Oracle® Retail Macro Space Planning

Addendum Guide

Release 14.1.2

December 2016

Value-Added Reseller (VAR) Language

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Oracle Macro Space Planning Addendum Guide Release, 14.1.2

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Preface

This document explains the enhancements and modifications made to Oracle Retail Macro Space Planning (MSP) Release 14.1.2 to support India specific business requirements.

Audience

This document is intended for business and technical users to understand the new functionality. This document only explains the changes made to the Macro Space Management (MSM) application, it is suggested that you refer the Planner Module User Guide to understand the base functionalities.

Documentation Accessibility

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Related Documents

For more information, see the following documents in the Oracle Retail Sales Audit Release 14.1.2 documentation set:

- *Oracle Retail Macro Space Planning Installation Guide*
- *Oracle Retail Data Integrator Planogram Import Installation Guide*
- *Oracle Retail Macro Space Planning Release Notes*
- *Oracle Retail Macro Space Planning Data Model*
- *Oracle Retail Licensing Guide*

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, 14.1) or a later patch release (for example, 14.1.2). 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.

Improved Process for Oracle Retail Documentation Corrections

To more quickly address critical corrections to Oracle Retail documentation content, Oracle Retail documentation may be republished whenever a critical correction is needed. For critical corrections, the republication of an Oracle Retail document may at times **not** be attached to a numbered software release; instead, the Oracle Retail document will simply be replaced on the Oracle Technology Network web site, or, in the case of Data Models, to the applicable My Oracle Support Documentation container where they reside.

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

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

An updated version of the applicable Oracle Retail document is indicated by an Oracle part number, as well as print date (month and year). An updated version uses the same part number, with a higher-numbered suffix. For example, part number E123456-**02** is an updated version of a document with part number E123456-**01**.

If a more recent version of a document is available, that version supersedes all previous versions.

Oracle Retail Documentation on the Oracle Technology Network

Oracle Retail product documentation is available on the following web site:

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

(Data Model documents are not available through Oracle Technology Network. You can obtain them through My Oracle Support.)

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
```

Security Guide Addendum

For release 14.1.2, the following chapters of the Oracle Retail Space Planning Suite Security Guide have been updated.

Overview of Security Features Chapter

This section describes the updates to the Security Features Overview chapter in the Oracle Retail Space Planning Suite Security Guide.

Space Planning Physical Deployment

The physical deployment diagram for Windows 7 is as follows:
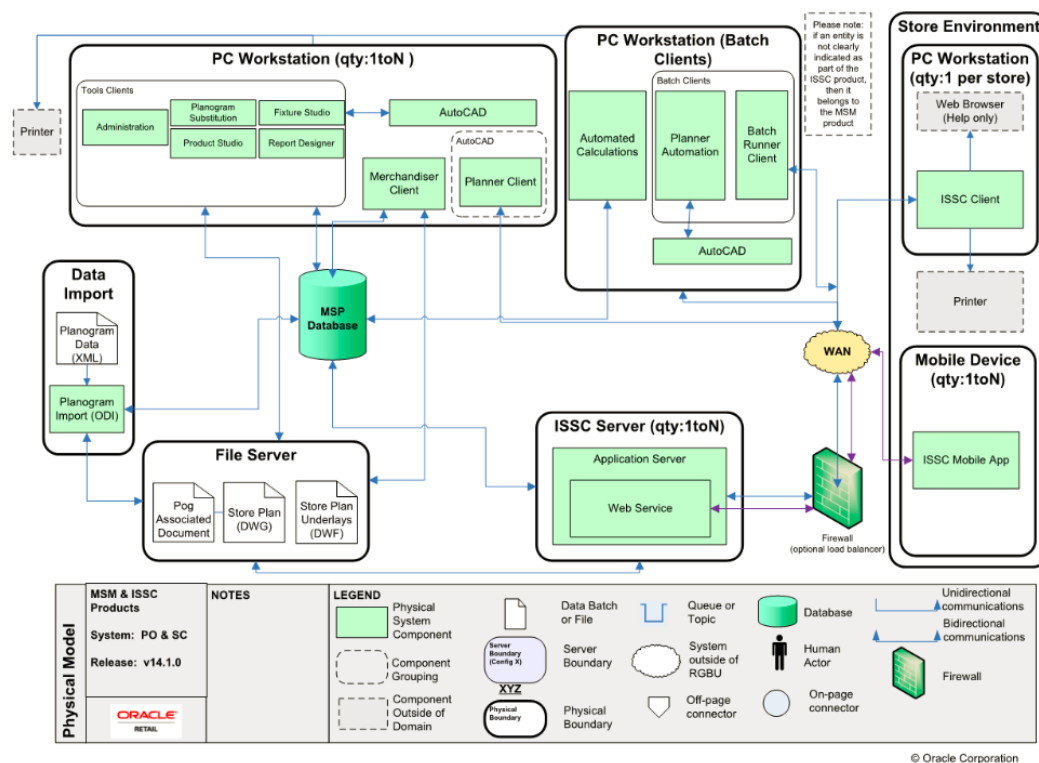
The physical deployment diagram for Windows 10 is as follows:
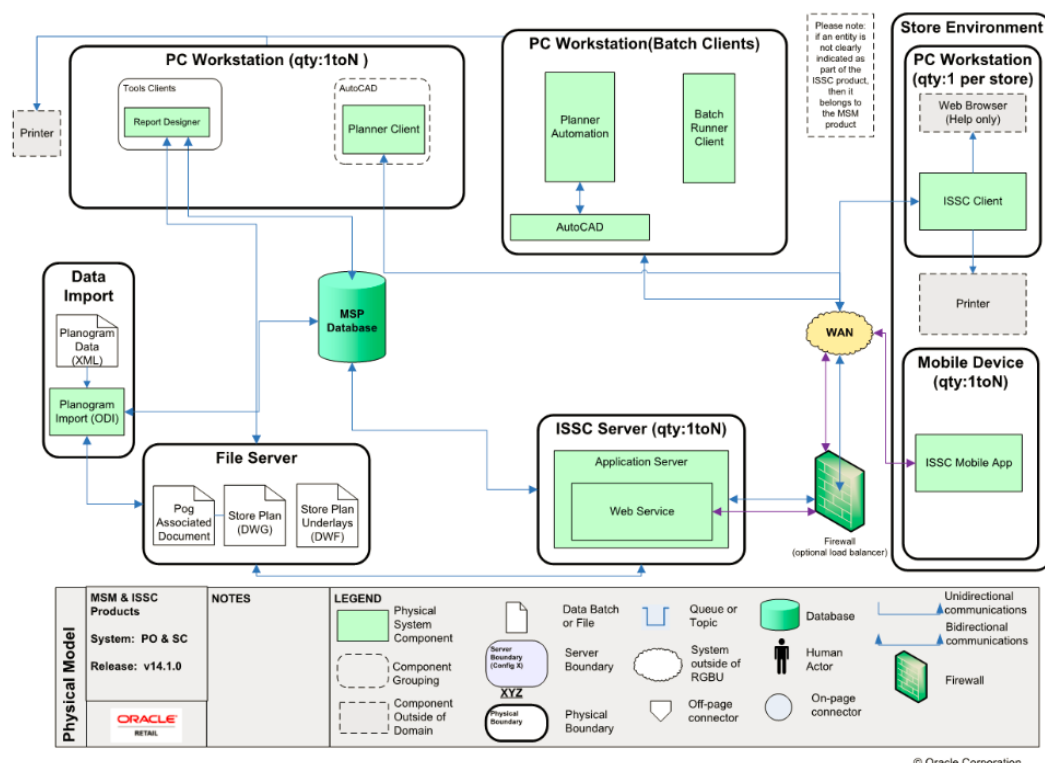
Macro Space Management (MSM) is primarily used within the Corporate Headquarters environment. It is a suite of productivity applications supported by administrative, configuration and automation tools. It is the responsibility of the retailer to ensure the MSM suite is only accessible by highly privileged users.

The In-Store Space Collaboration (ISSC) product is built upon the client-server architecture and is primarily made for usage within the store environment. The desktop and mobile device clients are usually deployed within the stores. The clients interact with the application server, which is located in the Corporate Headquarters. The communication channel between the server and the clients is protected by a secure communication mechanism. It is the responsibility of the retailer to restrict access to the ISSC desktop and mobile clients.

Data is imported into the database through the use of the MSM functionality. This mainly consists of dedicated data import solutions. An example is the Planogram Data Import solution which makes use of Oracle Data Integrator. The import tools assume the data to be imported is from a trusted source. It is the retailer's responsibility to ensure the integrity of the imported data and to secure access to the imported files on the servers.

MSM and ISSC share the same database server and therefore large parts of configuration and security are shared. The MSM Administration module is the main method used for the Space Planning security configuration.

The application, file and database servers are intended to be deployed in a corporate data center environment, with computer and physical access restricted to the machines.

Dependent Applications

The following link is for the Oracle products that the Space Planning products have dependencies on:

Oracle Database Security Guide 12c Release (12.1)

The following link is for the Oracle products that the Macro Space Management product has dependencies on:

Fusion Middleware Developer's Guide for Oracle Data Integrator (12.2.1)

The following link is for the Oracle products that the In-Store Space Collaboration product has dependencies on:

Fusion Middleware Mobile Application Framework JDeveloper 12.2.1 using MAF 2.3.1

Dependencies on Underlying Platform

Products within the Space Planning Suite operate in the Microsoft Windows environments. The products make use of the available operating system's security features where possible.

- The ISSC secure communication leverages the Windows Schannel functionality. The detailed configuration of the Schannel is carried out using the Windows operating system tools.

  > **Note**: The MSP Server to desktop client communication only supports the TLS 1.2 protocol.

  Refer to the Secure Channel link in the Microsoft documentation on how to configure the Schannel in Windows.

- The MSP server makes use of the X509 certificates in order to establish a successful connection between the server and the clients. The management and protection of the certificates is handled via the Windows Certificate Store, which is administered using the Microsoft Management Console (MMS). Refer to the Certificates link in the Microsoft documentation for additional information.

- Microsoft .NET Framework 4.5 (Full Profile). Refer to the Installing .NET Framework link in the Microsoft documentation for additional information.

- The Autodesk AutoCAD 2016 with SP1 – this is used by the MSM Planner application. Planner is integrated within the AutoCAD environment. It makes use of the AutoCAD secure bundle loading mechanism, which tightly controls loading of the application code. Refer to the AutoCAD documentation for further information about the security aspects it offers.

- The Microsoft Visual Basic run-time environment – this is built into the Windows operating system but if required a redistribution pack can be obtained from Microsoft.

- The Microsoft Visual C++2010 run-time environment – this is built into the Windows operating system, but if required, a redistribution package can be obtained from Microsoft.

It is the responsibility of the retailer to ensure that the underlying platform dependencies are kept up to date with the latest patches and security fixes distributed by Microsoft and Autodesk.

Installation Chapter

This section describes the updates to the Installation chapter in the Oracle Retail Planner Module Guide.

Installing an Infrastructure Component

Microsoft Windows

The Space Planning products operate within the Microsoft Windows Environment. It is the retailer's responsibility to ensure the Microsoft Operating System is kept up to date with the latest security fixes. Listed below are the guides, published by Microsoft, for strengthening security:

Microsoft Windows Server 2012 R2 Security Baseline

https://technet.microsoft.com/en-us/library/jj898542.aspx

Microsoft Windows 7 Security Baseline

http://technet.microsoft.com/en-us/library/ee712767.aspx

Microsoft Windows 10 Security Baseline

https://technet.microsoft.com/en-us/itpro/windows/keep-secure/windows-security-baselines

In-Store Space Collaboration Desktop Secure Communication

The ISSC product supports secure communication between the server and the desktop client. This is enabled by default, but requires additional configuration in order for it to work. This is done through the use of the application configuration files, located on the server and the client sides.

Server Configuration

The server supports secure communication by presenting the desktop client with a valid X509 certificate which validates the server's identity. The certificates are managed and stored in the Windows Certificate Store. The server's configuration must be set to point to the certificates in the Certificate Store.

The application configuration file is called MSPServer.exe.config and is located in the ISSC Server installation folder.

In-Store Space Collaboration Mobile Secure Communication

The ISSC product offers a mobile solution which is primarily used for store compliance. The ISSC Mobile App communicates with the MSP Server via a Web Service. The communication channel between the app and the service is protected using standard web HTTPS protection. The Web Service is built upon the Microsoft Windows Communication Framework (WCF) and is hosted within the MSP Server Windows Service.

Server

The ISSC Mobile functionality is disabled by default. The functionality is enabled and secured using the application configuration file. The application configuration file is located in the MSP Server installation folder and is called MSPServer.exe.config.

The settings used to configure the service are located in the *<system.serviceModel>* section. The configuration file comes pre-configured with the secure and unsecure versions of the serviceModel sections. Both versions are disabled and therefore need to be enabled by using standard xml notation. It is recommended to use the secure version of the configuration. The secure section enables the HTTPS secure communication by enabling transport security.

Once the secure section is enabled, the remaining section is to bind a certificate to the port being used for the Web Service communication. The port defaults to 8080. Refer to the Space Planning Installation Guide for additional information.

Client

The ISSC Mobile App is distributed as a Mobile Application Archive (MAA). Therefore, the app itself is configured and compiled by the retailer. The ISSC Mobile App is built upon the Oracle Mobile Application Framework (MAF). Usage of the domain whitelist security feature in order to control access to the device is recommended.

Refer to Fusion Middleware Mobile Application Framework JDeveloper 12.2.1 using MAF 2.3.1for additional information.

```xml
<CommunicationSettings
    ConnectionPort="7001"
    ConnectionMonitorPort ="0"
    SecureConnection="True"
    CertificateStoreLocation="CurrentUser"
    CertificateStoreName="Personal"
    CertificateFindType="SubjectName"
    CertificateFindValue="CN="
    TimeoutsDisconnect="300"
    TimeoutsReConnect="300"
    MobileInterfaceEnabled="False"
    LoggingEnabled="False"
    LoggingMaxSize="0">
</CommunicationSettings>

<SecuritySettings
    PasswordHandlerConfigurationFile="MSPSecurity.config">
</SecuritySettings>
</MSPServerGroup>
```

There are a number of settings available that allow the server to locate the required X509 certificate within the Certificate Store.

The following steps should be carried out:

1. Setup the server X509 certificate in the Certificate Store. Refer to the Import a Certificate link in the Microsoft documentation for additional information. A valid server X509 certificate and the associated private keys are required for secure communication via TLS.

2. Check that the *Secure Connection* is enabled (this should be the default value).

   Set the *Certificate Store Location* value to indicate the location of the certificate store.

   The options are:
   - CurrentUser
   - LocalMachine

   The Current User offers the greatest level of security as it is tied to the current user's Windows account. Only the account in question is allowed to access the protected area used to manage the sensitive data, like private keys. The LocalMachine location

is the certificate store assigned to the local machine. It is accessible by all the Windows accounts on the machine, but is restricted to the local machine usage only.

3. Set the *Certificate Store Name* value to indicate the name of the certificate store.

The options are:

- TrustedPublisher – directly trusted publishers
- Root – trusted root certificate authorities (CAs)
- Personal – personal certificates
- CertificateAuthority – intermediate certificate authorities

The default value is Personal. The personal certificates are usually certificates that have been explicitly issued to the machine the ISSC Server is running on and therefore act as valid proof of identity for the machine.

Refer to the Display Certificate Stores link in the Microsoft documentation for additional information.

4. Set the *Certificate Find Value* and *Certificate Find Type*. The find type allows you to specify the search criteria to be used and has the following options:

- SubjectName
- SubjectDistinguishedName
- SerialNumber
- SubjectKeyIdentifier

The default setting is SubjectDistinguishedName. Set the find value based on the certificate information being searched. This is the value   used to locate the certificate. The find value must match the certificate's value as stored in the find type.

For example,

```
Certificate Subject Field = 'cn=ISSCServer, ou=example.ou=com'
```

Then using `SubjectDistinguishedName` as find type would require the find value to be 'cn=ISSCServer, ou=example.ou=com'

> **Note**: It is crucial to get the certificate configuration correct as failure to locate a valid certificate will prevent the MSP Server from starting.

Technical Overview of the Security Features Chapter

This section describes the updates to the Security Features chapter in the Oracle Retail Planner Module User Guide.

Security features of the Application

Authentication

The Space Planning products use a common mechanism to configure and enforce authentication. Authentication is carried out internally at the application level. There is no support for any external authentication systems. For Example LDAP.

The application user's credentials are stored in the database. The user's passwords are stored in a hashed form. The available hash algorithms are SHA-256, SHA-384 and SHA-512.

Password Policy Configuration

Space Planning is installed with the following default password policy settings:

Policy Group	Policy Item	Value
Failed Log-in	Number of login attempts before suspending	5
	Number of minutes account will be suspended	60
Password Complexity	Minimum password length	7
	Maximum password length	30
	Minimum number of upper case characters	1
	Minimum number of lower case characters	1
	Minimum number of numeric characters	1
	Minimum number of extended characters	0
Password Expiry	Password expiry period (days)	90
	Lock (days past expiration)	14
Password History	Number of passwords to keep	4
	Number of days to keep passwords	7
Excluded Passwords	*Empty*	

The level of protection offered by the settings above can be strengthened even further either by manually changing the values or by selecting a pre-defined 'Max' level option.

The extended characters list is as follows:

`	~	!	@	#	$	%	^	&	*	(	)	_	-	+	=
{	}	[	]	\	|	:	;	"	'	<	>	,	.	?	/

Configure the password policy to comply with the standards defined by your business.

Customizable Button Security consideration

The following security considerations should be taken into consideration.

- Customizable button functionality allows direct manipulation of data in the database. Access must be restricted to appropriate users.
- The output of custom stored procedures could potentially be displayed to the end user. Care should be taken not to display sensitive information to unintended recipients.
- When writing error handlers, make sure all database cursors are properly closed to prevent cursor snarfing.
- When reporting errors, replace generated error messages such as exceptions with simple text messages to prevent the end user seeing details of the error. The actual error messages can be written to a protected system log for debugging purposes.

Database Roles and Synonyms

If the database security described in the Oracle Retail Macro Space Planning Implementation Guide has been implemented, the pertinent user roles provided will require updating to give execute privileges for the stores procedures associated with customizable buttons.

Similarly, each user given access to the customizable button functionality will need the appropriate synonyms assigned to allow them to access the stored procedures.

Encryption and Hashing

The database credentials are protected using the security technologies exposed by the Windows operating system. The encryption and decryption of the credentials is handled using the Data Protection Application Programming Interface (DPAPI). The DPAPI handles management and protection of the encryption keys. The encrypted credentials are secured using user or machine level protection. The user level protection ties the credentials to a specific Windows account. The machine level protection ties the credentials to the machine itself. The required level of protection depends on the Space Planning Suite product and its usage. The encrypted credentials are stored in a protected location. The protected credentials cannot be used in a roaming scenario as they are tied to a specific Windows account or the machine itself.

The database credentials are configured using a specialized Database Configuration tool which is distributed with each Space Planning Suite product. Refer to the Macro Space Planning Installation Guide for instructions on how to use the Database Configuration Tool.

The application user passwords are handled using a hashing technique. The following hashing algorithms are supported: SHA-256, SHA-384 and SHA-512. This applies to MSM and ISSC products and is configured using the MSM Administration Module.

A new password hashing system has been created, which is compatible with the deployment model of the MSM and the ISSC products. The new system operates through the use of password handlers. The password handlers define characteristics of the hashing algorithm. The handlers are configured through the use of .NET application configuration files. The core configuration file is used to configure PasswordHandler settings. For more information on using the Security Configuration Tool, see the Oracle Retail Macro Space Planning Installation Guide.

The MSM Planogram Import solution makes use of Oracle Data Integrator (ODI). Refer to the Fusion Middleware Developer's Guide for Oracle Data Integrator for more information on the encryption and hashing for the ODI.

The following cipher technologies are recommended by Oracle:

- Cipher algorithms: AES (>=128 bit)
- Hash algorithms: SHA-1
- Key Exchange algorithms: Diffie Hellman (>=2048 bits)

Application Administration Chapter

This section describes the updates to the Application Administration chapter in the Oracle Retail Space Planning Suite Security Guide.

The diagram below summarizes different permissions the users of the MSM and ISSC applications must have.
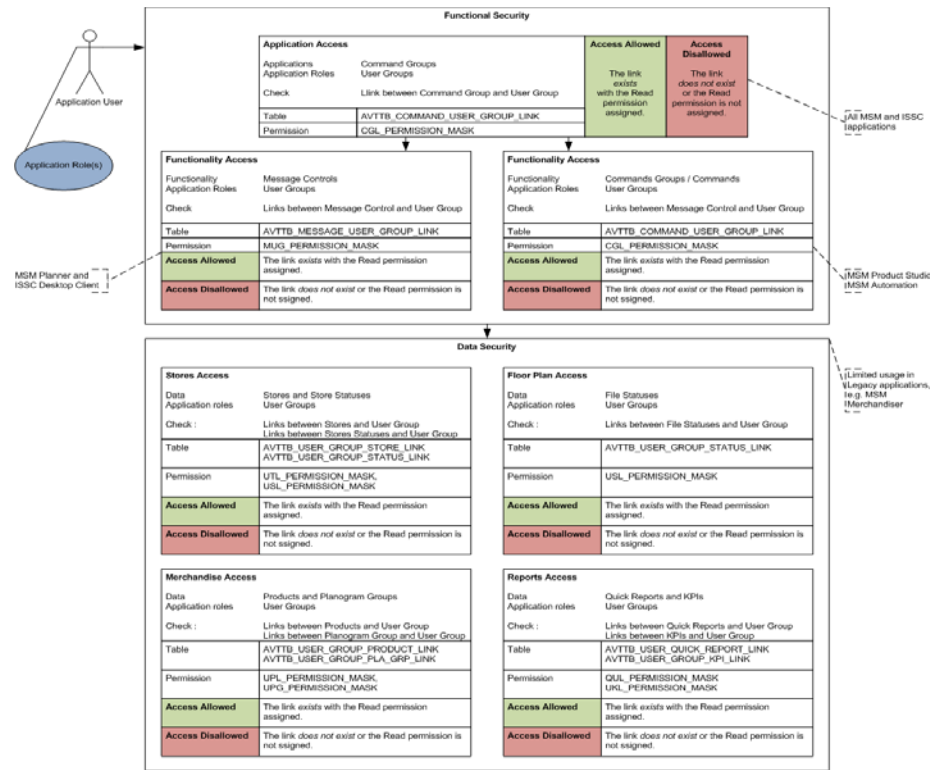
Appendix Checklists Chapter

Space Planning Database Roles

IT Security Administration Role	Administration	Automated Calculations	Fixture Studio	Merchandiser	Planner	Planogram Substitution	Product Studio	Report Designer	Update Status	Batch Runner	Planner Automation
Application Administrator	X	X	X	X	X	X	X	X	X	X	X
IT Help Desk	X	X	X	X	X	X	X	X	X	X	
Merchandising Manager				X	X	X	X	X			
Merchandising Planner				X	X	X	X				

IT Security Administration Role	Administration	Automated Calculations	Fixture Studio	Merchandiser	Planner	Planogram Substitution	Product Studio	Report Designer	Update Status	Batch Runner	Planner Automation
Product Data Steward							X				
Store Planner				X	X						
Store Planning Manager			X	X	X			X			
Automation		X							X	X	X
Item Planner					X						
IT Security Administrator	X	X	X	X	X	X	X	X	X	X	X
MSP Server	X	X	X	X	X	X	X	X	X	X	X

The table above lists the default database roles distributed for the use in the MSM product. Each role is configured to be used by a specific number of application(s).

The ISSC product only has a single database role defined, called the *ISSC Server*. Users of this role are intended to be the ISSC Desktop Client and ISSC Mobile application users.

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Planner Module User Guide Addendum

For release 14.1.2, the following chapters of the Oracle Retail Planner Module User Guide have been updated.

Overview of Floor Plan Management Chapter

This section describes the updates to the Object Browser chapter in the Planner Module User Guide.

Select Floor Plan

The Select Floor Plan window is displayed as a modal window when you run the AVT_OPEN command. This is an enhanced version of the existing ISSC Select Store window, and will be shared by ISSC and Planner, but not Merchandiser.
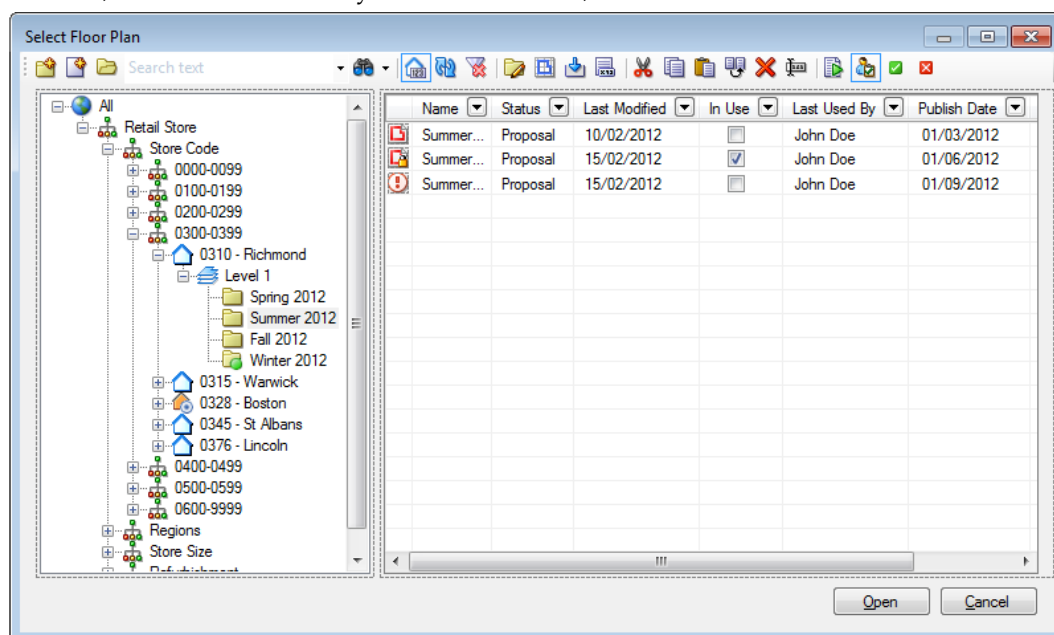
The Select Floor Plan window:

- Can be resized, maximized and restored, but not minimized.
- Allows you to control the horizontal size of the tree view and list view, using a splitter bar. The minimum horizontal size of the tree view and list view will be 50 pixels.
  - When the Select Floor Plan window is maximized, the tree view and the list view will be expanded to use the space available. The relative size of the tree view and the list view will be maintained.
  - When the Select Floor Plan window is restored, the relative size of the tree view and the list view will be maintained, and hence they will be made smaller.

The toolbar is updated to include the following buttons:

Icon	Tooltip	Shortcut Key	Comment	Default User Roles
	New revision			
	New floor plan	Ctrl+N		AA, IT, SP, SPM
	Open	Ctrl+O		All
	Search	Ctrl+F		All
	Show store codes		Toggle button	All
	Refresh	F5		All
	Clear Filters			All
	Edit revision			All
	Associate architectural plan			AA, IT, SP, SPM
	Import new version	Ctrl+Alt+I		AA, IT, SP, SPM
	Floor plan properties	Alt+Enter		All
	Cut	Ctrl+X		All
	Copy	Ctrl+C		All
	Paste	Ctrl+V		All
	Duplicate	Ctrl+Alt+D		All
	Delete	Delete		All
	Rename			All
	Submit floor plan			All
	District manager view		Toggle button	AA, IT, SPM, MM
	Approve floor plan			AA, IT, SPM, MM
	Reject floor plan			AA, IT, SPM, MM

Application Role	Key
Application Administrator	AA
IT Help Desk Agent	IT
Merchandising Manager	MM
Merchandising Planner	MP
Store Planner	SP
Store Planning Manager	SPM

User access to the Toolbar buttons is controlled per user group using the existing ISSC message control mechanism in the database. Refer to the table above to see the buttons that are visible and enabled for each user role.

Tree View

The tree view displays the store hierarchy from the database as per the existing ISSC functionality (including alphabetic sorting of the store hierarchy based on the displayed labels, using the language-specific sorting algorithms for your preferred language). The following icons are used to represent items in the store hierarchy instead of the ICO_ID field on the respective tables.

Icon	Description
	All
	Cluster
	Store
	Store (read-only)
	Store prototype
	Floor
	Revision

A store prototype is a store that has the prototype flag (STR_IS_PROTOTYPE) set to a non-zero value. The root node does not exist in the database, but is added in the store hierarchy on the tree view, and labeled as 'All'. Only clusters that contain stores that you have permission to view or edit will be shown in the tree view. If you do not have permission to view or edit any stores associated with a cluster then the cluster will be hidden. Similarly empty clusters will not be displayed.

The **Show Store Codes** button is a toggle button. When it is on, the store hierarchy will display the store code followed by a hyphen as a prefix to the store name. When the **Show Store Codes** button is toggled off, then only the store name will be shown in the store hierarchy. The button state will be remembered between sessions. Toggling the button will re-sort the hierarchy.

The **Refresh** button refreshes the data   in the list view. The data will depend upon the selected node in the hierarchy.

Clusters, stores, floors and revisions that are marked for deletion will not be shown in the tree view.

Only revisions that contain floor plans at a status that the user has permission to view or edit will be shown in the tree view. If you do not have permission to view or edit any floor plans associated with a revision then the revision will be hidden.

The state of the store hierarchy for the user will be restored when the Select Floor Plan window is reopened.   to say that the nodes in the tree view that are open in the tree view when the Select Floor Plan window is closed will be open when the window is next opened by the same user in the same session. Similarly the node   highlighted in the tree view will also be restored when the Select Floor Plan window is reopened. This will be remembered between user sessions.

List View

The list view will display details of architectural plans and floor plans. The list view will allow the following columns to be displayed.

Column Header	Cell Type	Comment	Default
	Icon	The icons are described in detail in the next section.	Yes
Id	Number		
Directory	Text	Directory path based on the DIR_ID in the database minus the 'Store Root'	
Path	Text	FIL_PATH in the database	
Name	Text		Yes
Extension	Text	Does not include the dot	
File date	Short date and time	Date of the physical file. Format read from the Windows Regional Settings	
File size (bytes)	Number	Size of the physical file	
Store	Text	Store code based on the STR_ID in the database	
Status	Text	Status description based on the STL_ID and STT_ID in the database	Yes
Checked out by	Text	First Name Last Name of the user who has the file checked out	Yes
Created	Short date and time		
Expired	Short date and time		
Predecessor Id	Number		

Effective date	Short date	Format read from the Windows Regional Settings	Yes
Publish date	Short date	Format read from the Windows Regional Settings	
Active date	Short date	Format read from the Windows Regional Settings	
Date made current	Short date and time	Format read from the Windows Regional Settings	
Last modified	Short date and time	Format read from the Windows Regional Settings	Yes
Last published	Short date and time	Format read from the Windows Regional Settings	
Store prototype	Text	Store name based on the Prototype STR_ID in the database	
File type	Text	File type description based on the FIT_ID in the database	
Number of changes	Number	Number of changes between the Current status version. Only shown when District Manager is toggled on.	

Columns indicated as default will be shown by default, when a user opens the Select Floor Plan window for the first time.

In addition, the user defined attributes (UDAs) are displayed in the list view. Only UDAs that have a name defined in the Administration module will be listed.

If the floor/architectural plan can only be opened as read-only for the user (for whatever reason, for example store status, floor plan status, checked out and so on) then the read-only version of the appropriate icon will be shown (see the table below).

Icon	Description		Comment
	Floor plan		The Floor plan icon is associated with each floor plan in the list view.
	Floor plan (read-only)		If the floor plan can only be opened as read-only for the user (for whatever reason, for example store status, floor plan status, checked out and so on), then the read-only version of the appropriate icon will be shown.
	Architectural plan		The Architectural plan icon is associated with each architectural plan in the list view.
	Architectural plan (read-only)		If the architectural plan can only be opened as read-only for the user (for whatever reason, for example store status, floor plan status, checked out and so on) then the read-only version of the appropriate icon will be shown.

	Missing file	When viewing the Select Floor Plan window in Planner, a missing file icon represents if the file cannot be found in the expected location on the file server for the floor/architectural plan.

The list view will automatically show an additional Number of changes column when the **District Manager** button is toggled on.

You are able to show and hide columns by use of the right click context menu when the mouse pointer is on the list view's header row. The columns will be shown in the context menu in the order listed above, which is based on the database's column order. You will not be able to hide the Name column or the Number of changes column (if the **District Manager** button is toggled on).

Vertical and horizontal scroll bars will be available if the data cannot all be shown within the visible area of the list view or tree view.

You are able to change the order that the columns are displayed in the list view by dragging and dropping the column headers in the list view.

The columns that a user has chosen to show and hide and their order will be restored after the Select Floor Plan window is closed and reopened. The columns that a user has chosen to show and hide and their order will be remembered between user sessions.

You are able to use distinct and custom filters for all columns displayed in the list view by clicking the **Auto Filters button** on the column header. The Auto filters will operate as per the existing universal list view used for the Fixture Swap window in Planner.

You are able to use quick filters for all columns displayed in the list view by selecting the Quick filter option from the right click context menu when the mouse pointer is within a populated cell in the list view. The quick filters will operate as per the existing universal list view used for the Fixture Swap window in Planner. Quick filters can be applied to more than one column.

If a column is hidden then any filters applied to that column will be automatically removed. The **Clear Filters button** clears all filters in the list view.

You are able to sort the data displayed in a column of the list view by clicking the column header. The sort direction will be ascending on the first click and then descending on the next click, and so on. The sort order will be based on the language set for you in the MSM Administration module.

Your filters will be removed each time a new set of data is shown in the list view. This will ensure that data is always displayed to you when they switch between floors or revisions in the store hierarchy.

You are able to multi-select rows in the list view by using the Ctrl key when clicking to add rows; by holding the Shift key and clicking to add all rows between the already selected row and the mouse pointer; or using the Ctrl+A keyboard shortcut to select all rows. Dragging the mouse across the list view will also select multiple rows.

You are able to copy the displayed data in the list view, including the floor plan identifier, by selecting the required data and clicking the Copy button (or the Ctrl+C keyboard shortcut) or the Cut button(or the Ctrl+X keyboard shortcut). The data will be sent to the Windows clipboard as tab separated values. This will allow the data to be pasted into external applications such as Word or Excel. This functionality is in addition to the Copy and Cut functions described in the later sections.

The Duplicate button will continue to perform as is. The Duplicate Toolbar button is enabled when:

- Only one floor plan is selected in the list view.

- The selected floor plan is checked in.
- The store for the selected floor plan is not at a read-only status.

The Duplicate Toolbar button will be grayed out and disabled when:

- No floor plan is selected in the list view.
- More than one floor plan is selected in the list view.
- The selected floor plan is checked out.
- The store for the selected floor plan is at a read-only status.

The Rename button is similar to the existing Edit button in the current ISSC Select Store window. However, it will only enable the name to be edited (the Publish date and Effective date will now be edited in the Properties window only). The Rename button is enabled when:

- Only one floor plan is selected in the list view.
- The selected floor plan is checked in.
- The selected floor plan is not at a read-only status.
- The store for the selected floor plan is not at a read-only status.

The Rename Toolbar button will be grayed out and disabled when:

- No floor plan is selected in the list view.
- More than one floor plan is selected in the list view.
- The selected floor plan is checked out.
- The selected floor plan is at a read-only status.
- The store for the selected floor plan is at a read-only status.

When a row is highlighted in the list view and floor plans are being displayed, clicking the Name field will allow the field to be edited if the required conditions are met. The existing content of the field will be selected and it will have focus. It will not be possible to rename architectural plans as this would cause complications with architectural plans already attached in a floor plan.

Clicking the Rename button will set the Name field to edit mode. The existing content of the Name field will be selected and it will have focus. If the Name is not visible, because the table is scrolled away from the field, then the table will be automatically scrolled to make it visible.

It will be possible to cut, copy and paste to and from the Windows clipboard using the Ctrl+X, Ctrl+C and Ctrl+V keyboard accelerators when the Name field is being edited, or via the Cut, Copy and Paste options on the right click context menu.
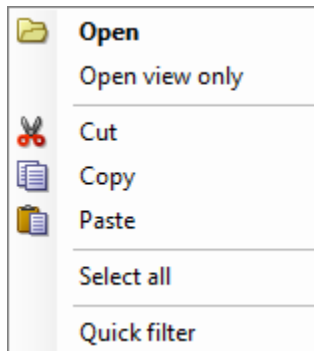
The Cut, Copy and Paste context menu options will use the same graying out rules as their equivalent Toolbar buttons. The Open and Open view only right click context menu

options will only be enabled when the mouse pointer is over a row in the list view containing an architectural/floor plan.

All of the Name field's content is able to be selected using the Ctrl+A keyboard accelerator when a field is being edited, or via the Select all option on the right click context menu.

Once a Name field has been edited, You are able to move to another Name field by clicking another editable Name. You are able to exit from editing by clicking to another area on the Select Floor Plan window or by clicking the Enter key.

- The Name field will accept any text characters to be entered that are allowed for a valid Windows filename.   to say it will not accept the following characters:
- \ (backslash)
- / (forward slash)
- : (colon)
- * (asterisk)
- ? (question mark)
- " (double quote)
- < (less than)
- > (greater than)
- | (vertical bar or pipe)

> **Note**: This is not a complete list of reserved characters.

An error window will be displayed if the Name is in any of the following reserved Windows filenames:

.. (two consecutive periods), CON, PRN, AUX, NUL, COM1, COM2, COM3, COM4, COM5, COM6, COM7, COM8, COM9, LPT1, LPT2, LPT3, LPT4, LPT5, LPT6, LPT7, LPT8, and LPT9

The error will say "The specified name is invalid." Clicking **OK** will close the window and the Filename value will be highlighted and the field will have focus ready for editing.

A warning window will be displayed if the Name is not unique within its revision folder (this will be case insensitive). This check includes floor plans that are marked for deletion. The warning will say "There is already a floor plan with this name in this revision. Do you want to set the name to {NAME}?" Where {NAME} will be the name set with a hyphen and a number appended (2 will be the first number used).
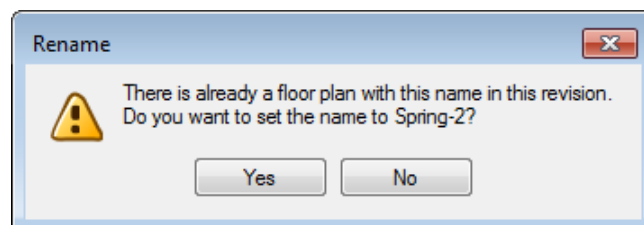
When the floor plan's name already has a hyphen and number appended to the end, the number will just be incremented by 1 to the next available number. For example:

- A revision contains four floor plans called Winter 01, Winter 01-11, Winter 01-12 and Winter 02
- The floor plan Winter 01 is copied
- The copy of the floor plan is called Winter 01-2
- The floor plan Winter 01 is copied again
- The second copy of the floor plan is called Winter 01-3
- The floor plan Winter 01-2 is copied
- The copy of the floor plan is called Winter 01-4
- The floor plan Winter 01-11 is copied
- The copy of the floor plan is called Winter 01-13
- The floor plan Winter 02 is copied
- The copy of the floor plan is called Winter 02-2

Clicking the **Yes** button on the Edit name warning window will close the window and save the Name using the suggestion. Clicking the **No** button will close the window and the Name value will be highlighted in the list view and will have focus ready for editing.
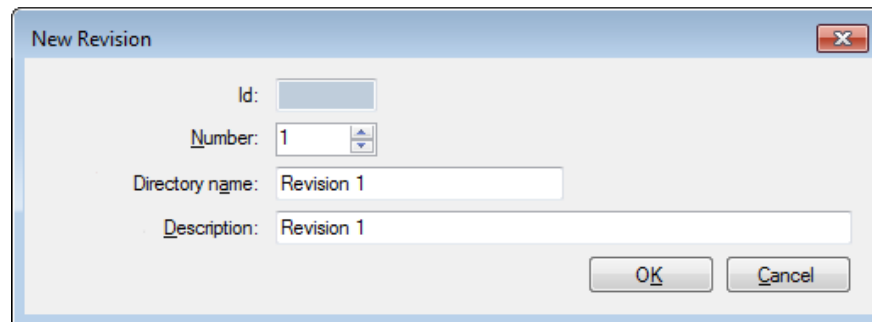
Editing the Name field will change the floor plan name to be saved in the AVTTB_FILE database table. It will also change the filenames of the associated AutoCAD drawing and DWF files on the fileserver. The extensions of the files will not change.

Creating the New Revision Folders

The Add Revision folder is now updated to New Revision.

The Select Floor Plan window is enhanced to add a New Revision Toolbar button.

The New Revision Toolbar button is enabled when a floor is selected in the store hierarchy and its parent store does not have a read-only status. The New Revision Toolbar button will be grayed out and disabled when any other point in the store hierarchy is selected. Clicking the New Revision Toolbar button opens the New Revision window.
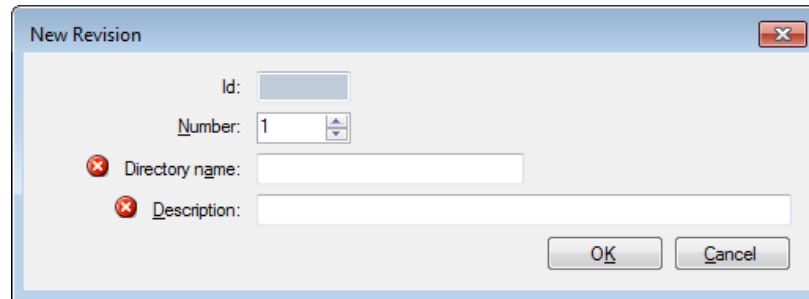
In the New Revision window:

- The Id field will be blank and read-only.
- The Number field will be set to the next ascending unique revision number available for the floor. For example the first revision will have the Number field set to 1 and the second one will be 2 and so on. It allows only numeric values between 1 and 9999999999.
- The Directory name field will be set to Revision followed by a space character, and the next ascending unique revision number available for the floor. For example the first revision will have the Directory name field set to Revision 1 and

the second one will be Revision 2 and so on. A maximum of 50 characters are allowed in this field.

– If the Directory name is left blank, an error ⊗ icon is displayed beside the field name.
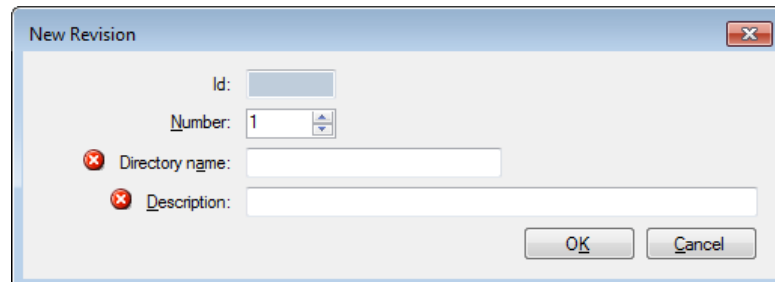
– Click **OK** on the blank Directory name, to open an error window as shown below:
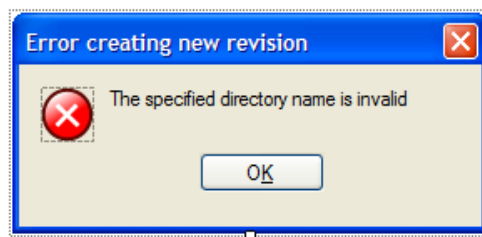
- The Description field will be set to match the Directory name field. , the first revision will have the Description field set to Revision 1 and the second one will be Revision 2 and so on. A maximum of 100 characters are allowed in this field.

– Similar to the Directory name, if the Description field is left blank, an error ⊗ icon is displayed beside the field name.

– If you still click **OK** without entering a description, a revision is created with that name.

– If the new revision doesn't get saved for some reason, for example, if the Directory name you entered already exists, the following error window is displayed.
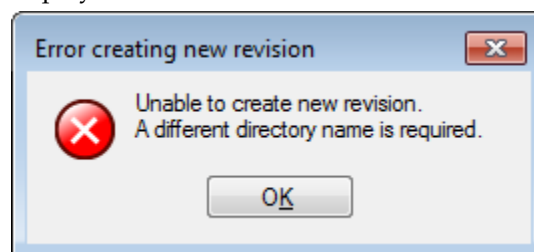
- If the Number field is empty, then the value will revert to its last numeric value. A warning window opens if the Number is not unique within its floor. This check includes revisions that are marked for deletion. Clicking Yes saves the suggested number, and clicking No closes the window, and the number gets highlighted for editing.
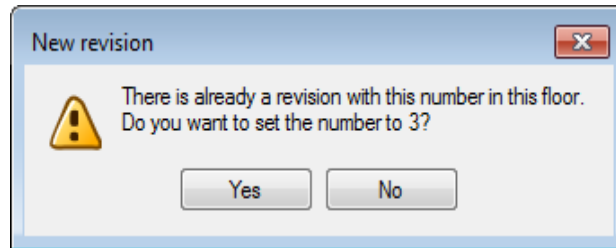
Editing the Revision Folders

This section describes the features and steps of store planner to edit a revision folder.

- The Edit Revision Toolbar button is enabled when a revision is selected in the store hierarchy, and its parent store does not have a read-only status. The button will be grayed out and disabled when any other point in the store hierarchy is selected.

- To edit a revision, click the **Edit Revision** Toolbar button from the Select Floor Plan window.

- The Edit Revision window opens, and the existing details of the selected revision will be displayed.

- The Id field is read-only, and shows the database value of the REV_ID for the revision.

- You can enter values in the Number, Directory name and Description fields as per your requirement.

- Click **OK** to close the Edit Revision window. If the new revision does not get saved for any reason, for example, if the Directory name you entered already exists, the following error window is displayed.
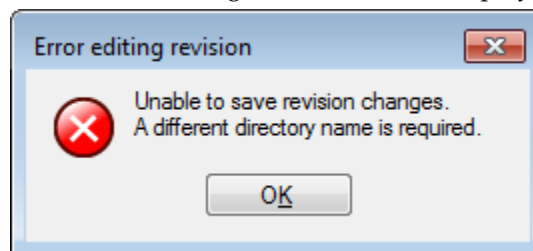
Deleting a Revision

This section describes the features and steps of a store planner to mark revision folders for deletion.

- The **Delete Toolbar** button is enabled when:
  - A revision is selected in the store hierarchy.
  - The revision's parent store does not have a read-only status.
  - The revision does not contain a floor plan at Current status.
  - The revision does not contain a floor plan checked out.
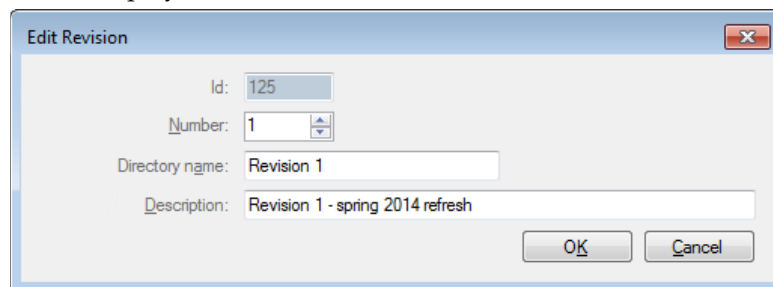- **The Delete Toolbar** button is disabled when:
  - A revision is not selected in the store hierarchy.
  - The revision's parent store does have a read-only status.
  - The revision contains a floor plan at Current status.
  - The revision contains a floor plan checked out.
- To click a revision, click the **Delete Toolbar** button from the Select Floor Plan window.
- If one of the floor plans in the revision to be deleted has an authorized status level, the following warning is displayed:
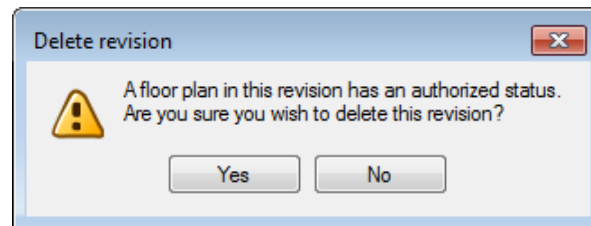
- If one of the floor plans in the revision to be deleted has a published status level, the following warning is displayed:
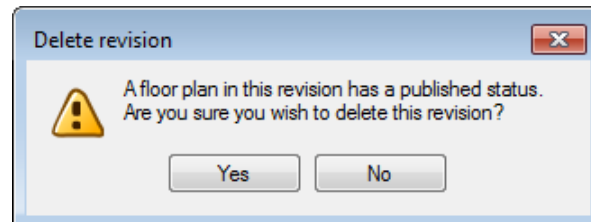
- If one of the floor plans has an effective date set, but is not in an authorized or published status, the following warning is displayed:
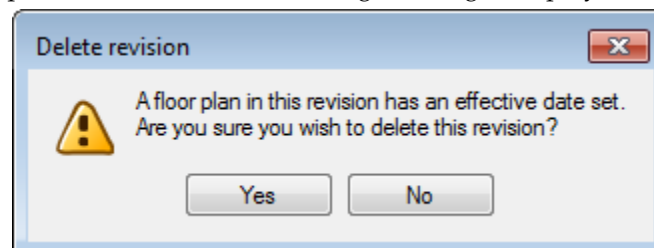
- If more than one of the conditions listed above exists, the following warning message is displayed:
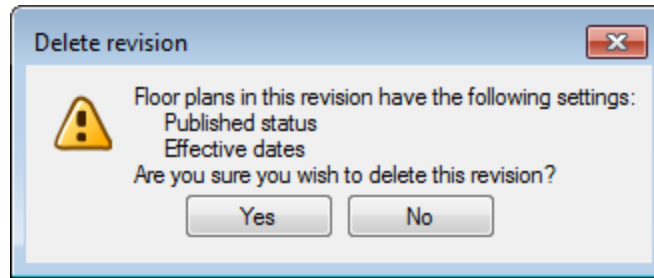
- If none of the above conditions are met, the following warning message is displayed

.
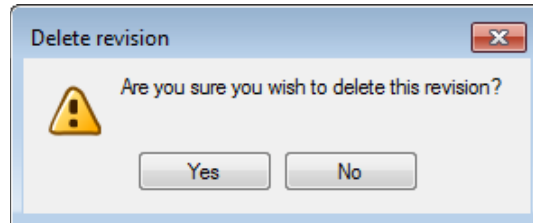
Associating Architectural Plans

This section describes the features and steps of a store planner to list and manage architectural plans for each floor of each store.

- The Associate Architectural Plan Toolbar button is enabled when a floor is selected in the store hierarchy and its parent store does not have a read-only status. This button is disabled when any other point in the store hierarchy is selected.

- To list any associated architectural plans when a floor is selected in the store hierarchy, click the **Associate Architectural Plan Toolbar** button.

- The standard Windows Open window is displayed, with the Store Root directory as the default directory.
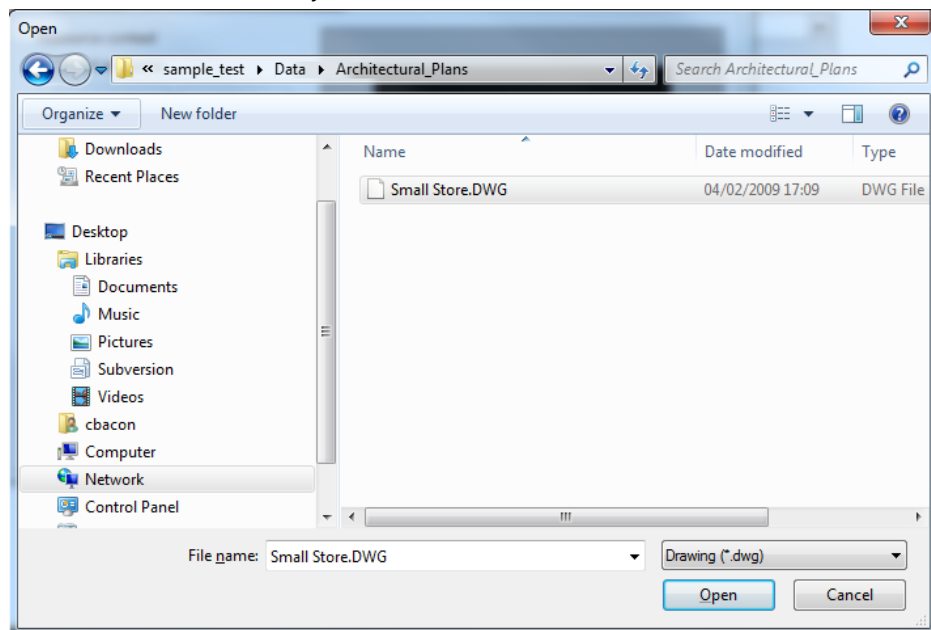
- The Open window filters the list of files and lists files with a DWG or DWF extension. Using the standard filter drop-down list, You are able to select the type of file to filter.
- The button has two options Drawing (*.dwg) and DWF files (*.dwfx, *.dwf). The default option for MSM Planner is set to Drawing (*.dwg), and DWF files (*.dwfx, *.dwf) for ISSC.
- When you click Open, the selected file will be compared to the new MAX_IMPORT_FILE_SIZE system variable.
  - If the system variable is missing or non-numeric, then a default value of 5Mb will be used.
  - If the file size is less than or equal to the value of the system variable, then the association process will continue.
  - If the file size is greater than the value of the system variable then an error window will be displayed as shown below:
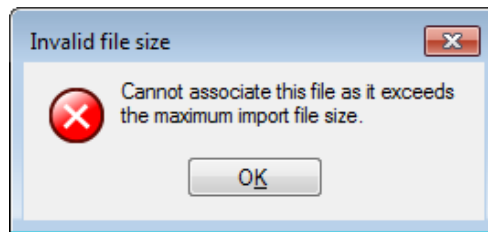
If an architectural plan already exists for the selected floor with the same filename (including its extension and items marked for deletion), then the following warning window is displayed. Click **Yes** to set the suggested filename and close the warning window.
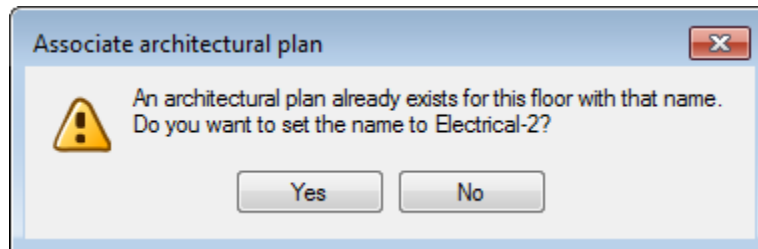
Deleting Architectural Plans

This section describes the features and steps of a store planner to mark architectural plans for deletion.

- The Delete Toolbar button is enabled when an architectural plan is selected in the list view and its parent store does not have a read-only status.
- To delete an architectural plan, click the **Delete Toolbar** button.
  - If an architectural plan is referenced by a floor plan not marked for deletion, then the following error window is displayed. Click **OK** to abort the deletion of the architectural plan, and to close the error window.
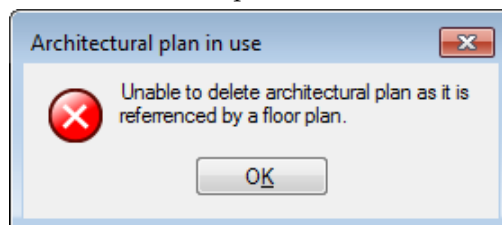
- A warning is displayed as shown below. Click **Yes** to delete the architectural plan. If the architectural plan is on the clipboard with the Cut flag set then it will also be removed from the clipboard when it is marked for deletion.
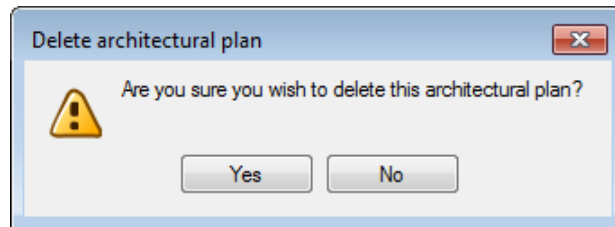
- The following error window is displayed when an error occurs during the deletion process. Click **OK**.
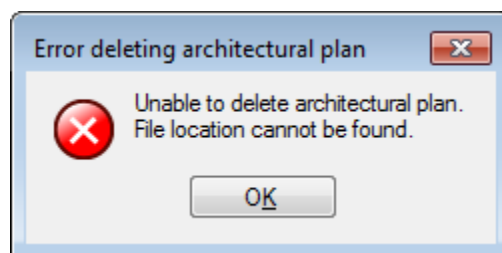
Floor Plan Management for MSP

This section describes the features and steps of a store planner, to list and manage floor plans for each store.

- The New Floor Plan button is enabled when a revision folder is selected in the store hierarchy and its parent store does not have a read-only status. This button is disabled when any other level is selected in the store hierarchy.

- From the Select Floor Plan window, click the **New Floor Plan Toolbar** button. A new floor plan entry is added to the selected revision folder and shown in the list view on the Select Floor Plan window.

- The new floor plan will be named Proposal-n, where 'n' is a number starting from 1 for each revision folder.

- When a new floor plan is created an AutoCAD drawing (DWG) for the floor plan will also be added on the file server in the revision folder's Windows folder.

- The new floor plan drawing file will be duplicated from the template/prototype drawing file, its location and name (for example C:\Program Files\Oracle Retail\MSM\Data Files\prototype_imperial.dwg) will be stored in the new System Setting Prototype Drawing, defined in the existing Configuration window of the Administration module.

- The status of the new floor plan will be set to a default value as set in the MSM database.

- By default the database will have this set as the status at the Proposed level. If no status is set as the default, then the floor plan status at the Proposed level will be used.

- The Create date of the new floor plan will be set to the system date and time of the application server machine.

- The Expiry date of the new floor plan will be set to midnight on December 31, 2999.
- The Predecessor will be set to Null.
- The Effective date will be set to Null.
- The Publish date will be set to Null.
- The Last processed will be set to Null.
- The Active date will be set to the system date and time of the application server machine.
- The Set to Current date will be set to Null.
- The Last modified date will be set to the date and time of floor plan's physical file's modified date.
- The Last published will be set to Null.
- The STR_ID will be set to the STR_ID of the parent store.
- The STR_PROTOTYPE will be set to the STR_PROTOTYPE of the Store.
- A new Windows folder will be created for the associated store if it is missing.
- A new Windows folder will be created for the associated revision if it is missing.
- If it is not possible to create the new floor plan for any reason, the following error window is displayed.
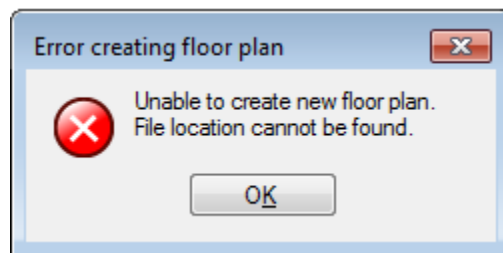
Floor Plan Management for ISSC

By default, the ISSC Desktop Client application will only be accessible by the following users:

- IT Help Desk Agent
- Application Administrator
- In-Store Merchandiser
- Store Manager
- Store Surveyor
- District Manager

The existing ISSC Select Store window will be replaced with the Select Floor Plan window as described in the Planner.

The following functionalities are available for the MSM Planner module, not for ISSC, even if the message control permissions enable them for the user's user group.

- Associate architectural plans
- Import new version of a floor plan

The POG Filter functionality will be removed from existing ISSC module and the user can configure the Planogram rules using the Planogram Rules tab in the User Options window in Planner.

Search Functionality

The existing store search feature is enhanced to allow the user to define what to search

for, by ticking one of the items in the Search button rop down list. The drop down list has the following options:

- Find By Store Code
- Find By Store Name
- Find By Floor Name
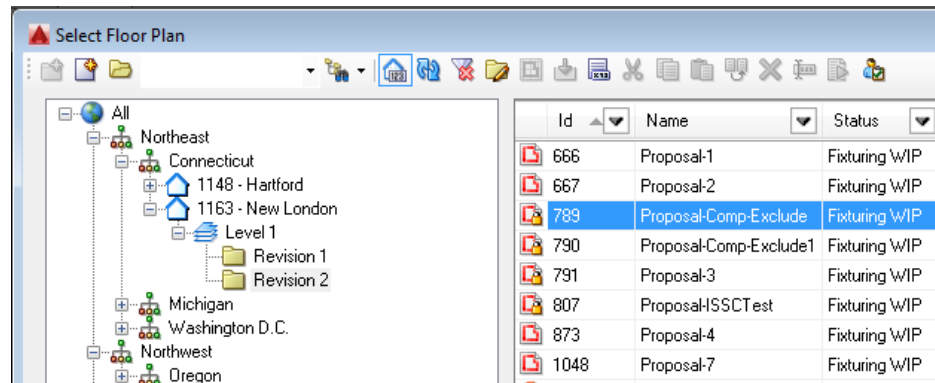
Description

- The Find combo-box control on the Select Floor Plan window allows text to be typed into it, or select it from existing list.
- The Find combo-box control will provide a list of ten most recent distinct find texts accessed through its drop down button. The list of find texts will be remembered separately for each option where the Find combo-box is shown, i.e. there will be a list of 10 most recent store name find texts and a different list of 10 most recent distinct floor name find texts and a different list of 10 most recent distinct store code find texts.
- A "Find by Store Code" search will be used for the find text by default. The user will be able to change the search type by ticking the appropriate option from the Find Buttons drop down menu.
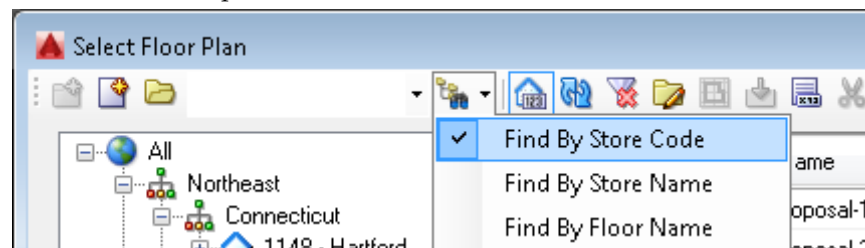
- The following search types will be supported:
  – Find By Store Code
  – Find By Store Name
  – Find By Floor Name

  > **Note:** The find text will not support wildcards, as such characters like * or % will be matched with the contents of the object fields.

- Pressing the Find button will begin the find process.

- Find process will match the find text with the stores or floor plans and gets the result set.
- If result set has matching stores or floor plans it will be highlighted in hierarchy or data grid view respectively.
- In case of Find by Floor Name search will be done only at root level i.e. "All" and Store Cluster Level.
  - When you select "All" in the hierarchy, search for floor plan will be done in all the clusters.
  - When you select particular "Cluster" in the hierarchy then search for floor plans will be done only in that particular cluster.
  - When you select anything other than "All" or some "Store Cluster" in the hierarchy then following message will be displayed.
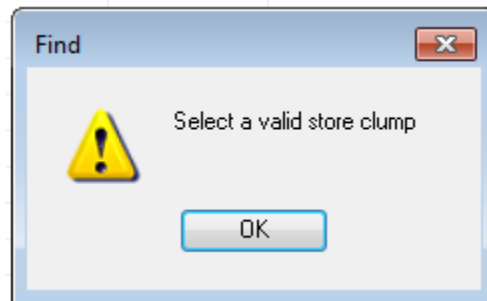
- Clicking the Find button 🔍 again will select the next result in the hierarchy. Once all the items in the result set have been found a warning dialog saying "Finished searching the hierarchy. Do you want to continue searching from the beginning?" will be displayed.
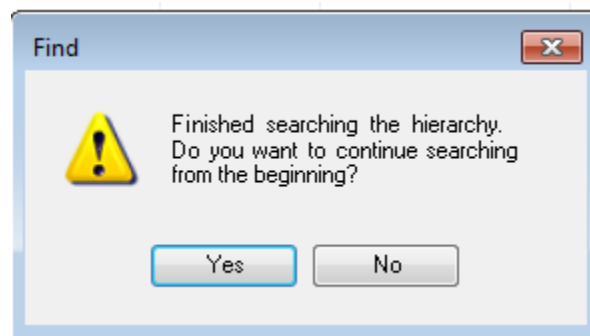
- Clicking the Yes button will cycle back to the first item in the result set and allow the process to continue.
- All of the hierarchy results displayed to the user will be subject to MSM user access rights. That is to say that only stores and floor plans that a user has permission to read will be shown in the results.
- An error dialog with the message "<search string> not found" will be displayed if the find text returns no results.
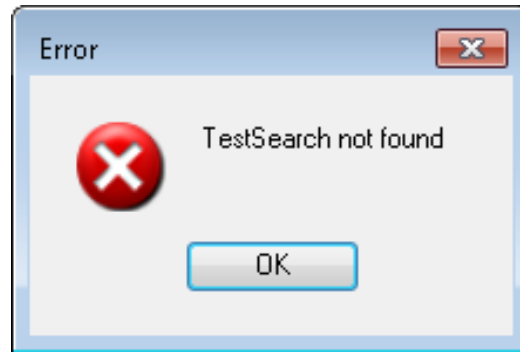
Cut, Copy and Paste

This section describes the features and steps of a store planner to copy, cut and paste an existing floor plan.

- The Copy ▣ Toolbar button is enabled when:
  - One or more floor plans or architectural plans are selected in the list view.
  - All of the selected floor plans are checked in.
- The button is disabled when:
  - No floor plans or architectural plans are selected in the list view.
  - Any of the selected floor plans are checked out.
- To copy, click the **Copy** ▣ **Toolbar** button. This will save the identifier of objects (FIL_ID) to the clipboard. Any previous identifiers will be removed from the clipboard. If the previous identifiers on the clipboard have a Cut flag the relevant floor/architectural plans will be restored to their original locations.
- The **Cut** ✂ **Toolbar** button is enabled when:
  - The user's user group has Allow edit permissions.
  - One or more floor plans or one or more architectural plans are selected in the list view.
  - All of the selected floor plans are checked in.
  - All of the selected floor plans are not at a read-only status.
  - All of the selected floor plans are not at an authorized, published, current or historical status level.
  - The store for the selected floor plans is not at a read-only status.
  - All of the selected architectural plans are not referenced by any floor plan.
  - The store for the selected architectural plans is not at a read-only status.
- The **Cut** ✂ **Toolbar** button is disabled when:
  - The user's user group does not have Allow edit permissions.
  - No floor plans or architectural plans are selected in the list view.
  - Any of the selected floor plans are checked out.
  - Any of the selected floor plans are at a read-only status.
  - Any of the selected floor plans are at an authorized, published, current or historical status level.

- – The store for the selected floor plans is at a read-only status.
- – Any of the selected architectural plans are referenced/attached by any floor plan.
- – The store for the selected architectural plans is at a read-only status.
- To cut a floor plan, click the **Cut** ✂ **Tool Bar** button. This will save the identifier of objects (FIL_ID) to the clipboard. Any previous identifiers will be removed from the clipboard. If the previous identifiers on the clipboard have a Cut flag the relevant floor/architectural plans will be restored to their original locations
- Floor/architectural plans that are on the clipboard with a Cut flag will display their Name in the Select Floor Plan list view as gray text.

> **Note:** The clipboard will not be cleared when the Floor Plan Management window is closed during a Planner session.

- The **Paste** 📋 **Toolbar** button is enabled when:
  - – The user's user group has Allow add permissions for the store.
  - – One or more floor plans or architectural plans are in the clipboard.
  - – A revision or floor is selected in the store hierarchy. The button will be grayed so as to paste floor plans to revisions, and architectural plans to floors.
  - – The store associated with the selected revision or floor is not at a read-only status.
  - – Any of the floor plans have a Cut flag and the revision selected in the store hierarchy is not the same revision that any of the floor plans were cut from.
  - – Any of the architectural plans have a Cut flag and the floor selected in the store hierarchy is not the same floor that any of the architectural plans were cut from.
- The button is disabled when:
  - – The user's user group does not have Allow add permissions for the store.
  - – No floor plans or architectural plans are in the clipboard.
  - – A revision or floor is not selected in the store hierarchy.
  - – The store associated with the selected floor or revision in the store hierarchy is at a read-only status.
  - – Any of the floor plans have a Cut flag and the revision selected in the store hierarchy is the same revision that any of the floor plans were cut from.
  - – Any of the architectural plans have a Cut flag and the floor selected in the store hierarchy is the same floor that any of the architectural plans were cut from.
- To paste a floor plan, click the **Paste** 📋 **Toolbar** button. This reads the identifier of the objects (FIL_ID) from the clipboard.
- When the clipboard has a Cut flag, the user's user group must have Allow edit permissions for the store to be able to paste:
  - – An architectural plan to another floor within the original store.
  - – An architectural plan to a floor within a different store.
  - – A floor plan to another revision within the original floor.
  - – A floor plan to a revision within a different store/floor.
- When an architectural plan is pasted, and the clipboard has a Cut flag:

- The architectural plan will be linked to the new floor in the MSM database, and the original floor link will be removed.
- The associated AutoCAD (DWG) file and/or Design Web Format (DWF) file will be moved to the relevant folder on the MSM file server.

- When a floor plan is pasted and the clipboard has a Cut flag:
  - The floor plan will be linked to the new revision in the MSM database and the original revision link will be removed. The AVTTB_FILE.FIL_PATH will also be updated with the new location of the plan.
  - The associated AutoCAD (DWG) file will be moved to the relevant folder on the MSM file server.

- When an architectural/floor plan is pasted and there is no Cut flag:
  - A new plan is created in a new location and all of the database data associated with the plan will be copied for the new plan. This is like the duplicate function, except that there is a new parent folder.
  - The associated AutoCAD (DWG) file or Design Web Format (DWF) file will be copied to the relevant folder on the MSM file server. For floor plans, if there is a DWF file in the revision folder with the same name as the floor plan then this will be copied, as well as the floor plan's associated DWG file.

- When an architectural/floor plan is pasted, the plan's name will be the same as the original floor plan's name as long as this will be unique for the new location. If the plan's name is not unique in the new location, then the existing name will be appended with a hyphen and a number.

- When the floor plan's name already has a hyphen and number appended to the end, or the modified name is not unique, the number will just be incremented by 1 to the next available number.

- Example:

  A revision contains four floor plans called Winter 01, Winter 01-11, Winter 01-12 and Winter 02

  The floor plan Winter 01 is copied and pasted from another revision

  The pasted copy of the floor plan is called Winter 01-2

  The floor plan Winter 01 is pasted again

  The second copy of the floor plan is called Winter 01-3

  The floor plan Winter 01-2 is copied and pasted from another revision

  The pasted copy of the floor plan is called Winter 01-4

  The floor plan Winter 01-11 is cut and pasted from another revision

  The pasted copy of the floor plan is called Winter 01-13

  The floor plan Winter 02 is cut and pasted from another revision

  The pasted copy of the floor plan is called Winter 02-2

- If a floor plan has been copied and pasted, the status of the new floor plan will be set to the default status set up in the Status window in the Administration module.

- – If no status is marked as default, then the status of the new floor plan will be set to the Proposed level.
  - ▪ If a floor plan has been cut and pasted to a different store/floor, the status will be set to a default status.
    - – If no status is marked as default then the Status of the new floor plan will be set to the Proposed level.
  - ▪ When a floor plan has been cut and is pasted to a different revision of the same floor then the status remains unchanged.
  - ▪ When an architectural/floor-plan is copied and pasted:
    - – The plan's Creation date will be set to the application server machine's date and time, and the plan's Expiry date will be set to midnight on December 31, 2999.
    - – The Last published, Effective, Publish and Made current dates will be set to Null. If a floor plan has been cut and is pasted to a different store/floor than its original location the Last published, Effective, Publish and Made current dates will be set to Null. When a floor plan has been cut and is pasted to a different revision of the same floor then the Last published, Effective, Publish and Made current dates will be unchanged.
    - – The Store Prototype will be set to the Store Prototype of the target store.
  - ▪ When an architectural/floor-plan is pasted:
    - – The Active, Last modified, Last processed and File dates will be set to be the same as the original plan.
    - – The Parent store of the pasted floor plan will be set to the appropriate store for the new location.
  - ▪ When a floor plan is cut and pasted to a new revision within the same floor, then the status and dates will be set to be the same as the original floor plan.
  - ▪ When a floor plan is pasted to a new revision, associated with a different floor, then any attached architectural plans will be removed from the database.
  - ▪ When an architectural/floor plan is copied and pasted, the identifier of the original floor plan will be saved as the new floor plan's Predecessor.
  - ▪ When an architectural plan is copied and pasted the Store Prototype will be set to null.

Importing New Version

This section describes the features and steps of a store planner to import a new version of a floor-plan or architectural plan. This is used by retailers who use a third-party system to manage fixture layouts, or where the floor-plan is edited outside the MSM environment.

- ▪ The Import New Version Toolbar button is enabled when:
  - – Only one floor plan or architectural plan is selected in the list view.
  - – The selected floor/architectural plan is checked in (it is not checked out for editing).
  - – The selected floor plan is not at a read-only status.
  - – The store for the selected floor plan is not at a read-only status.
  - – The store for the selected architectural plan is not at a read-only status.
- ▪ The button is disabled when:
  - – More than one floor plan or architectural plan is selected in the list view.

- – The selected floor/architectural plan is checked out for editing.
- – The selected floor plan is at a read-only status.
- – The store for the selected floor/architectural plan is at a read-only status.
- – The selected architectural plan is referenced by any floor plan.
- – The store for the selected architectural plan is at a read-only status.
- ▪ Click the **Import New Version Toolbar** button. The standard Windows Open window is displayed with the Store Root directory as the directory default.
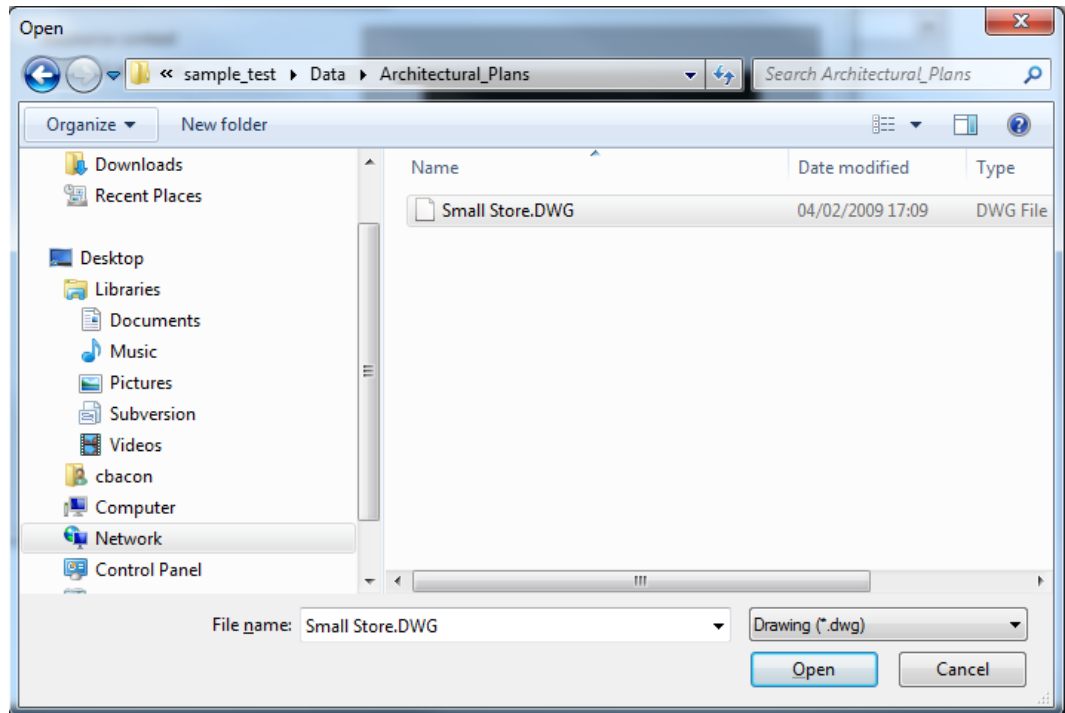
- ▪ When you click the **Open** button, the size of the selected size is compared with the new MAX_IMPORT_FILE_SIZE system variable.
  - – If the system variable is missing or non-numeric, then the default value of 5Mb is used.
  - – If the file size is less than or equal to the value of the system variable, then the import will continue.
  - – If the file size is greater than the system variable, then an error window will be displayed.
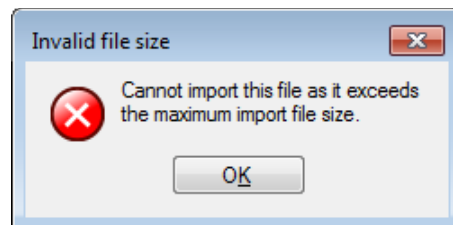
- ▪ When you click the **Open** button, the selected filename is compared with the original floor plan's name. If the file name selected is different from the original plan's name (ignoring case), then the Import New Version window opens.

Import New Version

○ Change name to match imported file name (Store 1001 - Summer 2013)

○ Keep existing name (Store 1001 - Spring 2013-2)

OK   Cancel

> **Note:** This feature is not available for architectural plans; hence the filename will always keep the existing name.

- The Import New Version window will allow the user to change the architectural/floor plan's name or to keep the existing name.
- If the file name selected in the Open window already exists for a different plan in the target floor/revision, then the suggested name will be the existing name appended with a hyphen and a number.
    - If the file name already has a hyphen and number appended to the end, or the modified name is still not unique, the number will be incremented by 1 to the next available number.
- Example:

    A revision contains four floor plans called Winter 01, Winter 01-11,

    Winter 01-12 and Winter 02

    The floor plan Winter 01 has a version imported called Winter 02

    The imported name for the floor plan will be Winter 02-2

    The Winter 02-2 floor plan has a version imported called Winter 02 again

    The imported name for the floor plan will now be Winter 02-3

    The floor plan Winter 02 has a version imported called Winter 01-11

    The imported name for the floor plan will be Winter 01-13
- When a floor/architectural plan is imported, the original DWG or DWF file is copied on the file server. The existing filename will be modified to include the suffix _BAK prior to the extension. If a file of that name already exists (or the file already has _BAK as a suffix), then a number is added to the suffix, for example _BAK1. The number will be incremented by 1 so that the file name is unique.

Deleting Floor Plan

This section describes the features and steps of a store planner to mark floor plans for deletion.

- The **Delete Toolbar** button is enabled when:
    - One or more floor plans are selected in the list view.
    - All of the selected floor plans are checked in.
    - All of the selected floor plans are not at a read-only status.
    - All of the selected floor plans are not at an authorized, published, current or historical status level.
    - The store for the selected floor plans is not at a read-only status.
- The button is disabled when:

- No floor plans are selected in the list view.
- Any of the selected floor plans are checked out.
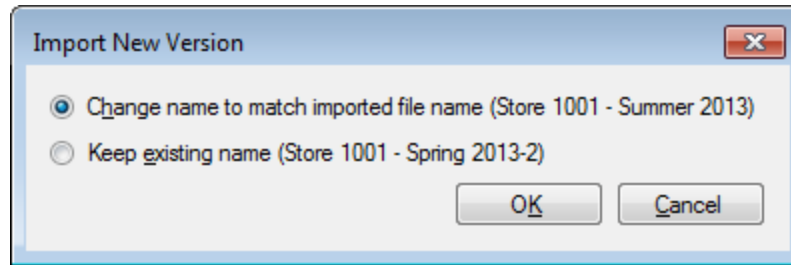- Any of the selected floor plans are at a read-only status.
- Any of the selected floor plans are at an authorized, published, current or historical status level.
- The store for the selected floor plans is at a read-only status.

■ Click the **Delete** ✖ **Toolbar** button to delete a floor plan. A warning window opens. Click Yes to mark the selected floor plans for deletion. If a floor plan is on the clipboard with the *Cut* flag set then it will also be removed from the clipboard when it is marked for deletion.
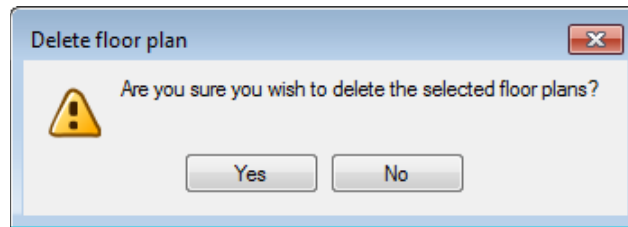
■ Floor plans that are marked for deletion:
- Are not displayed in the list view.
- Will remain in their existing revision Windows folder on the file server.

> **Note**: The Merchandiser module will continue to use the existing Store Manager window which moves files to the RFBin directory when they are deleted. The Store Manager window has an Undelete function, which handles files that are in either the RFBIn location or their original location. The Purge feature that will be moved to the Administration module will also handle files in either the RFBin location or their original location.

Viewing and Editing Floor Plan Properties

This section describes the features and steps of a store planner to view and edit store plan properties.

■ The **Floor Plan Properties Toolbar** button is enabled when one floor plan is selected in the list view of the Select Floor Plan window. The **Floor Plan Properties Toolbar** button is disabled when none or more than one floor plan is selected.

■ Click the **Floor Plan Properties Toolbar** button, to open the Floor Plan Properties window.

■ Your user group must have Allow read permissions for you to be able to open the Floor Plan Properties window. If your user group does not have Allow edit permissions then all the editable controls will be replaced with read only text boxes.

> **Note:** You are able to copy the values into the Windows clipboard, when the fields are read only.

Details Tab

- Name: shows the floor plan's name.
- Path: shows the full path where the floor plan's associated AutoCAD drawing file is located. This includes the store root, store, floor and revision folders.
- Predecessor: Shows the name of the floor plan that the floor plan was created from. This field can be blank.
- Status: Shows the floor plan's status.
  - Application Administrator user group role is able to change the status by selecting another status.
  - The status is shown as a combo box when you have the permission to change the status.
  - You are able to select a status from the drop-down list.
  - The list of statuses will be ordered by the order set in the Status window in the Administration module.
  - If the status is set to be not selectable, then it will not be shown in the dropdown list unless it is the actual status of the file.
  - If a status is set to be not reversible, then the previous statuses will not be shown in the drop-down list.
  - User groups that can change the Status field will be set by using the existing ISSC message control permission mechanism for the user group role. By default, only Application Administrators will be granted access to this functionality.
- Prototype store: Shows the store code then a hyphen and then the name of the prototype store associated with the floor plan (for example 0101-Birmingham).
  - If the floor plan does not have a prototype store explicitly associated with it, then the Prototype store field will default to the prototype defined for the store (the entry will be displayed in italics to indicate that it is the default value).
  - If the store is not associated to a prototype store, then the field will be shown as blank.

- You are able to change the floor plan's prototype store by clicking a store in the Prototype store drop-down list.
- The Prototype store drop-down list will list the store code, followed by a hyphen, and then the name of all the prototype stores in the database.
- The list will be sorted in ascending order.
- The list will not be filtered based on your data security permissions since the list does not give you access to edit or change the prototype store.

- The Active date field shows the floor plan's active date in long date format based on the client machine's Windows regional settings.
  - You will only be able to change the Active date if the floor-plan is not in use.
  - When the floor plan is in use, the Active date field becomes inactive.
  - If you hover the mouse pointer over the field, when the Active date field is grayed out, the following error message is displayed:

- The Effective date field shows the floor plan's effective date in long date format based on the client machine's Windows regional settings.
  - You will only be able to change the Effective date if the floor-plan is not in use. When the floor plan is in use, the Effective date field becomes inactive.
  - If you hover the mouse pointer over the field, when the Effective date field is grayed out, the following error message is displayed:
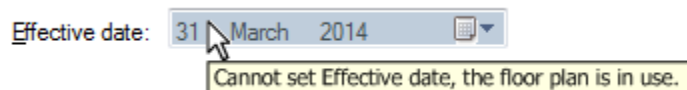
- The Publish date field will show the floor plan's publish date in long date format based on the client machine's Windows regional settings.
  - You will only be able to change the Publish date if the floor-plan is not in use (to say that it is not checked out for editing) and the Effective date set (to say that it is not Null).
  - When the floor plan is in use or the Effective date is not set, then the Publish date field becomes inactive.
  - If you hover the mouse pointer over the field, when the Publish date field is grayed out, the following error message is displayed.
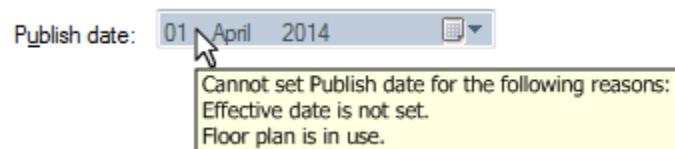
- You are able to type a date in to the Active date, Effective date and Publish date fields, or use the drop-down **Calendar** button at the end of the fields to select a date from the calendar control.

> **Note:** The Active date, Effective date and Publish date fields do not include a time element.

- A tooltip is displayed, as shown below, when you hover the mouse pointer over a date field in edit mode.
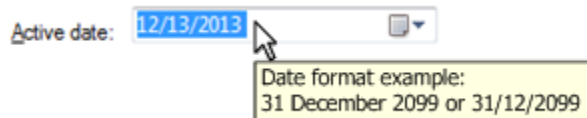
- Numeric format date values in date fields will have each number divided with a character separator. These are the standard separators used by Windows for short date formats: / . –

  The numeric elements will be verified using the order set by the Windows short date format set for the client machine, for example dd/MM/yyyy, yyyy-MM-dd, and so on.

- If you enter an unsupported date format, the following error window is displayed:
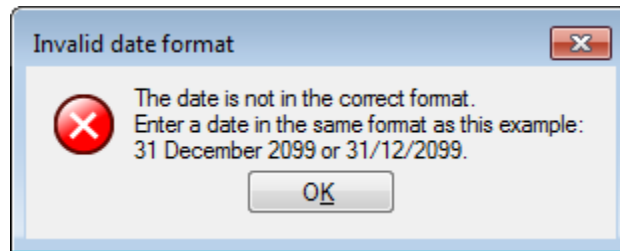
- A default Effective date will be suggested when the calendar control is opened to set the Effective date for the first time.

  - The default effective date will be based on the system date of the application server machine plus the existing EFFECTIVE_DATE_LEAD_PERIOD system variable.

- A default Publish date will be set when the Effective date is first set (, after focus is lost from the Effective date field or the **OK** button is clicked).

  - The default Publish date will be based on the Effective date, minus the System publishing lead period, which is set in the Floor Plan Publishing Configuration window of the MSM Administration module.

  - If the default Publish date is earlier than the server's date then it will be set to match the application server's date. The Publish date is able to be reset (set to blank), provided the status order is less than the Authorized status order.

  - The Publish date field does not allow you to pick dates after the Effective date. You will have to enter these dates manually.

  - The Publish date field will then be validated against the Effective date after editing.

- If the Publish date is before today's date, the following warning window is displayed:
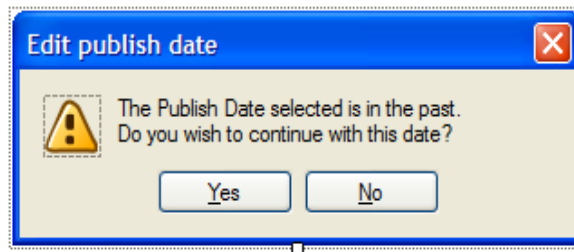
- If the Effective date is before the Publish date, the following warning window is displayed:
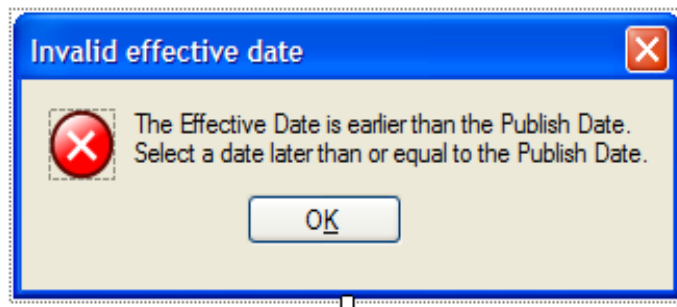
- The following error window is displayed, if the Effective date is the same as another floor plan's Effective date.
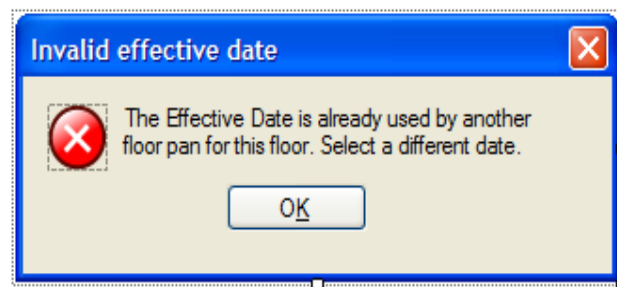
- A warning window is displayed if the Effective date is before or equal to the effective date of its predecessor or equal to or after the Effective date of the next effective floor plan in chronological order.

  Effective Date <= Predecessor's Effective Date

  OR Effective Date >= Next Floor Plan's Effective Date
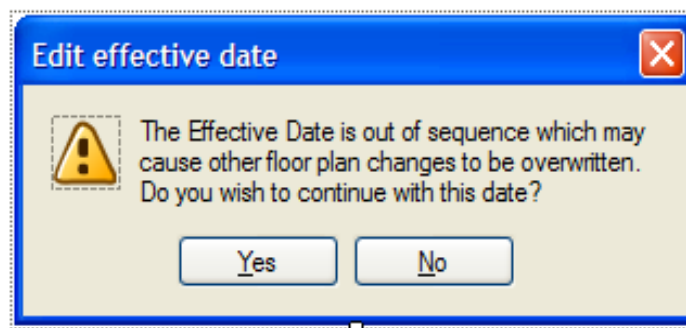
- If the floor plan's predecessor does not have an Effective date, or the predecessor is marked for deletion, then the parent of the predecessor will be used to

determine the predecessor's Effective date. This check will be repeated through the chain of predecessors until an Effective date is found or there are no predecessors in the same floor as the floor plan   being edited.

- Checked out by: Shows the first and last name of the Space Planning user who has the floor plan checked out for editing. If the floor plan is not checked out for editing then the field will be blank. This field also shows the date and time when the floor plan was checked out for editing, in long date and time format based on the client machine's Windows regional settings. If the floor plan is not checked out for editing then the field will be blank.

- File size: Shows the file size read from the floor plan's physical AutoCAD drawing file on the Windows file server. If this information is not available then the File size field will show the file size stored in the MSM database for the floor plan. The File size will be displayed in bytes until the size is greater than 9999 bytes (represented as kilo-bytes with two decimal places).

    – Once the size is greater than 99.99 kilo-bytes, it will be shown as kilo-bytes with no decimal places.

    – Once the size is greater than 9999 kilo-bytes, it will be shown as mega-bytes with two decimal places.

    – The display of size in mega-bytes will then follow the same pattern as in kilo-bytes before then showing in gigabytes and so on.

    – When the file size is not shown in bytes, it will be followed by the byte size in brackets.

    – The local settings will be used to determine exact format (, the decimal marker, thousands separator).

    – A kilo-byte will be 1024 bytes and a mega-byte will be 1024x1024 bytes and so on to be consistent with Windows.

- File created: Shows the created date and time read from the floor plan's physical AutoCAD drawing file on the Windows file server. The date and time will be shown in the long date and time format set in the Windows regional settings for the client machine. If this information is not available then the field will be blank.

- File modified: Shows the modified date and time read from the floor plan's physical AutoCAD drawing file on the Windows file server. The date and time will be shown in the long date and time format set in the Windows regional settings for the client machine. If this information is not available then the field will be blank.

- Last modified: Shows the floor plan's last modified date and time read from the MSM database. The date and time will be shown in the long date and time format set in the Windows regional settings for the client machine.

- Last modified by: Shows the first and last name of the Space Planning user who last saved changes to the floor plan.

- Last published: Shows the floor plan's last published date and time read from the MSM database. The date and time will be shown in the long date and time format set in the Windows regional settings for the client machine. If the floor plan has not been published then the Last published field will be blank.

- Expired: Shows the floor plan's expiry date read from the MSM database.

    – The date will be shown in the long date format set in the Windows regional settings for the client machine.

    – If the floor plan has not been expired then the Expired field will be blank. The expiry date will be set if a store closes and will match the store's closed

date. Alternatively the expiry date will be set when another floor plan becomes effective/current for the floor and will be the day before the effective date of the subsequent floor plan.

- Name, Path, Predecessor, Status, Checked out by, Last modified by and Id text boxes will be grayed out and read-only. You are able to move the cursor along the text box so that you can read the full text if it is longer than can be displayed in the text box.

Attributes Tab

- The Attributes tab displays the current values of the floor plan's User Defined Attributes (UDA).The list of UDAs shown will be determined by the UDAs set in the User Defined Attributes window of the MSM Administration module.

- Only the UDAs that have a Name set in the Administration module will be displayed. The number of rows displayed will not exceed the number of columns that are defined in the MSM database to store floor plan UDA data.

- The list of UDAs will display the attribute name and value.

- The UDAs will be sorted in the order set by the Sequence column in the MSM Administration module. You will not be able to sort the columns.

- This tab functions similar to the existing Floor Plan User Defined Attributes window.

- The column widths will be set by default so that the full text of all the UDA names, values and column headers can be displayed.

- You are able to change the width of the columns. The column width will be remembered between sessions and used the next time the window is open.

- If a floor plan has no UDA values in the MSM database, then the default value for the UDAs will be displayed if one has been set in the Administration module. If no default is set for a UDA then the value will be displayed as blank.

- You will also be able to highlight the content in the cell by single clicking the cell.

- The value of a UDA can only be edited if your user group has Allow edit permissions. The background appears inactive and grayed out when the values are read-only.

- To edit the value of a UDA, click the cell of the value to be edited, when the row is highlighted.
- You can move up and down the list of cells by using the up and down cursor keys.
- The control for the value field changes depending on the data type set for the property in the MSM Administration module.

  The table below shows the control displayed for different settings:

Data Type	Control Type	Format	Entry Restrictions
Text	Text box	Left justified	64 characters
Whole number	Numeric up down	Right justified	$\pm 1x10^{15}$
Decimal	Numeric up down	Right justified	$1x10^{-308}$ to $1x10^{308}$
Date	Date picker	Long date and time format from the Windows regional settings	64 characters when in free text mode

- The value of the UDA will only accept an input   appropriate for the given data type.
- Date fields will allow you to type a date and time or use the drop-down calendar control.

  Example: 31 December 2999 23:59:59
  or 31-12-99 23:59:59

- A combo box will be used for a field if lookup values have been set in the UDA window of the MSM Administration module. The use of a combo box can be replaced with using controls explained above. .

> **Note**: Boolean data type UDAs will not use lookup values.

- You are able to cut, copy and paste from and to a cell when it is being edited via the Windows clipboard, either from a standard right-click context menu or by using keyboard shortcut keys.

- If a UDA is set to be mandatory, but does not have a value set, and if you click the **OK** button, then the following error window is displayed.
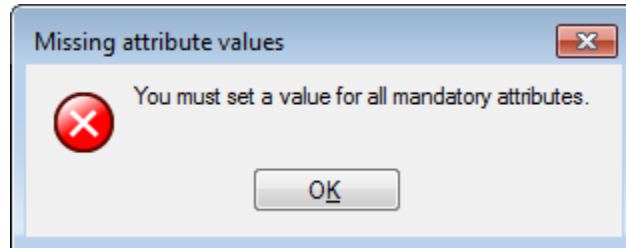
Notes Tab
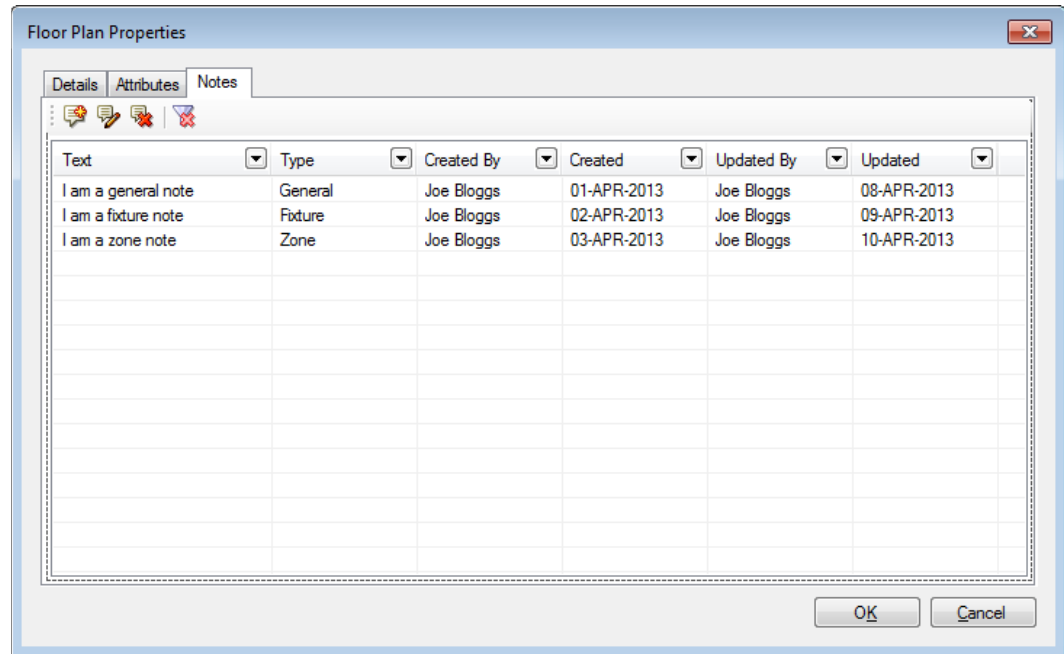
- The Notes tab displays the current values of all notes for the floor plan.
- The toolbar will be updated to include the following buttons:

Icon	Tooltip	Shortcut Key	Default User Roles
	Add note	Ctrl N	All
	Edit note		Application Administrator
			Merchandising Manager Store Planner Manager

	Delete note	Delete	Application Administrator
			Merchandising Manager Store Planner Manager
	Clear filters		All

- The **Add Note, Edit Note** and **Delete Note** buttons will only be enabled when your user group has Allow edit permissions for the store and the floor plan's status.
- The list view displays details of the notes, and displays the following columns:

Column Header	Cell Type	Comment
Text	Text	NOT_DESC. Carriage returns will be shown a space characters when displayed in the list view.
Type	Text	NTT_NAME
Created By	Text	NOT_CREATED_BY First Name Last Name of the user who created the note
Created	Short date and time	NOT_CREATED Format read from the Windows Regional Settings
Updated By	Text	NOT_UPDATED_BY First Name Last Name of the user who created the note
Updated	Short date and time	NOT_UPDATED Format read from the Windows Regional Settings

- Vertical and horizontal scroll bars are available if the data cannot be shown within the visible area of the list view.
- You are able to change the order of columns displayed in the list view by dragging and dropping the column headers in the list view.
- The column order that you choose will be restored after the Floor Plan Properties window is closed and reopened.
- The column order will be remembered between user sessions.
- You are able to use distinct and custom filters for all columns displayed in the list view by clicking the **Auto Filters** ▼ button on the column header.
- You are able to use quick filters for all columns displayed in the list view by selecting the Quick filter option.
- The **Clear Filters** ▒ button clears all filters in the list view.
- You are able to sort the data displayed in a column of the list view. The sort is able to be either descending or ascending. The sort order will be based on the language set for you in the MSM Administration module.
- You are able to select multiple rows in the list view by using the Ctrl key.
- You are able to view the complete text of a note in a tooltip when you hover over a cell in the Text column.

- You are able to add, edit and delete General notes without opening the floor plan.

Add Notes

- The **Add Note** 📝 **Toolbar** button is enabled when:
  – The floor plan is not at a read-only status.
  – The store for the floor plan is not at a read-only status.
- This button is disabled when:
  – The floor plan is at a read-only status.
  – The store for the floor plan is at a read-only status.
- Click the **Add Note Toolbar** button to add a note. The Add Note window opens.
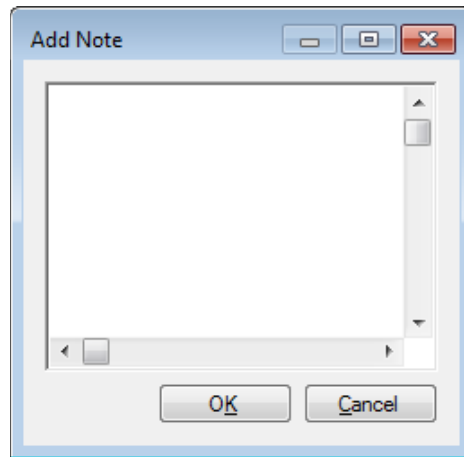
- The Add Note window can be resized, maximized, but not minimized. The multi-line text box will expand to use the additional space when the window is resized. The size of the Add Note window will be stored per user and maintained between user sessions.
- This window allows any text character to be entered in to the multi-line text box, including carriage returns. A maximum of 500 characters will be allowed to be entered. The horizontal and/or vertical scroll bars will be enabled when the text does not fit in to the visible area of the multi-line text box.
- Click **OK** to close the window and save the note as a General note.

Edit Notes

- The **Edit Note Toolbar** button will be enabled when:
  – The floor plan is not at a read-only status.
  – The store for the floor plan is not at a read-only status.
  – Only one General note is selected in the list view.
- The **Edit Note Toolbar** button will be grayed out and disabled when:
  – The floor plan is at a read-only status.
  – The store for the floor plan is at a read-only status.
  – No General notes are selected in the list view or more than one General note is selected.
- Click the **Edit** 📝 **Toolbar** button to edit a note. The Edit Note window opens.

Delete Notes

- The **Delete Note Toolbar** button is enabled when:
  - The floor plan is not at a read-only status.
  - The store for the floor plan is not at a read-only status.
  - One or more General notes are selected in the list view.
- The button is disabled when:
  - The floor plan is at a read-only status.
  - The store for the floor plan is at a read-only status.
  - No General notes are selected in the list view.
- Click the **Delete** 🔖 **Toolbar** button to delete a note. The Delete Note window opens.
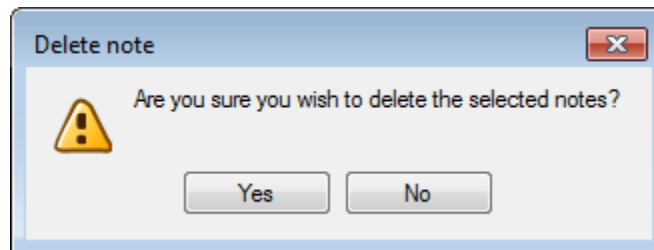
Opening Floor Plans

This section describes the features and steps to open multiple floor plans concurrently in MSM Planner.

- The **Open** 📂 **Toolbar** button and **Open** button is enabled when one or more floor plans are highlighted in the list view of the Select Floor Plan window.
- This button is disabled when a floor plan is not highlighted in the list view.
- It is also grayed out in Planner if the floor plan's AutoCAD drawing file cannot be accessed.
- Click the **Open** 📂 **Toolbar** button to open a floor plan.
- The **Open** 📂 **Toolbar** button and the **Open** button become inactive if the floor plan's AutoCAD drawing file cannot be accessed in Planner. This results in an error as shown below:
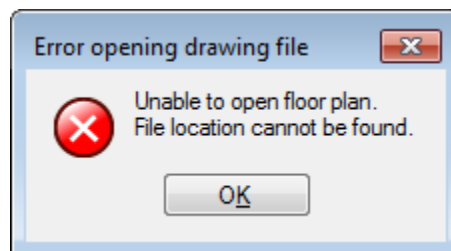
- The existing check-out process ensures that a floor plan be opened only for editing, if it is not currently checked-out for editing by another user. The check-out process also ensures that the floor-plan can only be opened for editing if the status is not set to read-only, and its parent store does not have a read-only status.
- If a floor plan cannot be opened for editing when an Open action is executed, then a warning window is displayed as shown below:
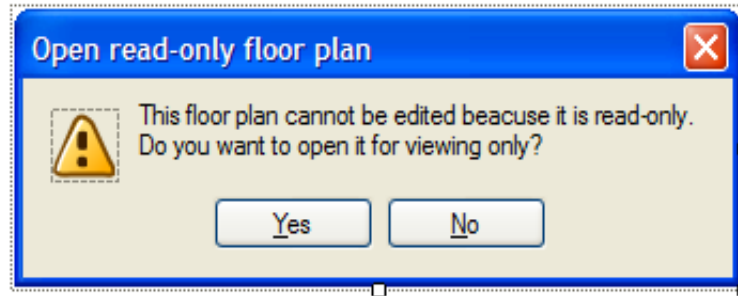
- If a floor plan cannot be opened for editing when an Open action is executed because the store status is marked as read-only, the following warning message is displayed. Click **Yes** to close the window, and open the floor plan as read-only.
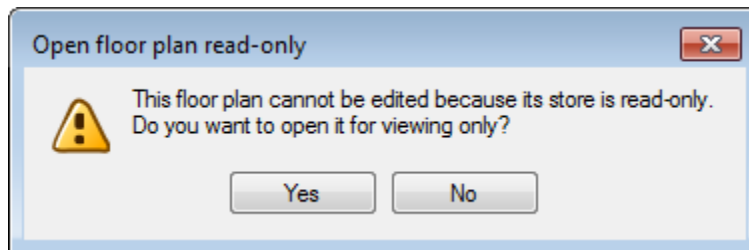
- When you do not have permission to open the floor plan status or store for editing (, your user group does not have Allow edit permissions), then the following warning message is displayed. Click Yes to close the window and open the floor plan as read-only.
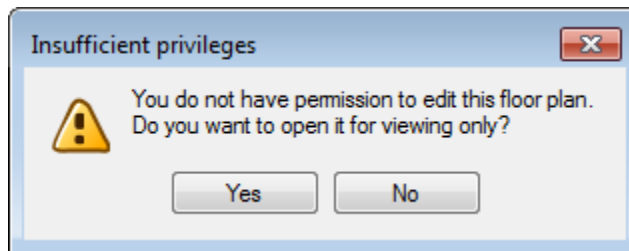
- You are able to open a floor plan in read-only mode without receiving a warning by using the Open view only option on the right click context menu. This will allow a user to view a floor plan without preventing another user opening it for editing.
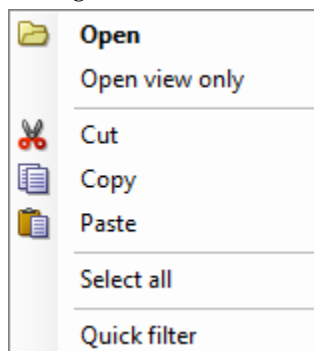
- When a floor plan is to be opened as read-only, a temporary duplicate version of the floor plan will be created in the database. Temporary duplicate floor plans are not visible in the Select Floor Plan window. Click **OK** to close the window

and open the floor plan using the appropriate version of the data stored in the database.
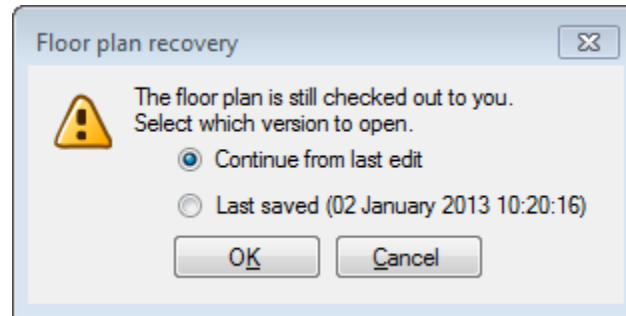
Opening Architectural Plans

This section describes the features and steps to open multiple architectural plans concurrently in MSM Planner.

The **Open** 📂 **Toolbar** button is enabled when one or more architectural plans are highlighted in the list view of the **Select Floor Plan** window.

The button is disabled when an architectural plan is not highlighted in the list view.

The **Open Toolbar** button and **Open** button will also be grayed out in Planner if the floor plan's AutoCAD drawing file cannot be accessed.

- You are able to open multiple architectural plans concurrently in MSM Planner.
- The **Open Toolbar** button and the **Open** button become inactive if the architectural plan's AutoCAD drawing file cannot be accessed in Planner. This results in an error as shown below:
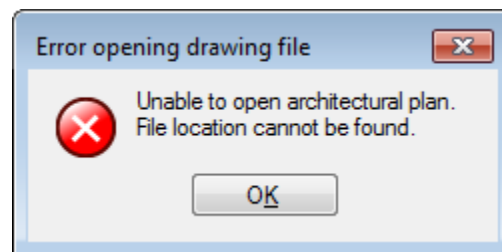

- A check-out process ensures that an architectural plan can only be opened for editing if it is not currently checked-out for editing by another user. The check-out process also ensures that the architectural plan can only be opened for editing if its parent store does not have a read-only status.
- If an architectural plan cannot be opened for editing when the **Open** button is clicked, then the following warning window is displayed. Click Yes to close the window and open the architectural plan as read-only.
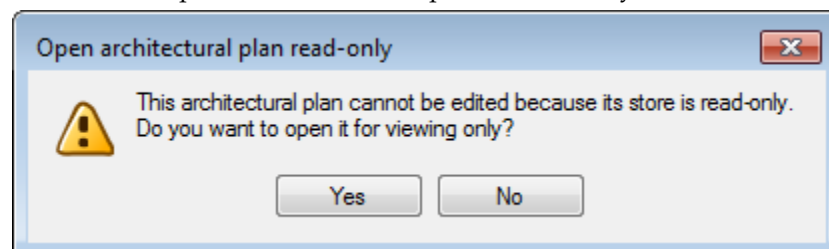
- When you do not have permission to open the store for editing (i.e. your user group does not have **Allow edit** permissions for the store), then the following

warning message is displayed. Click Yes to close the window and open the architectural plan as read-only.
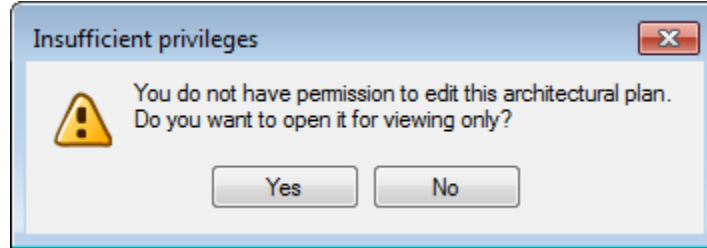
- If you click the **Open View Only** button from the right context menu, you will be able to open an architectural plan in read-only mode without receiving a warning.
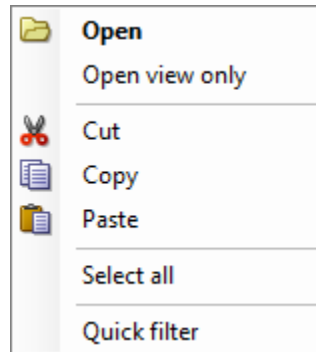
- If you have checked out the architectural plan, and try opening it again in the same module (in Planner), then the architectural plan opens with edit permission, as long as it is not already opened in the current session.

- When the selected architectural plans are opened (either for editing or for viewing only), the Select Floor Plan window closes, and the architectural plan AutoCAD drawing files opens in Planner.

- A log message will be stored in the File Log when an architectural plan is opened (both for editing and for viewing only). The following information is logged:
  - ID of the architectural plan
  - User details
  - Domain and Machine on which it was opened
  - Date and time when it was opened
  - Read Only or Editing
  - The application being used (this will always be Planner)

Status Workflow

This section describes the features and steps to manage the floor-plan workflow using status values, as defined in the Status window of the MSM Administration module.

- The **Submit Floor Plan Toolbar** button is visible when:
  - The user is a member of a user group listed in the AVTTB_PROCESS_FLOW table where the Process flow option (PFO_ID) is set to 2 (Save, discard and submit). When this condition is not met, the **Submit Floor Plan Toolbar** button will be hidden.

- When the **Submit Floor Plan Toolbar** button is visible, it will be enabled when the following conditions are met:
  - When one or more floor plans are selected in list view of the Select Floor Plan window.
  - The status of the floor plans have an accept status set in the Status window of the Administration module.
  - The status level of the floor plan is less than the Authorized status level.
  - The STA_ORDER of the selected floor plan should be less than the Authorized status' STA_ORDER.
  - The status of the floor plan is at the status set in the AVTTB_PROCESS_FLOW table for the user's group where the Process flow option is set to 2 (Save, discard and submit).
- The **Submit Floor Plan Toolbar** button is disabled when one or more of the above conditions are not met.
- When you click the **Submit Floor Plan Toolbar** button, the status of the selected floor plans will change to the next status based on the accept status set for the original status.
- When a floor plan's status is changed, the Select Floor Plan window's list view will be automatically refreshed to show the new status of the floor plan. If you do not have permission to view the new status, then the floor plan will no longer be shown on the list view.

Zones Overview in the Object Browser Chapter

This section describes the updates to the Zone's Overview section in the Object Browser chapter of the Planner Module User Guide.

Zone Hierarchy

This section describes the functionality to allow store planners to browse the zone library. The Zones Hierarchy displays the available zones.

- From the Object Browser window, click the Zones tab.
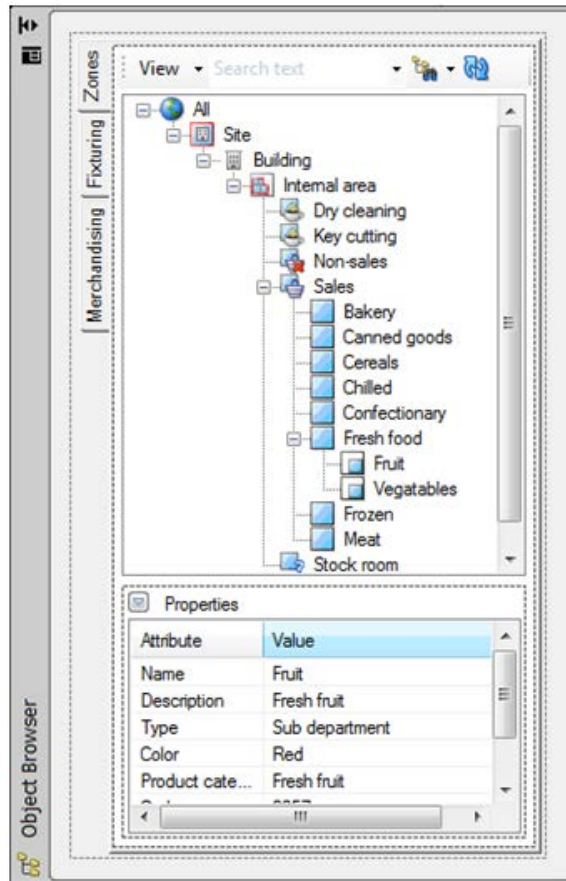
- The Zone tab toolbar has the following buttons:

Icon	Description
View ▾	View
📇	Find in hierarchy
🔄	Refresh

- The following user group roles will have access to the Zone tab, set-up by default:
    - Application Administrator
    - IT Help Desk Agent
    - Store Planning Manager
    - Merchandising Manager
    - Store Planner
    - Merchandising Planner

    Note: The Merchandising Manager and the Merchandising Planner user group roles will only be able to view the hierarchy, and use the search functionality relevant to the zones.

- The zone hierarchy is displayed in a tree view in the Zones tab of the object browser. The tree view displays the zone names as tree nodes. The names will be displayed as stored in the database (, the case will not be changed). The names will be sorted in ascending order based on the user's language set in the Administration module.
- Each type of zone can be easily identifiable by use of different icons.
- The following is a list of icons that are used to distinguish each zone type:

Icon	Description
	All
	Site
	Building area
	Internal area
	Sales area
	Department
	Sub department
	Non sales area
	Concession area
	Custom zone

- The root node does not exist in the database, but is added in the zone hierarchy on the tree view, and labeled as All.
- When you move the mouse pointer over a node in the zone hierarchy, the zone name is displayed in a tooltip. This allows zone names that are too long to display within the available space to be viewed.
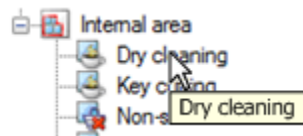
- Click the **View** button to display the view dropdown menu.
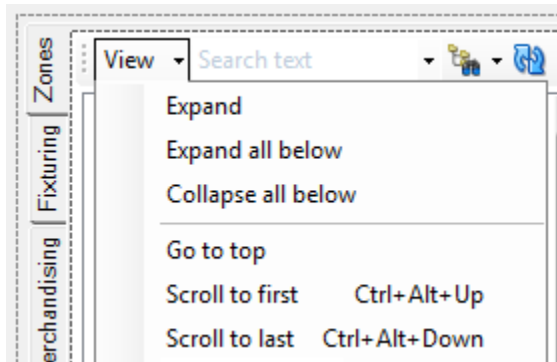
Expand

- The Expand option is enabled when a zone, selected in the hierarchy, is closed or collapsed.
- The Expand option is disabled when a zone is not selected in the hierarchy or it is already expanded.
- The Expand option on the View menu expands or opens the currently highlighted parent zone.

Expand all

- The Expand all below is enabled when:
  - A parent zone is selected in the hierarchy that has child zones.
  - One or more child zones are collapsed or closed.
- The option is disabled when:
  - A parent zone is not highlighted.
  - It doesn't have any child zones.
  - All the child zones are expanded or opened.
- The Expand all below option on the View menu will expand or open the currently highlighted zone and any descendant zones (child, grandchild, great-grandchild and so on) that are not already expanded or open.

Collapse all

- The Collapse all below option is enabled when:
  - A parent zone is highlighted in the hierarchy that has child zones and one or more of its child zones are expanded or open.
- The option is disabled when:
  - A parent zone is not highlighted.
  - Does not contain child zones.
  - All the child zones are collapsed or closed.
- The Collapse all below option on the View menu collapses or closes any descendant zone (child, grandchild, great grandchild and so on) that are expanded or open.

Go to top

- The Go to top option on the View menu scrolls the tree view to the top, and highlights the root node.

Scroll to first

- The Scroll to first option (or using the Ctrl + Alt + Up shortcut key) on the View menu scrolls the tree view to show the first zone   an ancestor of the currently highlighted node in the hierarchy.

Scroll to last

The Scroll to last option (or using the Ctrl + Alt + Down shortcut key) on the View menu scrolls the tree view to show the last object   the last descendant of the last zone in current branch of the hierarchy.

- The list view displays the properties of the zone selected in the tree view. The properties includes Name, Description, Zone Type, Hatch Pattern and Color in the order mentioned by default. It also displays the columns returned by the custom query from the AVTTB_CUSTOM_SQL table   mapped from the custom view type

(CSQ_TYPE) and custom view level (CUV_LEVEL) in the existing AVTTB_CUSTOM_VIEW table. This will map to the PROPERTIES_ZONE custom SQL entry by default, which will be created by renaming the existing CUV_ZONE custom SQL entry during the database upgrade.

▪ On execution of the custom SQL, the filter clause will have the defined filter field and the node selected in the zone hierarchy.

> **Note**: The implementer is able to specify which custom SQL should be used for different levels of the zone hierarchy. This will be specified in the AVTTB_CUSTOM_VIEW table. The CUV_TYPE must be 0 when mapping to a zones custom query. Data will be fetched based on the zone type (ZNT_ID in the AVTTB_ZONE_DEFINITION table) selected in the hierarchy.

▪ You are able to select individual cells , cells in a column, or rows from the list view.

▪ You are able to select multiple rows in the list view by using the Ctrl key.

▪ You are able to copy the displayed data in the list view by using the Ctrl+C keyboard shortcut. The data will be set on the Windows clipboard as tab separated values. This will allow the data to be pasted in to external applications such as Word or Excel.

▪ A splitter will be provided between hierarchy and properties tab to dynamically adjust the height of the controls. The minimum height of the tree view or list view will be 50 pixels.

▪ You are able to adjust the size of the Object Browser, either horizontally or vertically depending on where it is docked. The size of the Object Browser will be stored per user and maintained between sessions.

▪ To find any particular zone in the hierarchy, enter the text in the search text combo box $\boxed{\text{Search text} \quad \blacktriangledown}$, and click the **Find** 🔍 button.

▪ To refresh the zone hierarchy, click the **Refresh** 🔁 button on the toolbar.

Zone Planning

This section describes the following operations that you can perform with the zones:

▪ Add and delete zones
▪ Add and delete holes
▪ Show and hide hatch patterns
▪ Re-assign existing poly-lines in the AutoCAD drawing to be zones or holes by pre-selecting them before using the add functions.

Description

▪ The Zone and Aisle Planning group will have the following buttons:

Icon	Description	AutoCAD Commands
🖼️	Attach architectural plan	AVT_ARCHPLAN
🟩	Add zone	AVT_ADDZONE
🟦	Add hole	AVT_ADDHOLE

	Delete zone	AVT_DELETEZONE
	Delete hole/boundary	AVT_DELETEBOUNDARY
	Refresh zone hatch patterns	AVT_REFRESHHATCH
	Hide zone hatch patterns	AVT_HIDEHATCH
	Add aisle	AVT_ADDAISLE
	Delete aisle	AVT_DELETEAISLE
	Rename aisle	AVT_RENAMEAISLE

- The buttons are enabled only when a floor plan is opened for editing.
- The buttons are disabled when the active floor plan is opened for viewing only, or the active drawing is not a floor plan.
- The Zone and **Aisle Planning Group** buttons will use the existing ISSC message control mechanism to determine which buttons are visible and enabled for a user group. By default the Store Planner, Store Planning Manager, Applications Administrator and IT Help Desk Agent user roles will have the buttons visible and enabled.
- You can attach and detach any architectural plan by clicking the **Attach Architectural Plan** button on the Zone and Aisle Planning group.
- You are able to add a zone on the floor plan by selecting a zone in the hierarchy and dragging to the floor plan drawing or clicking the **Add Zone** button of the Zone and Aisle Planning group on the MSP Ribbon. The command that will be called for adding a zone is AVT_ADDZONE. If a zone with the same definition as the selected zone in the hierarchy already exists in the floor plan then the new boundary will be linked with the existing zone in the AVTTB_ZONE_BOUNDARY_LINK table.
- You will also be able to define a zone boundary on the floor plan by pre-selecting one or more existing closed polylines. The zone boundary can consist of both straight line and curved segments. If one or more closed polylines are included in an existing selection set when the AVT_ADDZONE command is run these will be automatically assigned to the zone selected in the zone hierarchy. Closed polylines in the selection set that are already assigned to the zone selected in the zone hierarchy will be ignored.
- When defining a zone boundary using an existing selection set, and if the selected boundary is already assigned to another zone (, a different zone than the one selected in the hierarchy), then the following warning is displayed in the Re-assign boundary window. Click Yes to close this window and re-assign the boundary to the zone selected in the zone hierarchy.

Re-assign boundary

The selected boundaries are already assigned to a zone.
Are you sure you want to re-assign them to Grocery?

Yes   No
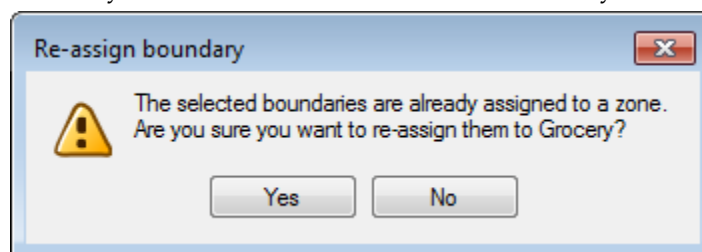
- You will be prompted to enter a name for a particular zone boundary. By default the name will be the zone definition name.
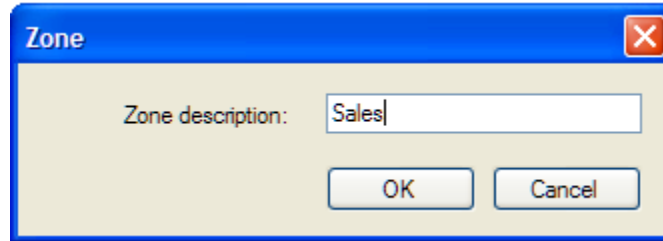
- If zones of the same type overlap, the following error window is displayed. Click **OK**.
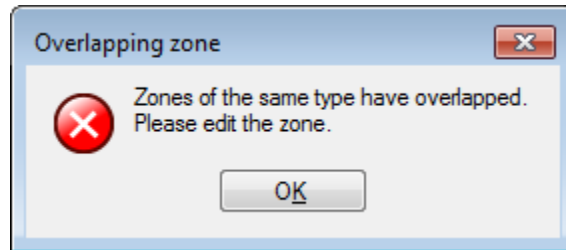
- Click the **Add Hole** button to define zone-hole boundaries. The AutoCAD command for this functionality is AVT_ADDHOLE.
- If one or more closed polylines are included in an existing selection set when the AVT_ADDHOLE command is run these will be automatically assigned as holes in the zone selected in the zone hierarchy. Closed polylines in the selection set that are already assigned as holes in the zone selected in the zone hierarchy will be ignored.
- If the AVT_ADDHOLE command is started without an existing close polyline being selected then the same AutoCAD command line options used by the AVT_ADDZONE (start point, next point, arc, close and so on) will be used to draw a boundary for the hole. The same checks will be made for crossing segments and the number of vertices too.
- A check is made in the floor plan's AutoCAD drawing if the hole boundary is totally encompassed by a parent zone of the same zone definition as the zone selected in the hierarchy.
- If the boundary for a hole is not totally encompassed by the parent zone, the system will display a warning window asking you to edit the hole boundary.
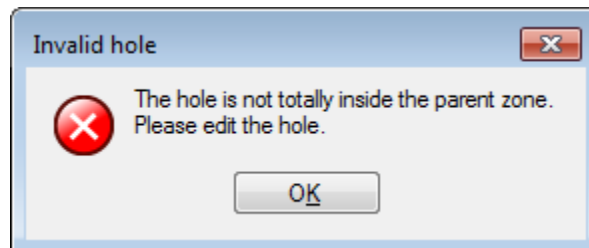
- If the parent zone in the floor plan's AutoCAD drawing is not present in the database when a hole is added, the existing AUTOSYNC system variable will be checked. If the system variable is set to Process (, the value is 2), then the Synchronize process will be executed for zones using the Match the drawing option.

If the AUTOSYNC system variable is set to Warning (i.e. Value is 1), then the following warning window is displayed.
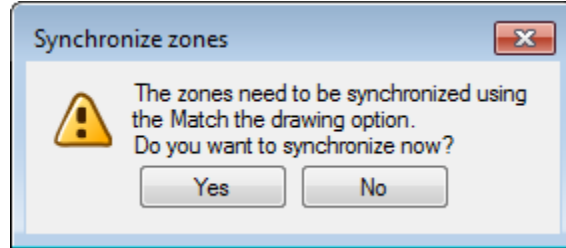
- When a hole is added, the hatch pattern of the parent zone boundary will have a hole cut in it so that the hole is not hatched. If the boundary is an implied hole the boundary will be filled with the hatch pattern associated with the zone definition of the zone using the implied hole, if the option to include hatch patterns is set in the Options window.

- You are able to edit a boundary by adding, removing or moving the vertices using standard AutoCAD functionality. You can also edit the boundary by bending or straightening segments using standard AutoCAD functionality. You select the boundary, the vertices will be highlighted as per standard AutoCAD polyline functionality. You are able to move a zone boundary or a zone-hole boundary by selecting it in the floor plan and dragging it to its new position within the floor plan. The system will make a note of the new position of the boundary by updating the vertices in the database when the standard AutoCAD command is finished. Hatching and annotation will also be updated when a boundary is edited.

- You are able to cut, copy and paste zones within the floor plan or between floor plans.

- You are able to delete all boundaries for a zone from the floor plan by selecting the zone in the hierarchy and clicking the **Delete Zone** button on the Zone and Aisle Planning group on the MSP Ribbon. The AutoCAD command for this will be AVT_DELETEZONE.

- Upon clicking the **Delete Zone** button, a warning window is displayed. Click Yes to close the window and delete all the boundaries for the selected zone in the floor plan.

Delete zone dialog box:

Delete zone

⚠ Are you sure you want to delete the Grocery zone?

[Yes]   [No]
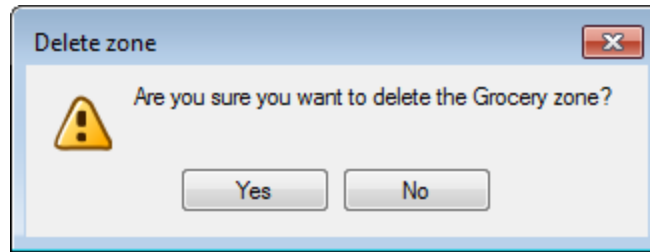
- You are able to delete a hole or zone boundary on the floor plan by selecting the hole or zone boundary on the floor plan and clicking the **Delete Hole/Boundary** button on the Zone and Aisle Planning group on the MSP Ribbon. The AutoCAD command for this will be AVT_DELETEBOUNDARY. You can also use the standard AutoCAD functionality to delete a boundary.

- If any boundary is deleted, any associated annotation, holes or hatches will automatically be deleted too.

    > **Note**: If the hole boundary is shared with a zone, the boundary will not be deleted, but the hole reference in the database will be removed.

- If any boundary is added or edited, any associated annotation, holes or hatches will be automatically updated too.

- Annotation will be placed automatically once you pick a polyline or finish drawing a boundary.

- When a zone is added, deleted, or modified in any way, a background process will check which dependent objects (, fixtures and zone notes) are included within the zone boundary. The process will update their relationships within the database.

- You are able to find and highlight a zone on the floor plan.

- You are able to show hatch patterns within zone boundaries by clicking the **Refresh Zone Hatch Patterns** button or running the AVT_REFRESHHATCH command from the AutoCAD command line. This will add/remove the hatch patterns for the zones in the floor plan based on the zone types ticked in the Zones tab of the Options window. The hatch pattern set in the appropriate zone definition will be used when refreshing the hatch patterns. This will also refresh any existing zone hatch patterns so that they display the current hatch pattern and color associated with the zone definition

- You are able to hide hatch patterns within zone boundaries by clicking the **Hide Zone Hatch Patterns** button or running the AVT_HIDEHATCH command from the AutoCAD command. This will remove the hatch pattern for any zones that are not hatched.

Aisles

- You are able to define an aisle by selecting the **Add Aisle** button and drawing a polyline indicating the flow direction of the aisle from start to end. The AutoCAD command to add an aisle will be AVT_ADDAISLE.

- When adding the aisle on the floor plan, the system will prompt for an identifier for the aisle if the Prompt for name option is ticked for you in the Aisles tab of the Options window. The identifier will be a unique alpha-numeric string if the new AISLE_IDENTIFIER system variable is set to 0 or a unique number if the

system variable is set to 1 or any other value. The Identifier can be a maximum of 64 characters.
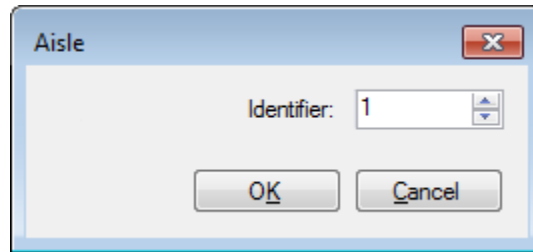
- When the AISLE_IDENTIFIER system variable is set to 0, the Identifier control will be a text box. When the AISLE_IDENTIFIER system variable is set to 1 or any other value, the Identifier control will be a numeric up/down control. The buttons on the numeric up/down control will increment the Identifier by 1.

- If the AISLE_IDENTIFIER system variable is not set to 0 (for example it is set to 1) then when the first aisle is added to the floor plan, the window will show the number 1 as the suggested Identifier. When further aisles are added the maximum Identifier in the floor plan will be checked Identifier and the suggested Identifier will be the next unique number in ascending order.

- If the AISLE_IDENTIFIER system variable is set to 0 then when the first aisle is added to the floor plan, the Aisle window will show A as the suggested Identifier. When further aisles are added, the last Identifier (in ascending order) that contains two or less letters from the English alphabet will be found. The last character of the last Identifier will be changed to be the next ascending English alphabetical character.

- If the last **Identifier** is *Z* then the suggested Identifier will be AA. If the last **Identifier** has two English letters and the last character is *Z* then the first character will be changed to be the next ascending English alphabetical character and the last character will be reset back to *A*.

  For example the sequence of identifier would be as follows:

  – A to Z
  – AA to AZ
  – BA to BZ
  – CA to CZ
  – …
  – YA to YZ
  – ZA to ZZ

- When the AISLE_IDENTIFIER system variable is set to 0 and the last Identifier is ZZ, then the suggested Identifier will append a hyphen and a number appended to the end (so ZZ-1). If the last Identifier already exists with ZZ and a number, then the number will just be incremented in ascending order.

- The **OK** button is disabled when the Identifier is blank or all spaces.

- You are able to insert an aisle into a series of aisles by overriding the suggested Identifier. If you click **OK** on the Aisle window and the Identifier is not unique in the floor plan, then a warning window is displayed:
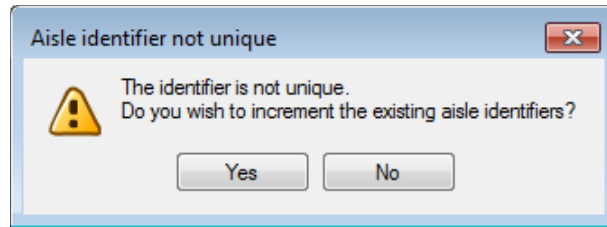
- If you click the Yes button on the warning window, both the warning and the Aisles windows will close and existing identifiers which are greater than or equal to the specified Identifier will be incremented in the floor plan. If the aisle identifier is a letter, it will be incremented following the rules described above.

- If you click No, the warning window closes and the following message is displayed in the Aisle window. An error icon is displayed to the left of the Identifier label. The text in the text box gets selected so that you may edit values. The **OK** button will be grayed out until the Identifier field is edited.
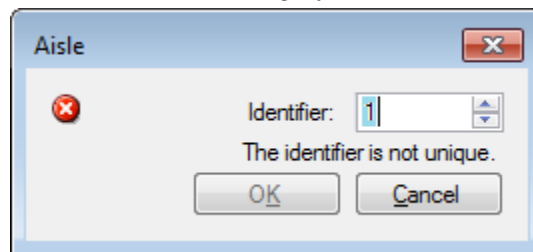
- If you click the **Cancel** or **Close** in the Aisle window, the window closes and exits the AVT_ADDAISLE command without adding an aisle to the floor plan.

- To delete an aisle, click the **Delete Aisle** button. The AutoCAD command to delete an aisle is AVT_DELETEAISLE.

- To rename an aisle, click the Rename aisle button. The AutoCAD command for renaming the aisle is AVT_RENAMEAISLE. You will be prompted to pick an object on the floor plan.

- You are able to move an aisle either as a whole or each vertex separately. You are able to perform this by selecting the whole aisle and dragging that across the floor plan. You will also be able to move a single vertex by selecting the aisle and using the standard AutoCAD Stretch Vertex option, when you hover your mouse pointer over a vertex grip point.

> **Note:** Moving the start vertex automatically moves the label.

- You are able to add or remove vertices. You will need to select an aisle and opt for standard AutoCAD options of either Add vertex or Remove vertex when you hover your mouse pointer over a vertex grip point.

> **Note**: If the aisle has only two vertices, the Remove vertex option will not be displayed.

- You are able to reverse the aisle direction. You will need to select an aisle and select for Reverse aisle option from the context menu. This will just reverse the sequence of the segments in the aisle's polyline. This will also force the aisle's label to move to the new start point.

- Annotation will be updated whenever an aisle is renamed (including incrementing existing aisles), edited or deleted.

Zone tab on the Option window

The Zones tab will be displayed in the Options window when your user group has permission to view the Zones tab in the Object Browser.

Overview of Option Window Chapter

This section describes the updates to the Option Window Overview section of the Zones Overview chapter on the Object Browser.

Zone Tab in the Option Window

This section describes the options that you can configure for zones.

The Zones tab is displayed in the Options window when your user group has permission to view the Zones tab in the Object Browser.
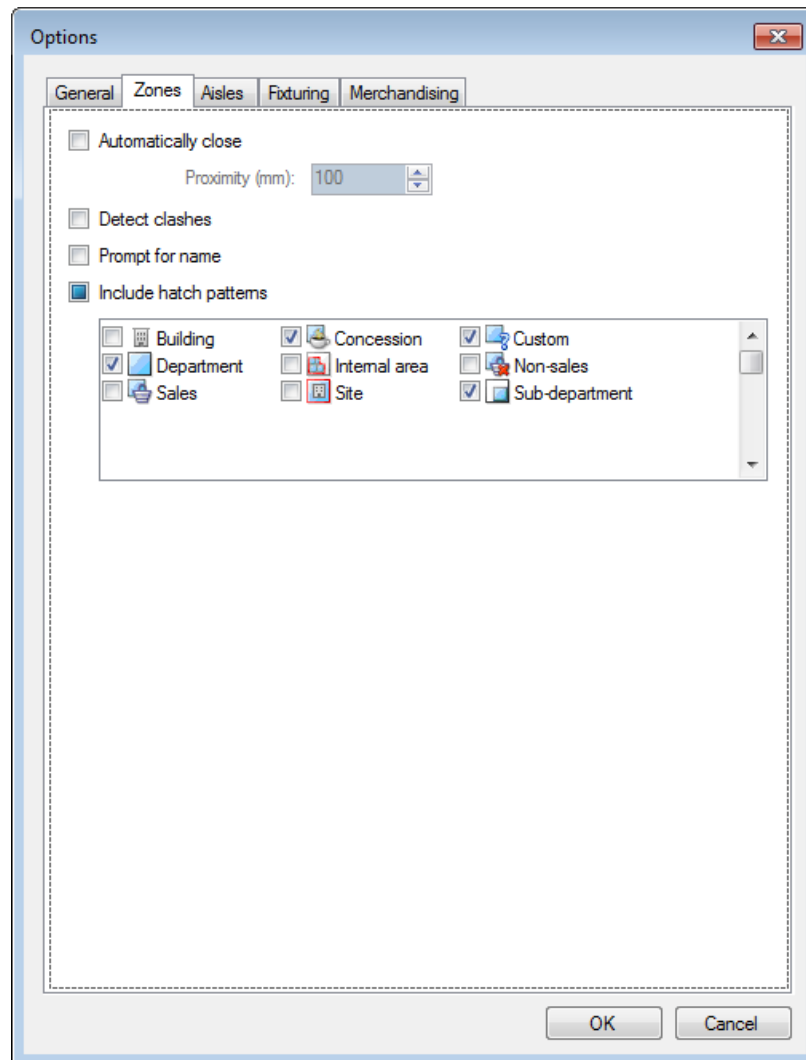
- When you click the Zones tab in the Object Browser, the zones tab in the Options window opens.
- You are able to configure whether the zone will be automatically closed while drawing a boundary point close to the first point, or not, by ticking/un-ticking the Automatically Close check box.

- Check the Automatically Close check box to configure the zone to automatically close while drawing a boundary point close to the first point.
- If you do not check the Automatically Close check box, then zones boundaries will only close when you either use the Close option of the AVT_ADDZONE command or exit the command.
- You are able to configure the proximity distance used between the first and current (last) vertices to automatically close a zone boundary.
- While drawing zone boundaries, if the current vertex comes below or equal to the Proximity value, the last mouse click will snap to the starting point and so the penultimate point and the first point will be joined automatically, and the zone boundary will be closed.
- The Proximity will be set in mm for metric systems and inches for imperial systems.
- The units being used are shown in brackets in the Proximity label. The position of the units in the label may be language specific. The buttons on the numeric up/down control will increment the value by 1.

> **Note:** This option will be enabled only if the Automatically Close check box is checked. The Proximity option will be grayed out if the Automatically Close check box is not checked, but its last value will be displayed.
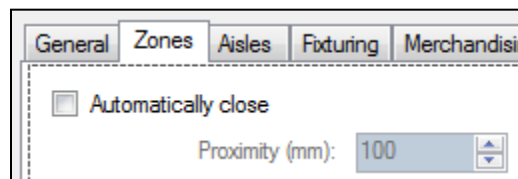
- Check the Detect Clashes check box to configure any clashes automatically detected when drawing a zone boundary.
- When the Detect Clashes check box is not checked, you will not be informed of overlapping zones.
- You are able to configure whether the system will prompt for a name for a zone boundary, or not, by ticking/un-ticking the Prompt For Name check box.
- Check the Prompt For Name check box to configure the system to prompt for a name for a zone boundary.
- When the Prompt For Name check box is not checked, you will not be prompted for a zone name when a zone is added to a floor plan.
- The list view shows the zone type descriptions set up in the database (AVTTB_ZONE_TYPE table). The zone types will be ordered alphabetically.
- Check the Include hatch patterns check box to select all the zone types in the list view.
- Check the Include hatch patterns check box, to configure the hatch pattern to be included when a zone is added.
- Click **OK** to save the zone options. The zone options will be saved in three new user variables. The ZONE_DRAW_OPTION user variable will hold bit-wise values to represent the states of the Automatically close, Detect clashes and Prompt for name checkboxes.
- The ZONE_PROXIMITY user variable will store the Proximity value.

- The ZONE_HATCH_OPTION user variable will store the state of the Include hatch patterns zone type checkboxes.
- The first time a user opens the Options window, the user variables will not exist in the AVTTB_USER_VARIABLE table. So the default values will be taken from the AVTTB_SYSTEM_VARIABLE table. Once saved, the values will be stored in the AVTTB_USER_VARIABLE table and will be used for that user going forward.
- If the ZONE_DRAW_OPTION and ZONE_HATCH_OPTION user variable does not have an associated entry in the AVTTB_SYSTEM_VARIABLE, or the value is invalid, then the checkboxes are checked by default. Similarly if the ZONE_PROXIMITY user variable does not have an associated entry in the AVTTB_SYSTEM_VARIABLE, or the value is invalid, then the Proximity will be assumed to be 100mm for metric systems or 4 inches for imperial systems.

Aisles Tab in the Options Window

This section describes the options to configure for zones.

The Aisles tab will be displayed in the Options window when your group has permission to view the Add aisle button in the MSP ribbon bar.
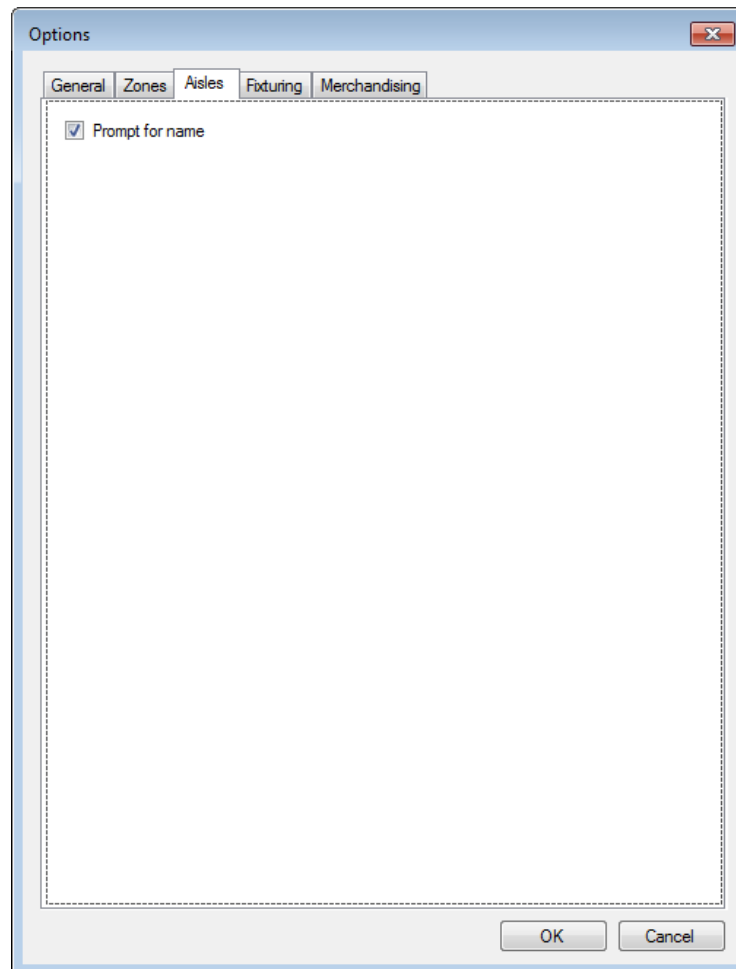
- Check the Prompt For Name check box to configure so that the system prompts for a name for an aisle.

- Click **OK** to save aisle options. The aisle options will be saved in a new user variable called AISLE_DRAW_OPTION that will hold the state of the Prompt For Name check box.
- When you open the Options window for the first time, the user variables will not exist in the AVTTB_USER_VARIABLE table. So the default values will be taken from the AVTTB_SYSTEM_VARIABLE table. Once saved, the values will be stored in the AVTTB_USER_VARIABLE table and will be used going forward.
- If the AISLE_DRAW_OPTION user variable does not have an associated entry in the AVTTB_SYSTEM_VARIABLE, or the value is invalid, then the checkbox is checked by default.

Overview of Fixtures on the Object Browser Chapter

This section describes the updates to the Overview of Fixtures on the Object Browser chapter Overview of Zones on the Object Browser.

Fixture Hierarchy

This section describes the functionality to allow store planners to browse the Fixture Library.

Description

- The following user group roles will have access set-up by default, unless explicitly stated otherwise:
  - Application Administrator
  - IT Help Desk Agent
  - Store Planning Managers
  - Merchandising Manager
  - Store Planner
  - Merchandising Planner
- The Fixturing tab of the Object Browser contains the Fixtures and Gondolas sub-tabs.
- The Planner module displays the fixture hierarchy in the Fixtures tab in the Fixturing tab of the Object Browser.
- The Object Browser is in an AutoCAD pallete that will be docked or floated within the AutoCAD drawing environment where the floor plan is displayed. You cannot close the Object Browser but hide it.
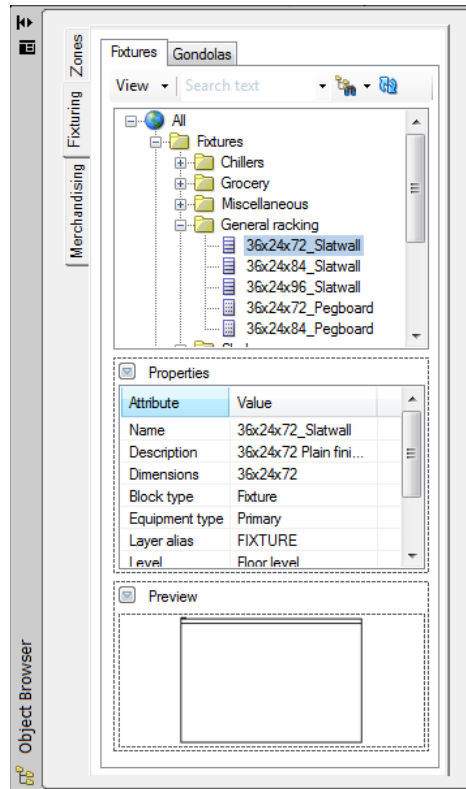
- The fixture hierarchy is displayed in the tree view on the Fixtures tab of the Fixturing tab. The tree view displays the fixture group description (BLG_DESC) or fixture name (BLK_NAME) as appropriate.

- A tooltip displays the fixture group description or fixture name, when you hover your mouse pointer over a node.

- The tooltip will allow you to view the full text when the text is truncated due to the width of the Object Browser.

- Blocks that are not associated with a fixture group will not be shown in the fixture hierarchy.

- The tree view will only display fixtures, fittings, non-retail (or 'Other') objects and composites from the database that are effective for the currently active floor plan.

- Effective items will be determined as ones that have an Effective date less than or equal to the floor plan's Effective date, and an Expiry date greater than the floor plan's Effective date.

- If a floor plan does not have an Effective date set, then the floor plan's Active date will be used.

  If the Floor plan Effective date is not null then Include fixtures where

  Fixture Effective date <= Floor plan Effective date <= Fixture Expiry date

  Otherwise If the Floor plan Active date is not null Include fixtures where

  Fixture Effective date <= Floor plan Active date <= Fixture Expiry date

  Else

  Fixture Effective date <= Application server date <= Fixture Expiry date

- The fixture hierarchy will be refreshed when the user shifts focus between floor plans. Fixtures will be listed based on the newly selected floor plan effective date.

- In case the floor plan effective date is not set, floor plan active date will be used instead.
- If this is also not set then today's application server date will be used instead.
- If the currently selected node is not visible when the hierarchy refreshes then no node will be selected.

▪ The following icons are used to represent items in the fixture hierarchy:

Icon	Description/ Equipment Sub-type	Block Type
	All	Not applicable
	Fixture group	Not applicable
	Pallet	Not applicable
	Slatwall	Not applicable
	Pegboard	Not applicable
	Back panel	Not applicable
	Metal upright	Fixture
	Fitting	Fitting
	Non-retail object	Non-retail object
	Composite	Composite
	Dynamic composite	Not applicable
	Chest/bin	Not applicable
	Drop feeder	Not applicable
	Fashion 4 way	Not applicable
	Table	Not applicable

▪ The tree will be sorted in ascending alphabetical order.

▪ The sort algorithm will be based on your preferred language set in the User window in the Administration module.

▪ The root node is not held explicitly in the database, but will be shown in the fixture hierarchy on the tree view.
- Only fixture groups that have descendants of fixtures, fittings, non-retail objects or composites that are effective will be shown in the tree view. If no effective fixtures, fittings, non-retail objects or composites are descendants at any level of a fixture group, then the fixture group will be hidden.
- This behavior can be configured using the OBJECT_BROWSER_SHOW_ALL_BLOCK_GROUPS user variable from the General tab of the Options window.
- By default it will be set to 0 (zero) meaning only fixture groups which have descendants will be shown in the hierarchy.
- When the OBJECT_BROWSER_SHOW_ALL_BLOCK_GROUPS user variable is set to 1 or any other non-zero value, then all fixture groups will be shown in the hierarchy even if there are no fixtures to be displayed in it.
- All fixture groups will be shown in the Object Browser by default if the system variable is not found.

- The state of the fixture hierarchy for you will be restored when the Object Browser is reopened. This means the selected node in the tree view when the Object Browser is closed will be selected when the Object Browser is next opened by the same user. Similarly the parents of the selected node that are open in the tree view will also be restored when the Object Browser is reopened. This will be remembered between user sessions.

- You are able to find any particular fixture or group in the hierarchy by typing the text in the search text combo box and clicking the **Find in hierarchy** button or clicking the Enter key will activate the find process. This functionality is described in the Planner.

- Click the **Refresh** button to reload the fixture hierarchy with any block definition changes.

   > **Note**: When you click the **Refresh** button, the fixtures that are already present in an open floor plan will not be updated according to the changes made to the fixture definitions.

- On selecting a fixture in the hierarchy, corresponding properties will be displayed in the list view in the Properties section.

- The Properties list view will display the columns returned by the custom query mapped from the custom view type (CSQ_TYPE) and custom view level (CUV_LEVEL) in the existing AVTTB_CUSTOM_VIEW table. This will map to the following custom queries, as appropriate to the type of object highlighted in the hierarchy to be displayed.

Object Type	Custom Query Name
Fixture	PROPERTIES_ FIXTURE
Fitting	PROPERTIES_FITTING
Non-retail	PROPERTIES_NON-RETAIL
Composite	PROPERTIES_COMPOSITE

- The fixture and fitting custom query will be created by renaming the existing CUV_FIXTURE custom query during the database upgrade. Similarly the composite and non-retail custom query will be created by renaming the CUV_BLK custom query during the database upgrade.

- On execution of the custom SQL, the filter clause will consist of the defined filter field and the node selected in the hierarchy.

   > **Note**: The implementer is able to specify which custom SQL should be used for different types in the fixture hierarchy. This will be specified in the AVTTB_CUSTOM_VIEW table. The CUV_TYPE must be 1 when mapping to a fixture custom query.

- Vertical and horizontal scroll bars are available on the tree view and list view if the data cannot all be shown within the visible area.

- You are able to copy the displayed data to the Windows clipboard in the list view.

- A splitter will be provided between the hierarchy and Properties frame to dynamically adjust the height of the control. The minimum height of the tree view or list view will be 50 pixels (the list view can be hidden).

- You are able to adjust the size of the Object Browser, either horizontally or vertically depending on where or if it is docked. The size of the Object Browser will be stored per user and maintained between sessions.
- The Fixtures tab of the Object Browser includes the Preview frame beneath the Properties frame in Planner only. The Preview frame will display the AutoCAD block drawing's thumbnail when a block node is selected in the fixture hierarchy.
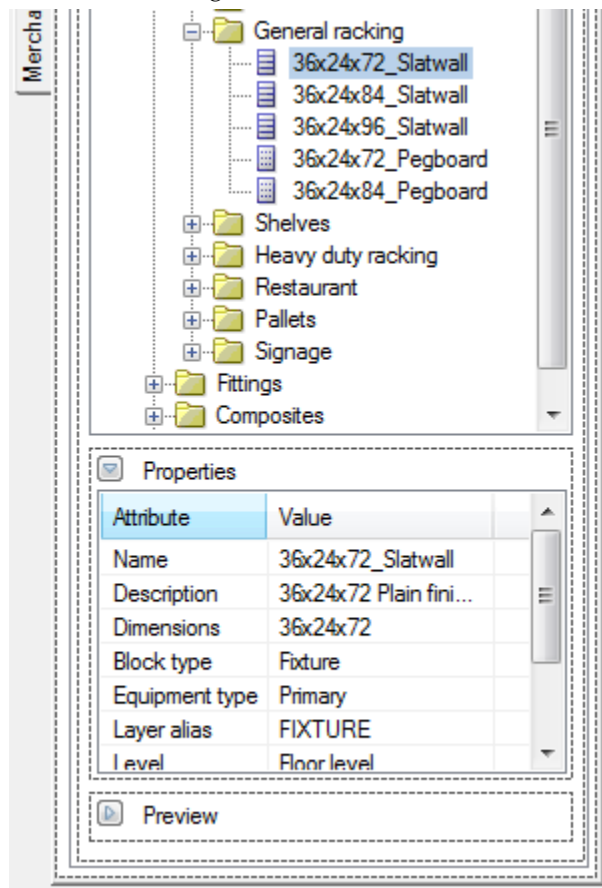
- A splitter is provided between the Preview and Properties frames to dynamically adjust the height of the controls. The minimum height of the Preview will be 50 pixels.

Gondola Hierarchy

- The Planner module will display the gondola hierarchy in Gondolas tab of the Fixturing tab of the Object Browser. The Object Browser will be in an AutoCAD pallete that will be docked or floated within the AutoCAD drawing environment where the floor plan is displayed.
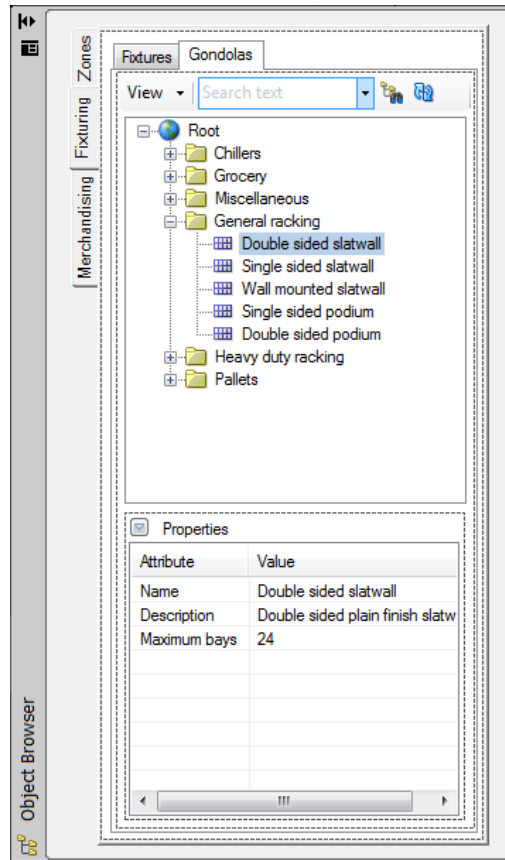
- The gondola hierarchy will be displayed in the tree view on the Gondolas tab of the Fixturing tab. The tree view will display the gondola group name (GNG_NAME) or gondola name (GON_NAME) as appropriate.

- The following icons will be used to represent items in the gondola hierarchy:

Icon	Description
	All
	Gondola group
	Gondola

- Gondolas can be associated with more than one gondola group in the hierarchy.

- Gondolas that are not associated with a gondola group will not be displayed in the gondola hierarchy.

- The tree will be sorted in ascending alphabetical order.

  > **Note**: The sort algorithm will be based on your preferred language set in the User window in the Administration module.

- The root node is not held explicitly in the database, but will be shown in the gondola hierarchy in the tree view.

- The state of the gondola hierarchy for you will be restored when the Object Browser is reopened. This means the selected node in the tree view when the

Object Browser is closed will be selected when the Object Browser is next opened by the same user.

- The parents of the selected node that are open in the tree view will also be restored when the Object Browser is reopened. This will be remembered between user sessions.

- You are able to find any particular gondola or group in the hierarchy by typing the text in the search text combo box `Search text ▾`, and clicking the **Find in hierarchy** button will activate the find process.

- Click the **Refresh** button to reload the gondola hierarchy with any definition changes.

> **Note**: The gondolas that are already present in an open floor plan will not be updated according to the changes made to the gondola definitions when the **Refresh** button is clicked.

- On selecting a gondola in the hierarchy, corresponding properties will be displayed in the list view in the Properties section.

- The Properties list view will display the columns returned by the custom query mapped from the custom view type (CSQ_TYPE) in the existing AVTTB_CUSTOM_VIEW table. The CUV_TYPE must be 2 when mapping to a gondola custom query. This will map to the PROPERTIES_GONDOLA custom query. The custom query will be created by renaming the existing CUV_GONDOLA custom query during the database upgrade.

- On execution of the custom SQL, the filter clause will consist of the defined filter field and the node selected in the hierarchy.

- Vertical and horizontal scroll bars will be available on the tree view and list view if the data cannot all be shown within the visible area.

- You are able to select multiple rows in the list view.

- You are able to copy the displayed data in the list view to the Windows clipboard.

Fixture Placement

This section describes the functionality to allow store planners to place fixturing in the floor plan.

Description

- The Fixturing group on the MSP ribbon bar will have the following buttons:

Icon	Description	AutoCAD Commands
	Add fixture	AVT_ADDFIXTURE
	Add gondola	AVT_ADDGONDOLA
	Delete fixture	AVT_DELETEFIXTURE
	Toggle group on Toggle group off	AVT_GROUP
	Move fixtures	AVT_MOVE

	Slide fixtures	AVT_SLIDE
	Rotate and offset fixtures	AVT_OFFSET
	Match rotation	AVT_MATCH_ROTATION
	Cut fixtures	AVT_CUT
	Copy fixtures	AVT_COPY
	Paste fixtures	AVT_PASTE
	Rotate fixtures	AVT_ROTATE
	Rotate fixtures 90° clockwise	AVT_ROTATE_90
	Rotate fixture 90° anti-clockwise	AVT_ROTATE_270
	Rotate fixture 180°	AVT_ROTATE_180
	Mirror fixtures	AVT_MIRROR
	Find mirrored blocks	AVT_FINDMIRRORBLKS
	Fixture swap	AVT_FIXTURESWAP
	Fixture attributes	AVT_FIXTURE_ATTRIBUTE
	Restructure drawing	AVT_RESTRUCTUREDRAWING
	Validate fixtures	AVT_VALIDATE FIXTURES

- Drag the selected fixturing block from the fixture hierarchy to place the fixturing into the floor plan.
- Each fixture placed into a floor plan is known as a fixture/block instance.
- During the drag operation the new block's drawing will be read from the floor plan's AutoCAD drawing block directory if it is available. If the block drawing is not currently in the floor plan's drawing block directory it will be loaded into the block directory from the MSP file server.
- You can drag a fixture/block from the Object Browser if the active drawing is not a floor plan or the floor plan is opened as read only. The standard Windows Unavailable cursor will be shown if a drag is attempted in this situation. The add operation will exit if you releases the mouse button (drops the fixture/block) while the Unavailable cursor is shown.
- You are able to place fixturing into the floor plan by highlighting a block in the fixture hierarchy and clicking the **Add Fixture** button on the MSP ribbon bar or typing the command AVT_ADDFIXTURE in to the AutoCAD command line.

Mode Selection
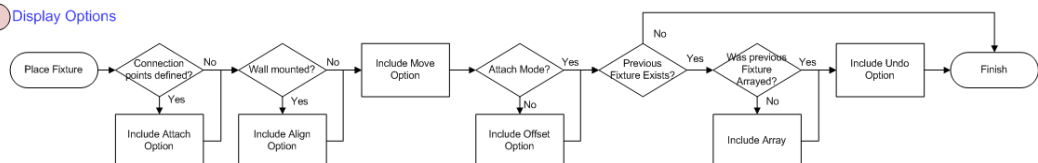
- When fixture placement is started (either by dragging using the Add fixture button, or by running the AVT_ADDFIXTURE command), the default placement

mode will be set based on the Default placement mode value set in the Fixturing tab of the Options window. The mode will be Move, Attach or Align.

- The Attach mode will only be used by default if the block definition of the fixture selected in the fixture hierarchy has connection points defined (where BLC_TYPE = 2, so it is not a reference point) and they are not connection lines or arrays (that is where BLC_XGAP, BLC_XMAX, BLC_YGAP, BLC_YMAX, BLC_ZGAP or BLC_ZMAX are not set to 0). If there are no connection points and the user's default placement mode is Attach then fixture placement will default to Move mode instead.

- The Align mode will only be used by default if the block definition of the fixture is marked as wall mounted (BLK_MOUNTING bit 2 is set). If the fixture definition is not set as wall mounted and the user's default placement mode is Align then fixture placement will default to Move mode instead.

- When fixture placement is started, a prompt will be displayed on the AutoCAD command line saying "Pick a point or [{OPTIONS}]:" Where {OPTIONS} will be replaced by user options (separated by a forward slash) based on the current mode and the block definition of the selected fixture.

- The Attach option will be included if the block definition of the fixture selected in the fixture hierarchy has connection points defined as detailed in point 2 above.

- The ALign option will be included if the block definition of the fixture selected in the fixture hierarchy is defined as wall mounted as detailed in point 3 above.

- The Move option will be include when placing any new fixture.

- The current placement mode will not be displayed as an option on the prompt, for example if the current placement mode is Align then the prompt will display "Pick a point or [Attach/Move]:"

  The Offset option will be included when placing a new fixture if the placement mode is not set to Attach.

- You will be able to select an option by typing the appropriate option or using the shortcut key followed by <Enter>. Note that the shortcut keys will be language specific based on the user's preferred language as set in the Administration module.

- After the placement mode has been changed then the "Pick a point or [{OPTIONS}]:" prompt will be displayed again on the AutoCAD command line.

  You will be able to place the new fixture by picking a point on the active floor plan. The point will be set by releasing the mouse button to drop the fixture if it was being dragged. The point will be set by clicking on the floor plan drawing or typing a co-ordinate. If a user co-ordinate system (UCS) is being used then the user will enter points relative to the UCS and Planner also will display them relative to the UCS. The database will store all data as world co-ordinates.

- Both drag and drop and pick a point will interact with standard AutoCAD settings such as snap, object snap, ortho and so on when as the cursor moves (this will be Move mode). In addition Attach mode will interact with connection points as the cursor moves and Align mode will interact with object edges. Attach and Align modes are described below.

- After the new fixture is placed "Pick a point or [{OPTIONS}]:" prompt will be displayed again on the AutoCAD command line.

- The ARray option will be included after placing a fixture. This option will operate on the last placed/previous fixture. The ARray option will not be available if the last placed fixture has already been arrayed.

- The Undo option will be included after placing a fixture. This option will remove the last placed/previous fixture. After the Undo option has been used the "Pick a point or [{OPTIONS}]:" prompt will be displayed again on the AutoCAD command line.

  If the Undo option was used to remove the first placed fixture then the Undo and ARray options will not be available on the "Pick a point or [{OPTIONS}]:" prompt.

Attach Mode
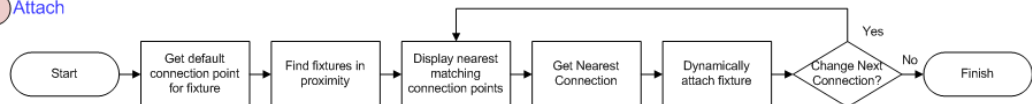
When the placement mode is set to Attach then the default connection point will be identified (BLC_DEFAULT is not 0) excluding any connection arrays or lines (arrays or lines are where BLC_XGAP, BLC_XMAX, BLC_YGAP, BLC_YMAX, BLC_ZGAP or BLC_ZMAX are not set to 0). If no default connection is set then the first valid connection point defined for the block will be used.

The center of the base of a three-dimensional triangle will be displayed at the default connection point's position on the cursor's fixture preview. The cursor will hold the fixture preview by the connection point, as shown by the black spot of the diagram below.
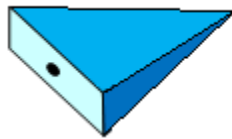
- The triangle will be rotated to point in the direction and angle of the connection point.
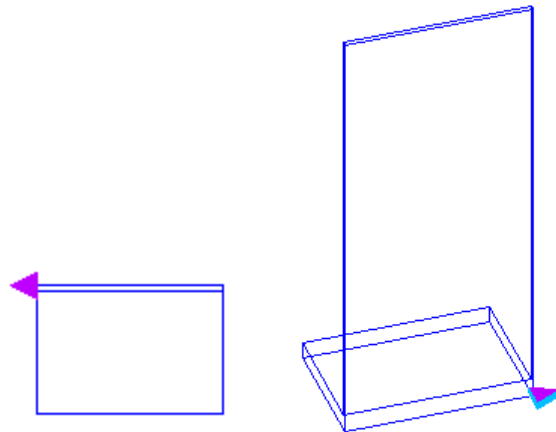
> **Note:** The connection points may not be on the extents of the fixtures.

- The length of the base of the connection triangle will be based on the value of the existing POINTER_SIZE user variable. This value will represent the base length of the triangle.

Base length
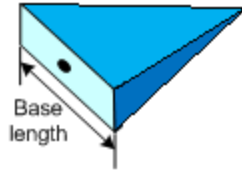
The value is in the default units for the system (that is inches for imperial and mm for metric). The size of the triangle will be scaled equally based on the base size, so that the triangles aspect ratio is maintained.

▪ The color of the connection triangle will be based on the following new user variables:

  – NEUTRAL_TOP_COLOUR_CNX
  – NEUTRAL_BOTTOM_COLOUR_CNX
  – NEUTRAL_LEFT_COLOUR_CNX
  – NEUTRAL_RIGHT_COLOUR_CNX
  – NEUTRAL_BACK_COLOUR_CNX
  – MALE_TOP_COLOUR_CNX
  – MALE_BOTTOM_COLOUR_CNX
  – MALE_LEFT_COLOUR_CNX
  – MALE_RIGHT_COLOUR_CNX
  – MALE_BACK_COLOUR_CNX
  – FEMALE_TOP_COLOUR_CNX
  – FEMALE_BOTTOM_COLOUR_CNX
  – FEMALE_LEFT_COLOUR_CNX
  – FEMALE_RIGHT_COLOUR_CNX
  – FEMALE_BACK_COLOUR_CNX

▪ You will be able to set the value of the connection pointer user variables using the Fixturing tab of the Options window.

▪ The AutoCAD command line prompt will have the option Next connection appended to the list of options when in attach mode, for example "Pick a point or [ALign/Move/Next connection]:". The user will be able to move to the next valid connection point on the new block by typing the option and clicking Enter. The order of the connections will be sorted starting from the default connection and then by x-axis, y-axis and finally z-axis.

Fixtures, fittings, composites and non-retail blocks that are crossing the Connection proximity distance from the cursor will display as three-dimensional triangles any connection points that are compatible with the new block's active connection point. The Connection proximity will be set as the number of pixels in the Fixturing tab of the Options window.

▪ The compatible connections shown will be able to be filtered down when the Gender, Size and Shape options on the Fixturing tab of the Options dialog are turned ON.

  – The Gender option will ensure that male connections are only compatible with female connections, and the other way around. Note that Neutral gender connections can connect to any other gender of connection point. The following table indicates with a cross where two genders can connect.

	Neutral	Male	Female
Netural	X	X	X
Male	X		X
Female	X	X	

- – The Size option will ensure that the new block's connection is only compatible with connections that have an overlapping size range set in Fixture Studio. If the Match option is check in Fixture Studio for the new block's size then the Size option will ensure that only connections with the same size range are compatible.
- – The Shape option will ensure that only connections with the same shape, defined in Fixture Studio, are compatible.
- ▪ As you move the cursor in attach mode, the cursor's preview fixture will snap to the nearest compatible connection point that is within the standard AutoCAD aperture/object snap target box. For example, the cursor's preview fixture is shown on the right in the before diagram approaching an existing fixture. The preview fixture has snapped to the connection point on the existing fixture in the '*After*' diagram. Note that in this example male connections are colored gray and female connections are purple.
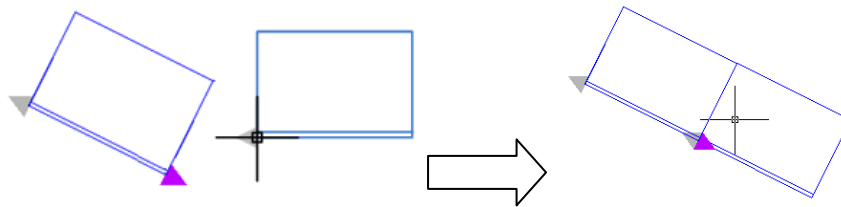
- ▪ When the cursor's preview fixture is snapped to a connection point, it will remain snapped to the connection point until another connection point is nearer to the cursor point, or the connection point is no longer within the standard AutoCAD aperture/object snap target box. If there are no connection points with the AutoCAD aperture/object snap target box, then the fixture will be shown back at the cursor point in its default orientation.
- ▪ When the cursor's preview fixture moves away from a connection point, the fixture's rotation will return to 0.
- ▪ When a connection point is found on a block within the Connection proximity distance, standard AutoCAD osnap points will be ignored. If no connection point is found then standard AutoCAD osnap points will be used if OSNAP is turned on.

Align Mode

⑥ Align
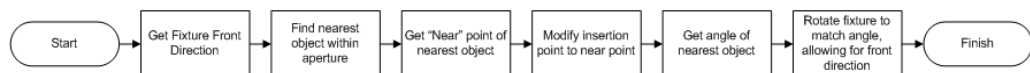
- ▪ When the placement mode is set to Align, as the user moves the cursor, its preview fixture will snap the fixture's insertion point to the nearest edge that is within the standard AutoCAD aperture/object snap target box. The point that the fixture snaps to will be the nearest perpendicular intersection point from the edge to the cursor point. For example:
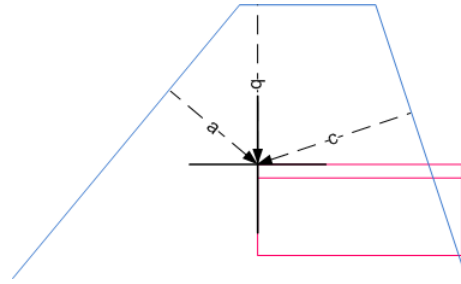
- The arrows a, b and c go from the perpendicular intersection point of three edges found within the standard AutoCAD object snap target box. As the distance of 'a' is the smallest then the cursor's preview fixture will snap to this point as shown below.
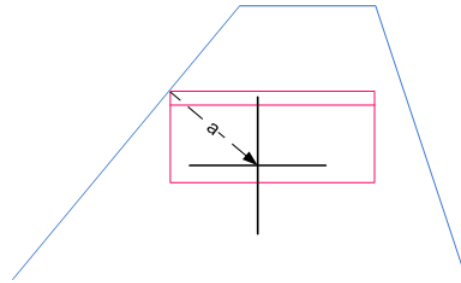
- The cursor's preview fixture will be rotated when it snaps to an edge, so that the front is aligned to match the angle of the edge.
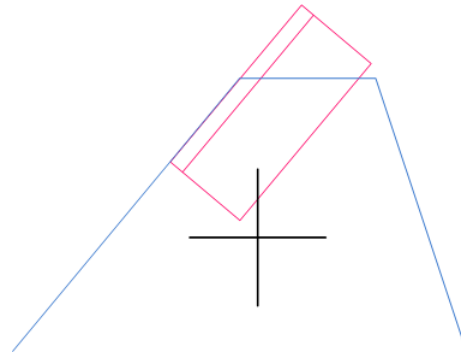
- The system will calculate the angle from the near point to the cursor point, and subtract the fixture's front direction. For example, when the cursor is below a horizontal line, the angle from the near point to the cursor will be 270 degrees, and the front direction of the fixture is 90 degrees in this example.

Front
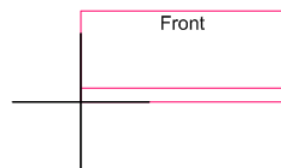
- The final rotation for the fixture will be 180 degrees (since 270-90 = 180).
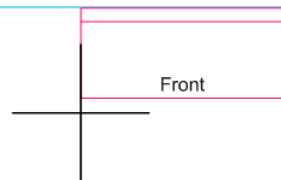
Front

- If the cursor's position is at a point where the nearest line, and therefore the angle, is indeterminate, for example the curser is equidistant between two lines, then the fixture's rotation will be unchanged (that is it stays at the last rotation that was applied).

- Moving the mouse towards the desired line will then set the angle. OSNAPS will be ignored when determining the cursor position.

- The position that the cursor's preview fixture snaps to will include the offset value, if one is set. For example if an offset value has been set as shown below when the cursor's preview fixture snaps and rotates the offset value will be applied.
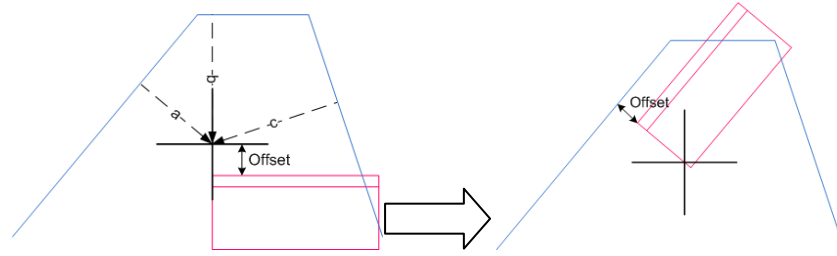
- When the cursor's preview fixture is snapped to an edge, it will remain snapped to the edge until another perpendicular intersection point is nearer to the cursor point, or the edge is no longer within the standard AutoCAD aperture/object snap target box. If there are no edges within the AutoCAD object snap target box, then the fixture will be shown back at the cursor point.

- Note that when the cursor's preview fixture is shown back at the cursor point, the fixture rotation will return to 0 until it aligns to another edge.

- When a nearest edge is found standard AutoCAD osnap points will be ignored. If no nearest edge is found then standard AutoCAD osnap points will be used if OSNAP is turned on.

Offset option
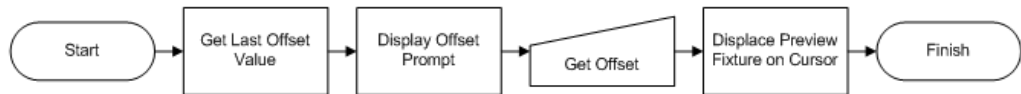
- When the Offset option is selected from the "Pick a point or [{OPTIONS}]:" prompt, a prompt saying "Specify start point [Justification]:" will be shown on the AutoCAD command prompt. The user will be able to specify the start point by clicking the mouse on a point in the AutoCAD drawing.

- If the user selects the Justification option then the modal Justification window will be displayed.
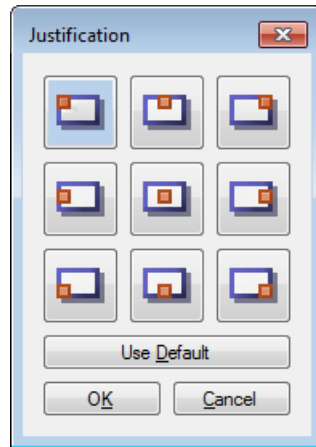
- A tooltip will be available for each justification button on the Justification dialog. The tooltips text will say Back left, Back middle, Back right, Center left and so on.
- The insertion point position of the fixture set in Fixture Studio will be highlighted by default. Note that as the offset distance will be remembered during the user session, if the previous offset distance equates to one of the justification points then this will be highlighted when the justification dialog opens.
- You will be able to press the justification buttons to highlight the desired offset. Only one button will be highlighted at a time.
- Click the Use Default button to reset the justification to the insertion point position of the fixture.
- Click OK on the Justification window, to close the window, and set the offset distance automatically based on the extents of the fixture and the highlighted justification button. This will allow you to offset the fixture's insertion point relative to the picked point and the position indicated by the red square.
- When the Cancel button or the Close button on the titlebar is pressed the Justification dialog will close and the "Specify start point [Justification]:" prompt will be shown again.
- If the user picks a start point for the offset, a prompt saying "Specify offset distance <{VALUE}>:" will be shown on the AutoCAD command prompt. {VALUE} will be replaced by the user's last offset distance (this will be the same distance for either fixture placement or gondola placement). The offset distance will be shown in the format x,y, where x is the distance on the x-axis and y is the distance on the y-axis. The distances will be in the current drawing units and relative to the current UCS, for example 100,250.
- The cursor's preview fixture will be hidden whilst setting the offset distance, that is the plain cross hair cursor will be displayed.
- You will be able to keep the previous offset distance by pressing Enter.
- When you move the mouse a temporary 'elastic' line will be shown from the start point on the AutoCAD drawing.
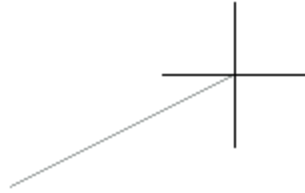
- The user will be able to set the offset distance by clicking the mouse on a point in the AutoCAD drawing or by typing the x and y distances separated by the appropriate list separator for the user's language and pressing the Enter key.

> **Note:** The cursor will interact with the state of the standard AutoCAD ORTHO setting whilst setting the offset distance. The user will be able to toggle ORTHO on and off whilst the offset distance is being set.

- When the offset distance has been set, then the cursor's preview fixture will be shown with the block's insertion point positioned from the cursor point by the offset distance.
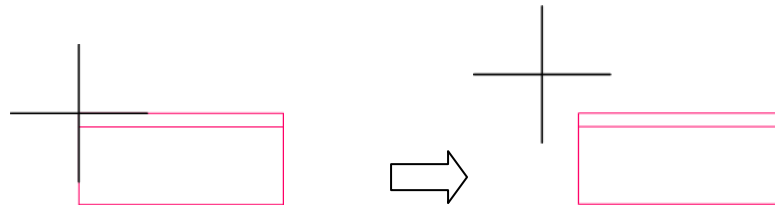
- When the offset distance has been set the "Pick a point or [{OPTIONS}]:" prompt will be shown again.

Array option
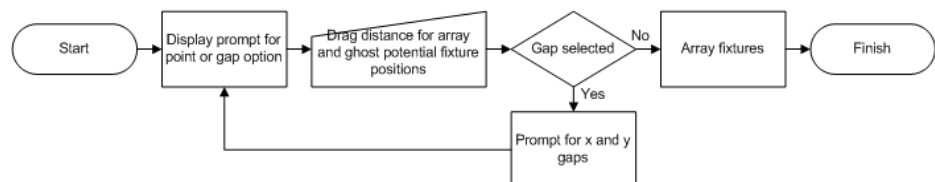
- The cursor's preview fixture will be hidden whilst using the Array option, that is the plain cross hair cursor will be displayed.
- When the Array option is selected from the "Pick a point or [{OPTIONS}]:" prompt, a prompt saying "Specify X, Y gaps <{VALUE}>:" will be shown on the AutoCAD command prompt. {VALUE} will be replaced by the user's last gap values. The gap values will be shown in the format x, y, where x is the gap along the X axis and y us the gap in the Y axis, for example 10,20. The gaps will be shown in the current drawing units.
- You will be able to keep the previous array gaps by clicking Enter without typing in any values.
- If the user types a value, without including a comma, and presses Enter (for example 10), then the value will be used for both the X and the Y gaps. If the user includes a comma (for example 10, 20) then the first number will be used for the X gap and the second for the Y gap.
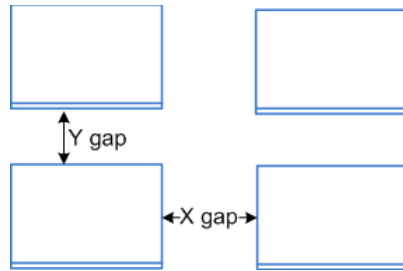
- Once the gaps have been set a prompt saying "Specify array distance <{VALUE}>:" will be shown on the AutoCAD command line. {VALUE} will be replaced by the user's last array distance. The array distance will be shown in the format x,y, where x is the distance on the x-axis and y is the distance on the y-axis. The distances will be in the current drawing units, for example 200,100.
- The Array option will affect the last fixture placed. The position of the placed fixture will be used as the start point for the array.
- When the user moves the mouse a temporary 'elastic' boundary box will be shown from the start point on the AutoCAD drawing.
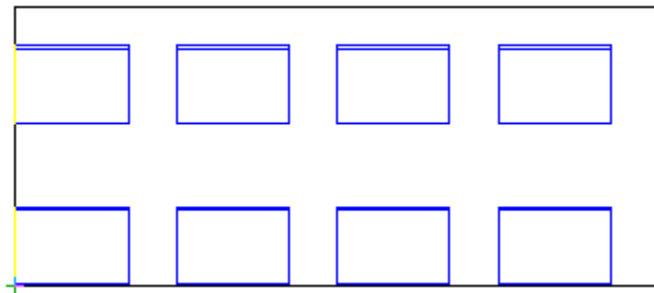
- A preview of the arrayed fixtures will be shown within the boundary using the gap values previously set. The number of columns and rows of fixtures shown will be determined by the X and Y dimensions of the boundary box given the gap values.
- The array will always have at least one row and column. For example if the X dimension of the boundary is less than the X dimension of the placed fixture, fixtures can still be arrayed along the Y axis as long as this is greater than the Y dimension of the placed fixture plus the Y gap.
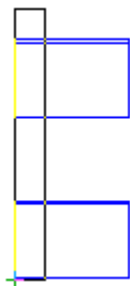
- Similarly if the Y dimension of the boundary is less than the Y dimension of the placed fixture, fixtures can still be arrayed along the X axis as long as this is greater than the X dimension of the placed fixture plus the X gap.
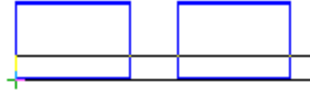
- The user will be able to set the array distance by clicking the mouse on a point in the AutoCAD drawing or by typing the x and y distances and pressing the Enter key.

> **Note**: The cursor will interact with the state of the standard AutoCAD ORTHO setting whilst setting the array distance. The user will be able to toggle ORTHO on and off whilst the offset distance is being set.

- When the array distance has been set then the arrayed fixtures will be added to floor plan.
- When the arrayed fixtures have been added, then the cursor's preview fixture will be shown ready for the next fixture.
- When the arrayed fixtures have been added the "Pick a point or [{OPTIONS}]:" prompt will be shown again

Place fixture

- The user will be able to abort fixture placement using the <Esc> key at the "Pick a point or [{OPTIONS}]:" prompt. The <Enter> key or the <Spacebar> key will also exit the command when no string has been entered at the command prompt. Similarly the user will be able to abort fixture placement if the fixture is dropped outside the active floor plan.
- When a valid point has been picked, the new block will be placed at the correct elevation (Z position). The elevation will be based on the level set in the block definition of the new fixture unless it has been attached to a connection point. The elevation associated with a level is based on the floor that a floor plan is associated with (FLL_ELEVATION in the existing AVTTB_FLOOR_LEVELTYPE_LINK table). If a level is not found for a floor then the default elevation will be used (LVL_DEFAULT_ELEVATION in the existing AVTTB_LEVELTYPE table).
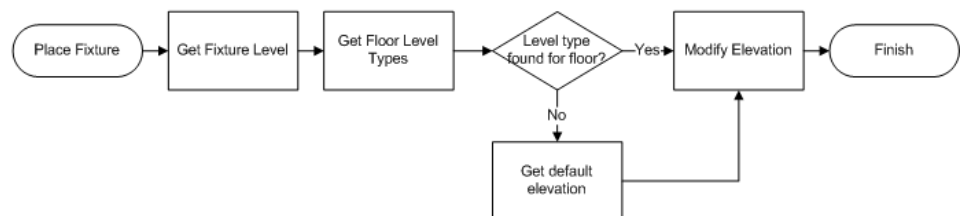
- When a block definition has a level set to Undefined then the elevation will be set based on the Z position of the picked point.
- When a fixture is attached via a connection point then the attached fixtures will be members of the same fixture group. If the existing fixture was already part of a fixture group (because it was attached to an existing group or placed as a gondola) then the attached fixture will be added to the existing fixture group. The AutoCAD group name will use the prefix AVT-GON.

- Arrayed fixtures will be members of the same fixture group. If the original placed fixture was already part of a fixture group (because it was attached to an existing group) then the arrayed fixtures will be added to the exiting fixture group. Fixture groups are identified by being part of an AutoCAD group and by having a unique group identifier in the database (FIX_GROUP). The AutoCAD group name will use the prefix AVT-GON.

- Fixture groups are created so that all the blocks in the group are of the same AutoCAD group. This ensures that all the blocks in a fixture group can be selected together when using the standard AutoCAD selection methods. Additionally fixture groups have a unique group identifier (FIX_GROUP) in the database so that they can be selected as a group in ISSC.

- When the new block is placed in free space, that is it is not aligned to an edge nor attached to a connection point, then a prompt saying "Specify rotation angle or [Match rotation] <{ANGLE}>:" will be displayed on the AutoCAD command line. {ANGLE} will be replaced by the user's last rotation angle, for example 45. If the user has not used the command before then {ANGLE} will be replaced with 0.
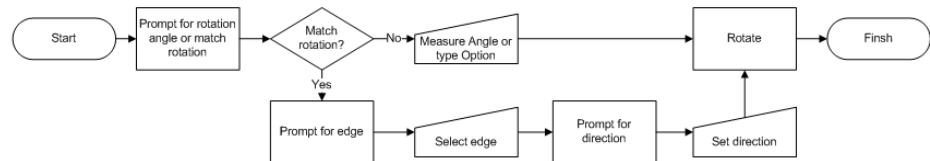
- The position of the new block's insertion point will be used as the base point for the rotation.

- The user will be able to use the previous rotation angle by pressing Enter without moving the mouse or typing in any values.

- When the user moves the mouse a temporary 'elastic' line will be shown from the base point on the AutoCAD drawing.
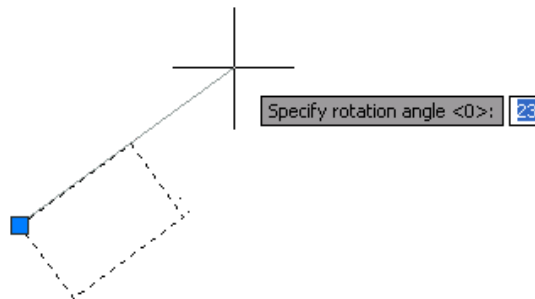
- The user will be able to set the rotation angle by clicking the mouse on a point in the AutoCAD drawing or by typing a value and pressing the Enter key.

  Note : The cursor will interact with the state of the standard AutoCAD ORTHO setting whilst setting the rotation angle. The user will be able to toggle ORTHO on and off whilst the offset distance is being set

- The user will be able to match the rotation of another object by typing the **Match rotation** option and pressing the Enter key.

- When the **Match rotation** option is selected then a prompt saying "Pick an edge to match to:" will be shown on the AutoCAD command line.

- When the user picks a point in the AutoCAD drawing a check will be made for the nearest edge that is within the standard AutoCAD aperture/object snap target box. If no edge is found then the command will abort the Match rotation option and the "Specify rotation angle or [Match rotation] <{ANGLE}>:" prompt will be shown again.

- When an edge is found by the Match rotation option then a prompt saying "Select direction for edge" will be shown on the AutoCAD command line.

- The user will pick a point to indicate the direction that the edge's angle will be measured along. The direction will be orthogonal to the reference edge. This will also clarify the edge being used if a corner is picked as the reference edge.

- Once a direction has been set then the placed fixture rotation angle will be set to match the angle of the selected edge.

- When the rotation angle has been set, then the cursor's preview fixture will be shown ready for placing the next instance of the fixture.

- When the rotation angle has been set the "Pick a point or [{OPTIONS}]:" prompt will be shown again.

- Composite blocks, where their BLK_EXPLODE <> 0, will be exploded and each part within the AutoCAD block will be treated as a separate block.

7 Explode
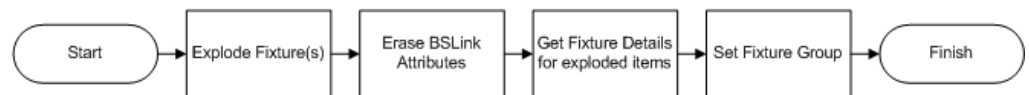
- If any of the blocks within the composite have a legacy BSLink attribute then this will be erased after the composite block is exploded.

- The parts of the composite will be grouped, so that when one is selected, the whole group is selected (assuming that grouping is turned on). They will be marked as grouped in the drawing sharing an AutoCAD group and marked in the database to have the same unique value in the FIX_GROUP field. The AutoCAD group name will use the prefix AVT-GON.

1 Make Layer
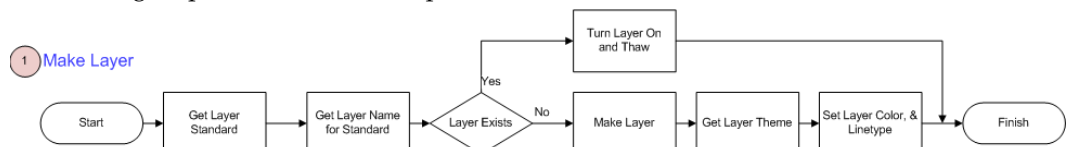
- After composite blocks have been exploded (if necessary) the layer alias defined for the block will be read from its block definition in the MSP database. The current layer standard will be read from the existing LAYER_STANDARD system variable.

- If no layer name can be found linked to the layer alias for the current layer standard, then a new layer name will be created using the layer alias as its name. A warning message will be written to the AutoCAD command window saying "Layer {LAYER} created", where {LAYER} will be the layer alias name used for the new layer.

- If an AutoCAD layer exists in the active floor plan drawing with a name that matches the layer name linked to the layer alias for the current layer standard in the database then the system will ensure that it is turned on and thawed.

- If the required AutoCAD layer does not exist then a layer will be created in the AutoCAD drawing using the properties (color, line type and so on) defined for the active layer theme. The layer theme will be read from the LAYER_THEME user variable. The user variable value will be the layer theme's identifier (LAT_ID) field. If the value is invalid then the value set for the LAYER_THEME system variable will be used by default. If the LAYER_THEME system variable value is invalid then the lowest layer theme identifier in the database will be assumed.

- If there is no link between a layer alias and the active layer theme when a layer is being created, then the new layer will be added to the layer theme using AutoCAD's default values for the layer color, lintype and so on. A warning message will be written to the AutoCAD command window saying "{LAYER} added to layer theme", where {LAYER} will be the layer name.

- The new block and blocks from composite will be placed on the layer associated with the block definition and the layer standard.

- After the block layer has been set the user will be able to place another instance of the same block by following the same flow as before. The user will be able to end fixture placement by using the <Esc> key at the "Pick a point or [{OPTIONS}]:" prompt. The <Enter> key or the <Spacebar> key will also exit the command when no string has been entered at the command prompt.

- When blocks that have non-constant/variable AutoCAD attributes are placed, they will not prompt for a value. All non-constant/variable AutoCAD attributes will be stored in the AVTTB_FIXTURE_ATTRIBUTE table for the relevant block in the floor plan if the new system variable STORE_FIXTURE_ATTRIBUTES is set to a value other than 0 and the block is not set to Exclude attributes in the Fixture Studio module. These values will be updated if the system variable is enabled when the user modifies them using the standard AutoCAD functionality. By default AutoCAD attribute values will not be stored in the database.

- The text of an AutoCAD attribute will be rotated about its centre to ensure that it is readable if the user has the Keep attributes upright option ON in the Fixturing tab of the Options window When the text rotation is greater than 90o and less than or equal to 270o then the text will be rotated by 180o + text rotation, as shown below.
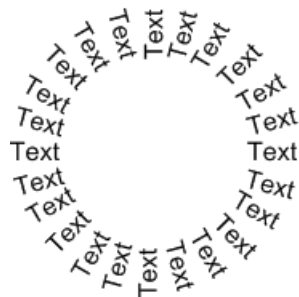
- When a new block is added then the department zone in which the centre of the block's extents (excluding any AutoCAD attribute text) is within will be stored in the database for reporting purposes. If the centre of the fixture is on the boundary of more than one department then the block will be assigned to the department that was added to the floor plan first (that is the department with the lowest zone identifier (ZON_ID)).

Gondola Placement

This section describes the functionality to allow store planners to place gondolas in the floor plan.

- Drag the selected gondola into the floor plan, to place a gondola into the floor plan. Only the active floor plan will be a valid drop position.

- After the drag is complete, the new gondola's starting point will be deemed to be the last position of the drag cursor during the operation. The elevation of the starting point will not be used when the individual objects are placed in the gondola. The elevation of the individual objects will be determined by the level set for them in the Fixture Studio module.

- You are able to place gondolas into the floor plan by highlighting a gondola in the gondola hierarchy and clicking the **Add Gondola** 🔲 button on the MSP ribbon bar, or typing the command AVT_ADDGONDOLA into the AutoCAD command line.

- It will not be possible to drag a gondola from the Object Browser if the active drawing is not a floor plan, or the floor plan is opened as read only. The standard Windows Unavailable cursor will be shown if a drag is attempted in this situation.

Add Gondola Window

- When the gondola placement process starts, the Add Gondola window will be shown as a modal window. The last size and position of the window for you will be restored when it is opened.
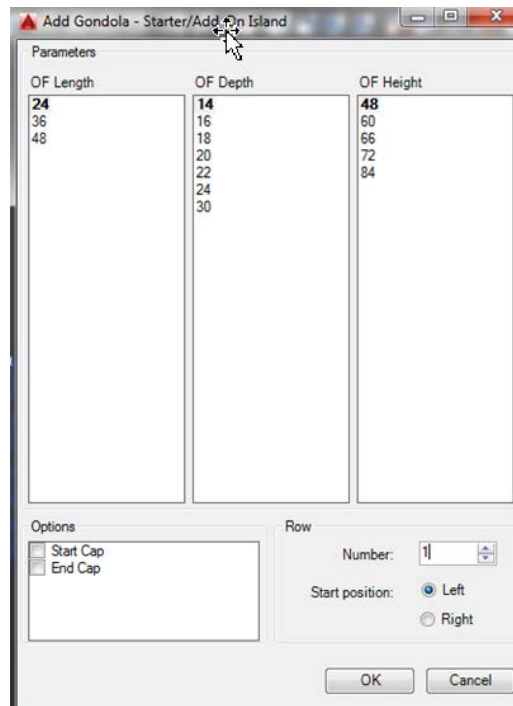
- You can adjust the size, and minimize/maximize the window. The width and height of the Parameters panel will adjust as the size of the window is changed, so that its relative size is maintained. Similarly the width of the Options panel will adjust as the size of the window is changed so that its relative width is

maintained. The minimum height and width of the window will be 200 x 300 pixels.

- The Parameters panel will show a separate list box for each Gondola Size associated with the selected gondola definition. The order of the Gondola sizes will be in the Name order (GND_ORDER) of the gondola definition. There can be between 0 and 10 Gondola Sizes associated to a gondola definition.

- The Label set for the Gondola Size in the selected gondola definition will be shown above each list box in the Parameters panel. The label will be displayed in your preferred language if a translation is available in the database.

- The Dimension label (GND_LABEL) defined for each Gondola Size in the gondola definition will be shown as the list items in the Parameters panel's list boxes. The items will be ordered as defined by the Gondola Size.

- The width of the Parameters list boxes will be automatically adjusted so that they use the available width of the Parameters panel equally. If no Gondola Sizes are associated with the gondola definition then the Parameters panel will be hidden.

- The Options panel will show a check box list view of the optional Parts defined in the selected gondola definition. The list will be a distinct list of part option names (GNP_OPTION_NAME) for the gondola definition. The optional Parts will be ordered in the order they were added to the gondola definition.

- The option names will be translated to the user's language (as set in the MSM Administration module) via the existing AVTTB_DICTIONARY and AVTTB_TRANSLATION mechanism.

> **Note**: If an option's text is not matched in the AVTTB_DICTIONARY table, or the translated text for the appropriate language cannot be found in the AVTTB_TRANSLATION table, then the option name set in the gondola definition will be used unaltered. The match will be case insensitive.

- Vertical and horizontal scroll bars will be shown when required on the Parameters panel's list boxes and the Options list view.

- The Number numeric up/down control will allow you to set how many bays of the gondola will be placed in to the floor plan. The number control will allow a number between 1 and 999 to be set. The up down control will increment the number by 1. If the gondola definition has the Maximum bays set greater than 0 then the Number will not be able to be set greater than this value.

- The Start position radio buttons will allow you to set whether the gondola's first base point is placed at the first point picked in the floor plan or offset by the main parameter value to the left along the base line. Each base point is calculated from left to right when the Start position is set to Left. Each base point is calculated right to left when the Start position is set to Right. For example:

Starting position left

1   2   3

Key
○ Picked point
○ Base point
= Wall

Starting position right

3   2   1
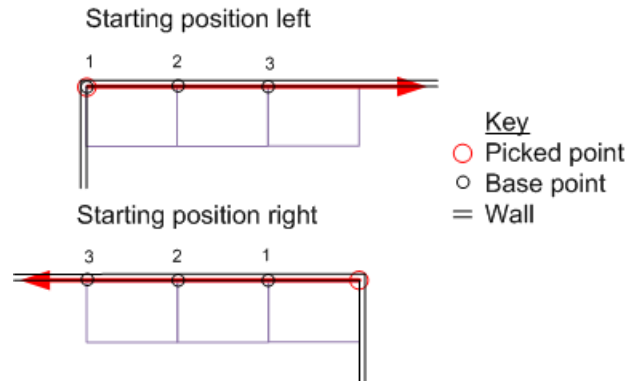
- Click the OK button to close the window. This will open the gondola preview in the AutoCAD drawing.

- Click the **Cancel** button or the **Close** button on the titlebar to close the window and **cancel** the gondola placement process.

- If you have placed the selected gondola before, then your last values for the gondola will be automatically set in the Add Gondola window.

- If you have not previously placed the selected gondola before, then the message "Change gondola settings" will be displayed in the AutoCAD command panel.

- You are able to select a single Size from each of the Parameters list boxes. When a Size is selected in a list box then the gondola definition will be read to calculate valid combinations in the other list boxes. A valid combination will be any that will result in at least one block being placed in a gondola bay. Invalid combinations will be grayed in the other list boxes. A Windows Busy cursor will be shown while the valid combinations are calculated.

- The block name associated with a part will be determined by the Prefix (GNP_PREFIX), Name dependency and Suffix (GNP_SUFFIX) settings set in the gondola definition.

- The Parameters selected in the Add Gondola window that correspond to the items ticked in the Name dependency list will be applied to the Prefix in the Name order (GND_NAME_ORDER). The Name of the size (GNV_NAME) and the dimension's Suffix (GND_SUFFIX) of the selected Parameters will be used when determining the block name. Once all the Name dependencies have been used, the Suffix set for the part will be applied.

| Determine block name | → | Start with part's Prefix to block name | → | Name dependencies ticked? | –Yes→ | Get first Name dependancy | → | Add Size Name for Parameter value to block name | → | Add Dimension Suffix for Parameter to block name | → | More Name dependancies? | | Add part's Suffix to block name | → | Finish |

Get next Name dependency

Yes

No

No
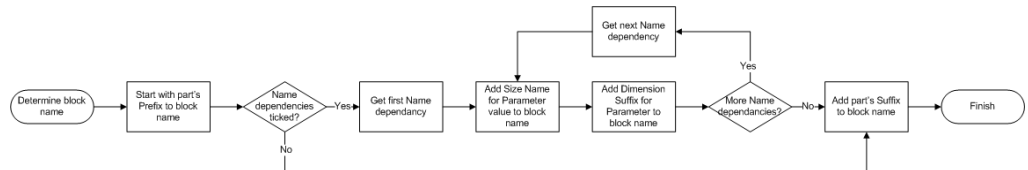
- The derived block name for a gondola part will be mapped using the AVTTB_GONDOLA_MAPPING table in the MSM database. The derived block name (GMP_NAME) will be looked up and the corresponding specific block name (BLK_NAME) will be used instead. If no mapping is found then the derived block name will be used. If the derived block name does not exist in the MSM database then the block name will be treated as invalid.

- If you change the selection in a list box then the valid combinations will be calculated for the other list boxes and if a current selection is invalid in one or more of the other list boxes then the invalid selection will be automatically removed from the other list box.

- During the drag operation the block's drawing required for the gondola will be read from the floor plan's AutoCAD drawing block directory if it is available. If the block drawing is not currently in the floor plan's drawing block directory it will be loaded into the block directory from the MSP file server.
- The layout of the parts within a gondola definition will be determined using the Include if options that are ticked and the Size, position and rotation settings set in the Fixture Studio module.
  - A part will be included in the gondola's first bay if the First bay option is ticked in the Include if options.
  - A part will be included in the gondola's last bay if the Last bay option is ticked in the Include if options.
  - A part will be included in the other gondola bays between the first and last bay if the Middle bay option is ticked in the Include if options. In addition the following settings will also be taken in to account:
    - i.   If the Odd bay option is also ticked in the Include if options then the part will only be included for odd numbered bays, bays 3, 5, 7 and so on.
    - ii.   If the Even bay option is ticked in the Include if options then the part will only be included for even numbered bays, bays 2, 4, 6 and so on.
- The placed size of a part in a gondola may be adjusted from the block definitions default sizes when the part is set as stretchable in the Fixture Studio module. This takes the Delta size in the gondola definition and adds it to the Parameter size selected in the Add Gondola window multiplied by the Size scale factor set in the gondola definition.

Part size = Delta + (Parameter size x Size scale factor)

The size is calculated separately for each dimension (length, depth and height) of the part.

Each part will be positioned using the insertion point of the block and the base point. The insertion point can be offset from the base point. This takes the Fixed offset in the gondola definition and adds it to the Parameter size selected in the Add Gondola window multiplied by the Offset scale factor set in the gondola definition.

Insertion position = Fixed offset + (Parameter size x Offset scale factor)

- The rotation of a part within a gondola bay is based on the rotations set in the gondola definition.
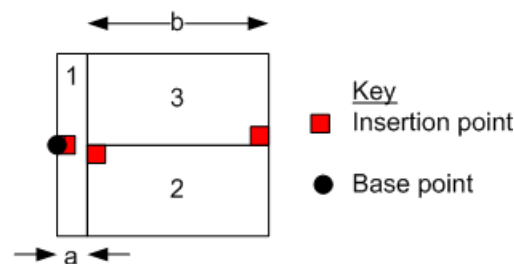
  - Part 1 has a middle-left insertion point, as such it is placed at the base point and so no offset or rotation is set for this part.
  - Part 2 has a back-left insertion point. It has a fixed offset of length 'a' and 0 rotations.
  - Part 3 has a back-left insertion point. It has an offset of 'b' which is equal to the value of the Parameter called Length selected in the Add Gondola window. The part has a rotation of 180 degrees.

- The gondola parts will be repeated along the base line for the number of bays set in the Add Gondola window. The next bay's base point will be set from the previous base point by adding the value for the main Parameter set in the Add Gondola window. The main Parameter is identified from the gondola definition. If none of the Parameters are marked as Main then the Main Length set for the gondola definition will be used to set the next base point.

Start point   2nd bay's base point   3rd bay's base point

←Main parameter value→←Main parameter value→

Start point   2nd bay's base point   3rd bay's base point

←Main length→←Main length→
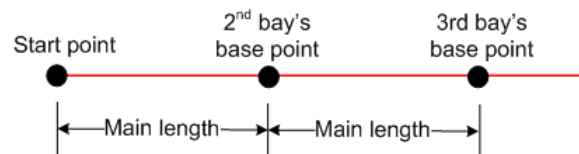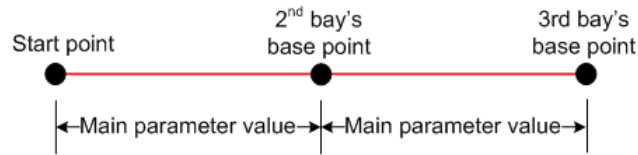
- The new gondola will be superimposed onto the AutoCAD cursor, when a Size has been selected in all of the Parameters list boxes. The base point of the gondola will be at the same position as the drag cursor point.

Mode selection

1 Display Prompt

Start → Start or End Point? → Start → Prompt for first point → Fixture has valid Conxn Pts? → Yes → Include Attach Option → No → Fixture is wall mounted? → Yes → Include Align Option → No → Include Move Option → Include Offset Option → Finish
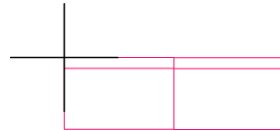
End → Prompt for second point → Include Undo option
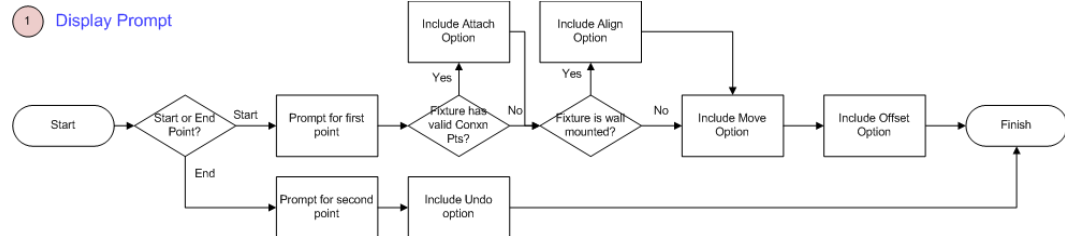
- When gondola placement starts, a prompt will be displayed on the AutoCAD command line.
- The Attach option will be included if the block definitions in the first bay of the gondola selected in the fixture hierarchy has connection points.
- The Align option will be included if the block definitions in the first bay of the gondola selected is defined as wall mounted.
- The Move option will be included when placing any new gondola. The Move mode will be selected by default when gondola placement is started.
- The Offset option will be included before picking the first point if the placement mode is not set to Attach.
- You are able to select an option by typing the appropriate option or using the shortcut key followed by <Enter>. Shortcut keys will be language specific based on your preferred language as set in the Administration module.

Attach mode

- When the placement mode is set to Attach then the first default connection point (BLC_DEFAULT is not 0) will be identified on the blocks used for the first bay (excluding any connection arrays or lines (arrays or lines are where BLC_XGAP, BLC_XMAX, BLC_YGAP, BLC_YMAX, BLC_ZGAP or BLC_ZMAX are not set to 0). If no default connection is set (or multiple default connections are set) then the first valid connection point defined for a block in the first bay will be used, starting from the first part.

- The center of the base of a three-dimensional triangle will be displayed at the default connection point's position on the cursor's gondola preview.

- The AutoCAD command line prompt will have the option Next connection appended to the list of options when in attach mode. You are able to move to the next valid connection point on the new blocks, within the parts of the first bay, by typing the option and clicking Enter. The connections will be used in the order that they were added to each block definition in and in the order each block was added to the gondola definition.

- Fixtures, fittings, composites and non-retail blocks that are crossing the Connection proximity distance from the cursor will display as three-dimensional triangles any connection points that are compatible with the new block's active connection point.

- The compatible connections shown is able to be filtered down when the Gender, Size and Shape options on the Fixturing tab of the Options window are turned ON.

- As you moves the cursor in attach mode, the cursor's preview gondola will snap to the nearest compatible connection point within the standard AutoCAD aperture/object snap target box. For example, the cursor's preview fixture is shown on the right in the before diagram approaching an existing fixture. The preview fixture has snapped to the connection point on the existing fixture in the 'A*fter*' diagram.

Before   After
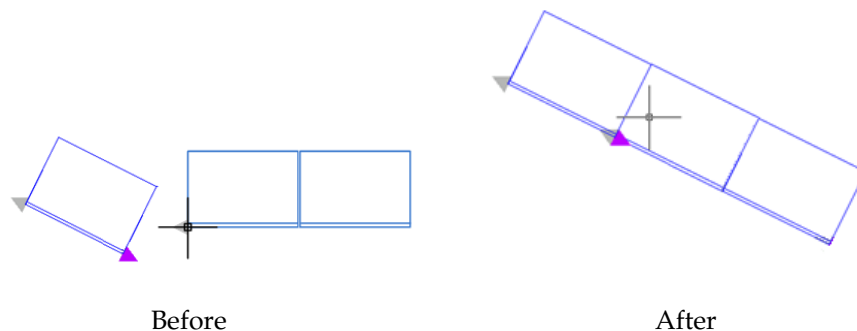
- When the cursor's preview gondola is snapped to a connection point, it will remain snapped to the connection point until another connection point is nearer to the cursor point, or the connection point is no longer within the standard AutoCAD aperture/object snap target box. If there are no connection points with the AutoCAD aperture/object snap target box, then the gondola preview will be shown back at the cursor point.

- When the cursor's preview gondola moves away from a connection point, the gondola's rotation will return to 0.

- When a connection point is found on a block within the Connection proximity distance, standard AutoCAD osnap points will be ignored. If no connection point

is found then standard AutoCAD osnap points will be used if OSNAP is turned on.

Align mode

- When the gondola placement mode is set to Align, as you move the cursor, its preview gondola will snap the gondola's first base point to the nearest edge within the standard AutoCAD aperture/object snap target box. The point that the gondola snaps to will be the nearest perpendicular intersection point from the edge to the cursor point.
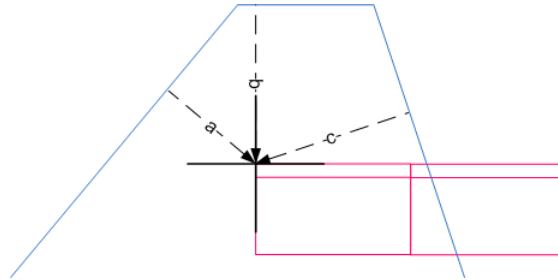
- The arrows a, b and c go from the perpendicular intersection point of three edges found within the standard AutoCAD object snap target box. As the distance of 'a' is the smallest then the cursor's preview gondola will snap to this point as shown below.
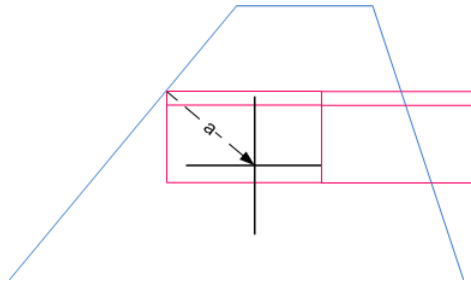
- The cursor's preview gondola will be rotated when it snaps to an edge, so that the base line of the gondola is aligned to match the angle of the edge.
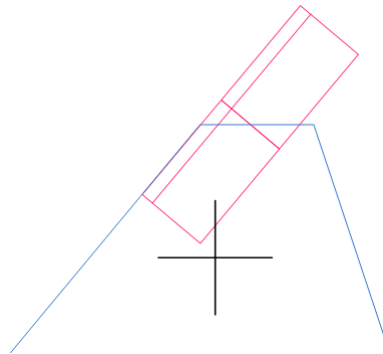
- If the cursor's position is at a point where the nearest line, and therefore the angle, is indeterminate, for example the cursor is equidistant between two lines, then the fixture's rotation will be unchanged (, it stays at the last rotation that was applied).

- Moving the mouse towards the desired line will then set the angle. OSNAPS will be ignored when determining the cursor position. The position that the cursor's preview gondola snaps to includes the offset value, if one is set. For example if

an offset value has been set as shown below when the cursor's preview gondola snaps and rotates the offset value will be applied.

Before   After
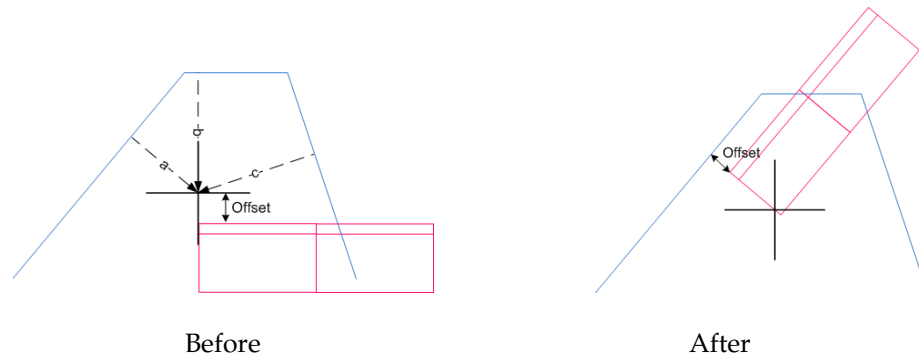
- When the cursor's preview gondola is snapped to an edge, it will remain snapped to the edge until another perpendicular intersection point is nearer to the cursor point, or the edge is no longer within the standard AutoCAD aperture/object snap target box. If there are no edges within the AutoCAD object snap target box, then the gondola will be shown back at the cursor point.

  > **Note**: When the cursor's preview gondola is shown back at the cursor point, the gondola rotation will return to 0 until it aligns to another edge.

- When a nearest edge is found standard AutoCAD osnap points will be ignored. If no nearest edge is found then standard AutoCAD osnap points will be used if OSNAP is turned on.

Offset

- When the Offset option is selected from the "Pick first point or [{OPTIONS}]:" prompt, a prompt saying "Specify start point [Justification]:" will be shown on the AutoCAD command prompt. You are able to specify the start point by clicking the mouse on a point in the AutoCAD drawing.

- The cursor will interact with the state of the standard AutoCAD OSNAP setting while setting the start point. You are able to toggle OSNAP on and off while the start point is being set.

- If you select the Justification option, then the modal Justification window is displayed.
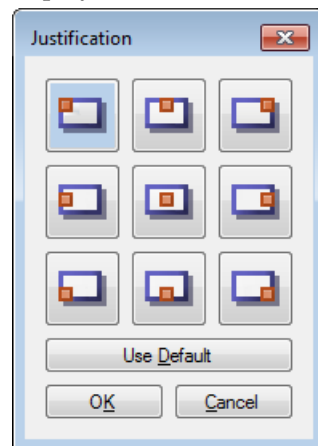
- A tooltip will be available for each justification button on the Justification window. The tooltips text options are:
  - Back left
  - Back middle
  - Back right
  - Center left
- The default justification will be calculated relative to the extents of all the parts in the first bay. The nearest justification to where the base point is located will be highlighted by default. For example:
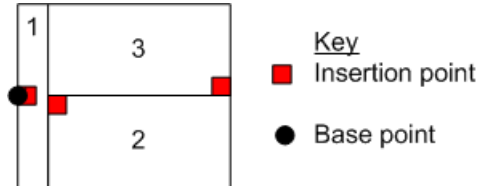
- The base point would be considered as Center left in the above example and this will be highlighted by default.

  > **Note**: As the offset distance will be remembered during the user session, if the previous offset distance equates to one of the justification points then this will be highlighted when the justification window opens. Note that this may result in none of the justification buttons being highlighted.

- You are able to click the justification buttons to highlight the desired offset. Only one button will be highlighted at a time.
- Click the **Use Default** button to reset the justification to the base point position of the first bay.
- Click the **OK** button on the Justification window, to set the offset distance automatically, based on the extents of all the parts in the first bay and the highlighted justification button. This will allow you to offset the gondola base point relative to the picked point and the position indicated by the red square on the highlighted justification button.
- When the **Cancel** button or the **Close** button on the titlebar is clicked the Justification window will close, without setting an offset distance, and the "Specify start point [Justification]:" prompt will be shown again.
- If you pick a start point for the offset, a prompt saying "Specify offset distance <{VALUE}>:" will be shown on the AutoCAD command prompt. The {VALUE} will be replaced by your last offset distance (this will be the same distance for either fixture placement or gondola placement). The offset distance will be shown in the format x,y, where x is the distance on the x-axis and y is the distance on the y-axis. The distances will be in the current drawing units and current UCS.
- The cursor's preview gondola will be hidden while setting the offset distance (, the plain crosshair cursor will be shown).
- Click Enter to keep the previous offset distance.
- When you move the mouse pointer, a temporary 'elastic' line will be shown from the start point on the AutoCAD drawing.
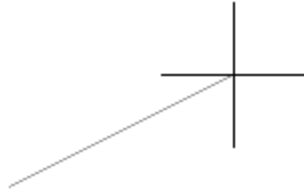
- You are able to set the offset distance by clicking the mouse on a point in the AutoCAD drawing or by typing the x and y distances separated by the list separator for your language and clicking the Enter key.

- The cursor will interact with the state of the standard AutoCAD ORTHO setting while setting the offset distance. You are able to toggle ORTHO on and off while the offset distance is being set.

  When the offset distance has been set, then the cursor's preview gondola will be shown with the block's insertion point positioned from the cursor point by the offset distance.

Before   After
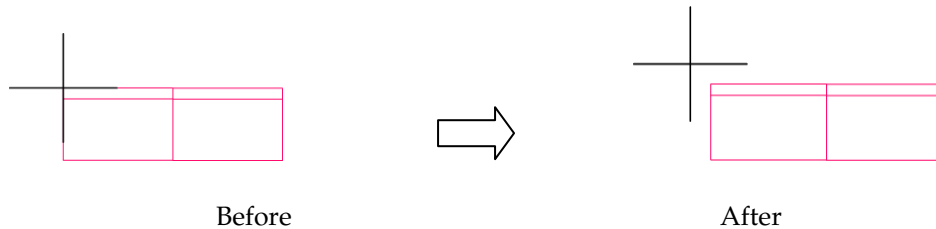
Pick a point

- You are able to set the first point for the gondola by picking a point on the active floor plan. The point will be set by releasing the mouse button to drop the gondola if it was being dragged. The point will be set by clicking the floor plan drawing or typing a co-ordinate. If a user co-ordinate system (UCS) is being used then you will enter points relative to the UCS and Planner also will display them relative to the UCS. The database will store all data as world co-ordinates.

- Both drag and drop and pick a point will interact with standard AutoCAD settings such as snap, object snap, ortho and so on when as the cursor moves (this will be Move mode). In addition Attach mode will interact with connection points as the cursor moves and Align mode will interact with object edges. Attach and Align modes are described above.

- The Z elevation for the first point will be set to floor level. The elevation associated with a level is based on the floor that a floor plan is associated with (FLL_ELEVATION in the existing AVTTB_FLOOR_LEVELTYPE_LINK table). If a level is not found for a floor then the default elevation will be used (LVL_DEFAULT_ELEVATION in the existing AVTTB_LEVELTYPE table).

- The floor/default elevation can be relative to another level, in which case the actual elevation will be calculated by adding the floor/default elevation to the elevation of the relative level.

- After the first point is picked then a prompt saying "Pick second point or [Undo]:" prompt will be displayed on the AutoCAD command line. The second point will always be picked using Move mode.

- When you pick the second point, a temporary elastic line will be shown from the first point on the AutoCAD drawing. The elastic line will be based on the

number of bays set in the Add Gondola window and the angle set by using the Align or Attach modes. The elastic line will change distance as the mouse is moved.

- The gondola preview will be shown along the elastic line and the number of bays will be updated dependent on the distance selected.
- The number of bays that can fit within the distance will be automatically updated on the Add Gondola window as the distance is adjusted. If the distance is less than the distance of a single bay then a single bay will be shown.

> **Note:** The gondola distance will always be on the XY plane.

- You are able to change the settings in the Add Gondola window before picking the second point. This will update the cursor's gondola preview to reflect the new settings.
- You are able to pick the second point by clicking the mouse on a point in the AutoCAD drawing or by clicking the Enter key.

> **Note**: The cursor will interact with the state of the standard AutoCAD ORTHO setting while picking the second point. You are able to toggle ORTHO on and off while the offset distance is being set.

- The Z elevation for the second point will be set to floor level.
- You are able to abort gondola placement using the <Esc> key at the "Pick first point or [{OPTIONS}]:" and at the "Pick second point or [Undo]:" prompts. The <Enter> key or the <Spacebar> key will also exit the command when no string has been entered at the command prompt. Similarly You are able to abort gondola placement if the gondola is dropped outside the active floor plan.

Fixture placement

- When the second point is picked the Parts defined in the gondola definition (fixtures, fittings and so on) will be placed in the floor plan's AutoCAD drawing. The position of each gondola part will be set based on the values defined in the gondola definition relative to the base point. The base point will be defined from the first picked point depending on the Start position setting in the Add Gondola window.
- The angle of each gondola part will be set based on the values defined in the gondola definition relative to the angle set along the base line between the first and second points.
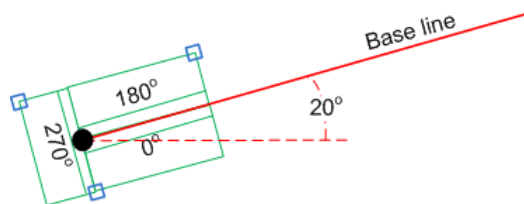
- Composite blocks, where their BLK_EXPLODE <> 0, will be exploded. If any of the blocks within the composite have a legacy BSLink attribute then this will be erased after the composite block is exploded.
- The parts of the gondola will be grouped, so that when one is selected, the whole group is selected (assuming that grouping is turned on). They will be marked as grouped in the drawing sharing an AutoCAD group and marked in the database to have the same unique value in the FIX_GROUP field. The AutoCAD group

name will identify that the objects came from a gondola by using the prefix AVT-GON.

- After composite blocks have been exploded (if necessary) the layer alias defined for the blocks will be read from their block definitions in the MSP database. The current layer standard will be read from the existing LAYER_STANDARD system variable.

- If no layer name can be found linked to a layer alias for the current layer standard, then a new layer name will be created using the layer alias as its name. A warning message will be written to the AutoCAD command window saying "Layer {LAYER} created", where {LAYER} will be the layer alias name used for the new layer.

- If an AutoCAD layer exists in the active floor plan drawing with a name that matches the layer name linked to the layer alias for the current layer standard in the database then the system will ensure that it is turned on and thawed.

- If the required AutoCAD layer does not exist then a layer will be created in the AutoCAD drawing using the properties (color, line type and so on) defined for the active layer theme. The layer theme will be read from the LAYER_THEME user variable. The user variable value will be the layer theme's identifier (LAT_ID) field. If the value is invalid then the value set for the LAYER_THEME system variable will be used by default. If the LAYER_THEME system variable value is invalid then the lowest layer theme identifier in the database will be assumed.

- If there is no link between a layer alias and the active layer theme when a layer is being created, then the new layer is added to the layer theme using AutoCAD's default values for the layer color, linetype and so on. A warning message will be written to the AutoCAD command window saying "{LAYER} added to layer theme", where {LAYER} will be the layer name.

- The gondola's blocks will be placed on the layer associated with their block definition and the layer standard.

- Gondola parts will be placed at the correct elevation (Z position). The elevation will be based on the level set in the block definition of the new fixture unless it has been attached to a connection point. The elevation associated with a level is based on the floor that a floor plan is associated with (FLL_ELEVATION in the existing AVTTB_FLOOR_LEVELTYPE_LINK table). If a level is not found for a floor then the default elevation will be used (LVL_DEFAULT_ELEVATION in the existing AVTTB_LEVELTYPE table).

2 Set Level
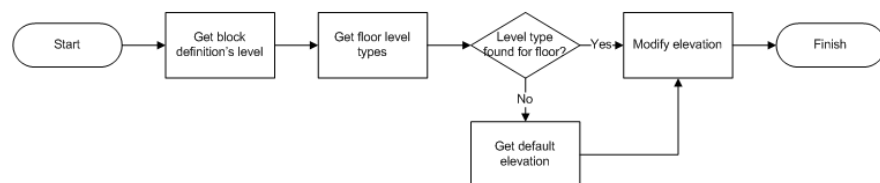
Note: The floor/default elevation can be relative to another level, in which case the actual elevation will be calculated by adding the floor/default elevation to the elevation of the relative level.

- When the block definition of a part has a level set to *Undefined* then the elevation will be set based on the Z position set in the gondola definition for the part.

- When blocks that have a non-constant/variable AutoCAD attributes are placed as part of the gondola, they will not prompt for a value. All non-constant/variable AutoCAD attributes will be stored in the AVTTB_FIXTURE_ATTRIBUTE table for the relevant block in the floor plan if the new system variable STORE_FIXTURE_ATTRIBUTES is set to a value other than 0. These values will be updated if the system variable is enabled when the user modifies them using the standard AutoCAD functionality. By default AutoCAD attribute values will not be stored in the database.
- The text of an AutoCAD attribute will be rotated about its center to ensure that it is readable if you have the Keep attributes upright option ON in the Fixturing tab of the Options window.
- When a new gondola is added, the values used in the Add Gondola window will be stored in the existing AVTTB_USER FORM table and the window will be closed. The values stored will be set by default the next time you select the same gondola definition.
- When a new gondola is added then the department zone that each block's extents (excluding any AutoCAD attribute text) center is within will be stored in the database for reporting purposes. If the center of the fixture is on the boundary of more than one department then the block will be assigned to the department that was added to the floor plan first (the department with the lowest zone identifier (ZON_ID)).
- When gondola placement is complete then fixture annotation will be automatically run.
- When gondola placement is complete the fixturing last changed date and time will be updated for the floor plan.
- Placement of the whole gondola will be treated as a single command by AutoCAD, so that when the standard AutoCAD Undo command is used the whole gondola would be removed in a single action.

Delete Fixturing

This section describes the functionality to allow store planners to delete fixtures in the floor plan.

Description

- You are able to delete fixturing by making a selection and clicking the **Delete fixture** button or by typing AVT_DELETEFIXTURE command at the AutoCAD command line. When the Delete fixture command is started any objects pre-selected will be filtered to only include fixture, fitting, composite and non-retail (other) block types. If no appropriate block types are in the selection then a prompt saying "Select blocks:" will be shown on the AutoCAD command line.
- If there is no selection set when the Delete fixture command is run then a prompt saying "Select blocks:" will be shown on the AutoCAD command line. You are able to use standard AutoCAD selection methods to select objects. Only fixture, fitting, composite and non-retail (other) block types is added to the selection set. A message saying "n blocks found" will be shown in the AutoCAD command box when a selection is made, where n is the total number of valid blocks in the selection set.
- If AutoCAD grouping is turned on then blocks which belong to the same groups will be automatically selected when a block is selected.

- When you finish selecting objects, and if no appropriate block types are in the selection, then the message "No blocks selected" will be displayed in the AutoCAD command box and the command will exit.
- When the selection includes valid blocks and only part of a planogram instance is included in the selection set (, when a planogram is shared across multiple fixtures), a warning message saying "The selected fixtures contain part of a planogram. The whole planogram will be deleted. Do you want to continue?" is displayed.
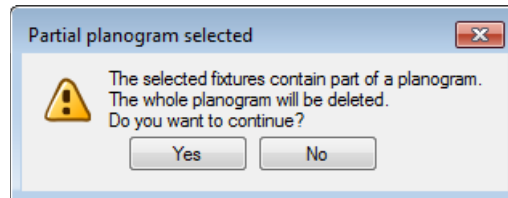
- Click Yes to close the window and remove the entire planogram instance but only remove the original fixtures that were selected for deletion.

Manipulating Fixture

This section describes the functionality to allow store planners to manipulate fixtures in the floor plan.

Description

- The existing fixture manipulation commands are as listed below:
  - AVT_MOVE
  - AVT_SLIDE
  - AVT_OFFSET
  - AVT_MATCH_ROTATION
  - AVT_CUT
  - AVT_COPY
  - AVT_PASTE
  - AVT_ROTATE
  - AVT_ROTATE_90
  - AVT_ROTATE_270
  - AVT_ROTATE_180
  - AVT_MIRROR
- The commands will have the same default permissions assigned to them as the equivalent buttons.
- When the commands are run from the AutoCAD command line or otherwise, it will display the message "Command not available for read only floor plans" in the AutoCAD command line if the active floor plan is opened as read only. Similarly, the command will display the message "Command only available for floor plans" in the AutoCAD command line if the active drawing is not a floor plan. The command will automatically exit after displaying the message.
- The existing AVT_ARRAY command will be removed. You will also be able to use the standard AutoCAD ARRAY command to array fixtures already placed in the floor plan drawing.

- When changes are made to space planning objects in the floor plan drawing using standard AutoCAD functionality the existing dynamic synchronize functionality will update the database when the existing DYNAMIC_SYNC system variable is set to any value other than 0 (for example 1). This is as per the existing functionality.

- When fixturing is moved, added or deleted the fixturing last changed date and time will be updated for the floor plan.

- The commands will be updated so that when fixturing is rotated, AutoCAD block attributes will be rotated.

- When a fixture is copied and pasted then any merchandise on the fixture will be copied too. This will occur whether you use the AVT_PASTE command or the standard AutoCAD commands. This will be true when fixturing is copied and pasted within a floor plan and between different floor plans.

> **Note**: Any copied merchandise will be a new instance (a new PRO_SEQUENCE number) so that it is not linked to the original merchandise when the fixture is copied within the same floor plan

Swapping Fixture

This section describes the functionality to allow store planners to swap fixtures in the floor plan.

Description

- The icons in the Fixture Swap window will be updated, and the accelerator shortcuts will be included for the buttons.
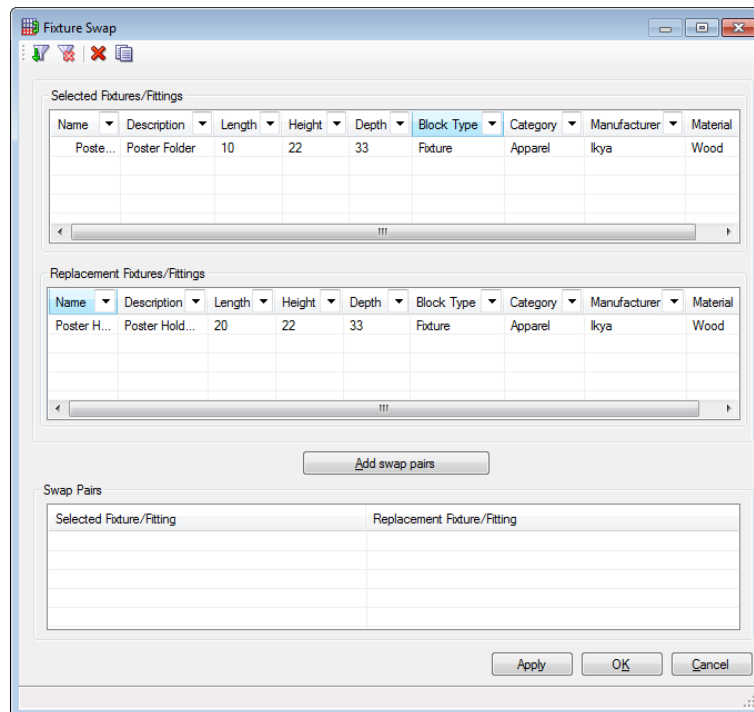
- The existing Attributes window will be updated to allow space on the Block label and buttons for internationalization. Accelerator keys will be included for the buttons.
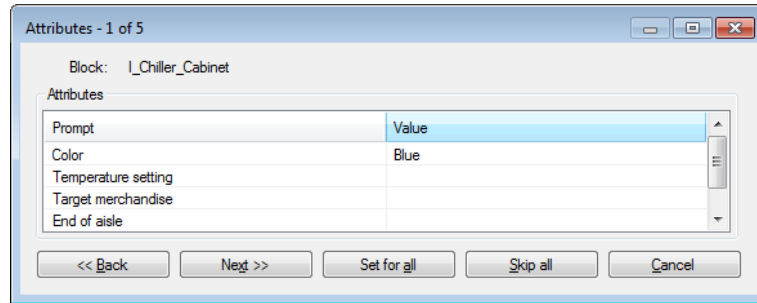
- The existing Fixture Swap functionality will be maintained such that it will only act upon fixture, fitting and non-retail (other) blocks registered in the MSM Fixture Studio module.

- The existing functionality will be maintained to highlight the fixture in the floor plan that the AutoCAD attributes are being set for. This will use the Highlight options set in the Fixturing tab of the Options window.

- The Fixture Swap feature will integrate with the new product display functionality.

- The Fixture Swap feature will integrate with the new annotation functionality.

- When fixtures are swapped the fixturing last changed date and time will be updated for the floor plan.

Mirror Fixturing

This section describes the functionality to allow store planners to mirror fixtures in the floor plan.

Description

- Click the **Mirror fixtures** button or execute the AVT_MIRROR command to mirror fixturing including all associated annotation.

- The Mirror fixtures command will use the new product display functionality.

- The Mirror fixtures command will use the new annotation functionality.

- When the Mirror fixtures command is complete then the department zone in which the center of the block's extents (excluding any AutoCAD attribute text) is within will be stored in the database for reporting purposes.

- When fixtures are mirrored the fixturing last changed date and time will be updated for the floor plan.

- Click the **Find Mirrored Blocks** button or execute the standard AutoCAD MIRROR command to find mirrored blocks.

- When the Find mirrored blocks command is started, it will remove any objects from the current selection set.

- The Find mirrored blocks command will highlight any fixture, fitting, composite or non-retail (other) blocks that have a negative scale factor in the floor plan's AutoCAD drawing. This will use the Highlight options set in the Fixturing tab of the Options window.

- If there are no blocks with a negative scale factor in the floor plan drawing when the Find mirrored blocks command is run, then an error window saying "No mirrored blocks were found" will be displayed.

Find mirrored blocks

No mirrored blocks were found

OK
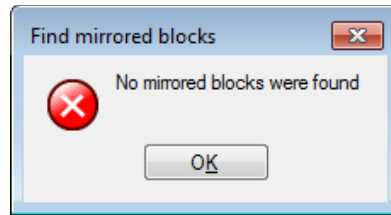
- The Mirror fixtures and Fix mirrored blocks command will ensure that all AutoCAD attribute text is justified such that the text is positioned in the original relative position on the fixture. For example, the attribute text for fixture 27 below is right justified relative to the fixture. During the mirror process the text becomes left justified, so the text is re-positioned to return it to right justification.

Original   During Mirror   Final Position
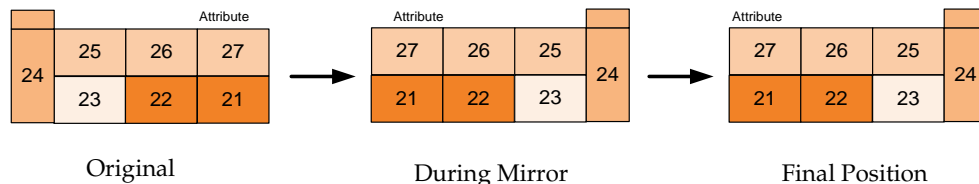
- The text will also be rotated so that it is legible after mirroring.

Restructuring Blocks

This section describes the functionality to allow store planners to restructure blocks in the floor plan.

Description

- Execute the AVT_RESTRUCTUREDRAWING command to restructure blocks in the floor plan. You are able to start the command from the AutoCAD command line or by clicking **The Restructure Drawing** button.
- The Restructure Drawing window will be updated to allow space for internationalization and to include accelerator keys.
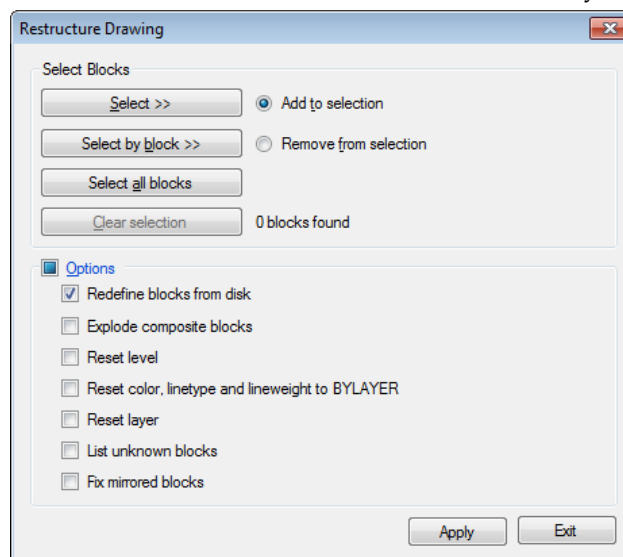
- The Options selected in the Restructure Drawing window will be processed in the order shown on the window. This will ensure, for example, that composite blocks are exploded prior to setting the levels or layers.

- The Reset level option will ensure that the elevation for each fixture, fitting, composite and non-retail (other) type block is based on the level set in the block definition. The elevation associated with a level is based on the floor that a floor plan is associated with (FLL_ELEVATION in the existing AVTTB_FLOOR_LEVELTYPE_LINK table). If a level is not found for a floor then the default elevation will be used (LVL_DEFAULT_ELEVATION in the existing AVTTB_LEVELTYPE table).

- The Reset layer option will ensure that an AutoCAD layer exists associated with the layer alias set for the selected blocks.

- If no layer is associated with a layer alias then a new layer will be created in the floor plan drawing and the AutoCAD layer will be named to match the layer alias name. The required data is added to the database to associate it with the layer alias (this includes links to the current layer theme and layer standard).

- When a new layer is created, the AutoCAD layer properties will be set to the values defined in the active layer theme. The active layer theme will be read from the LAYER_THEME user variable. If the value is invalid then the value set for the LAYER_THEME system variable will be used by default. If the LAYER_THEME system variable value is invalid then the lowest layer theme identifier in the database will be assumed.

- When the Fix mirrored blocks option is checked, it will correct the scale factor for any fixture, fitting, composite or non-retail (other) blocks that have a negative scale factor as per the existing AVT_MIRROR command.

- The Fix mirrored blocks option will maintain the relative position of the blocks in the floor plan, but as the insertion point may move then the actual insertion position will be updated in the database. See example below, where the insertion point for the blocks is represented by the red mark.

Before   After
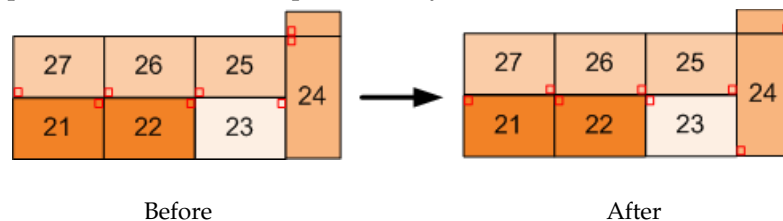
- The number of blocks corrected by the Fix mirrored blocks option will be listed in the AutoCAD command line window.

- The Fix mirrored blocks option will ensure that all AutoCAD attribute text is justified such that the text is positioned in the original relative position on the fixture. For example, the attribute text for fixture 27 below is right justified relative to the fixture. During the mirror process the text becomes left justified, so the text is re-positioned to return it to right justification.

Original   During Mirror   Final Position
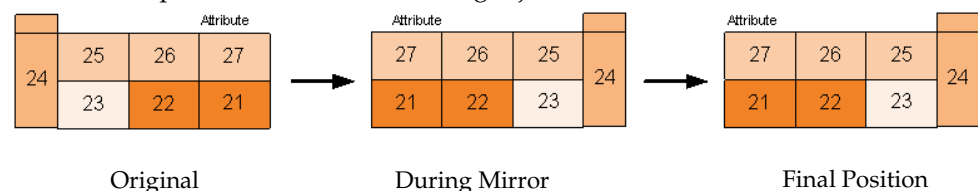
- The Fix mirrored blocks option is added to the Restructure drawing group on the Pre-processing tab in the Publish Floor Plans and Process Floor Plans windows in Planner. It will also be added to the Floor Plan Publishing Configuration window in the Administration module.

- A bitwise integer for fixed mirrored blocks is added to the command line /RESTRUCTURE switch for the Floor plan processing batch process. The bitwise value will be 32.
- When the Fixed mirrored blocks option is selected and the Publish Floor Plans or Process Floor Plans processes are run, then the functionality described above will be applied.

Validating Fixturing

This section describes the functionality to allow store planners to validate fixtures in the floor plan

Description

- You are able to validate blocks in the floor plan using the new AVT_VALIDATE command. You are able to start the command from the AutoCAD command line followed by the parameter (CPR_ALIAS) of the registered stored procedure, as follows:

  `AVT_VALIDATE FIXTURES`

- Valid stored procedures will be registered in the existing AVTTB_CUSTOM_PROCEDURE table as per the 14.1 release AVT_CUSTOM command functionality. The table will be updated to include a procedure type field (CPR_TYPE). The existing customizable button stored procedures listed in the table will be given a CPR_TYPE = 0. Fixture validation stored procedures will have a CPR_TYPE = 1.

- You will also be able to validate blocks in the floor plan by clicking the **Validate Fixtures** ⬛ button.

- When the Validate fixtures command is started the fixture, fitting, composite and non-retail (other) blocks in the floor plan drawing will be compared to the data in the AVTTB_FIXTURE database table. If this information is found to be different (differences will be identified using the existing Synchronize functionality) then the Synchronize command will be run silently with the Match the drawing option for fixturing blocks.

- When fixtures are synchronized during validation the fixturing last changed date and time will be updated for the floor plan.

- The Validate fixtures command will run the existing Fixture adjacency command if the fixturing last changed date and time is later than the date and time that fixture adjacency calculations were last run.

- Once the fixture adjacency data is up to date the stored procedure will be run. The stored procedure will accept the floor plan's file ID (FIL_ID) as an input parameter and will optionally return a result set.

- If the stored procedure returns a result set with one or more rows then a Quick Reports palette will automatically open to display the results.

  > **Note:** The department is set when a fixture is added to a floor plan either manually (individually or as part of a gondola) or by the Synchronize command.

- A processing window will be displayed while the validation process runs.
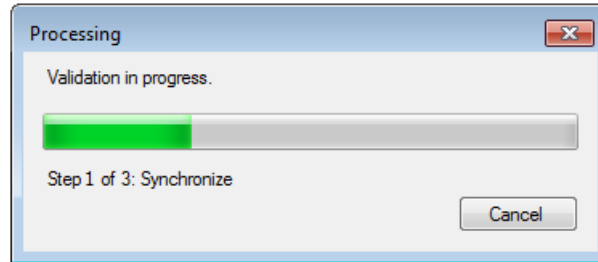
- The progress bar will be updated as each stage of the synchronize, fixture adjacency calculation and stored procedure is completed. The label under the progress bar will say "Step {N} of 3: {PROCESS}" where {N} is replaced with the number of the step being run and {PROCESS} is replaced with the Synchronize, Fixture adjacency calculation or Stored procedure to tell you which of the steps in the validation process is running.

- Click the **Cancel** button or the **Close** button on the titlebar to abort the validation process and return control.

Fixture Attributes

This section describes the functionality to allow store planners to easily view and edit the properties for selected fixturing in the drawing, in a tabular manner.

Description

- To view the Fixture attributes, execute the AVT_FIXTURE_ATTRIBUTE command or click the **Fixture Attributes** button.

- When Fixture attributes is started, a check will be made for a current selection set. If a selection set exists then it will be filtered to contain fixture, fitting, composite and non-retail (other) block types only. If the selection set contains one or more valid blocks then the Fixture Attributes window will open.
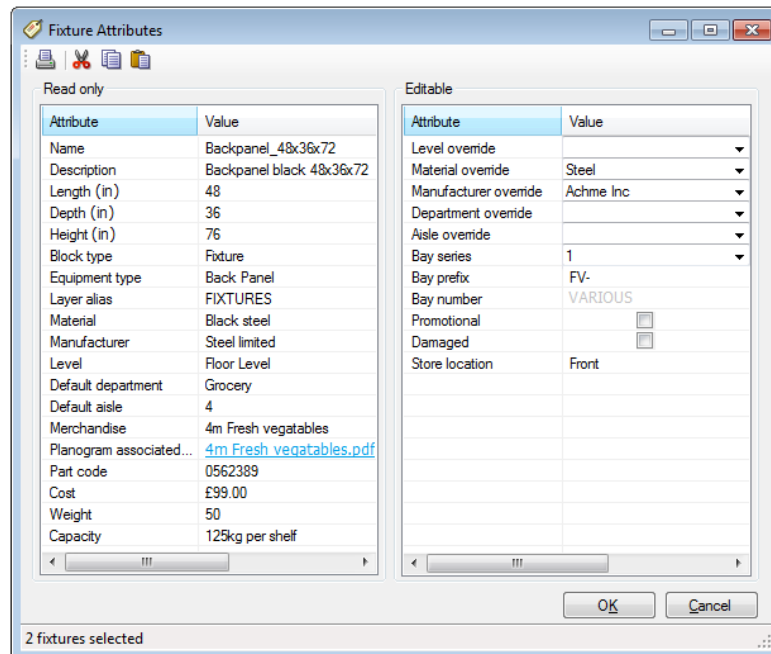
- If there is no current selection set or the selection set contains no valid blocks then a prompt saying "Select blocks:" will be displayed on the AutoCAD

command line. You are able to use standard AutoCAD selection methods to add to the selection set.

- When you add to the selection set, objects that are not fixture, fitting, composite or non-retail (other) blocks will be filtered out. A message saying "{X} objects selected {N} blocks found" will be displayed in the AutoCAD command window. {X} will be replaced by the number of objects selected by the selection action and {N} will be replaced by the total number of valid blocks in the selection set.

- When you finish selecting blocks, if the selection set contains one or more valid blocks, then the Fixture Attributes window will open as a modal window. If the selection set does not contain any valid blocks then Fixture attributes will exit.

- The Fixture Attributes window will list the attributes in the order shown. You will not be able to change the sort order of the attributes or hide the columns.

- The column widths will default such that the entire text of the longest string in each column is displayed in full. If the header text is longer than the longest string then the default column width will ensure that the header title is shown in full. You are able to adjust the width of the columns. The user's column width setting will be remembered between sessions.

- You are able to adjust the height and width of the Fixture Attributes window. You will also be able to maximize and restore the size of the window, but not minimize it. The list view will expand to use the available space. You will not be able to adjust the size of the window to less than 300 x 300 pixels. Your window size setting will be remembered between sessions.

- You are able to adjust the horizontal size of each set of attributes by moving a splitter bar between each panel. Scroll bars will be shown when required.

- The size of each panel will be adjusted when the size of the window is changed. The relative sizes of the panels will be maintained when the size of the window is changed.

- The Read only attributes will be read-only, they cannot be edited, but You are able to copy them to the Windows clipboard. The following attributes will be listed.

Attribute	Database Field	Data Type
Name	BLK_NAME	Text
Description	BLK_DESC	Text
Code	BLK_CODE	Text
Length	FIX_XSIZ	Decimal (see below regarding precision)
Depth	FIX_YSIZ	Decimal (see below regarding precision)
Height	FIX_ZSIZ	Decimal (see below regarding precision)
Block type	BLT_DESC	Text
Equipment type	EQS_DESCRIPTION	Text
Layer alias	LAY_NAME	Text

Material	MAT_NAME	Text
Manufacturer	MAN_NAME	Text
Level	LVL_DESC	Text
Default department	ZON_DESC	Text
Default aisle	AIS_NAME	Text
Merchandise	PRD_NAME or POG_NAME	Text
Planogram associated document	POG_ASSOCIATED_DOC_FILENAME	Text

- The Length, Depth and Height values will be displayed as the default length unit set in the Units window of the Administration module. The dimensions will be shown with the number of decimal places defined by the Precision for the default length unit.
- If no default length unit is set then the Length, Depth and Height values will be shown in the default system units (mm for metric systems and inches for imperial systems).
- The Length, Depth and Height will be shown with the number of decimal places defined by the Fixture Decimal Precision value set on the Options tab of the Configuration window in the Administration module.
- The units used for the Length, Depth and Height values will be shown in brackets after the attribute label. The string will use the suffix set in the Units window of the Administration module for example "Length (m)". If the system units are being used then mm and in will be used for metric and imperial as appropriate.
- The Default Department attribute will be populated when fixtures and zones are edited.
- The Default Aisle attribute will be the result of the Aisle adjacency calculation.
- The Merchandise attribute will display the name of the planogram   on the selected fixtures. When the fixtures are not merchandised with a planogram, but have products, these will be displayed as the common point in the product hierarchy. The value will be shown as Various if no common product can be determined or the fixtures are merchandised with more than one planogram.
- The Planogram associated document attribute will have its value read from the AVTTB_PLANO.POG_ASSOCIATED_DOC_FILENAME field for the selected fixturing when the merchandise is a single planogram.
- The Read only attributes will also list the UDAs where the name is not NULL, for the selected fixturing. The UDAs will be listed after the rows listed above, ordered by the sequence (UDT_SEQUENCE) set in the User Defined Attributes window in the Administration module.
- The following Editable attributes will be listed:

Attribute	Database Field	Data Type	Control Type
Level override	LVL_DESC	Text	Combo box with drop-down list selection only
Material override	MAT_NAME	Text	Combo box with drop-down list selection only
Manufacturer override	MAN_NAME	Text	Combo box with drop-down list selection only
Department override	ZON_DESC	Text	Combo box with drop-down list selection only
Aisle override	FIX_AISLE_OVERR IDE	Text	Numeric up/down or Combo box (see below)
Bay series	FIX_BAYSERIES	Text	Combo box
Bay prefix	FIX_BAYPREFIX	Text	Text box
Bay number	FIX_BAYNUMBER	Number	Numeric up/down
Promotional	FIX_ISPROMO	Boolean	Check box

- The Editable attributes will all be read only if the active floor plan is opened for viewing only.
- The Level override will allow you to select from a drop-down list of level descriptions. You are able to set the Level override to blank in order to remove the override.
- When a Level override is set and the **OK** button is clicked then the elevation of the fixturing will be updated based on the value associated with the level for the floor that a floor plan is associated with (FLL_ELEVATION in the existing AVTTB_FLOOR_LEVELTYPE_LINK table). If the level is not found for a floor then the default elevation will be used (LVL_DEFAULT_ELEVATION in the existing AVTTB_LEVELTYPE table).
- When the Level override is set to blank and the **OK** button is clicked then the elevation of the fixturing will be updated based on the fixturing's default level set in Fixture Studio.
- The Manufacturer override will allow you to select from a drop-down list of manufacturer names. Only fixture manufacturers will be listed (MAN_TYPE = 1). You are able to set the Manufacturer override to blank in order to remove the override.
- The Department override attribute will have its value read from the new FIX_DEPT_OVERRIDE column in the AVTTB_FIXTURE table.
  - You are able to manually select a department zone name for a zone in the floor plan by selecting from the drop-down list. The zone name will be referenced from the AVTTB_ZONE. ZON_DESC field.
  - You are able to manually select a department zone name for a zone that has not been drawn in the floor plan by selecting from the drop-down list. The zone name will reference the AVTTB_ZONE_DEFINITION.ZND_NAME field
  - You are able to set the Department override to blank in order to remove the override.

- The Aisle override attribute will have its value read from the AVTTB_FIXTURE.table, which is able to be manually set by you.

- The Aisle override value cell will be set using a combo box when the AISLE_IDENTIFIER system variable is set to 0. The combo box's dropdown list of values will be read from the new AVTTB_AISLE table. The list will be sorted in ascending order.

- You are able to pick an existing aisle identifier from the drop-down list (the list will be a distinct list of both default and override values) or type a value. The Aisle value can be a maximum of 64 characters. If you type the value then a check will be made to see if it matches with an existing aisle identifier. The check will be case insensitive. If the check finds that it matches an existing identifier then the text will be updated so that the strings match case..

- The Aisle override value cell will be set using a numeric up/down control when the AISLE_IDENTIFIER system variable is set to 1 or any value other than 0.

  > **Note**: The Aisle override will only be set for blocks with the type Fixture.

- The Bay series value cell will be a combo box. This combo box will be used to select the name of the bay number series from an ascending list of series names already used in the floor plan. You will also be able to provide a new Bay series by typing the value. The Bay series can be a maximum of 50 characters.

- The Bay prefix value cell will accept any character that can be supplied from the keyboard but cannot be more than 5 characters.

- The Bay number value cell will only allow numeric values and will use a numeric up and down control. The value will be a maximum of 10 digits and will accept up to 4 digits after the decimal. The Bay number will be grayed out if the selected fixtures are not part of the same Bay group or if multiple fixtures are selected.

- When you click **OK** on the Fixture Attributes window, and select to use an existing Bay series, the bay numbers for the blocks will be checked against the existing bay numbers for the series (any fixtures already bay numbered in the series, but in the selection set will be excluded from the check). If the process finds a duplicate number then a warning window will be displayed with the message "Duplicate bay numbers not allowed. Do you want to insert new bay numbers into the series?".
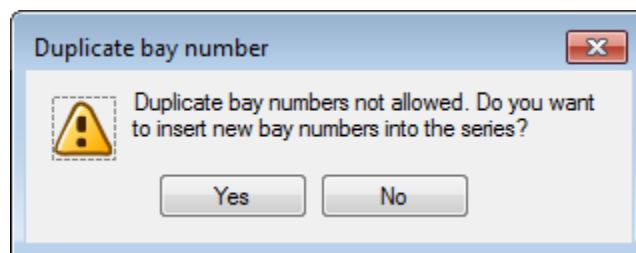
- When you click Yes on the warning window, then the existing bay numbers in the series that are greater than or equal to the lowest duplicate bay number that were not included in the selection set, will be incremented to avoid duplication. The amount that they will be incremented will be calculated as the difference between one more than the maximum duplicate bay number for the selection set and the minimum existing bay number in the series of a non-selected fixture greater than or equal to the lowest duplicate number.

```
Increment = (maximum new bay number + 1) – minimum existing bay number
```

> **Note**: Gaps in the incremented bay numbers in the series will be maintained.

- If you click **No**, on the warning window then the Bay Number Series will automatically revert to the original value.

- The Promotional attribute will have its value read from the AVTTB_FIXTURE.FIX_ISPROMO field for the selected fixturing. The value cell will be a check box. The check box will be ticked when all the blocks have the FIX_ISPROMO set to any value other than 0. The check box will be un-ticked when all the blocks have the FIX_ISPROMO is 0. The check box will be set as indeterminate when the blocks have various values. You will only be able to check or uncheck the check box.

- Only fixture block types can be assigned as a promotional bay. This attribute name and value will be grayed out when some of the blocks are not fixtures. A tooltip will be displayed saying "Only fixtures can be set as promotional" when the mouse hovers over either the attribute name or the value cells.

- The Editable attributes will list the variable fixture attributes that are linked to the selected fixturing in Fixture Studio. The attributes will be listed in the sequence order set in the Attribute Definitions window in Fixture Studio (ATD_SEQUENCE) after the attributes listed above.

- The controls shown for the values will depend upon the attribute's data type, as shown below:

Data Type	Control Type	Format
Text	Text box	Left justified
Whole number	Numeric up down	Right justified
Decimal	Numeric up down	Right justified
Date	Date picker	Long date and time format from the Windows regional settings
Boolean	Tick box	Positioned in the center of the cell
Currency	Numeric up down	Right justified

- When a variable fixture attribute has a list of possible values defined then the control will be a combo box. You will only be able to select one of the values from the drop-down list.

- The Fixture Attributes window will display values for attributes for multiple fixtures using different text styles. A tooltip will be displayed when the mouse pointer hovers over a value cell to explain the meaning of the text style. The following are the text styles and the tooltips.

Value's Characteristics	Text Style	Tooltip
A value is common for all the blocks	The normal text (not bold, italic and so on)	Value common to all the selected equipment
A value varies between the blocks	The word *Various* displayed in gray text	Values differ between the selected equipment

A value is undefined for all the blocks	The cell will be empty	No value is set for the selected equipment
The user edits a value	Bold	The value has been edited.

- The word Various will automatically be deleted if you start to edit a cell where the value varies between the blocks. If you click the <Escape> key to abort editing, while focus is still in the cell, then the cell will revert to showing the word Various in gray text and any text that had been typed will be discarded.

> **Note**: The <Escape> key will be a keyboard shortcut for the **Cancel** button only when you are not editing a field.

- Click the **Print** button to print all the attributes. The attributes will be printed as two simple grids of attributes and values in a similar format to the existing ISSC functionality. Each grid will have a title to identify the type of attributes. The titles will be Read Only Attributes, and Editable Attributes.
- You are able to cut or copy the values in the Fixture Attributes window to the Windows clipboard by highlighting one or more rows.
- You are able to use the **Cut** or **Copy** buttons or the Ctrl+X (cut) or Ctrl+C (copy) keyboard shortcuts. You will only be able to copy the values of read only variables (to say, the Cut option will only be available with editable attributes).
- You are able to paste values from the Windows clipboard by highlighting one or more rows. You are able to use the **Paste** button or the Ctrl+V keyboard shortcut. The content of the Windows clipboard will be validated when the Paste function is used. If the content of the clipboard is not valid for the target field then the Paste function will have no effect. You will not be able to paste to read only attributes.
- You are able to close the Fixture Attributes window and save any changes made (shown in bold in the window) by clicking the **OK** button. The value of non-edited properties will not be saved. This is to ensure that where multiple fixtures are selected in the floor plan values are not overwritten when the values vary between fixtures.
- The Fixture Attributes window will close and discard any changes when you click the **Cancel** button or the **Close** button on the titlebar.

Fixturing Options

This section describes the functionality about the options a user can configure for fixturing.

Description

- The Fixturing tab will be displayed in the Options window when your group has permission to view the Fixturing tab in the Object Browser.
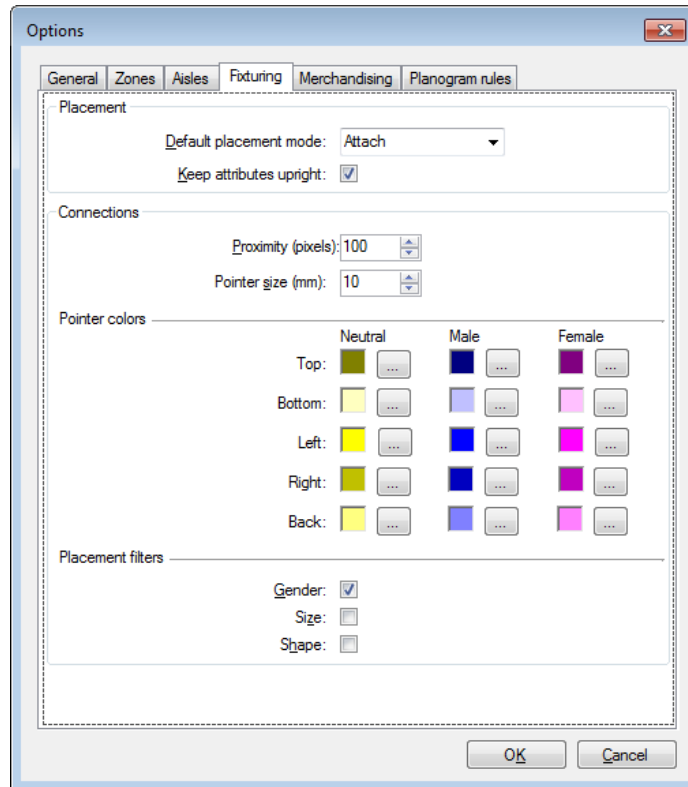
- The Options window will open by default on the Fixturing tab when the Fixturing tab is selected in the Object Browser.
- You are able to set the Default placement mode by selecting an option from the drop-down list. The options will be as follows:
  - Move
  - Attach
  - Align

    Note: By default the **Move** option will be selected.

- You are able to determine how AutoCAD block attributes are treated when fixturing is added, or edited in a floor plan. When the Keep attributes upright check box is ticked then AutoCAD block attributes will be rotated.
- You are able to set the distance in pixels when fixturing will show connection points by setting the value in the Proximity numeric up/down control..
- The Proximity numeric up/down control will allow a positive whole number to be set. The buttons on the numeric up/down control will increment the value by 1.
- You are able to set the size that connection points are shown as by setting the value in the Pointer size numeric up/down control. The Pointer size label includes the system's unit suffix in brackets, based on whether the system is metric or imperial (the position of the units in the label may be language specific).
- The Pointer size numeric up/down control will allow a positive number to be set with the number of decimal places as per the precision set in the Units window of the Administration module. The buttons on the numeric up/down control will increment the value by 1.

- You are able to set the color that connection points are shown as using the Pointer colors controls. When you click an ellipses (…) button, then a standard Windows Color window will be displayed.
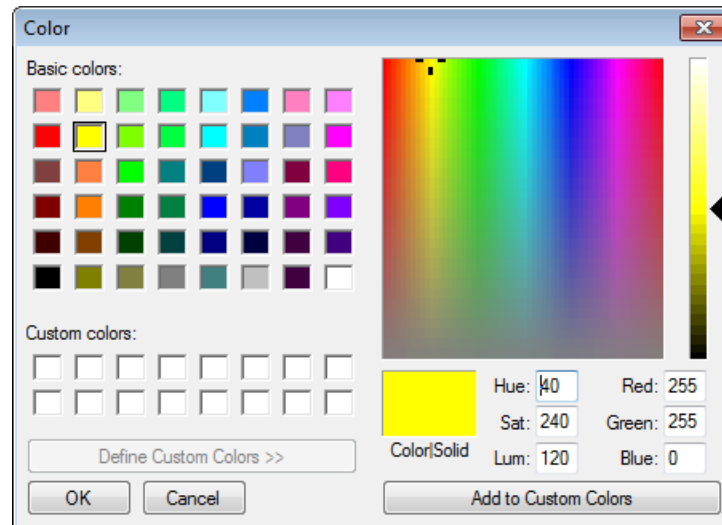
- When you pick a color, the appropriate color swatch on the Fixturing tab of the Options window will be updated.
- You are able to set Placement filters for Connections. There will be the following filters available:
  - Gender
  - Size
  - Shape
- You are able to tick the Placement filters to enable them so that Planner will only allow compatible connections to join. When a filter is un-ticked then the check for that filter will not be applied.
- Click OK to save any fixturing options.

Overview of Bay Numbering Chapter

This section describes the updates to the Overview of Bay Numbering chapter in the Oracle Retail Planner Module User Guide.

Bay Numbering buttons

Description

- The Fixturing group of the MSP ribbon will have the buttons that will facilitate bay numbering and bay grouping of the fixtures on the floor plan. The table below details the list of buttons and also details the icons, commands and the tooltip for each button.

Tool buttons	Icons	Commands	Tooltip
Add bay numbers		AVT_ADDBAYNUM	Add bay numbers to fixtures: AVT_ADDBAYNUM

Remove bay numbers		AVT_REMOVEBAYNUM	Remove bay numbers from fixtures: AVT_REMOVEBAYNUM
Add bay numbers using polyline		AVT_PLINEBAYNUM	Add bay numbers using a polyline to set the order: AVT_PLINEBAYNUM
Add bay numbering polyline		AVT_ADD_BAYNUM_PLINE	Add a polyline to be used for bay numbering
Add bay group		AVT_ADDBAYGROUP	Add a bay group: AVT_ADDBAYGROUP
Remove bay group		AVT_REMOVEBAYGROUP	Remove a bay group: AVT_REMOVEBAYGROUP
Select bay group		AVT_SELECTBAYGROUP	Select a bay group: AVT_SELECTBAYGROUP

- The buttons will only be enabled when a floor plan is opened for editing (, not when an architectural plan or a native AutoCAD drawing is opened for editing or when the floor plan is opened as read-only). When the active floor plan is opened for viewing only, or the active drawing is not a floor plan, then the buttons will be grayed out and disabled. The same checks must be enforced on the application server.
- The Fixturing group buttons will use the existing ISSC message control mechanism to determine which buttons are visible and enabled for a user group.

When the AutoCAD commands associated with the Fixturing group buttons are run, they will display the message "Command not available" in the AutoCAD command line if the associated button is grayed out. The command will automatically exit after displaying the message.

Bay Group

You are able to define bay groups. Bay groups are used to group fixtures together such that they share the same bay number.

Description

- Adding a bay group will be initiated through:
  - Clicking the **Add Bay Group** button on the Fixturing group of the MSP ribbon.
  - Selecting the Add bay group menu item from the Modify – Block menu.
  - Entering the AVT_ADDBAYGROUP command on the AutoCAD command line.
- When the Add bay group has been initiated you will be prompted to Select the fixtures to be grouped. While the fixtures are being selected for bay grouping the prompt Select fixtures: <Count> found will be displayed in AutoCAD command line. Where <Count> is the number of fixture blocks selected.
- Only fixtures will be part of bay groups. Blocks other than fixtures on the floor plan will not be able to be bay grouped. When you select objects, only the fixtures is added to the selection set (, non-fixture blocks will be filtered from the selection set).

- The fixtures in the selection set will be saved in the database as a bay group by recording the same unique bay group identifier against each fixture in the existing AVTTB_FIXTURE table (in the FIX_BAYGROUP column). The unique bay group identifier will be the maximum bay group identifier for the floor plan incremented by 1.

- The first fixture that was selected for the bay group will become the primary fixture for that bay group. The primary fixture for the bay group will be saved in the existing AVTTB_FIXTURE database table with a Boolean flag (in the FIX_BAYGROUP_PRIMARY column), such that it can be made use of while applying the bay numbering annotation.

- You will also be able to bay group the fixtures by selecting the fixtures first and then initiating the bay group command through the methods mentioned above. If fixtures are preselected then the Select fixtures prompt will not be displayed.

- A fixture will have only one bay group, and cannot be part of multiple bay groups. If a fixture is a member of an existing bay group this will be overridden when the fixture is added into a new bay group.

- If a fixture is a member of an existing bay group and is made part of a new bay group, any other fixtures in the existing bay group will remain in the existing bay group. If only one fixture is left in the existing bay group, or the primary fixture is removed from the bay group, then the bay group reference will be removed for all fixtures in the existing bay group.

- When you select the already bay numbered fixtures to bay group them, a message will be shown with the following details:
  - The selected fixtures already have bay numbers. The bay group will use the first fixture's bay number. Do you want to continue?

  - Warning Icon .
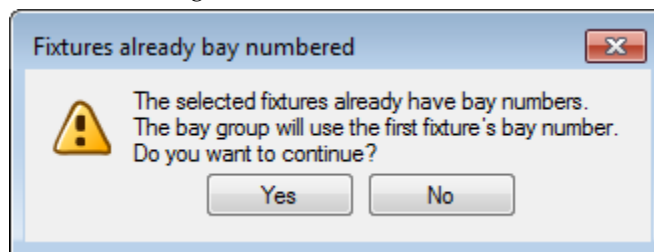
- If you click Yes, the bay number for the first fixture in the selection (that will be the primary fixture in the new bay group) will become the bay number for that bay group. If you select No, the bay group process for the selected fixtures will be aborted.

- Fixtures that are being bay grouped must belong to the same gondola. When adding a bay group, the selected fixtures will be checked against the existing fixture sequence table (AVTTB_FIXTURE_SEQUENCE) and will fixture groups in the floor plan drawing to confirm that they are all members of the same gondola or fixture group. If one or more fixtures do not belong to the same gondola or fixture group, the following message will be shown.
  - "Not all the selected fixtures belong to the same gondola. Do you want to continue?"

  - Warning Icon .

Bay group spans multiple gondolas

Not all the selected fixtures belong to the same gondola. Do you want to continue?

Yes   No
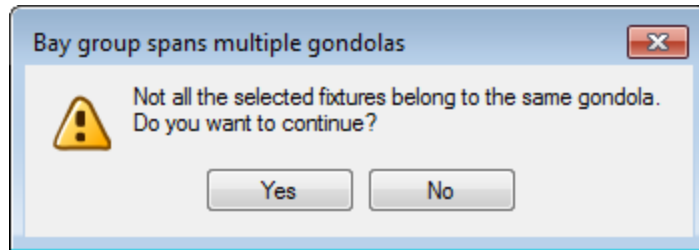
- If you click the Yes button to continue with creating the bay group, the bay group will be created. Bay annotation will be run automatically for the affected fixtures to update the bay numbers in the floor plan's AutoCAD drawing. If user the clicks the No button the bay grouping process will stop.

- Composite blocks is able to maintain bay grouping when it is placed on the drawing and exploded. This will be done when exploding the composite block by referencing the original file id and fixture ids where the composite block was created and then getting the bay group from the database. The unique bay group identifier for the exploded composite block will be the maximum bay group identifier for the new floor plan incremented by 1

- The user is able to select the fixtures that belong to a bay group by:

  – Clicking **The Select Bay Group** button on the Fixturing group of the MSP ribbon.

  – Selecting the Select bay group menu item from the Modify – Block menu.

  – Entering the AVT_SELECTBAYGROUP command in the AutoCAD command line.

- When the Select bay group has been initiated a Pick fixture prompt will be displayed in the AutoCAD command prompt. You are able to pick a single object on the floor plan. When you select a fixture all the other fixtures that are in the same bay group will also be selected.

- The user is able to remove fixtures from a bay group by:

  – Clicking the **Remove Bay Group** button on on the Fixturing group of the MSP ribbon.

  – Selecting the Remove bay group menu item off Modify - Block.

  – Entering the AVT_REMOVEBAYGROUP command in the AutoCAD command line.

- When Remove bay group is initiated, the Select fixtures prompt will be shown in the command line. While the fixtures are being selected for bay grouping the Select fixtures prompt <Count> found will be displayed in the AutoCAD command line. The <Count> will show the number of fixtures found.

- The bay group details of the selected fixtures will be removed when you end the selection. If the primary fixture is removed from a bay group then a warning will be displayed with the following details:

  – "The selection includes a primary fixture from an existing bay group. This bay group will be removed. Do you want to continue?"

  – Warning Icon .
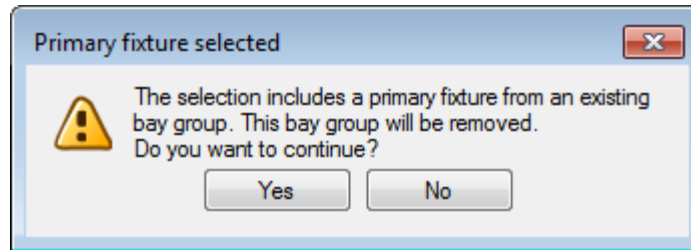
- If you click Yes to continue, the whole bay group will be removed (any other fixtures in the bay group will also be removed). If you click No the remove bay grouping process will stop.

- If removing fixtures from a bay group leaves only one fixture in the bay group then this fixture's bay group details will also be removed.

- When you select any already bay numbered fixtures to remove them from the bay group, the following message will be shown:

  - "The bay numbers on the selected fixtures will be deleted if you remove them from a bay group. Do you want to continue?"

  - Warning Icon .
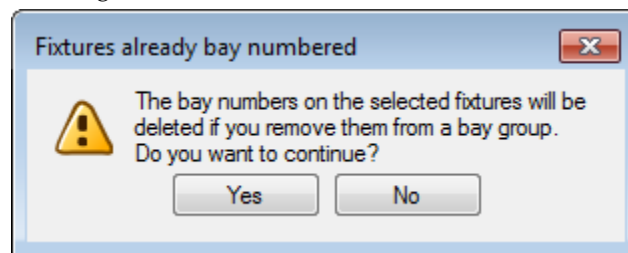
- If you click Yes to continue, the selected fixtures will be removed from their bay group and their bay numbers will also be removed. Bay annotation will be run automatically for the affected fixtures to update the bay numbers in the floor plan's AutoCAD drawing. If you click No, the remove bay grouping process will stop.

- You will also be able to pre-select the fixtures and then initiate the Remove bay group function to remove the bay groups. In this case the Select fixtures prompt will not be shown and the bay group details will be removed immediately.

- If bay grouped fixtures are copied and pasted, the pasted fixtures will belong to their own bay group and will not be merged into the same group as the original fixtures. The pasted fixtures will be given the next available maximum bay group number,   the maximum bay group number + 1.

Add Bay Numbering Polyline

This section describes functionality to allow you to be able to add polylines on the floor plan to be used when bay numbering.

Description

- The Add bay numbering polyline functionality is launched through any of the following ways:

  - Clicking the **Add Bay Numbering Polyline** button on the Fixturing toolbar.

- Selecting the Add bay numbering polyline menu item under Insert menu on the menu bar.
- Typing the AVT_ADD_BAYNUM_PLINE command from the AutoCAD command line.

- When the **Add bay numbering polyline** functionality is started a check will be made that an AutoCAD layer exists associated with the BAYNUMBER_PLINE layer alias.

- If no layer is associated with the BAYNUMBER_PLINE layer alias then a new layer will be created in the floor plan drawing and the AutoCAD layer will be named BAYNUMBER_PLINE and the required data added to the database to associate it with the BAYNUMBER_PLINE layer alias (this will be include links to the current layer theme and layer standard).

- The AutoCAD layer properties will be set to the values defined in the active layer theme. The active layer theme will be read from the LAYER_THEME user variable. The variable value will be the layer theme's identifier (LAT_ID) field. If the value is invalid then the value set for the LAYER_THEME system variable will be used by default. If the LAYER_THEME system variable value is invalid then the lowest layer theme identifier in the database will be assumed.

  > **Note**: The AutoCAD layer associated with the BAYNUMBER_PLINE layer alias will not be added when the layer already exists in the floor plan drawing, but it will be shown if it is hidden.

- If the BAYNUMBER_PLINE layer alias does not exist in the database then a message of Missing BAYNUMBER_PLINE layer alias will be shown on the AutoCAD command line and the command will end.

- Once the AutoCAD layer associated with the BAYNUMBER_PLINE layer alias exists in the AutoCAD floor plan drawing, the layer will be made active and you will be prompted to Specify a start point on the AutoCAD command line.

- When you set the start point in the floor plan's AutoCAD drawing you will be prompted Specify the next point.

- The Specify next point or [Undo] prompt will be shown each time you specify another point until you exit the command. You can exit the command by using the <Esc> key. The <Enter> key or the <Spacebar> key will also exit the command when no string has been entered at the command prompt.

- The mouse pointer will interact with the standard AutoCAD snap functions (for example snap, object snap and so on) during the Add bay numbering polyline functionality.

- You are able to undo segments while drawing the bay numbering polyline by right clicking and selecting the Undo context menu option or clicking keyboard shortcut keys Ctrl+Z. Alternatively you can undo segments by typing Undo or U at the AutoCAD command line (the command will be case insensitive).

- When you exit from the command, any duplicate points (where a point is in exactly the same x, y position) will be removed.

- A check will be made that a minimum of two points have been specified (after duplicate points have been removed). If only one point has been specified an error message will be displayed on the AutoCAD command line saying Invalid action. The polyline requires more than 1 point. The command will then exit without creating a polyline.

> **Note**: The AutoCAD layer associated with the
> BAYNUMBER_PLINE layer alias will remain in the floor
> plan's drawing, even if it was added by the Add Bay
> numbering polyline function.

▪ The points will be joined to form a lightweight polyline. The linetype, lineweight
and transparency of the boundary will be set to BYLAYER. The polyline will be
set at 0 elevation. The polyline will be set to be on the AutoCAD layer
associated with the BAYNUMBER_PLINE layer alias.

> **Note**: The details of the polyline will only be stored in the
> AutoCAD floor plan drawing and not in the database. Also
> the details of the standard AutoCAD PLINE command are
> outside the scope of this document.

▪ If the active AutoCAD layer was changed when the Add Bay numbering
polyline was started, the active layer will be reset back to your original active
layer when it finishes. This will occur even if the polyline was not added
successfully.

Add/Remove Bay Numbering

The process flow for Add Bay Numbering has been shown below:
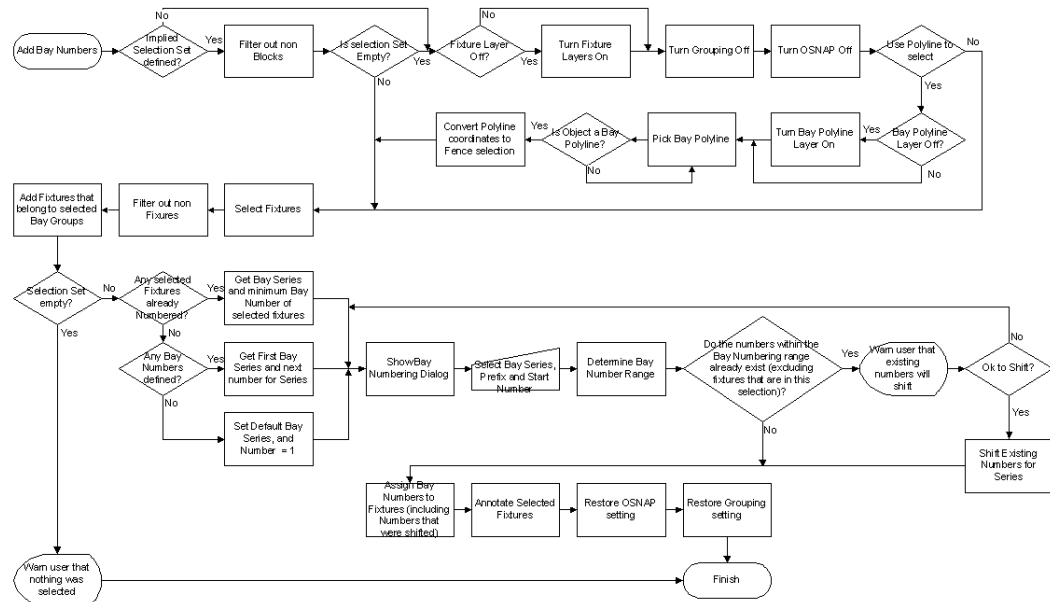
Description

▪ The Add bay numbers functionality is launched through any of the following
ways:

  – Clicking the **Add Bay Numbers** button on the Fixturing group of the
  MSP ribbon.

  – Selecting the Add bay numbers menu item under Insert menu on the menu
  bar.

  – Entering the AVT_ADDBAYNUM command from the AutoCAD command
  line.

- When you initiate the Add Bay Numbers functionality you will be taken to the floor plan to allow you to select the fixtures. The Select fixtures prompt will be shown in AutoCAD command line while selecting the fixtures. The fixture selection allows standard AutoCAD selection methods. The selection finishes when the user uses the enter key.

- When you select objects in the floor plan, only the fixtures are included in the selection set. Fittings, composite and non-retail (other) blocks and non-block objects will be filtered out during selection.

- The Bay Numbering window will be launched only when there are fixtures in the selection set. If the selection set has no fixtures in it, when the user ends the selection process, a warning message will be shown on the AutoCAD command line saying No fixtures selected and the bay numbering process will be aborted. When one or more fixtures have been selected, the Bay Numbering window is displayed.

- When you have already selected fixtures using the standard AutoCAD selection and then initiate the Add bay numbers functionality, then you will not be prompted to select the fixtures, instead, the bay numbering window will be launched immediately.

> **Note**: If the existing selection set contains no fixtures when the Add bay numbers functionality is initiated then you will be prompted to select fixtures.

- The bay numbering window will have the following properties:
    - This will be a modal window, and cannot be minimized.
    - The window cannot to be resized, thus it cannot be maximized.
    - The window will not have an icon since it cannot be minimized.
    - The table below shows the controls and its accelerator keys for this window.

Label	Control Type	Accelerator Keys
Series name	Combo box	Alt + N
Prefix	Text box	Alt + X
Start from	Numeric up down	Alt + S
Apply	button	Alt + L
Close	button	Alt + C
Pick	button	Alt + P

- The number of fixtures selected for bay numbering will be displayed in status bar as <Number> Fixtures selected.
- The Series name – The Series name represents a group of fixtures which are to be, or have been, bay numbered in a similar style and structure. A series can be defined for a single fixture, multiple fixtures or a gondola run. This combo box will be used to select the name of the bay number series from an ascending list of series names already used in the floor plan. You will also be able to provide a new Series name for bay numbering by typing the value in the series name field.
- In the case of multiple fixtures being in the selection set, the first selected fixture will be used to deduce the bay number series. The following rules will be applied in the order shown:
  - If the first selected fixture is already bay numbered then the Series name of that bay number will be shown in the combo box.
  - If the first selected fixture is not bay numbered then the last Series name used during the current session will be shown in the combo box.
  - If the first selected fixture is not bay numbered, and you have not used the Bay Numbering window in the session, then the first Series name from the drop-down list will be shown in the combo box.
  - If the floor plan has no existing bay numbers, the Series name drop-down list will be empty. The first alphabetic character, when the language specific ascending sort is applied, will be shown as the default value. Your language, set in the Administration module, will be used to determine which language sort to use.
- When you click the **Apply** button, the bay numbers will be applied to the selected fixtures. The sequence that the bay numbers will be applied will be the order the fixtures were added to the selection set.
- If the selection set includes fixtures that already have bay numbers, then the existing bay numbers will be overridden while applying the new bay numbers.
- If the selection set includes a fixture in a bay group then all other members of the same bay group will also be added to the selection set. All members of the same bay group will be given the same Prefix and bay number within the same series. The bay number is determined by the sequence in which the first fixture in the bay group was added to the selection set. The other fixtures in the selection set will be bay numbered with no gap in the number sequence. Even if a bay group has 3 fixtures in it and they are all given bay number 1, the next bay number will be 2.
- If you select an existing Series name, the range of numbers required to assign a bay number to the selected fixtures will be calculated and checked against the bay numbers for the series. (any fixtures already bay numbered in the series, but in the selection set will be excluded from the check). If the process finds a duplicate number between the required bay numbers and the existing ones then a message box will be displayed with the message Duplicate bay numbers not allowed. Select remedial action and click **OK** to continue. There will be three options as shown below.
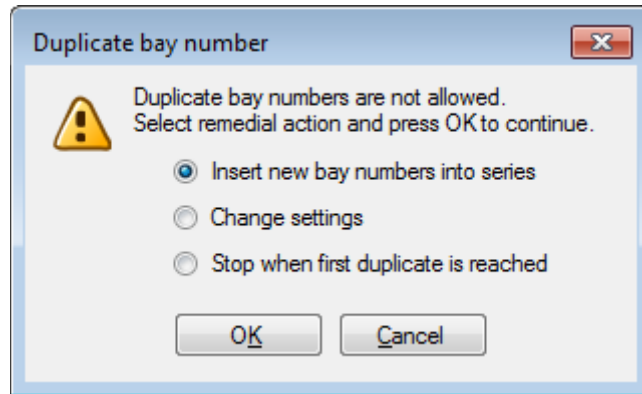
- When you click **OK**, the Duplicate bay number message box will close and the bay numbering process will continue based on the radio button selection. The following actions will happen:

  - Insert new bay numbers into series - The bay numbers that are greater than or equal to the Start number of the existing fixtures in the series that were not included in the selection set, will increment by the same amount. The amount that they will be incremented will be calculated as the difference between one more than the maximum new bay number for the selection set and the minimum existing bay number in the series of a non-selected fixture greater than or equal to the Start number.

  ```
  Increment = (maximum new bay number + 1) – minimum existing bay number
  ```

  > **Note**: Gaps in the incremented bay numbers in the series will be maintained.

  - Change settings: Will reopen the Bay numbering window with the last settings you had set. You can then change the settings so that the duplicate bay numbers don't occur.
  - Stop when first duplicate is reached – Will add bay numbers to each fixture in the selection set until the last non-duplicate bay number is reached. The remaining fixtures in the selection set will not be bay numbered. If any of the remaining fixtures in the selection set had bay numbers prior to the process starting, then these fixtures will have their original bay numbers removed (set to NULL).

- If you click the **Cancel** button the bay numbering process will exit and no bay number changes will be made. (The bay series, bay prefix and bay number will all have their original values).

- Once the bay numbering process has updated the bay numbers to the database the standard annotation process will be run to update the bay number annotation onto the floor plan for the affected fixtures.

- The Add bay numbers using the polyline functionality is launched through any of the following ways:

  - Clicking the **Add Bay Numbers Using The Polyline** button on the Fixturing group of the MSP ribbon.
  - Selecting Add bay numbers using the polyline menu item under Insert menu on the menu bar.
  - Typing the AVT_PLINEBAYNUM command from the AutoCAD command line.

- When the Add bay numbers, using the polyline functionality is initiated, you will be prompted with the message Pick a bay numbering polyline on the AutoCAD command line. The AutoCAD layer associated with the BAYNUMBER_PLINE layer alias will be shown if it is hidden. When you pick a polyline on the layer associated with the BAYNUMBER_PLINE layer alias, the segments of the polyline will be used to select fixtures as if a fence selection had been used following the same points as the polyline (this polyline may have been created using the Add bay numbering polyline feature). If the polyline does not select any fixtures then the message No fixtures found will be displayed on the AutoCAD command line and you will be prompted to Pick a bay numbering polyline again.

- You are able to escape from the Add bay numbers in the polyline functionality by using the <Escape> key when prompted to Pick a bay numbering polyline.

- When you have pre-selected a polyline on the layer associated with the BAYNUMBER_PLINE layer alias and then have initiated the Add bay numbers using the polyline, it will not prompt you to select the polyline again; instead it will select the fixtures in the same manner.

- When the fixture selection is complete using a polyline the Bay Numbering window will be launched and bay numbering will occur. Once the bay numbering process is finished the AutoCAD layer associated with the BAYNUMBER_PLINE layer alias will be hidden if it was made visible by the command.

- The Remove Bay Numbering functionality will allow you to remove the bay numbering for the selected fixtures.

- The Remove bay numbering functionality is launched through any of the following ways:

    - Clicking the **Remove Bay Numbers** button on the Fixturing toolbar.
    - Selecting the Remove bay numbers menu item under Edit menu on the menu bar.
    - Typing the AVT_REMOVEBAYNUM command on the AutoCAD command line.

- When you initiate Remove bay numbers the Select fixtures prompt will be shown in the AutoCAD command line. Standard AutoCAD selection methods will be used to select the fixtures.

- When you are selecting the fixtures, the selection set will be filtered so that only fixtures are included. As such fittings, composite and non-retail (other) blocks and non-block objects will not be included in the selection set. The bay series name, prefix and numbers for the selected fixtures will be removed from the floor plan and database. If the selection set includes a fixture part of a bay group then the series name, prefix and bay numbers will be removed for all the fixtures in the bay group.

    > **Note**: The Series name will not be shown in the drop-down list the next time the Bay Numbering window is opened, if all the bay numbers for a series have been removed.

- When you have already selected fixtures using the standard AutoCAD selection and then initiate the Remove bay numbers functionality, you will not be prompted to select the fixtures, instead, the selection set will be filtered to remove any non-fixture objects and the bay numbers will be removed immediately.

Merchandise Overview in the Object Browser Chapter

This section describes the updates to the Merchandise Overview in the Object Browser chapter in the Oracle Retail Planner Module User Guide.

Description

- The Object Browser will be within an AutoCAD palette. The standard properties and behavior of a palette will be applicable to the Object Browser window and so the pallete is able to be docked or float within the AutoCAD drawing environment. It is not possible to close the Object Browser, but You are able to hide it.

- The behavior of the controls on the Merchandising tab will be the same as the equivalent controls in the Zones tab unless specified differently below.

- The Merchandising tab will only be visible to users that are a member of user groups that have been granted access using the existing ISSC Message Control mechanism based on their user group role. The following user group roles will have access set-up by default, unless explicitly stated otherwise:
  - Application Administrator
  - IT Help Desk Agent
  - Store Planning Managers
  - Merchandising Manager
  - Store Planner
  - Merchandising Planner

- The Merchandising tab of the Object Browser will contain Products and Planogram sub-tabs. All users that have access to the Merchandising tab will have access to these sub-tabs.
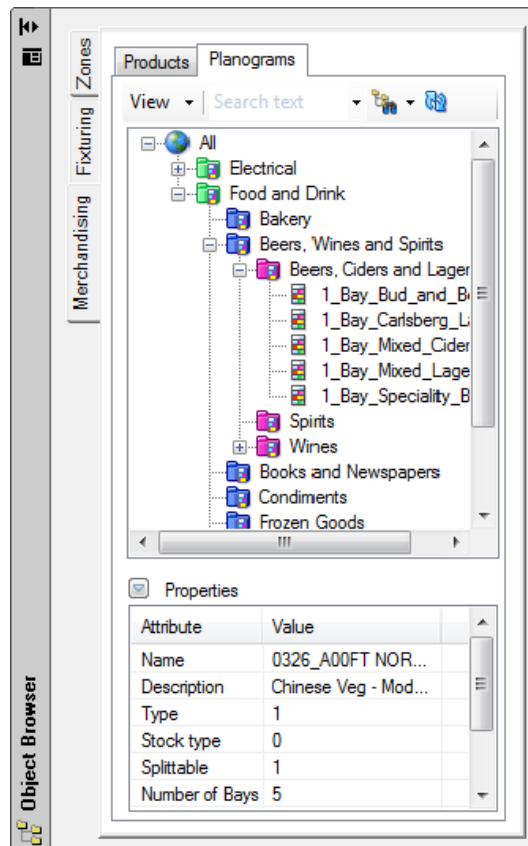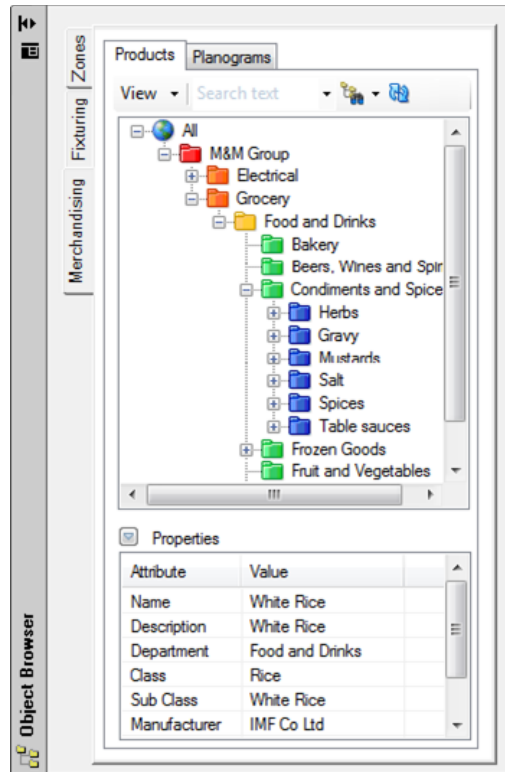
▪ The following icons will be used to represent items in the product hierarchy:

Icon	Description	Level (PRT_ID)
	All	Not applicable
	Product Company	5
	Product Group	4
	Product Division	3
	Product Department	2
	Product Class	1
	Product Subclass	0
	Product Style	-1
	Product Item	-2

- The product name (PRD_NAME) will be displayed as the text in the product hierarchy. The tree will be sorted in ascending alphabetical order. The sort algorithm will be based on the user's preferred language set in the User window in the Administration module.

- The following icons will be used to represent items in the planogram hierarchy. Any further customization in the planogram hierarchy levels beyond PGT_ORDER 6 would simply be shown using a default planogram folder icon.

Icon	Description	Level (PRT_ID)
	All	Not applicable
	Planogram Company	1
	Planogram Group	2
	Planogram Division	3
	Planogram Department	4
	Planogram Class	5
	Planogram Subclass	6
	Planogram	Not applicable

- The planogram group name (PGG_NAME) and planogram name (POG_NAME) will be displayed as the text in the planogram hierarchy. The tree will be sorted in ascending alphabetical order. The sort algorithm will be based on the user's preferred language set in the User window in the Administration module.

- The root node All is not held explicitly in the database, but will be shown in the Product/Planograms hierarchy on the tree view.

- The state of the product/planogram hierarchy for you will be restored when the Object Browser is reopened. This means the last selected node in the tree view that was open when the Object Browser was closed will be expanded and highlighted when it is next opened by the same user. This will be remembered between user sessions.

- Only the products to which you has been granted read access and their descendants will be listed in the product hierarchy. Product permissions will be set through the existing Data Security window of the Administration module.
- Only the planogram groups to which you have been granted read access and their descendants will be listed in the planogram hierarchy. Planogram permissions will be set through the existing Data Security window of the Administration module. If you do not have read permission for a planogram group, then the planograms associated with that group will not be displayed in the planogram hierarchy on the Object Browser
- Products will be displayed in the product hierarchy based on the effective date of the currently active floor plan. In the case when the floor plan effective date is not set, then the floor plan active date will be used instead. If this is also not set then today's application server date will be used instead. Only products whose effective date is less than or equal to the floor plan's date and whose expiry date is greater than the floor plan's date will be shown.   to say:
- Product effective date <= floor plan date <= Product expiry date
- The time elements of effective and expiry dates are to be ignored.
- To aid performance all of the child products of a node will be cached in the client's memory when a node is first expanded, but only those that meet the effective date criteria will be visible.
- If a product is expired then all its descendant products will be assumed to be expired too. For example if a Department is expired any Class or Sub-class associated with it will be assumed to be expired too.
- Only the products to which you have been granted read access and their descendants will be listed in the product hierarchy. Product permissions will be set through the existing Data Security window of the Administration module.
- Only the planogram groups to which you have been granted read access and their descendants will be listed in the planogram hierarchy. Planogram permissions will be set through the existing Data Security window of the Administration module. If the user does not have read permission for a planogram group, then the planograms associated with that group will not be displayed in the planogram hierarchy on the Object Browser.
- Only a single revision from each planogram lineage will be displayed in the planogram hierarchy based on the effective date of the currently active floor plan. In the case when the floor plan effective date is not set, then the floor plan active date will be used instead. If this is also not set then today's application server date will be used instead. The planogram revision shown will be the highest revision whose effective date is less than or equal to the floor plan's date and whose expiry date is greater than the floor plan's date.
  ```
  Planogram effective date <= floor plan date <= Planogram expiry date
  ```
- To aid performance all of the child planograms of a planogram group will be cached in the client's memory when a group is first expanded, but only those that meet the effective date criteria will be visible.

> **Note:** Revisions are a maximum of two characters and are numeric, alpha or alphanumeric. Alpha revisions follow the sequence of A to Z and then ZA to ZZ. Alphanumeric revisions have a static alpha character and then an incrementing number, or a static number and then an incrementing alpha character. This is as per the existing Planogram Substitution functionality.

- The Product/Planogram hierarchy will be refreshed when the user shifts focus between floor plans. Products and Planograms will be listed based on the newly selected floor plan effective date. In case the floor plan effective date is not set, floor plan active date will be used instead. If this is also not set then today's application server date will be used instead. If the currently selected node is not visible when the hierarchy refreshes then no node will be selected.

- The **Refresh** button will be used to refresh the product or planogram hierarchy based on the user permissions and active floor plan as described above. Only the displayed hierarchy on the Object Browser will be refreshed.

  > **Note**: The products and planograms that are already present in an open floor plan will not be updated according to the changes made to the product or planogram definitions when the **Refresh** button is clicked.

- On selecting a product/planogram in the hierarchy, corresponding properties will be displayed in the list view in the Properties section.

- The Properties list view will display the columns returned by the custom query from the AVTTB_CUSTOM_SQL table   mapped from the custom view type (CSQ_TYPE) and custom view level (CUV_LEVEL) in the existing AVTTB_CUSTOM_VIEW table. This will map to PROPERTIES_PRODUCT custom query for the product hierarchy and PROPERTIES_PLANOGRAM custom query for the planogram hierarchy. These will be created by renaming the existing CUV_PRODUCT and CUV_POG custom queries (as appropriate) during the database upgrade.

- On execution of the custom SQL, the filter clause will consist of the defined filter field and the node selected in the hierarchy.

  > **Note**: The implementer is able to specify which custom SQL should be used for different levels of the product/planogram hierarchy. This will be specified in the AVTTB_CUSTOM_VIEW table. The CUV_TYPE must be 3 when mapping to a product custom query. The CUV_TYPE must be 4 when mapping to a planogram custom query. Data will be fetched based on the product type (PRT_ID in the AVTTB_PRODUCT_DEF table) or the planogram group type (PGT_ID) selected in the hierarchy or 0 if a planogram is selected (this will be mapped to the CUV_LEVEL column).

- ISSC will continue using the existing IN--STORE_PROD_PROPS (for products) and IN-STORE_PLAN_PROPS (for planograms) custom SQL to display the properties and will not make use of AVTTB_CUSTOM_VIEW table.

- The rows will be shown in the list view in the order that the columns are returned by the custom query.

- Vertical and horizontal scroll bars will be available on the tree view and list view if the data cannot all be shown within the visible area.
- A splitter will be provided between the hierarchy and Properties frame to dynamically adjust the height of the control. The minimum height of the tree view or list view will be 50 pixels.
- The user is able to adjust the size of the Object Browser, either horizontally or vertically depending on where or if it is docked. The size of the Object Browser will be stored per user and maintained between sessions.
- The user is able to find any particular product or planogram in the hierarchy by typing the text in the search text combo box [Search text ▼] and clicking the **Find** button or clicking the Enter key.
- The Merchandising tab of Object Browser will also operate as described above in ISSC, but it will not be contained in a palette and so will not be able to be un-docked, moved or hidden. This is as per the existing ISSC functionality.
- The Merchandising tab of the Object Browser includes the Key plan frame beneath the Properties frame in ISSC only. The Key plan frame will display the zoom window extents on the floor plan as per the existing ISSC functionality
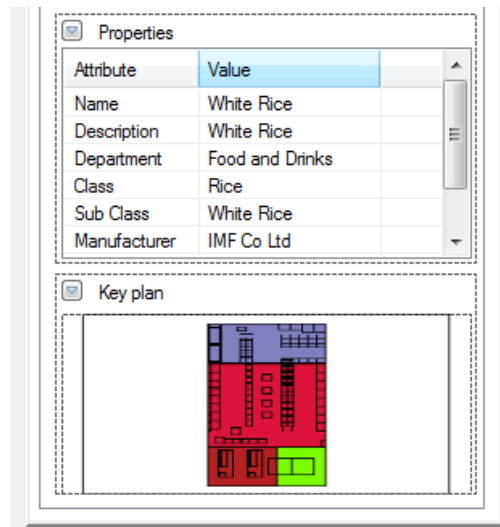
- The Key plan is able to be hidden by clicking the button ▼ next to the Key plan label in the same way as the Properties frame. When the Key plan is hidden, the Properties frame will move down and the addition height is added to the tree view as per the existing ISSC functionality.
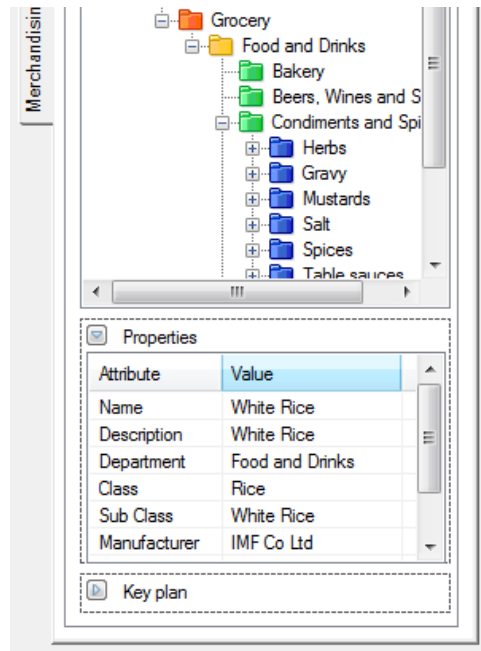
- The button will change to ▷ when the Key plan is hidden. The Key plan will be shown again at its previous size by clicking the ▷ button. When the Key plan is restored, the Properties frame will move up to make room for the Key plan and the tree view's height will be reduced. The button will change back to ▽ when the Key plan is restored.
- A splitter will be provided between the Key plan and Properties frames to dynamically adjust the height of the controls. The minimum height of the Key plan will be 50 pixels (the list view can be hidden as described above).

Overview of Merchandise in Planner Chapter

This section describes the updates to the Merchandise Overview in the Planner chapter of the Oracle Retail Planner Module User Guide.

Description

- A New Merchandising group on the MSP ribbon is added to the Planner module

Icon	Description	Level (PRT_ID)
	Assign merchandise	AVT_ADD_MERCH
	Remove merchandise	AVT_REMOVE_MERCH
	Reverse planogram	Not applicable
	Change planogram flow direction	AVT_CHANGE_POG_FLOW
	Planogram preview	AVT_VIEW_POG_PREVIEW

- The actions listed above will only be available to an Application Administrator, IT Help Desk, Merchandising Manager and Merchandising Planner, by default.
- When commands that affect the floor plan are run from the AutoCAD command line, it will display the message "Command not available for read only floor

plans" if the active floor plan is opened as read only. Similarly, the command will display the message "Command only available for floor plans" in the AutoCAD command line if the active drawing is not a floor plan. The command will automatically exit after displaying the message.

▪ The Assign merchandise, Remove merchandise, Change planogram flow direction and **Reverse Planogram** buttons will only be enabled when a floor plan is opened for editing. When the active floor plan is opened for viewing only, or the active drawing is not a floor plan, then the buttons will be grayed out and disabled.

▪ The Merchandising group buttons will use the existing ISSC message control mechanism to determine which buttons are visible and enabled for a user group. By default the Merchandiser, Merchandising Manager and Business Operations user roles will have the buttons visible and enabled.

▪ When the AutoCAD commands associated with the Merchandising group buttons are run, they will display the message "Command not available" in the AutoCAD command line if the associated button is grayed out. The command will automatically exit after displaying the message.

▪ Merchandise from the Object Browser or Object Grid can be applied in the following 3 ways:

– Pre-select fixtures and assign merchandise

– Pre-select fixtures and drag and drop the merchandise
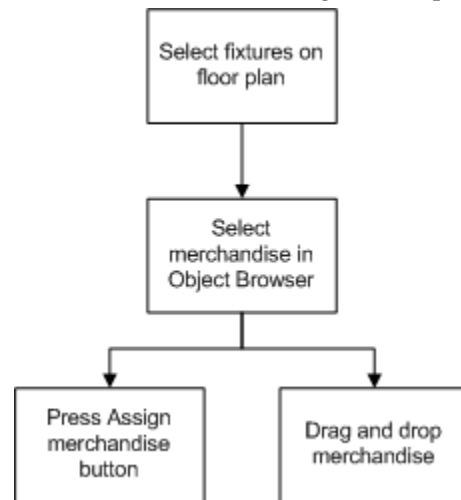
– Drag drop the merchandise
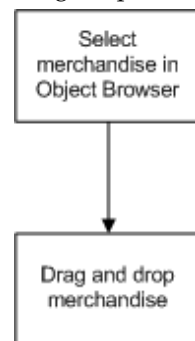
▪ Fixtures can be merchandised with products using the **Assign Merchandise** button of the Merchandising group on the MSP ribbon bar or by running the AVT_ADD_MERCH command from the AutoCAD command line. Using Assign

merchandise will assign the currently selected item in the product hierarchy when the Product tab is active. The **Assign Merchandise** button will be enabled when any level of the product hierarchy is selected and one or more fixtures are selected in the floor plan.

- Fixtures can be merchandised with Planograms using the **Assign Merchandise** ![icon] button of the Merchandising group on the MSP ribbon bar or by running the AVT_ADD_MERCH command from the AutoCAD command line. When the Planogram tab is active, using the **Assign Merchandise** button will assign the currently selected planogram in the planogram hierarchy. The **Assign Merchandise** button will be enabled when a planogram is selected.

- Pre-selection of the fixture will use the standard AutoCAD block selection process. When the Assign merchandise command is run, the selection set will be filtered to contain only valid fixtures (, a fixture block registered can populate with the placeholder option ON in the Fixture Studio module).

- The mouse pointer will be changed when a user selects a product/planogram in the Object Browser hierarchy, or from the Object Grid, and drags it across the floor plan. When the user drags a planogram across a fixture the position of where the planograms is dropped will determine the direction that the planogram will assign merchandise fixtures. If the drop position is to the left of the center of the extents of the fixture then the planogram will assign merchandise to the right. If the drop position is to the right of the center of the extents of the fixture then the planogram will assign merchandise to the left of the fixture. When the drop position is in the center of the extents of the fixture the planogram will assign merchandise to the right.

- The fixture selected will be based on the dimensions and position of the fixtures if the mouse pointer is within more than one fixture. The fixture nearest to the user, in the current view, will be selected. If the fixtures in the AutoCAD floor plan drawing are in 2D then the fixture dimensions will be read from the database. When testing which fixture is nearer, the system will use the drawing to determine the position and dimensions, except when the fixture is 2D (, the z dimension is 0), in which case the database value for the z size will be used. The physical shape of the drawing object will be used rather than the extents. Fixtures on layers that are not visible or frozen will be ignored.

- The image below, on the left, shows a 3D solid rendered view of a backpanel with a cabinet in front. The center image shows the fixtures in wireframe, similar to the way they would be shown in AutoCAD. The user drops merchandise at the position shown by the cursor. The cabinet is shown as merchandised in the image on the right as it is closer to the user in the view.
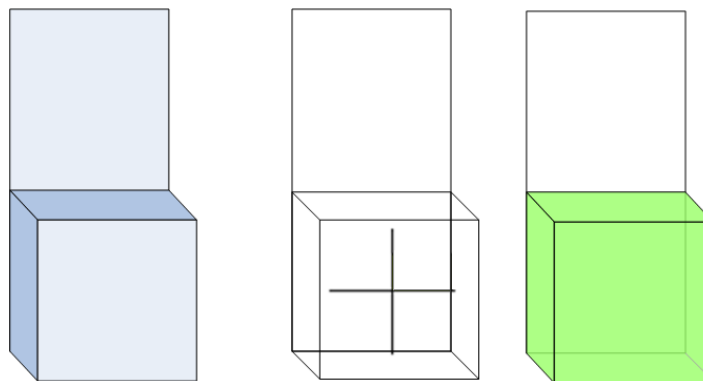
- In the second scenario the image on the left shows a 3D solid rendered view of a backpanel with a cabinet behind. The center image shows the fixtures in a wireframe, similar to the way they would be shown in AutoCAD. The user drops merchandise at the position shown by the cursor. The backpanel is shown as merchandised in the right image as it is closer to the user in the view.
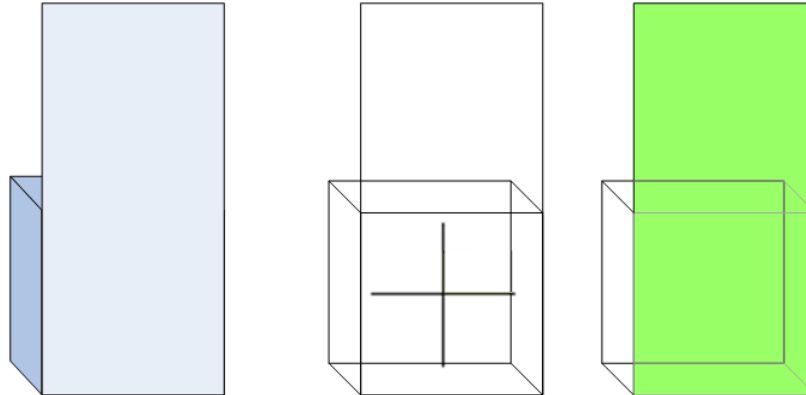
- When the user drags merchandise from the Object Browser or the Object Grid and releases the mouse button, a check will be made that the mouse pointer is within a fixture. If the mouse pointer is not within a fixture then the mouse pointer will revert to the default AutoCAD cursor and a message will be displayed on the AutoCAD command line saying "Unable to add merchandise to this location".
- When the user drags and drops a product, if the mouse pointer is over a fixture then the product is added to the fixture.
- When the user drags and drops a planogram, the planogram length information will be retrieved to calculate the number of adjacent fixtures required in the gondola to merchandise the dropped planogram. The number of fixtures required will be rounded to the nearest whole fixture, with a minimum of 1 fixture (this is a change from the existing ISSC functionality). The fixtures will be required to be adjacent in the direction indicated by the arrow on the cursor and on the same level and side of the gondola. If there are enough adjacent fixtures then the planogram is added to the fixtures.

> **Note**: The multiple profile setting will be checked when dragging and dropping merchandise. The existing fixture adjacency calculation data will be checked when identifying the adjacent fixtures. The AVTTB_FILE table will be updated to store the date and time that the fixture adjacency calculation was last run for the floor plan and when its fixturing was last changed. If the fixturing has changed, since the fixture adjacency calculation was run, the fixture adjacency calculation for the active floor plan will be run. The planogram is added using the results of the calculation.

- If the fixture, where the planogram was dropped, is not found in the fixture adjacency data, then a warning will be displayed on the command line saying "The fixture could not be found in the database, running synchronize to 'Match the drawing' may be required."
- The planogram is able to wrap on to fixtures on other sides of the gondola if the Wrap planogram option is ticked in the Merchandising tab of the Options window.

- The following error message will be displayed if there are insufficient empty adjacent fixtures for the planogram to be added.
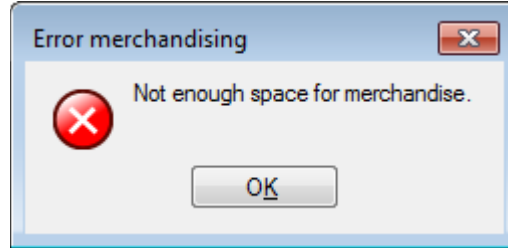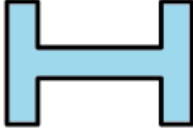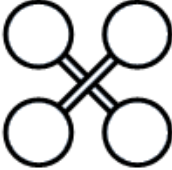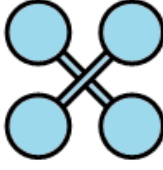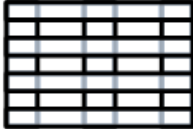
- When the user drags and drops a planogram, the fixture where the planogram is dropped will be the first selected fixture for the unique product sequence (PRO_SEQUENCE). The fixture selection order will follow each adjacent fixture in the direction of the arrow on the cursor. The selection order will be overridden if the Sort left most option is ticked in the Merchandising tab of the Options window.

- You will be able to pre-select fixtures in the floor-plan and assign the currently selected product/planogram in the hierarchy to the fixtures by clicking the **Assign Merchandise** button. Objects in the existing selection set, that are not fixtures, will be filtered out of the selection set when the **Assign Merchandise** button is clicked, to ensure that only fixtures are merchandised.

- Placed merchandise will only be associated to the fixture within the database. The merchandise will also be represented by an annotation in the floor plan. The fixture will be colored based on the product color, or parent product color in the case of planograms. The selected fixtures' product and planogram annotation will be automatically updated when merchandise is added.

- In the database the existing AVTTB_PRODUCT table will link the merchandise to the fixture and the product dimensions will be set to match the size of the fixture (ignoring merchandisable areas and capacity offsets of the fixture). The product block will be set in the database to the value of the product block associated with the fixture or the value of the existing DEFAULT_MERCH_BLOCK system variable. If the system variable is an invalid value or missing then an error window will be displayed saying "Cannot add merchandise. Product block not defined" and the merchandise will not be added.
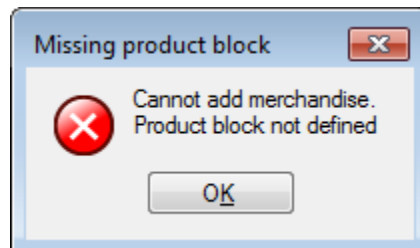
- The common parent product color will be used when the fixture is merchandised with multiple items, (, the product in the product hierarchy   common to all merchandise on the fixture). If no common product is found then the color will be shown as the default merchandise color. The default merchandise color will be set in the new DEFAULT_MERCHANDISE_COLOR system variable as a BGR decimal value. If the system variable is not found or the value is invalid then a value of 8421504 (gray) will be used.

- Fixture coloring will be based on the below requirements:
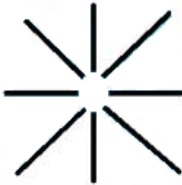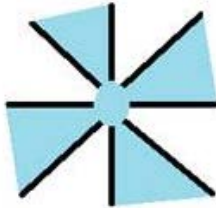
- The fixture block objects that are on the 2D layer will be colored. If there is no 2D layer in the block then any layers that don't begin with 3D will be used. If all the layer names have the prefix 3D then the block will not be colored.
- All enclosed areas found in the fixture block will be colored.

Fixture Type	Before Coloring	After Coloring
Metal upright		
Hanging rail		
Cantilever		
Flower holder		
Pallet		

- If no enclosed areas are found then any multi-segment polylines or single segment polylines with a bulge factor greater than 0 that are not closed will be colored as if the polyline was closed, a straight line will be assumed from the last point to the first point and then the enclosed areas will be colored.

1st Point   2nd Point
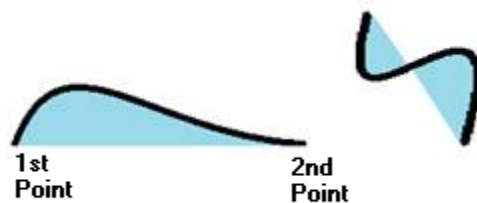
- If the fixture does not have any bulged polylines and could not be colored then any single segment polylines with a 0 bulge factor will be connected to each other by connecting a point to the nearest point on another polyline then connecting the other point on that polyline to the nearest point and so on. A straight line will be assumed from the last point to the first point and then the enclosed areas will be colored.

Fixture Type	Before Coloring	After Coloring
Metal upright		Numbers indicate the points found and used for connecting to form an enclosed area
Complex shape		

- When merchandising, the order in which the merchandise will be placed will depend on the Sort left-most option. If the Sort left-most option is selected (ON) in the Merchandising tab of the Options window, the selected fixtures will be sorted from left to right (when viewed towards their front direction) using the existing fixture adjacency calculation to automatically derive the order in which the merchandise will be placed. If the fixturing has changed since the fixture adjacency calculation was run, or the fixture where the planogram was dropped is not found in the fixture adjacency data, then the synchronize process will run with the Fixtures and Match the drawing options followed by running the fixture adjacency calculation for the active floor plan.

- The merchandise order will be stored in the existing product sub-group (PRO_SUBGROUP) column of the AVTTB_PRODUCT table. The product sub-group (PRO_SUBGROUP) will be incremented for each fixture.

- The selected fixtures are shown below with a bold dashed outline. They were selected in the order shown by the black numbers and the front of the fixture is on the top side as shown:
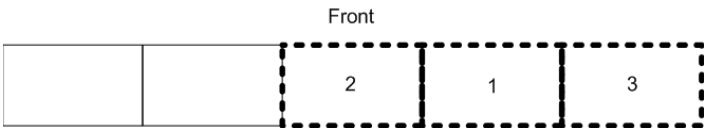
- The planogram bays/profiles is added as shown by the red numbers below.

- When using the Sort left-most option, fixtures will be merchandised per level and gondola side, in the order that the sides were selected by the user, based on the first fixture on a level or side that was selected.

- The following diagram shows two double sided gondolas each with one end cap. The fixtures with the dotted outlines have been selected for merchandising in the order indicated by the black numbers using a fence selection represented by the red dashed line.
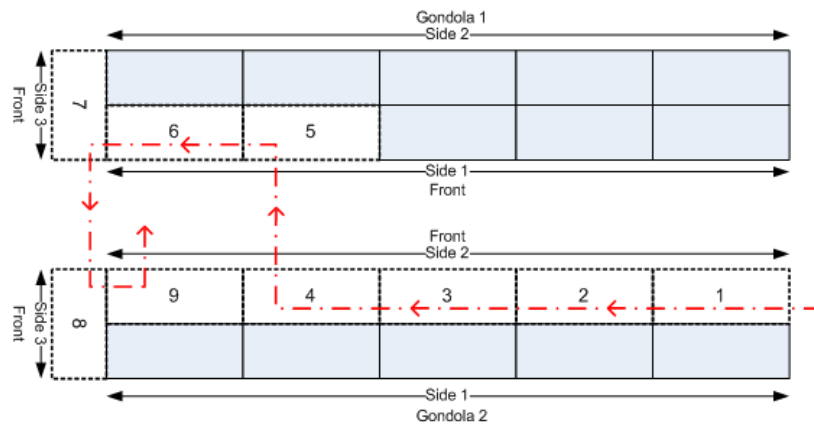
- Using the **Sort left most** option will merchandise the fixtures in the order shown by the red numbers in the diagram below. These would be the product sub-group numbers.
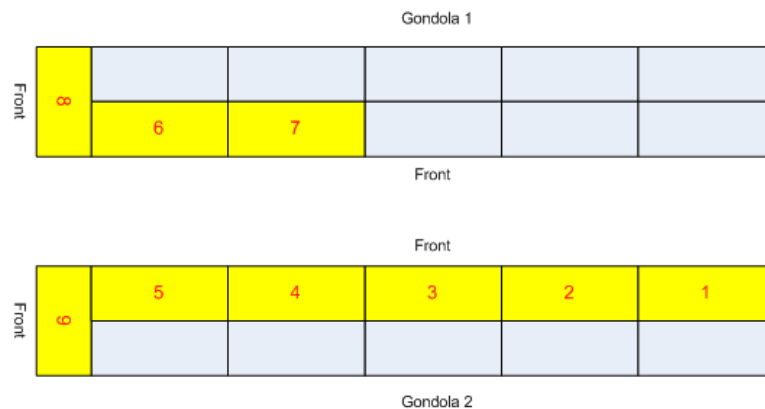
- If the Sort left-most option is not selected (OFF), the order in which the fixtures were selected will be used for the product sub-group order of the merchandise.

- When merchandising using a planogram, the planogram reverse flag (PGI_REVERSE in the AVTTB_POG table) will be set, based on the state of the **Reverse Planograms** toggle button on the Merchandising group of the MSP ribbon bar. If the **Reverse Planograms** button is set to OFF then the planogram reverse will be set to 0 to indicate that the planogram bays/profiles are placed in ascending order following the ascending product sub-group order. If the

Reverse Planograms button is set to ON, the planogram reverse flag will be set to 1 to indicate that the planogram bays are placed in descending order.

▪ Fixtures that are merchandised in a single action will be assigned a unique product sequence (PRO_SEQUENCE) for the floor plan. As such all fixtures containing a single instance of a planogram will be assigned the same product sequence. Similarly, fixtures that were pre-selected and a product placeholder merchandised to them, will be assigned the same product sequence. The product sequence will be set to be one more than the maximum product sequence for the floor plan (MAX(PRO_SEQUENCE)+1).

▪ The existing MERCH_MULTI_PROFILE system variable will indicate the merchandising behavior when merchandising an already merchandised fixture. By default the system variable is set to 0. The system variable will be changed to be a user variable to allow users to disable multi-profiling if it is enabled. The system variable can be configured with one of the existing values to act as the retailer's default. The values are:

```
0=Allow multi-profiling
1=Don't allow multi-profiling
2=Replace merchandise
```

▪ The user is able to set their multi-profile preferences in the Merchandising tab of the Options window.

> **Note**: If the Business Operations user sets the system variable value to be 1 (Don't allow) or 2 (Replace), this value will mean that the Allow option will be hidden in the Options window and cannot be set by the user.

▪ When the MERCH_MULTI_PROFILE user variable is set to 0 (Allow), the new merchandise is added to the pre-selected fixtures (even if the fixtures are already merchandised).

▪ When the MERCH_MULTI_PROFILE is set to 1 (Don't allow), an error message will be displayed to the user, when the pre-selected fixtures are already merchandised, and no placement will take place.

▪ When the system variable is set to 2 (Replace), any existing merchandise on the pre-selected fixtures will be replaced with the new merchandise.

▪ If a product placeholder on a fixture is to be replaced and it is part of a product group then the whole product group will be removed, even if the new merchandise will not span all the fixtures of the product sequence/group.
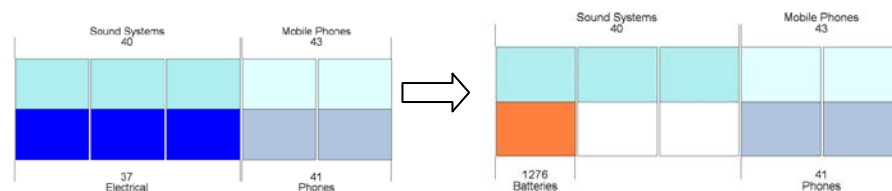
Electrical is a product placeholder

Whole group removed when Batteries placed

▪ If a planogram on a fixture is to be replaced then the whole planogram will be removed even if the new merchandise will not span all the bays of the planogram.

> **Note**: If the fixtures are pre-selected then the new merchandise will only apply to selected fixtures, but the original merchandise will be removed from all fixtures that hold a part of the planogram. In other words complete planograms will be removed even though the new merchandise requires only part of the occupied space

- Planogram rules, as configured in the Planogram rules tab of the Options window, will be checked when merchandising the fixtures. Below are the rules which will be checked before adding new planograms when they are turned on in the Planogram rules tab of the Options window:

  - Planogram Length – This rule will pass when the following is true:

    Fixture length – Negative length tolerance <= New planogram length <= Fixture length+ Positive length tolerance

    > **Note**: The check will be made taking into account the cumulative length of each of the selected fixtures against the planogram definition length.

```
Fixture length = sum of selected fixture's length
```

The selected fixtures can be calculated from a drag and drop operation, or have been manually selected by the user.

  - Planogram Depth – This rule will pass when the following is true:
```
Fixture depth– Negative depth tolerance <= New planogram Depth <= Fixture
depth + Positive depth tolerance
```

- Planogram Style: This rule will pass when one of the styles of the new planogram style matches with at least one style of the fixture.

- Planogram split: The planogram definitions *Can be split* property, will be checked before placing the planogram across gondolas or on multiple sides of the same gondola.

- If the planogram's *Can be split* property is set to *true* and the selection requires the planogram to be split across gondolas (as identified using the existing fixture adjacency calculation), then the rule will pass. Similarly, the rule will pass if the selection places the whole planogram on a single side of a gondola, irrespective of the state of the planogram's *Can be split* property.

- Ranges: This rule will pass when the minimum and maximum values of the fixture temperature ranges are equal to or between the minimum and maximum values of the temperature range of the new planogram.
```
Planogram minimum temperature <= Fixture minimum temperature
AND Fixture maximum temperature <= Planogram maximum temperature
```

- The following warning message is displayed if any of the planogram merchandising rules fail.
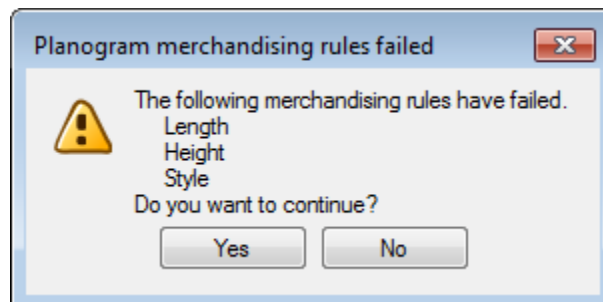
- When the user clicks the **Yes** button the window will be closed and the merchandise is added to the floor plan. When the user clicks the No button the window will be closed and the merchandise operation will be cancelled.

- Users is able to remove merchandise by selecting one or more fixtures and clicking the **Remove merchandise** button of the Merchandising group on the MSP ribbon bar or by running the AVT_REMOVE_MERCH command from the AutoCAD command line. The **Remove Merchandise** button will be enabled when one or more fixtures are pre-selected in the floor plan. The **Remove Merchandise** button will be grayed out when no fixtures are selected.

- When Remove merchandise is run, a check will be made that the selected fixtures are merchandised. If no merchandise is found on the selected fixtures then the message "No merchandise to remove" will be displayed on the AutoCAD command line. If merchandise is found then the Remove Merchandise window will be displayed if the Prompt on deletion setting in the Merchandising tab of the Options window is turned ON.

- The Remove Merchandise window will list the merchandise details.
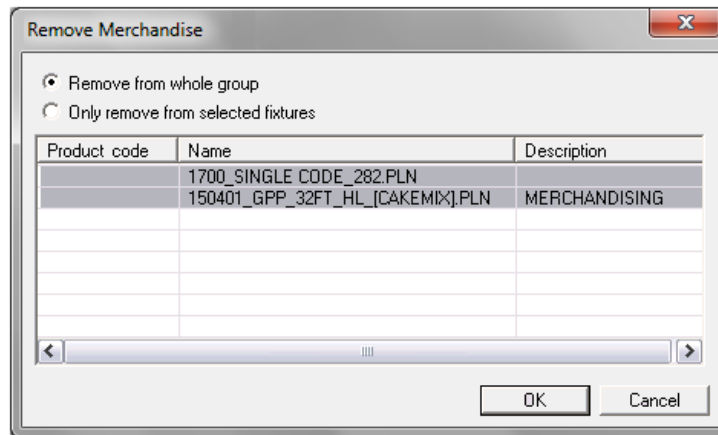
- The window contains the following columns detailing the merchandise to be removed
  - Product Code
  - Name
  - Description

- The Product code field will display the value of the product code (PRD_CODE) for the merchandise on the selected fixtures. If the merchandise is a planogram then the Product code will be from the parent product of the planogram as per the existing ISSC window.

- The Name and Description fields will display either the product name (PRD_NAME) and description (PRD_DESC) or the planogram name (POG_NAME) and description (POG_DESC) for the merchandise, as appropriate.

- By default the column widths will be set to allow the whole text of the column values to be read. If the column header text is longer than any of the values in the column, the column width will be set, by default, to allow the whole text of the header to be read.

- The Remove Merchandise window will be resizable as per the existing ISSC window. The list view will expand to use the available space. The **OK** and **Cancel** buttons will always be shown when the window is resized. The

- minimum length of the window will be the length of the radio button label text and the minimum height will be 200 pixels. The next time the window is opened, it will display as the same size as when it was last closed. The window size will be remembered between user sessions.

- The Remove Merchandise window will show vertical and/or horizontal scroll bars when required.

- You are able to resize the columns in the Remove Merchandise window list view. The next time the window is opened it will display the columns as the same size as when the window was last closed. The column sizes will be remembered between user sessions. The user will not be able to re-order or sort the columns as per the existing ISSC window.

- By default all merchandise in the list will be selected for removal and the Remove from whole group option will be selected. The Remove Merchandise window will be closed and the Remove merchandise command will be aborted if the user clicks the **Cancel** button.

- The user will also be able to manually select rows in the Remove Merchandise window list view. Users is able to select multiple rows using the Ctrl key. When clicking to add rows; hold the Shift key and click to add all rows between the already selected row and the mouse pointer; or use the Ctrl+A keyboard shortcut to select all rows. Dragging the mouse across the list view will also select multiple rows.

- When the Remove from whole group option is selected and the user clicks the **OK** button, the Remove Merchandise window will close and the whole instance of each product/planogram selected in the list view will be removed. The whole instance of a product/planogram is all the merchandise that shares the same product sequence (PRO_SEQUENCE).The Remove from whole group option will be the default selection in the window.

- When the Only Remove from selected fixtures option is selected and the user clicks the **OK** button the Remove Merchandise window will close and the product/planogram selected in the list view will be removed only from the selected fixtures. The product sub-group for the remaining/un-deleted fixtures will be updated when merchandise for a product sequence is partially removed (, the Only remove from selected fixtures option is used) so that the product sub-group starts from 1 and increments continuously.

- When the Prompt on the deletion setting in the Merchandising tab of the Options window is turned OFF, the whole instance of all the products and planograms on the selected fixtures will be removed when the Remove merchandise command is run. No prompt will be displayed.

- The selected fixtures' product and planogram annotation will be automatically updated when merchandise is removed. The fixtures' product color will also be automatically updated.

- Users is able to change the flow direction of planograms by selecting one or more fixtures and clicking the Change **Planogram Flow Direction** button on the Merchandising group on the MSP ribbon bar or by running the AVT_CHANGE_POG_FLOW command from the AutoCAD command line. The Change planogram flow direction will be enabled when one or more fixtures are pre-selected in the floor plan. The **Change Planogram Flow Direction** button will be grayed out when no fixtures are selected.

- When Change planogram flow direction is run a check will be made that the selected fixtures are merchandised with planograms. If no planograms are found

on the selected fixtures then the message "No planograms to change" will be displayed on the AutoCAD command line and the command will end.

- The Change planogram flow direction command will change the state of the planogram reverse flag (PGI_REVERSE in the AVTTB_POG table) for the planograms on the selected fixtures. If the planogram reverse flag is set to 0, for a planogram, then it will be changed to 1 to indicate that the planogram bays are placed in descending product sub-group order. If the planogram reverse flag is set to 1 then it will be changed to 0 to indicate that the planogram bays are placed in ascending order.

- The selected fixtures' product and planogram annotations will be automatically updated when Change planogram flow direction makes changes.

Planogram Preview

This section describes the planogram preview options available for Merchandiser through Merchandising group on the MSP ribbon.

Description

- The **Planogram Preview** button on the Merchandising group of the MSP ribbon bar, or using the Planogram preview option on the right click context menu of planogram hierarchy, will open the preview of the currently selected planogram in the planogram hierarchy using the AVT_VIEW_POG_PREVIEW command. The command will prompt for "Select planogram location [Tree, Drawing]:" The Tree option will be automatically passed to the command when it is initiated from the ribbon or the right click context menu of the planogram hierarchy.

- The existing ISSC Schematic Preview window will be modified to show the front view of the planogram. The window will be hosted in a standard AutoCAD palette, so that it can be moved, hidden and docked as required. The title of the palette will be appended with a hyphen followed by the name of the selected planogram. The Options window called from Schematic Preview in ISSC will only display the Display and Colors options and all other options will be hidden in Planner.
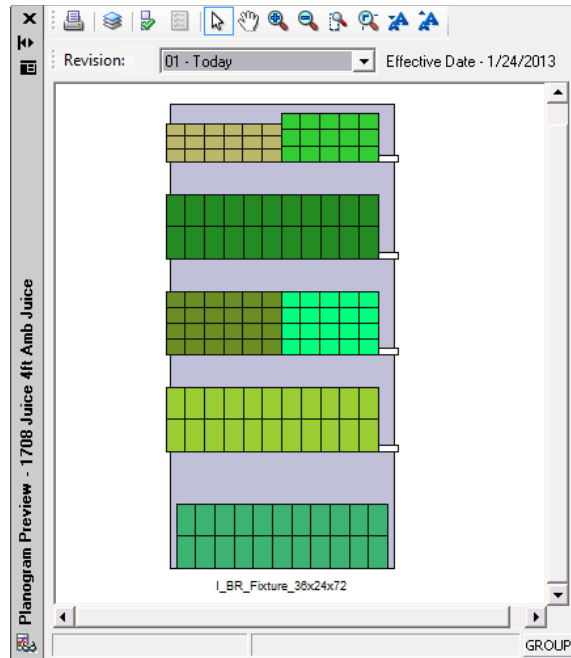
- The **Print** 🖨 and **Properties** 📋 windows will be the same as the existing ISSC 13.3 windows. The **Layers** 📚 window will be the same as the existing ISSC window, but will only list layers displayed in the Planogram Preview. The existing Schematic Preview does not use a layer alias, but has hard coded layers (planogram fixtures, planogram shelves and planogram products). You will also need Fixture text, shelf text, and product text.

- The Planogram preview context menu option of the currently selected fixture will open the preview of the planograms on the selected fixtures in the floor plan using the AVT_VIEW_POG_PREVIEW command. The command will prompt for "Select planogram location [Tree, Drawing]:" The Drawing option will be automatically passed to the command when it is initiated from the right click context menu of the selected fixture. The existing ISSC Schematic Preview window will be modified to show the planogram preview as described above.

- The Planogram preview palette will display the word "Reverse" on its status bar if the POG_REVERSE flag is set to 1 for the selected fixture in the floor plan.

- The user is able to open multiple Planogram preview palettes at the same time, one for each different planogram selected in the hierarchy or the floor plan. If a Planogram preview palette is already open, when the user selects the Planogram preview option, then the existing palette will be un-hidden.

- When Planogram preview is run for a fixture in the floor plan, if the user does not have read permission for the planograms in the floor plan, then the error message "You do not have read permissions for these planograms" will be displayed on the AutoCAD command line. The message will only be displayed once, and will not be shown for each planogram in the selection that the user does not have read permissions for.

Merchandising Options

This section describes the configuration of various merchandising options available for merchandising.

Description

- The Merchandising tab will be displayed in the Options window when the user's user group has permission to view the Merchandising tab in the Object Browser.

- The Merchandising tab of the Options window will store user settings that will be used during merchandising operations within the Planner module. The default value for each option will be set using the associated user variable. When the user first uses Planner, the options will be set to the default values. If the user variable is missing from the database then the settings will use the default value and any changes will only be for the duration of the user session.

- The Sort left most check box will allow the user to enable sorting the selection order of fixtures during merchandising. When the check box is ticked then the selection set will be sorted. When the check box is un-ticked then the fixtures will be merchandised in the order they are selected. This will use the existing OPTIONS_SORT_LEFTMOST user variable. If the OPTIONS_SORT_LEFTMOST user variable is set to an invalid value or is missing then the Sort left most check box will be ticked.

- The Wrap planogram check box will allow the user to enable planograms to be merchandised on multiple sides of a gondola when they are dragged and dropped from the Object Browser or the Object Grid. When the check box is ticked then the available space for a planogram includes fixtures on other sides of a gondola (as determined by the existing Fixture adjacency calculation). When the Wrap planogram check box is un-ticked the available space for a planogram will be determined only using the side of the gondola where the planogram is dropped. This will use the existing OPTIONS_WRAP_INSERT user variable. If the OPTIONS_WRAP_INSERT user variable is set to an invalid value or is missing then the Wrap planogram check box will be un-ticked.

- The Use promotional fixtures check box will allow the user to enable planograms/products to merchandise onto the fixtures marked as promotional when they are dragged and dropped from the Object Browser or the Object Grid. When the Use Promotional Fixtures check box is ticked then promotional fixtures will be included in the available space when merchandising with planograms. When the check box is un-ticked then the promotional fixtures will be excluded from the available space. This will use the existing OPTIONS_POPULATE_PROMO user variable. If the OPTIONS_POPULATE_PROMO user variable is set to an invalid value or is missing then the Use Promotional Fixtures check box will be un-ticked.

- The Multiple profiles radio buttons will allow the user to determine how merchandise will be handled when adding it to fixtures that are already merchandised. The **Allow** radio button will only be visible if the Administrator has set the retailer's default value to 0 (Allow) as the MERCH_MULTI_PROFILE user variable. When the Allow radio button is not visible the other radio buttons will be moved so that there is not a space at the top of the list.

- The radio button selected by default will use the value the Administrator sets in the MERCH_MULTI_PROFILE user variable. If the MERCH_MULTI_PROFILE

user variable is set to an invalid value or is missing then all three radio buttons will be visible and the Allow setting will be used as the default.

- The Prompt on Delete check box will be a new user variable OPTIONS_MERCH_PROMPT_ON_DELETE which guides whether a Remove Merchandise window should be shown on merchandise removal. This setting applies only for the fixtures which are merchandised with one item. If a fixture is multi profiled, then the Remove Merchandise window will be shown irrespective of what value is set for OPTIONS_MERCH_PROMPT_ON_DELETE variable. If the OPTIONS_MERCH_PROMPT_ON_DELETE user variable is set to an invalid value or is missing then the Prompt on delete check box will be ticked.

- All changes made in the Options window will be saved when the user clicks **OK** button. Any changes made in the Options window will be discarded if you click the **Cancel** button.

Planogram Rules Options

This section describes the configuration of various merchandising options available for merchandising.

Description

- The Planogram rules tab will be displayed in the Options window when the user's user group has permission to view the Merchandising tab in the Object Browser.

- The Planogram rules tab of the Options window will store user settings that will be used during planogram merchandising operations within the Planner module. The default value for each option will be set using the associated user variable. When the user first uses Planner the options will be set to the default values.

- The state of the planogram rules check box will be stored in the new OPTIONS_POG_RULES user variable. The value will be a bitwise integer that indicates which settings are enabled. The following table shows the bitwise value of each setting.

Setting	Bitwise Value
Match length	1
Match depth	2
Match height	4
Match style	8
Match temperature range	16
Match style	32
Can be split	64

- The Match length option will allow the user to enable the length rule to be used when merchandising a planogram. When the Match Length check box is ticked the overall length of the planogram will be compared to the total length of the pre-selected fixtures. When the Match Length check box is un-ticked the rule will not be applied.

- The Match Depth option will allow the user to enable the depth rule to be used when merchandising a planogram to fixtures. When the Match Depth check box is ticked the depth of the planogram bays/profiles will be compared to the depth

of each fixture. When the Match Depth check box is un-ticked the rule will not be applied.

- The Match Height option will allow the user to enable the height rule to be used when merchandising a planogram to fixtures. When the Match Height check box is ticked the height of the planogram bays/profiles will be compared to the height of each fixture. When the Match Height check box is un-ticked the rule will not be applied.

- The Tolerance label will show the system units in brackets (mm for metric systems and inches for imperial systems). The position of the brackets will be user language dependent.

- The Tolerance for length, depth and height will be stored in the system's units (mm for metric systems and inches for imperial systems). The Tolerance value will be stored in a new set of user variables named as follows OPTIONS_POG_LENGTH_OVER, OPTIONS_POG_LENGTH_UNDER, OPTIONS_POG_DEPTH_OVER, OPTIONS_POG_DEPTH_UNDER, OPTIONS_POG_HEIGHT_OVER, OPTIONS_POG_HEIGHT_UNDER. If the value of the user variable is non-numeric then it will be assumed to be 0.

- The Tolerance up down controls will allow any value between 0 and 3000 for metric systems or between 0 and 120 for imperial systems. The user is able type a value. The value will only be able to be an integer value (a whole number).

- The Match Temperature Range option will allow the user to enable the temperature range rule to be used when merchandising a planogram to fixtures. When the Match Temperature Range check box is ticked the temperature range of the planogram will be compared to the temperature range of the fixtures. When the Match Temperature Range check box is un-ticked the rule will not be applied.

- The Match Style option will allow the user to enable the fixture style rule to be used when merchandising a planogram to fixtures. When the Match Style check box is ticked the styles of the planogram will be compared to the styles of the fixtures. When the Match Style check box is un-ticked the rule will not be applied.

- The Check Planogram Can Be Split option will allow the user to enable the 'can be split' rule to be used when merchandising a planogram to fixtures. When the Check Planogram Can Be Split check box is ticked the Can Be Split setting of the planogram will be compared to the fixture adjacencies. When the Check Planogram Can Be Split check box is un-ticked the rule will not be applied.

- All changes made in the Options window will be saved when you click the **OK** button. Any changes made in the Options window will be discarded if you click the **Cancel** button.

Overview of Annotation in Planner Chapter

This section describes the updates to the Annotation Overview of the Planner chapter in the Oracle Retail Planner Module User Guide.

Automatic Annotation in Planner

This section describes the Annotation operations in the Planner.

Description

- Annotations will be called automatically when any of the following actions are completed.
  - Zones and holes are added, edited or deleted
  - Fixturing is added, edited or deleted
  - Merchandise is added, edited or deleted
  - Aisles are added, renamed or deleted
  - Bay numbers are added, edited or deleted
- Automatic annotation is able to run by other Space Planning processes. Processes that run automatic annotation are as follows:
  - Synchronize
  - Planogram substitution
  - Floor plan publishing
  - Process floor plans (drawing automation)
- The system will determine what annotation is to be set, by checking the Auto Placement value of each text style.
- A mapping between Object type and the Auto Placement value is shown below:

Object	Auto Placement
Site zone	Site zone*
Building area	Building zone*
Internal zone	Internal zone
Sales area zone	Sales zone*
Department zone	Department Zone
Sub-department	Zone
Non sales area zone	Non sales zone*
Concession area zone	Concession zone*
Custom zone	Custom zone*
Fixture	Fixture
Product	Product placeholder
Planogram	Planogram
Bay Number	Bay Numbering*
Aisle	Aisle*

> **Note**: * indicates a new **Auto Placement** value. the possible **Auto Placement** values are stored in the AVTTB_AUTOTEXT_TYPE table.

- Multiple text styles can be set to automatically annotate for a single type of object by setting the same Auto Placement value to the applicable text styles.
- When an annotation is added to a floor plan the parent-child relationship between the object and the annotation will be saved in the database. The position and text of the annotation will also be saved in the database.
- There are 3 points which will be stored for each piece annotation.

- The ANNO_LINE1_POS and ANNO_LINE2_POS points will be the co-ordinate of the start point of the extension lines. ANNO_TEXT_POS represents the center point of the annotation text. The 3 points will be stored even if dimension or extension lines are not visible.

- The user is able to move the annotation that has been placed automatically using standard AutoCAD functionality. When an annotation is moved the new position of the annotation will be saved in the database.

Manual Annotation in Planner

This section describes the Annotation operations in the Planner.

Description

- The annotation can be run manually by clicking one of the annotation buttons in the Retail group of the MSP Ribbon.

    - Annotate fixtures ⊞

    - Annotate merchandise ⊞

    - Annotation 🅰

- The **Annotation** buttons and their corresponding commands will be available by default to the following users: Application Administrator, IT Help Desk Agent, Merchandising Planner, Merchandising Manager, Store Planner and Store Planning Manager.

- When the **Annotate Fixtures** button is clicked the automatic annotation for fixturing will be re-applied.

- When the **Annotate Merchandise** button is clicked the automatic annotation for product placeholders and planograms will be re-applied.

- If there is an AutoCAD selection set when the **Annotate Fixtures** or **Annotate Merchandise** button is clicked then the annotation will only be applied to the fixturing or merchandise in the selection set. Otherwise the annotation will be re-applied to all the fixturing or merchandise in the floor plan.

- Click the **Annotation** button to open the Annotation window.
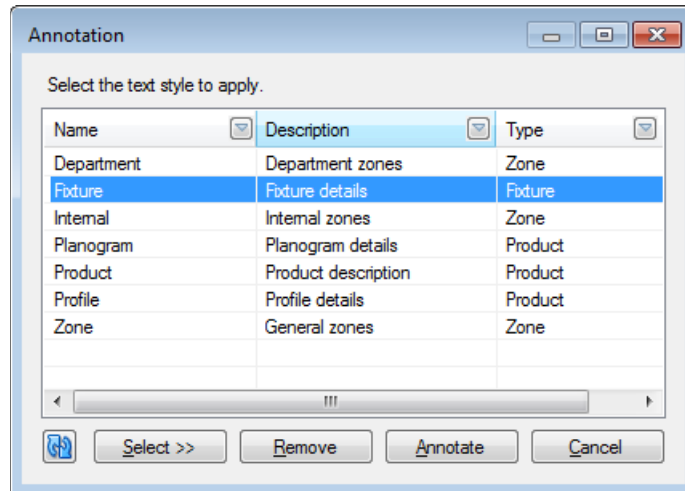
- The Annotation window is able to be resized and maximized, but not minimized. The minimum size of the window will be 430 x 300 pixels.

- The text styles with File, Fixture, Product or Zone Parameter type set up in the Administration module will be displayed in the grid on the Annotation window. The text style's Name, Description and Parameter type will be shown. Scroll bars will be shown when required.

- You are able to change column widths, sort and filter the text styles using the standard functionality of the Universal List View control. You will not be able re-order the columns. These settings will be remembered between user sessions.

- Click **Refresh** to refresh the text style cache from the database for all the text styles.

- You are able to select one or more text styles from the grid. If a user clicks on an already selected row then the row will be unselected. This will disable all the buttons except the **Cancel** button.

- Selecting any of the text styles will enable Select >> and the **Remove** ✏ buttons.

- Click the **Select >>** button to hide the Annotation window and display the prompt "Select objects:" on the AutoCAD command line.

  - You are able to select objects in the floor plan.

  - Only objects applicable to the Parameter type of the selected text styles is added to the selection set. The other objects selected will be ignored.

  - Clicking Enter after selection will annotate the objects in the selection set using the selected text style. For objects that already have annotation, the text will be updated, but its previous position will be used.

- Select any of the text styles and click the **Remove** button, to remove all the annotation from the floor plan created by the selected text styles. The annotation will be removed in the floor plan drawing and the database. If a row is selected in the list of text styles then only an annotation related to that text style will be removed even if it is on the same layer as an annotation from another text style.

  > **Note:** Removing the annotation will allow you to reapply the annotation in the position defined by the text style when it has been moved manually.

- Selecting a text style and clicking the **Annotate** button will annotate all the appropriate objects in the floor plan with the annotation defined by the selected

text style. The default annotation for the text styles will be as per the existing template database, except for the Aisle and Bay Numbering Parameter types.

- When an object is already annotated, manual annotation will use the position of the annotation saved in the database, but generate the text based on the Text Styles. When an object does not have annotation positions saved in the database, the position will be based on the text style.   to say, if an annotation position record is linked to multiple objects in the database, then the text style had the Use Separate Text check box unchecked when the annotation was placed. If the text style now has the Use Separate Text check box checked then the saved position of the text will be ignored and the annotation will be repositioned based on the text style rule.

- The saved annotation position will be ignored if the state of the Use Separate Text option is found to have changed since the annotation position was saved.

- When manual annotation is applied to a floor plan the parent-child relationship between the object and the annotation will be saved in the database. The position of the annotation will also be saved in the database (in World co-ordinates).

- You are able to move the annotation that has been placed manually using standard AutoCAD functionality. When an annotation is moved or edited in any way the new position or text of the annotation will be saved in the database.

- Annotation text entry will be limited to no more than 200 characters. This can only be enforced during the automatic, dynamic and manual synchronization, because the actual text modification will be carried out using the standard AutoCAD functionality. The limit will be enforced by truncating the text.

Annotation Process

The annotation process is run from a feature in the Planner or Publishing modules.

Description

Initialization

- When automatic annotation is run after objects are added or edited, then the objects' identifier will be passed to the annotation process. For example, the annotation process would run if a zone is edited by adding a boundary or hole, moving a boundary or vertex, deleting a vertex, or straightening/bending a segment. This will detect standard AutoCAD events as well as when Planner commands are run.

- When manual annotation is run against a specific selection set then a list of the objects' identifiers will be passed to the annotation process.

Text Styles
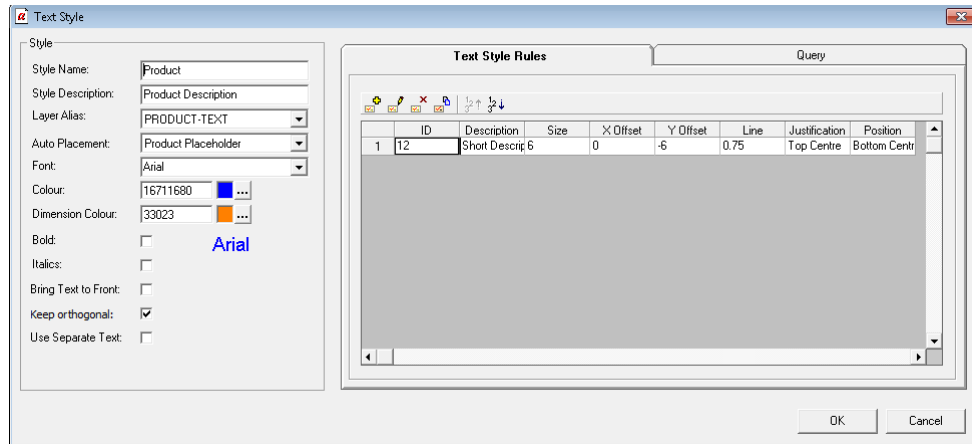
- The annotation process will use the Text Style settings set in the existing Administration module.

- The annotation process will pass the object identifiers to the text style query. The text style query includes the identifiers (for example, zone boundary, fixture and so on) as a filter at one or more points in the query. When the annotation process is run for an entire floor plan then the text style query will run without a list of identifiers.

- Existing annotation for the objects will be removed from the floor plan drawing by the annotation process. The position information for the existing annotation will remain in the database.

- The annotation process will pass the floor plan identifier (FIL_ID) to the text style query. The text style query includes the identifier as a filter at one or more points in the query.

- The text style query includes the identifier of the object that the annotation is associated with, as a column in the query results. Which identifier is returned will be based on the Parameter type set for the text style query.

Parameter Type	Object Identifier
File	Not applicable
Fixture	FIX_ID
Product	FIX_ID
Zone	BND_ID
Aisle	BND_ID

- The annotation will be placed on the AutoCAD layer name associated with the Layer alias in the text style for the current layer standard. The current layer standard will be read from the existing LAYER_STANDARD system variable.

- If an AutoCAD layer exists in the active floor plan drawing, with a name that matches the layer name linked to the Layer alias for the current layer standard in the database, then the system will ensure that it is turned on and thawed.

- If no layer name can be found linked to the Layer alias for the current layer standard, then a new layer name will be created using the Layer alias as its name. A warning message will be written to the AutoCAD command window saying "Layer {LAYER} created", where {LAYER} will be the layer alias name used for the new layer.

- If the required AutoCAD layer does not exist then a layer will be created in the AutoCAD drawing using the properties (color, line type and so on) defined for the active layer theme. The layer theme will be read from the LAYER_THEME user variable. The user variable value will be the layer theme's identifier (LAT_ID) field. If the value is invalid then the value set for the LAYER_THEME system variable will be used by default. If the LAYER_THEME system variable value is invalid then the lowest layer theme identifier in the database will be assumed.
- If there is no link between a Layer alias and the active layer theme when a layer is being created, then the new layer is added to the layer theme using AutoCAD's default values for the layer color, linetype and so on.
- The annotation Font will be the font set in the text style. The font will be shown as Bold and/or Italic if these options are set in the text style.
- The annotation text color will be the Color set in the text style.
- When the Bring to Front check box is ticked then the annotation process will ensure that the annotation is on top of all other objects in the floor plan drawing.
- When adjacent fixtures are on the same side but not co-linear, then the annotation will stretch from the left most point of the first fixture to the right most point of the last fixture.
- The existing Keep Parallel option on the Text Style window will be renamed to Keep orthogonal.
- When the Keep Orthogonal check box is not ticked and the Use Separate text check box is not ticked then the annotation will be kept parallel with the extents of the objects. The annotation will stretch from the left most point of the first fixture to the right-most point of the last fixture (based on the front direction of the fixture).
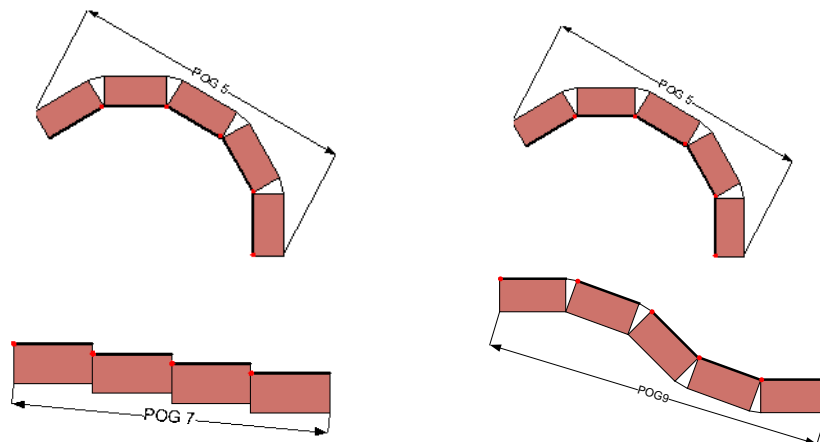
- When the Keep Orthogonal check box is ticked and the Use Separate Text check box is not ticked then the annotation will be kept orthogonal to the extents of the objects. For example:
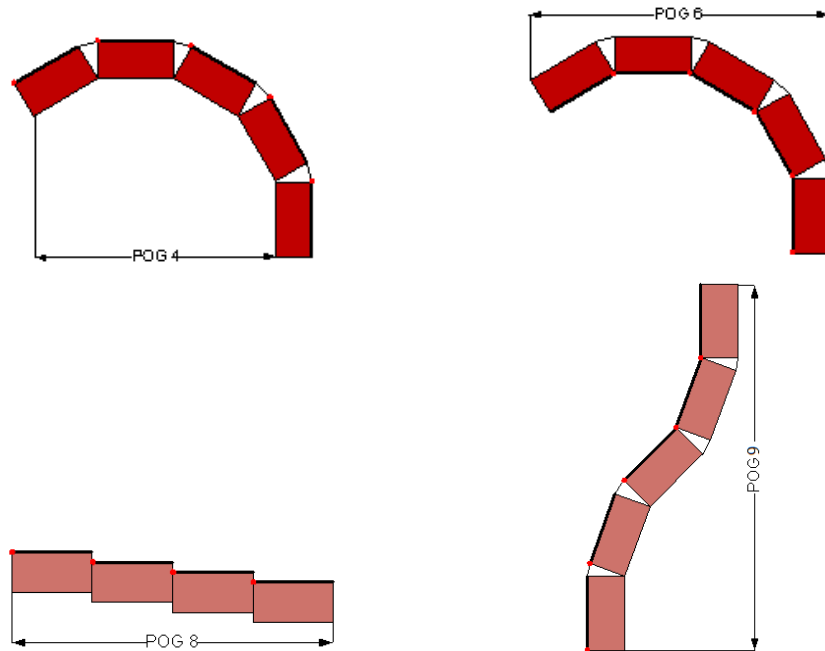
> **Note**: In the above examples, the red mark represents the insertion point of the fixture at the back of the fixture. The Keep orthogonal option will have no effect for text styles with a Parameter type of File since they do not reference an AutoCAD object.

- When the Use Separate Text check box is not ticked and an annotation needs to be shown on more than one side of a gondola, a separate annotation is added to each side. For example:
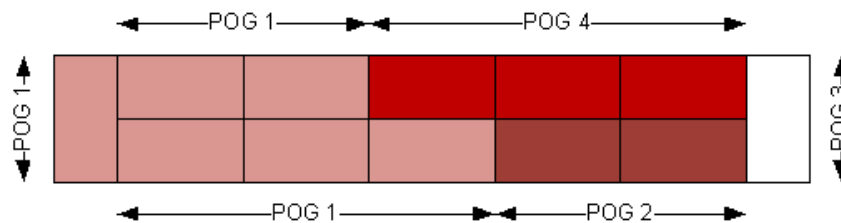
> **Note**: The sides of a gondola are calculated using the existing Fixture Adjacency calculation. The existing system variable ADJACENCY_MAX_ANGLE determines the maximum angle between adjacent fixtures before they are classified as a different side. The Text Style Query will not be required to group the fields in any way for the annotation to be grouped as shown.

- When Use separate text check box is ticked then a separate piece of annotation will be shown for each object. For example:
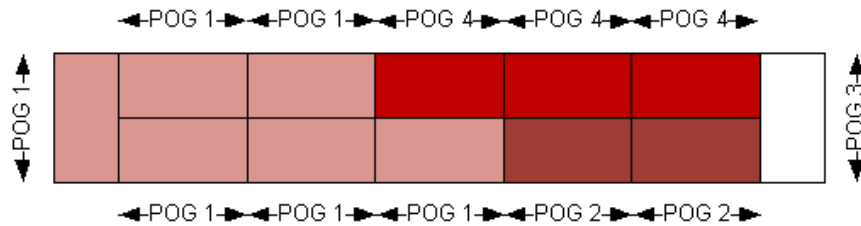
- The Use Separate Text option will have no effect for text styles with a Parameter type of File since they do not reference an AutoCAD object.

- When the Keep orthogonal check box is not ticked the annotation will be rotated to align with the angle of the first and last points of the objects. Aisle annotation will be oriented to match the angle of the first segment of the aisle polyline. The process will ensure that the annotation is upright and never shown upside-down. When the text rotation is greater than 90° and less than or equal to 270° then the text will be rotated by 180 ° + text rotation, as shown below.
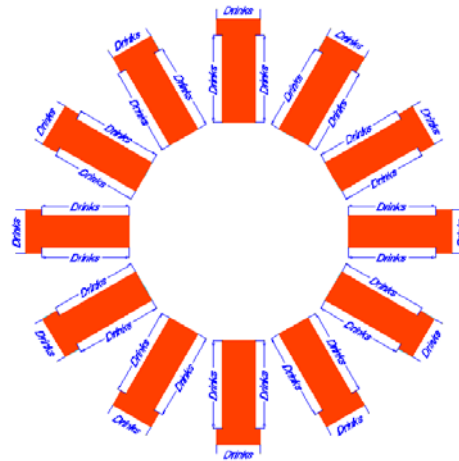
- When the additional 180° rotation is added to the text to ensure that it is upright, the position of the text is not affected.

- For example the text on the top row of the gondola has an additional 180° rotation added to the 180° angle derived from the rotation of the fixtures. The text is still positioned to the left, relative to the angle of the fixtures.
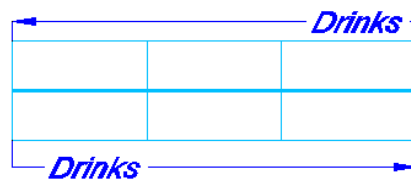
- When the Keep orthogonal check box is ticked then an annotation will be placed at a fixed 0° rotation. For example for aisles the annotation would look as follows:
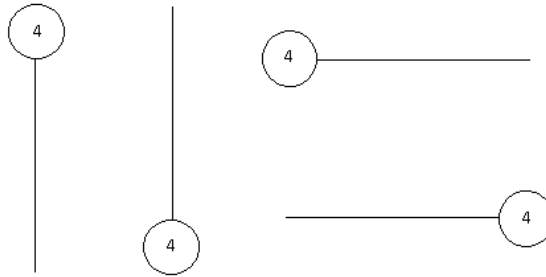
Text Style Rules

- The Text Style rules are checked in the order that they are listed in the Text Style window for each object to be annotated. If the text for the first rule doesn't fit within the given space, then the second rule will be tried and so on. For example one rule may be used for a small product and another rule for a large product in the same floor plan.

- The Options and Fit Within settings in a Text Style rule will be used to determine whether the rule should be used for an object. If the rule is not used then the next rule will be checked. The last rule for a Text Style will be applied if all the previous rules have been discarded.

  > **Note**: For text styles with Parameter type File the first Text Style rule will always be used since there is no object to fit the annotation within.

- The height of the annotation will be as set by the Size field in the Text Style Rule window. The Size is in inches for imperial systems and millimeters for metric systems.

- Width factor determines the ratio of width to height of the font. Values of less than 1 result in the width being reduced relative to the height. Values of greater than one result in the width being increased, relative to the height. The Width factor may be within a range of 0.5 - 1.5. For example the top annotation has a Width factor of 0.5and the bottom annotation has a Width factor of 1.
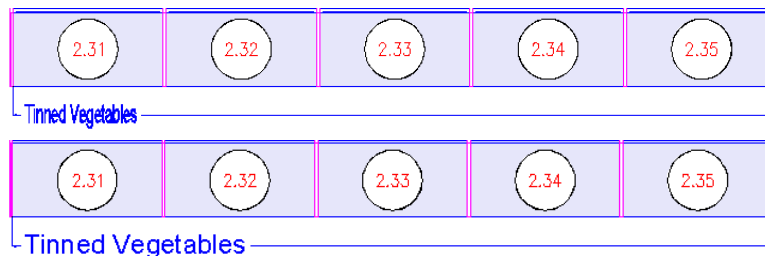
- The Field index determines the field from the Query that will be included in the annotation. The first two fields in the Query will be ignored when setting the Field index, and as such, the third field returned by the query has a Field index of 1. The Field index increments by one for each field returned by the query thereafter. The fields to be included in the annotation text are set as a comma separated list of the required index numbers.

- The Field separator determines the character that will be shown between the fields included in the annotation. In the example below, the block description,

length and depth have been included in the annotation and the Field separator is /.

|← Base/36/24 →|
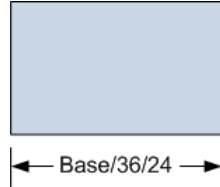
- The color of the annotation text will be set using the value of the Color field set for the Text Style.

- The new Boundary shape drop-down list will allow the annotation to be surrounded by an outline.

- The available shapes will be as follows:
    - None
    - Circle
    - Ellipse
    - Rectangle
    - Rounded rectangle

- The outline will be drawn to encompass the annotation text and will be on the same layer. It will use the Dimension color. For example:

- The position of the annotation text will be determined using the Position settings.

- The Relative position setting sets the position of the insertion point of the text relative to the extents of the object   being annotated. The Justification setting moves the insertion point of the text on its extents.
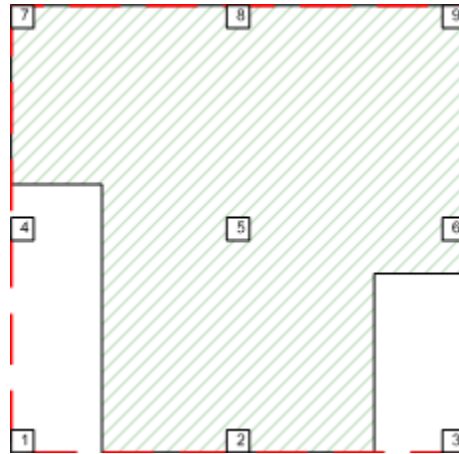
- The above diagram shows a zone as the hatched area. The zone's extents are shown by the red dashed rectangle. The insertion point of the annotation text can be positioned at any of the points shown by the numbered squares.

- The above diagram shows the annotation text and the red dashed rectangle represents its extents. The insertion point of the annotation text can be at any of the points shown by a numbered square. For example, if the Relative position is set to point 9 in the zone and the Justification is set to point 2 then the annotation text would be positioned as follows:
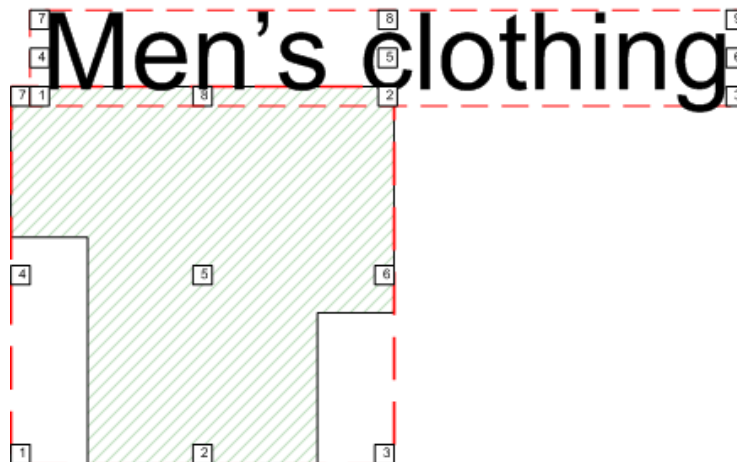
- If the Justification is changed to point 9 then the annotation text would be positioned as follows:
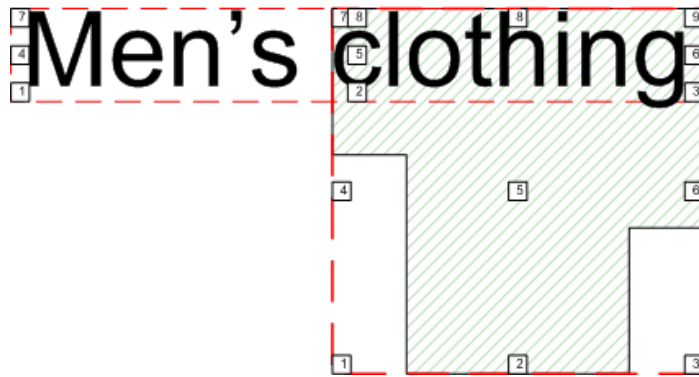
- When the text style is applied to a zone then the center Relative position (shown as 5 in the above diagram) will use the centroid (or geometric center) of the zone boundary, instead of the center of the extents. All other positions for zone text styles will use the extents.
- The Position of the annotation text will be offset based on the values of the X offset and Y offset fields. The values will be measured from the Relative position to the insertion point of the annotation text.
- The position of the annotation will ensure that any dimension arrows will be visible on the dimension lines when the text style rule is setup to show them.
- The new Detect Clashes options for the text style rule will check whether the position of the annotation text will overlap with any other annotation text on the same layer and/or any fixtures (based on the state of the Detect text and Detect fixtures check boxes). If the annotation text will overlap then the Offset is added to the Y offset of the annotation text. The Offset is added enough times so that the text will no longer overlap. The extension lines may still overlap if the extents of the objects are the same.
- This will allow for the scenario where fixtures are stacked one above the other, for example; shelves above a freezer chest, to ensure that the annotation text is offset so that it does not clash.
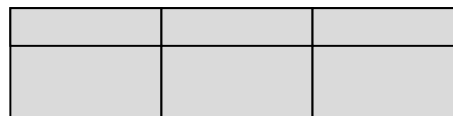
- The Scale and Scale Offset check boxes will be removed from the Text Style Rule window as the Planner should print the annotation as it is shown in the AutoCAD model space.
- When the Rotate Vertically check box is ticked, then the text will be rotated by 90° so that it can be written vertically relative to the object.

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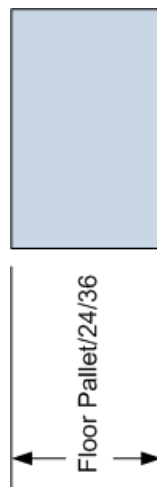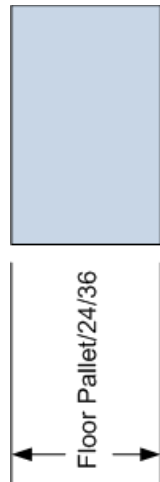
1. When an object is re-annotated, the position of the annotation will be obtained from the values saved in the database and the text style rule's **Position** settings will be ignored.

2. The Fit Within option will check that the annotation text is less than or equal to the size of the object. The Fit Within check will take into account the Size, Width factor, Field index, and Field separator.

   The Fit Within options will have no effect on text styles with a Parameter type of *File* since there is no AutoCAD object for the annotation to fit within.

▪ When the Fit Within check fails (so the annotation text is larger than the space available) then the Fit Within options will be used. If the Fit Within option mean that the annotation text still does not fit then the next rule will be used, if one is available (to say, if no more rules are available then the last rule will be used).

▪ When the None radio button is selected then this will not affect the annotation text.

▪ The Abbreviate option will not be supported in this release as it cannot be internationalized and will be removed from the Text Style Rule window. Implementers can include an appropriate abbreviation within the Query.

▪ When the **Truncate** radio button is selected the annotation text will be truncated such that the maximum number of characters are displayed. If the annotation text has been truncated then an ellipsis will be displayed at the end of the truncated text.

- When the **Word wrap** radio button is selected then the annotation text will be wrapped to fit the extents of the object. The appropriate rules for the user's selected language will be used in order to determine where the annotation text should be wrapped, as well as the Field Separator character of the text style rule. If there are applicable characters in the annotation text then it will wrap, such that the maximum number of characters are displayed on each line.
- If the text is outside the projected boundary of the object, then the available space would be unconstrained and as such the Word wrap or Truncate would have no effect.
- When the Dimension Lines check box is ticked then lines will be shown between the extents of the object and the annotation text. For example

—— Base/36/24 ——

> **Note**: Dimension lines will not be applied for text styles with a Parameter type of File since there is no AutoCAD object for the dimension lines to reference.

- The Dimension lines will normally be drawn from left to right allowing for the rotation of the object.
    - When the Parameter type of the text style is set to Product, then the Dimension lines will be drawn in the direction of the ascending product sub-group numbers of the product sequence.
    - If the planogram definition defines the Traffic flow as Right to Left then the Dimension lines will normally be drawn in the direction of the descending product sub-group numbers and in the direction of the ascending order if Traffic flow is set as Left to right.
    - If the merchandise is a planogram and the reverse flag is set then the Dimension lines will be drawn in the direction of the descending product sub-group numbers when the Traffic flow is set as Left to Right and in ascending order when the Traffic flow is set as Right to Left.
- If the merchandise is on a single fixture then the Dimension lines will be drawn from Left to Right unless the merchandise is a planogram and its Traffic flow is set as Right to Left in which case the Dimension lines will be drawn from right to left.
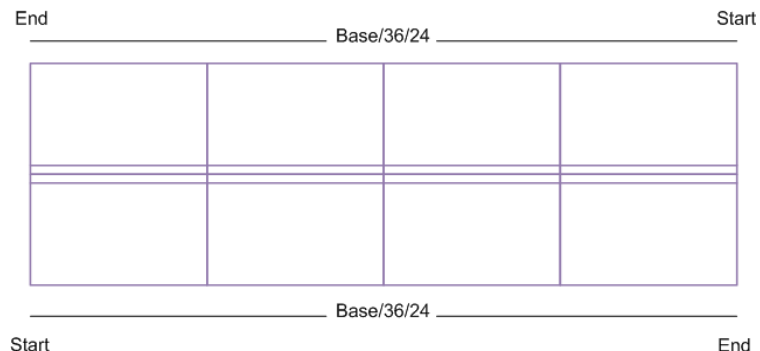
- The above diagram shows fixture annotation for a double sided gondola, where the annotation is at the front of the fixtures. The fixtures at the top are at a 180° rotation and the ones at the bottom are at 0 degrees. The start and end positions of the dimension lines are as shown.

- The following diagram shows product annotation on the same fixtures as above. The numbers shown represent the product sub-group numbers for the product sequences. The order of the product sub-group numbers is from the selection order used when the fixtures were merchandised. As such the start and end positions of the dimension lines are as shown.
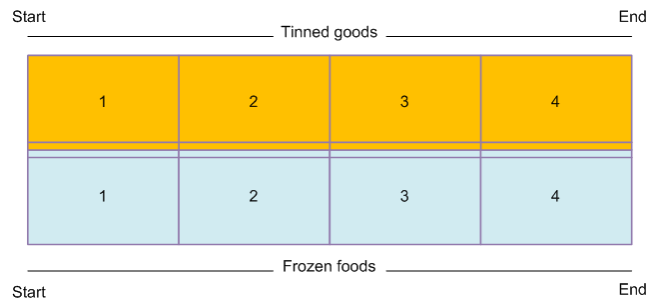
- The following diagram shows the product annotation on the same fixtures, but the top fixtures have been merchandised with a reversed planogram. In this case the start and end of the dimension lines for the planogram are reversed compared to the product sub-group numbers.
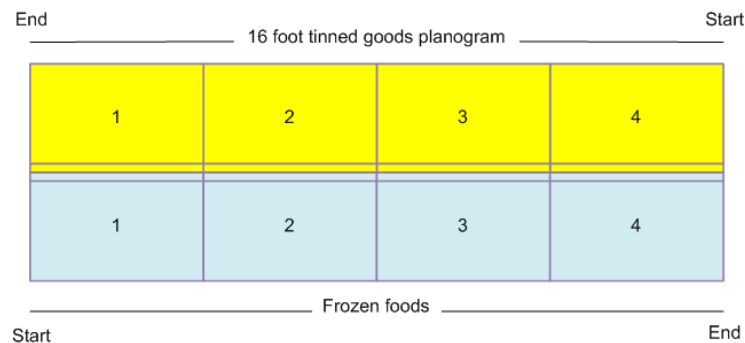
- The annotation process will add arrows to the Dimension lines when the new Start arrows or End arrows check boxes are ticked. Arrows will only be shown when the Dimension lines check box is also ticked.

- This will allow implementers to set up arrows on Dimension lines that show the merchandise flow based on the product sub-group numbers and planogram Traffic direction as described above. For example, using the same merchandise described above, the yellow product is a reversed planogram and the blue product is normal) when Start arrow is not ticked and End arrow is ticked then the Dimension lines will be shown as follows:
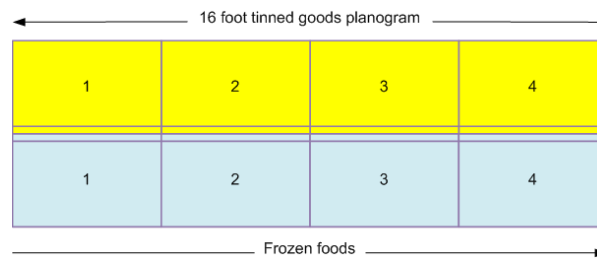
- The Arrow size value will be used to set the size of the arrows on the Dimension lines.

- The Arrow type setting will be used to set the shape of the arrows on the Dimension lines.
- When the Extension Lines check box is ticked then the extension lines will be shown from the extents of the object   being annotated. For example:

Base/36/24
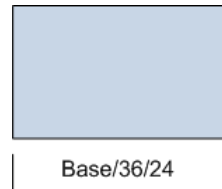
> **Note**: Extension lines will not be applied for text styles with a Parameter type of File since there is no AutoCAD object for the extension lines to reference.

- Extension lines and Dimension lines will be shown at the same time, if both check boxes are ticked. For example:

Base/36/24
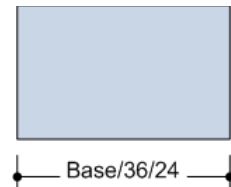
- The color of the Dimension lines and the Extension lines will be set using the value of the Dimension color field set for the Text Style.

Aisle annotation

- Aisle annotation will use a Text Style with a query Parameter type set to Aisle.

   In the Administration module, when the query Parameter type is set to Aisle, the query will be checked to ensure that it includes {FIL_ID} and {IDS} placeholders and returns BND_ID and BND_ACADHANDLE as the first two columns. If these conditions are not met then an error window will be displayed.
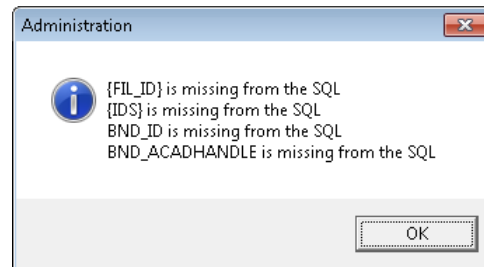
- When a Text Style has an Aisle Parameter type then the Dimensions option in the Text Style Rule window will be grayed out.
- An Aisle annotation will be positioned from the first point of the aisle boundary, rather than using the extents of the boundary. As such the Relative position setting will not affect the position of the annotation. For example:
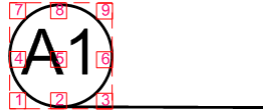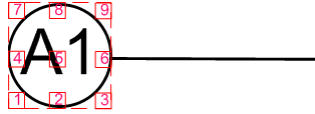
- The above example shows the same aisle with the annotation with two different justifications. In the top example the justification is set to *middle-right* and in the second example the justification is set to *front-center*.

> **Note:** The UCS is set to align relative to the first Vector.

Saving Annotation Position

- The annotation position will be saved in the new AVTTB_ANNOTATION table after the annotation process is run.
- The annotation of the affected objects will be deleted from the floor plan and the AVTTB_ANNOTATION table after the following actions:
  - Deleting fixturing (fixture, bay number and merchandise annotation will be deleted)
  - Removing bay numbering (bay number annotation will be deleted)
  - Deleting a zone (zone annotation will be deleted)
  - Removing merchandise (merchandise annotation will be deleted)
  - Deleting an aisle (aisle annotation will be deleted)
  - Deleting annotation
- The annotation position will not be copied when an object is copied from one floor plan to another.
- The annotation position will be copied when a floor plan is copied in the Select Floor Plan window.

Error handling

- If an error is encountered while generating an annotation, then the error will be logged in the database. The errors includes:
  - Annotation failed due to invalid SQL in the {TEXTSTYLE} text style
  - Annotation failed due to missing mandatory fields in the {TEXTSTYLE} text style
- Where {TEXTSTYLE} is the appropriate text style's name.
- When the annotation process is run due to a user action in the Planner module, an error window will be displayed. A single error window will be displayed after all the appropriate text styles have been processed stating all the errors.
- The error window will display the message "Unable to apply annotation for the {TEXTSTYLE} text style." Where {TEXTSTYLE} is the appropriate text style's name:
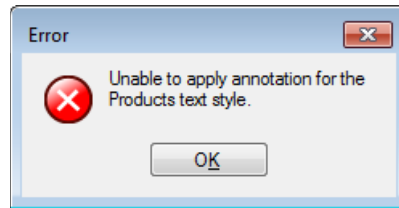
Synchronize

Description

- The existing Synchronize window will be updated to include the option to synchronize annotations.
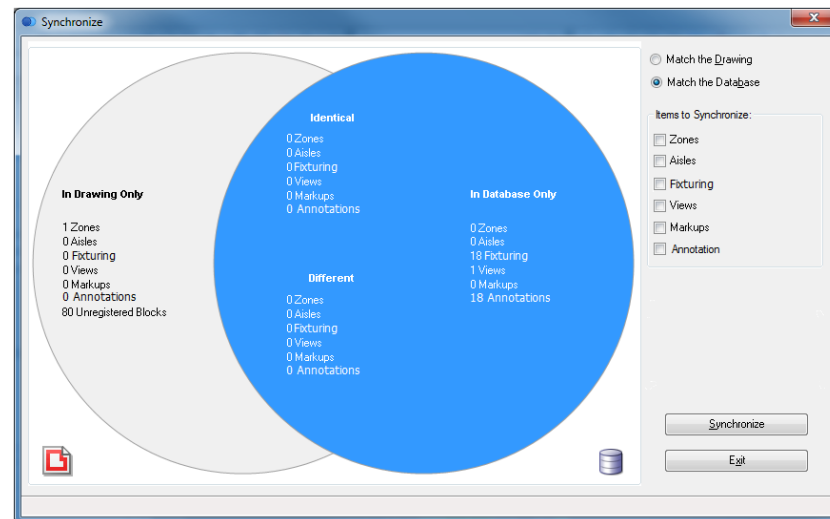
> **Note:** The Other blocks option will be removed from the synchronize window and the Fixtures option will be updated to also synchronize these objects.

- The Annotation options on the Venn diagram will compare the text and position of the annotation in the floor plan drawing with the text and positions stored in the new AVTTB_ANNOTATION, AVTTB_ANNO_BND_LINK and AVTTB_ANNO_FIX_LINK database tables.

- The value for Annotations in the In Drawing Only list on the Venn diagram will be the number of annotation objects in the floor plan drawing where no annotations are found in the database.

- The value for Annotations in the Identical list on the Venn diagram will be the number of annotation objects that are found in the database and the floor plan drawing.

- The value for Annotations in the Different list on the Venn diagram will be the number of annotation objects where an annotation object is found in the database, but the text or the position of the annotation is different between the floor plan drawing and the database.

- The value for Annotations in the In Database Only list on the Venn diagram will be the number of annotation objects that are for objects where no annotation are on the floor plan, but text and position is found in the database.

- When you click one of the Annotation labels in the Venn diagram, the existing Differences window will display the details of the annotation found. The difference will be shown as Position, Text or Position and Text for the annotation, depending on what differences were found.
- When the **Synchronize** button is clicked and the Annotation check box is ticked then the synchronize process will be updated to update the position of the annotation from the database unless the **Match the Drawing** radio button is selected.
- If the parent object (boundary, fixture and so on) is deleted by the Synchronize process then the related annotation will be removed from both the floor plan drawing and the database. If the annotation is also associated with other objects that were not deleted, then the remaining objects will be re-annotated.
- The Floor Plan Publishing Configuration window in the Administration module will be updated to include an Annotation check box in the Items to Synchronize group box on the Pre-processing tab.
- The Synchronize process will function in the same manner when the Annotation option is ticked in the Floor Plan Publishing Configuration window and the BatchRunner /publishplans process is run.
- The Floor Plan Publishing, Print Floor Plans and Process Floor Plans windows in the Planner module will be updated to include an Annotation check box in the Items to the Synchronize group box on the Pre-processing tab.

Overview of Find Chapter

This section describes the updates to the Find Overview chapter in the Oracle Retail Space Planning Planner Module User Guide.

Find Palette

The Planner module includes a Find palette. Due to the additional flexibility required by this functionality, column headers and data are included only as an indication of the control's ability to display information, the actual content will be dynamically generated.

Description
- If the Find palette is already open when the **Find** button is clicked then the existing palette will be given focus. If the palette has Auto-hide on then Auto-hide will be turned off so that the palette is expanded.
- The Find palette will sit within an AutoCAD palette. The palette will allow all standard palette functionality including Auto-hide and Pinning.
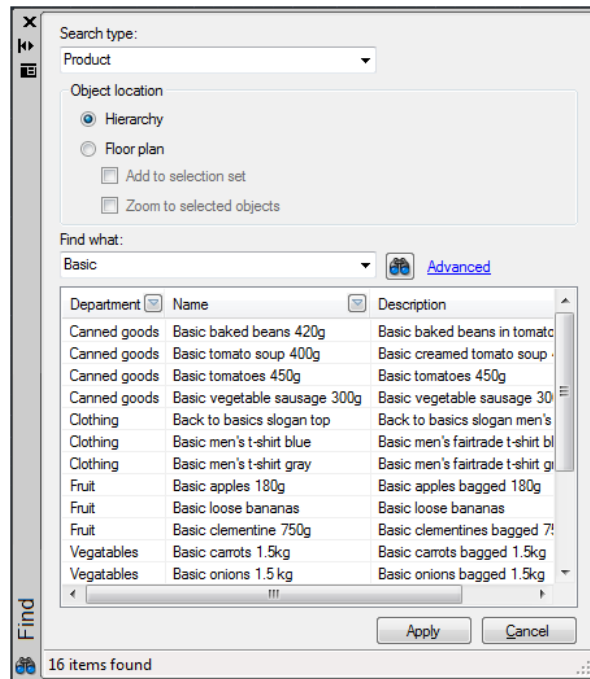
- The Search type is a drop-down list and will not allow text to be typed. The options available in the drop-down list will be as follows:
  - Zones
  - Equipment
  - Gondola
  - Bay number
  - Aisle identifier
  - Products
  - Planograms
  - Zone notes
  - Fixture and product notes
- The **Object Location** radio buttons will be dynamically linked to the Search type combo box. The following table lists the locations that will be enabled and selectable for each Search type.

Search Type	Hierarchy	Floor Plan
Zone	Yes	Yes
Equipment	Yes	Yes
Gondola	Yes	No
Bay number	No	Yes
Aisle identifier	No	Yes
Product	Yes	Yes
Planogram	Yes	Yes
Zone note	No	Yes
Fixture and product note	No	Yes

- When the **Floor plan Object Location** radio button is selected the Add to selection set and Zoom to selected objects will be enabled. The user is able to tick one or both of these options when they are enabled.
- The Find combo-box control will allow text to be typed into it.
- The Find combo-box control will prevent input past a maximum character limit. The limit will be defined by the MAX_FIND_INPUT_SIZE system variable.
- The Find combo-box control will provide a list of the ten most recent distinct find texts for the selected Search type (a different 10 find texts will be listed for zones, equipment, products, planograms and so on). This list will be accessed through the combo-box's drop-down button.
- The **Find** button 🔍 will be disabled when the Find combo box is blank or all spaces. The **Find** button will be enabled once the Find text box has a valid string.
- The find process will be started against the database for a particular find text when the **Find** button is clicked. The find text will be case insensitive and will use a Starts With match by default.
- You are able to change the match type by clicking the Advanced link and ticking the appropriate option from the context menu.
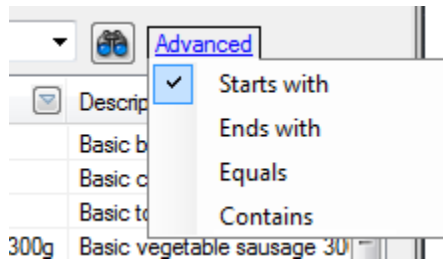
- The following match types will be supported:
  - Starts with
  - Ends with
  - Equals
  - Contains

  > **Note**: The find text will not support wildcards, as such characters like * or % will be matched with the contents of the object fields.

- The implementer is able to customize the fields that the find text is matched in and this will be specific to the Search type and Object location. By default the following columns will be matched.

Hierarchy	Search Type	Columns
Hierarchy	Zone	Name or description
	Equipment	Block name, block description and block group description
	Gondola	Gondola name and description and gondola group name
	Product	Product name, description, UPC and SKU code

	Planogram	Planogram name, description, code and planogram group name and description
Floor plan	Zone	Name or description
	Equipment	Block name and description
	Bay number	Bay prefix and number
	Aisle identifier	Boundary name
	Product	Name, description, UPC and SKU code
	Planogram	Name, description and code
	Zone notes	Description and created by
	Fixture Notes	Description and created by

- ▪ The results grid will have standard universal list view sorting and filtering features enabled.
- ▪ The results grid will display one row for each element returned.
- ▪ The results grid will allow for multiple rows to be selected when the Object location is set to Floor plan. When the Object location is set to Hierarchy you will only be able to select a single row at a time from the grid.
- ▪ The results grid will allow for the results to be copied to the Windows clipboard (with tab separated fields).
- ▪ The column headings in the results grid will be specific to the Search type. The implementer is able to customize the columns returned in the results grid. The columns returned grid does not have to include the columns that were used to match the find text against. By default the following columns will be shown in the results grid.

Search Type	Hierarchy	Floor Plan
Zone	Name, description, zone type	Name, description, zone type
Equipment	Block group name, block name, description, length, depth height	Name, description, department, length, depth height
Gondola	Gondola group name, gondola name, description	Not applicable
Bay number	Not applicable	Fixture name, description, department, bay prefix, number
Aisle identifier	Not applicable	Boundary name
Product	Name, description, UPC, SKU code	Name, description, UPC, SKU code
Planogram	Planogram group name, planogram name, description, code, length, depth, height	Planogram name, description, code, length, depth, height
Zone note	Not applicable	Description, created by, create date, updated by, update date
Fixture note	Not applicable	Description, created by, create date, updated by, update date

- You are able to display, hide and alter the order of columns appearing in the results grid. This will be stored and restored between user sessions. Because each Search type and Object location can return different columns, this information will be stored for each combination of settings.

- The following error window is displayed if the find text returns no results:
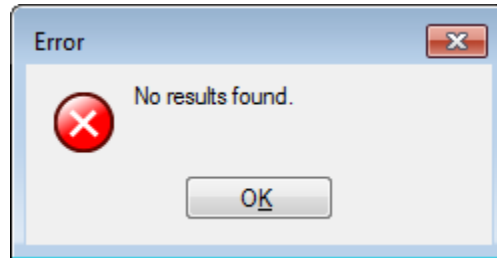
- The search criterion is added to the Find What control's distinct list of 10 most recent searches. A unique Find What list will be remembered for each Search type.

- The Search type, Object location and Advanced option will preserve the most recent settings when the palette is closed. The settings will be restored when the palette is next opened. The settings will be remembered between user sessions.

- On loading the palette for a new user for the first time the default settings will be:
  - Search type: Fixture
  - Location: Hierarchy
  - Find what: blank (with no references to previous searches within the drop-down list).
  - The **Find** button will be disabled
  - The results will have no data and no column headers will be visible in the results grid.
  - The Add to selection and Zoom to selected items checkboxes will be grayed out.
  - The **Apply** button will be disabled.

- The find text and the result grid will be cleared when the Selection type is changed or when the palette is closed and re-opened.

- The Add to selection and Zoom to selected items are post find functions for affecting the floor plan view. They use items selected within the results grid to dictate an action run when the **Apply** button is clicked. The **Apply** button will only be enabled when one or more rows are selected in the result grid.

- All of the hierarchy results displayed to the user will be subject to MSM user access rights.   to say that only products and planograms that a user has permission to read in the hierarchy will be shown in the results. There will be no permission filtering when the Object location is set to Floor plan.

- Click **Cancel** to close the palette without instigating any actions.

Select From Results Grid

Description

- When the **Apply** button is clicked on the Find palette and the Object location is set to Hierarchy then the Object Browser tab appropriate to the Search type setting will be selected. For example, if the Search type is set to Equipment, then the Fixturing tab and Fixtures sub-tab will be selected on the Object Browser when the **Apply** button is clicked.

- When the **Apply** button is clicked on the Find palette and the Object location is set to Hierarchy, the object selected in the results grid will be selected in the appropriate Object Browser hierarchy.

- When the **Apply** button is clicked on the Find palette and the Object location is set to Floor plan then the item or items selected in the results grid will be highlighted in the floor plan. How the objects are highlighted will be based on the highlight settings set in the General tab of the Options window.

- When the **Apply** button is clicked on the Find palette and the Object location is set to Floor plan, the state of the Add to selection and Zoom to selected items checkboxes will be assessed.

- When the Add to selection checkbox is ticked, the objects selected in the results grid is added to the current AutoCAD selection set in the floor plan drawing when the **Apply** button is clicked. A message will be shown in the AutoCAD command window saying 'N objects added to selection set.', where N is the number of objects selected in the results grid.

- If the layer is locked then the object will not be able to be added to the selection set and a warning message in the AutoCAD command window will say 'N objects added to selection. X objects on locked layers not added.', where N is the number of objects added to the selection set and X is the number of objects selected in the results grid, but found to be on locked layers.

- When the Zoom to Selected Items checkbox is ticked, the floor plan view will automatically zoom the floor plan around the extents of the objects selected in the results grid when the **Apply** button is clicked. You are able set the Selection zoom factor in the General tab of the Options window which will determine the size of margin   added to the zoom window.

Select from Floor plan

You are able to select certain types of objects in the floor plan and highlight the corresponding object definition in the hierarchy.

Description

- The **Select Item in Tree** button will be included in the retail group of the MSP ribbon. You will also be able to run the AVT_SELECT_IN_TREE command to select items in the Object Browser from the floor plan.

- When the Select Item in Tree command is run and there are no objects in the AutoCAD selection set then the prompt "Pick an object:" will be displayed on the AutoCAD command line. You are able to pick a single zone or block.

- When the **Select Item In Tree** button is clicked when a fixture block is selected in the floor plan that has merchandise, then the merchandise on the fixture will be selected in the appropriate hierarchy.

> **Note**: The Merchandising tab in the Object Browser will not be selected, as the Fixturing tab will be selected for the selected fixture. However if the Merchandising tab is already selected in the Object Browser then the selected tab will not change when a merchandised fixture is selected in the floor plan.

- When the **Select Item In Tree** button is clicked, and when a fixture block is selected in the floor plan that has a planogram revision on it not included in the hierarchy for the user, then the planogram lineage will be checked. The last revision for the planogram lineage included in the hierarchy will be selected and a warning saying "Planogram revision not found. Selecting last available revision." will be displayed in the AutoCAD command window.

- If no revision can be found in the hierarchy for a planogram lineage, then the "Selected object not found in tree" error will be displayed.

- When a fixture is merchandised with multiple items, then the **Select Item In Tree** button will not find the merchandise in the hierarchy. A warning message will be displayed in the AutoCAD command window saying "Fixture merchandised with multiple items. Cannot select multiple items in the hierarchy."

- When multiple objects are added to the AutoCAD selection set in a single action (for example when using a selection window) then clicking the **Select Item In Tree** button will not find any of the objects in the hierarchy. A warning message will be displayed in the AutoCAD command window saying "Cannot select multiple items in the hierarchy."

- When the **Select Item In Tree** button is clicked and an equipment block, zone or product is selected in the floor plan not included in the Object Browser hierarchies for the user (because of user permissions, for example) then a message will be displayed in the AutoCAD command window saying "Selected object not found in hierarchy".

Find in Object Browser

You are able to search for an object in the hierarchy directly from the Object Browser.

Description
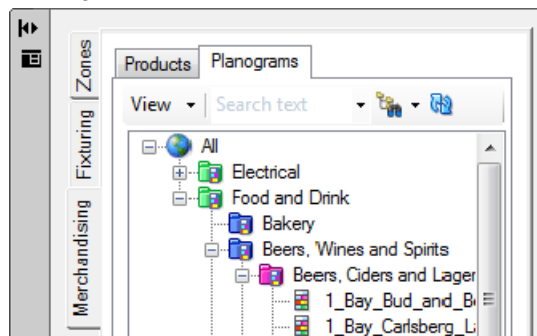
- The Find combo-box control on the Object Browser will allow text to be typed into it.

- The Find combo-box control will prevent input past a maximum character limit. The limit will be defined by the MAX_FIND_INPUT_SIZE system variable.

- The Find combo-box control will provide a list of the ten most recent distinct find texts accessed through a drop-down button. The list of find texts will be remembered separately for each tab where the Find combo-box is shown. For example there will the 10 most recent fixtures find texts and a different list of 10 most recent distinct planogram find texts.

- A Starts with match will be used for the find text by default. You are able to change the match type by ticking the appropriate option from the Advanced menu on the Find in hierarchy drop-down menu.
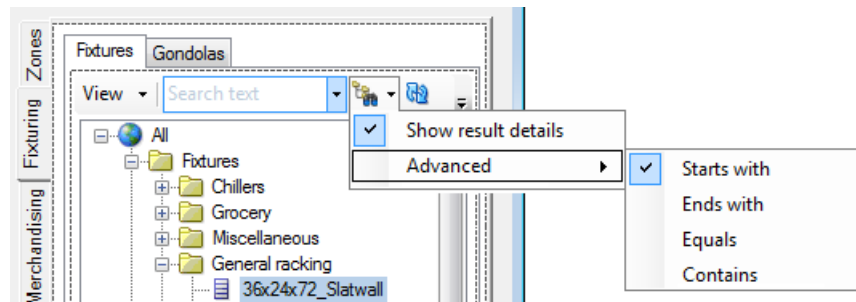
- The following match types will be supported:
  - Starts with
  - Ends with
  - Equals
  - Contains

  > **Note**: The find text will not support wildcards, as such characters like * or % will be matched with the contents of the object fields.

- The selected Show result details and Advanced options will be remembered and restored between user sessions.

- Clicking the **Find in Hierarchy** button or the Enter key will begin the find process. The **Find in Hierarchy** button will be disabled when the Find combo box has no text in it or is all spaces.

- The find process will match the find text against the fields defined in the customizable query used by the Find palette for the appropriate hierarchy.

- Where the hierarchy is made up of two object types (for example on the Fixtures tab fixture groups and equipment blocks) the find text will be matched against both object types. This will apply to the Fixtures, Gondolas and Planogram Object Browser tabs.

- The find process will only match against entries included in the Object Browser hierarchies for the user (For example: objects not shown because of user permissions, will not be matched).

- If the find query returns one result, this will automatically be highlighted in the hierarchy. If the search query returns more than one result then the next item in the hierarchy in the result set will be highlighted in the hierarchy. The starting point will be the currently selected node in the hierarchy.

- The tree will be automatically scrolled to ensure that the selected node is visible.

- Clicking the **Find in Hierarchy** button again will select the next result in the hierarchy. Once all the items in the result set have been found, a warning window saying "Finished searching the hierarchy. Do you want to continue searching from the beginning?" will be displayed.
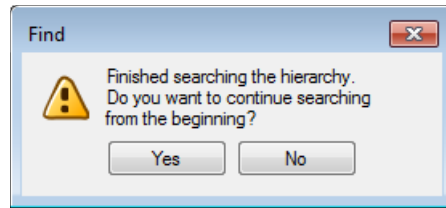
- Click Yes to cycle back to the first item in the result set and allow the process to continue.
- All of the hierarchy results displayed to the user will be subject to MSM user access rights. For example: Only products and planograms that a user has permission to read in the hierarchy will be shown in the results.
- Clicking the **Find in Hierarchy** button again after the Finished Searching window has been displayed will start the Find in Hierarchy process again.
- When an item is selected in the hierarchy by the Find in Hierarchy process the appropriate Properties will be updated in the same way as if the item had been selected manually.
- An error window will be displayed if the find text returns no results
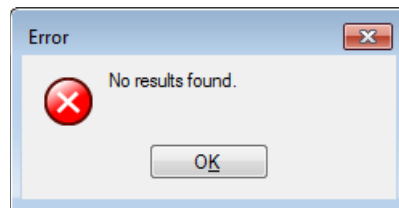
- You are able to toggle whether the Find palette opens or not when the find process is run, by changing the state of the Show Result Details option from the **Find in Hierarchy** button drop-down menu.
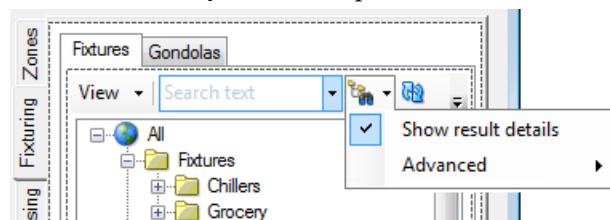
- The Find palette will be opened when the Show result details option is ticked and the find process in run. The Search type, Object location and Find what fields and the results grid will be automatically populated when the Find palette is opened.
- The row in the Find palette results grid that corresponds with the object selected by the find process in the hierarchy will be highlighted automatically.
- The Find in hierarchy button on the Object Browser will keep focus when the Find palette is opened so that the user can cycle through the results in the hierarchy by clicking the Find in hierarchy again. Finding the next result in the hierarchy will also automatically highlight the next row in the results grid of the Find palette.

Find and Open

- To open multiple floor plans, use the existing Find and Open window through the following ways:

– Clicking the **Find and Open** 🗂 button in the standard group of the MSP ribbon

– Typing AVT_OPENFLOORPLAN in the AutoCAD command line.

▪ The existing Rendering tab will be updated to move Set Layer Theme and Change Visual Appearance to be under the Set Layout option.
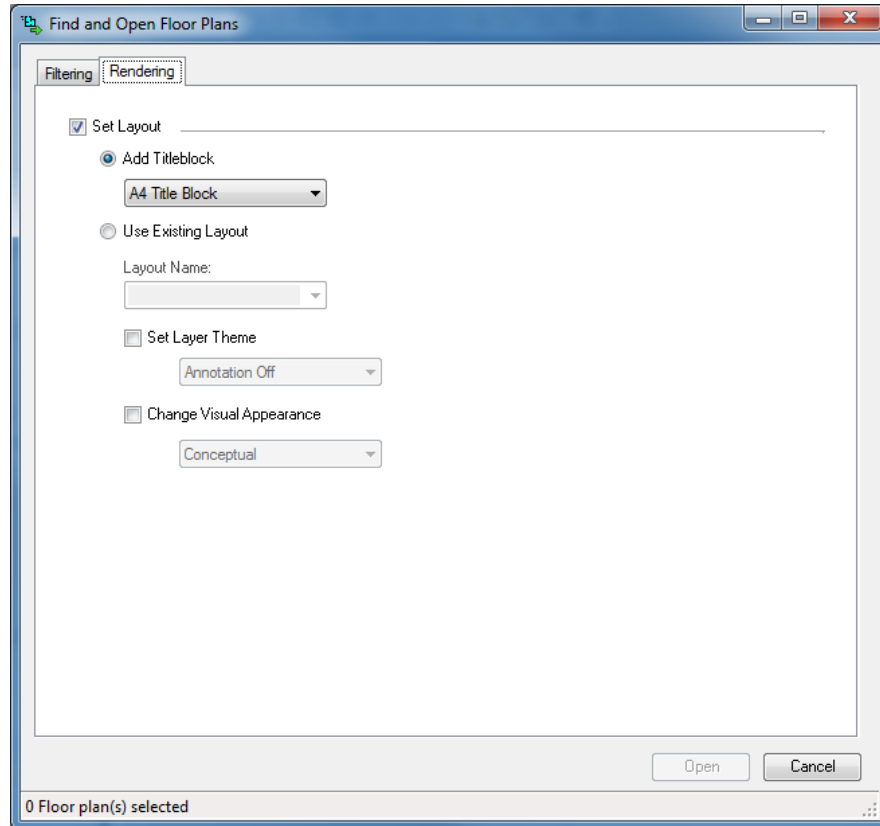
▪ The Set Layer Theme and Change Visual Appearance options will be enabled only when the Use Existing Layout option is selected and the Layout Names is set to Model.

▪ When one or more floor plans are opened from the Find and Open window then the updated title block functionality will be used if the Add title block option is set on the Rendering tab.

▪ When one or more floor plans are opened from the Find and Open window then the Set Layer Theme and Change Visual Appearance settings will be applied to the floor plans as per the existing functionality, but only when the Use Existing Layout option is set and the Layout Name is Model. This is because title block definitions will have their own values for these settings.

▪ When one or more floor plans are opened from the Find and Open window the remaining features will be as per the existing functionality.

▪ When the AutoCAD commands associated with the Printing group buttons are run, they will display the message "Command not available" in the AutoCAD command line if the associated permissions are not available. The command will automatically exit after displaying the message.

Find AutoCAD handle

The AutoCAD handle option allows you to search for an object in the floor plan from the AutoCAD command line.

Description

- You are able to use the command AVT_FINDHANDLE to find an object in the floor plan. Alternatively You are able to click the **Find Handle** button in the retail group of the MSP ribbon bar.
- When AVT_FINDHANDLE is run the prompt "Enter handle:" will be shown on the AutoCAD command line.
- When you enter a hexadecimal number and clicks the Enter key then the command will check the floor plan for a drawing object that has a matching AutoCAD handle. The search will be case insensitive.
- If you enter a non-hexadecimal string or more than 16 digits then the error "Invalid handle" will be displayed in the AutoCAD command window and the command will end.
- If you enter a handle that does not exist as a drawing object in the floor plan then the error "Handle not found" will be displayed in the AutoCAD command window and the command will end.
- When a drawing object in the floor plan is matched with the entered handle then the floor plan drawing will zoom to the extents of the object plus 10% with the object in the center of the view and the command will end

Overview of Quick Reports Chapter

This section describes the updates to the Quick Reports Overview chapter in the Oracle Retail Planner Module User Guide.

Reports Hierarchy

Reporting Palette

- The Reporting Palette is shown below:
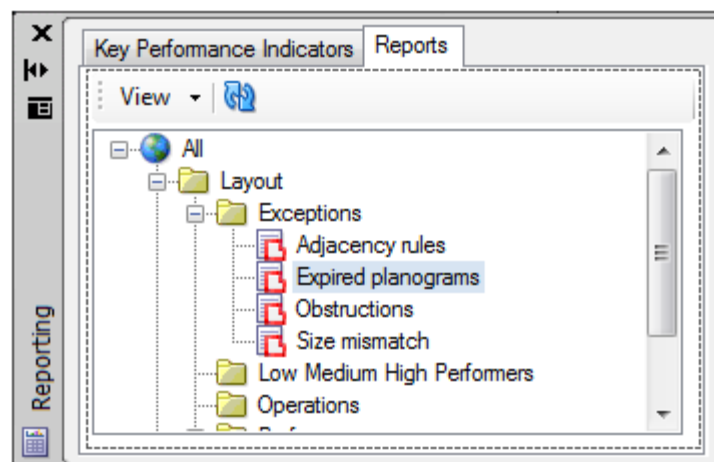
- The Reports tab is displayed in an AutoCAD palette with Reporting as the title. The standard properties of the palette will be applicable.
- There are two ways to launch the Reporting palette:
  - Click the **Reporting** button 🖩 on the Reporting group on the MSP ribbon.
  - Execute the AVT_REPORTING command.
- The Reporting Palette will have the following buttons in the Reports toolbar
  - **View**: Shows options for expanding/collapsing the quick reports hierarchy.
  - **Refresh** 🔄: Refreshes the quick reports hierarchy.
- The palette size, position, active tab and quick reports group will be saved between user sessions per user. The next time you open the Reporting palette, it will be opened at the saved position. The group of the last run report will be selected. No report will be selected or executed automatically when the palette is opened.
- The Reporting palette will follow standard AutoCAD behavior. When the Reporting palette is resized the tree view will be expanded to use the space available.
- The quick reports hierarchy and reports will be configured in the database by the implementer.
- The hierarchy will only display the quick report groups which your user group has read-permission granted. If your group doesn't have read-permissions on the parent quick report group, then the quick report group will not be listed in the hierarchy even if your group has read-permissions on the child quick report groups.
- In the case where no quick reports are listed under a quick report group, the group will not be displayed.
- There will be different icons shown for expanded and collapsed tree nodes.

Icon	Node Type
🌐	All
📁	Collapsed quick report group
📂	Expanded quick report group
📄	General report
📰	Floor Plan report
📑	Object report

- A root node labeled as "All", is displayed in the quick reports hierarchy. All the top level quick report groups are added to this node. This is node will not exist in the database, but will be shown on the quick reports hierarchy.
- Clicking the **View** button in the KPI toolbar will display the View drop-down menu.
- A quick report group called Summaries will be included in the hierarchy by default. The group includes the existing Zones, Fixtures and Merchandise summaries. These will be dynamic refresh reports.

Report Process

Prior to the report being executed, a permission check will be carried out to ensure that you are authorized to access the requested report. The message "Report not available" will be displayed in the AutoCAD command line if the user does not have permission to run the associated report.

- The implementer is able to set a quick report as one of the following types in the database.
  - General: Reports that return static information and will not be dynamically refreshed.
  - Floor Plan: Reports that can dynamically refresh when a change is made to the active floor plan. Zone, fixture and merchandise summaries would be this type of quick report. The active floor plan identifier will be passed to the report's query and the query will support a {FileId} placeholder.
  - Object: Reports that can dynamically refresh when a zone or fixturing object is selected in the floor plan. The active floor plan identifier, object identifier and object type (zone or fixture) will be passed to the report's query and the query will support a {FileId} and an {ID} placeholder.
- When a General report is executed the appropriate query will be run against the MSM database and the results displayed in the report palette.
- When a Floor Plan report is executed the active floor plan identifier will replace any instances of the {FileId} placeholder in the report's query. The query will be run against the MSM database and the results displayed in the report palette.
- When an Object report is run, the active floor plan identifier will replace any instances of the {FileId} placeholder in the report's query. Also the appropriate identifiers of the objects in the current AutoCAD selection set will replace the {ID} placeholder in the report's query. Object reports will be configured by the implementer to one of the following Object Types:
  - Fixture (fixture, fitting, composite or non-retail blocks)
  - Zone
- If there are no appropriate objects in the current AutoCAD selection set when an Object report is run, then the prompt "Select {TYPE} objects:" will be displayed on the AutoCAD command line, where {TYPE} will be replaced with "fixture" or "zone" dependent on the Object Type of the report. You are able to end the selection using the standard AutoCAD methods.
- When the AutoCAD selection set is changed in the floor plan, the open Object reports that are for the appropriate Object Type will be refreshed when the **Dynamic Refresh** toggle button is ON.

> **Note**: If the selection set does not contain any appropriate objects for an open Object report then the report palette will display no results.

- To aid performance, report palettes that are collapsed will not be dynamically refreshed when the AutoCAD selected set is changed in the floor plan, but will be refreshed when the palette is expanded again.
- All report types will support the {UserId} placeholder within the report query. When a report is run then the identifier for the user will replace the {UserId} placeholder.

- To aid performance, report palettes that are collapsed will not be dynamically refreshed when the selected node is changed in the Object Browser, but will be refreshed when the palette is expanded again.
- The column headings returned from the report's query will be displayed in the user's preferred language by using the existing AVTTB_DICTIONARY and AVTTB_TRANSLATION table mechanism.
- Floor Plan and Object reports will be automatically closed when their associated floor plan is closed.

Report Results

You can concurrently run multiple quick reports. Each report will open in a separate AutoCAD palette. When a report is run a 'marquee' style progress bar will be shown on the status bar.

- When the report results are returned from the server, they will be displayed in the results grid on the AutoCAD palette and the progress bar will be hidden from the status bar.

- The headings from the report query, will be shown as the column headings. The headings will be translated into the user's preferred language, using the existing dictionary process.
- If a report is run that already has a report result palette open for the same active floor plan, then the palette will be brought to the front and opened if the palette is hidden.
- The status bar at the bottom will indicate the number of rows in the report results.
- The following Toolbar buttons will be included on the report results palette.

Icon	Description
- Refresh	This will Refresh the report data Clear all the filters
- Dynamic refresh	This toggle button will allow users to stop reports from automatically updating when changes are made.
- Print	This will open the standard print window. It will print only the contents of the report grid.
- Copy to clipboard	This will copy the contents of the grid to the Windows clipboard.
- Find	This will allow users to find text in the report grid.

- The report buttons listed above will be accessible to any user permitted to use the Reporting functionality.

- The **Refresh** button will be displayed only for General reports. Clicking the button will run the report query again and update the results in the report grid. Any filters that have been applied to the result grid will be cleared. The sort order, column order and visible columns will be unchanged when a report is refreshed.

- The **Dynamic Refresh** toggle button will be displayed for Floor Plan and Object reports if the implementer has configured the report to refresh dynamically. When a dynamic refresh report is run the **Dynamic Refresh** toggle button will be OFF by default.
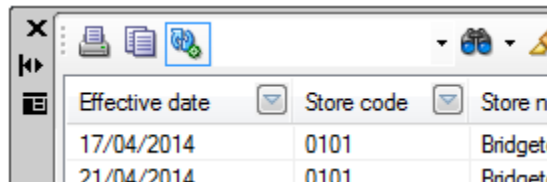
- When the **Dynamic Refresh** toggle button is ON then the report query will be re-run automatically each time one of the following changes are made, dependent on the setting configured by the implementer.

  – Zones change

  – Fixtures change

  – Zones or fixtures change

- When a report is dynamically refreshing a 'marquee' style progress bar will be shown on the status bar. This will indicate that the displayed results are out of date and that the report's query is being re-run.

- When the new results are returned during a Dynamic refresh from the server the result's grid will be updated and the progress bar will be hidden from the status bar.

- When the **Dynamic Refresh** toggle button is OFF then the report will be unchanged, when changes are made in the floor plan.

- The result grid will support the following standard universal list view features:
  - Sorting columns
  - Change the order of the columns
  - Hide and show columns
  - Auto filters using the drop-down distinct list of values in a column
  - Custom filters
  - Quick filter using the value of a cell
- You are able to copy all of the contents of the report grid by clicking the **Copy to Clipboard** button, or using the Ctrl+C keyboard shortcut, when nothing is highlighted in the grid. This will copy the content as tab separated text and carriage returns between rows. (A row can be deselected by the user holding the Ctrl key when clicking a selected row)
- If you have one or more cells selected in the report grid then clicking the **Copy to Clipboard** button, or using the Ctrl+C keyboard shortcut, will copy only the selected cells.
- You are able to find the text in a cell of the report results by typing the text in the search text combo box and clicking the **Find** button or hitting the Enter key will activate the find process. The **Find** button will be disabled when the Find combo box has no text in it or is all spaces.
- The Find combo-box control will provide a list of the ten most recent distinct find texts accessed through its drop-down button.
- A Starts With match will be used for the find text by default. The user is able to change the match type by ticking the appropriate option from the drop-down menu on the Find drop-down menu.
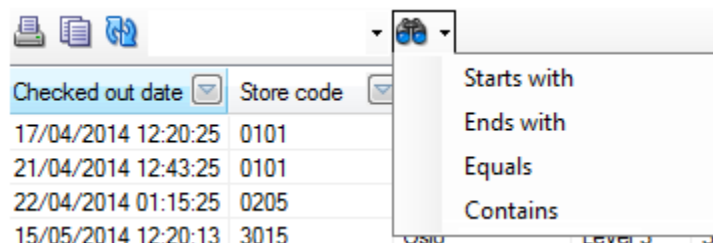
- The following match types will be supported:
  - Starts with
  - Ends with
  - Equals
  - Contains

  > **Note**: The find text will not support wildcards, as such characters like * or % will be matched with the contents of the report cells.

- The selected match type option will be remembered and restored between user sessions.
- If the find query returns one result, this will automatically be highlighted in the report grid. If the search query returns more than one result then the item in the result set will be highlighted in the grid. The starting point will be the currently selected cell in the grid.

- The grid will be automatically scrolled to ensure that the selected cell is visible.
- Click Find to select the next result in the grid (working from left to right and from top to bottom). Once all the items in the result set have been found, the following warning window is displayed.
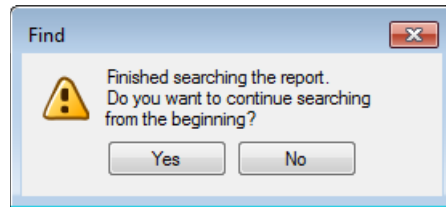
- Click Find again, if you want to start the Find process again.
- An error window will be displayed if the find text returns no results.
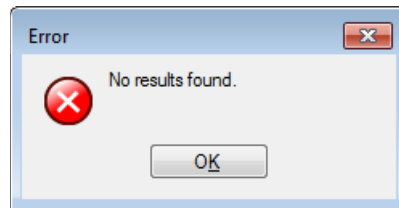
- The **Highlight in Floor Plan** button will be displayed on the toolbar of the report result palette when the report's query includes an Object Instance Identifier (ZON_ID, BND_ID, FIX_ID, MRK_ID, NOT_ID or PRO_ID).
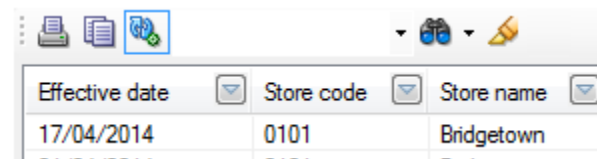
- The Object Instance Identifier (ZON_ID, BND_ID, FIX_ID, MRK_ID, NOT_ID or PRO_ID) column will be automatically hidden from the results grid.
- If more than one object instance identifier column is included in the report query (for example ZON_ID and FIX_ID) then the **Highlight in Floor Plan** button will not be shown.
- When the **Highlight in Floor Plan** button is clicked the selected objects in the results grid will be highlighted in the floor plan view using the user's highlighted settings. The user is able set the highlight settings in the General tab of the Options window.
- The **Add to Floor Plan** button will be displayed on the toolbar of the report result palette when the report's query includes an object definition identifier as the first column.
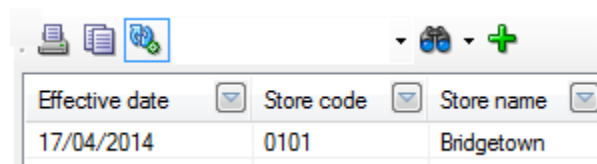
- The Object Definition Identifier (ZND_ID, BLK_ID, GON_ID, PRD_ID or POG_ID) column will be automatically hidden from the results grid.
- If more than one object definition identifier (ZND_ID, BLK_ID, GON_ID, PRD_ID or POG_ID) column is included in the report query (for example GON_ID and PRD_ID) then the **Add To Floor Plan** button will not be shown.

- You are able to add an object (zone, fixture, gondola, product or planogram) to the floor plan by selecting a row in the results grid and clicking the **Add to Floor Plan** button. This will start the appropriate add function which will operate in the same way as if the object had been added from the Object Browser

Quick Reports for ISSC

- The Reports tab is added to the ISSC browser pane on the Top View window.
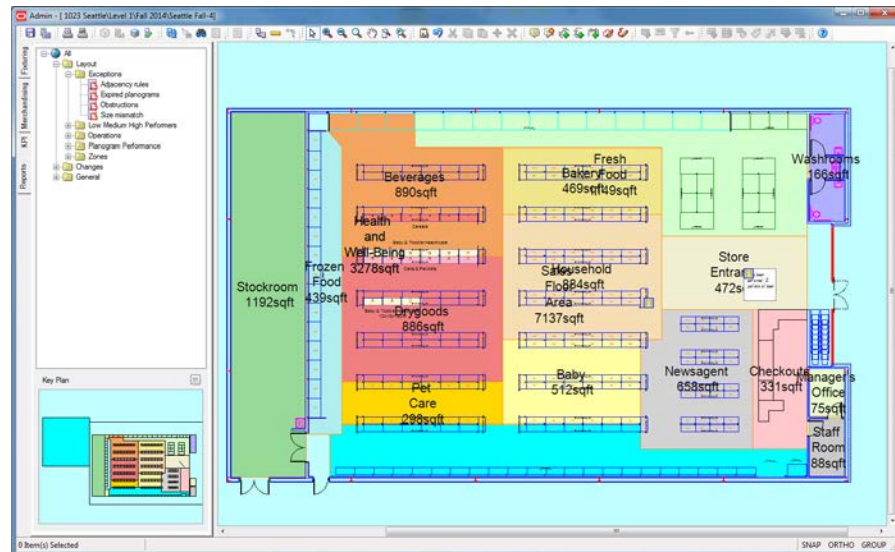
- The quick reports hierarchy will be displayed in the Reports tab in the structure described in the Planner.
- The quick reports permissions will be applied to the hierarchy as described in the Planner. The hierarchy will not show zone object reports, as it is not possible to select zones in ISSC.
- Clicking the Refresh button on the toolbar when the Reports tab is active will refresh the quick reports hierarchy.
- The toolbar Reports button will be updated to use the standard Oracle reports icon   and renamed to Run report. The Run report button will be enabled when the Reports tab is active in the ISSC browser and a report is selected in the hierarchy. Pressing the Run report button will run the selected report.
- When a report is executed, the report process will execute as described in the Planner. The user prompts and messages detailed in the Planner will be shown on the status bar instead of the AutoCAD command line.
- The report results will be shown in a non-modal window. The title will show the name of the report.

- You will be able to run multiple reports and each set of results will be shown in a separate results window.
- The report results will be manually refreshed or dynamically refreshed as appropriate, as described in the Planner.
- You will be able to find text, print and copy from the report results grid as described in the Planner.
- You will be able to highlight an object in the floor plan when the report's query includes an object instance identifier.

- The user will be able to add an object to the floor from the report results grid when the report's query includes an object definition identifier as the first column.

- All floor plan reports will close when the floor-plan is closed.
- All reports will be closed if the app is closed.

Overview of Object Grid Chapter

This section describes the updates to the Object Grid Overview chapter in the Oracle Retail Planner Module User Guide.

Object Grid

The Object Grid palette in AutoCAD will provide the ability to list properties of multiple zones, fixtures, products and planograms in a tabular manner.

By default, the Object Grid functionality will only be accessible by the following types of users.

- Application Administrator
- IT Help Desk Agent
- Store Planning Manager
- Merchandising Manager
- Store Planner
- Merchandising Planner

Description

The existing Object Grid is within an AutoCAD palette. The standard properties and behavior of a palette are applicable to the Object Grid and so the palette is able to be docked or float within the AutoCAD drawing environment.

- User access (whether it is visible and enabled) to the Object Grid will be controlled per user group, using the existing ISSC message control mechanism in the database. Similarly when the AVT_SHOWOBJECTGRID command is typed in the AutoCAD command line the same user group permissions will be checked. If the user does not have permission to use the command then the message "Command Not Available" will be shown on the command line.

- The existing Object Grid functionality will be used to select which custom SQL query is executed to populate the grid on the Data tab, based on the active tab in the Object Browser and the object selected. The existing requirements for object identifiers (BLK_ID, POG_ID, PRD_ID and so on) in the custom SQL will be maintained.

- The existing functionality of the **Refresh** toggle button will be maintained, such that the data in the grid on the Data tab will only be updated when the **Refresh** toggle button is ON and the user changes the selected node in a hierarchy on the Object Browser.

- The column headings of the grid on the Data tab will be translated to the user's preferred language using the existing dictionary functionality.

- On successful retrieval of the data, the status bar will display the number of rows retrieved. The message will be "{NUMBER} records" where {NUMBER} is the number of rows retrieved as per the existing functionality. The maximum number of rows shown in the grid on the Data tab will be controlled using the existing OBJECT_GRID_DATALIMIT system variable functionality.

- Right-click the context menu to show and hide columns in the grid on the Data tab. The columns will be shown in the context menu in the order returned from the custom query..

- Drag and drop the column headers in the grid on the Data tab to change the order of columns in list view.

- The columns that a user has chosen to show and hide and their order will be restored after the Object Grid is closed and will be remembered between user sessions per query.

- The existing Find functionality will be maintained to allow users to find an item in the grid on the Data tab.

- The existing functionality to be able to add an object listed in the grid on the Data tab to the active floor plan will be maintained. When an object is added to a floor plan from the grid on the Data tab, the appropriate command will be run to add the object in the same way as if it had been added from the Object Browser.

> **Note:** This functionality will use the object identifier (BLK_ID, POG_ID, PRD_ID and ZND_ID) included in the custom SQL to determine the object to be added, as per the existing functionality.

- The existing Sort tab will be used to define the sort order for the columns in the grid on the Data tab as per the existing functionality. The sort order will be applied when the Use Sort check box is ticked on the Data tab as per the existing functionality.

- The existing Filter tab will be used to define the filter to be applied to the grid on the Data tab as per the existing functionality. The filter will be applied when the Use filter check box is ticked on the Data tab as per the existing functionality.

- The Filter tab will be enhanced so that when a column name is selected from a Field drop-down control then the Combination field will be automatically set to AND on the previous row if it is not already set to a value.

Object Grid Object Browser Filters

The Object Grid palette in AutoCAD will provide ability to list the properties of multiple zones, fixtures, products and planograms in a tabular manner.

Description

The Object Grid will be enhanced to allow the user to select which custom query to use, to populate the grid, by selecting from the drop-down list in the left-hand combo box.
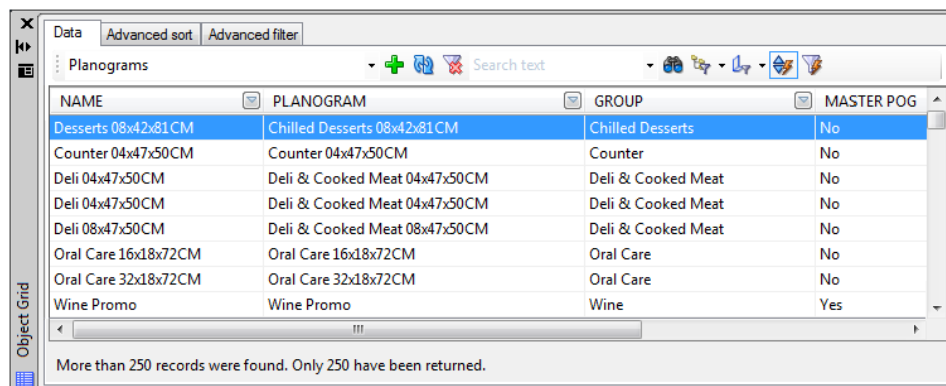
- The drop-down list will show the query name (CSQ_NAME) for all Object Grid custom queries. The custom SQL to be included in the drop-down list will have a custom SQL type of Object Grid (CST_ID = 4). Which query is used by the Object Grid will no longer be determined by the selected node in the Object Browser.

- The Object Grid will be enhanced to allow the data shown in the Data tab to be filtered based on a combination of the selection in the zone, fixture, product and planogram hierarchies in the Object Browser. The user is able to select which hierarchies are included in the filter by ticking the appropriate options in the **Hierarchy Filter** button drop-down options. The options will be as follows:
  - Zone
  - Fixture
  - Product
  - Planogram

- When a Hierarchy filter option is ticked, the value of the ID for the current selection in the Object Browser for the appropriate hierarchy will be used to replace the appropriate placeholder in the Object Grid custom SQL. The following custom SQL placeholders will be used.

Hierarchy Object	Placeholder
Zone	{ZND_ID}
Fixture group	{BLG_ID}
Fixture	{BLK_ID}
Product	{PRD_ID}
Planogram group	{PGG_ID}
Planogram	{POG_ID}

For example if the custom SQL was set as follows:

```
SELECT POG.POG_NAME AS "Name", POG.POG_REVISION AS "Revision"
FROM AVTTB_PLANO POG
INNER JOIN AVTTB_PLANO_GROUP_LINK PGL ON PGL.POG_ID = POG.POG_ID
INNER JOIN AVTTB_PLANO_GROUP PGG ON PGG.PGG_ID = PGL.PGG_ID
WHERE PGL.PGG_ID = {PGG_ID} OR {PGG_ID} IS NULL
```

If the user clicks on a planogram group with an ID of 27, the query will be executed as follows:

```
SELECT POG.POG_NAME AS "Name", POG.POG_REVISION AS "Revision"
FROM AVTTB_PLANO POG
INNER JOIN AVTTB_PLANO_GROUP_LINK PGL ON PGL.POG_ID = POG.POG_ID
INNER JOIN AVTTB_PLANO_GROUP PGG ON PGG.PGG_ID = PGL.PGG_ID
WHERE PGL.PGG_ID = 27 OR 27 IS NULL
```

- If the appropriate Hierarchy filter is not ticked, then the placeholder will be replaced with null in the custom query. As such the implementer must write the custom SQL to cope with a null value so that it will run successfully and return all rows.

Overview of Synchronization Chapter

This section describes the updates to the Object Grid Overview chapter in the Oracle Retail Planner Module User Guide.

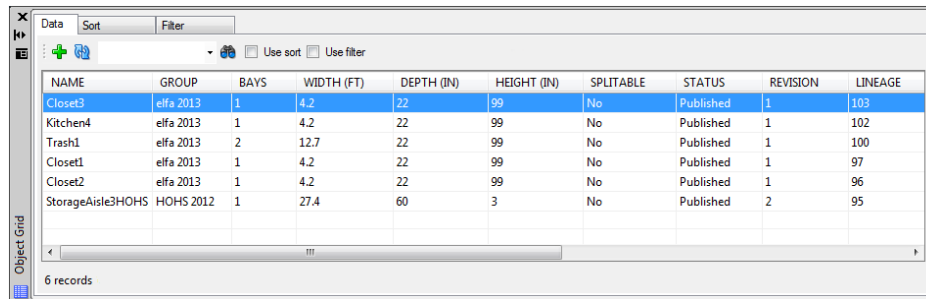This section describes changes to be made to the existing Synchronize feature.

By default, the Manual Synchronization functionality will only be accessible by the following types of users.

- Application Administrator
- IT Help Desk Agent
- Store Planning Manager
- Store Planner

Description

- The existing synchronization process will be updated to combine the existing Fixtures and Other blocks options into a single Fixturing option. The Fixturing option includes the following types of object:
  - Fixtures
  - Fittings
  - Composites
  - Non-retail (other) blocks
- The Fixturing option will only synchronize objects that have a block name (BLK_NAME) registered in the MSM database and blocks that are not marked as Exclude instances in the database (BLK_EXCLUDE_DB) as per the existing functionality.
- AutoCAD variable (non-constant) attribute values will be synchronized when the block definition is not marked to Exclude attributes. The value set in AutoCAD for a named attribute will be compared to the value held in the MSM database (AVTTB_FIXTURE_ATTRIBUTE).
- The synchronization process will be updated to include Annotations.
- The synchronization process will be updated to remove the Products option. This is because merchandise will no longer be represented as product blocks in the floor plan's AutoCAD drawing file, but will be rendered using data read directly from the database.
- The existing Merge and Only Keep Identical options will no longer be supported by the synchronization process.
- The existing Synchronize window will be updated to reflect the changes in options and the order of the items to synchronize will be updated as shown below.
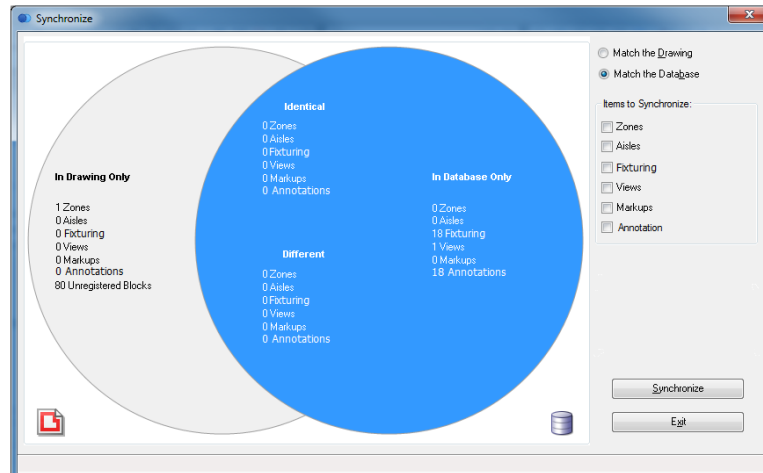
- The Application Administrator user is able to control whether Store Planners can save their Synchronize window options using the existing SYNC_SETTINGS system variable.

- The Application Administrator user is able to set the default values Synchronize window options using the existing SYNC_OBJECTS and SYNC_DIRECTION system variables. The system variables will be updated to reflect the changes in the Synchronize options.

- The user is able to see the details of the objects detected by the synchronize process by opening the existing Information window. The existing functionality allows the user to do the following:

  – The Information window will open when the user clicks on an object label on the Venn diagram in the Synchronize window.

  – The Information window will open when the label has one or more objects listed, for example three zones have been found to be identical or 18 Annotations in the database only.

- The existing Information window will be updated to show the following differences:

Object	Difference	Existing Display	Updated Display
Zone	The number of boundaries in a zone	Details	Number of boundaries
	The number of vertices	Details	Number of vertices
	Positions or bulge factors for the vertices	Details	Vertices details
Fixturing	X or Y co-ordinate	Position	Position
	Z co-ordinate	Elevation	Elevation
	Rotation	Rotation	Rotation
	X size	Length	Length
	Y size	Depth	Depth
	Z size	Height	Height
	Fixture attributes	Details	Attributes
Aisle	Number of vertices	Details	Number of vertices

	Positions or bulge factors for the vertices	Details	Vertices details
Annotation	Text position or rotation	Not applicable	Position/rotation
	Content of the text	Not applicable	Text
Markups (red-lining and revision clouds)	Number of vertices	Details	Number of vertices
	Positions or bulge factors for the vertices	Details	Vertices details
	Color	Details	Color
	Line weight	Details	Line weight

- The existing auto-synchronize process will be updated to synchronize Fixturing, Markups and Annotation when a Match the Database Synchronize is run. Products will no longer be synchronized.
- The existing auto-synchronize process will be updated to synchronize Fixturing, Zones, and Aisles when a Match the drawing synchronize is run. Products will no longer be synchronized.
- The existing auto-synchronize process will be updated to merge Markups when a Match the drawing synchronize is run. Markups that exist in both the floor plan's AutoCAD drawing and the database, or only exist in the drawing, will be synchronized to match the drawing. Markups that only exist in the database will be synchronized from the database to the AutoCAD drawing.
- The existing auto-synchronize Cross match option will be removed. This option will no longer be required as products will always be read direct from the database in Planner and will not have product objects saved in the AutoCAD drawing.
- The annotation process will be automatically run only for objects that have changed once the synchronize process completes. This will apply to both manual and automatic synchronization.
- The Validate fixturing command will automatically synchronize to Match the drawing.
- The existing dynamic synchronize process will be updated to ensure that the database is updated when changes are made to zones, aisles and fixturing. The process will allow the Store Planner to continue to use Planner while it updates the database.
- The Store Planner is able to turn on/off the dynamic synchronize process using the existing AVT_DYNAMICSYNC command. Turning dynamic synchronize off will ensure that the application remains responsive for the user.

Overview of General Features Chapter

This section describes the new chapter in the Oracle Retail Planner Module User Guide.

General Options

This section describes requirements for the General tab of the Options window. This functionality will be available to all default users of the Planner module.

Description

- The General tab will be displayed in the Options window as shown below.
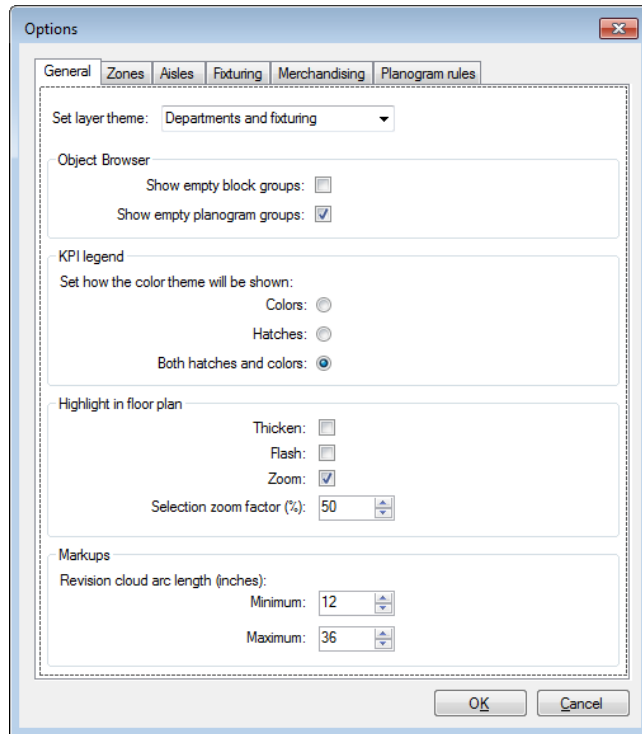
- You are able to set the layer theme to be applied to the open floor plans by selecting an option from the Set layer theme combo box. The combo box will list the layer themes that have been configured in the database.

- The **KPI Legend** radio buttons will allow the user to choose how the legend on the KPI tab of the Reporting palette is displayed. The user is able to choose to display the legend using the theme's colors (for example ■), the color theme's hatch pattern (show a monochrome hatch pattern, for example ▨) or using both the color and the hatch pattern (for example ▨).

- The **KPI Legend** radio buttons setting will also be used to determine whether colors, hatches or both are shown in the floor plan when a KPI is run.

- The Highlight in Floor Plan checkboxes will allow the user to set how objects are shown in the floor plan when an appropriate find function is used.

- When you select the Thicken checkbox and objects are highlighted then the AutoCAD show line weight option will be turned on, if it is not already on, and the appropriate objects' line weight will be increased to the maximum line weight. When you click Enter or click the floor plan, the object's line weight will be reset to its original value and the AutoCAD show line weight option will be returned to its original state.

- When you select the Flash checkbox and objects are highlighted then the appropriate objects' visibility property is turned off and on six times. The system will wait 400 milliseconds between each time the visibility state is changed.

- When you select the Zoom checkbox and objects are highlighted then the floor plan will be zoomed in to the extents of the appropriate objects.

- You are able to set the Selection Zoom factor to a value between 25 and 100%. The Selection Zoom factor will determine the size of margin added to the zoom extents window when objects are highlighted in the floor plan. For example a

Selection Zoom factor of 75% will be the equivalent to an AutoCAD zoom scale of 0.75, relative to the selected objects extents. The default Selection Zoom factor will be 90%.

- The Markup settings will be applied when adding revision clouds using the AVT_REVCLOUD command.
- The Revision cloud arc length Minimum and Maximum numeric controls will allow a positive non-zero value to be set.
- The Maximum arc length value will cannot be set as a value less than the Minimum arc length. The Maximum arc length cannot be set to more than three times the Minimum arc length.
- The default Minimum arc length will be set to 12 inches for imperial systems or 300 millimeters for metric.
- The default Maximum arc length will be set to 36 inches for imperial systems or 900 millimeters for metric.
- The changes to the options will be saved and the Options window will close when the user clicks the **OK** button.
- The settings associated with the selected layer theme will be applied to the open floor plans when the **OK** button is clicked.
- The Object Browser settings will be applied to the Fixtures and Planograms hierarchies when the **OK** button is clicked.
- The KPI legend settings will be applied to the active KPI when the **OK** button is clicked.
- Any changes to the options will be discarded if the user clicks the **Close** button on the titlebar or the **Cancel** button.

Ribbon Bar, Toolbars and Menus

This section describes the layout of the new Planner ribbon bar tabs and the changes required for the existing Planner toolbars and menus.

Description

Ribbon bar

- Planner includes 4 ribbon bar tabs as follows:
  - Retail
  - Space Planning
  - Merchandising
  - Print and Publish
- The Retail ribbon tab will contain the following commands

Panel Name	Display Name	Command
Standard	Open	AVT_OPEN
	Save	QSAVE
	Find & open	AVT_OPENFLOORPLAN
	Options	AVT_OPTIONS
Modify	Move	MOVE
	Copy	COPY

	Stretch	STRETCH
	Rotate	ROTATE
	Mirror	MIRROR
	Scale	SCALE
	Chamfer/Fillet	Split button with most recent command shown. See requirement 3 below.
	Array	Split button with most recent command shown and static text. See requirement 4 below.
	Erase	ERASE
	Explode	EXPLODE
	Offset	OFFSET
Layers	Freeze layer	LAYFRZ
	Isolate layer	LAYISO
	Delete layer	LAYDEL
	Reverse layer	AVT_LAYER_REVERSE
	Change layer color	AVT_LAYER_COLOR
	Layer properties manager	LAYER
	Layer	Layer Combo Control
Reports	Display reports	AVT_REPORTS
Find	Find in tree	AVT_SELECT_IN_TREE
	Find object	AVT_FIND
	Find handle	AVT_FINDHANDLE
	Find text	FIND

▪ The Chamfer/Fillet split button includes the following commands.

Display Name	Command
Fillet	FILLET
Chamfer	CHAMFER
Blend curves	BLEND

▪ The Array split button includes the following commands.

Display Name	Command
Rectangular array	ARRAYRECT
Path array	ARRAYPATH
Polar array	ARRAYPOLAR

▪ The Retail ribbon tab includes the following commands on slideout rows. Slideout rows can be pinned by the user using standard AutoCAD ribbon bar functionality.

Panel Name	Display Name	Command
Modify	Set to ByLayer	SETBYLAYER
	Edit polyline	PEDIT
	Edit spline	SPLINEDIT
	Edit array	ARRAYEDIT
	Join	JOIN
	Reverse	REVERSE
	Align	ALIGN
	Delete duplicate objects	OVERKILL
	Draw order	Split button with most recent command shown.
Layers	Turn zone layers on	AVT_LAYER_ZONE_ON
	Turn fixturing layers on	AVT_LAYER_FIXTURE_ON
	Turn fitting layers on	AVT_LAYER_FITTING_ON
	Turn fixture coloring on	AVT_LAYER_MERCH_ON
	Turn markup layers on	AVT_LAYER_MARKUP_ON
	Turn annotation layers on	AVT_LAYER_ANNOTATION_ON
	Turn 2D layers on	AVT_LAYER_2D
	Unlock layer	LAYULK
	Turn zone layers off	AVT_LAYER_ZONE_OFF
	Turn fixturing layers off	AVT_LAYER_FIXTURE_OFF
	Turn fitting layers off	AVT_LAYER_FITTING_OFF
	Turn fixture coloring off	AVT_LAYER_MERCH_OFF
	Turn markup layers off	AVT_LAYER_MARKUP_OFF
	Turn annotation layers off	AVT_LAYER_ANNOTATION_OFF
	Turn 3D layers on	AVT_LAYER_3D
	Lock layer	LAYLCK

▪ The **Draw Order Split** button includes the following commands.

Display Name	Command
Bring to front	DRAWORDER f
Send to back	DRAWORDER b
Bring above objects	DRAWORDER a
Send under objects	DRAWORDER u
Bring all annotations to front	TEXTTOFRONT a

Send hatches to back   HATCHTOBACK

- ▪ The Retail ribbon tab will be laid out as shown below.
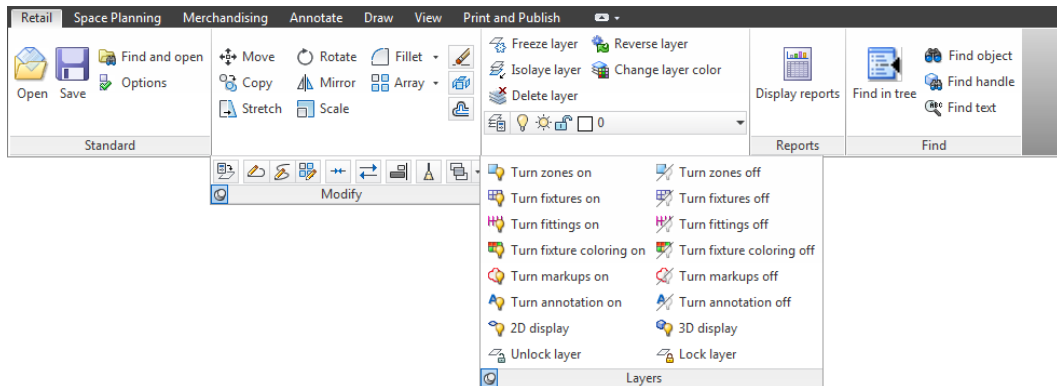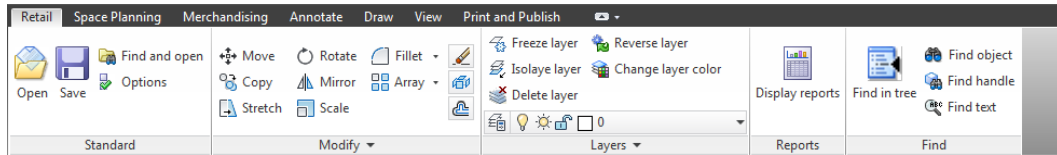
- ▪ Planner will react to the standard AutoCAD QSAVE command and persist the active floor plan's data stored in the database.
- ▪ When Planner saves a floor plan, the AutoCAD drawing file's Last Modified date will be read and stored as the File and Last Modified dates in the database. This will ensure that the dates are always the same when the floor plan is saved.
- ▪ The Space Planning ribbon tab will contain the following commands.

Panel Name	Display Name	Command
Architectural plans	Architectural plans	AVT_ARCHPLAN
Zones	Add zone	AVT_ADDZONE
	Add zone hole	AVT_ADDHOLE
	Delete zone	AVT_DELETEZONE
Aisles	Delete boundary	AVT_DELETEBOUNDARY
	Add aisle	AVT_ADD_AISLE
	Rename aisle	AVT_EDIT_AISLE
	Delete aisle	AVT_DELETE_AISLE
Fixturing	Add fixture	AVT_ADDFIXTURE
	Add gondola	AVT_ADDGONDOLA
	Cut	AVT_CUT
	Copy	AVT_COPY
	Paste	AVT_PASTE
	Delete fixtures	AVT_DELETEFIXTURE
	Fixture attributes	AVT_FIXTURE_ATTRIBUTE
	Toggle group selection	AVT_GROUP

	Fixture manipulation	Not applicable. This is a drop-down menu button.
Bay numbering	Add bay numbers	AVT_ADDBAYNUM
	Remove bay numbers	AVT_REMOVEBAYNUM
	Add bay numbers using polyline	AVT_PLINEBAYNUM
	Add bay numbering polyline	AVT_ADD_BAYNUM_PLINE
Validation	Validate fixtures	AVT_VALIDATE_FIXTURES
	Synchronize	AVT_SYNCHRONIZE
	Calculate fixture adjacency	AVT_CALCADJ
	Calculate aisle adjacency	AVT_CALCAISLE
	Restructure drawing	AVT_RESTRUCTUREDRAWING
	Display reports	AVT_REPORTS
	Find in tree	AVT_SELECT_IN_TREE
	Find object	AVT_FIND
	Find handle	AVT_FINDHANDLE
	Find text	FIND

- The Space Planning ribbon tab includes the following commands on slideout rows. Slideout rows can be pinned by the user using standard AutoCAD ribbon bar functionality.

Panel Name	Display Name	Command
Zones	Hide hatch	AVT_HIDEHATCH
	Refresh hatch	AVT_REFRESHHATCH
	Turn zone layers on	AVT_LAYER_ZONE_ON
	Turn zone layers off	AVT_LAYER_ZONE_OFF
Fixturing	Turn fixturing layers on	AVT_LAYER_FIXTURE_ON
	Turn fixturing layers off	AVT_LAYER_FIXTURE_OFF
	Turn fitting layers on	AVT_LAYER_FITTING_ON
	Turn fitting layers off	AVT_LAYER_FITTING_OFF
	Turn 2D layers on	AVT_LAYER_2D
	Turn 3D layers on	AVT_LAYER_3D
Bay numbering	Add bay group	AVT_ADDBAYGROUP
	Select bay group	AVT_SELECTBAYGROUP
	Clear bay group	AVT_REMOVEBAYGROUP
Validation	Find mirrored blocks	AVT_FINDMIRRORBLKS

- The **Fixture Manipulation** button in the Fixturing tab of the Space Planning ribbon tab will display a drop-down menu when it is clicked. The drop-down menu includes the following commands.

Display Name	Command
Slide fixtures	AVT_SLIDE
Rotate and offset fixtures	AVT_OFFSET
Match rotation	AVT_MATCH_ROTATION
Rotate fixtures	AVT_ROTATE
Rotate fixtures 90 clockwise	AVT_ROTATE_90
Rotate fixtures 90 anti-clockwise	AVT_ROTATE_270
Rotate fixtures 180	AVT_ROTATE_180
Mirror fixtures	AVT_MIRROR

▪ The Space Planning ribbon tab will be laid out as shown below.

▪ The Merchandising ribbon tab will contain the following commands.

Panel Name	Display Name	Command
Merchandising	Add merchandise	AVT_ADD_MERCH
	Remove merchandise	AVT_REMOVE_MERCH
	Reverse planogram	Not applicable. This is a toggle button
	Change planogram flow	AVT_CHANGE_POG_FLOW
Substitution	Run planogram substitution	AVT_RUNPOGSUB
	Planogram preview	AVT_VIEW_POG_PREVIEW
Planogram view	View planogram document	AVT_VIEW_POG_DOC
	Display reports	AVT_REPORTS
Reports	Find in tree	AVT_SELECT_IN_TREE
Find	Find object	AVT_FIND
	Find handle	AVT_FINDHANDLE
	Find text	FIND

- The Merchandising ribbon tab includes the following commands on slideout rows. Slideout rows can be pinned by the user using standard AutoCAD ribbon bar functionality.

Panel Name	Display Name	Command
Merchandising	Turn fixture coloring on	AVT_LAYER_MERCH_ON
	Turn fixture coloring off	AVT_LAYER_MERCH_OFF

- The Merchandising ribbon tab will be laid out as shown below.
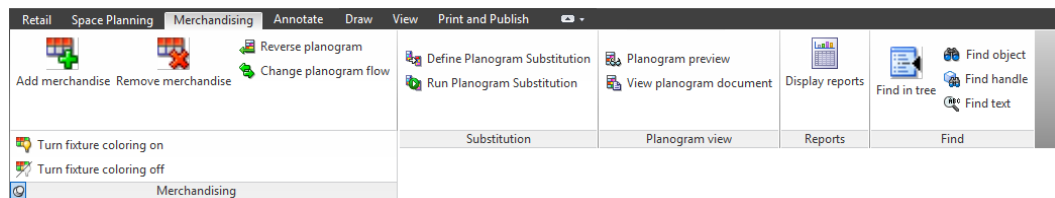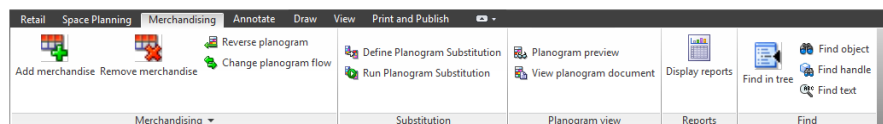
- The Annotate ribbon tab will contain the following commands.

Panel Name	Display Name	Command
Annotation	Annotation	AVT_ANNOTATE
	Annotate fixtures	AVT_ANNOTATEFIX
	Annotate products	AVT_ANNOTATEPRODUCTS

	Add revision cloud	AVT_REVCLOUD
Dimensions	Linear	DIMLINEAR
	Aligned	DIMALIGNED
	Dimension style	Drop-down combo box
	Quick dimension	QDIM
	Update	DIMSTYLE _apply
	Left justify	DIMTEDIT _l
	Center justify	DIMTEDIT _c
	Right justify	DIMTEDIT _r

- The Annotate ribbon tab includes the following commands on slideout rows. Slideout rows can be pinned by the user using standard AutoCAD ribbon bar functionality.

Panel Name	Display Name	Command
Annotation	Add freehand markup	AVT_MARKUP
	Turn markup layers on	AVT_LAYER_MARKUP_ON
	Turn markup layers off	AVT_LAYER_MARKUP_OFF
	Turn annotation layers on	AVT_LAYER_ANNOTATION_ON
	Turn annotation layer off	AVT_LAYER_ANNOTATION_OFF

- The Dimensions panel includes a window launcher on the panel title for the standard AutoCAD Dimension Style Manager window.
- The Annotate ribbon tab will be laid out as shown below.
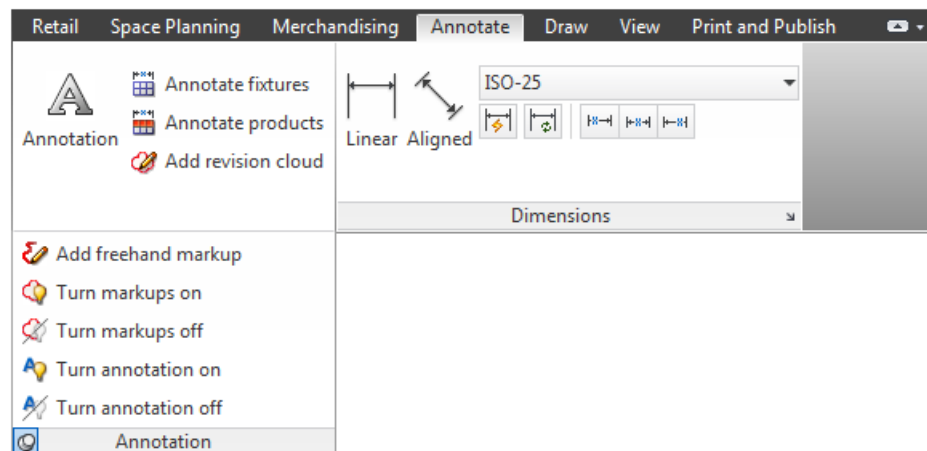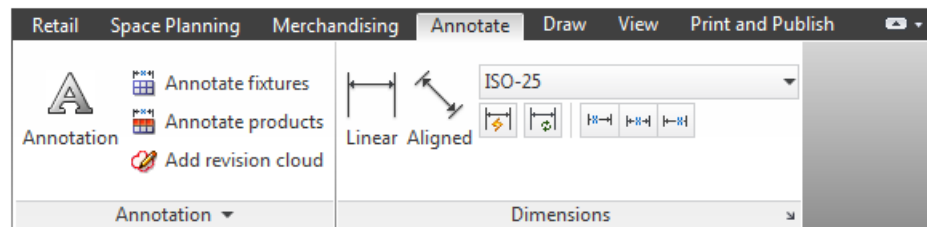
- The Draw ribbon tab will contain the following commands.

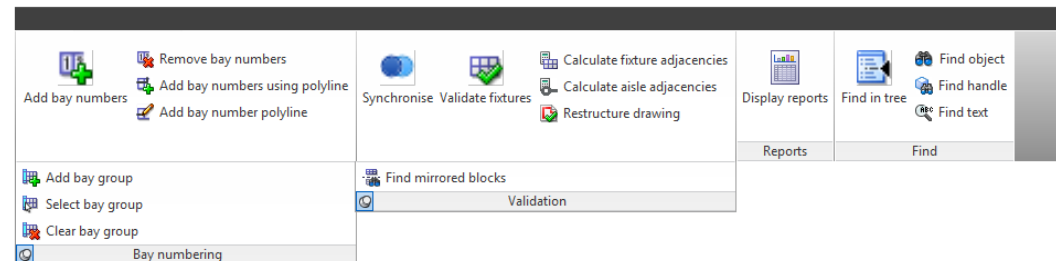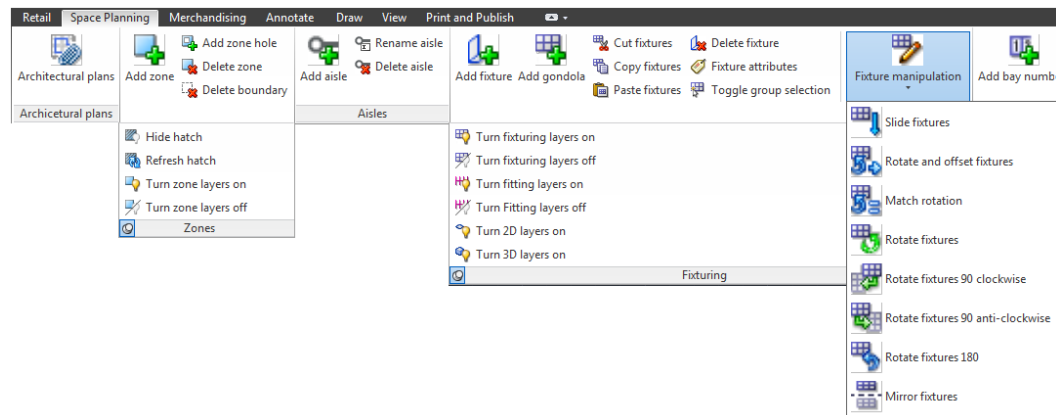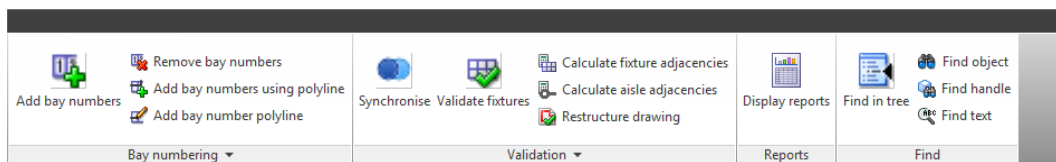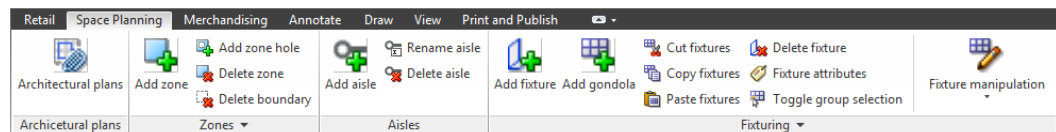| Panel Name	Display Name	Command
Draw	Line	LINE
	Polyline	PLINE
	Circle	Split button with most recent option and static text.
	Arc	Split button with most recent option and static text.
	Rectangle/Polygon	Split button with most recent option.
	Ellipse	Split button with most recent option.
	Spline fit	SPLINE _m _fit
	Spline CV	SPLINE _m _cv
	Region	REGION
	3D polyline	3DPOLY
Modeling	Solid shapes	Split button with most recent option.
	Solid creation	Split button with most recent option.
	Polysolid	POLYSOLID
	Clickpull	CLICKPULL
Block	Insert	INSERT
	Edit attribute	Split button with most recent option and static text.
Block Definition	Create block	Split button with most recent option.
	Define attributes	ATTDEF
	Manage attributes	BATTMAN
	Block editor	BEDIT

- The Draw ribbon tab includes the following commands on slideout rows. Slideout rows can be pinned by the user using standard AutoCAD ribbon bar functionality.

Panel Name	Display Name	Command
Block	Attribute display	Drop-down button with most recent option.
Block Definition	Set base point	BASE
	Set color ByBlock	CHPROP c byblock
	Set lineweight ByBlock	CHPROP lw byblock

- The Circle split button on the Draw panel includes the following commands.

Display Name	Command
Center, radius	CIRCLE
Center, diameter	CIRCLE _d
2-point	CIRCLE _2p

3-point	CIRCLE _3p
Tan, tan, radius	CIRCLE _ttr
Tan,tan,tan	CIRCLE _3p _tan _tan _tan \\

- The **Arc Split** button on the Draw panel includes the following commands.

Display Name	Command
3-point	ARC
Start, center, end	ARC _c
Start, center, angle	ARC _c _\a
Start, center, length	ARC _c _l
Start, end, angle	ARC _e _a
Start, end, direction	ARC _e _d
Start, end, radius	ARC _e _r
Center, start, end	ARC _c
Center, start, angle	ARC _c _a
Center, start, length	ARC _c _l
Continue	ARC ;
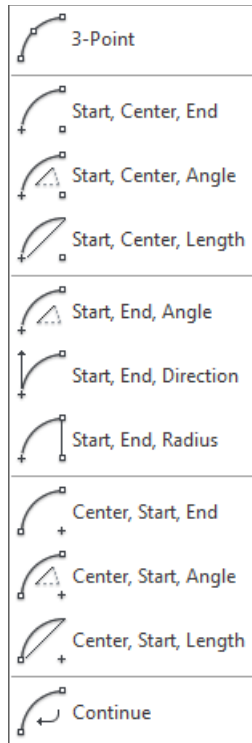
- The **Rectangle/Polygon Split** button on the Draw panel includes the following commands.

Display Name	Command
Rectangle	RECTANG
Polygon	POLYGON
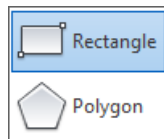
- The **Ellipse Split** button on the Draw panel includes the following commands.

Display Name	Command
Center	ELLIPSE _c
Axis, end	ELLIPSE
Elliptical arc	ELLIPSE _a
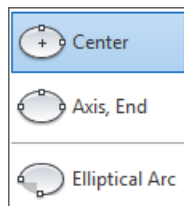
- The **Solid Shapes Split** button on the Modeling panel includes the following commands.

Display Name	Command
Box	BOX
Cylinder	CYLINDER
Cone	CONE
Sphere	SPHERE
Pyramid	PYRAMID
Wedge	WEDGE
Torus	TORUS
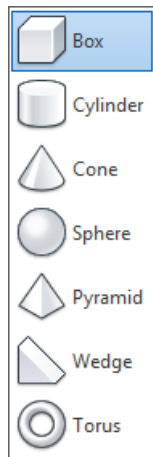
- The **Solid Creation Split** button on the Modeling panel includes the following commands.

Display Name	Command
Extrude	EXTRUDE _mo _so;
Loft	LOFT _mo _so;
Revolve	REVOLVE _mo _so;
Sweep	SWEEP _mo _so;
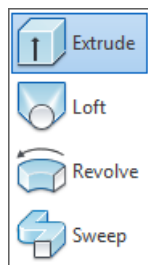
- The **Edit Attribute Split** button on the Block panel includes the following commands.

Display Name	Command
Single	EATTEDIT
Multiple	-ATTEDIT
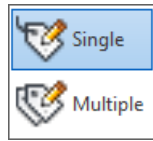
- ▪ The **Attribute Display** drop-down button on the Block panel includes the following commands.

Display Name	Command
Retain attribute display	ATTMODE 1
Display all attributes	ATTMODE 2
Hide all attributes	ATTMODE 0
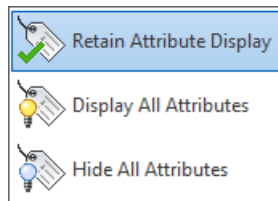
- ▪ The **Create Block Split** button on the Block Definition panel includes the following commands.

Display Name	Command
Create block	BLOCK
Write block	WBLOCK

- ▪ The Draw ribbon tab will be laid out as shown below.
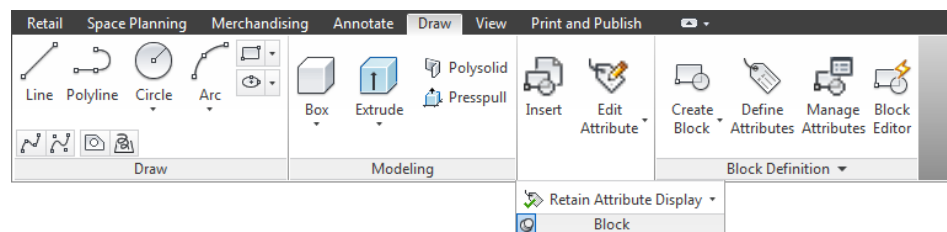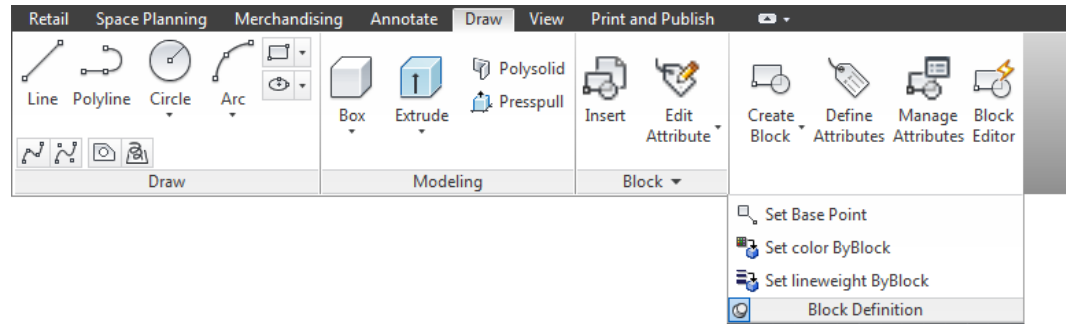
■ The View ribbon tab will contain the following commands.

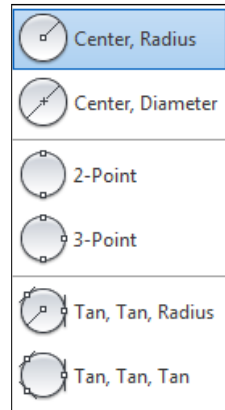| Panel Name	Display Name	Command
View	NW Isometric	NWISO
	NE Isometric	NEISO
	SE Isometric	SEISO
	SW Isometric	SWISO
	Plan, World UCS	PLAN _w
	Orbit	3DORBIT
	View Manager	VIEW
View Styles	View Styles	Combo box list of view styles
	Edge mode	Drop-down button.
	Hide	HIDE
	Face color mode	Drop-down button.
	Face style	Drop-down button.
	Shadow mode	Drop-down button.
	Material display	Drop-down button.
	X-ray	VSFACEOPACITY on/off toggle button
	Opacity	VSFACEOPACITY slider value control
Viewports	Viewports window	VPORTS
	Single viewport	-VPORTS _si
	Polygonal viewport	-VPORTS _p
	Convert object to viewport	-VPORTS _o

■ The View ribbon tab includes the following commands on slideout rows. Slideout rows can be pinned by the user using standard AutoCAD ribbon bar functionality.

Panel Name	Display Name	Command
Viewports	Clip existing viewport	VPCLIP

■ The Visual Styles panel includes a window launcher on the panel title for the standard AutoCAD Visual Styles Manager palette.

- The **Edge Mode** drop-down button on the Visual Styles panel includes the following commands.

Display Name	Command
No edges	VSEDGES 0
Isolines	VSEDGES 1
Facet edges	VSEDGES 2
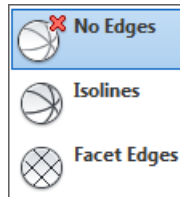
- The **Face Color Mode** drop-down button on the Visual Styles panel includes the following commands.

Display Name	Command
Normal	VSFACECOLORMODE 0
Monochrome	VSFACECOLORMODE 1
Tint	VSFACECOLORMODE 2
Desaturate	VSFACECOLORMODE 3
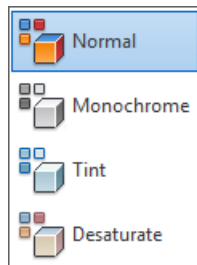
- The **Face Style** drop-down button on the Visual Styles panel includes the following commands.

Display Name	Command
No face style	VSFACESTYLE 0
Realistic face style	VSFACESTYLE 1
Warm-cool face style	VSFACESTYLE 2
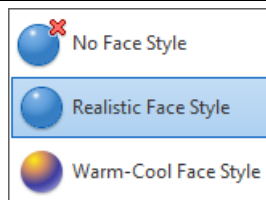
- The **Shadows** drop-down button on the Visual Styles panel includes the following commands.

Display Name	Command
No shadows	VSSHADOWS 0
Ground shadows	VSSHADOWS 1
Full shadows	VSSHADOWS 2
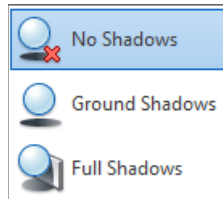
- The **Materials** drop-down button on the Visual Styles panel includes the following commands.

Display Name	Command
Materials / textures off	VSMATERIALMODE 0
Materials on / textures off	VSMATERIALMODE 1
Materials / textures on	VSMATERIALMODE 2
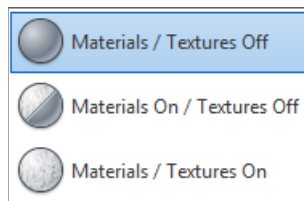
- The View ribbon tab will be laid out as shown below:
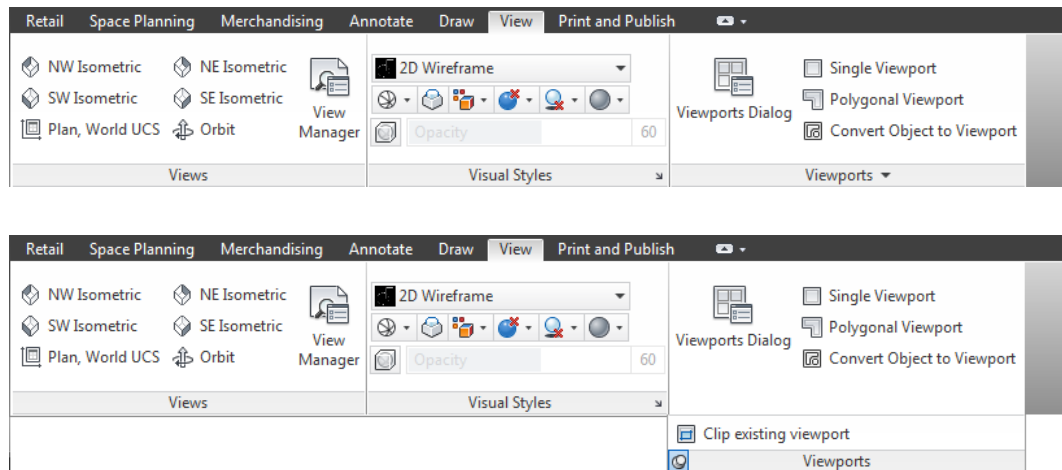
- The Print and Publish ribbon tab will contain the following commands:

Panel Name	Display Name	Command
Printing	Plot…	PLOT
	Print planograms	AVT_IMEDPOGPRINT
	Search and print	AVT_PRINTFLOORPLAN

Publishing	Publish floor plans	AVT_PUBLISHFLOORPLAN
	Publish planograms	AVT_IMMEDPOGPUBLISH
	Floor plan processing	AVT_PROCESSFLOORPLAN
	Add title block	AVT_TITLEBLOCK
	Update title block	AVT_UPDATETTLBLK

- The Print and Publish ribbon tab will be laid out as shown below:
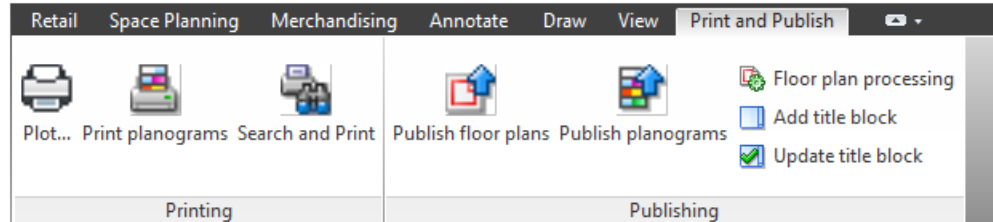
- The Planner commands shown on the ribbon bar will only be visible if the user has permission to run the command. User permissions will be configured in the database using the existing ISSC message control mechanism.

- The standard AutoCAD functionality will ensure that there are no gaps shown in the panels on the ribbon bar when commands are hidden

- If the user does not have permission for any of the commands on a tab then the tab will be automatically hidden.

- The ribbon bar layouts will adjust to the resolution of the user's display using standard AutoCAD functionality.

Toolbars

- The command tooltips will be updated to match the display names defined for the commands on the Planner ribbon bar tabs. The following is a list of the existing Planner toolbars.

  - Aisles
  - Calculations
  - Fixturing
  - Layers
  - Quick views
  - Retail layers
  - UCS
  - Zoom
  - Bay numbering
  - Draw order
  - Layer tools
  - Object snap
  - Retail
  - Standard
  - Workspaces

- The existing Layers: Notes On and Layers: Notes Off commands will be removed and replaced by the new Turn annotation layers on and Turn annotation layers off commands on the Retail Layers toolbar.

- The existing Layers: Shelves/Products On and Layers: Shelves/Products Off commands will be removed and replaced by the new Turn fixture coloring on and Turn fixture coloring off commands on the Retail Layers toolbar.
- The new Turn markup layers on and Turn markup layers off commands is added to the existing Retail Layers toolbar.
- The new Remove bay numbers, Add bay numbers using polyline and Add bay numbering polyline commands will added to the existing Bay Numbering toolbar.
- The existing Calculate: Areas, Calculate: Face Planes, Calculate: Product Adjacencies and Calculate: Space Measurements commands will be removed from the existing Calculations toolbar.
- The existing Fixtures: Array command will be removed from the existing Fixturing toolbar.
- The existing Block: Attach command will be removed from the existing Retail toolbar.
- The existing Text: Send to Front and Send Products to Back commands will be removed from the existing Draw Order toolbar. The standard AutoCAD Bring all annotation objects to front and Send hatch to back commands will be included.
- The Planner features (for example zone, fixturing, merchandising, aisle and annotation) will ensure that objects are drawn in the appropriate order. The draw order is defined as part of the layer theme. If the draw order values are the same for an object and an annotation layer then the annotation will always be brought to the front so that it is visible.
- The existing Quick Views toolbar will be removed as this functionality will not be available in this release.
- A new Dimension toolbar has been added to the Planner workspace. The toolbar includes the following commands.

Display Name	Command
Linear	DIMLINEAR
Aligned	DIMALIGNED
Quick dimension	QDIM
Dimension update	DIMSTYLE _apply
Dimension style control	Dimension style drop-down control
Dimension style	DIMSTYLE

- The Dimension toolbar is laid out as shown below:
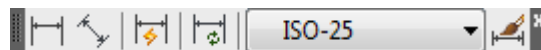
- A new Modify toolbar has been added to the Planner workspace. The toolbar includes the following commands:

Display Name	Command
Erase	ERASE
Copy	COPY
Mirror	MIRROR

Offset	OFFSET
Array	ARRAY
Move	MOVE
Rotate	ROTATE
Scale	SCALE
Stretch	STRETCH
Join	JOIN
Chamfer	CHAMFER
Fillet	FILLET
Blend curves	BLEND
Explode	EXPLODE

- The Modify toolbar is laid out as shown below:

Figure 1 - Modify toolbar layout

- The Array button on the Modify toolbar is a flyout button linked to the Array toolbar. The Array toolbar is the same as the standard AutoCAD toolbar.
- A new Draw toolbar has been added to the Planner workspace. The toolbar includes the following commands:

Display Name	Command
Line	LINE
Polyline	PLINE
Polygon	POLYGON
Rectangle	RECTANGLE
Arc	ARC
Circle	CIRCLE
Ellipse	ELLIPSE
Insert block	INSERT
Make block	BLOCK
Region	REGION
Multiline text	MTEXT
Add selected	ADDSELECTED

- The Draw toolbar is laid out as shown below:

- A new Modeling toolbar has been added to the Planner workspace. The toolbar includes the following commands.

Display Name	Command
Polysolid	POLYSOLID

Box	BOX
Wedge	WEDGE
Cone	CONE
Sphere	SPHERE
Cylinder	CYLINDER
Torus	TORUS
Pyramid	PYRAMID
Extrude	EXTRUDE
Clickpull	CLICKPULL
Sweep	SWEEP
Revolve	REVOLVE
Loft	LOFT
Union	UNION
Subtract	SUBTRACT
Intersect	INTERSECT

- The Modeling toolbar will be laid out as shown below:

- The standard AutoCAD Solid Editing, Inquiry, Measurement Tools, Viewports and View toolbars have been added to the Planner workspace.

Menus

- The existing Planner menus have been updated to use the icons and command names. The menu option descriptions have been updated to match the display names defined for the commands on the Planner ribbon bar tabs. The following is a list of the existing Planner menus.
    - File
    - View
    - Format
    - Calculations
    - Window
    - Edit
    - Insert
    - Modify
    - Tools
    - Help
- The existing Configuration option on the File menu will be removed and replaced with the Planner options option. The Planner options call the new AVT_OPTIONS command.
- The existing Refresh Browser option in the File menu will be updated to refresh the Zones, Fixtures, Gondolas, Products and Planogram hierarchies in the new Object Browser. This option is the equivalent to clicking the Refresh button on the toolbar of each of the Object Browser tabs.

- The existing Color Products, Drawing Comparison, Show Fixturing Summary, Show Merchandising Summary and Show Zones Summary options have been removed from the View menu.
- The existing Attach Block and Fix Mirrored Blocks options have been removed from the Modify – Blocks sub-menu.
- The existing Calculate: Areas, Calculate: Face Planes, Calculate: Product Adjacencies and Calculate: Space Measurements options have been removed from the Calculations menu.

Fixture Studio connection

This section describes connecting Fixture Studio to AutoCAD and saving fixture blocks.

Description

- Fixture Studio can connect/disconnect to AutoCAD using the existing Connect to AutoCAD option in the File menu. Fixture Studio automatically disconnects from AutoCAD if the active drawing is closed, as per the existing functionality. The Connect to AutoCAD option in the File menu has been updated to reflect that Fixture Studio has disconnected.
- Fixture Studio connects to the current instance of AutoCAD if it is already running on the user's machine.
- Fixture Studio will start AutoCAD and connect to it if AutoCAD is not running on the user's machine.
- Fixture Studio is able to read block information as per the existing functionality from the active AutoCAD drawing when it is connected to AutoCAD. To read blocks from AutoCAD, the existing Read Blocks window is opened from the Fixture Studio File menu and the Drawing radio button is selected. The functionality will continue to read block data using the 14.1 Xdata format.
- Fixture Studio has been updated to only write block files to the appropriate Windows folder when the Destination is set to Drawing in the Save Block Definitions window. No Xdata will be written to the AutoCAD blocks by Fixture Studio. The Save dumb blocks and Update database with drawing options will be removed.
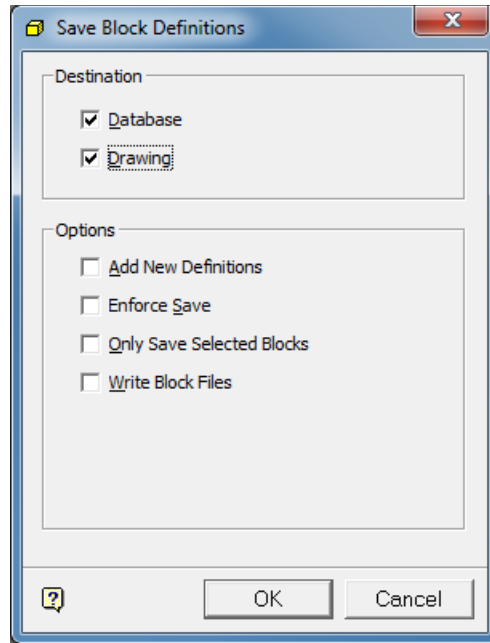
- The Save Block Definitions window will be updated to tick the Only Save Selected Blocks option by default when the window is opened.
- Blocks definitions will be saved to the database when the Destination is set to Database in the Save Block Definitions window, as per the existing functionality.

Administration – Advanced Security Options

The password handling mechanism used to manage application user's passwords has been changed in this release.

- The new password handling mechanism allows the system administrators to define a handler for processing of the application user's passwords.
- The new passwords handling mechanism is setup using a security configuration file which is in a form of a .NET application configuration file. The MSM and ISSC products will have their own copies of the security configuration files.
- The existing security functionality offered by the Advanced Security Options in the Administration module has been removed. This is no longer applicable. This includes all the corresponding system settings in the database.

- By default, the products are distributed with a pre-defined password handler.
- Introduction of the new passwords handling mechanism makes any existing user's passwords redundant. A mechanism will be put in place to ease the upgrade path for the existing customers. The basic upgrade mechanism is as follows:
  - Any existing user's accounts are disabled.
  - A new IT Security Administrator account is created to allow access to the system.

Automation Tools

Changes have been made to the way the application users' login into the BatchRunner and the Planner Automation MSM tools. In the new system, the users are no longer required to enter their credentials under normal tool execution. The tools are used in the following manner:

- Credentials configuration: The application user's credentials are configured, for the given automation tool.
- Tool usage: The automation tool is executed without passing of the application user's credentials. The pre-configured credentials are used to login the user.

Credentials Configuration – Description

- The user runs the tool, putting it into the credentials configuration mode, using the following commands:
  - BatchRunner /CONFIGURECREDENTIALS
  - PlannerAutomation /CONFIGURECREDENTIALS
  - The tool will prompt the user for the UserName and the Password.
  - The tool will save the credentials to a secure location.
  - The tool will inform the user of the successful or failed attempt to save the credentials.

Tool Usage – Description

- The user runs the tool using their chosen task and its relevant sub-switches. The user is not required to enter the login credentials.
- The configured login credentials are read from the secure location and used to login into the MSP application server.
- On completion of the given automation task, the status is reported using the existing mechanisms.
- If there is a failure in locating the appropriate login credentials then the user is informed via a message.

Overview of Planner Menu Overview Chapter

This section describes the updates to the Planner Menu Overview chapter in the Oracle Retail Planner Module User Guide.

Layer Tools

This section describes functionality to easily turn on and off various retail object layer groups in any AutoCAD drawing, opened in Planner. The Store Planner or Merchandiser will also be able to easily turn the 2D and 3D layers on and off.

By default, the layer tools will only be accessible by the following User types:

- IT Help Desk Agent
- Application Administrator
- Store Planning Manager
- Merchandising Manager
- Store Planner
- Merchandising Planner

Description

- The user is able to thaw and turn on all AutoCAD layers associated with the layer aliases in the Zones layer group and its sub-groups using the following methods:

    – Click the **Turn Zone Layers On** button in the Layers group of the MSP ribbon.

    – Type AVT_LAYER_ZONE_ON in the AutoCAD command line.

- The user is able to freeze all AutoCAD layers associated with the layer aliases in the Zones layer group and its sub-groups using the following methods:

    – Click the **Turn Zone Layers Off** button in the Layers group of the MSP ribbon.

    – Type AVT_LAYER_ZONE_OFF in the AutoCAD command line.

- The user is able to thaw and turn on all the AutoCAD layers associated with the layer aliases in the Fixtures layer group and its sub-groups using the following methods:

    – Click the **Turn Fixturing Layers On** button in the Layers group of the MSP ribbon.

    – Type AVT_LAYER_FIXTURE_ON in the AutoCAD command line.

- The user is able to freeze all the AutoCAD layers associated with the layer aliases in the Fixtures layer group and its sub-groups using the following methods:

    – Click the **Turn Fixturing Layers Off** button in the Layers group of the MSP ribbon.

    – Type AVT_LAYER_FIXTURE_OFF in the AutoCAD command line.

- The user is able to thaw and turn on all the AutoCAD layers associated with the layer aliases in the Fittings layer group and its sub-groups using the following methods:

    – Click the **Turn Fitting Layers On** button in the Layers group of the MSP ribbon.

    – Type AVT_LAYER_FITTING_ON in the AutoCAD command line.

- The user is able to freeze all the AutoCAD layers associated with the layer aliases in the Fittings layer group and its sub-groups using the following methods:

    – Click the **Turn Fitting Layers Off** button in the Layers group of the MSP ribbon.

- Enter AVT_LAYER_FITTING_OFF in the AutoCAD command line.
- The user is able to turn on the merchandising and fixture KPI rendering, using the following methods:
  - Click the **Turn Fixture Coloring On** button in the Layers group of the MSP ribbon.
  - Type AVT_LAYER_MERCH_ON in the AutoCAD command line.
- The user is able to turn off the merchandising and fixture KPI rendering using the following methods:
  - Click the **Turn Fixture Coloring Off** button in the Layers group of the MSP ribbon.
  - Type AVT_LAYER_MERCH_OFF in the AutoCAD command line.
- The user is able to thaw and turn on all the AutoCAD layers associated with the layer aliases in the Markups layer group and its sub-groups using the following methods:
  - Click the **Turn Markups Layers On** button in the Layers group of the MSP ribbon.
  - Type AVT_LAYER_MARKUP_ON in the AutoCAD command line.
- The user is able to freeze all the AutoCAD layers associated with the layer aliases in the Markups layer group and its sub-groups using the following methods:
  - Click the **Turn Markups Layers Off** button in the Layers group of the MSP ribbon.
  - Type AVT_LAYER_MARKUP_OFF in the AutoCAD command line.
- The user is able to thaw and turn on all the AutoCAD layers associated with the layer aliases in the General_Notes layer group and its sub-groups using the following methods:
  - Click the **Turn Annotation Layers On** button in the Layers group of the MSP ribbon.
  - Type AVT_LAYER_ANNOTATION_ON in the AutoCAD command line.
- The user is able to freeze all the AutoCAD layers associated with the layer aliases in the General_Notes layer group and its sub-groups using the following methods:
  - Click the **Turn Annotation Layers Off** button in the Layers group of the MSP ribbon.
  - Type AVT_LAYER_ANNOTATION_OFF in the AutoCAD command line.
- Planner will support AutoCAD fixturing created with both two-dimensional and three-dimensional models. This is per the existing functionality using standard AutoCAD sub-layers within the block. The sub-layers for the two-dimensional model must be on a standard AutoCAD layer called 2D and the three-dimensional model must be on a standard AutoCAD layer called 3D when the fixturing block is created.
- The user is able to thaw and turn on the AutoCAD layer called 2D and freeze the AutoCAD layer called 3D using the following methods:
  - Click the **Turn 2D Layers On** button in the Layers group of the MSP ribbon.
  - Type AVT_LAYER_2D in the AutoCAD command line.

- The user is able to thaw and turn on the AutoCAD layer called 3D and freeze the AutoCAD layer called 2D using the following methods:
  - Click the **Turn 3D Layers On** button in the Layers group of the MSP ribbon.
  - Type AVT_LAYER_3D in the AutoCAD command line.
- The user is able to control standard AutoCAD layers using the following standard AutoCAD buttons in the Layers group of the MSP ribbon.
  - Layer freeze
  - Layer isolate
  - Layer delete

    The standard AutoCAD icons will be used for these buttons
- The user is able to freeze thawed layers and thaw frozen layers using the following methods:
  - Click the **Reverse Layers** button in the Layers group of the MSP ribbon.
  - Type AVT_LAYER_REVERSE in the AutoCAD command line.
- This command will affect all AutoCAD layers in a floor plan and not just layers associated with a layer alias in the MSM database. It will ignore AutoCAD layers called 2D and 3D.
- The user is able to change the color of a layer using the following methods:
  - Click the **Layer Color** button in the Layers group of the MSP ribbon.
  - Type AVT_LAYER_COLOR in the AutoCAD command line.

  This command will affect all AutoCAD layers in a floor plan and not just layers associated with a layer alias in the MSM database.
- When the Layer color command is run the prompt "Pick object:" will be displayed in the AutoCAD command window. The user is able to pick a single object in the floor plan. Any objects in the current AutoCAD selection set will be ignored.
- Once an object is selected then the standard AutoCAD Select color window will be displayed with the layer color of the selected object selected by default.
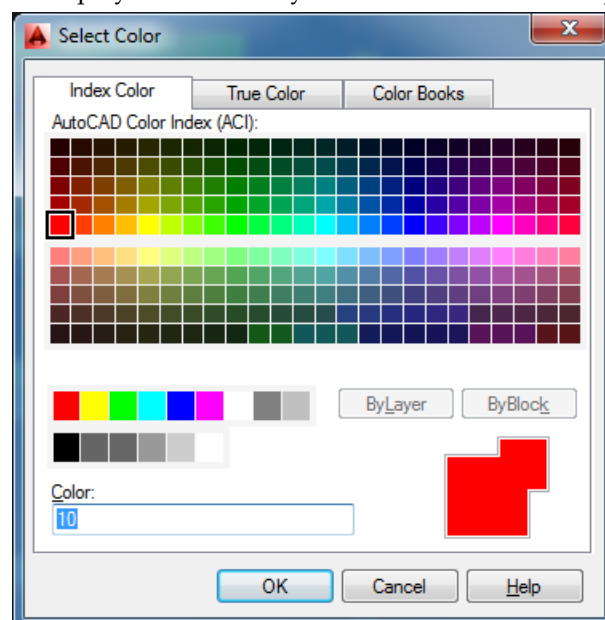
- When you click OK on the Select Color window, then your selection will be applied to the layer of the selected object.
- If the **Cancel** button is clicked on the Select Color window then the Layer color command will end and the layer color of the selected object will not be changed.
- When the commands associated with the **Layer Tools** buttons are run in the AutoCAD command line, they will display the message "Command not available" in the AutoCAD command line if appropriate permissions have not been setup using the existing ISSC Message Control mechanism. The command will automatically exit after displaying the message.

Cut, Copy and Paste

This section describes the requirements to allow you to be able to cut, copy and paste objects in the same floor plan and between floor-plans within the same environment. These requirements are in addition to the standard AutoCAD cut, copy and paste functionality. As such these requirements will not prevent you from using standard AutoCAD commands to work with standard AutoCAD objects.

Description

- The standard AutoCAD cut, copy and paste commands will be used when pasting objects in the same floor plan and between floor-plans within the same environment. The following space planning objects are able to be copied:
  - Zones
  - Fixturing
  - Aisles
  - Markups (revision clouds and red-lining)
  - Annotation

    Note: You will also be able to use these standard AutoCAD command to work with standard AutoCAD objects

- The following fixture manipulation commands will be used when pasting objects in the same floor plan and between floor-plans within the same environment:
  - AVT_CUT
  - AVT_COPY
  - AVT_PASTE
- When fixturing is pasted in to a floor plan (either using standard AutoCAD commands or fixture manipulation commands) all of the fixture instance data (AVTTB_FIXTURE) held in the MSM database for the appropriate objects will be copied within the database.
- When a pasted fixture has an override department then the system will ensure that the department exists in the floor plan. If the department doesn't exist then the override department will be set to null.
- When a pasted fixture has a bay number then the system will ensure that the bay number is still unique within the bay series. If the bay number is not unique within a bay series then it will be set to the next highest number in the series (the current maximum + 1).
- When an aisle is pasted then the system will ensure that the aisle identifier (BND_NAME) is still unique.

- If the aisle identifier is not unique and the AISLE_IDENTIFIER system variable is not set to 0 then the aisle identifier will be set to the next number (the current maximum + 1).
- If the aisle identifier is not unique and the AISLE_IDENTIFIER system variable is not set to 0 then the last aisle identifier (in ascending order) in the target floor plan that contains two or less letters from the English alphabet will be found and the identifier incremented.

- The last character of the last identifier will be changed to be the next ascending English alphabetical character.
- If the last identifier is Z then the next identifier will be AA.
- If the last identifier has two English letters and the last character is Z then the first character will be changed to be the next ascending English alphabetical character and the last character will be reset back to *A*.
- If the last identifier is ZZ then the next identifier will append a hyphen and a number appended to the end (so ZZ-1).
- If the last identifier already exists with ZZ and a number, then the number will be incremented to the next number (the current maximum + 1).
- When a fixture is pasted the department (AVTTB_FIXTURE.ZON_ID) will be set in the database as per the functionality.
- When a fixture is pasted into a floor plan, any merchandise associated with the cut/copied original fixture will also be pasted with the fixture.
- When an annotation is pasted into a floor plan a check will be made to ensure that its parent object is also being pasted at the same time. If the parent object is not being pasted then the annotation will be pasted as a standard AutoCAD object and no MSM data is added.
- When an annotation is pasted into a floor plan and its parent object is also being pasted at the same time then the associated data in the MSM database will also be copied.
- When MSM objects are pasted into a floor plan then the annotation process will be run automatically for the pasted objects in the same way as if the objects had been added to the floor plan as a new object (for example like when adding a zone from the Object Browser, or a markup cloud using the ribbon bar, and so on).

Update Status

This section describes the requirements to allow the Update Status batch process to change store, floor-plan, product, planogram and fixture status levels.

Description

- Appropriate authentication must take place when starting the Update Status process. The authentication will be detailed in the Security design documentation.
- You are able to update the status level of a specific object by starting the Update Status with one or more of the following switches. The Update Status process will support the following switches.

Switch	Description
/STORE	Store status
/PLAN	Floor plan status
/PROD	Product status (both SKU and display style)
/POG	Planogram status
/FIX	Fixture status

- The functional security will be linked to the existing Update Status Command Group.
- You must have access to the Update Status command group in order to be able to use the Update Status functionality.
- If none of the object switches are included then the statuses will be updated for all the objects.
- The Update Status process will allow the status level of an object to be changed ahead of the appropriate date. This is to allow for the fact that the process may need to be run the night before to ensure that the objects are ready on the actual date.
- The system variable will be called BATCH_PROCESS_LEAD_TOLERANCE and the value of the system viable will be set to the number of hours between 0 and 23. If the value is not within this range or the system variable does not exist then a value of 0 will be assumed. The system variable will be set to 0 by default.
- Update Status will update the store status level to Current if the following criteria are met:
  - The current application server date plus the BATCH_PROCESS_LEAD_TOLERANCE value is greater than or equal to the open date for the store
  - The current application server date is less than the close date for the store
  - The status level is not yet set to Current
- Update Status will update the store status level to Historical if the following criteria are met:
- The current application server date plus the BATCH_PROCESS_LEAD_TOLERANCE value is greater than the close date for the store
- The status level is not yet set to Historical
- Update Status will update the floor plan status level to Current if the following criteria are met:
  - The current application server date plus the BATCH_PROCESS_LEAD_TOLERANCE value is greater than or equal to the effective date for the floor plan
  - The current application server date is less than the expiry date for the floor plan
  - The floor plan is not currently checked out
  - The status level is not yet set to Current
  - The floor plan status level is at least Authorized level (, it is Authorized or Published)

- If a floor plan is changed to Current status level, then the existing Current status level floor-plan, for that floor, will be changed to Historical and its expiry date set to the day before the effective date of the new Current floor plan. The time element of the expiry date will set to 23:59:59.99. The time element of the expiry date will be ignored when it is displayed or compared.

- Update Status will update the planogram status level to Current if the following criteria are met:
  - The current application server date plus the BATCH_PROCESS_LEAD_TOLERANCE value is greater than or equal to the effective date for the planogram
  - The current application server date is less than the expiry date for the planogram
  - The status level is not yet set to Current

- If a planogram is changed to the Current status level, then the existing revision of the planogram will be set to Historical status level and its expiry date set to the day before the effective date of the new Current revision. The time element of the expiry date will set to 23:59:59.99. The time element of the expiry date will be ignored when it is displayed or compared.

- Update Status will update the planogram status level to Historical if the following criteria are met:
  - The current application server date is greater than the expiry date for the planogram
  - The status level is not yet set to Historical
  - Update Status will update the product SKU status level to Current if the following criteria are met:
  - The current application server date plus the BATCH_PROCESS_LEAD_TOLERANCE value is greater than or equal to the effective date for the product
  - The current application server date is less than the expiry date for the product
  - The status level is not yet set to Current

- Update Status will update the product SKU status level to Historical if the following criteria are met:
  - The current application server date plus the BATCH_PROCESS_LEAD_TOLERANCE value is greater than the expiry date for the product
  - The status level is not yet set to Historical

- Update Status will update the product display style status level to Current if the following criteria are met:
  - The current application server date plus the BATCH_PROCESS_LEAD_TOLERANCE value is greater than or equal to the effective date for the product
  - The current application server date is less than the expiry date for the product
  - The status level is not yet set to Current

- Update Status will update the product display style status level to Historical if the following criteria are met:

- The current application server date plus the BATCH_PROCESS_LEAD_TOLERANCE value is greater than the expiry date for the product
- The status level is not yet set to Historical.

▪ Update Status will update the fixture definition status level to Current if the following criteria are met:

- The current application server date plus the BATCH_PROCESS_LEAD_TOLERANCE value is greater than or equal to the effective date for the fixture definition
- The current application server date is less than the expiry date for the fixture definition
- The status level is not yet set to Current

▪ Update Status will update the fixture definition status level to historical if the following criteria are met:

- The current application server date plus the BATCH_PROCESS_LEAD_TOLERANCE value is greater than the expiry date for the fixture definition
- The status level is not yet set to Historical

▪ The BATCH_PROCESS_LEAD_TOLERANCE system variable will also be used by the existing floor plan publishing and planogram publishing processes instead of the existing FILE_PUBLISH_DATE_TOLERANCE and POG_PUBLISH_DATE_TOLERANCE system settings.

▪ In the Administration module, the Lead time tolerance (hours) controls will be removed from the Output tab of the Floor Plan Publishing Configuration and Planogram Publishing configuration windows.
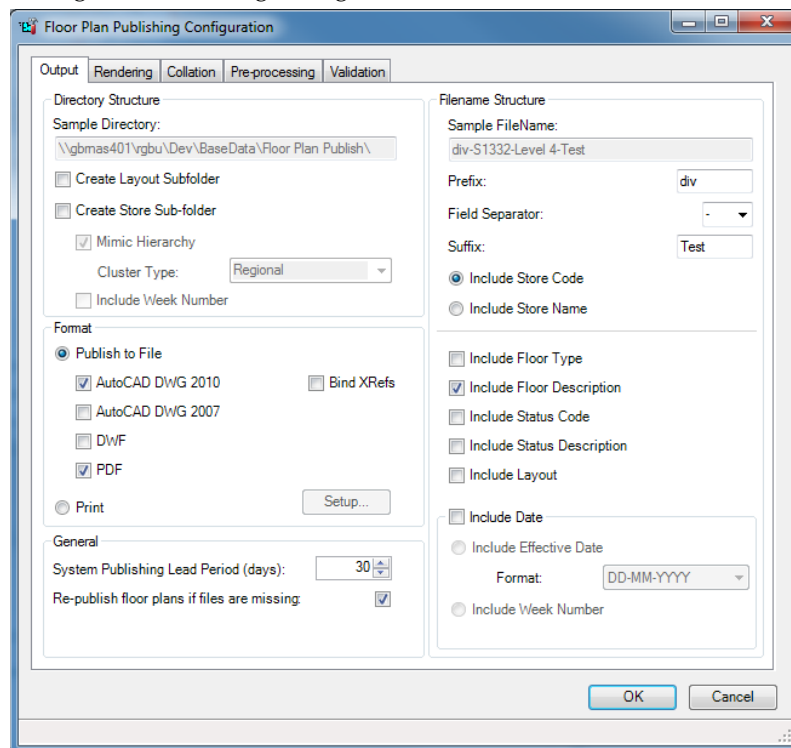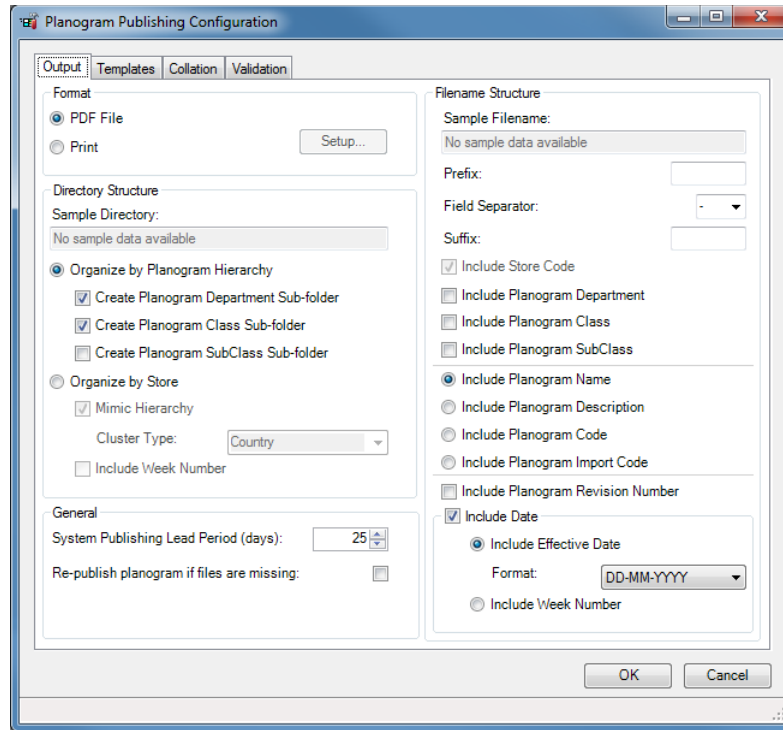
Calculations

Description

- The Calculate aisle adjacencies process may be run using the following methods:
  - Clicking the **Calculate Aisle Adjacencies** button in the Calculations group on the MSP ribbon.
  - Typing AVT_CALCAISLE on the AutoCAD command line.
  - During floor plan publishing.
  - During floor plan processing.
- The Calculate aisle adjacencies process will identify the nearest aisle to the front center of a fixture. The process will determine the nearest aisle by calculating the first perpendicular intersect from the front center of a fixture to an aisle segment. The distance to the nearest aisle must be less than or equal to the value of the existing ADJACENCY_AISLESIZE system variable. If no aisle is found then the fixture will not be given a aisle adjacency. The front of a fixture is defined in Fixture Studio.
- If the extents of a fixture actually intersect an aisle, then that aisle will be considered the nearest aisle. For example aisle 1 is nearest to fixtures F-1, F-2 and F3 in the diagram below:
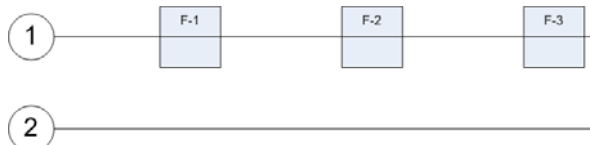
- The Calculate aisle adjacencies process will ignore aisles that are behind the fixture.

- The Calculate aisle adjacencies process will identify whether the fixture is on the left or right of the aisle based on the direction of the aisle.

- The Calculate aisle adjacencies process will identify how far each fixture is away from the start of the aisle.

- When calculating the distance from the start of the aisle, the process will calculate the distance from the perpendicular intersection point (used to determine the nearest aisle) back to the start of the aisle, summing the segment lengths up to that point.

- For example fixture 12 below is on the left side of aisle 1, and the distance is from point A (shown in red) where the black-arrowed projection line intersects with the aisle back to the start of the aisle (as indicated by the red dashed line.
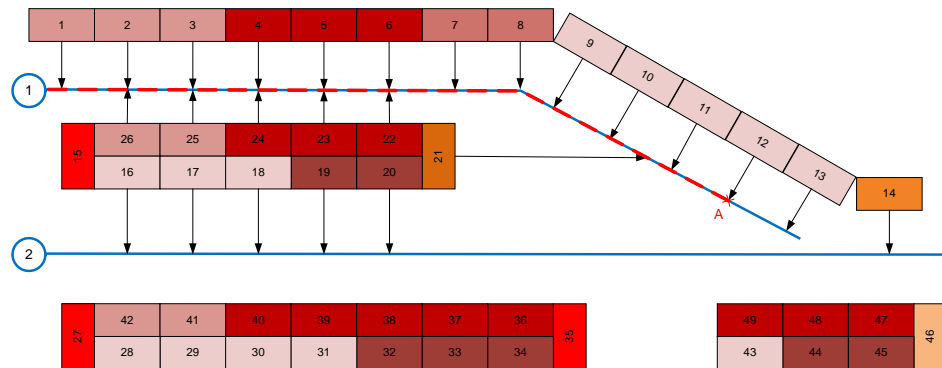
- The Calculate fixture adjacencies process may be run using the following methods:

  - Clicking the **Calculate Fixture Adjacencies** button in the Calculations group on the MSP ribbon.

  - Typing AVT_CALCADJ on the AutoCAD command line.

  - During floor plan publishing.

  - During floor plan processing.

- The Calculate fixture adjacencies process will be as per the existing functionality.

- The options to run the following calculation processes will not be available to run from within Planner. These calculations will only be able to be run using the existing Automatic Calculations module.

  - Areas

  - Face planes

  - Product adjacencies

  - Space measures

- When the commands associated with the Layer tools buttons are run in the AutoCAD command line, they will display the message "Command not available" in the AutoCAD command line if appropriate permissions have not been setup using the existing ISSC Message Control mechanism. The command will automatically exit after displaying the message.

Overview of Architectural Plans Chapter

This section describes the updates to the chapter in the Oracle Retail Planner Module User Guide.

Attach Architectural Plans

By default, the Attach Architectural Plans functionality will only be accessible by a user of the following types:

- Application Administrator
- IT Help Desk Agent
- Store Planning Manager
- Store Planner

Description

The Attach Architectural Plans window is displayed as a modal window when the AVT_ARCHPLAN command is executed.
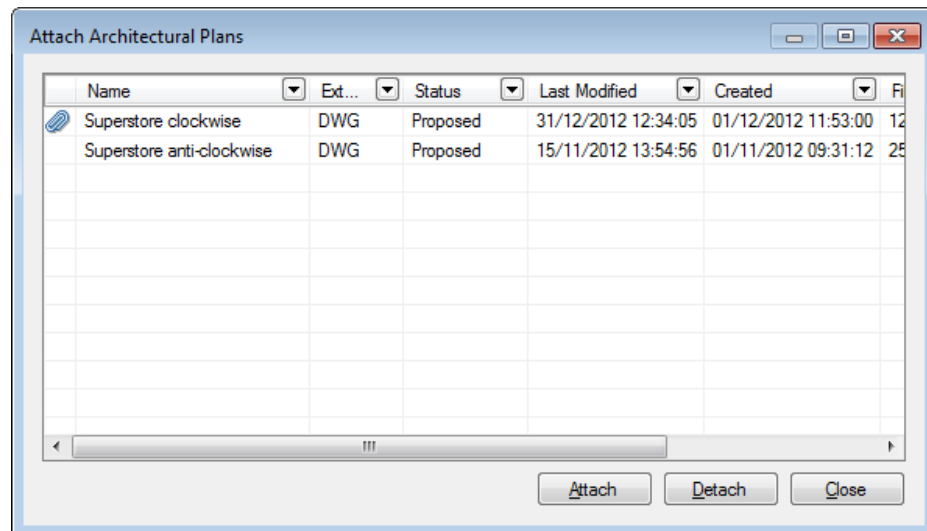
- User access (whether it is visible and enabled) to the **Attach Architectural Plan** button will be controlled per user group using the existing ISSC message control mechanism in the database. Similarly when the AVT_ARCHPLAN command is typed in the AutoCAD command line the same user group permissions will be checked. If the user does not have permission to use the command then the message "Command not available" will be shown on the command line.

- When the Attach Architectural Plans window is maximized the list view will be expanded to use the space available. Similarly when the Attach Architectural Plans window size is restored the size of the list view will be reduced to fit the window. The size and position of the window will be remembered and restored between user sessions.

- The Attach Architectural Plans window will not be able to be minimized.

- The Attach Architectural Plans window buttons will have accelerator keys. The accelerator keys will be language dependent and will be set during internationalization.

- The list view will display details of architectural plans that are associated to the same floor as the open floor plan. The list of architectural plans will exclude

those marked for deletion or are associated in the database, but the physical file cannot be found on the Windows file server.

- When two architectural plans of the same name, but different extensions (one DWG and one DWF) are associated with the same floor as the open floor plan then the list will only show the architectural plan with the DWG extension.

- Only listing the DWG extension file when there are two plans with the same name will mean that the user only has to attach a single architectural plan in Planner. ISSC will automatically check whether an architectural plan with the extension of DWF exists when a floor plan has a DWG extension plan attached. The remaining functionality of ISSC relating to architectural plans will be maintained, showing a DWF file architectural plan with the same name as the open floor plan and showing DWF architectural plans attached to the floor plan as recorded in the MSM database.

- The list view will allow the following columns to be displayed.

Column Header	Cell Type	Comment	Default
Id	Number		
Directory	Text	The directory path based on the DIR_ID value of the architectural plan. The path will have a trailing backslash as stored in the database	
Path	Text	The path of the architectural plan excluding the directory path shown above. The path will have a trailing backslash as stored in the database	
Name	Text		Yes
Extension	Text	Shown in uppercase and without a proceeding period (a full stop character).	Yes
File date	Short date and time	Modified date and time of the physical file on the Windows file server. The short date and time format will be based on the Windows regional settings of the client machine	
File size (bytes)	Number	Size of the physical file on the Windows file server.	
Store	Text	Store name based on the STR_ID in the database	

Created	Short date and time	The short date and time format will be based on the Windows regional settings of the client machine
Expired	Short date and time	The short date and time format will be based on the Windows regional settings of the client machine
Predecessor Id	Number	
File type	Text	File type description based on the FIT_ID in the database

- Columns indicated as default will be shown by default when a user opens the Attach Architectural Plans window for the first time.

- The user is able to show and hide columns by use of the right click context menu when the mouse pointer is on the list view's header row. The columns will be shown in the context menu in the order listed above, which is based on the database's column order. The user will not be able to hide the Name column or the Extension column.

- An **attach icon** 📎 will be displayed on the first column of the list view when an architectural plan has been attached to the floor plan. It will not be possible to move this column or to hide it. When the mouse pointer hovers over the attach icon a tooltip will be displayed that says "Attached architectural plan."
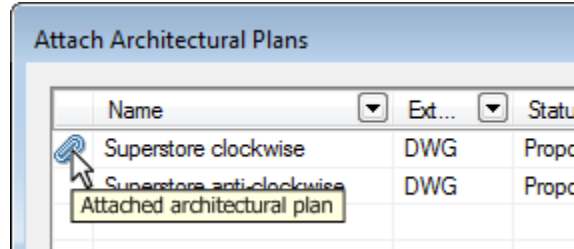
- Vertical and horizontal scroll bars are available if the data cannot all be shown within the visible area of the list view.

- You are able to change the order that the columns are displayed in the list view by dragging and dropping the column headers in the list view.

- The columns that a user has chosen to show and hide and their order will be maintained after the Attach Architectural Plans window is closed and reopened. The columns that a user has chosen to show and hide and their order will be remembered between user sessions.

- You are able to use distinct and custom filters for all columns displayed in the list view by clicking the auto filters ▼ button on the column header.

- You are able to use quick filters for all columns displayed in the list view by selecting the Quick filter option from the right click context menu when the mouse pointer is within a cell in the list view. The filters will operate as per the existing universal list view used for the Fixture Swap window in Planner. If a column is hidden then any filters applied to that column will be automatically removed.

- You are able to sort the data displayed in a column of the list view. The sort is able to be either descending or ascending. The sort order will be based on the language set for you in the MSM Administration module.
- The user's filters and sort order settings will be removed each time the Attach Architectural Plans window is opened. This will ensure that data is always displayed to you when they switch between floor plans in Planner.
- You are able to multi-select rows in the list view by using the Ctrl key when clicking to add rows; by holding the Shift key and clicking to add all rows between the already selected row and the mouse pointer; or using the Select all option in the context menu or the Ctrl+A keyboard shortcut to select all rows.
- You are able to copy the displayed data in the list view by using the Ctrl+C keyboard shortcut or the Copy option on the right click context menu. The data will be set on the Windows clipboard as tab separated values. This will allow the date to be pasted in to external applications such as Word or Excel.
- The Attach button will be enabled when an architectural plan is selected in the list view   not attached to the floor plan. The Attach button will be grayed out and disabled when all of the architectural plans selected in the list view are attached to the floor plan.
- The Detach button will be enabled when an architectural plan is selected in the list view   attached to the floor plan. The Detach button will be grayed out and disabled when none of the architectural plans selected in the list view are attached to the floor plan.
- When architectural plans are selected where some are attached and some are not then both the Attach and Detach button will be enabled.
- Clicking the Attach button will attach the selected architectural plans as AutoCAD XRefs in the floor plan's drawing file (or as an AutoCAD underlay if the architectural plan has a DWF extension). If the selected architectural plan has an extension of DWF then a check will be made whether a file with the same name, but a DWG extension exists in the same path as the DWF file. If a DWG file exists then this will be attached as an AutoCAD XRef instead of the DWF file, otherwise it will use the DWF file.
- If some of the selected architectural plans are already attached then clicking the Attach button will ensure that the architectural plans are still attached to the floor plan's drawing file via the AutoCAD XRef or underlay functionality.
- The attached architectural plans will be placed on the AutoCAD layer associated with the XREF layer alias. It will also be placed automatically at the floor plan drawing's origin, with zero rotation and unity scale factor.
- An architectural plan is able to be attached to multiple different floor plans.
- Clicking the Detach button will immediately detach the AutoCAD XRefs (and underlays) in the floor plan's drawing file for selected architectural plans. If some of the selected architectural plans are already detached then clicking the Detach button will have no affect for these.
- Attaching or detaching architectural plans will not affect any AutoCAD XRef drawings and underlays that are not associated to the floor in Space Planning and do not have the same name (but different extension, DWG instead of DWF) as an associated architectural plan. This will ensure that Planner users can have the flexibility to use the native AutoCAD XRef functionality in addition to the Space Planning architectural plans functionality.
- The list view will be refreshed when an architectural plan is attached or detached so that the attach icon is displayed or removed as appropriate.

- Click Close to close the Attach Architectural Plans window.
- When a floor plan with one or more architectural plans attached is opened in ISSC then a check will be made to see if any of attached architectural plans have a DWF extension. If one is found then the first architectural plan with a DWF extension (This may not be the first architectural plan attached, as there may be architectural plans with a DWG extension attached earlier) will be displayed as an underlay.
- When a floor plan with one or more architectural plans attached is opened in ISSC and none of them have a DWF extension (they all have a DWG extension), then a check will be made to see if any of the of the architectural plans have a 'buddy' file in the same location with the same file name (excluding the extension), but with a DWF extension. If a 'buddy' DWF file is found then the first 'buddy' DWF file will be displayed as an underlay.
- A check will be carried out against the 'buddy' DWF file to ensure that it is associated with the applicable floor.   to say the 'buddy' DWF must not be added to the file server directly via Windows.
- The existing ISSC functionality to display a DWF underlay which is in the same location and has the same file name (excluding the extension) will not be supported in this release.

Overview of Workflow Approval Chapter

This section describes the new chapter in the Oracle Retail Planner Module User Guide.

Workflow approval

This section describes the functionality that allows the user to save the floor plan and change the floor plan status.

Description

- When the user closes a floor plan a check will be made to confirm whether changes have been made since that last time it was saved.
- When changes have been made since the last time a floor plan was saved, the user will be shown the Save Changes window. The window will display one of the following sets of buttons:
  - Save, Discard
  - Save, Save and Submit, Discard
  - Accept, Reject

ISSC User - Small Prototype Store

Save or discard changes?
Note: Using the discard option will lose all changes made since the last save.

| Save | Discard | Cancel |
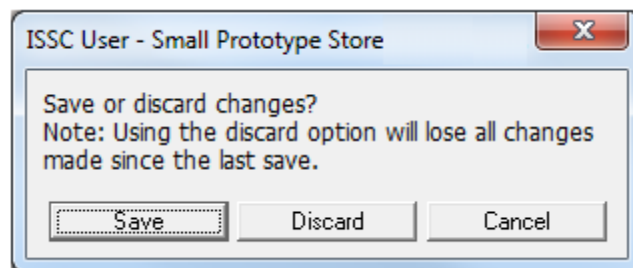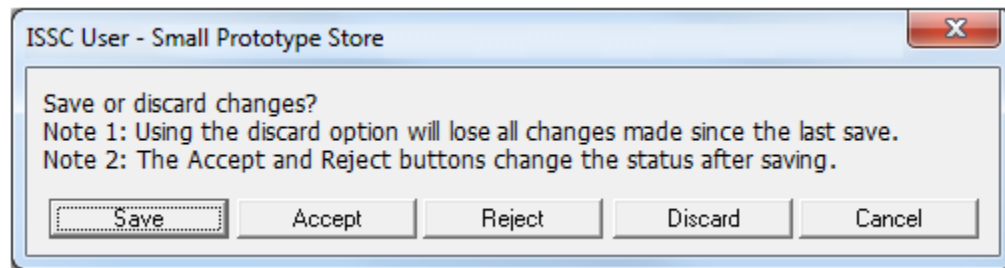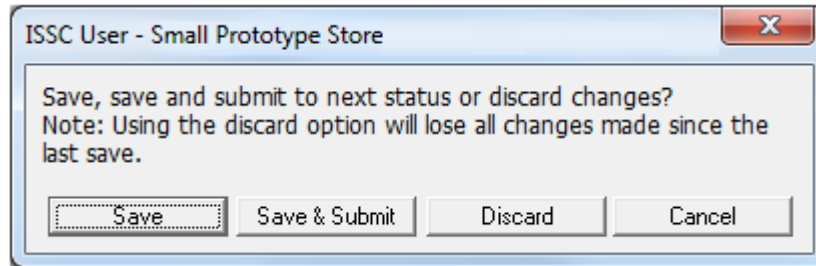
- The window's title will be the name of the logged in user group followed by the filename of the active floor plan, separated by a hyphen.

- A **Cancel** button will always be included on the Save Changes window. Clicking the Cancel will close the save window, return the user to the floor plan and stop the floor plan from being closed.

- Click Save to save the floor plan drawing file and close the Save Changes window and the floor plan without changing the status of the floor plan. This button will have focus by default.

- Click Discard to close the floor plan without saving any changes to the floor plan drawing file and rolling back any changes that have been made to the database.

- Click Submit or Accept to save the floor plan drawing, change the floor plan status to the Accept status set in the Status window of the Administration module and then close the floor plan.

- Click Reject to save the floor plan drawing, change the floor plan status to the Reject status set in the Status window of the Administration module and then close the floor plan

Overview of Title Blocks Chapter

This section describes the updates to the chapter in the Oracle Retail Planner Module User Guide.

Title Block Viewport Administration

Description

The existing Title Block window will open when a title block is edited by clicking the existing **Edit** button. The Viewports grid will be updated to add the following columns:

- View name
- Layer theme
- Appearance
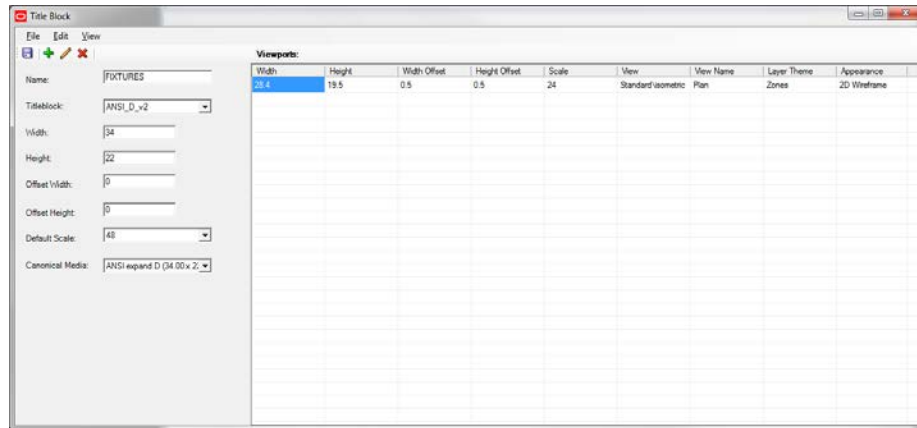
- When you edit a viewport, the View column will allow you to select one of the following options from a drop-down list:
    - Full floor plan
    - Standard/isometric
    - Aisle
    - Department zone
    - Other zone
    - Custom view
- When you edit a viewport, the View Name column will allow you to write in a text box the name of the aisle or custom view. The View Name will be a maximum of 64 characters. The View Name will allow wildcards to be included in the string. The following wildcards will be supported:
    - *   any number of characters
    - ?   any single character
    - #   any single numeric character
- The View Name column will allow you to pick from a drop-down list when the Standard/isometric view is used. The following options will be available:
    - Plan
    - NE
    - SE
    - SW
    - NW
    - N
    - E
    - S
    - W
- The View Name column will also allow you to pick a zone name (ZND_NAME) from a drop-down list when the Department zone view is used. Department zone definitions have a zone type that has been set-up with ZNT_TYPE = 5. The list will be sorted alphabetically.
- The View Name column will also allow you to pick from a drop-down list the Other zone view is used. Other zone definitions have a zone type that has been set-up with ZNT_TYPE <> 5. The list will be sorted alphabetically.

- The View Name column will not be used when the Full floor plan view is selected.
- When you edit a viewport, the Layer Theme column will allow you to select from a drop-down list one of the layer theme descriptions (LAT_DESC) set in the database.
- When you edit a viewport, the Appearance column will allow you to select one of the following options from a drop-down list:
  - 2D Wireframe
  - Wireframe
  - Hidden
  - Shaded
  - Shaded with Edges
  - Conceptual
  - Realistic
- When you edit a viewport, the Appearance column will allow you to type in the name of a custom view style. The Appearance will be a maximum of 64 characters. The Appearance will allow wildcards to be included in the string. The following wildcards will be supported:
  - * any number of characters
  - ? any single character
  - # any single numeric character
- When you edit a viewport, the Scale drop-down list will be updated to include the option Fit to size. This option will be shown as the first item in the list.
- A title block is able to include one or more viewports as per the existing functionality.
- The viewport settings will be saved for a title block when the existing **Save** 💾 button is clicked.
- The title blocks administration will be carried out by users of the Store Planning Manager group by default.

Title Blocks in Planner

You are able to add a title block to a floor plan or update the values in title block already associated with the floor plan.

Description

- You are able to add a title block to a floor plan using the following ways:
  - Clicking the **Add Title Block** 🔲 button in the Printing group of the MSP ribbon.
  - Typing the command AVT_TITLEBLOCK in AutoCAD command prompt.
- When the Add title block command is run then the Add Title Block window will open.
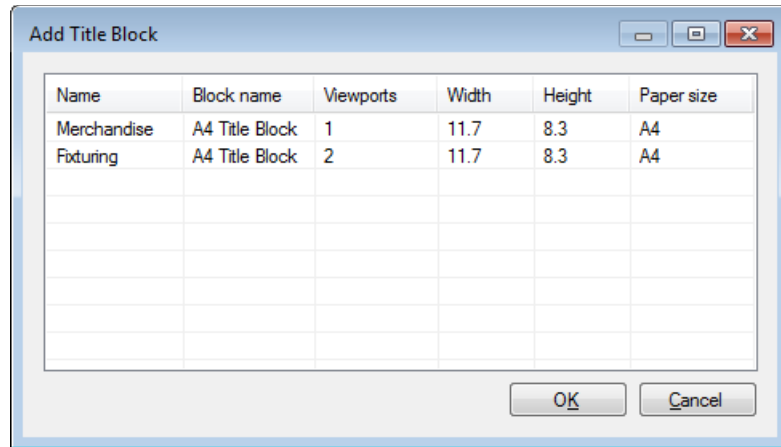
- The Add Title Block window will list the title blocks set-up in the Administration module. Scroll bars will be shown if required. The grid includes the name, block name, number of viewports, width, height and paper size set for each title block.

- The paper size will be based on the AutoCAD locale name associated with the canonical media set for the title block.

- You are able to adjust the size of the window and the columns in the grid. The settings will be remembered between user sessions.

- You are able to select a single row in the list of title blocks. When a row is selected the OK button will be enabled.

- When the OK button is clicked on the Add Title Block window, the window will close and the selected title block is added as per the existing functionality.

- If the selected title block has already been applied to a floor plan then a warning window will be displayed saying "Title block already exists. Do you want to replace the existing title block?"
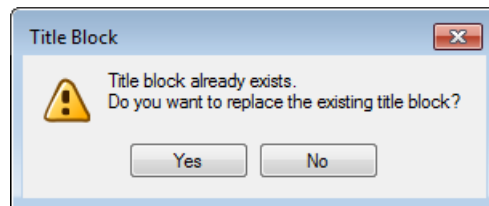
- When the **Yes** button is clicked on the warning window then the layout for the title block in the floor plan will be removed and the title block will be reapplied. If the No button is clicked on the warning window, the Add Title Block window will be closed and no changes will be made.

- The existing title block functionality will do the following:

  - The title block will be placed on its own AutoCAD layout which will be named the same as the title block's name.

  - The layout will be set with the paper size appropriate to the Canonical Media defined for the title block.

  - One or more viewports will be included in the layout based on the title block definition.

  - The AutoCAD attributes in the title block will be updated with the appropriate values from the database based on the custom SQL query named TITLEBLOCK_UPDATE.

- When a title block is added then the following additional functionality will also occur.
  - The title block will be placed on the AutoCAD layer associated with the layer alias set for the title block in the Fixture Studio module for the current layer standard. The current layer standard will be read from the existing LAYER_STANDARD system variable.
    a. If no layer name can be found linked to the layer alias for the current layer standard, then a new layer name will be created using the layer alias as its name. A warning message will be written to the AutoCAD command window saying "Layer {LAYER} created", where {LAYER} will be the layer alias name used for the new layer.
    b. If the required AutoCAD layer does not exist then a layer will be created in the AutoCAD drawing using the properties (color, line type and so on) defined for the active layer theme. The layer theme will be read from the LAYER_THEME user variable. The user variable value will be the layer theme's identifier (LAT_ID) field. If the value is invalid then the value set for the LAYER_THEME system variable will be used by default. If the LAYER_THEME system variable value is invalid then the lowest layer theme identifier in the database will be assumed.
    c. If there is no link between a layer alias and the active layer theme when a layer is being created, then the new layer is added to the layer theme using AutoCAD's default values for the layer color, linetype and so on. A warning message will be written to the AutoCAD command window saying "{LAYER} added to layer theme", where {LAYER} will be the layer name.
    d. If an AutoCAD layer exists in the active floor plan drawing with a name that matches the layer name linked to the layer alias for the current layer standard in the database then the system will ensure that it is turned on and thawed.
    e. The layer theme set for each viewport in the title block definition will be read and the layer properties set appropriately.
- When the Title block's block is marked to explode in the Fixture Studio module, then the block will be exploded when it is placed in the AutoCAD layout.
- The View and View Name set for each viewport in the title block definition will be read and the floor plan will be shown centered on the appropriate item.
  - If the View field is set to Aisle or Custom view then the View name will be read and used to determine the floor plan specific aisle or view to be used. The details of the Custom view will be read from the database and not the floor plan drawing file when the title block is added. This will allow implementers to script views in to the database if required.
  - If the View name includes wildcards and matches multiple items or the View name is not found for the floor plan then the extents of the full floor plan will be used.
  - If the View reverts to use the extents of the full floor plan when a title block is added during another process (such as publishing) then a warning will be logged in the database saying "View name could not be found, full floor plan extents used".
  - If the View is set to Standard/isometric then the View Name set for the viewport in the title block definition will be read. This will use the similar functionality as the existing Viewing direction setting of Print Floor Plans,

but read the views settings from the MSM database and will be applied separately for each viewport.

– If the View is set to Department zone or Other zone then the viewport will be set to be a plan view of the zone selected in the View Name.

– If the View is set to Full floor plan then the viewport will be set to be a plan view of the extents of the floor plan. The View Name will be ignored.

▪ The Scale set for each viewport in the title block definition will be set.

– If the scale for the viewport is set as Fit to size then the scale that the floor plan is shown at will be set in order that the item selected in the View and View Name plus 5% fills the viewport.

– Where the scale for the viewport is set as Fit to size and the View is set to Custom view then the scale saved with the view will be used.

– If the scale for the viewport is numeric (the Scale is not set to Fit to size) then value will be used as the scale for viewport. The viewport will be scaled around the center of the extents of the object set in the View and View Name.

▪ The Appearance set for each viewport in the title block definition will be set.

– This will use the same functionality as the existing Visual appearance setting of Floor Plan Publishing, but applied separately for each viewport.

– In addition the Appearance will be set to a custom visual style if the setting does not match one of the standard AutoCAD styles.

– If the Appearance includes wildcards and matches multiple items or the Appearance is not found for the floor plan then the appearance of 2D Wireframe will be used.

– If the Appearance reverts to use 2D Wireframe when a title block is added during another process (such as publishing) then a warning will be logged in the database saying "Custom appearance could not be found, 2D Wireframe used".

▪ Clicking the **Close** button on the titlebar of the Add Title Block window, or clicking the **Cancel** button, will close the window without adding a title block.

▪ The Store Planner user is able to initiate Update title blocks using the following ways:

– Clicking the **Update Title Blocks** button the Printing group of the MSP ribbon.

– Running the command AVT_UPDATETTLBLK in AutoCAD command prompt.

▪ Update title blocks will update the AutoCAD attributes in each of the title blocks on any of the AutoCAD layout tabs.

▪ When the AutoCAD commands associated with the Printing group buttons are run, they will display the message "Command not available" in the AutoCAD command line if the associated permissions are not available. The command will automatically exit after displaying the message.

▪ By default, the Add title block and the Update title blocks functionality will only be available to users of the following user groups:

– Application Administrator

– IT Help Desk Agent

– Store Planning Manager

– Store Planner

Overview of Floor Plan Publishing Chapter

This section describes the updates to the chapter in the Oracle Retail Planner Module User Guide.

Publish Floor Plans Configuration

Description

- The existing Rendering tab will be updated to move Set Layer Theme and Change Visual Appearance to be under the Set Layout option.
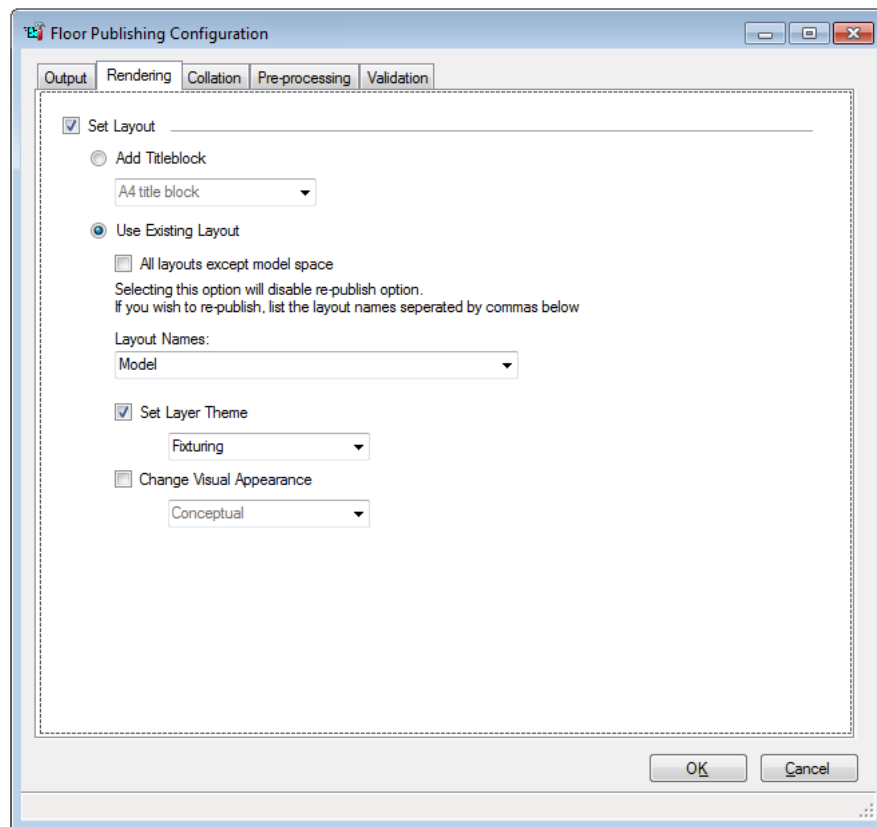
- The Set Layer Theme and Change Visual Appearance options will be enabled only when the Use Existing Layout option is selected and the Layout Names is set to Model.
- The existing Pre-processing tab will be updated to change the available options.

- The following changes will be made:
  - The Synchronize group will be updated to remove the Cross match option.
  - The Items to Synchronize group will be updated to remove the Shelves, Products and Views options.
  - The Items to Synchronize group will be updated to combine the Fixtures and Other blocks options in to a single Fixturing option.
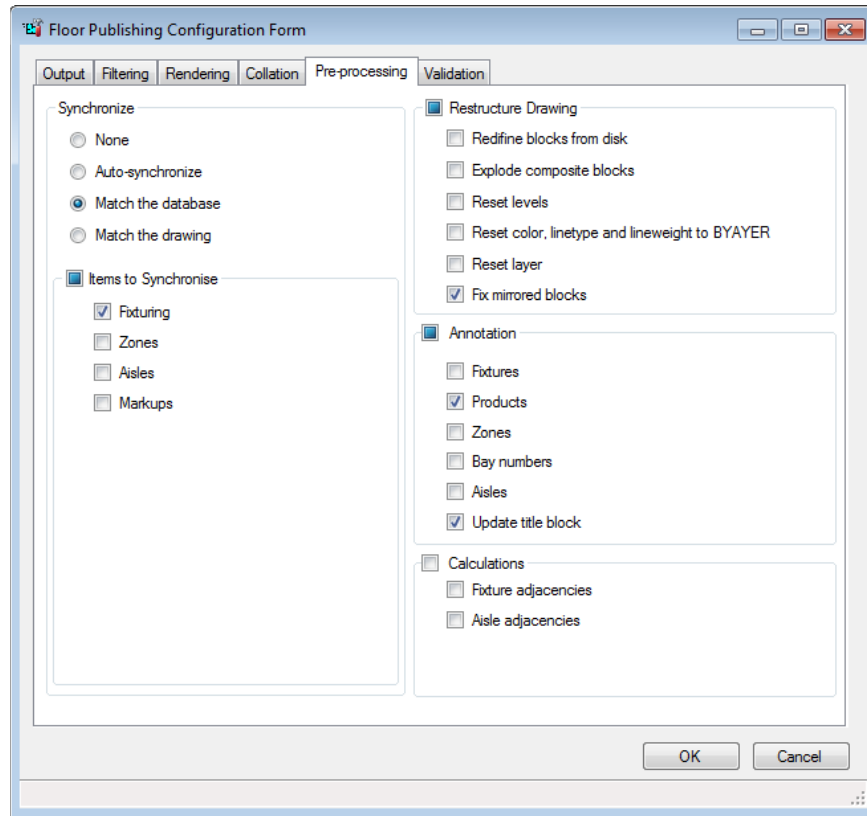 - The Restructure Drawing group will be updated to add the Fix mirrored blocks option.
  - The Annotation group will be updated to add the Bay numbers and Aisles options.
- The Calculations group will be updated to remove the Areas, Product Adjacencies, Space Measurements and Face Planes options.

Publish Floor Plans

- You are able to open the existing Publish Floor Plans window through the following ways:
  - Clicking the **Publish Floor Plans** button in the Printing group of the MSP ribbon
  - Typing AVT_PUBLISHFLOORPLAN in the AutoCAD command line.
- When the Publish Floor Plans window is opened, the active floor-plan will be checked in the grid of floor plans by default, if it is ready to be published.
- The Pre-processing tab will be updated to match the same tab on the Floor Plan Publishing Configuration window.

- When one or more floor plans are published from the Publish Floor Plans window then the updated title block functionality will be used if the Add title block option is set on the Rendering tab.
- When one or more floor plans are published from the Publish Floor Plans window then the Set Layer Theme and Change Visual Appearance settings will be applied to the floor plan as per the existing functionality, but only when the Use Existing Layout option is set and the Layout Name is Model.
- When one or more floor plans are published from the Publish Floor Plans window the options set in the Pre-processing options will be applied.
  - The updated functionality for Synchronize described in the General FSD will be applied.
  - The updated functionality for Restructure Drawing described in the Planner - Fixturing FSD will be applied.
  - The updated functionality for the Annotation described in the Planner – annotation FSD will be applied.
  - The updated functionality for the Calculations described in the Utilities FSD will be applied.
- When one or more floor plans are published from the Publish Floor Plans window the remaining features will be as per the existing functionality.
- The existing BatchRunner /publishplans process will be moved to a new PlannerAutomation process to allow floor plans to be published silently from the Windows command line. The updated settings detailed for the Floor Plan Publishing Configuration window will be used when floor plans are published silently. The publish floor plans process will use the same process as when publishing from the Publish Floor Plans window.
- When the AutoCAD commands associated with the Printing group buttons are run, they will display the message "Command not available" in the AutoCAD command line if the associated permissions are not available. The command will automatically exit after displaying the message.

Overview of Floor Plan Printing Chapter

This section describes the updates to the chapter in the Oracle Retail Planner Module User Guide.

Print Floor Plans

- You are able to print the currently open floor plan by using the standard AutoCAD plot functionality. The **AutoCAD Plot**… button will be included in the Printing group of the MSP ribbon.
- You are able to open the existing Print Floor Plans window through the following ways:
  - Clicking the **Search And Print** button in the Printing group of the MSP ribbon
  - Typing AVT_PRINTFLOORPLAN in the AutoCAD command line.
- The existing Rendering tab will be updated to move Set Layer Theme and Change Visual Appearance to be under the Set Layout option.

- The Set Layer Theme and Change Visual Appearance options will be enabled only when the Use Existing Layout option is selected and the Layout Names is set to Model.

- The Set Viewing Direction options will also be enabled only when the Use Existing Layout option is selected and the Layout Names is set to Model as per the existing functionality.

- The Pre-processing tab will be updated to match the same tab on the Floor Plan Publishing Configuration window.

- When one or more floor plans are printed from the Print Floor Plans window, then the updated title block functionality will be used if the Add title block option is set on the Rendering tab.

- When one or more floor plans are printed from the Print Floor Plans window then the Set Layer Theme and Change Visual Appearance settings will be applied to the floor plan as per the existing functionality, but only when the Use Existing Layout option is set and the Layout Name is Model. This is because title block definitions will have their own values for these settings.

- When one or more floor plans are printed from the Print Floor Plans window the options set in the Pre-processing options will be applied.

  - The updated functionality for Synchronize described in the General FSD will be applied.

  - The updated functionality for Restructure Drawing described in the Planner - Fixturing FSD will be applied.

  - The updated functionality for the Annotation described in the Planner – annotation FSD will be applied.

  - The updated functionality for the Calculations described in the Utilities FSD will be applied.

- When one or more floor plans are printed from the Print Floor Plans window the remaining features will be as per the existing functionality.

Overview of Floor Plan Processing Chapter

This section describes the updates to the chapter in the Oracle Retail Planner Module User Guide.

Process Floor Plans

- You are able to open the existing Process Floor Plans window through the following ways:
  - Clicking the Process Floor Plans button in the Printing group of the MSP ribbon
  - Typing AVT_PROCESSFLOORPLAN in the AutoCAD command line.
- When the Process Floor Plans window is opened, the active floor-plan will be checked in the grid of floor plans by default.
- The existing Rendering tab will be updated to move Set Layer Theme and Change Visual Appearance to be under the Set Layout option.
- The Pre-processing tab will be updated to match the same tab on the Floor Plan Publishing Configuration window.
- When one or more floor plans are processed then the updated title block functionality will be used if the Add title block option is set on the Rendering tab.
- When one or more floor plans are processed from the Process Floor Plans window then the Set Layer Theme and Change Visual Appearance settings will be applied to the floor plan as per the existing functionality, but only when the Use Existing Layout option is set and the Layout Name is Model.
- When one or more floor plans are processed from the Process Floor Plans window the options set in the Pre-processing options will be applied.
- When one or more floor plans are processed from the Process Floor Plans window the remaining features will be as per the existing functionality.
- The existing BatchRunner /processsplans process will be moved to a new PlannerAutomation process to allow floor plans to be processed silently from the Windows command line.
- The existing Rendering command-line options will be available:

Switch	Description
/THEME a	a=name of theme.
/VISUAL a	a=name of visual appearance.
/TITLEBLOCK a	a=name of title block.
/LAYOUT a	a=name of layout.

- The values for the /SYNC switch of PlannerAutomation /processsplans process will be updated to remove the cross-match, products and views options. The values will be as follows:

Switch	Description
/SYNC n, m	n is the type of synchronization:
	0=None 1=Auto-Synchronize 2=Match Drawing 3=Match Database
	m=bitwise integer for the items to synchronize:
	1= Zones 2= Aisles 4= Fixturing 8= Views
	16 =Markups
	32=Annotations

- When the Annotation option is set in the /SYNC switch and the PlannerAutomation /processplans process is run.
- The values for the /RESTRUCTURE switch for the PlannerAutomation /processplans process will be updated to add the Fix mirrored blocks option. The values will be as follows

Switch	Description
/RESTRUCTURE n	n=bitwise integer for the restructuring options:
	1=Redefine blocks from disk 2=Explode composite blocks 4=Reset level 8= Reset color, line-type, line-weight to BYLAYER 16= Reset layer 32= Fix mirrored blocks

- The values of the /ANNOTATE switch for the PlannerAutomation /processplans process will be updated to add the Aisles and Bay numbers options. The values will be as follows:

Switch	Description
/ANNOTATE n	n=bitwise integer for the annotation options:
	1= Fixtures 2= Products 4= Zones 8=Update title block 16= Aisles 32= Bay numbers

- The values of the /CALCULATE switch for the PlannerAutomation /processplans process will be updated to remove the area, product adjacency, space measurement and face planes calculations.

Switch	Description
/CALCULATE n	n=bitwise options for the calculations: 1= Fixture adjacencies 2= Aisle adjacencies

- The PlannerAutomation /processplans process will use the same process as when processing from the Process Floor Plans window.

- If the /THEME or /VISUAL switches are included when running the PlannerAutomation /processplans process then these settings will only be applied to the Model space for each floor plan. For title blocks, these settings will be applied from the appropriate title block viewport definition.

- When the AutoCAD commands associated with the Printing group buttons are run, they will display the message "Command not available" in the AutoCAD command line if the associated permissions are not available. The command will automatically exit after displaying the message.

Overview of Planogram Publishing Chapter

This section describes the updates to the chapter in the Oracle Retail Planner Module User Guide.

Print and Publish Planograms

- You are able to print planograms that are in the currently active floor plan in the Planner module using the existing print planograms functionality. You are able to open the Print Planograms window through the following ways:

    - Click the **Print Planogram** button in the Publish and print group of the MSP ribbon.

    - Type the existing AVT_IMEDPOGPRINT command in the AutoCAD command line.

- You are able to publish planograms using the existing publish planograms functionality. You are able to open the Publish Planograms window through the following ways:

    - **Publish Planograms** button in the Publish and print group of the MSP ribbon.

    - Type the existing AVT_IMEDPOGPUBLISH command in the AutoCAD command line.

- The existing BatchRunner /publishpogs process will allow planograms to be published silently from the Windows command line.

- When one or more planograms are published features will be as per the existing functionality.

- When the AutoCAD commands associated with the **Printing group** buttons are run, they will display the message "Command not available" in the AutoCAD command line if the associated permissions are not available. The command will automatically exit after displaying the message.

Overview of Find and Open Chapter

This section describes the updates to the chapter in the Oracle Retail Planner Module User Guide.

Overview of Planogram Substitution Chapter

This section describes the updates to the chapter in the Oracle Retail Planner Module User Guide.

Planogram Substitution

- You are able to configure planogram substitutions using the existing planogram substitution functionality.
- You are able to open the Planogram Substitution module through the following ways:
  - Click the **Planogram Substitution** button on the Merchandising group of the MSP ribbon.
  - Typing AVT_POGSUB in the AutoCAD command line.
- The Find window in the Definition Details window will be updated so that when a planogram is selected in the Find results grid, then the corresponding node in the planogram hierarchy on the Definition Details window will be selected. The planogram hierarchy will ensure that the selected node is visible and automatically scroll if required.
- You are able to run planogram substitutions that are applicable to the active floor plan through the following ways:
  - Click the **Run Planogram Substitution** button on the Merchandising group of the MSP ribbon.
  - Typing AVT_ RUNPOGSUB in the AutoCAD command line.
- After planogram substitutions are run in to the active floor plan the updated merchandise rendering process.
- After planogram substitutions are run in to the active floor plan the updated merchandise annotation process.
- The existing BatchRunner /substitution process will allow planograms to be substituted silently from the Windows command line.
- You are able to open the Planogram Substitution module via the Administration module as per the existing functionality.
- You are able to open the Planogram Substitution module direct from a Windows shortcut as per the existing functionality.
- The other features of planogram substitution will be as per the existing functionality.
- When the AutoCAD commands associated with the Merchandising group buttons are run, they will display the message "Command not available" in the AutoCAD command line if the associated permissions are not available. The command will automatically exit after displaying the message.