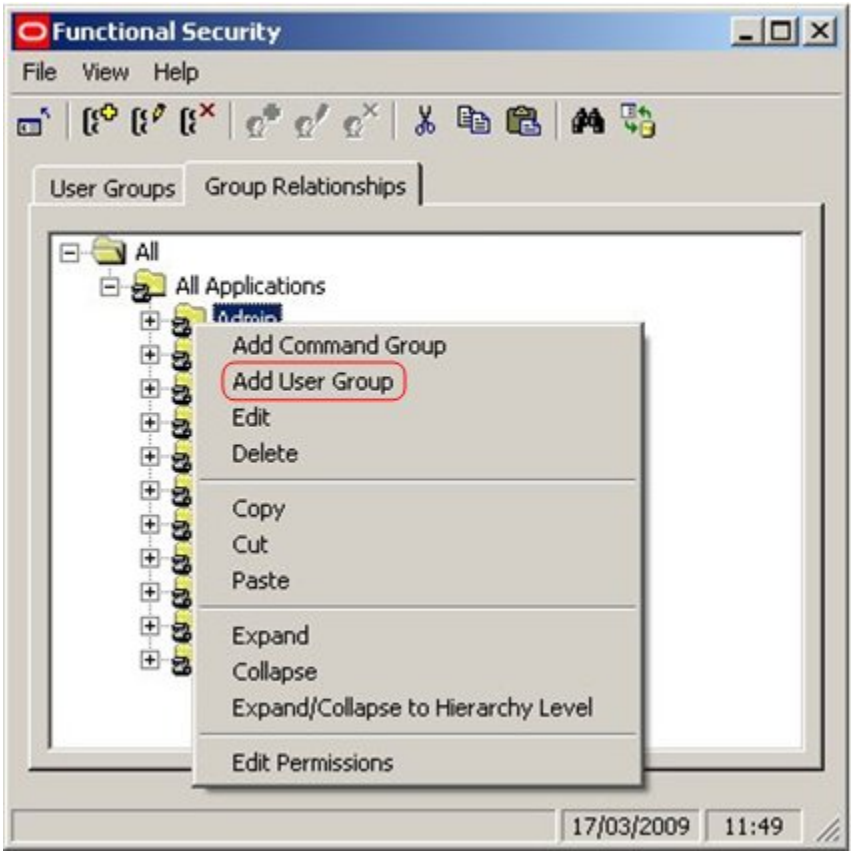
User Groups can be created in the User Groups Tab. Permissions to access specific parts of the Macro Space Management and In-Store Space Collaboration can then be granted by associating User Groups to the top level command groups.



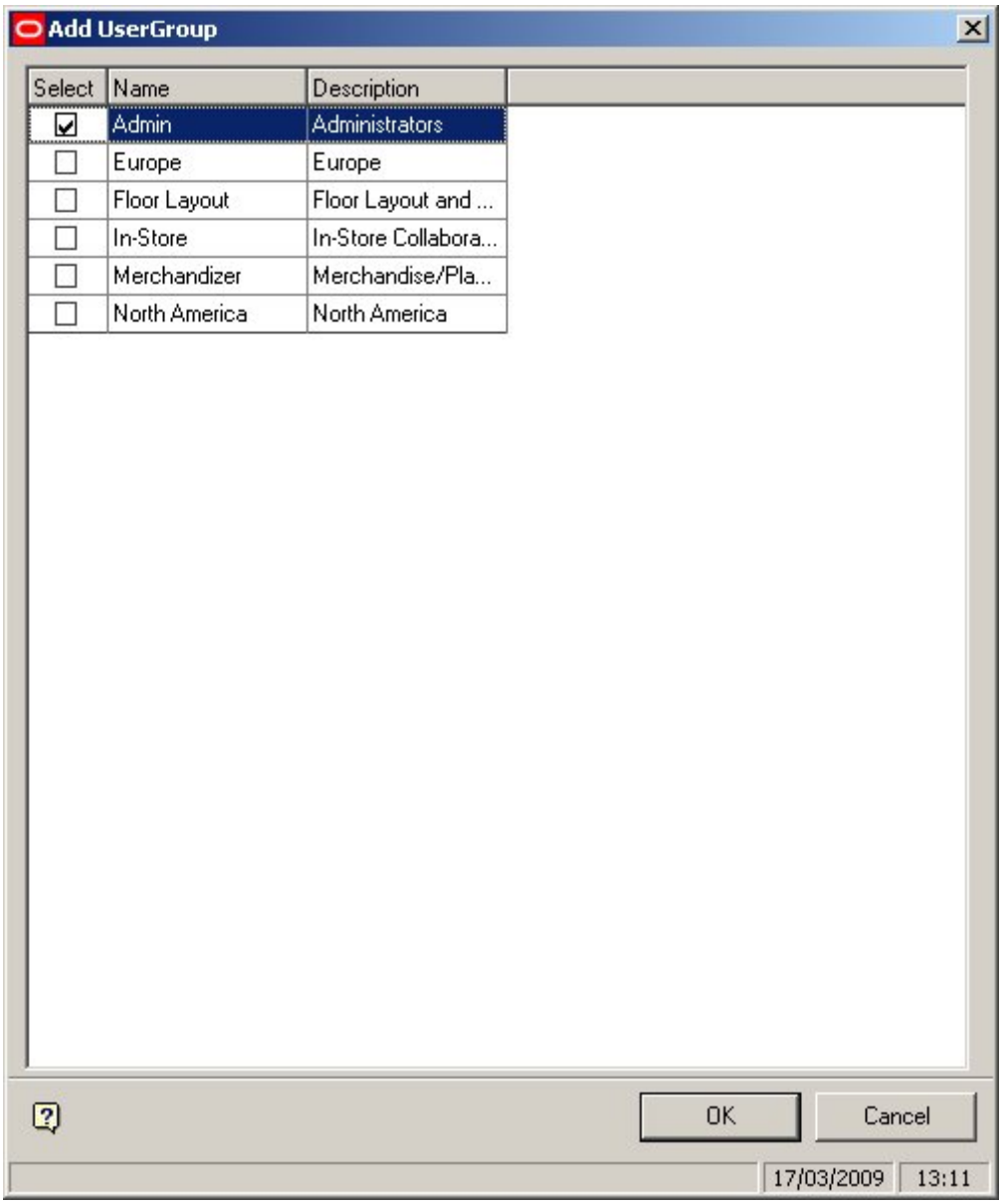
In the above example, Planogram Substitution has been made available to users belonging to the Administrator and Merchandise Planner User Groups.

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.



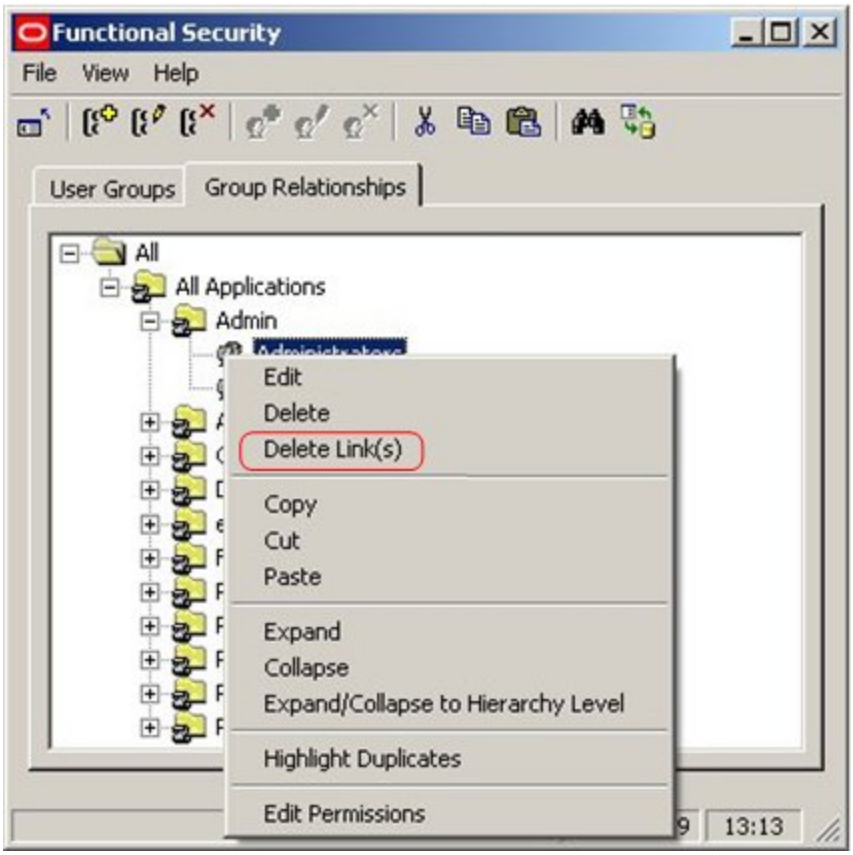
Select Add User Group to bring up a list of available User Groups.



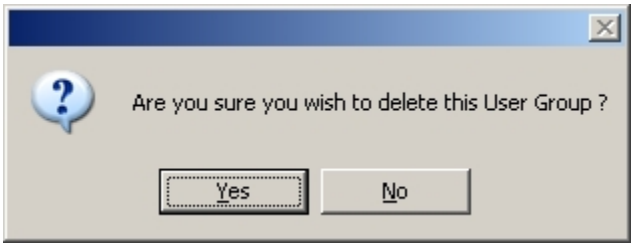
Check the boxes for the required User Groups and click **OK**.

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.



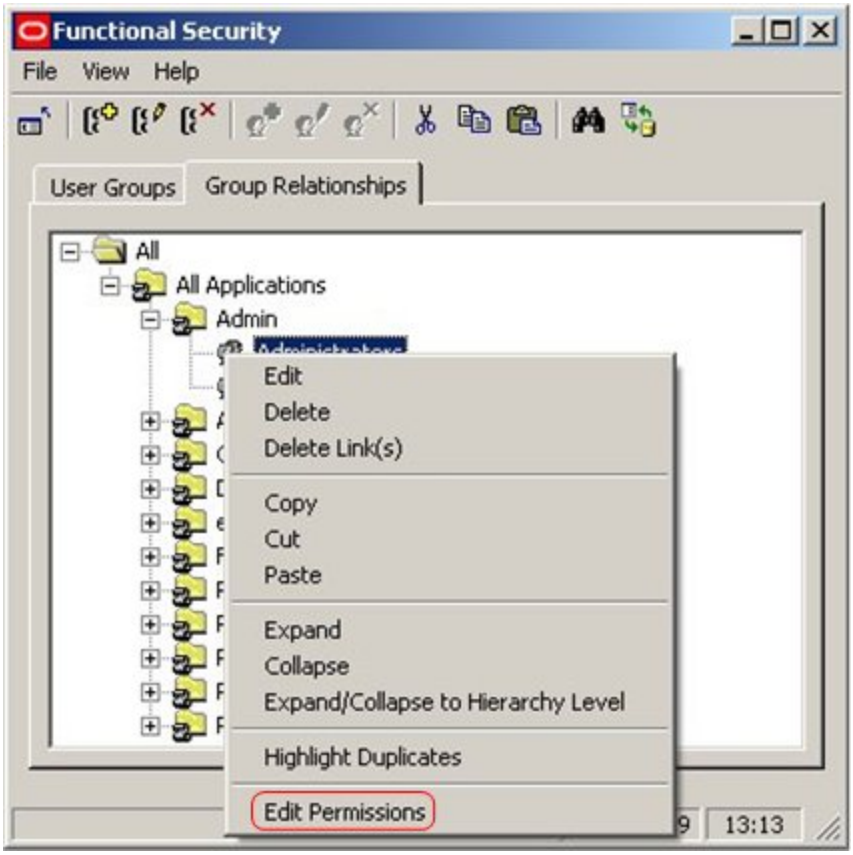
Select the Delete Links option. This will bring up a confirmatory dialogue.



Click on OK to confirm.

Setting Permissions

The Edit Permissions option is active for specific functionality in this release of Macro Space Management.



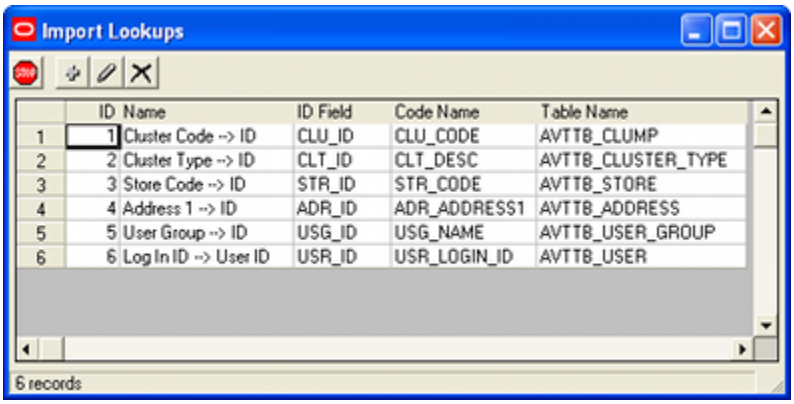
Specific Functionality Controlled by Functional Security

Data Importer

As well as setting general access to a module, some specific items of functionality require additional permissions to access. This is normally because inappropriate use can cause significant problems within the application. Within the Data Importer module, two specific items of functionality require additional permissions.

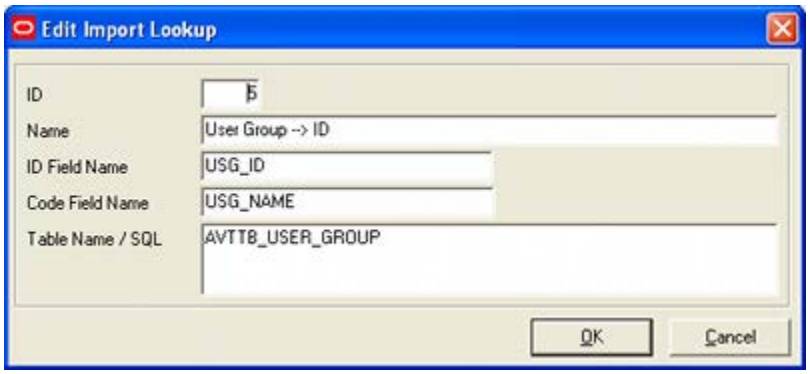
Lookup Dialog Box

The Import Lookups dialog box enables users to configure lookups for use when importing data.



	ID	Name	ID Field	Code Name	Table Name
1	1	Cluster Code --> ID	CLU_ID	CLU_CODE	AVTTB_CLUMP
2	2	Cluster Type --> ID	CLT_ID	CLT_DESC	AVTTB_CLUSTER_TYPE
3	3	Store Code --> ID	STR_ID	STR_CODE	AVTTB_STORE
4	4	Address 1 --> ID	ADR_ID	ADR_ADDRESS1	AVTTB_ADDRESS
5	5	User Group --> ID	USG_ID	USG_NAME	AVTTB_USER_GROUP
6	6	Log In ID --> User ID	USR_ID	USR_LOGIN_ID	AVTTB_USER

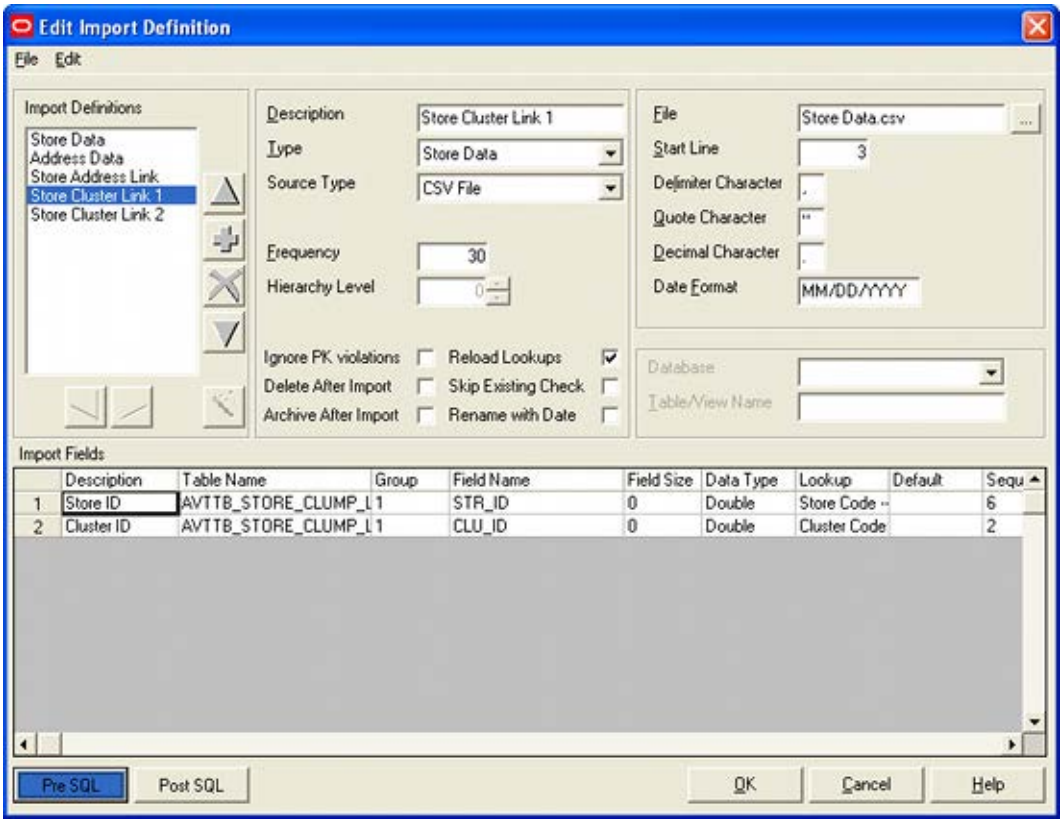
Selecting a lookup and choosing the edit option brings up the Edit Import Lookup dialog box.



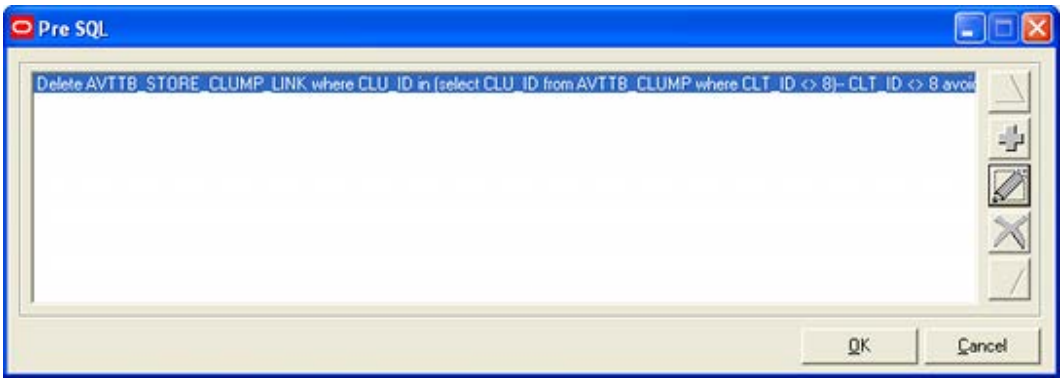
The Table Name/SQL field enables a user to use SQL statements in conjunction with the table name; for example a **Where** clause to be used to control how the table is to be updated. There are no restrictions on the SQL that could be used - unrestricted, customized queries can be constructed. Accordingly, permission to access this functionality must be assigned carefully and should be restricted to trusted power users.

Import Definition Dialog Box

The Import Definitions dialog box has the facility to run SQL on the data; either immediately before it is imported or immediately after it is imported.



The dialog box to do this is accessed by clicking the **Pre SQL** or **Post SQL** button.



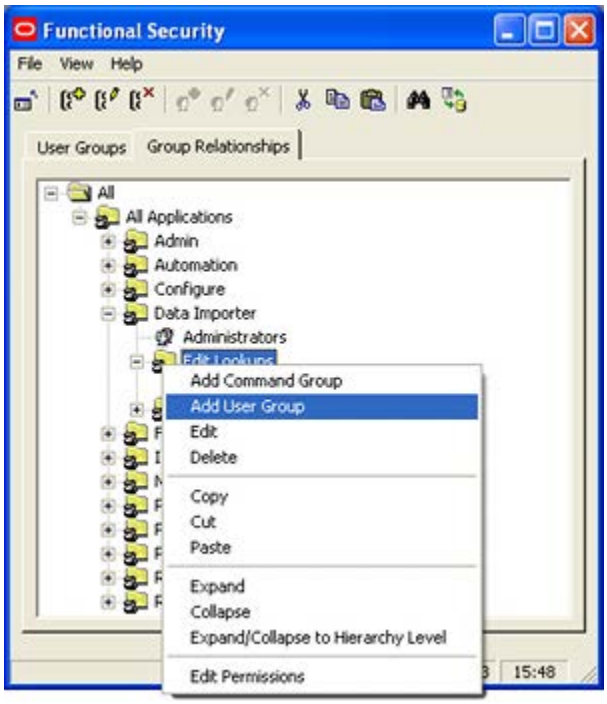
There are no restrictions on the SQL that could be used - in this example a **Delete** command is being used. Accordingly, permission to access this functionality must be assigned carefully and should be restricted to trusted power users.

Assigning Permissions

Assigning Permissions is done in two stages:

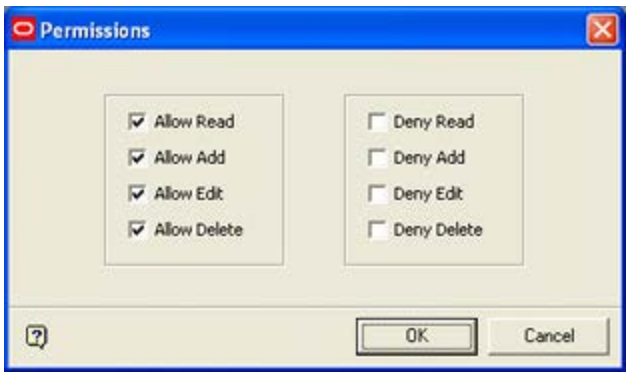
Assign User Group to Command Group

The first stage is to assign permission for a user group to access the functionality. This is done by highlighting the required functionality in the Group Relationships tab and selecting Add User Group from the right click menu. This will bring up the Add User Group dialog box - enabling the required user group to be selected.



Separate permissions are required to access the Looks dialog box and the Pre and Post SQL functionality.

Once this has been done, specific permissions are assigned. This is done by highlighting the recently added user group and selecting Edit Permissions from the right click menu. This will bring up the Permissions dialog box. Users will require the **Allow** permissions to use the functionality.

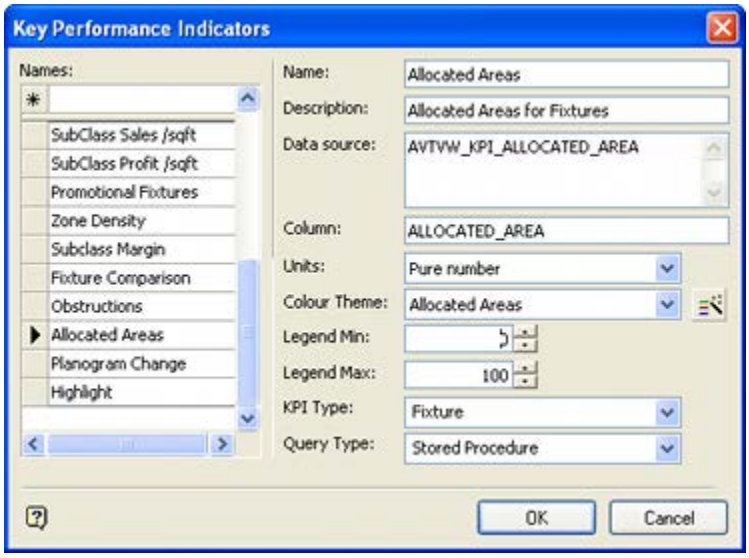


KPIs in Planner and Merchandiser

As well as setting general access to a module, some specific items of functionality require additional permissions to access. This is normally because inappropriate use can cause significant problems within the application. Within the Planner and Merchandiser modules, the ability to configure KPI's requires additional permissions.

Edit KPI Dialog Box

The Key Performance Indicators dialog box (accessed from the KPI tab of the Object Browser) allows anyone configuring a KPI to do two things:



- To execute a SQL statement - unrestricted, customized queries can be constructed.
- To invoke any stored procedure that exists in the database.

These options could result in unintended effects in the database. Permissions to use them must be assigned carefully and should be restricted to trusted power users

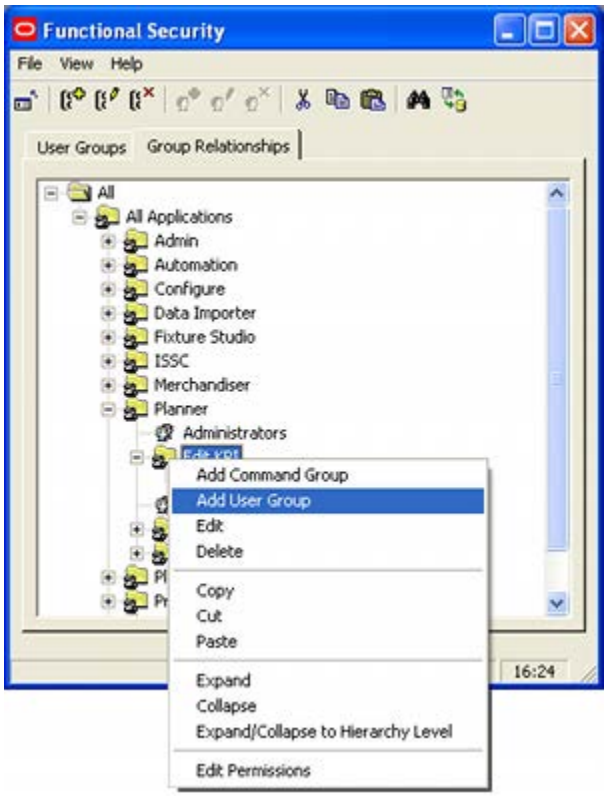
Assigning Permissions

Assigning Permissions is done in two stages:

Assign User Group to Command Group

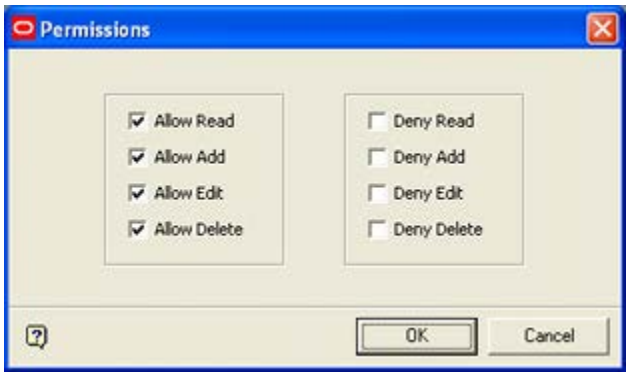
The first stage is to assign permission for a user group to access the functionality. This is done by highlighting the required functionality in the Group Relationships tab and

selecting Add User Group from the right click menu. This will bring up the Add User Group dialog box - enabling the required user group to be selected.



Separate access rights are required to access the Key Performance Indicators dialog in the Planner and in the Merchandiser modules.

Once user groups have been assigned, specific permissions have to be assigned. This is done by highlighting the recently added user group and selecting Edit Permissions from the right click menu. This will bring up the Permissions dialog box. Users will require the **Allow** permissions to use the functionality.

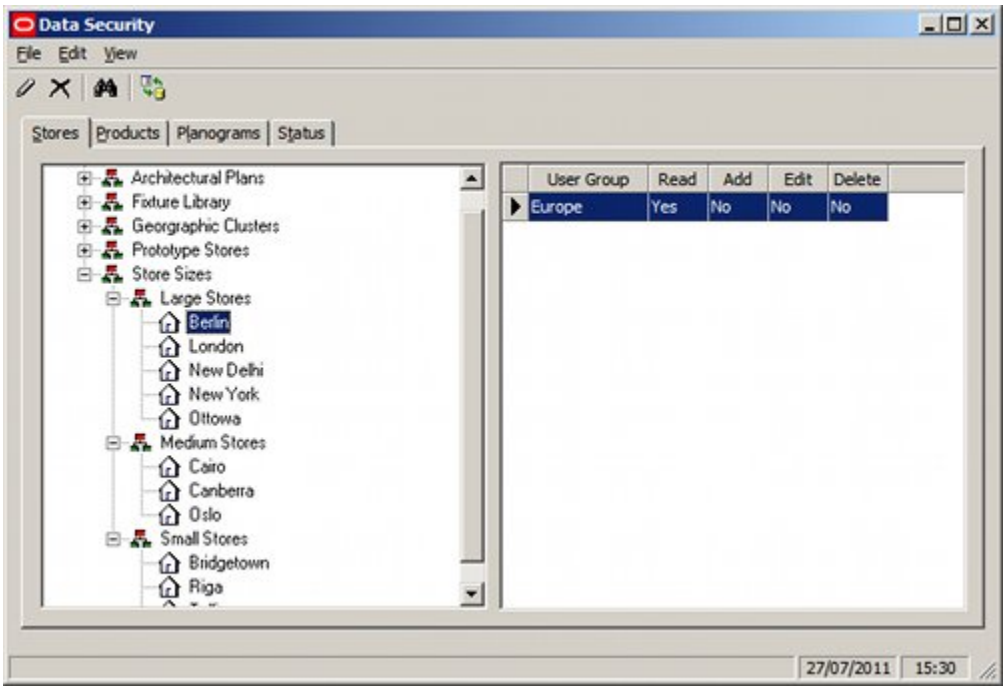


Data Security

About Data Security

Data Security is an extension of Functional Security. It allows Administrators to further restrict the permissions a user may have for functionality in both Macro Space Management and In-Store Space Collaboration. For example:

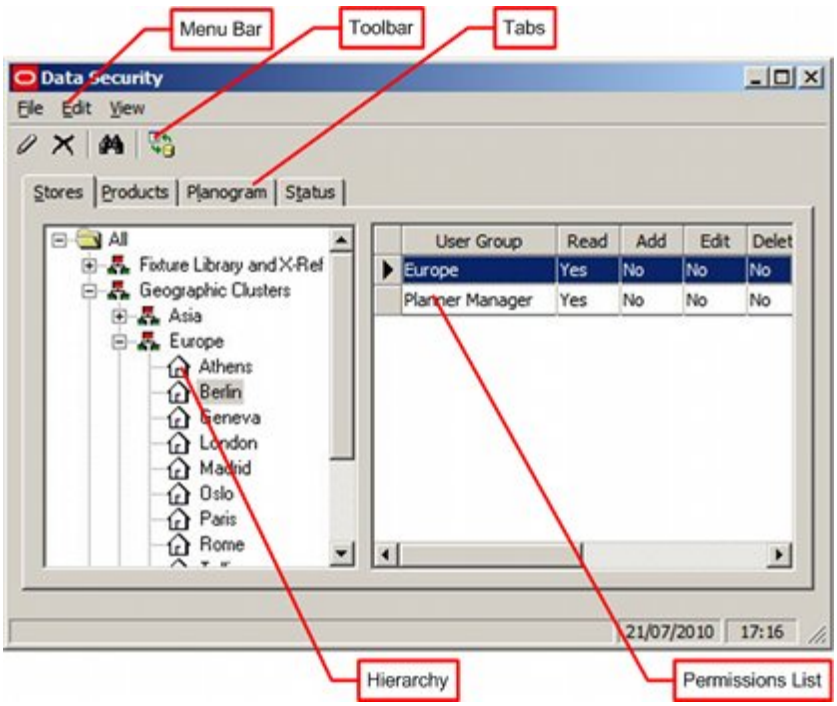
- The Floor Plans a particular user can publish via Macro Space Management can be restricted using Data Security.
- The Stores a particular user can access in In-Store Space Collaboration can be restricted using Data Security.



Note: at present Data Security only works for specific functionality.

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.

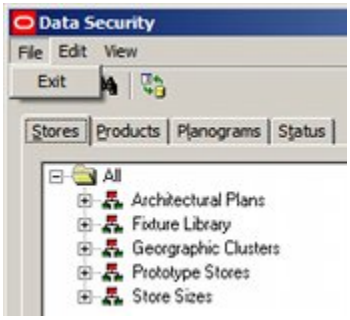
The **Tabs** allow the users to switch between setting Data security options for Stores, Products and Status.

The **Hierarchy** allows users to see a list of Stores, Products or Statuses.

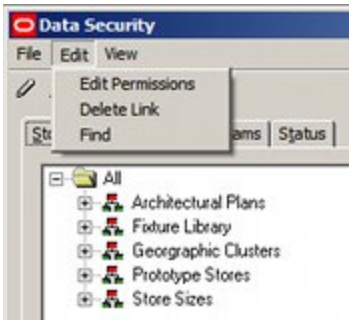
The **Permissions List** enables users to see the list of permissions allocated to that aspect of Macro Space Management.

Data Security Menus and Toolbar

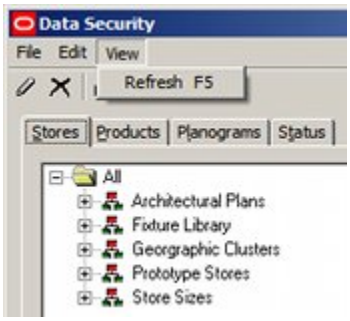
The **File pull down menu** allows users to exit this section of the Admin Module.



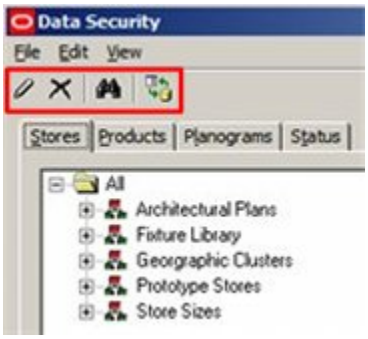
The **Edit pull down menu** allows users to configure the permissions for the data.



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 **Toolbar** has four options:



Icon	Meaning
	Edit Permissions
	Delete Link
	Find
	Refresh

Edit Permissions enables the user to modify the Add, Edit and Delete permissions for a specific item within Data Security.

Delete Link can be used to remove access for a User Group to a specific item within Data Security.

Find brings up the search dialogue.

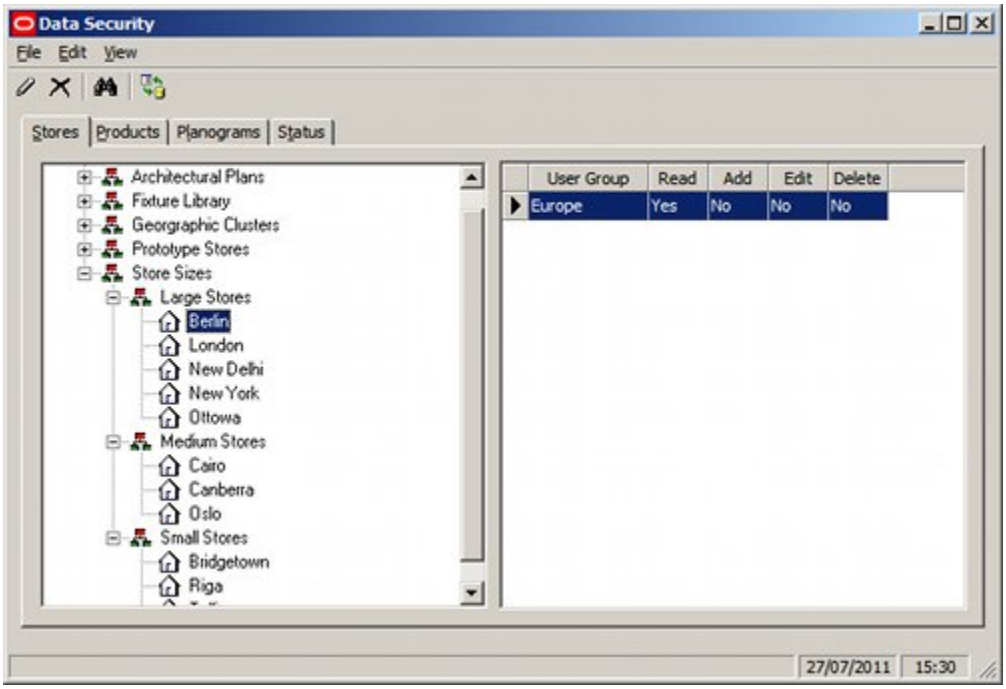
Refresh loads the latest version of the information in the database to the Data Security window.

Using Data Security

Overview of Data Security for Stores

Data Security for Stores is intended to allow Administrators to assign permission for User Groups accessing:

- Specific functionality within the Planner module
- Specific Stores and Floor Plans within In-Store Space Collaboration.



The store hierarchy that is visible is configured in the Store Manager module accessed from either the Planner or Merchandiser modules.

Macro Space Management

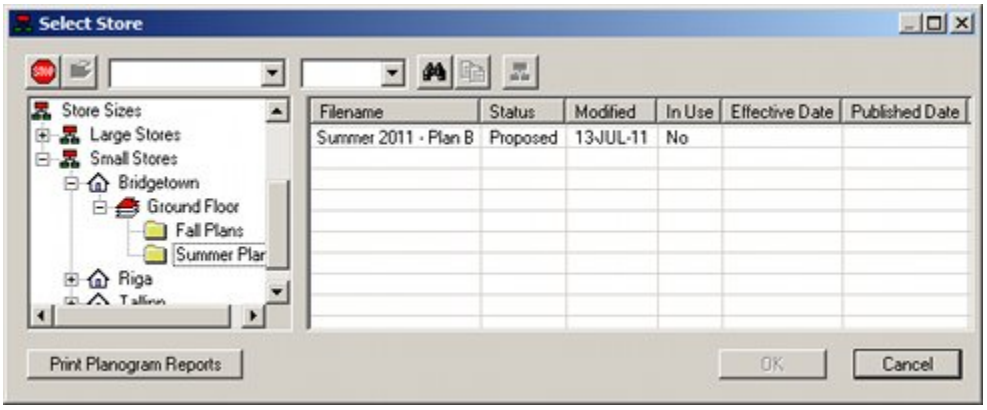
The Stores tab of the Data Security dialog box can be used to assign permissions for User Groups to:

- Run Floor Plan Processing as a Batch Process.
- Run Floor Plan Publishing as a Batch Processes.
- Run Find and Open Floor Plans in the Planner module.
- Run Pre-Process Floor Plans in the Planner module.
- Run Print Floor Plans in the Planner module.
- Run Immediate Floor Plan Publishing in the Planner module.

> **Note:** This functionality also depends on permissions set for Store Statuses and File (Floor Plan) Statuses.

In-Store Space Collaboration

The Stores tab of the Data Security dialog box can be used to assign permissions for User Groups to access specific stores. The available stores then appear in the Select Store dialog box when In-Store Space Collaboration is opened.



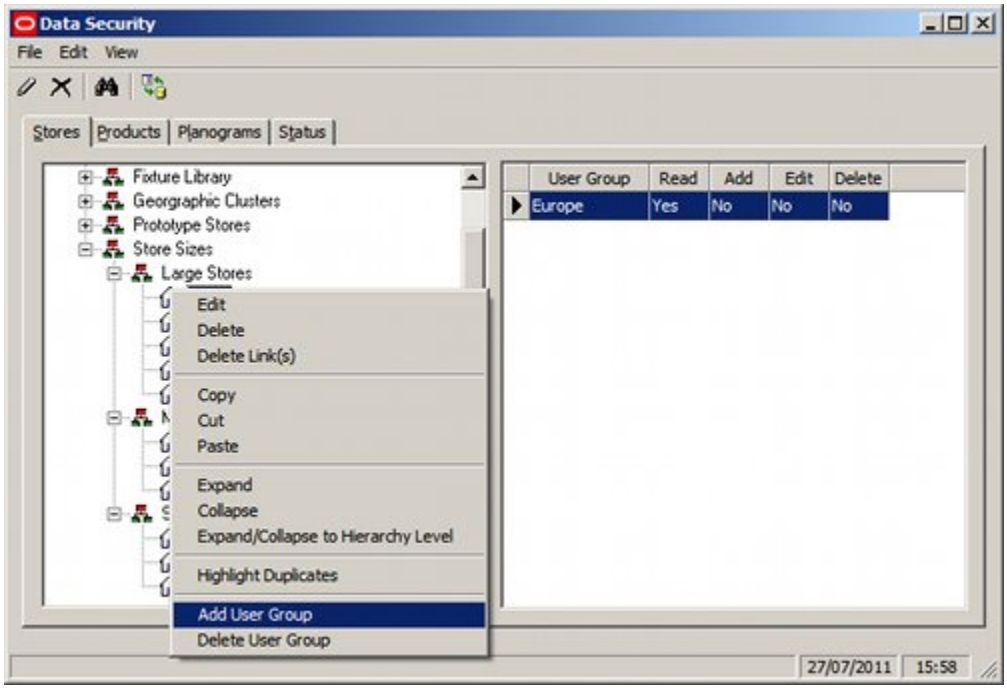
Note: Access to floor plans also depends on permissions set for File (Floor Plan) Statuses.

Adding and Removing Permissions for Stores

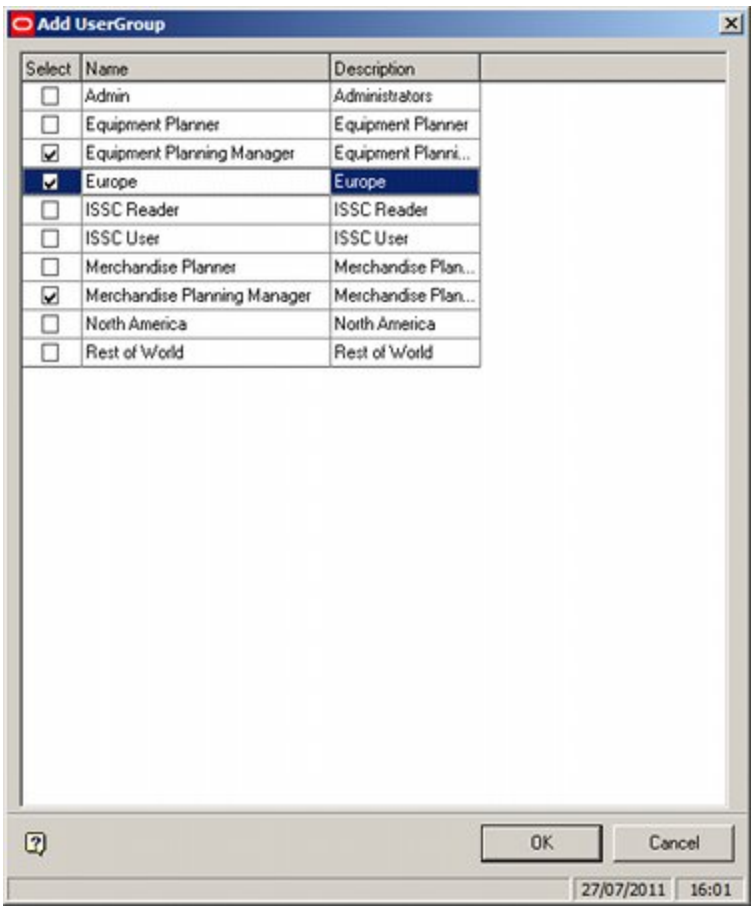
Adding Permissions for Stores

Adding Permissions for Statuses is done in three stages.

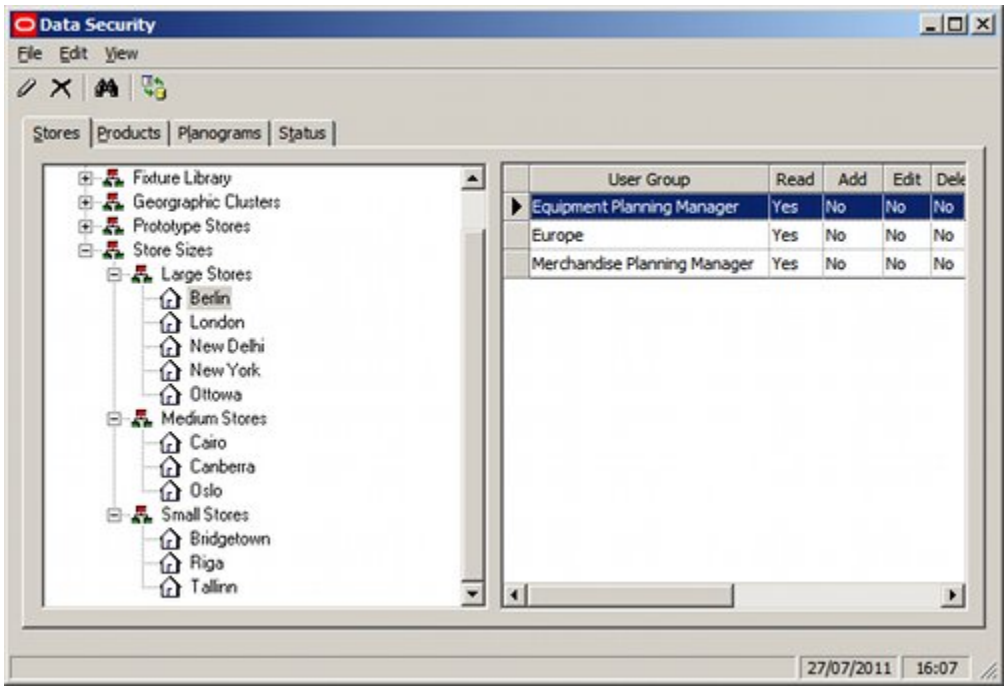
1. Highlight the required store and select the Add User Group option from the right click menu



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.



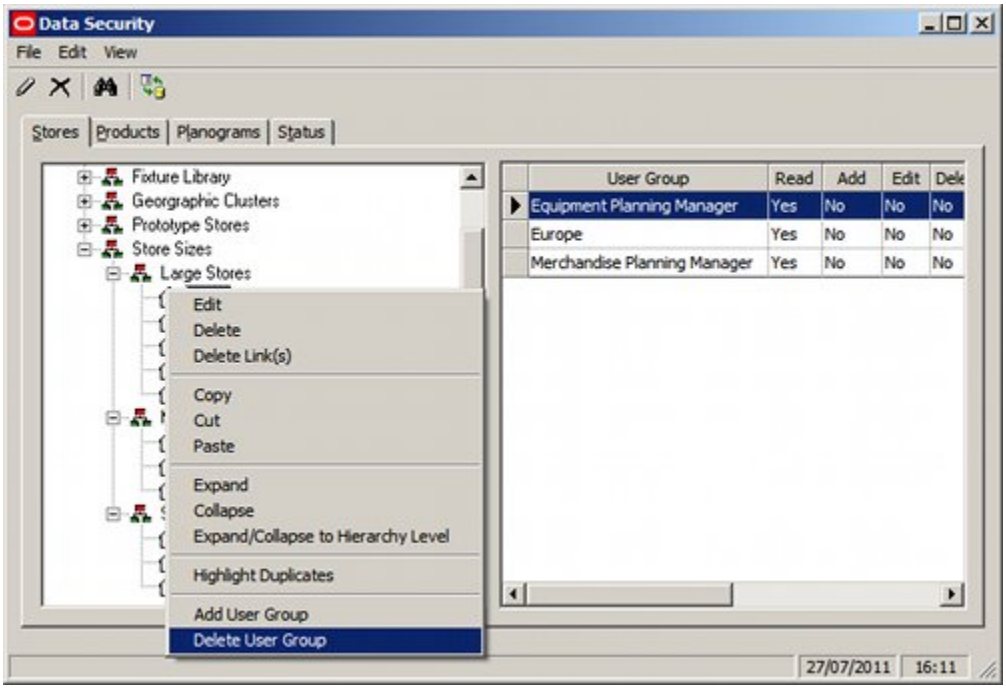
3. On clicking OK, the selected User Group will be added to the list of those that can access functionality associated with that store.



All Users belonging to the selected User Groups will be able to access functionality in Planner or access that store in In-Store Space Collaboration.

Deleting Permissions for Stores

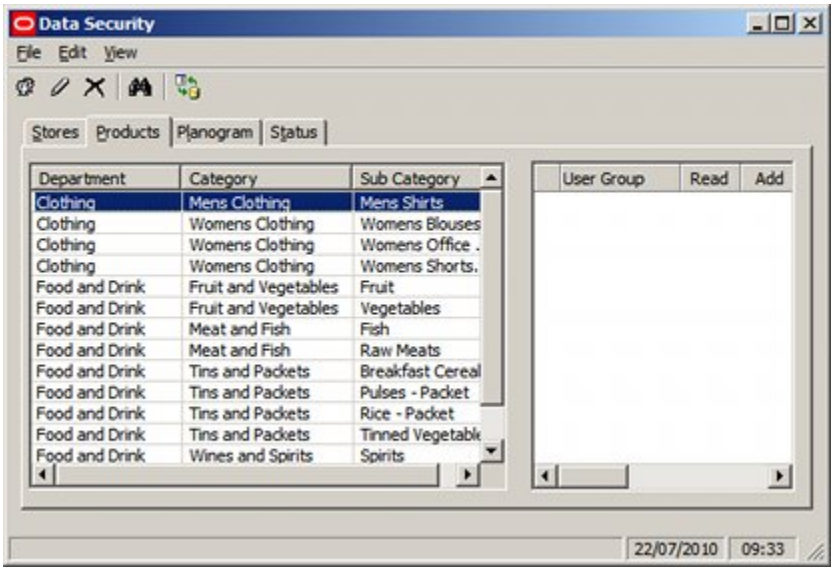
Deleting Permissions for Stores is done by highlighting the User Group it is desired to remove and selecting 'Delete User Group' from the right click menu.



Alternatively, the Delete Links option can be used from the toolbar.

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.

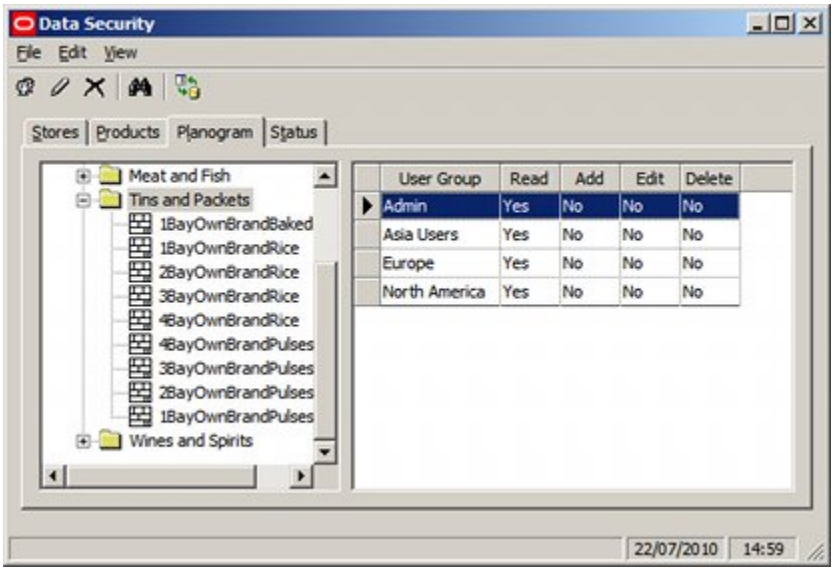


Note: This functionality is not fully implemented in this release of Macro Space Management.

Overview of Data Security for Planograms

Data Security for Planograms is intended to allow Administrators to assign permission for User Groups using Planograms in either Macro Space Management or In-Store Space Collaboration.

The planogram hierarchy that is visible is configured in the Merchandiser module.



Macro Space Management

The Planograms Tab of the Data Security dialog box can be used to assign permissions for User Groups to:

- Run Planogram Substitution as a Batch Process.
- Run Planogram Publishing as a Batch Process.
- Run Immediate Planogram Publishing in the Planner or Merchandiser modules.
- Run Planogram Printing in the Planner or Merchandiser modules.

In-Store Space Collaboration

- Run Planogram Printing.

If no user groups are assigned to planograms, then they will be available to all user groups. Once permissions have been assigned to one or more planogram groups, then users will only be able to see planograms assigned to a group they have permissions for.

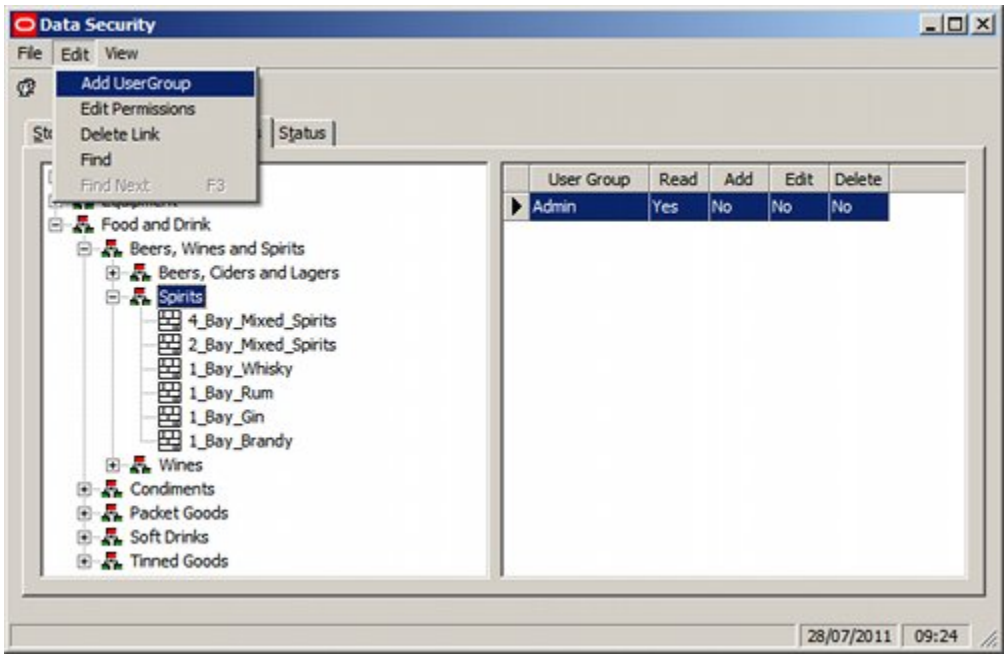
Adding and Removing Permissions for Planograms

Adding Permissions for Planograms

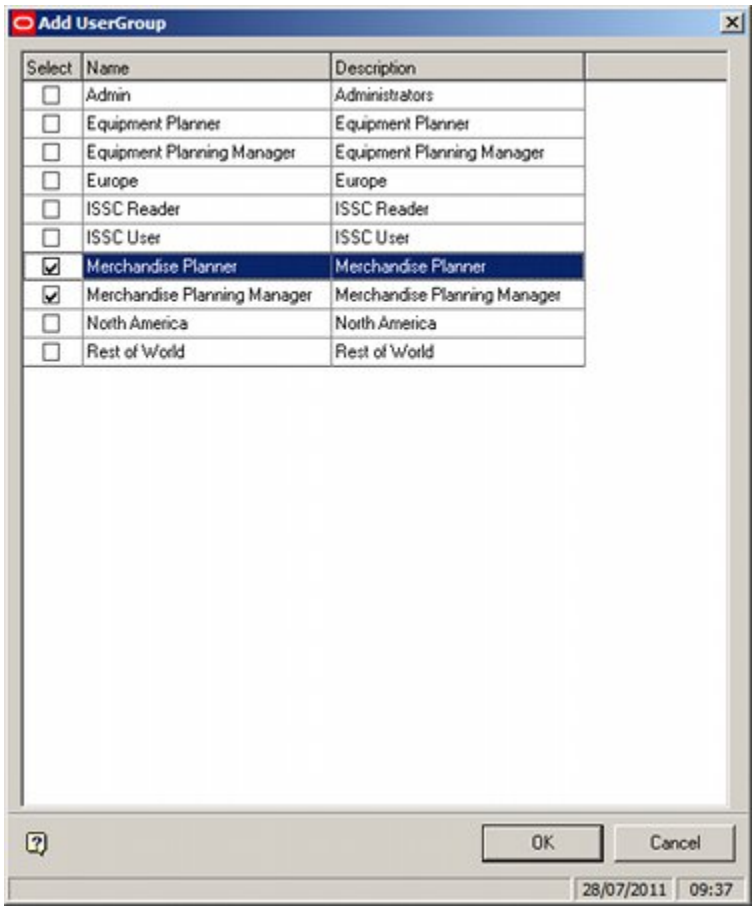
Note: permissions for planograms are allocated for their parent groups.

Adding Permissions for planograms is done in three stages.

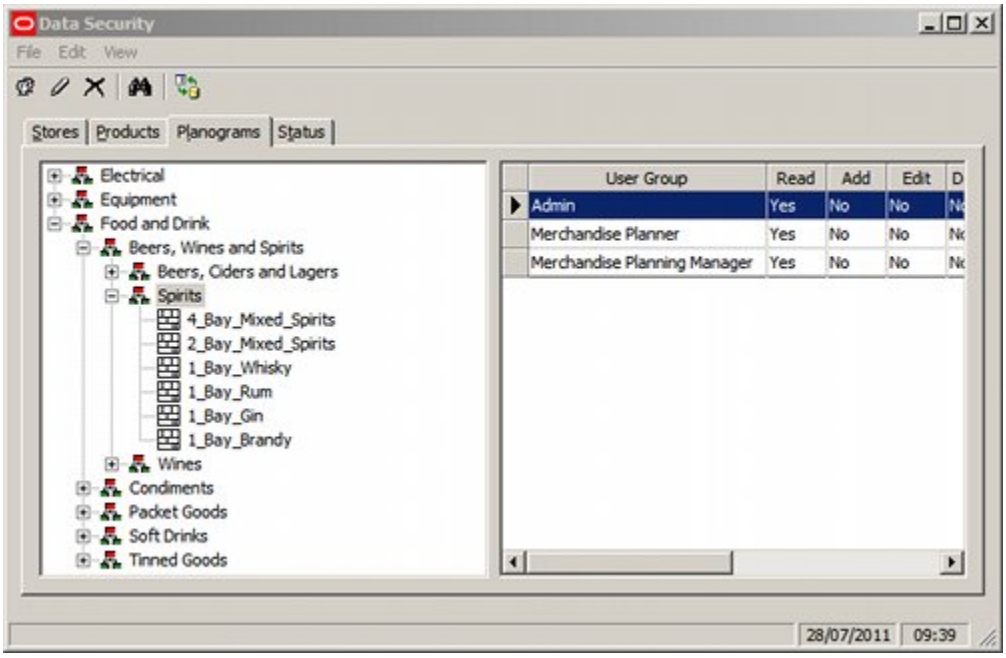
1. Highlight the required planogram group and select the Add User Group option from the Edit menu.



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.



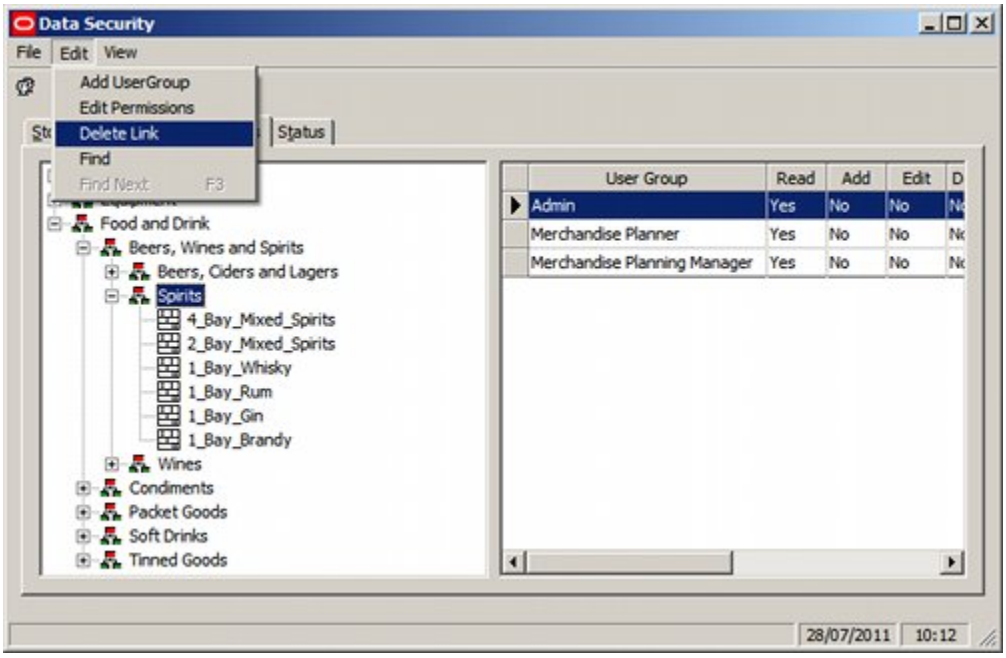
3. On clicking OK, the selected User Groups will be added to the list of those that can access planograms in that Planogram Group in the Planogram Substitution functionality.



All Users belonging to the selected User Groups will be able to access planograms belonging to that planogram group in the planogram substitution functionality.

Deleting Permissions for Planograms

Deleting Permissions for planograms is done by highlighting the User Group it is desired to remove and selecting 'Delete Link' from the Edit menu.

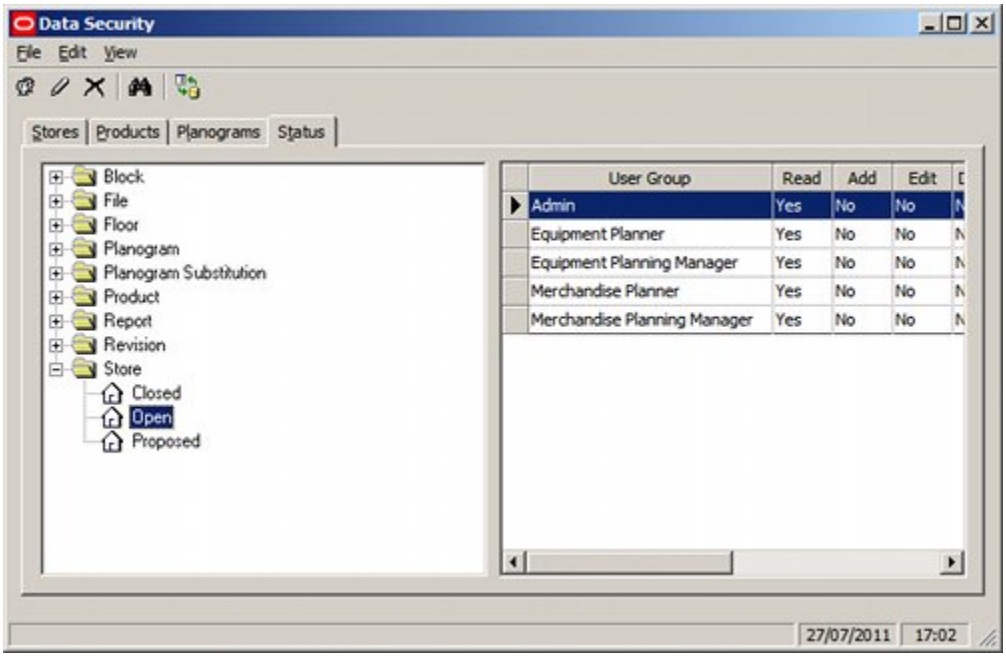


Permissions for Planograms

Permissions for planograms apply to all child objects in the hierarchy for a specified planogram group.

Overview of Data Security for Statuses

Data Security for Statuses is intended to allow Administrators to assign permissions for User Groups for accessing certain functionality associated with floor plans in the Planner Module. It also allows Administrators to assign permissions for User Groups for accessing floor plans of specific status in In-Store Space Collaboration.



At present Data Security for Statuses only operates for File and Store statuses.

File Statuses

File statuses are used to control how floor plans can be processed - users can only process file statuses that have been assigned User Groups they belong to.

Macro Space Management

The Stores Status option in the Status tab of the Data Security dialog box can be used to assign permissions for User Groups to:

- Run Floor Plan Processing as a Batch Process.
- Run Floor Plan Publishing as a Batch Processes.
- Run Find and Open Floor Plans in the Planner module.
- Run Pre-Process Floor Plans in the Planner module.
- Run Print Floor Plans in the Planner module.
- Run Immediate Floor Plan Publishing in the Planner module.

> **Note:** This functionality also depends on permissions set for Stores and File (Floor Plan) Statuses.

In-Store Space Collaboration

File statuses control which floor plans are visible in In-store space collaboration - users can only see file statuses that have been assigned User Groups they belong to.

Store Statuses

File statuses are used to control how floor plans can be processed - users can only process file statuses that have been assigned User Groups they belong to.

Macro Space Management

The Stores Status option in the Status tab of the Data Security dialog box can be used to assign permissions for User Groups to:

- Run Floor Plan Processing as a Batch Process.
- Run Floor Plan Publishing as a Batch Processes.
- Run Find and Open Floor Plans in the Planner module.
- Run Pre-Process Floor Plans in the Planner module.
- Run Print Floor Plans in the Planner module.
- Run Immediate Floor Plan Publishing in the Planner module.

> **Note:** This functionality also depends on permissions set for Stores and File (Floor Plan) Statuses.

In-Store Space Collaboration

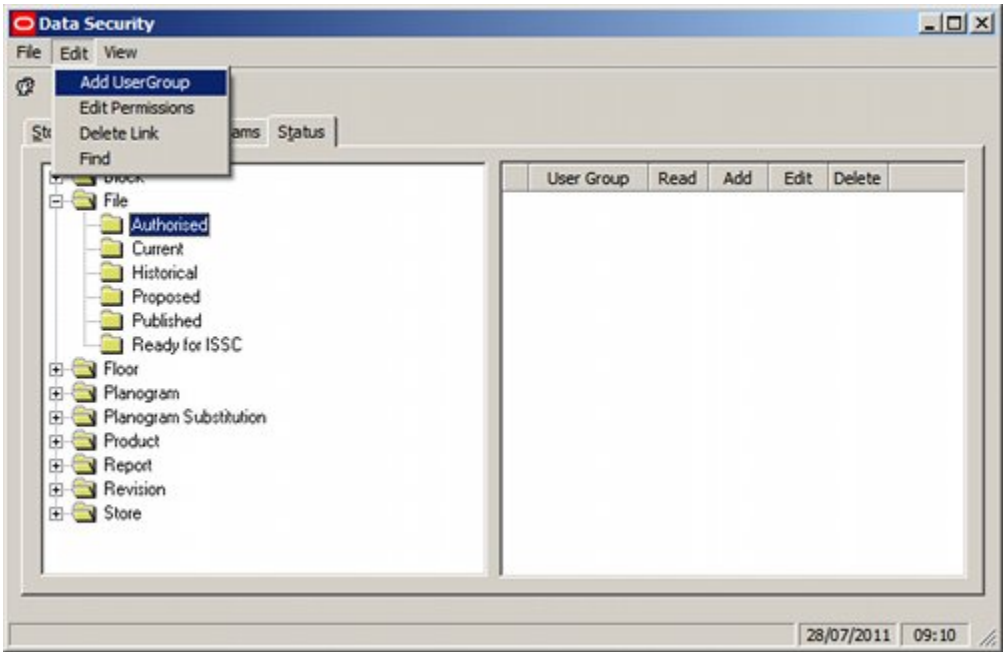
The Store Status option in the status tab of the Data Security dialog box does not currently affect store selection in In-Store Space Collaboration.

Adding and Removing Permissions for Statuses

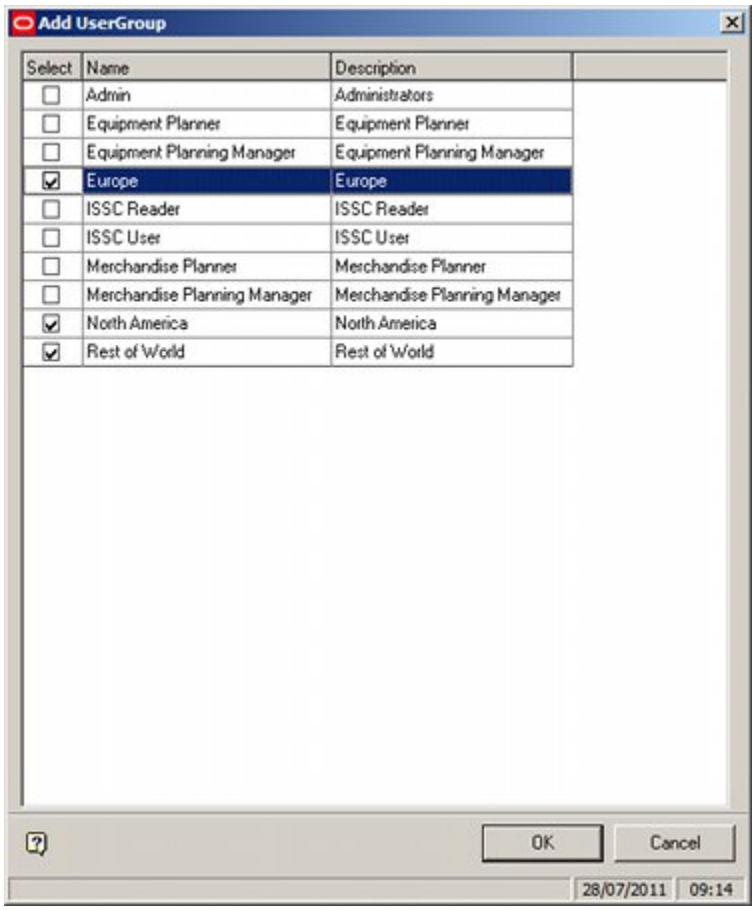
Adding Permissions for Statuses

Adding Permissions for Statuses is done in three stages

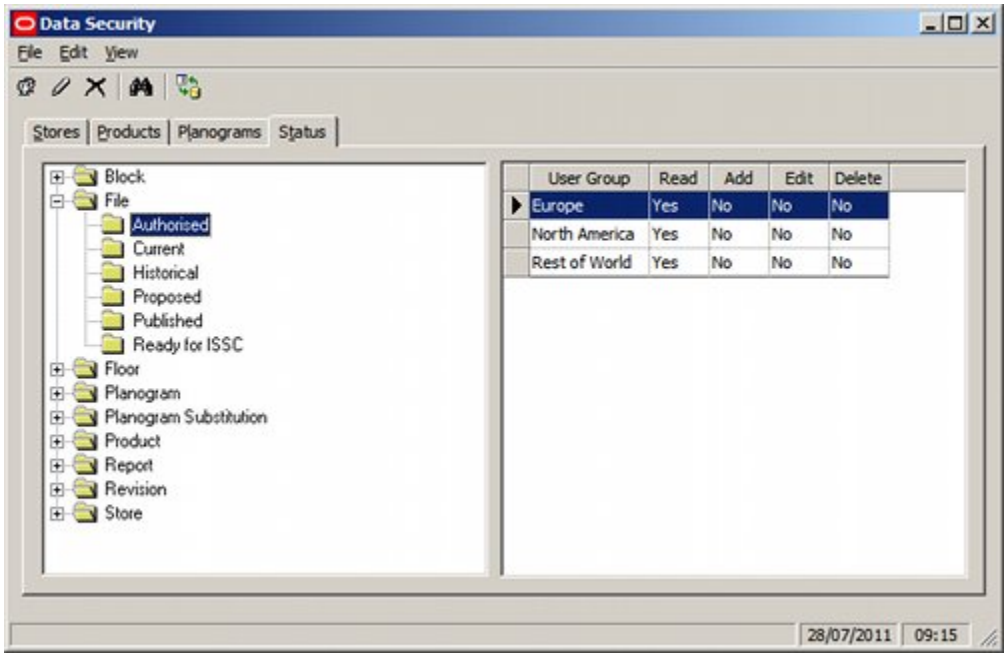
1. Highlight the required status and select the Add User Group option from the Edit menu



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.



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.

