Oracle® Retail Macro Space Management

Data Importer User Guide

Release 14.1

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Oracle® Retail Macro Space Management Data Importer User Guide, Release 14.1

Primary Author:

Contributors:

Value-Added Reseller (VAR) Language

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Preface

This guide describes the Macro Space Management user interface. It provides step-by-step instructions to complete most tasks that can be performed through the user interface.

Audience

This User Guide is for users and administrators of Oracle Retail Macro Space Management. This includes merchandisers, buyers, business analysts, and administrative personnel.

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Related Documents

For more information, see the following documents:

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

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

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

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

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

Conventions

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

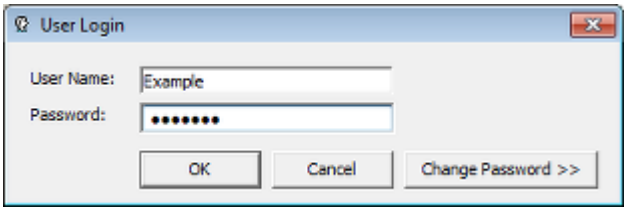
```
This is a code sample
    It is used to display examples of code
```

1

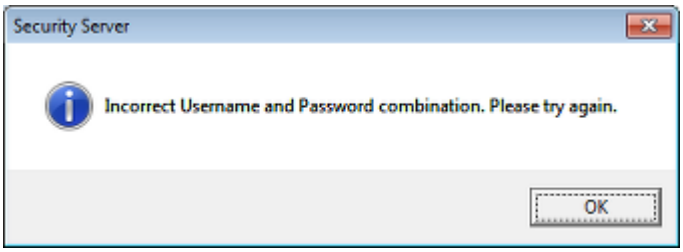
Logging Into Data Importer

Logging in to Macro Space Management Modules

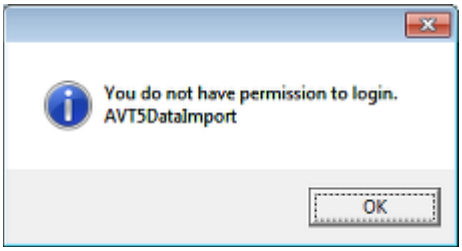
When a user first attempts to access a Macro Space Management module, the **Login dialog box** will appear.



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



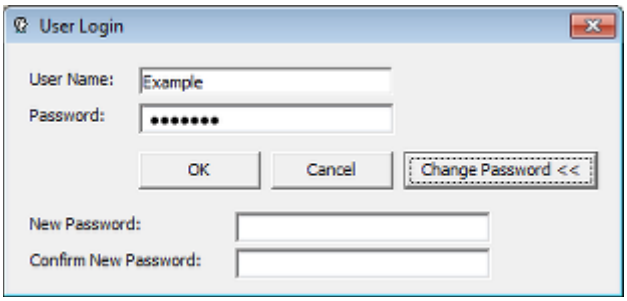
If the user attempts to log into a module for which they do not have permissions for, a warning will appear and the log in attempt will be terminated.



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

Password Changes

Macro Space Management can be configured to require password changes at specified intervals. If one of these intervals has been exceeded, the user will be asked to change their password the next time they log in. This can be done by means of the **Change Password >>>** option on the **Log In dialog box**. This will reveal another part of the dialog box where the changed password can be entered and confirmed.

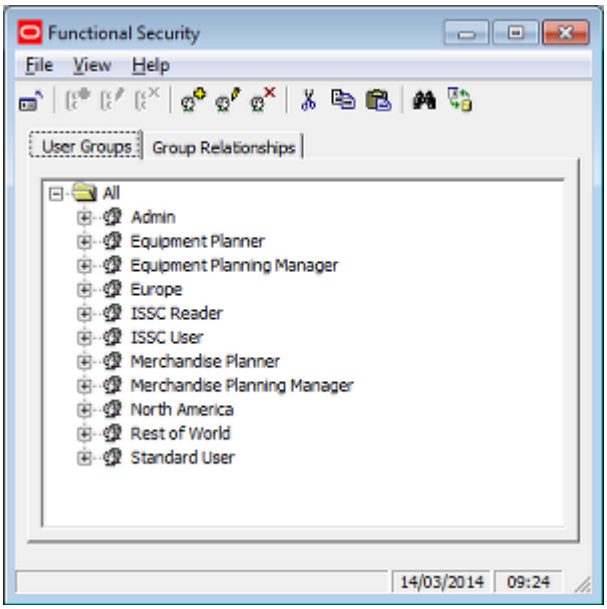


How Passwords and Privileges are Configured

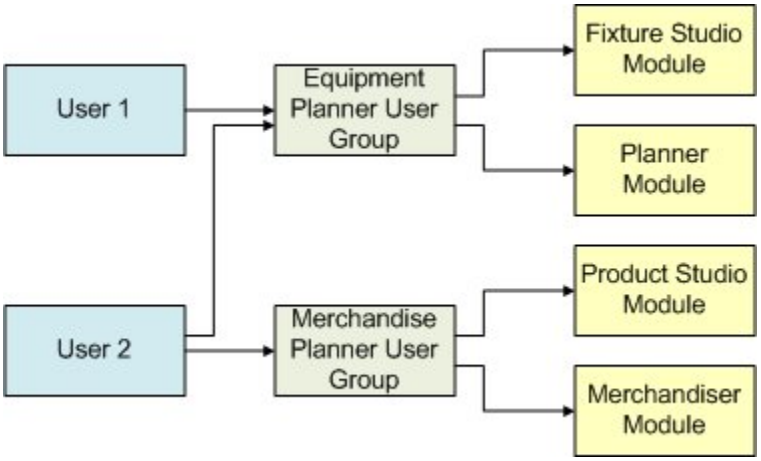
Passwords and privileges are configured in Macro Space Management's Administration module.

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

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



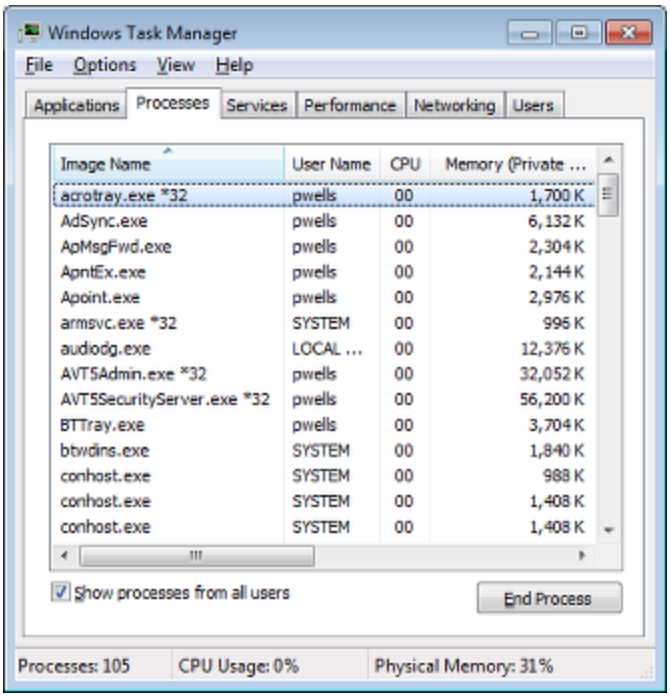
Users are assigned to User Groups in the User Groups Tab. Which modules a User Group can access is specified in the Group Relationships tab. A user's privileges thus depend on what user groups they are assigned to.



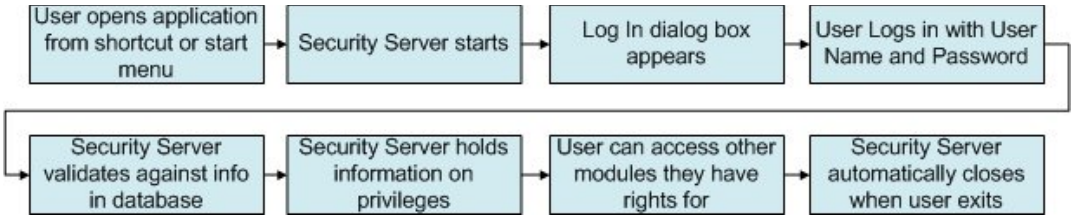
In the above example, User 1 is only a member of the Equipment Planner user group. Accordingly, their access is restricted to the Fixture Studio and Planner modules. User 2 is a member of the Equipment Planner and Merchandiser Planner user groups. They have wider access and can use the Fixture Studio,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

Security Server

Security Server is a Macro Space Management process that runs in the background and is normally not visible to users. When running, it can be seen in the Processes tab of Windows Task Manager as the **AVT5SecurityServer.exe *32** process.



How Security Server operates is shown in the following flowchart.



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

Security Server and Application Errors

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

1. Save the information in any other Macro Space Management modules that are open and close those modules.
2. Open Windows Task Manager, select the Processes tab, highlight the AVT5SecurityServer.exe *32 process and click End Task.
3. When Security Server has closed, the required Macro Space Management modules can be restarted.

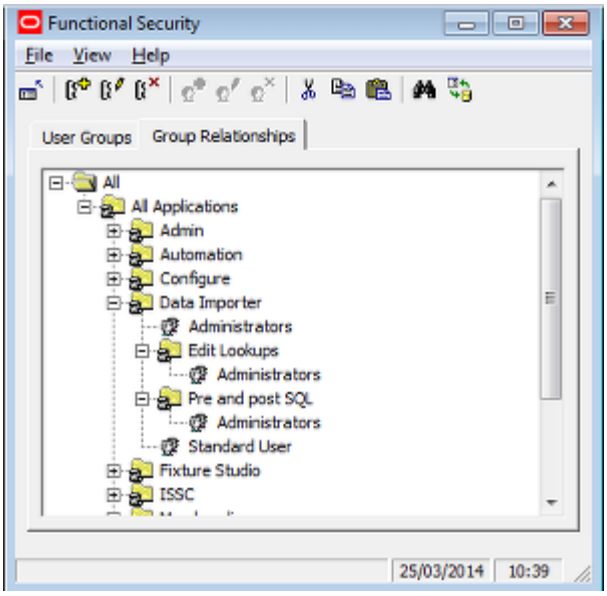
2

Overview of Data Importer

Getting Access to the Data Importer Functionality

Overview of Permissions

Permissions for access to the Data Importer Module are set in the Administration Module. This is done using the **Group Relationships** tab of the **Functional Security** dialog box accessed from the **Security Menu**.



There are two levels of permissions.

1. **General Access**

   Giving Access to the **Data Importer** Command Group gives the user permissions to open Data Importer and to access the **Import Types** and **Import Definitions** dialog boxes. It also allows the user to run data imports via the MSM Data Importer dialog box or as a batch process.

2. **Additional Access**

   There are two further options that give access to further functionality. These allow users to:

   – Access the Lookups dialog box.

   – Access Pre SQL and Post SQL buttons in the Import Definition dialog box.

   Both of these permissions should be granted with care as they allow users to create SQL statements that will be executed against the database.

Granting Permissions

Note: For full details about security options, see the *Oracle Retail Macro Space Management Administration Module User Guide*.

Access is granted in the administration module as follows:

1. Open the Functional Security dialog box.
2. Determine the names of the user groups that will be given access from the User Groups tab.
3. Go to the Group Relationships tab and highlight the Data Importer User Group.
   a. Right click to bring up the right click menu. Select the Add User Group option. Select the names of the required user groups in the Add User Group dialog box and click OK.
   b. Right click the User Groups that have just been added and select Edit Permissions from the right click menu. Check all the permissions and click OK.
4. Members in these user groups will now be able to access the Data Importer module and the majority of the functionality.
5. Repeat the process for the Edit Lookup and Pre and Post SQL command groups; ensuring that the number of user groups granted these permissions is kept to the minimum possible for security reasons.

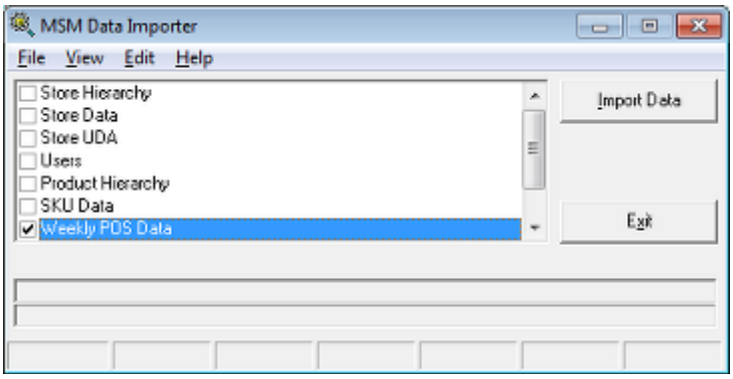
Access to Macro Space Planning Database

Users will also require direct access to the Macro Space Planning database in order to verify the imports. This can be done with a tool such as Oracle's SQL Developer software. This allows users to see the contents of the tables, create entity relationship diagrams and so on. Users should also consult to the *Oracle Retail Macro Space Planning Data Model*.

Overview of Data Importer

About Data Importer

Data Importer can be used at several levels. It is possible for a normal Macro Space Planning user to run a pre-configured import by selecting a few options in the Data Importer GUI. It is also possible for a user with Administrator's rights to configure the basic parameters determining how a specific import of data works. Users configuring the way data imports need an understanding of the Macro Space Management database schema and a good knowledge of how to write SQL statements. If you do not have these two skills, Oracle STRONGLY recommends that you do not attempt to configure the Data Import module. **Data Importer** allows users to import data into Macro Space Planning.



It takes data in one of the three following formats:

- CSV (Comma Separated Value)
- Fixed Width File

- XML File (Extensible Mark-up Language)

It then inserts the data into the central Macro Planning Management database. The data to be imported must be in a rigidly defined format that is not changed:

Fixture Name	Fixture Length	Fixture Depth	Fixture Height	File Name
Back Panel-1	600	10	1250	Back_panel_1.dwg
Back Panel-2	600	10	1500	Back_panel_1.dwg
Back Panel-3	800	10	1800	Back_panel_1.dwg

Data Importer will then put this into very specific places within the central Macro Space Management database. For example, this information might go into the **Block Definition** table. This imported data then becomes usable in Macro Space Management.

Note: For more information on this table see the *Oracle Retail Macro Space Planning Data Model*.

Using Data Importer

There are three basic levels of using Data Importer:

- Via the GUI
- Via the Command Line
- Configuring Data Importer

Via the GUI

Standard users operating the Data Importer via the Graphical User Interface (GUI) can select the data to import by means of the check boxes, click on the Import Data button and then check the error logs to confirm correct import of data.

Via the Command Line

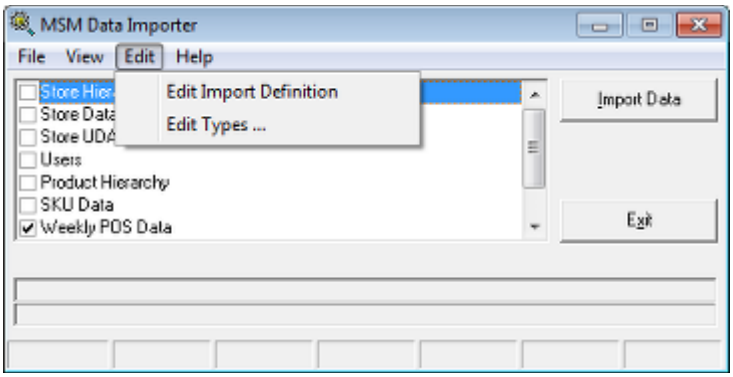
Users operating via the command line can use switches to determine which data to import. This form of operation is usually used in conjunction with automatic scheduling so data import can be carried out automatically overnight.

Configuring Data Importer

Users can configure the exact manner data is imported using the Data Importer. To do this you must been granted permissions in the Administration module. The level of access is dependent on the permissions granted.

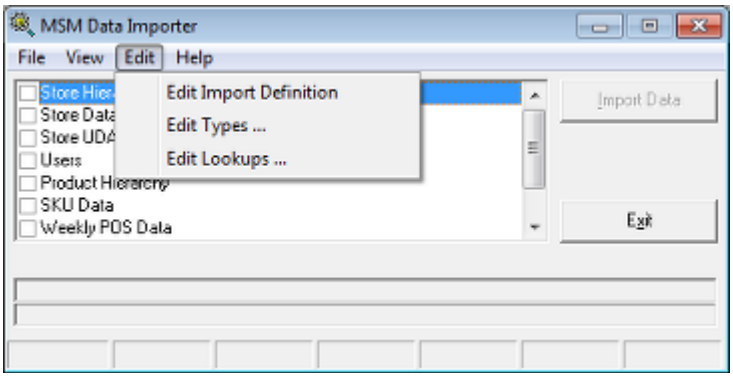
Standard Access

Users with standard access will be able to run import definitions, edit import definitions, edit import types and see the error logs. The screenshot below shows the edit menu with the standard options available.

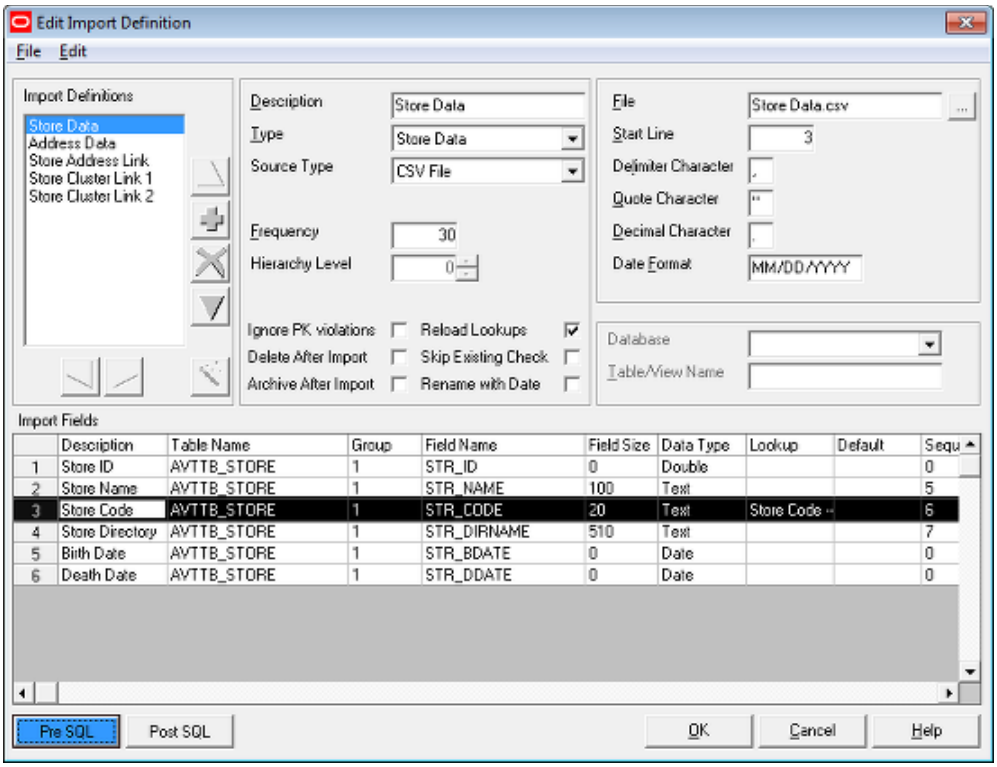


Additional Access

Users granted additional privileges in the Administration module will be able to access an additional option from the Edit menu.



They will also have access to the **Pre SQL** and **Post SQL** buttons in the **Import Definitions** dialog box.

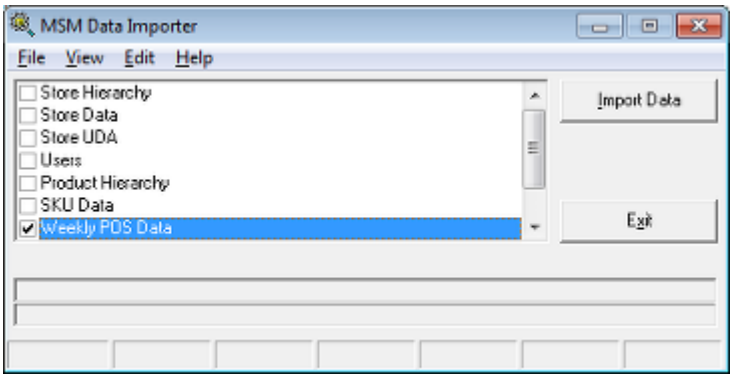


Overview of Dialog Boxes

This section gives a brief overview of the Data Importer dialog boxes and their purposes.

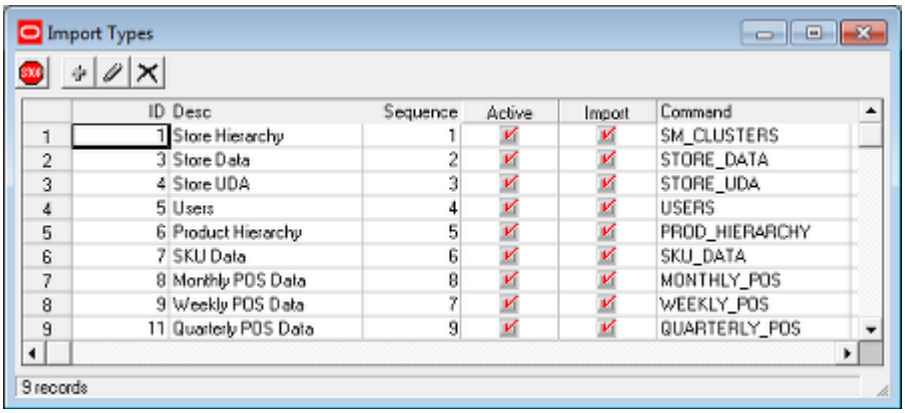
Data Importer Dialog Box

The Data Importer dialog box opens immediately after logging in. It allows the user to manually run imports and gives access to all other dialog boxes.



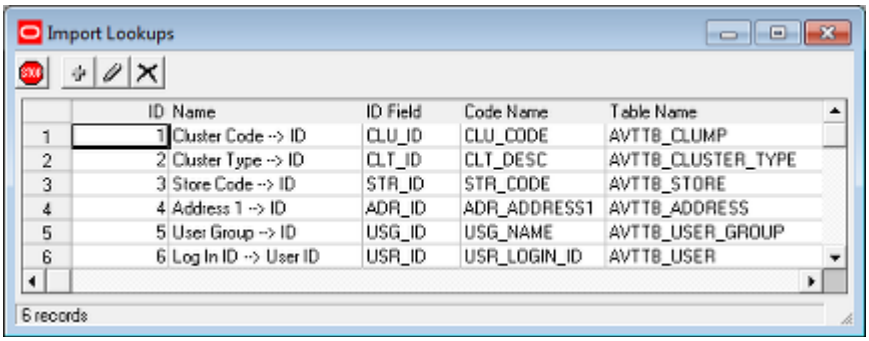
Import Types Dialog Box

The **Import Types** dialogue box is accessed from the **Edit** menu. It allows users to set up lists of import types. These import types then require additional configuration before they can be used.



Lookups Dialog Box

The **Lookups dialogue box** is accessed from the edit menu. Accessing this dialog box requires additional permissions so some Data Importer users may not have access. It allows users to define Look-ups. These are used to convert data in the process of being imported from one form to another.

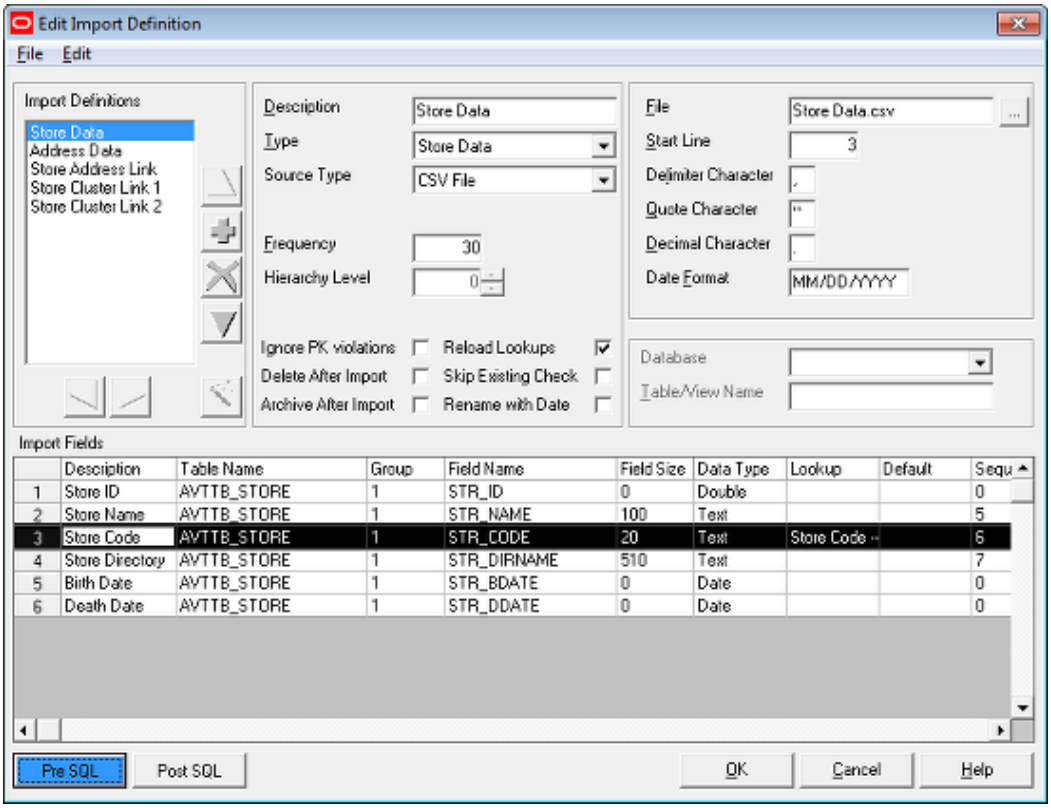


	ID	Name	ID Field	Code Name	Table Name
1	1	Cluster Code --> ID	CLU_ID	CLU_CODE	AVTTB_CLUMP
2	2	Cluster Type --> ID	CLT_ID	CLT_DESC	AVTTB_CLUSTER_TYPE
3	3	Store Code --> ID	STR_ID	STR_CODE	AVTTB_STORE
4	4	Address 1 --> ID	ADR_ID	ADR_ADDRESS1	AVTTB_ADDRESS
5	5	User Group --> ID	USG_ID	USG_NAME	AVTTB_USER_GROUP
6	6	Log In ID --> User ID	USR_ID	USR_LOGIN_ID	AVTTB_USER

Look ups allow users to convert one form of data being imported into another - for example the name of a cluster might be converted into its (numerical) primary key.

Import Definition Dialog Box

The **Import Definition dialogue box** allows users to configure Import Definitions.

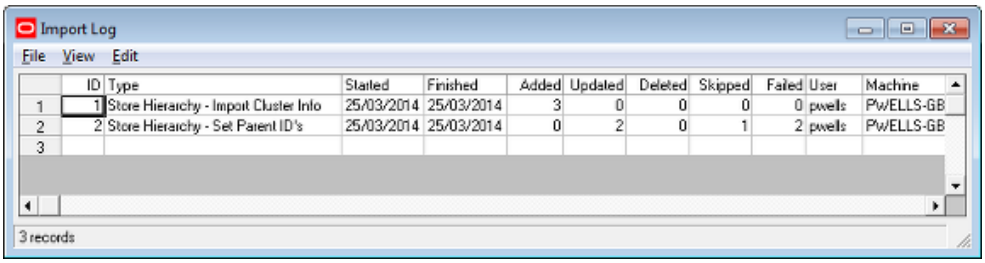


	Description	Table Name	Group	Field Name	Field Size	Data Type	Lookup	Default	Sequ
1	Store ID	AVTTB_STORE	1	STR_ID	0	Double			0
2	Store Name	AVTTB_STORE	1	STR_NAME	100	Text			5
3	Store Code	AVTTB_STORE	1	STR_CODE	20	Text	Store Code --		6
4	Store Directory	AVTTB_STORE	1	STR_DIRNAME	510	Text			7
5	Birth Date	AVTTB_STORE	1	STR_BDATE	0	Date			0
6	Death Date	AVTTB_STORE	1	STR_DDATE	0	Date			0

This allows users to configure how data is extracted from the source file (in this example Store Data.csv) and inserted into the database. Access to the **Pre SQL** and **Post SQL** buttons requires specific permission to be assigned in the Administration module, so not all users may have access.

Import Log Dialog Box

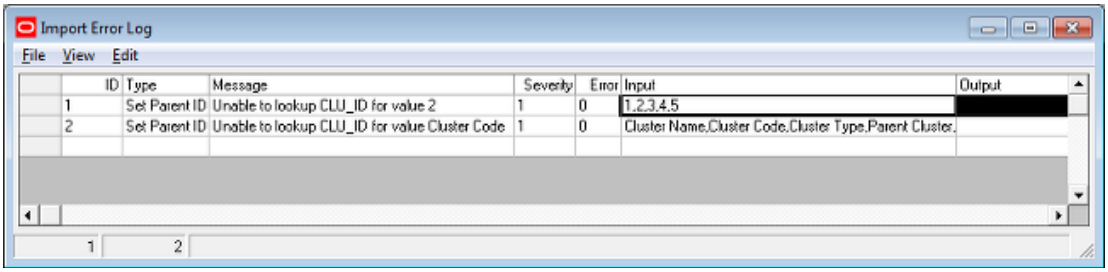
The **Import Log dialogue box** allows users to see the results of recent data imports.



	ID	Type	Started	Finished	Added	Updated	Deleted	Skipped	Failed	User	Machine
1	1	Store Hierarchy - Import Cluster Info	25/03/2014	25/03/2014	3	0	0	0	0	pwells	PWELLS-GB
2	2	Store Hierarchy - Set Parent ID's	25/03/2014	25/03/2014	0	2	0	1	2	pwells	PWELLS-GB
3											

Import Error Log Dialog Box

The **Import Error Log dialogue box** allows users to see details of any errors that might have resulted during recent data imports.



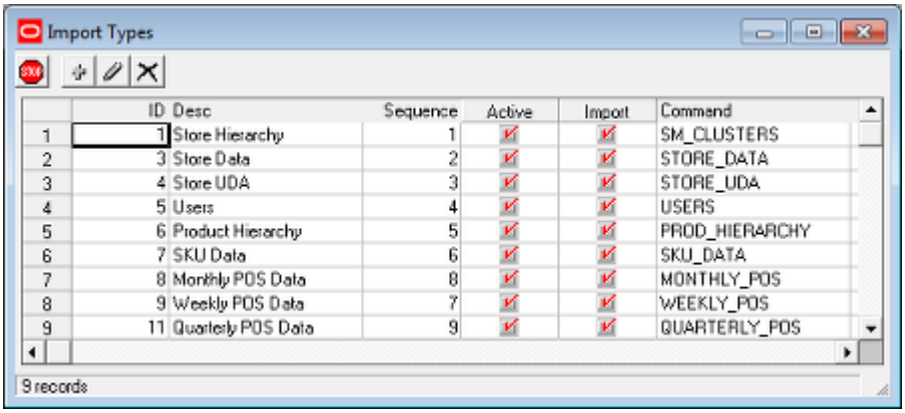
	ID	Type	Message	Severity	Error	Input	Output
	1	Set Parent ID	Unable to lookup CLU_ID for value 2	1	0	1,2,3,4,5	
	2	Set Parent ID	Unable to lookup CLU_ID for value Cluster Code	1	0	Cluster Name,Cluster Code,Cluster Type,Parent Cluster,	

3

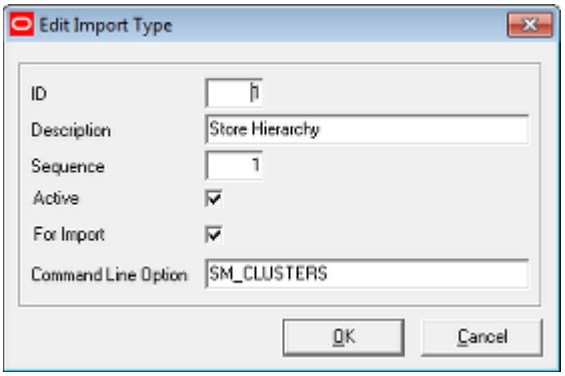
Import Type dialog box

The Import Type GUI

The **Import Type GUI** lists all Import Types.



Import Types can be Added, Edit or Deleted using the appropriate Icons. Some information for Import Types can be configured via the Add or Edit Options.



Option	Description
ID	This is assigned by the software and cannot be user configured.
Description	This is the name of the Import type.
Sequence	This determines the order the data import will be carried out. For example the shore hierarchy import should be run before that of store data.
Active	This specifies whether a Data Import Type is active.
For Import	This specifies whether a Data Import Type should be run.
Command Line Option	This allows users to specify the command line switch that will be used to invoke the Import Type if Data Importer is run using the Command Line.

Deleting Import Types

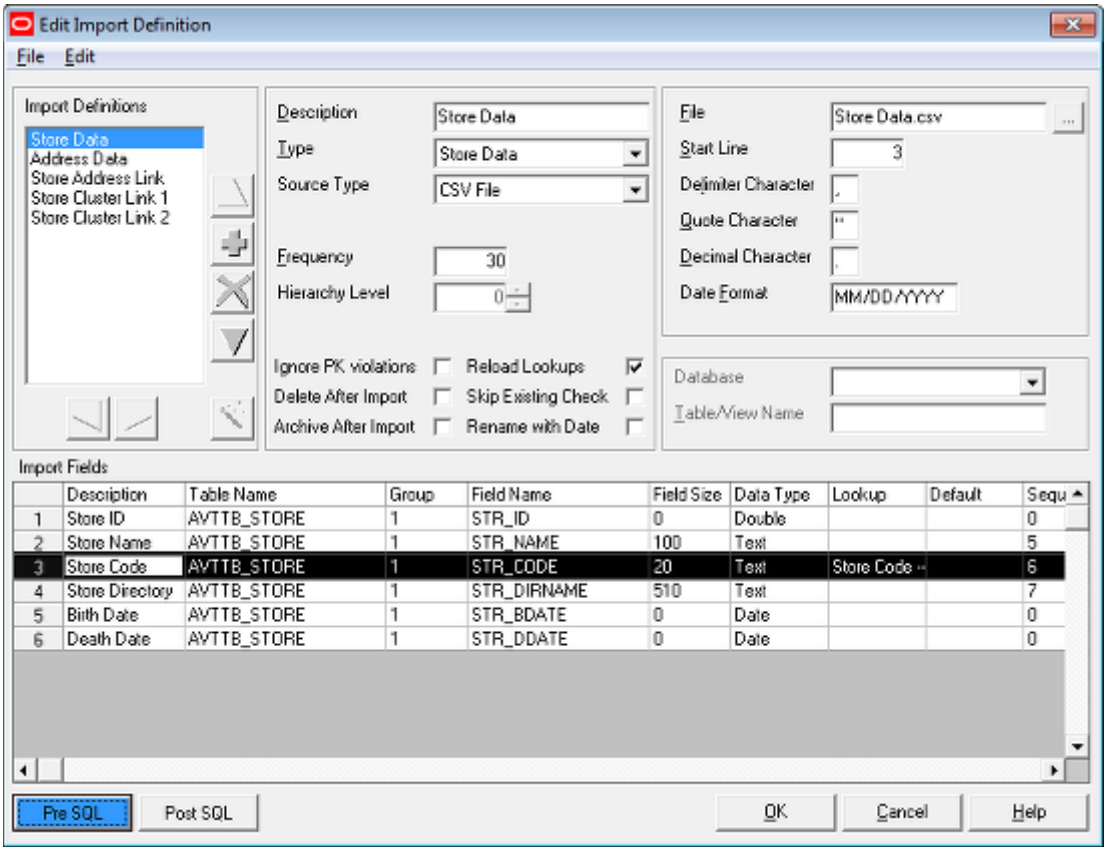
Import Types cannot be deleted until all child import definitions have been deleted. If child import definitions still exist, the Import Type will apparently deleted from the list of Import Types but will reappear the next time Data Importer is opened.

4

Import Definitions dialog box

Import Definition Dialogue Box

The **Import Definition dialogue box** allows users to configure Import Definitions.



This allows users to configure how data is extracted from the source file (in this example a csv file) and inserted into the database.

> **Note**: Access to the Pre SQL and Post SQL buttons requires additional permissions to be granted in the Administration module.

Import Definitions Frame

The Import Definitions Frame contains the list of Import Definitions. The detail of each Import Definition is configured in the Import Fields Frame. It can be selected by highlighting in the **Import Definitions** frame.

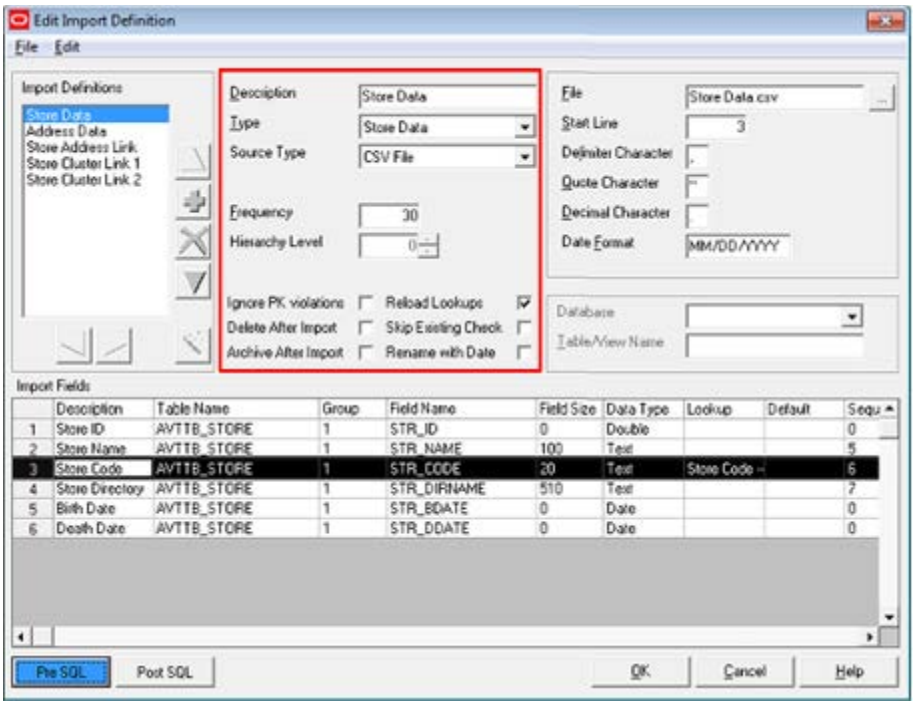
Import Definitions can be Added or Deleted using the appropriate icons. They will require further configuration in the Import Fields frame.

- The Import Definitions will be executed in the order that they are in the list during an import. The up and down arrows allow users to change the sequence of an individual import definition.
- Import Definitions can also be indented using the left and right arrows - this option is for XML files only and will be grayed out unless and XML file is specified in the Source type in the Description Frame.

Note: The Wizard Option is for XML files only and is not currently functional.

Descriptions Frame

The **Descriptions Frame** contains a series of options defining how the import will work.



Options

Description

This can be any helpful description for the Import definition currently being configured. The description will be also be displayed in the list of Import Definitions to the left of the Definitions frame.

> **Note**: The description for XML files must match the property tag, for example <Stores> must map to 'Stores'. this is case sensitive and must not include any spaces.

Type

This is the Type of Import Definition - it is selected from a drop down list containing the Types set up using the Import Types GUI.

Source Type

This is the type of file that will be used to import the data from. It may be one of two types:

- CSV (Comma Separated Value)
- Fixed Width

It is selected from a drop down list.

Transaction

This functionality is not yet enabled.

Frequency

This functionality is not yet enabled.

Hierarchy Level

This was used for XML files. It is no longer in use.

Ignore PK Violations

> **Important**: Please use this function with caution - it could result in significant errors during data import if incorrectly used.

Checking this option means Data Importer will not raise an error if the Primary Key constraint is violated. This would typically be used on link tables (e.g. Store Cluster Link) to avoid checking whether a composite key already exists; Date Importer will add the record and ignore the error raised by the database.

Delete After Import

Checking this option means Data Importer will delete the file after it had been imported.

Archive After Import

Checking this option means Data Importer will move the import file to the "*Archived Files*" directory, (as defined in the Configuration Module).

Reload Lookups

This will force Data Importer to clear the relevant look-up cache before items from the file are read.

Skip Existing Check

> **Important**: Please use this function with caution - it could result in significant errors during data import if incorrectly used.

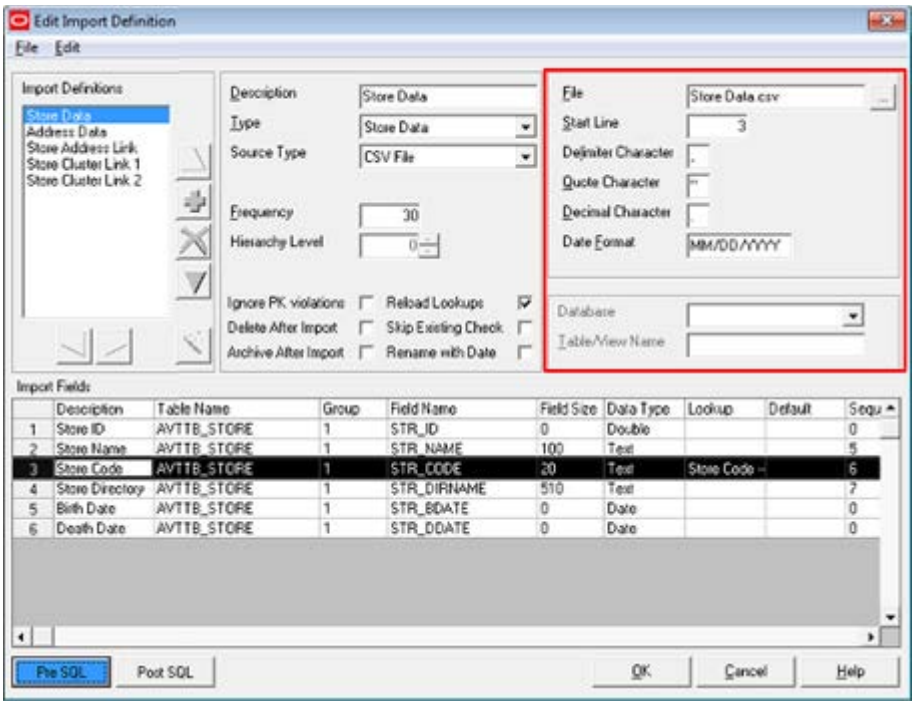
This option is for speed enhancement. It is intended for when the user knows that the table is empty, so that Data Importer can skip the process of checking whether each record exists in order to determine whether to add or update an existing record.

Rename with Date

If this option is checked, the file being imported will be renamed by appending the date once the import process for that file is complete. For example Products would be renamed Products 25/12/2005. This is often done in conjunction with the Archive After Import option.

File Frame

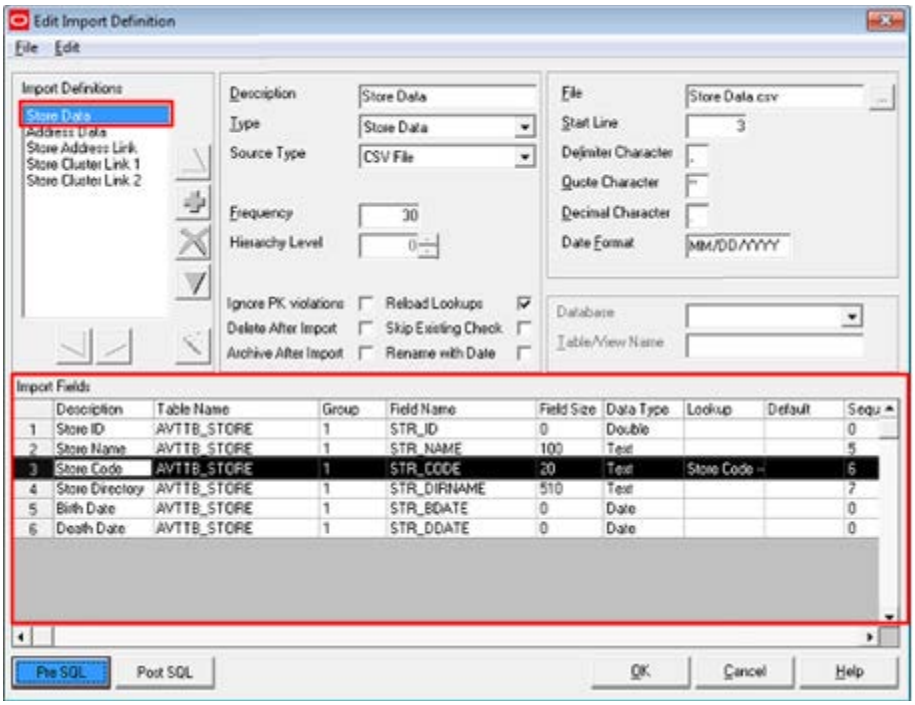
The **File Frame** contains information on the file to be used, and how to interpret the information in it.



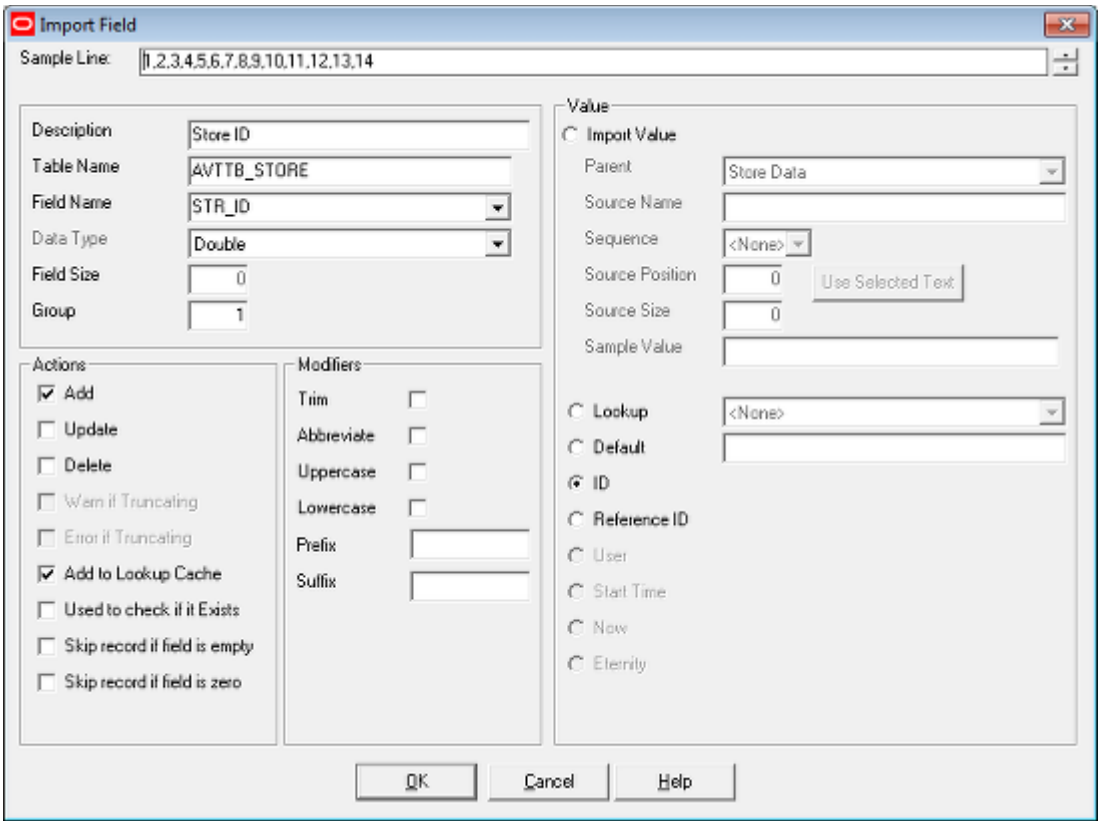
Option	Description
File	This is the name of the file that will be used for that import definition.
Start Line	This is the line which Data Import will start reading from in the file. For example if the first line of a .csv file contains the name of a field and the second the sequence, we would want to start reading data from line 3.
Delimiter Character	This is the character that separates items of data in a .csv file (for example a comma). This option will not be available for XML and Fixed Width files.
Quote Character	This specifies which character in the import file is used to indicate text. The quote characters will be stripped off when the data is imported into the database.
Decimal Character	This indicates which character is used to denote the decimal point in real numeric values. For example, the UK might use a period (3.14259) while France might use a comma (3,14159).
Date Format	This denotes how to interpret dates. These are always assumed to be numeric, but can be separated by delimiters, for example DD/MM/YY or YYYYMMDD.

Import Fields Frame

The **Import Fields Frame** specifies all fields for the Import Definition highlighted in the Import Definitions Frame.

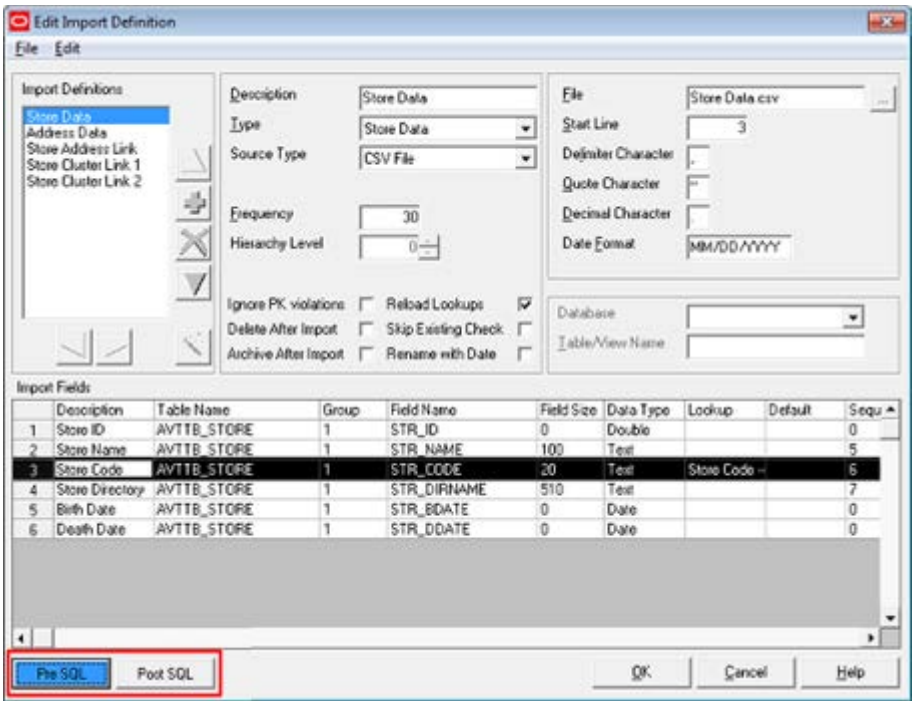


Double clicking any of the import fields will bring up the Import Field dialog box. This is discussed in more detail in the appropriate section. It is used to configure the detail of each import field.



Pre and Post SQL Options

The **Pre and Post SQL** options allow the user to add SQL statements to an import definition. Because this allows a user to directly modify the database, it requires additional permissions to be granted in the Administration module. Users without these permissions will not be able to access these buttons.



About Pre and Post SQL

Pre and Post SQL allow the Data Import module to execute changes to the database tables using SQL statements. Accordingly, Pre and Post SQL functionality is disabled by default. Please refer to the Functional Security section in the Administration Module User Guide for information on how to give access to this functionality.

Using Pre and Post SQL

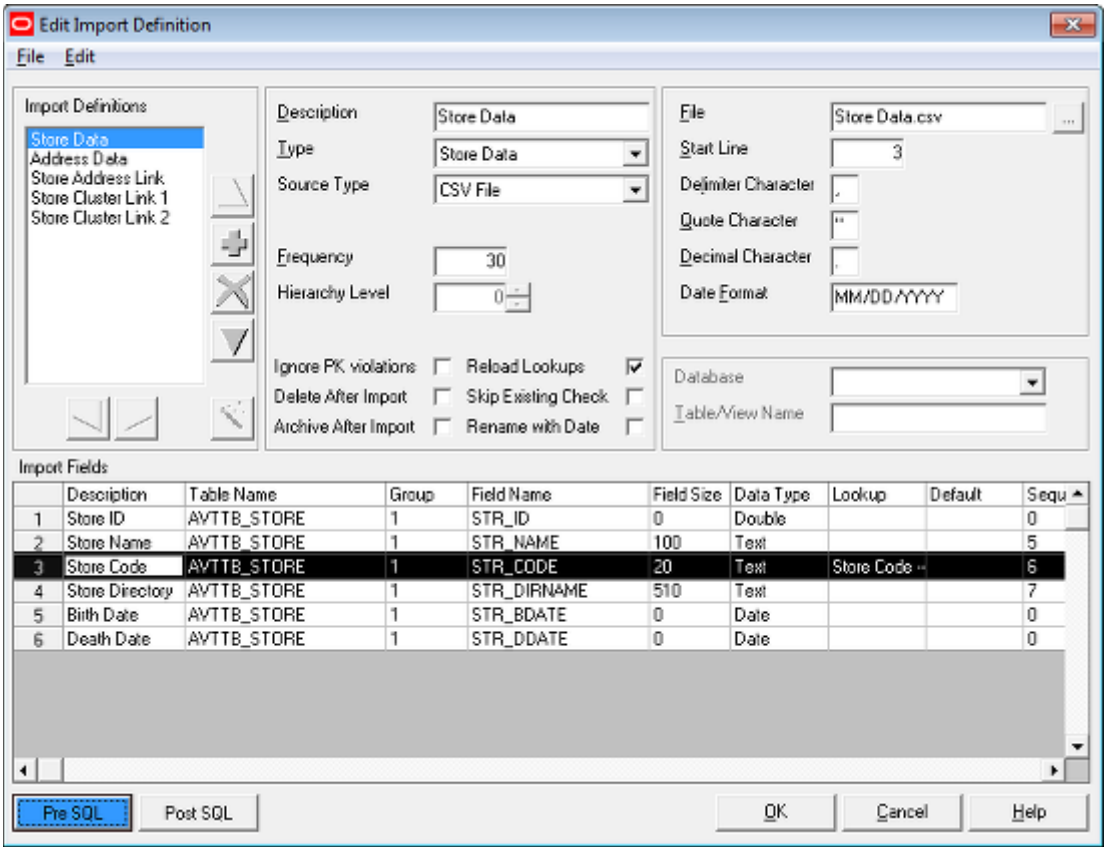
If either the Pre SQL or Post SQL options contains SQL to be executed, it will be shown colored blue. Pre SQL will be executed before the import is executed, and Post SQL will be executed after the import is executed. An example would be using Post SQL to ensure that the **Next ID** table is updated with the correct value to use when adding a new record to the database.

5

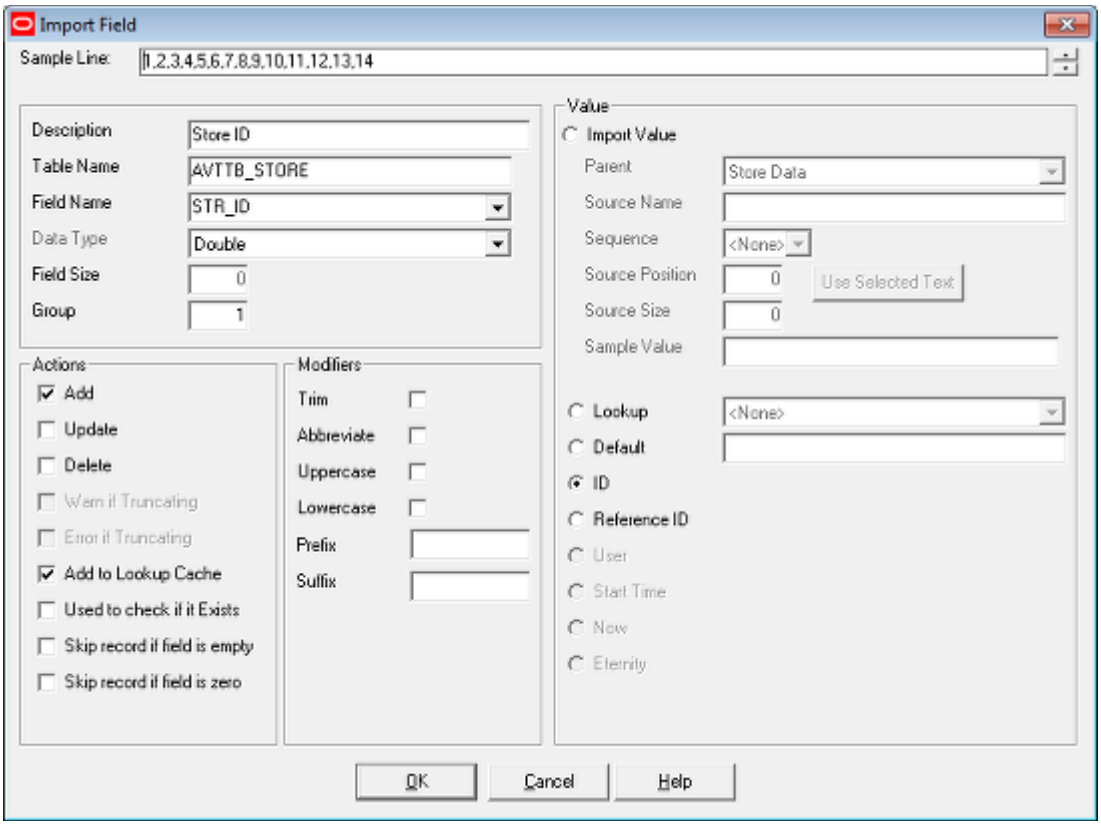
Import Field dialog box

Import Field Dialogue Box

The **Import Field dialogue box** is accessible from the **Edit Menu** of the Import Definitions dialogue box.

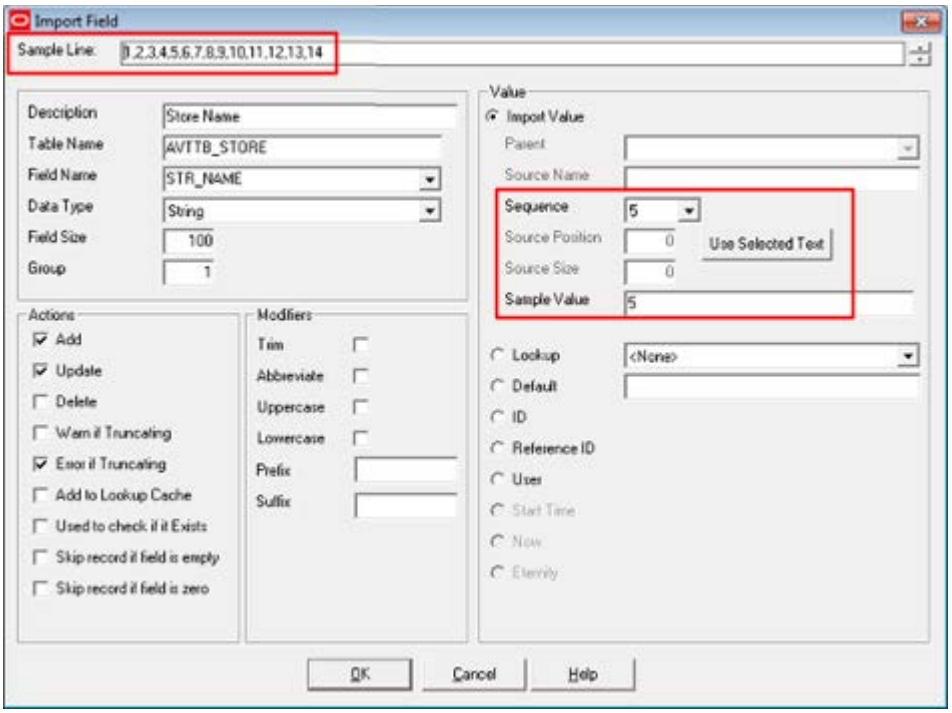


Right clicking on a selected field in the Import Fields frame will bring up a pop-up menu. This can be used to bring up the Import Field dialogue box. Alternatively, selecting a field and double clicking it will have the same effect.



Sample Line and Sample Value

The **Sample Line** and **Sample Value** show a sample of the data that is to be imported and the specific value referenced by the definition being configured.

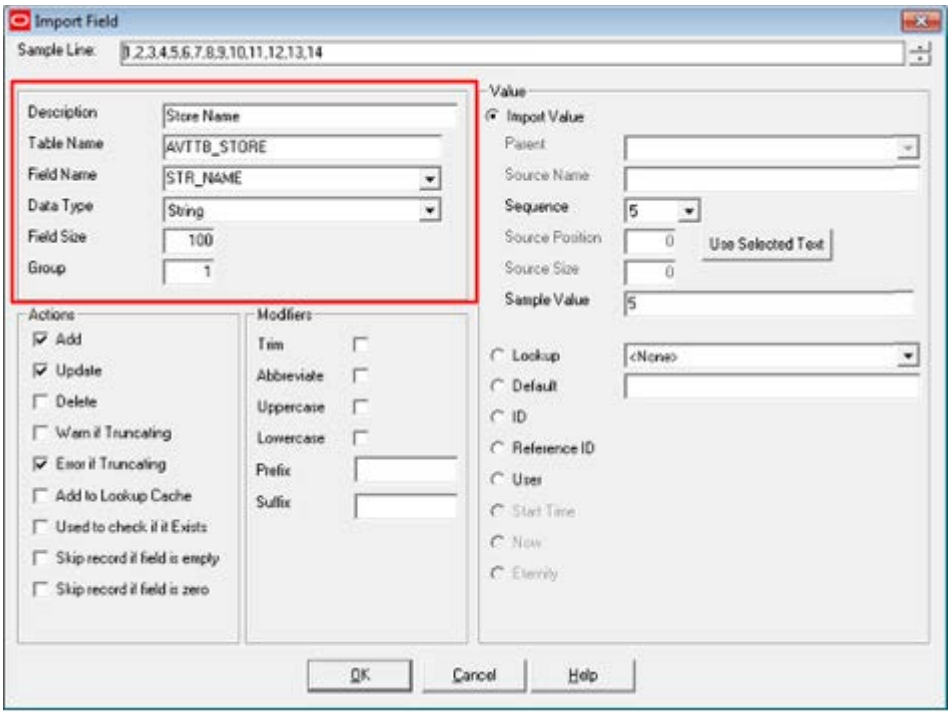


- Sample Line shows a full line of data. (The line selected is determined by the designated Start Line in the Import Design GUI.)
- Sample Value shows that value defined in the Value frame by the selected option.

Description Frame

The **Description Frame** enables users to specify information pertinent to the table that the data is to be imported into.

Note: for more information about the tables described in this section see the *Oracle Retail Macro Space Planning Date Model*.



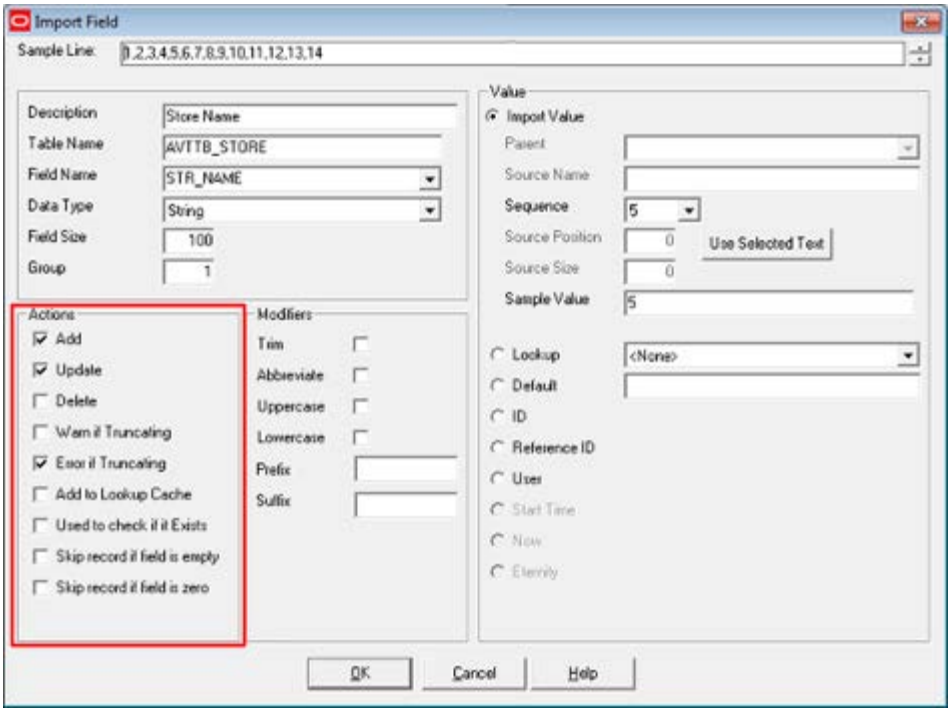
Option	Description
Description	This is a user input name that is used to describe the item of data bring imported. In this example, Store Name indicates that the user is bringing a store name into the database.
Table Name	This is the name of the table in the database into which the item of data must be written. In this example, the **Store** table name has been added.
Field Name	This is the name of the specific field within the table that the item of data is to be written to. Once the table name has been added, the field name can be selected from a drop down list.
Data Type	This field will be populated automatically after the Field Name has been selected.
Field Size	This field will be populated automatically after the Field Name has been selected.
Group	This indicates which table the data is to be added to.

About Groups

Each Import Definition is made up of a number of import fields. If these import fields are to be used to put data into two or more tables, then the group number must be used to indicate which table the data is to be imported to. For example, this import might need to write to the **Store** table and to the **Store Clump Link** table. The Store table would be in Group 1 and the **Store Clump Link** table in Group 2. This is because Data Importer works by producing a series of SQL Update statements for the data to be imported. Assigning each table to a unique group means that when Data Importer produces the Update statements, it assigns the right information to the statement for that table. If you do not assign tables to groups during configuring the import field, Data Importer will try and produce a single SQL statement that writes data to multiple tables.

Actions Frame

The **Actions Frame** enables users to specify how to manipulate the data being imported.

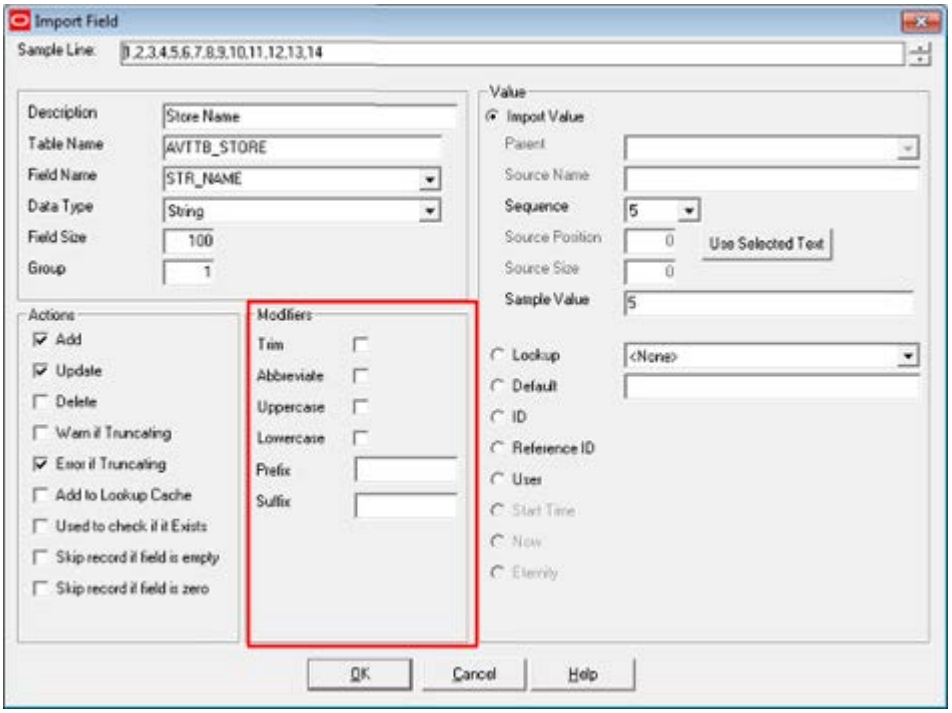


Option	Description
Add	This field indicates that the data is to be added.
Update	This field indicates that the data is to be updated.
Delete	This field indicates that existing data is to be deleted out of the specified table.
Warn if Truncating	This is only enabled for String data types. If selected, it adds a note to the Import Error Log that the imported value exceeded the field size. If this option is selected the data will still be imported.
Error if Truncating	This is only enabled for String data types. If selected, it adds a note to the Import Error Log that the imported value exceeded the field size and does not import the data.
Left Justify	This is not enabled in this release.
Add to Lookup Cache	This adds the result of the lookup so that when a new record is added during that specific import, it is first checked against the Lookup cache. This improves performance as it means that not all imported data needs to be checked against the database.
Used to Check if it Exists	This indicates that this field will be used to check if the record currently exists in the database. (This option is often used in conjunction with the lookup option in the Value frame). If the record exists, and the Update option is not enabled, the record will be skipped.
Skip Record if Field is Empty	This will result in this record being skipped during import if the field has been left empty.

Option	Description
Skip Record if Field is Zero	This will result in this record being skipped if a numeric field is zero. (An example might be if a product dimension is zero).

Modifiers Frame

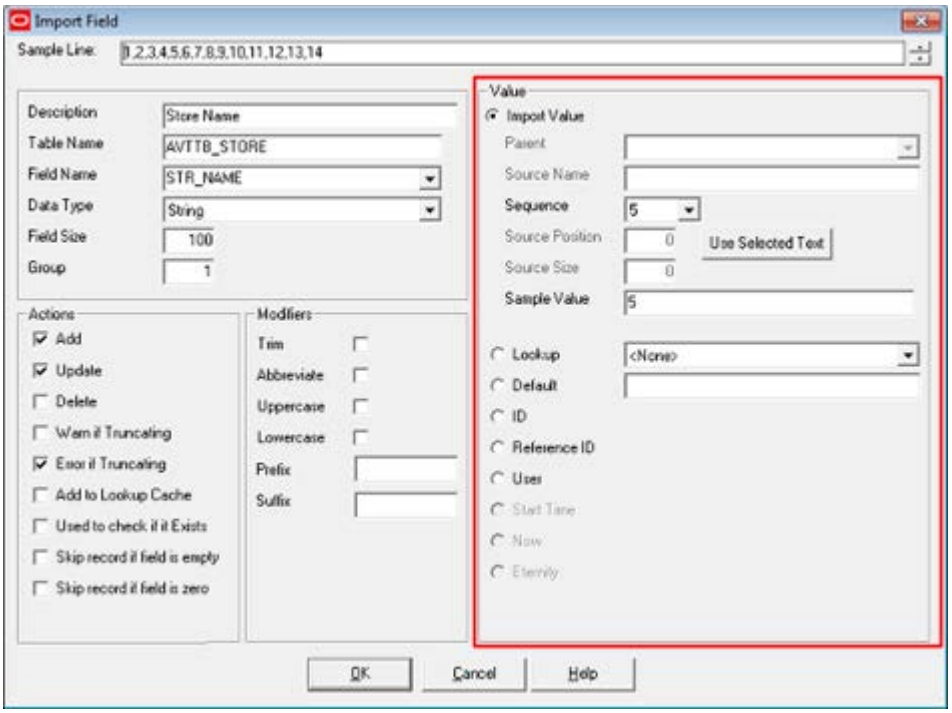
The **Modifiers Frame** is used to modify the data being imported.



Option	Description
Trim	This will remove leading and trailing spaces.
Abbreviate	This will truncate text strings if they exceed the maximum size of that field in the database.
Uppercase	This will ensure that the imported data is all converted to uppercase.
Lowercase	This will ensure that the imported data is all converted to lowercase.
Prefix	This will add the specified prefix to the imported value if the data being imported is a text string.
Suffix	This will add the specified suffix to the imported value if the data being imported is a text string.

Value Frame

The **Value Frame** enables the user to select the specific data to be imported.



Option	Description
Import Value Radio Button	When selected, this indicates that the data will be imported (as opposed to being allocated in the form of an ID, etc). When importing a value, it is possible to include either a default value, and/or a lookup along with the item of data being imported.
Parent	This is the name of the file from which the data will be imported. It must be located in the Macro Space Management Import Directory. This directory is specified in the Directories tab of the Configuration Module. This tab can only be accessed from the Administration module.
Source Name	This is only enabled when importing from an XML file. The drop down list will display all properties and attributes for the definition (hierarchy level); excluding properties which represent child objects. Note that if a parent is defined, then the properties/attributes should relate to the parent.
Sequence	This is only enabled when importing from CSV files. It defines which item in the list will be imported.
Source Position	This is only enabled when importing from Fixed Width Files and defines the starting character position of the field.
Source Size	This is only enabled when importing from Fixed Width Files and define the width of the field.
Use Selected Text	This is only enabled when importing from Fixed Width Files and allows the user to select part of the text in the sample line in order to define both the Source Position and Source Size.
Sample Value	This is an example of the data that will be imported.

Option	Description
Lookup	This will use the import value and convert it to an ID. For example, the imported value might represent the store name, but then convert this to the Store ID. This is often done to check whether the record exists.
Default	If selected, this will use the specified default value, instead of reading the Import Value.
ID	This is used when the application has to determine the next ID.
Reference ID	This is used when multiple groups are defined, and is used in the subordinate records to refer to the new ID that was used in the main record.
User	This sets the field value to the current system user for the **Modified_By** or **Created_By** fields used in the log tables in the database.
Start Time	This sets a date field value to the date and time of when this particular import process was started. Unlike the **Now** option, this ensures that all records have the same date time stamp.
Now	This sets the date field value to the current date and time for the instant the item of data was imported.
Eternity	This sets a date field value to the indefinite future; i.e. 31st December 2999.

Lookup Option

Lookup works in two different ways, depending on whether **Used to Check if Exists** has been selected in the Action Frame. If Used to Check if Exists has not been selected, the lookup will convert the value being imported from one value to another. The value will then be imported in the converted form. If Used to Check if Exists has been selected, the lookup will convert the value being imported from one value to another, and use that value to check if the data being imported currently exists in the database. The data will still be imported in the original form.

Reference IDs

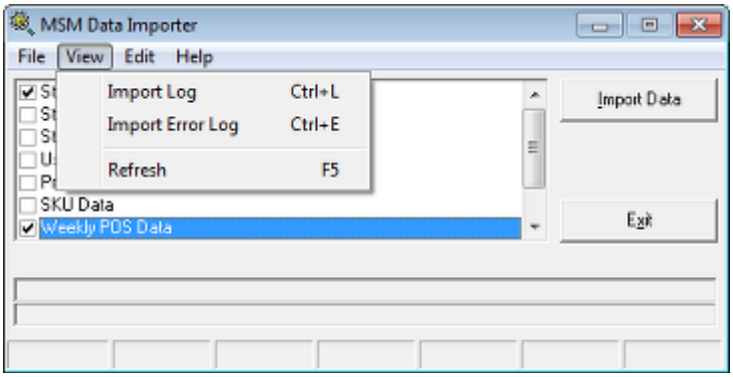
Incorrect use of Reference IDs is a frequent source of error in defining imports. If a primary key has been imported earlier during the import process, and it is to be added again to the same table, it should be added as a Reference ID and not as an ID. Attempting to add it again as an ID will cause Data Importer to error with the message "Duplicate Primary Key".

6

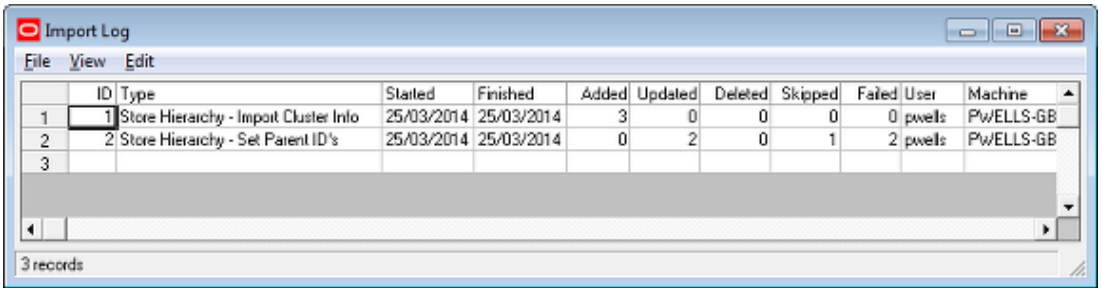
Import Log

Overview of the Import Log

The Import Log is activated by selecting the **Import Log** option from the View pull down menu.



This will bring up the Import Log.



	ID	Type	Started	Finished	Added	Updated	Deleted	Skipped	Failed	User	Machine
1	1	Store Hierarchy - Import Cluster Info	25/03/2014	25/03/2014	3	0	0	0	0	pwells	PWELLS-GB
2	2	Store Hierarchy - Set Parent ID's	25/03/2014	25/03/2014	0	2	0	1	2	pwells	PWELLS-GB
3											

The Import Log contains information on recent imports. In addition it can be used to access the Import Error Log for specific imports (View Menu).

Option	Description
ID	This is assigned by the software and is not user customizable.
Type	This is the name of the import type, followed by the specific import definition.
Started	This is the date and time when the import started.
Finished	This is the date and time when the import finished.
Added	This is the number of records added.
Updated	This is the number of records updated.
Deleted	This is the number of records deleted.
Skipped	This is the number of records omitted. This will occur when the Skip Record if Field is Empty or Skip Record if Field is Zero options are used when importing data.
User	This identifies the user initiating the import.
Machine	This indicates what machine the import was initiated from.

Number of Records Imported

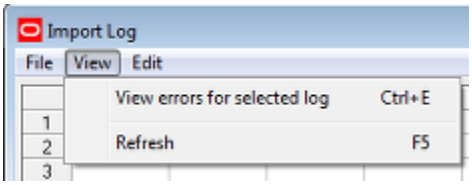
The **number of records imported** is calculated as follows for each import definition within an import type:

- The number of items of data to be input is calculated.
- This is multiplied by the number of tables the data is to be inserted into.

If there are 20 items of data to be imported for a particular definition, and the definition references 3 tables, the number of records imported will show as 60 (20 x 3).

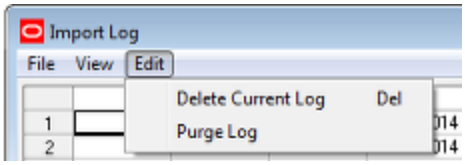
Import Log Options

Several options are available from the Menus in the Import Log.



The **View menu** allows two options:

- View errors for selected log allow users to view the errors for a selected import definition. (This is often a better option than viewing the Error Log directly, as it allows users to see specific errors, rather than all errors for all imports).
- Refresh refreshes the current view.



The **Edit menu** allows two options:

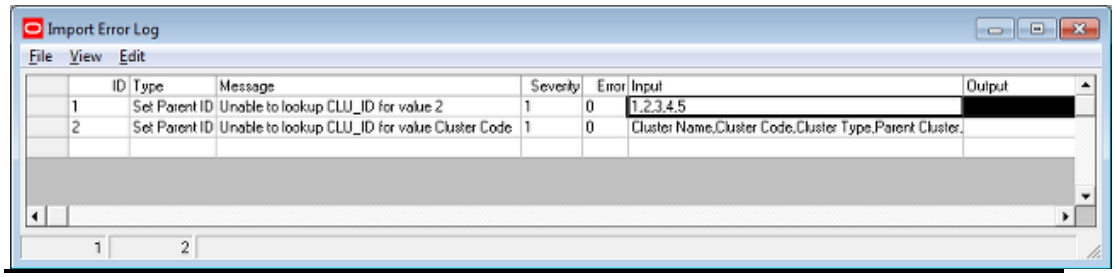
- Delete Current Log deletes the highlighted Import log.
- Purge Log deletes all import logs.

7

Import Error Log

Overview of the Import Error Log

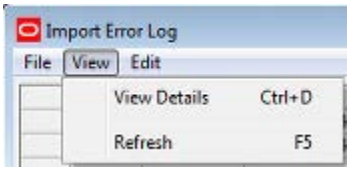
The **Import Error Log** contains details of all the errors that have occurred during data imports. It can be called directly from the main data importer dialogue box View menu, in which case it will show all errors in the import log. Alternatively, the Import Error Log may be called via the Import Log, allowing specific errors to be viewed.



Option	Description
ID	This is assigned by the software and is not user customizable.
Type	This is the Import Definition Type
Message	This is a description of the error.
Severity	This is the severity of the error. 1 is an error, 2 is a warning. The Import can set to warn only if (for example in an import definition) Data Importer is configured to truncate a text string being imported.
Error	This is the code number of the error that has occurred.
Input	This is the data being used by Data Importer.
Output	This is the SQL statement that Data Importer is attempting to compose.

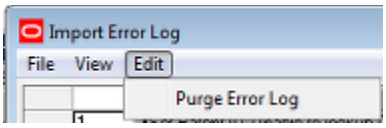
Import Error Log Options

Several options are available from the Menus in the Import Error Log.



The View menu allows two options:

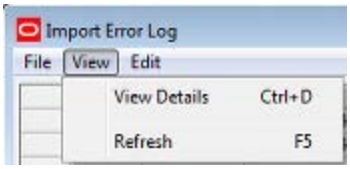
- View Details allows user to view a detailed report for a selected error.
- Refresh refreshes the current view.



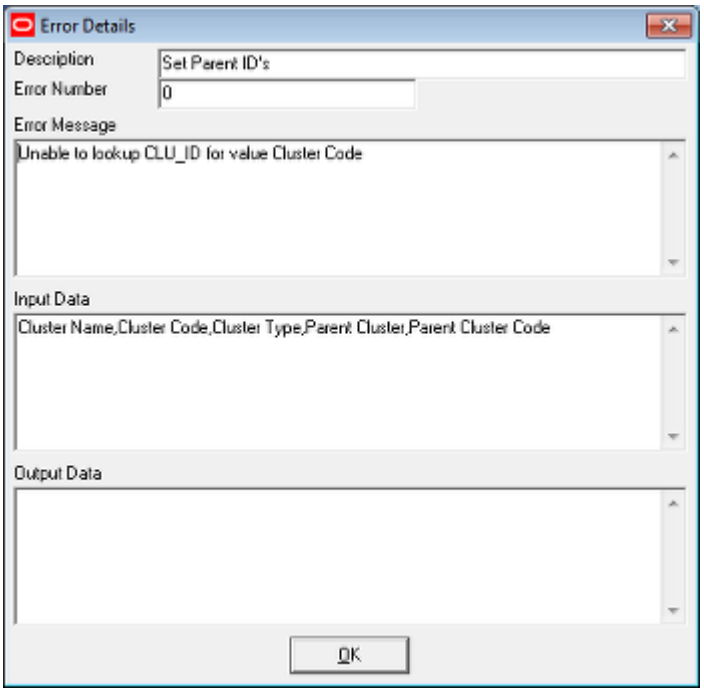
The Edit menu allows users to delete the highlighted error log.

Import Error Details

To see the error in more detail, it is possible to do so by selecting the View Details option from the View pull down menu.



This will bring up the Error Details dialogue box, which allows the error to be seen more clearly. This is useful if the data is extensive and difficult to see in its entirety in the Import Error Log.



- **Error** Message

  This section contains the error message specifying why the import failed.
- **Input** Data

  This section contains the data being read out of the source file prior to it being processed by data importer.
- **Output Data**

  If applicable, this is the data that Data Importer is trying to insert into the Macro Space Planning database.

In the above screenshot, the data is consistent with the starting row in the Import Definition dialog being incorrectly specified, so Data Importer is not reading the intended data.

8

Configuring Data Importer

Preparing to Configure an Import

> **Note**: The examples given in this section of the Help file are based on data imports set up for Macro Space Management v5.4.015. If applied to other builds (or to a schema modified by an upgrade script) the precise example may no longer work.

It is recommended that the user back up the database before import. Should there be errors during the import, this will enable the user to restore the database to its condition before the import. There should not be errors resulting from a well configured up Data Import - but as backing up a database is quick to carry out, it is a prudent precaution to take. Before starting to configure Data Importer the following must true:

- The user must be able to access the central Macro Space Management database.
- The use must have software capable of reading the central Macro Space Management database.
- The user should be familiar with the schema for the database.

For configuring a specific import:

- The user should list all the tables that will require data to be inserted
- For each affected table the user should list all fields that will require data inserted
- For all data to be imported the user should identify if a look up is required.

All non-nullable fields in a table must have a value inserted. This may be done in one of two ways:

- Directly inserted from Data Importer
- Added as a default from the database.

(Adding as a default from the database is only possible if that column has had a default value defined).

Planning the Import

It is recommended the following sequence of actions is carried when an import is configured and executed:

- The information available for import is documented. (This can be in spreadsheet or table form)
- The Schema is consulted to find all tables related to the intended import.
- The fields in the table(s) are listed and the fields that want populating identified.
- The Import Type is given a name.
- The Import Type is broken down into Import Definitions.
- Each Import definition is broken down into Import fields.
- Any Lookups required are identified.
- A spreadsheet template should be produced for entering the data to be input.

- A copy of the populated spreadsheet containing just the first few lines of data is put in the Macro Space Management import directory.
- Date Importer is configured.
- Data Importer is tested using the initial few lines of data.
- The full import is carried out.

The Next ID Table

The**Next ID** table contains the values to be assigned for the next instance of every primary key in the Macro Space Management database. This table needs to be regularly updated during the import to ensure the correct primary keys are inserted into the database. This can be done by using **Pre SQL** or **Post SQL** statements in the **Import Definition** dialog box.

Note: For more information on the Next ID table, see the *Oracle Retail Macro Space Planning Data Model.*

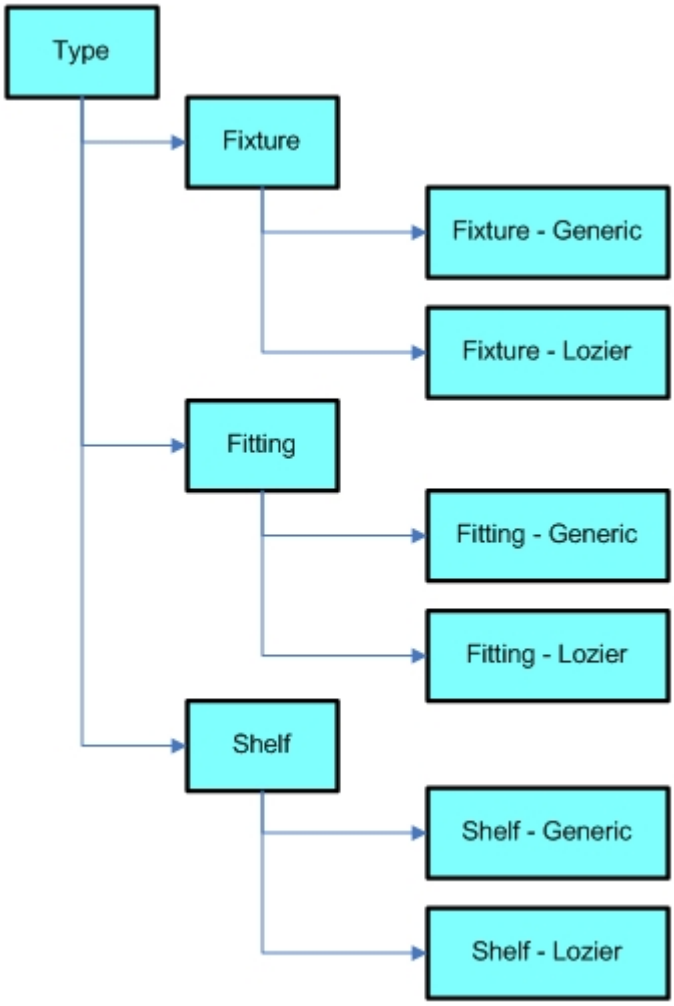
9

Fixture Hierarchy

Planning Adding Fixture Groups

The Required Fixture Hierarchy

The **Required Fixture Hierarchy** has been defined as follows:



The hierarchy has three levels.

- Type is the default root of the hierarchy and cannot be changed.
- Fixture, Fitting and Shelf form the three options for the next level in the hierarchy.
- The final level has two options for each type of equipment, for example Fixture - Generic and Fixture - Lozier.

Note: If importing a hierarchy, it is strongly recommended that each node in the hierarchy has a unique name.

That is because Data Importer will use a Look-up to assign a Block Group ID to each node (BLG_ID in the **Block Group** table). If the node names are not unique (for example if we had Generic at each level rather than Fixture-Generic, Fitting-Generic and Shelf-Generic) the look up would fail because the node name is not unique.

Note: For full details of the schema see the *Oracle Retail Macro Space Planning Data Model*.

Planning the Import from the Schema

To add the **Fixture Hierarchy**, we consult the *Oracle Retail Macro Space Planning Data Model*. From that we learn that the hierarchy is held in the **Block Group** table. There are four columns in the table. We must populate three of them:

Column	Purpose	Comment
BLG_ID	Block Group ID	(Primary Key)
BLG_PID	Block Group Parent ID	Required for anything but the first level of the hierarchy (Type)
BLG_DESC	Block Group Description	The name of the Block Group

The fourth column ICO_ID (Icon ID) is non-nullable but has a default, so we will not need to import this information. If fixture details are to be imported in a subsequent import, the link will be created to the fixture hierarchy during that import.

Note: For full details of the schema see the *Oracle Retail Macro Space Planning Data Model*.

Import Type, Definition and Lookups

We will create a new import type: **Fixture Hierarchy**. The Fixture Hierarchy will have three Import Definitions in it: Hierarchy Level 1, Hierarchy Level 2 and Hierarchy Level 3. The Import Definitions will have the following Import Fields:

Hierarchy Level 1

Data	Column	Data Type	Key	Not Null	Default
Group ID	BLG_ID	Integer	Yes	Yes	
Block Description	BLG_DESC	Nvarchar	No	Yes	

The Group ID will have to be assigned by looking up the next required value from the database. The Block Description will be read from the Data Import spreadsheet. The Icon (which has an available default set) can be read from the database.

Note: No Group Parent will be required for this level of the hierarchy, as it is the top level.

Hierarchy Level 2

Data	Column	Data Type	Key	Not Null	Default
Group ID	BLG_ID	Integer	Yes	Yes	

Data	Column	Data Type	Key	Not Null	Default
Group Parent	BLG_PID	Integer	No	No	
Block Description	BLG_DESC	Nvarchar	No	Yes	

The Group ID will have to be assigned by looking up the next required value from the database. The Group Parent will be defined as a Look-up value. The Block Description will be read from the Data Import spreadsheet. The Icon (which has an available default set) can be read from the database.

Hierarchy Level 3

Data	Column	Data Type	Key	Not Null	Default
Group ID	BLG_ID	Integer	Yes	Yes	
Group Parent	BLG_PID	Integer	No	No	
Block Description	BLG_DESC	Nvarchar	No	Yes	

The Group ID will have to be assigned by looking up the next required value from the database. The Group Parent will be defined as a Look-up value. The Block Description will be read from the Data Import spreadsheet. The Icon (which has an available default set) can be read from the database.

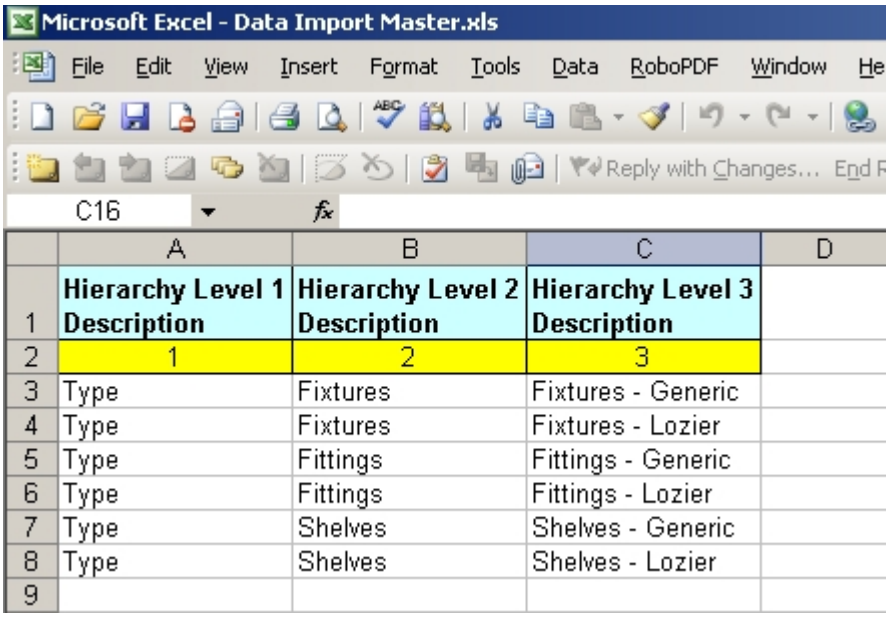
> **Note**: **Note** how these Import fields match up with the columns in the **Block Group** table.

The import will also need a look up (Block Group - PK). This will be used to convert the Block Group Description (BLG_DESC) into the Block Group ID (BLG_ID).

> **Note**: For full details of the schema see the *Oracle Retail Macro Space Planning Data Model*.

The Data Import Spreadsheet

Once the required data is known, the data import spreadsheet can be configured as required.



	A	B	C	D
1	**Hierarchy Level 1 Description**	**Hierarchy Level 2 Description**	**Hierarchy Level 3 Description**	
2	1	2	3	
3	Type	Fixtures	Fixtures - Generic	
4	Type	Fixtures	Fixtures - Lozier	
5	Type	Fittings	Fittings - Generic	
6	Type	Fittings	Fittings - Lozier	
7	Type	Shelves	Shelves - Generic	
8	Type	Shelves	Shelves - Lozier	
9				

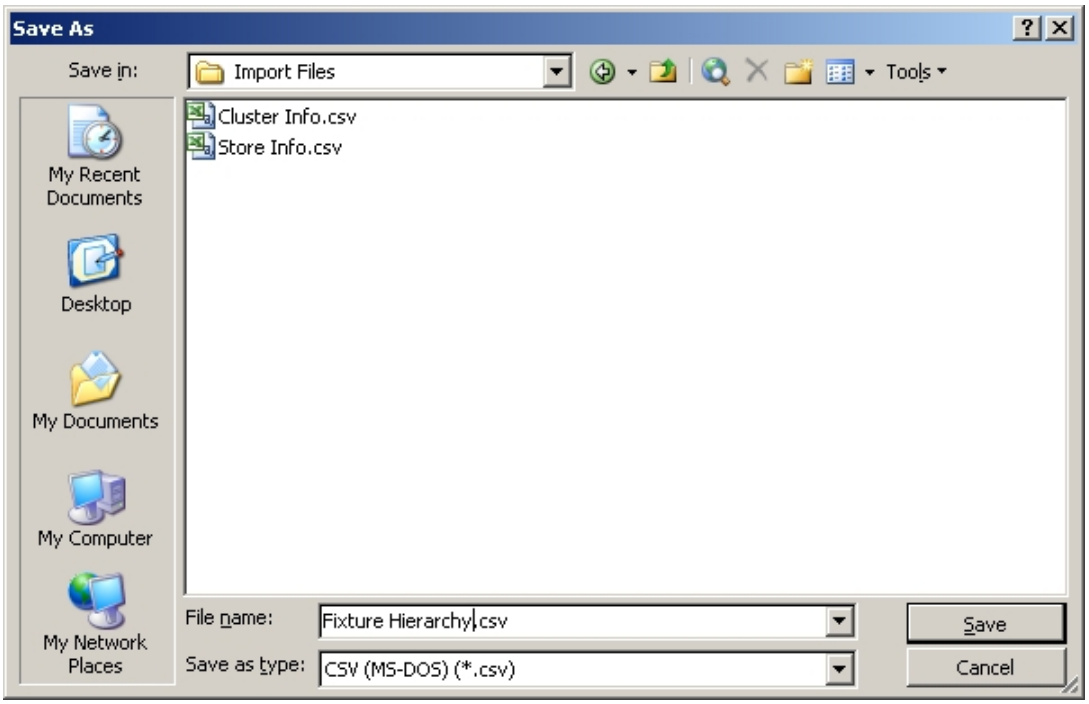
Row 1 contains the title of the information to be held below. This will be useful when configuring the Import Definition, but will not be imported itself. **Row 2** numbers the information to be imported. This will also be useful when configuring the Import Definition, but again will not be imported. **Rows 3 - 8** contain the information to be imported. Note that each row must contain a full list of every level in the hierarchy.

Output from the Spreadsheet

Once the information has been entered into the spreadsheet it must be saved into the Import Directory for Macro Space Management.

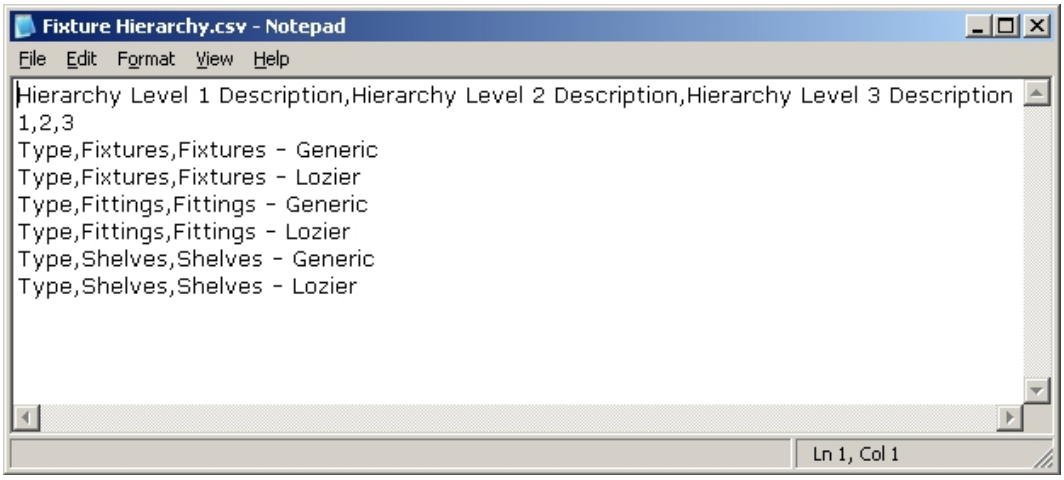
> **Note**: Data Import will only work if the import information is in this specific directory.

This is done by using the Save-As option in Excel.



Note: The Type must be set to CSV (or other type compatible with Data Importer)

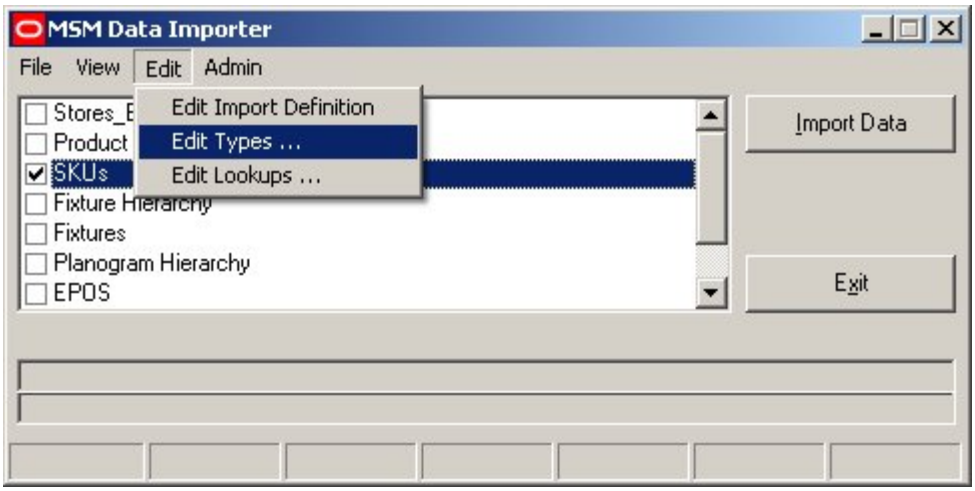
This will result in a file with all the data for a individual Fixture Group on one line, with the data separated by commas.



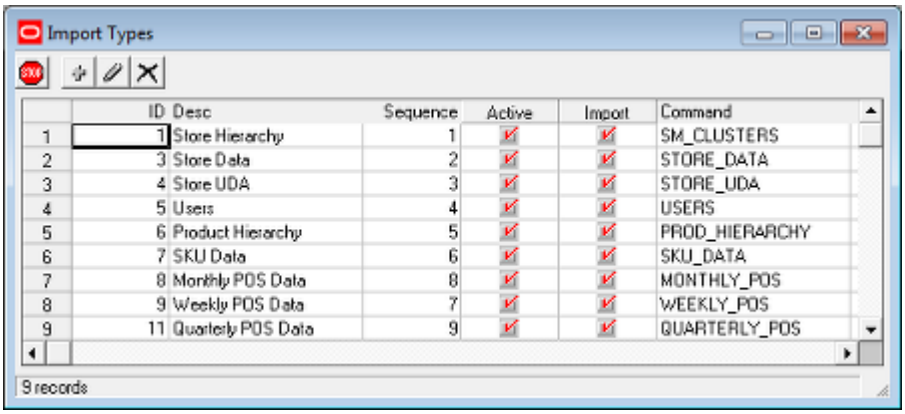
Adding an Import Type

Configuring the Import Type

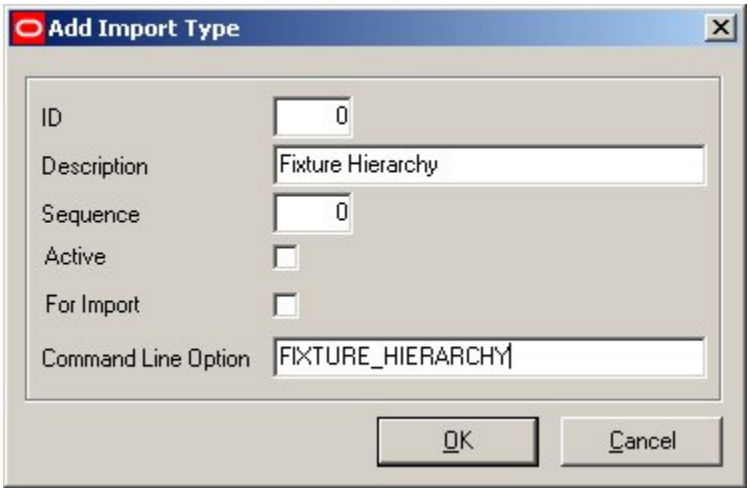
To add a new Import Type, select Edit Types from the Edit menu.



This will bring up the Import types dialogue box. Click on the Add icon.



This will bring up the Add Import type dialogue box.



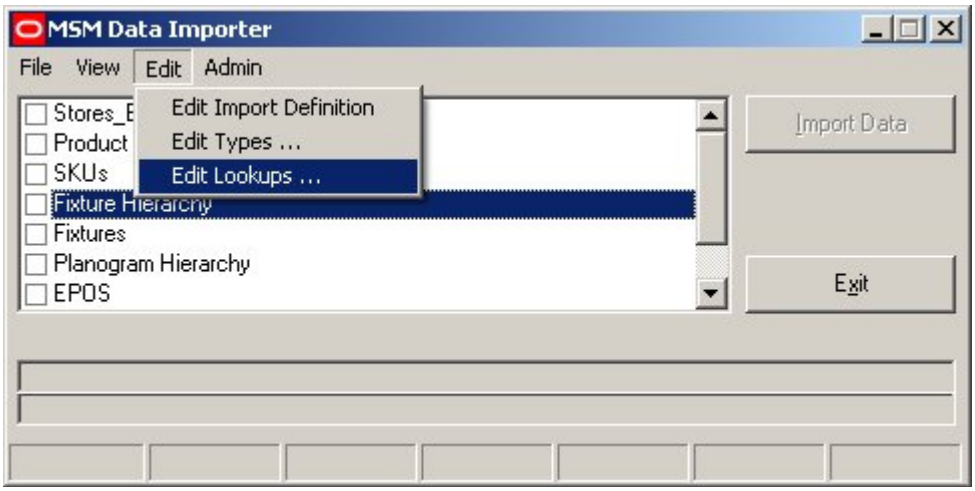
Fill it in as required and click on OK. (The ID will be automatically changed by Macro Space Management). (For the Import type to be available for further editing, the Active and For Import check boxes should be ticked).

Adding a Look Up

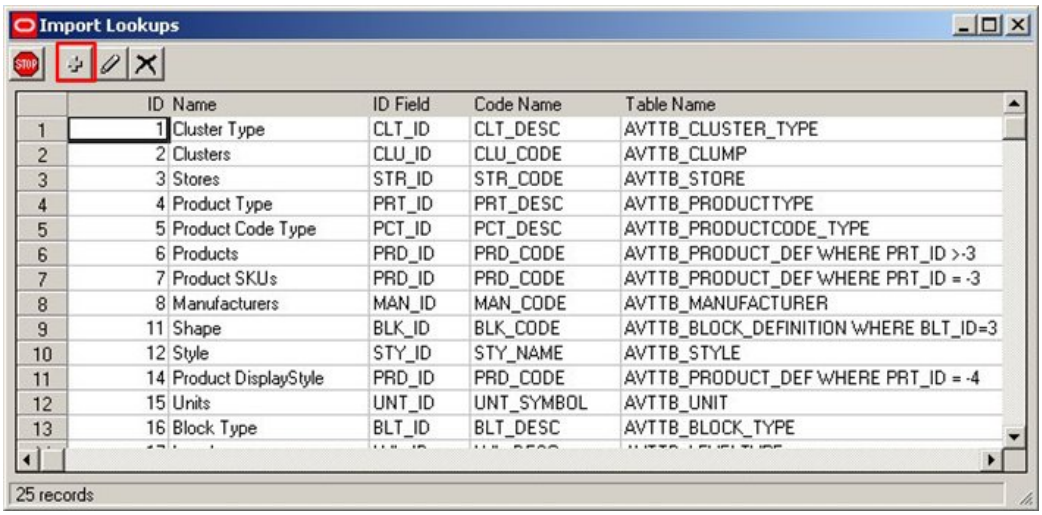
Configuring the Look-Up

To **configure a lookup**, select the Edit Lookups option from the Edit pull down menu.

> **Note**: The Look-ups dialog box allows changes to the database tables using SQL statements. Accordingly, access to the dialog box is disabled by default. Please refer to the Functional Security section in the Administration Module User Guide for information on how to give access to this functionality.

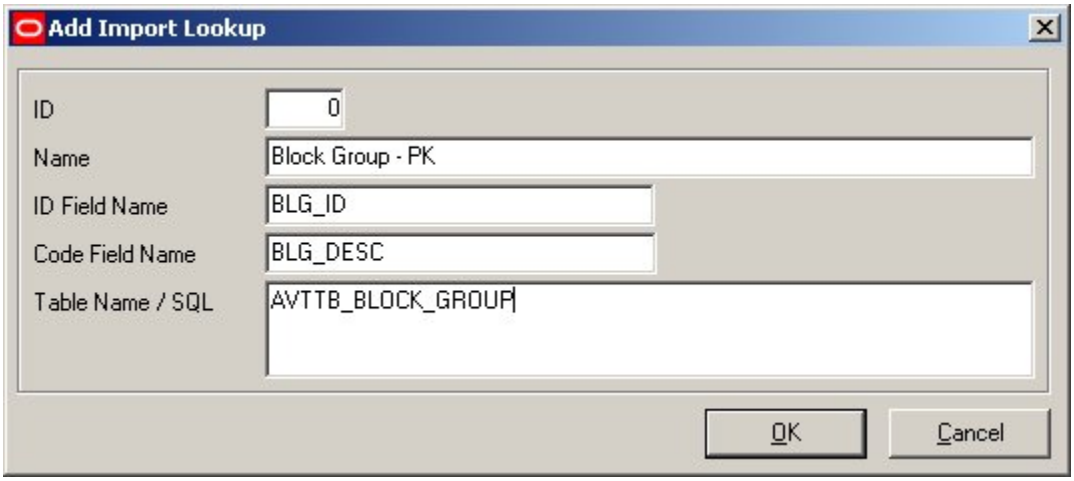


This will bring up the Import Lookups dialogue box. Click on the Add icon to add a new Lookup.



	ID	Name	ID Field	Code Name	Table Name
1	1	Cluster Type	CLT_ID	CLT_DESC	AVTTB_CLUSTER_TYPE
2	2	Clusters	CLU_ID	CLU_CODE	AVTTB_CLUMP
3	3	Stores	STR_ID	STR_CODE	AVTTB_STORE
4	4	Product Type	PRT_ID	PRT_DESC	AVTTB_PRODUCTTYPE
5	5	Product Code Type	PCT_ID	PCT_DESC	AVTTB_PRODUCTCODE_TYPE
6	6	Products	PRD_ID	PRD_CODE	AVTTB_PRODUCT_DEF WHERE PRT_ID >-3
7	7	Product SKUs	PRD_ID	PRD_CODE	AVTTB_PRODUCT_DEF WHERE PRT_ID = -3
8	8	Manufacturers	MAN_ID	MAN_CODE	AVTTB_MANUFACTURER
9	11	Shape	BLK_ID	BLK_CODE	AVTTB_BLOCK_DEFINITION WHERE BLT_ID=3
10	12	Style	STY_ID	STY_NAME	AVTTB_STYLE
11	14	Product DisplayStyle	PRD_ID	PRD_CODE	AVTTB_PRODUCT_DEF WHERE PRT_ID = -4
12	15	Units	UNT_ID	UNT_SYMBOL	AVTTB_UNIT
13	16	Block Type	BLT_ID	BLT_DESC	AVTTB_BLOCK_TYPE

This will bring up the Add Import Lookup dialogue box.

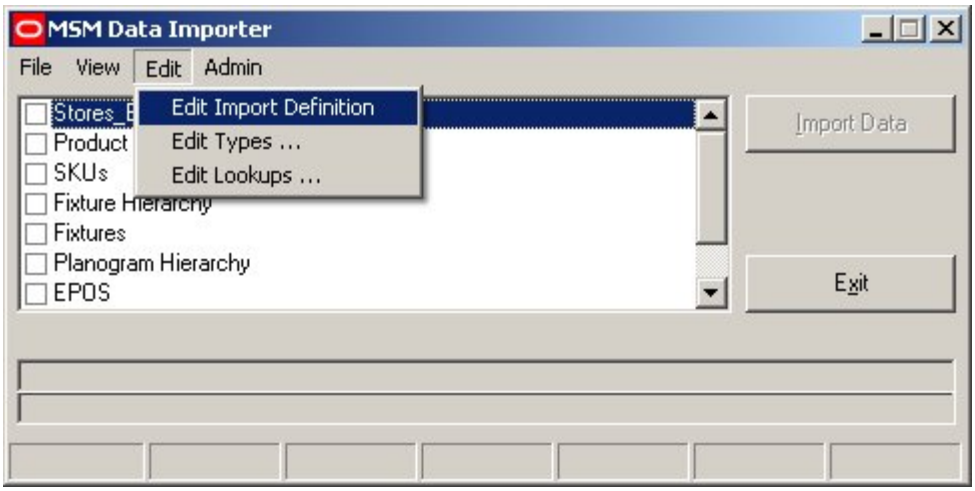


This look up can be used to convert a Block Group Description (BLG_DESC) into a Block Group ID (BLG_ID).

Adding the Fixture Hierarchy Import Definitions

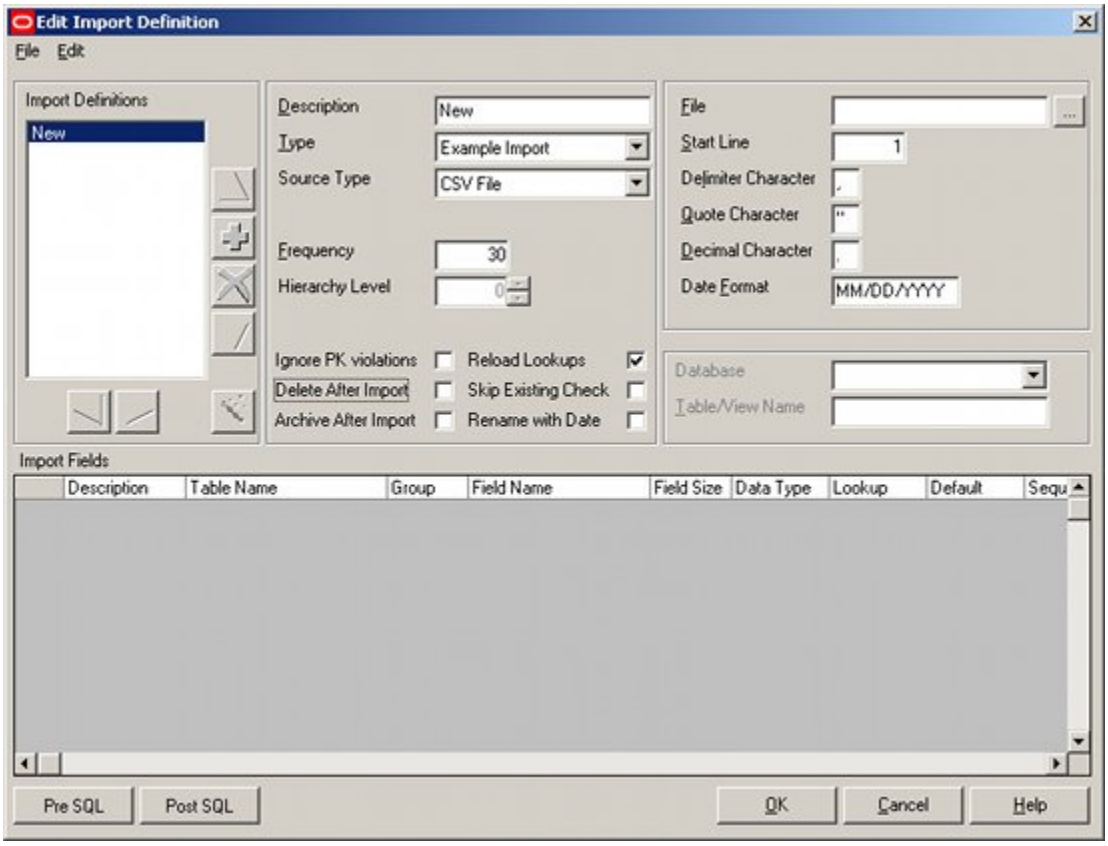
Opening the Dialogue

To **open the Import Dialogue option**, highlight the Import type and select Edit Import Definition from the Edit pull down menu.



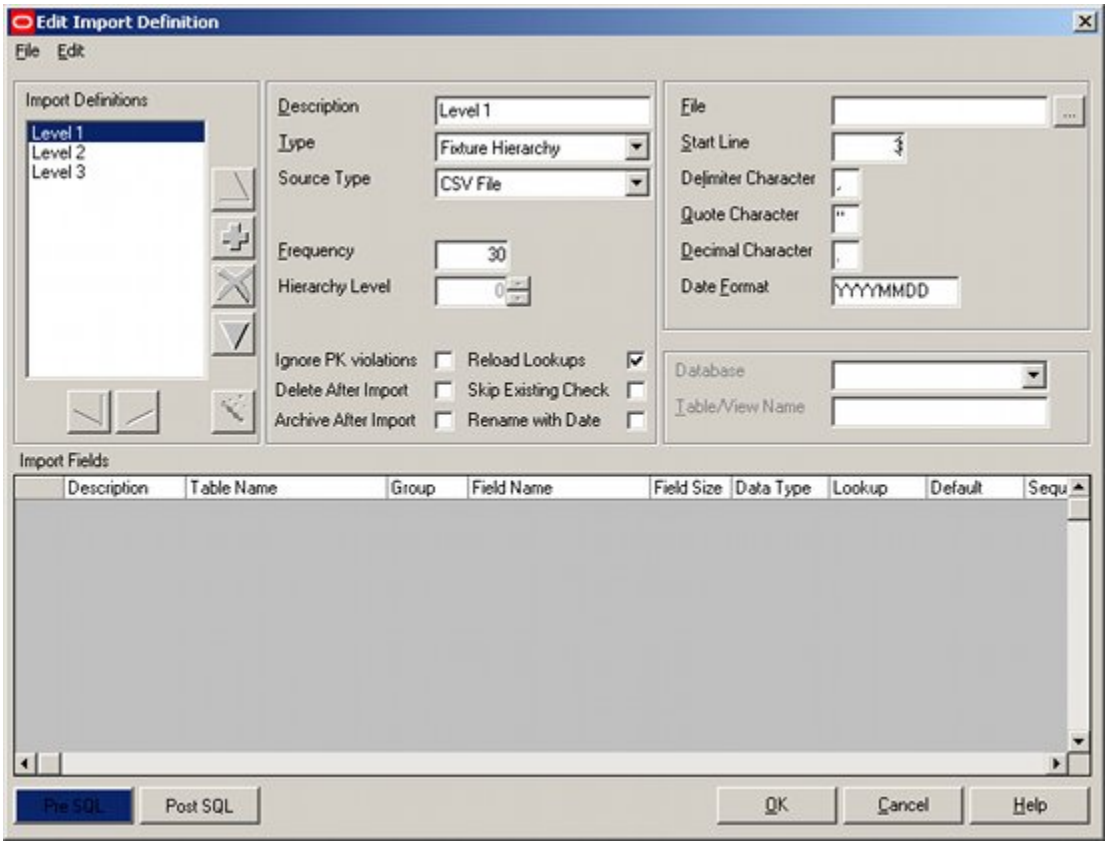
Note: The edit option is only available to Administrators.

This will bring up the Import Design dialogue box.



Setting the Levels for the Import Definitions

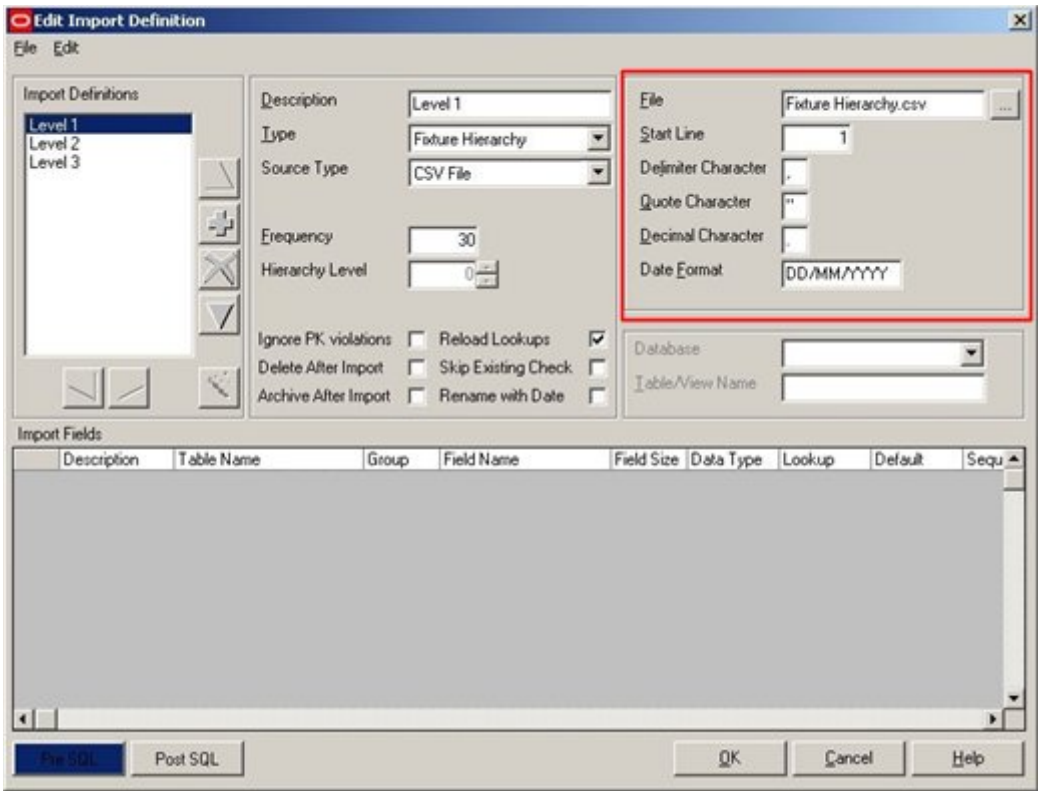
The **Levels for the Import Definitions** should be set first.



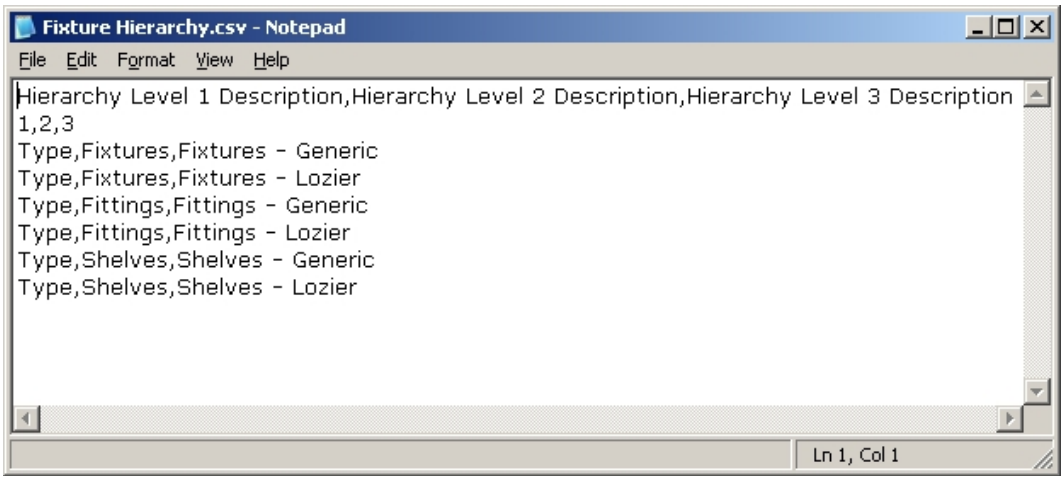
As there are three levels in the import definition, these will be called Hierarchy Level 1, Hierarchy Level 2 and Hierarchy Level 3 (as per the data to be imported). The levels are added by clicking on the Add icon in the Import Definitions frame. The level names are changed by editing the data in the Description field in the Description Frame.

Setting the File Information

The **File information** is set in the File Information frame. Each Import Definition will require the file to be set - this is because information could be read from several different files during the import.



File is set by clicking on the File button and selecting the Fixture Hierarchy.csv file in the Import directory. The rest of the information has to be set pertinent to the format of the file:

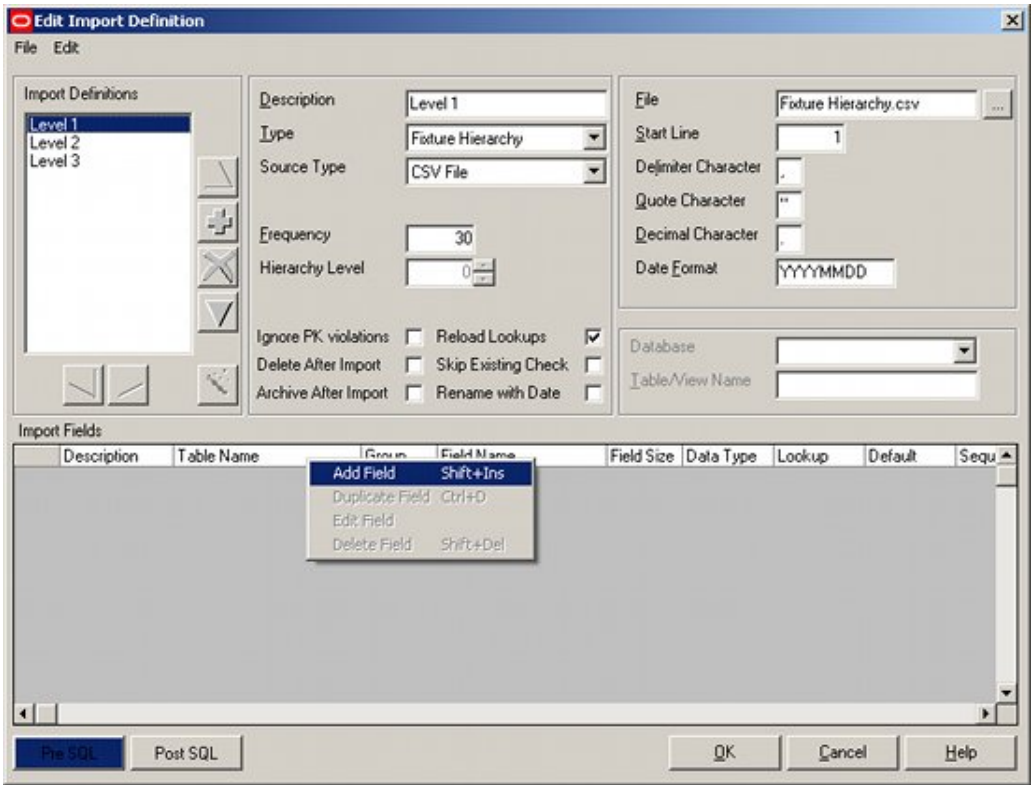


- Start Line is set to 1: this will allow us to confirm the data we are selecting is correct. (This setting will be changed later to 3).
- Delimiter Character is set to ',' as each item of data is separated from the next by a comma.
- Quote Character is set to " to enable us to import text strings if required. (Not required for this definition).
- Decimal Character is set to '.' as we will be using a full stop, not a comma, to indicate decimal places. (Not required for this definition).

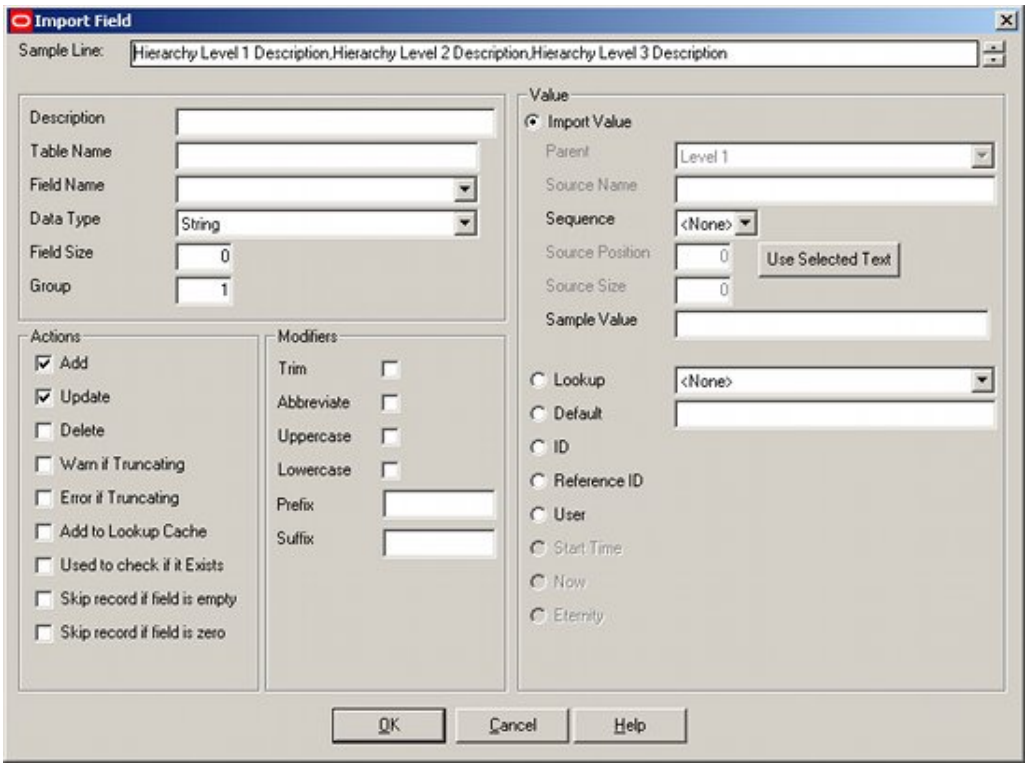
- Date Format is set to DD/MM/YYYY to indicate we will be importing dates in the form 23/12/2007. (Not required for this definition).

Bringing up the Import Field GUI

To set the **Hierarchy Level 1 import definition**, right click on the titles at the head of the Import Field frame.

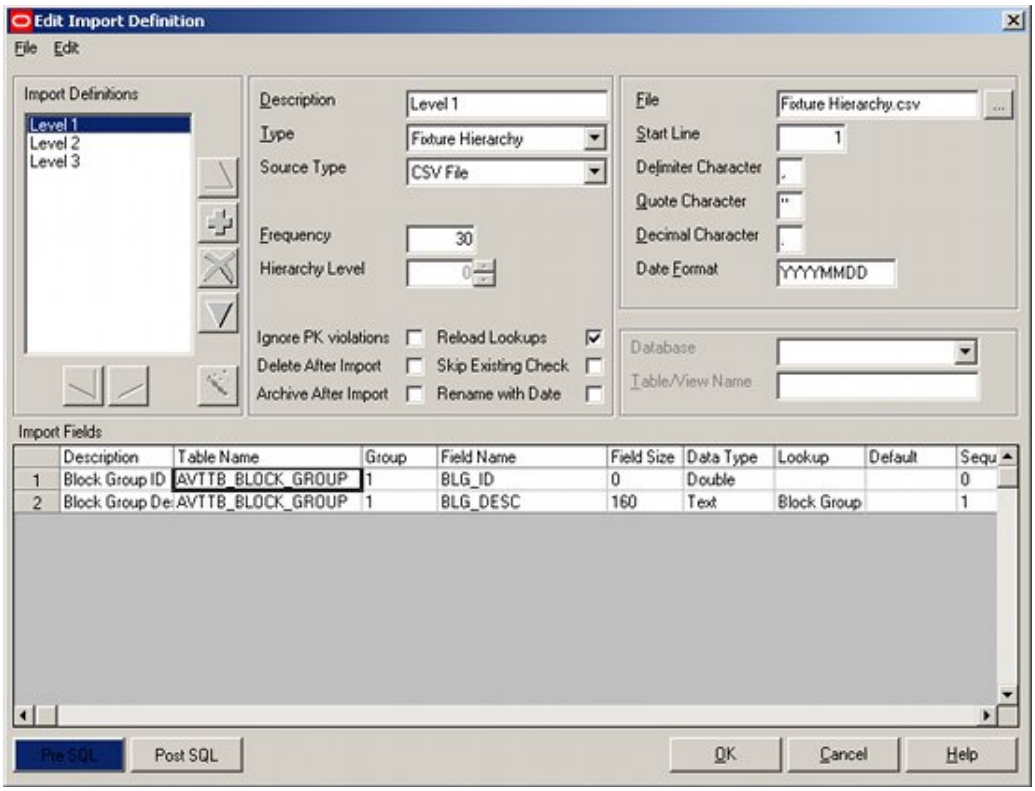


Right click and select **Add Field**. This will bring up the Import field dialogue box which can then be configured for the required parameters.



Hierarchy Level 1 Import Fields

There are Import Fields to configure for Hierarchy Level 1, Block Group ID and Block Group Description.

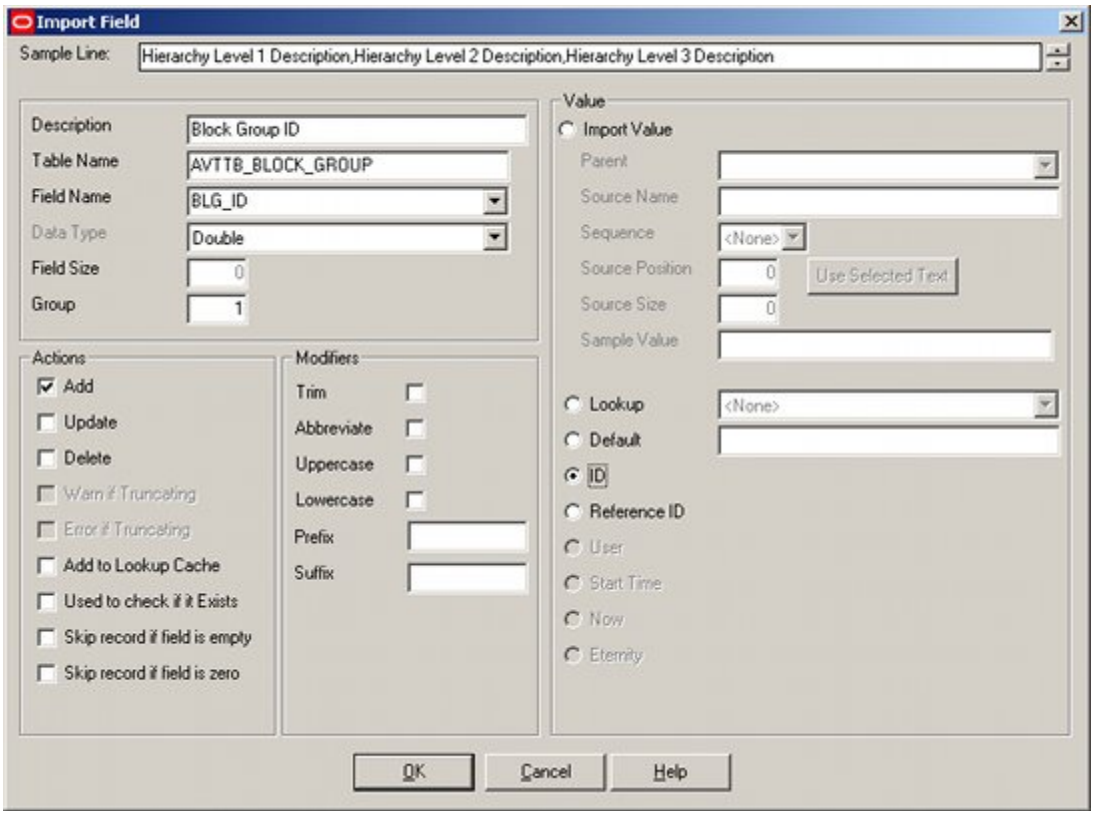


This Hierarchy level will require a Pre SQL statement. This will be used to ensure the **Next ID** table is up to date with the latest ID for Block Groups.

> **Note**: For full details of the schema see the *Oracle Retail Macro Space Planning Data Model*.

Configuring the Level 1 Information - Block Group ID

The **Level 1 Block Group** Information is configured as required:



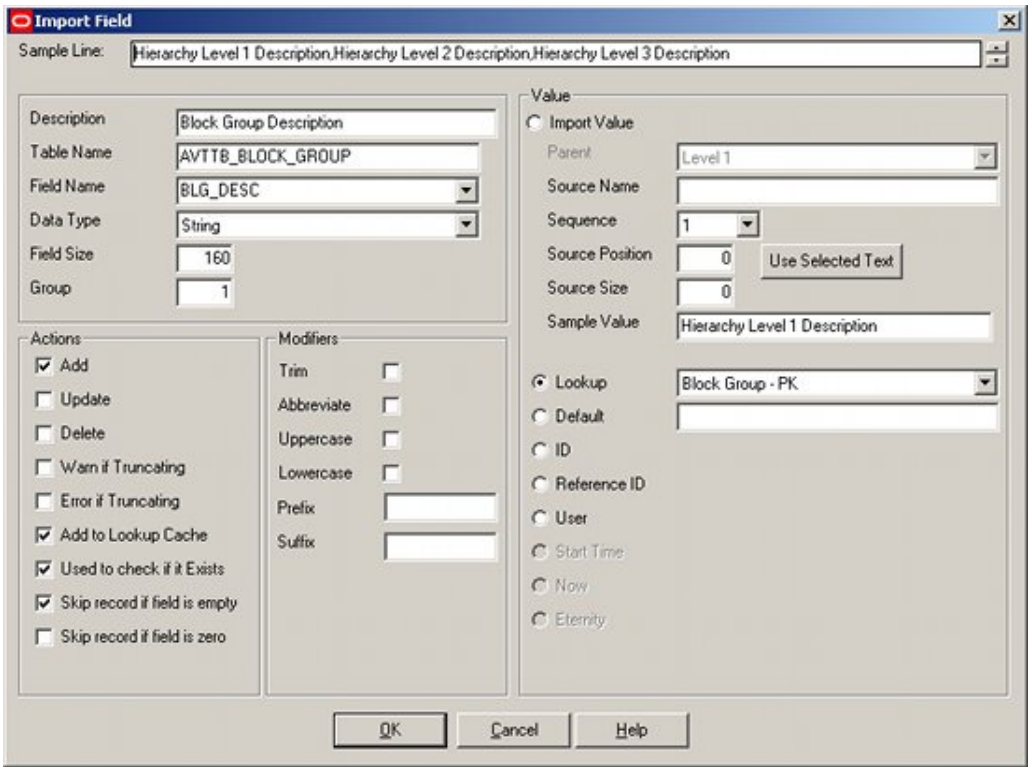
Comments

The Add option has been checked in the Actions frame as we will wish to add a Block Group ID if the Block Group does not exist. The ID radio button in the Value Frame has been selected to indicate we need to add a numeric value from the **Next ID** table.

> **Note**: For more information on this table see the *Oracle Retail Macro Space Planning Data Model*.

Configuring the Level 1 Information - Description

The **Level 1 Description** is configured as follows:



Comments

- Add has been checked because we wish to add the block description to the Block Group Link table.

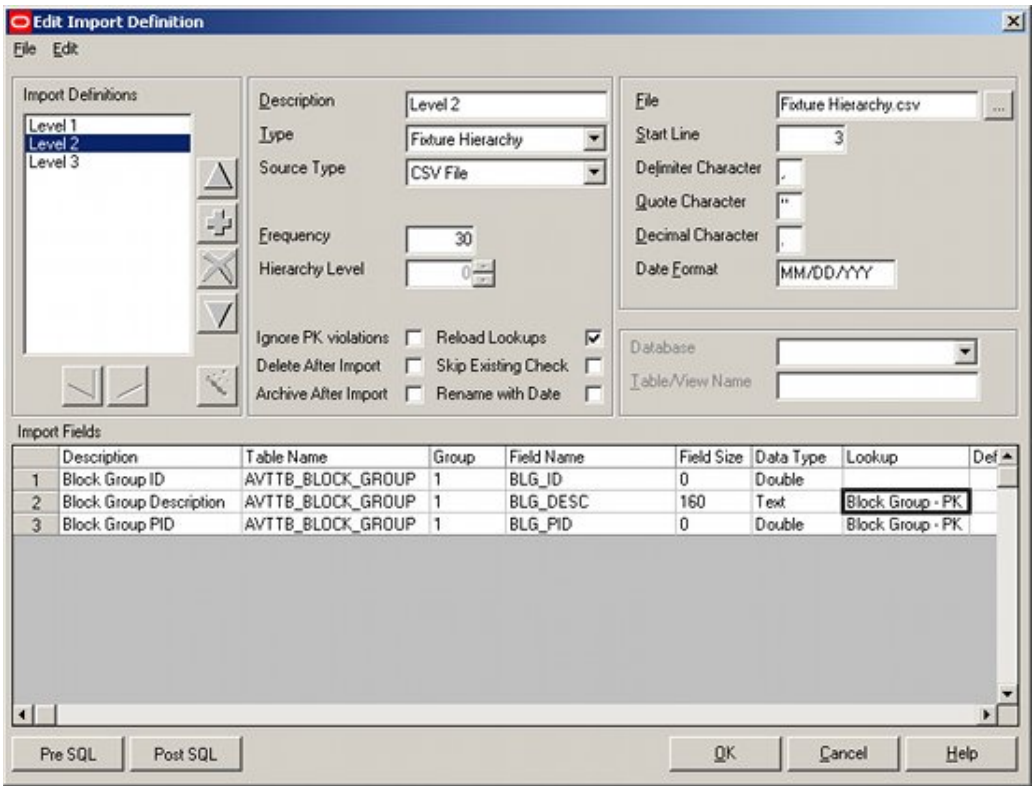
  Note: For more information on this table see the *Oracle Retail Macro Space Planning Data Model*.

- Add to Lookup Cache has been selected because we are using a lookup and this will speed up performance.
- Used to check if it Exists has been checked because we want to ensure that the description does not already exist in the database. This will allow us to avoid duplicate entries.
- Skip record if field is empty has been checked to allow a record to be skipped if it contains a blank description.
- Abbreviate has been chosen to so that any data being imported over 80 characters in length are truncated to that length.
- Sequence has been set to 1, to enable data to be selected from the right section of the .csv file.
- We are using the Lookup 'Block Groups' to convert the Description into a Block Group ID. This will be used to check if the description already exists.

  Note: As we have selected Sequence 1 from the .csv file, the Sample value is showing what is in that position in the file - in this instance Hierarchy Level 1.

Hierarchy Level 2 Import Fields

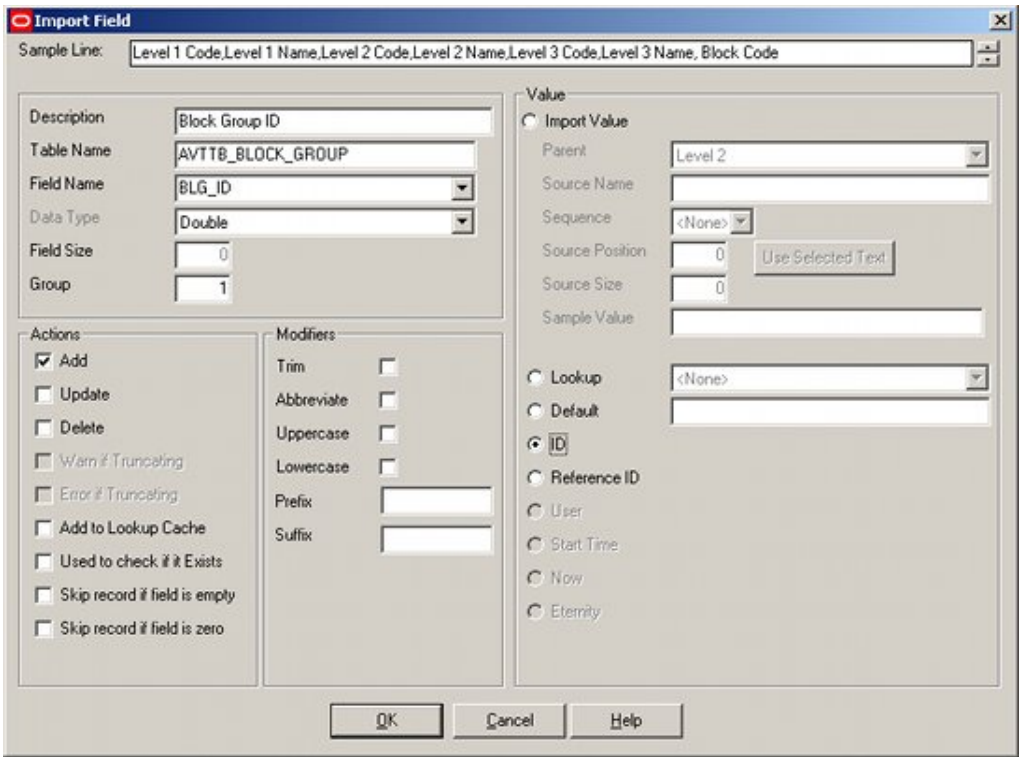
There is **three Import Fields** to configure for Hierarchy Level 2, Block Group ID, Block Group Description and Block Group Parent ID.



This Hierarchy level will not require any Pre or Post SQL.

Configuring the Level 2 Information - Block Group ID

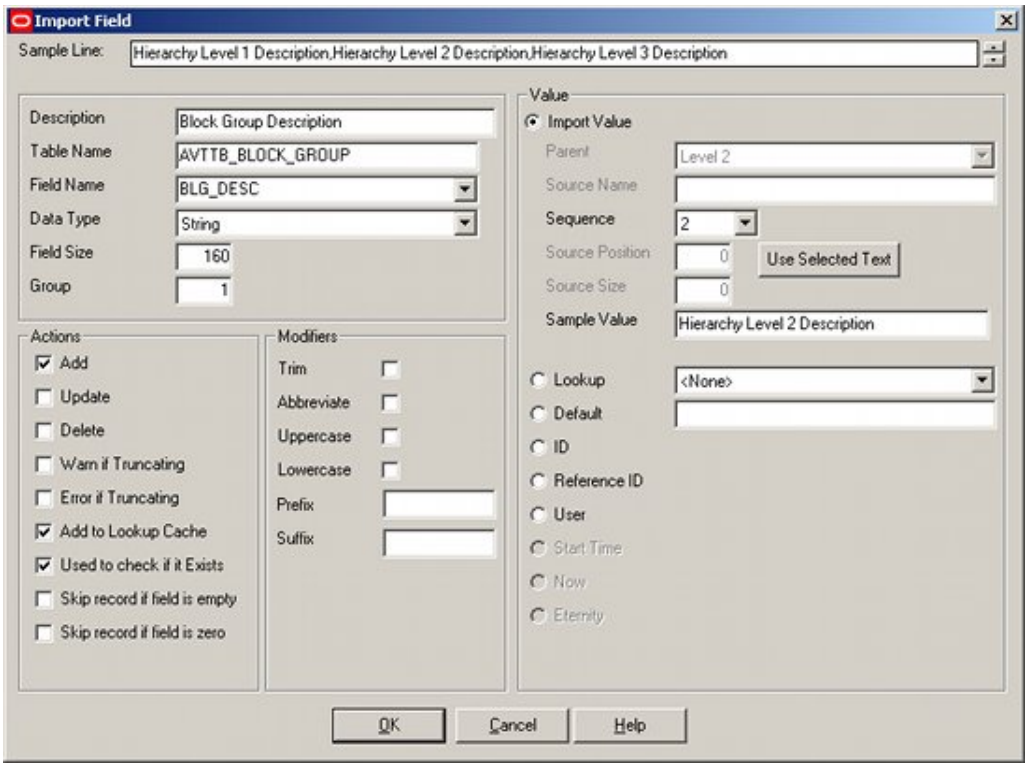
The **Level 2 Block Group Information** is configured as required:



It is essentially a duplicate of the Level 1 Block Group ID import.

Configuring the Level 2 Information - Description

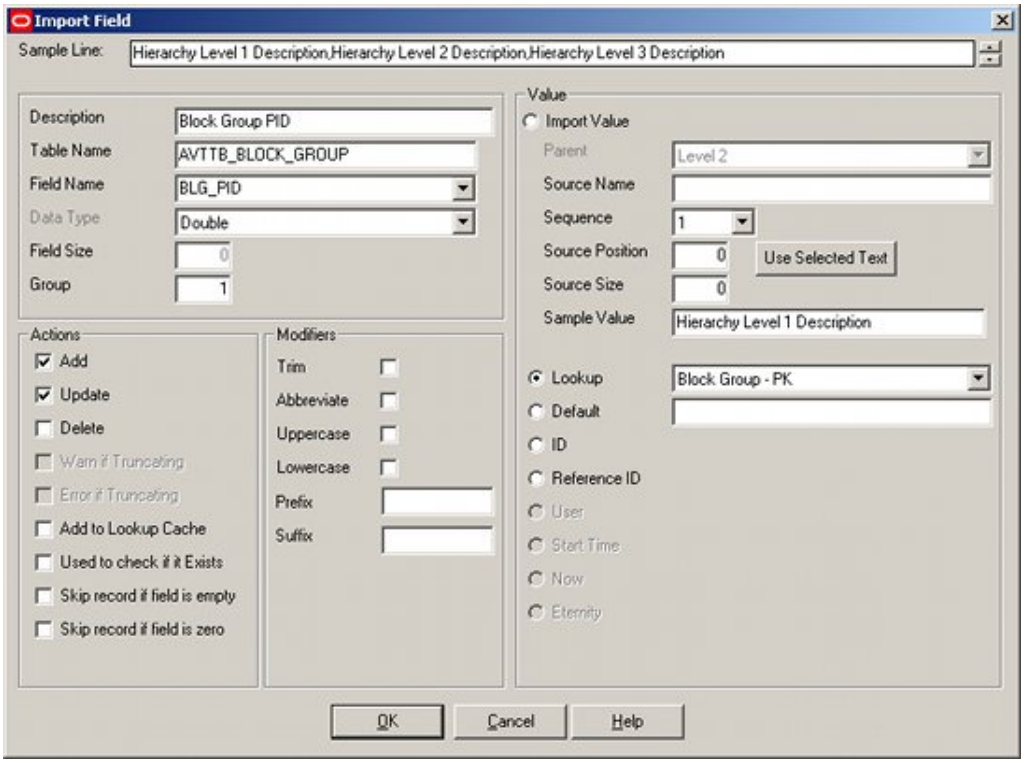
The **Level 2 Description** is configured as follows:



It is essentially a duplicate of the Level 1 Description, except the Sequence has been changed to 2 to read information from a different part of the .csv file.

Configuring the Level 2 Information - Parent Group

Parent Group is a new import field for Level 2 - it was not required for Level 1.

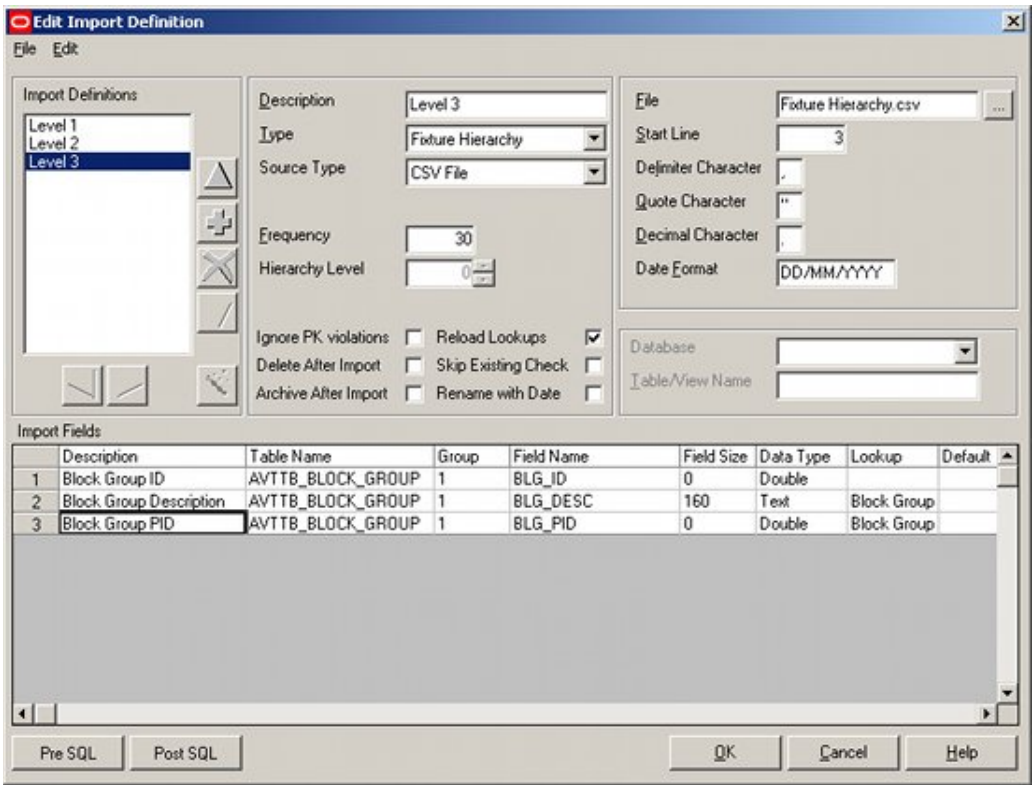


Comments

- Add and Update have been checked because we wish to add the description if new, or update it if the description already exists.
- Sequence has been set to 1 to pick up the information from the correct part of the CSV file.
- Lookup is being used to convert the parent group name to a Block Group ID (parent ID) that will be inserted into the database.

Hierarchy Level 3 Import Fields

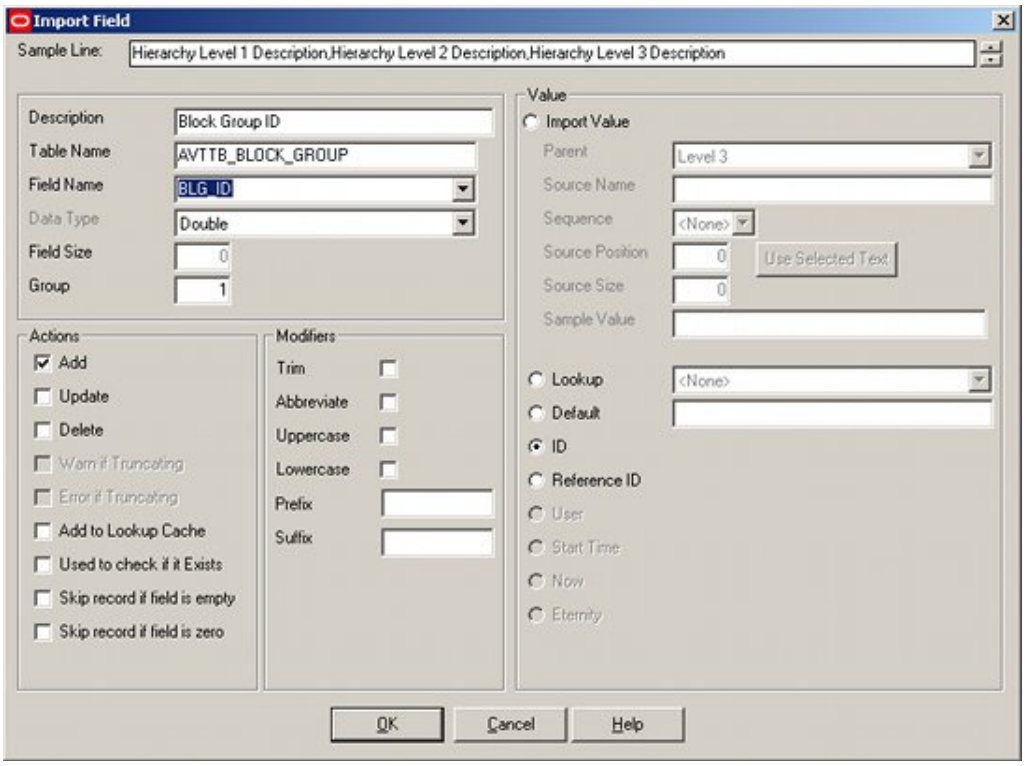
There is **three Import Fields** to configure for Hierarchy Level 2, Block Group ID, Block Group Description and Block Group Parent ID.



This Hierarchy level will not require any Pre or Post SQL.

Configuring the Level 3 Information - Block Group ID

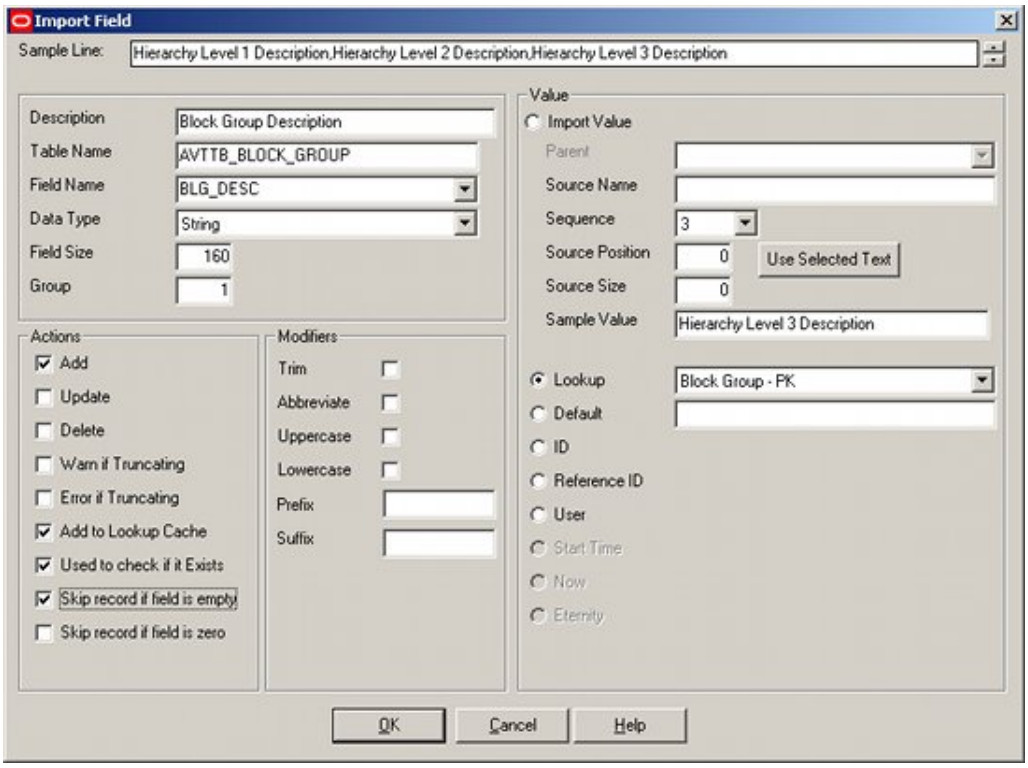
The **Level 3 Block Group Information** is configured as required:



It is essentially a duplicate of the Level 2 Block Group ID import.

Configuring the Level 3 Information - Description

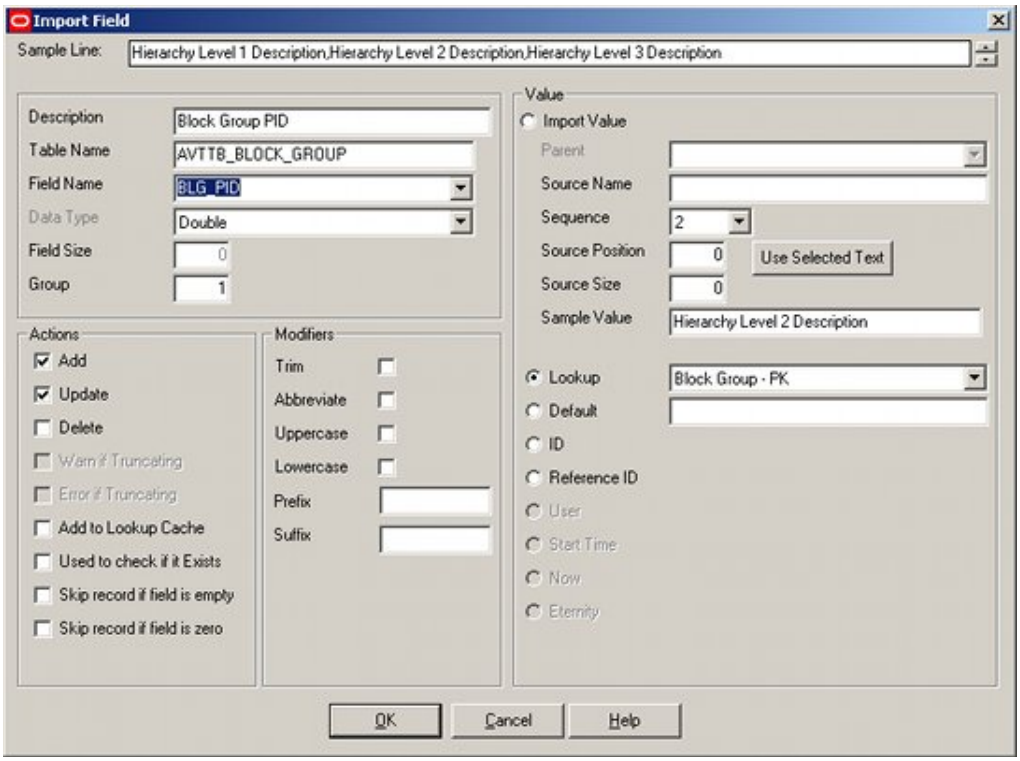
The **Level 3 Description** is configured as follows:



It is essentially a duplicate of the Level 1 and 2 Descriptions, except the Sequence has been changed to 3 to read information from a different part of the .csv file.

Configuring the Level 3 Information - Parent Group

The **Level 3 Parent Group Information** is configured as required:



It is essentially a duplicate of the Level 2 Parent Group, except the Sequence has been changed to 2 to read information from a different part of the .csv file.

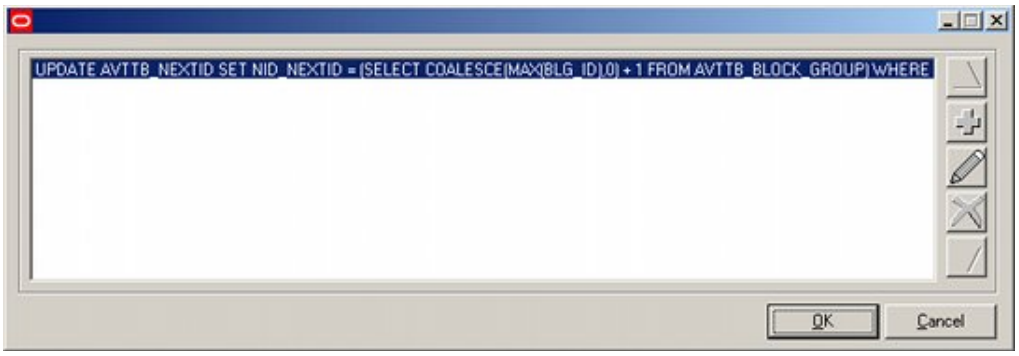
Adding the SQL Statements

Only one **SQL statement** is required for this definition.

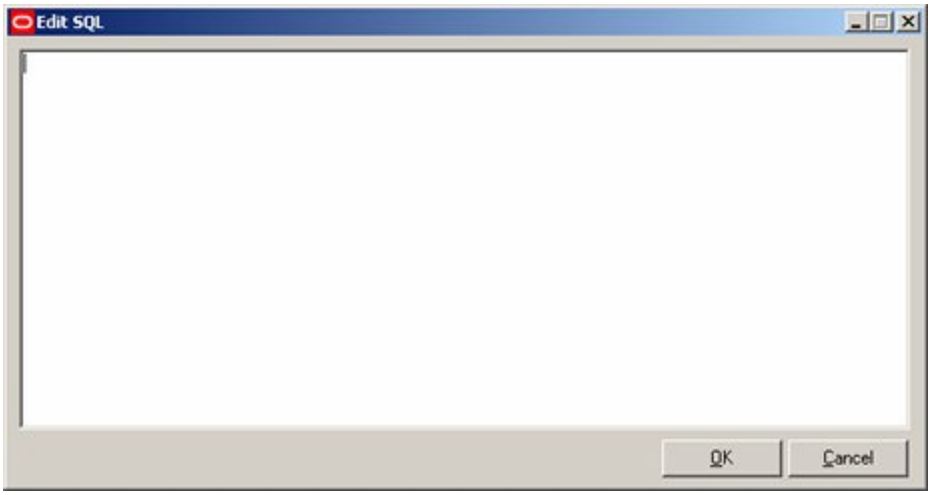
> **Note**: Pre and Post SQL allow the Data Import module to execute changes to the database tables using SQL statements. Accordingly, Pre and Post SQL functionality is disabled by default. Please refer to the Functional Security section in the Administration Module User Guide for information on how to give access to this functionality.

It is to ensure that the value for the Block Group ID (BLK_ID in the **Block Group** table is correct. This is done by adding a Pre SQL statement to the Import Definition dialog box.

> **Note**: For more information on this table see the *Oracle Retail Macro Space Planning Data Model*.

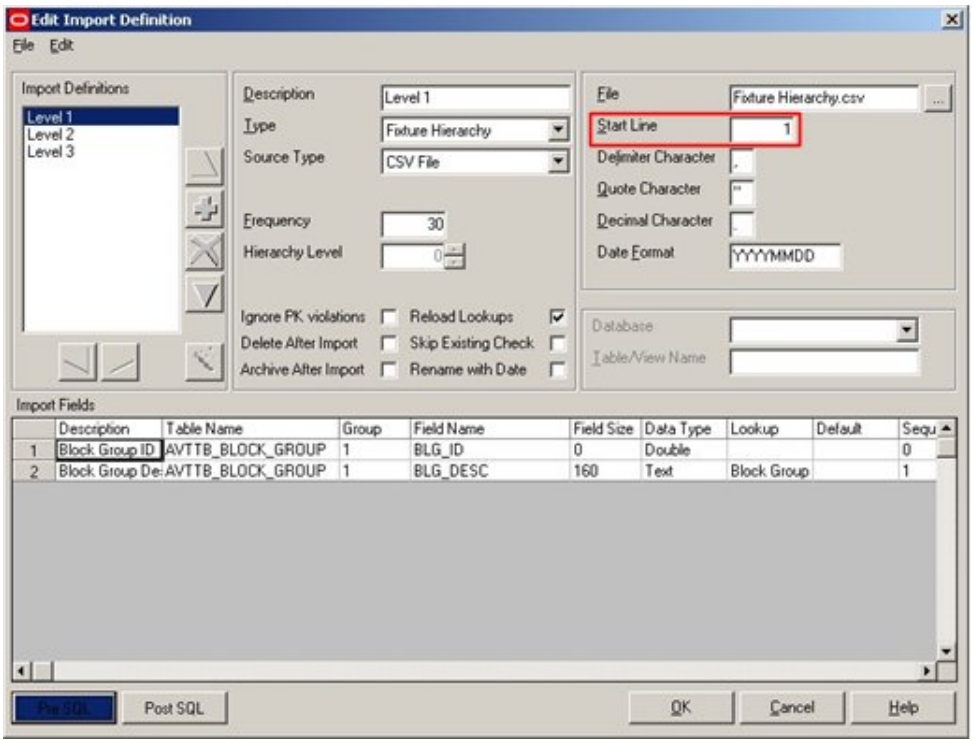


Clicking on the Add button will bring up the Add SQL dialogue box, where the SQL statement can be added.

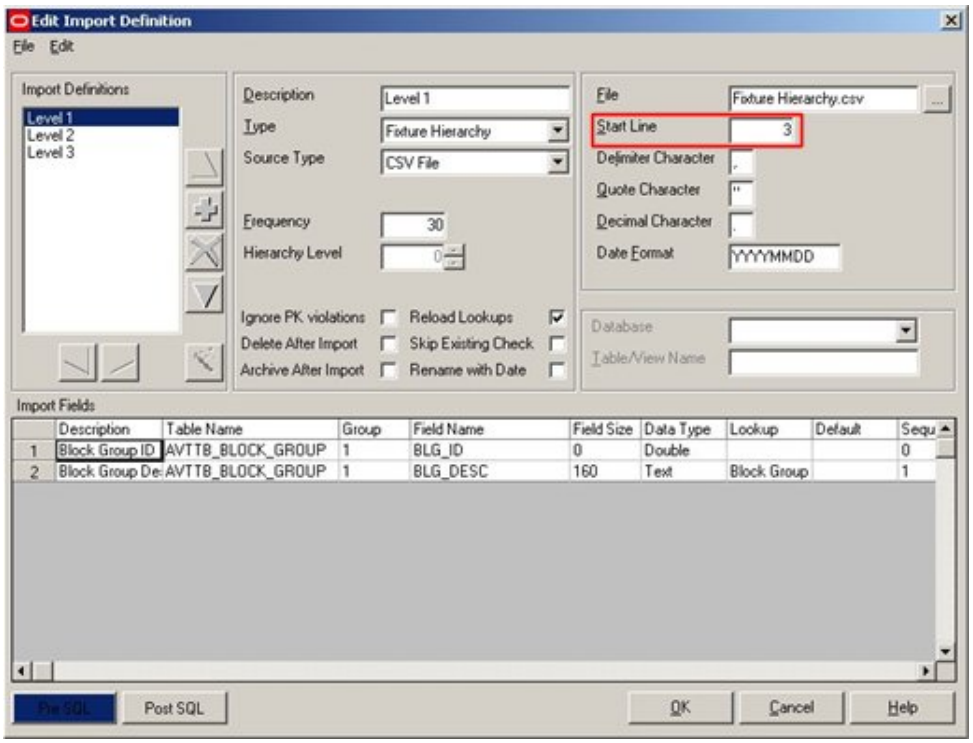


Resetting the Start Line Number

Resetting the line number is important. Until now we have had the line number set to 1, because this reads the first line of the .csv file - the information titles.



We must now set this to line number 3 for each of the Import definitions, so we read the first line of actual data.



This means the Data Import Process will read from line 3, which is the first line of data we actually want to import.

Note: Failing to reset the line number before running Data Importer is a common source of error.

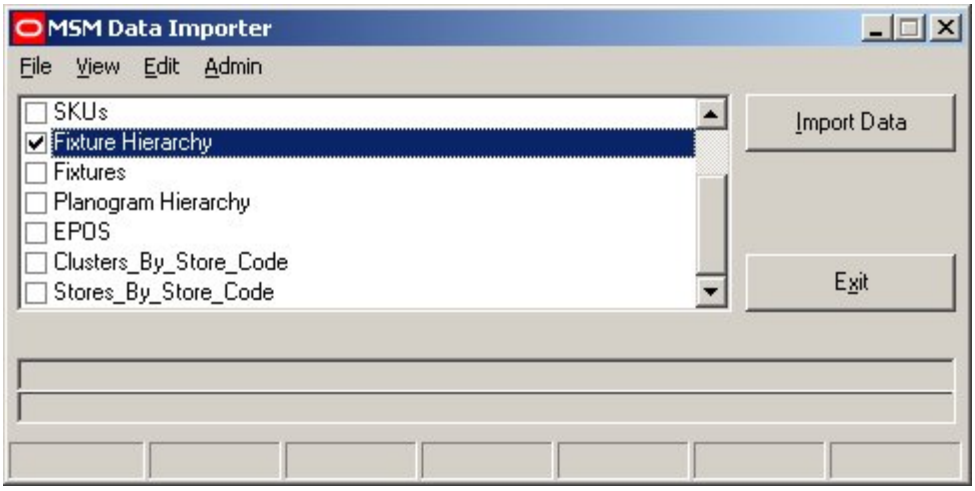
Testing the Import Definition

Overview of Testing the Import Definition

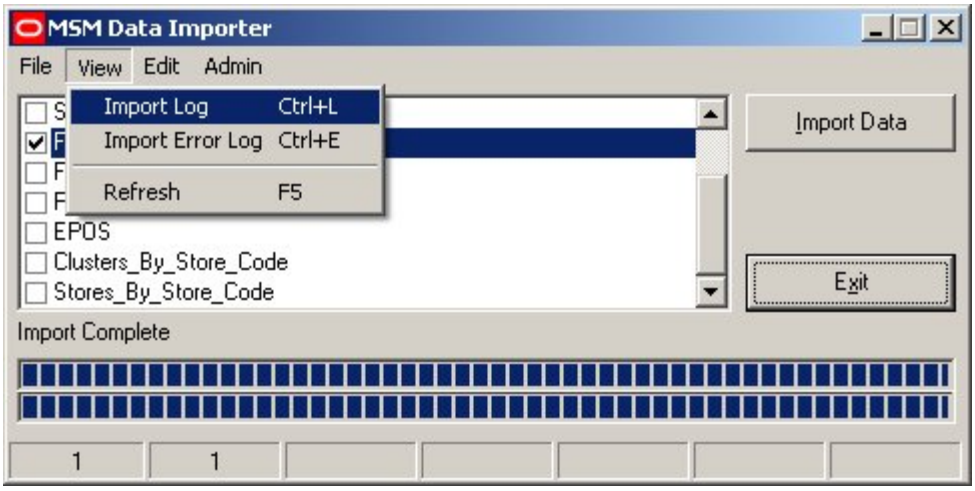
It is generally a good idea to test any new import definition with a few lines of data. This will allow problems to be identified and analyzed before a full import (which could take an appreciable period of time) is carried out. In this instance, there are only three lines of data in the Hierarchy to be imported, so it is unnecessary to carry out a small scale test.

Running Data Importer and Viewing the Error Log

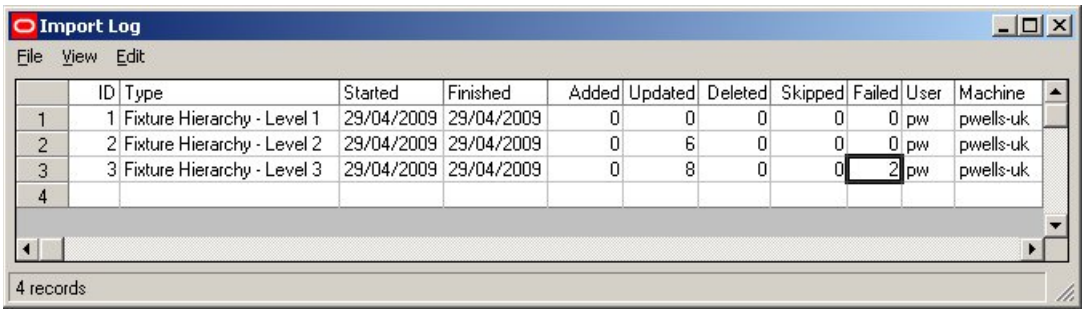
Data Importer can be run by ticking the Fixture Hierarchy checkbox and clicking on Import Data.



After the Import has run use the Import Log option on the View pull down menu to see how the Import has performed.



This will bring up the Import log.

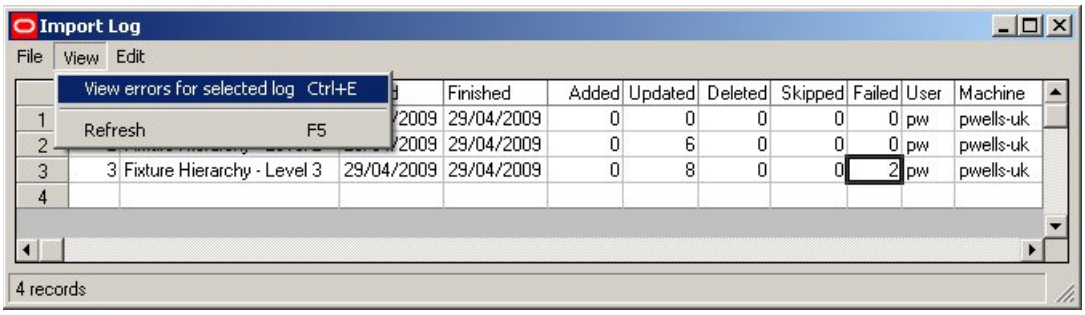


	ID	Type	Started	Finished	Added	Updated	Deleted	Skipped	Failed	User	Machine
1	1	Fixture Hierarchy - Level 1	29/04/2009	29/04/2009	0	0	0	0	0	pw	pwells-uk
2	2	Fixture Hierarchy - Level 2	29/04/2009	29/04/2009	0	6	0	0	0	pw	pwells-uk
3	3	Fixture Hierarchy - Level 3	29/04/2009	29/04/2009	0	8	0	0	2	pw	pwells-uk
4											

Examination of the record shows that there has been a failure during the import of Hierarchy Level 3.

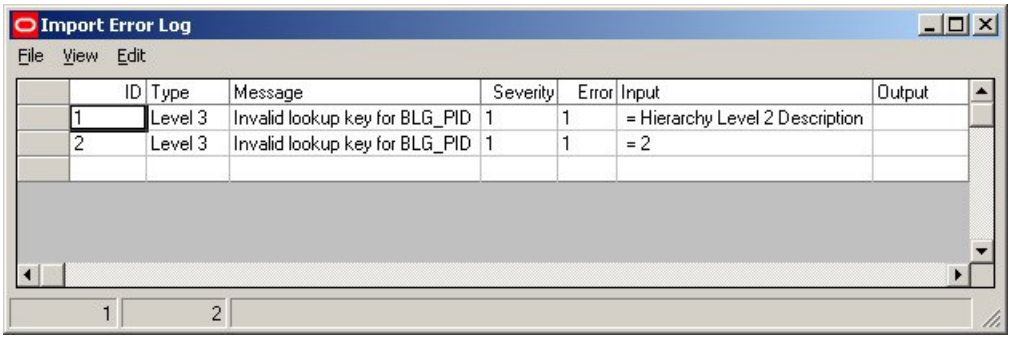
Viewing the Error Log

We need to view the Error log for that specific part of the import. To do this, highlight the required line in the Import Log and select the View errors for selected log option from the View pull down menu.



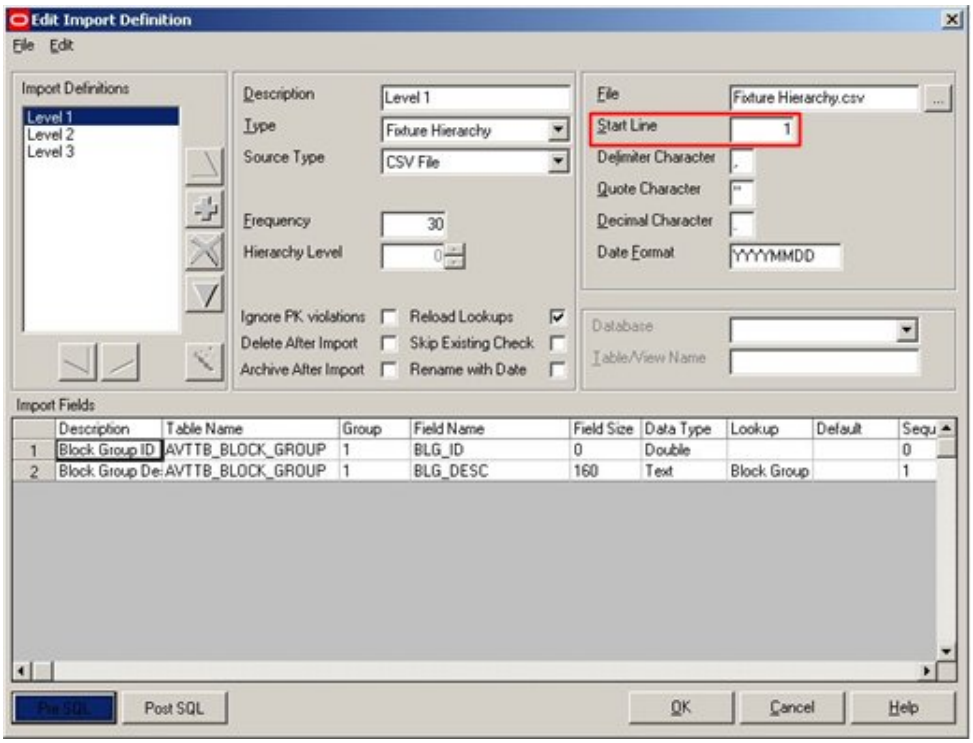
				Finished	Added	Updated	Deleted	Skipped	Failed	User	Machine
1			/2009	29/04/2009	0	0	0	0	0	pw	pwells-uk
2			/2009	29/04/2009	0	6	0	0	0	pw	pwells-uk
3	3	Fixture Hierarchy - Level 3	29/04/2009	29/04/2009	0	8	0	0	2	pw	pwells-uk
4											

This will bring up the Import Error Log.



ID	Type	Message	Severity	Error	Input	Output
1	Level 3	Invalid lookup key for BLG_PID	1	1	= Hierarchy Level 2 Description	
2	Level 3	Invalid lookup key for BLG_PID	1	1	= 2	

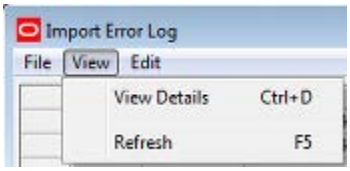
The Input in the error log is 'Hierarchy Level 2' and then '2'. This suggests we are importing data from lines one and two of the .csv file, not line three as we should be. Because the data is not as expected, the import will error.



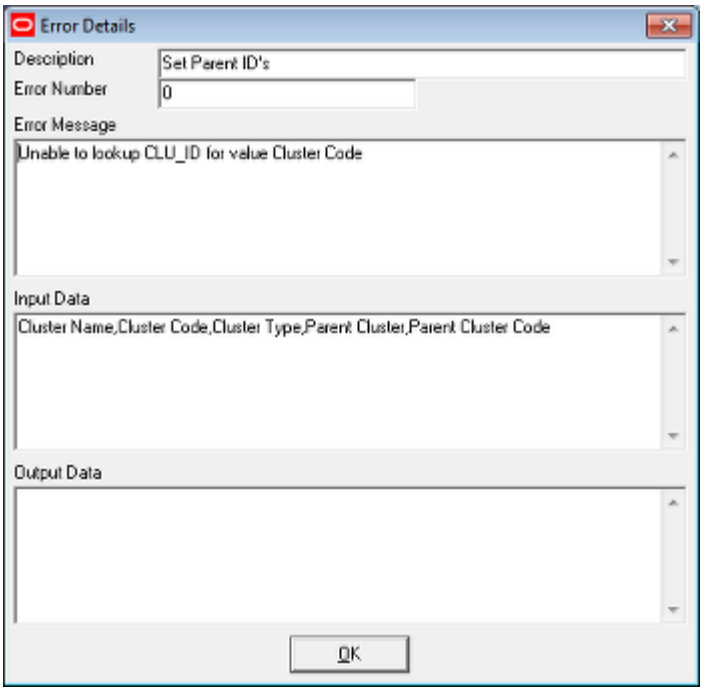
This would be readily corrected by changing the Start Line to '3', allowing the import to run correctly.

Seeing the Error in more Detail

To **see the error in more detail**, it is possible to do so by selecting the View Details option from the View pull down menu of the **Import Error Log** dialog box.



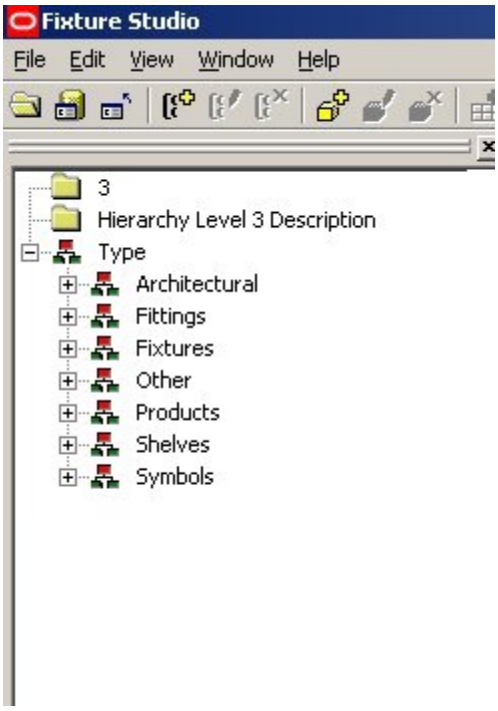
This will bring up the Error Details dialogue box, which allows the error to be seen more clearly.



This is useful if the data is extensive and difficult to see in its entirety in the Import Error Log.

Consequences of the Error

The error has resulted in some unintended groups being added to the Fixture hierarchy.



This is a good illustration as to why the import should be tested on small quantities of data before being run on a large quantity.

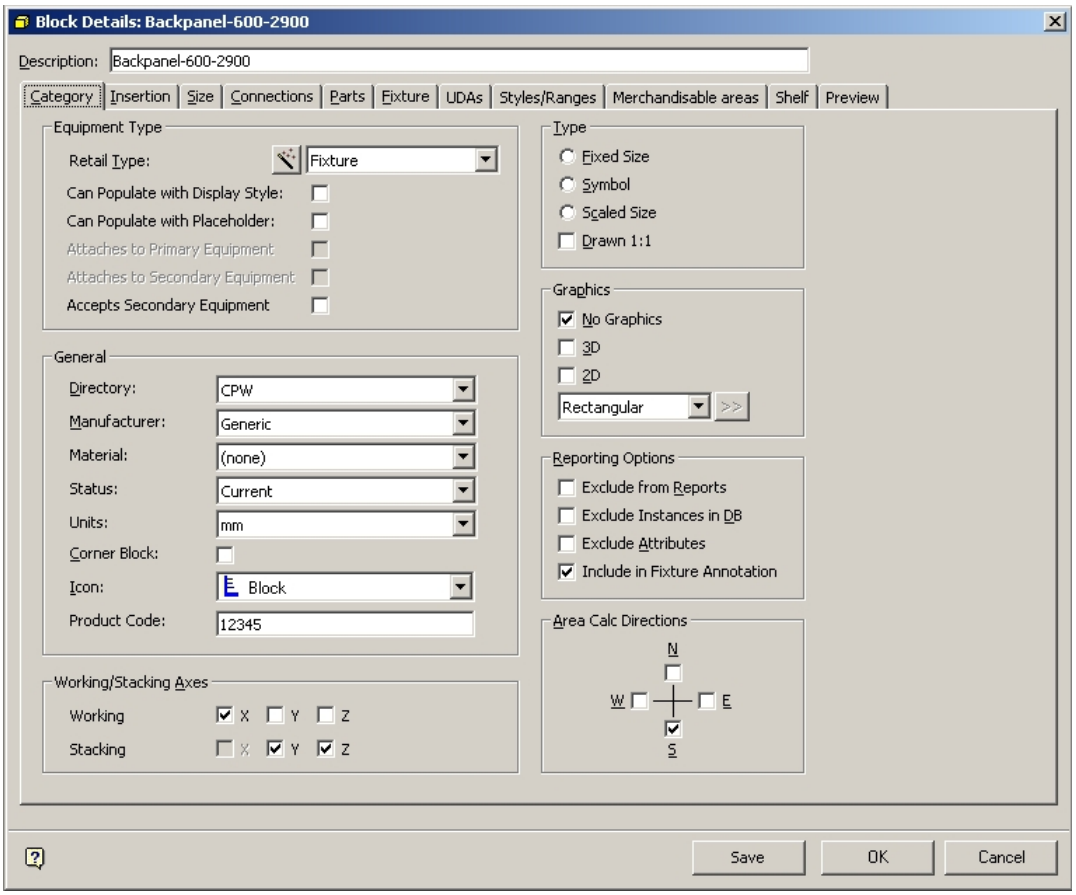
10

Adding Fixtures

Planning Adding Fixtures

Adding Fixtures

Adding Fixtures is more complex than adding groups to the fixture hierarchy.



Each Fixture has a significant amount of information associated with it - much of which can be imported via Data Importer. This example will import some (but not all) of the data required to fully define a fixture.

Use of Entity Relationship Diagrams

It is suggested users make use of the Entity relationship diagrams in the *Oracle Retail Macro Space Planning Data Model*. Alternatively, they can create their own using an application such as Oracle's SQL Developer.

Reviewing the Block Definition Table

The Block Definition table holds much of the information on a specific type of block. It should be reviewed to establish which columns of data need to be populated.

Columns | Data | Indexes | Relationships | Constraints | Triggers | Partit

Drag a column header here to group by that column

Column Name	Datatype	Key	Not Null	Def...
BLK_ID	int	☑	☑	
BLK_NAME	nvarchar(32)	☐	☑	
BLK_DESC	nvarchar(80)	☐	☐	
BLK_XSIZ	real	☐	☑	
BLK_YSIZ	real	☐	☑	
BLK_ZSIZ	real	☐	☑	
LAY_ID	int	☐	☑	
BLT_ID	smallint	☐	☑	(0)
MAN_ID	int	☐	☐	
BLS_ID	smallint	☐	☑	(0)
BLI_ID	smallint	☐	☑	(7)
LVL_ID	int	☐	☑	(3)
UNT_ID	int	☐	☑	
DIR_ID	int	☐	☑	(3)
SIZ_ID	int	☐	☐	
CTG_ID	int	☐	☐	
SCH_ID	int	☐	☐	
ICO_ID	int	☐	☑	(1)
BLK_ORIENTATION	real	☐	☑	(270)
BLK_MOUNTING	smallint	☐	☑	(0)
BLK_GRAPHICS	smallint	☐	☑	(0)

Note: The above screen shot only shows part of the **Block Definition** table.

All fields marked as not-null, need to be populated (either directly or by means of a default). In additional, many nullable fields may require populating - for example the Block Description (BLK_DESC) field.

Note: Not Null fields that have assigned default values may not need to be populated as the default value will be adopted in the case of no value being directly input.

Some fields will be populated directly in this table, and some fields will be read from other tables. Accordingly, as the required input information is listed, it will be necessary to identify which parent table the information is input into.

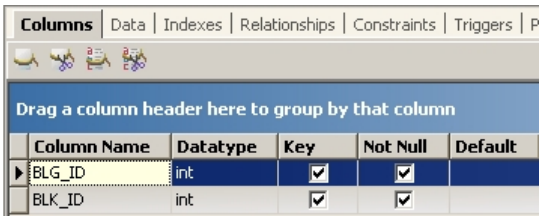
Field	Purpose	Data Type	Not Null	Default	Parent table	Form
BLK_ID	Block ID (Primary key)	Integer	Yes	None	N/A	Look up ID
BLK_NAME	Block Name	Nvarchar	Yes	None	N/A	User Input
BLK_DESC	Block Description	Nvarchar	No	None	N/A	User Input
BLK_XSIZ	Block Length	Real	Yes	None	N/A	User Input

Field	Purpose	Data Type	Not Null	Default	Parent table	Form
BLK_YSIZ	Block Depth	Real	Yes	None	N/A	User Input
BLK_ZSIZ	Block Height	Real	Yes	None	N/A	User Input
LAY_ID	Parent AutoCAD layer	Integer	Yes	None	**Layer Alias**	User Input /look-up
BLK_TYP_ID	Block type	Small Int	Yes	0	**Block Type**	User Input /look-up
BLS_ID	Block Shape	Small Int	Yes	0	**Blk Shape**	User Input /look-up
BLI_ID	Block Insertion Point	Small Int	Yes	0	**Blk Insertion**	User Input /look-up
LVL_ID	Block Level	Int	Yes	3	**Level Type**	User Input /look-up
UNIT_ID	Units	Int	Yes	None	**Unit**	User Input /look-up
DIR_ID	Directory	Int	Yes	3	**Directory**	User Input /look-up
SIZ_ID	Size Group	Int	No	None	**Size**	User Input /look-up
STA_ID	Status	Int	Yes	12	**Status**	User Input /look-up
BLK_CREATED	Date block Created	Datetime	Yes	None	N/A	Date Option
BLK_UPDATED	Date block updated	Datetime	Yes	None	N/A	Date Option
BLK_CREATED_BY	User who Created Block	Nvarchar	Yes	None	N/A	User Option
BLK_UPDATED_BY	User who updated block	Nvarchar	Yes	None	N/A	User Option
BLK_CODE	Block Code	Nvarchar	No	None	N/A	User Option

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

Reviewing the Block-Group Link Table

The Block-Group Link table should be reviewed to establish which columns of data need to be populated.



All fields marked as not-null need to be populated. Both fields will be read from other tables. Accordingly, as the required input information is listed, it will be necessary to identify which parent table the information is input into.

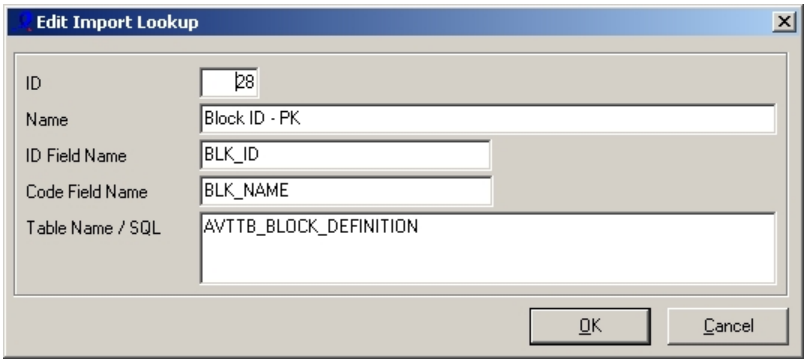
> **Note**: For full details of the schema see the *Oracle Retail Macro Space Planning Data Model*.

Field	Purpose	Data Type	Not Null	Default	Parent table	Form
BLK_ID	Block ID	Int	Yes	No	**Block Definition**	User Input /look-up
BLG_ID	Fixture Group ID	Int	Yes	No	**Block Group**	User Input /look-up

Populating this table will require two lookups: one in the **Block Definition** table and one in the **Block Group** table.

BLK_ID

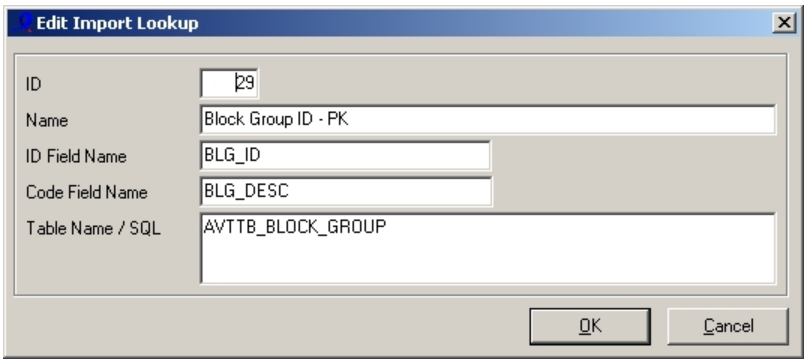
This look up is defined for the **Block Definition** table.



The input from the .csv file will be the name of a Block [Fixture] (BLK_Name), and the look-up will return the Block ID (BLK_ID) assigned to that block in the database.

BLG_ID

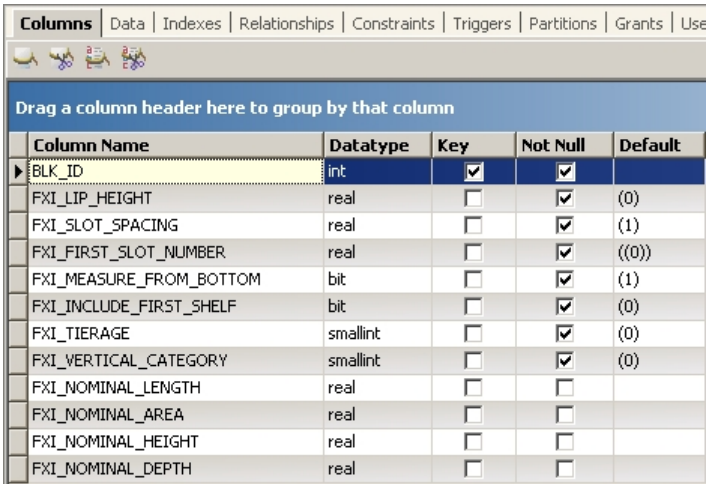
This look up is defined for the **Block Group** table.



The input from the .csv file will be the name of a Block [Fixture] Group (BLG_DESC), and the look-up will return the Block Group ID (BLG_ID) assigned to that block group in the database.

Reviewing the Fixture Info Table

The **Fixture Info** table should be reviewed to establish which columns of data need to be populated.



Columns | Data | Indexes | Relationships | Constraints | Triggers | Partitions | Grants | Use

Drag a column header here to group by that column

Column Name	Datatype	Key	Not Null	Default
BLK_ID	int	☑	☑	
FXI_LIP_HEIGHT	real	☐	☑	(0)
FXI_SLOT_SPACING	real	☐	☑	(1)
FXI_FIRST_SLOT_NUMBER	real	☐	☑	((0))
FXI_MEASURE_FROM_BOTTOM	bit	☐	☑	(1)
FXI_INCLUDE_FIRST_SHELF	bit	☐	☑	(0)
FXI_TIERAGE	smallint	☐	☑	(0)
FXI_VERTICAL_CATEGORY	smallint	☐	☑	(0)
FXI_NOMINAL_LENGTH	real	☐	☐	
FXI_NOMINAL_AREA	real	☐	☐	
FXI_NOMINAL_HEIGHT	real	☐	☐	
FXI_NOMINAL_DEPTH	real	☐	☐	

All fields marked as not-null need to be populated. In additional, some nullable fields may require populating - for example the Nominal Length (FXI_NOMINAL_LENGTH) field.

> **Note**: Not Null fields that have assigned default values may not need to be populated as the default value will be adopted in the case of no value being directly input.

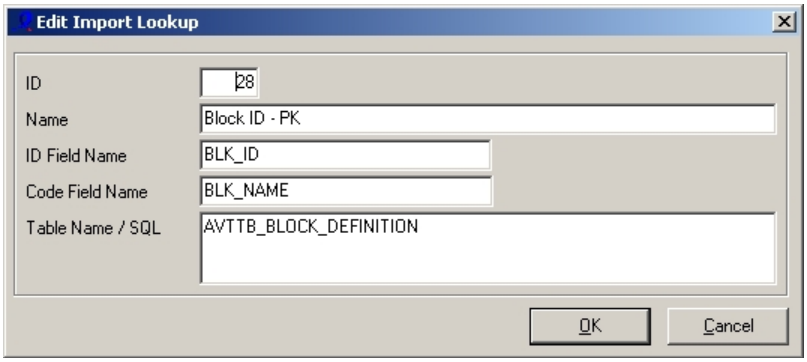
Some fields will be populated directly in this table, and some fields will be read from other tables. Accordingly, as the required input information is listed, it will be necessary to identify which parent table the information is input into.

Field	Purpose	Data Type	Not Null	Default	Parent table	Form
BLK_ID	Block ID	Int	Yes	No	**Block Definition**	User Input /look-up

Field	Purpose	Data Type	Not Null	Default	Parent table	Form
FXI_NOMINAL_LENGTH	Nominal Length	Real	No	No	N/A	User Input
FXI_NOMINAL_HEIGHT	Nominal Height	Real	No	No	N/A	User Input
FXI_NOMINAL DEPTH	Nominal Depth	Real	No	No	N/A	User Input

BLK_ID

This look up is defined for the **Block Definition** table.

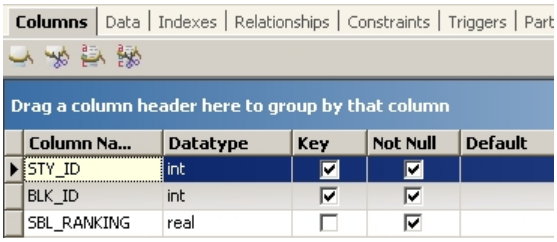


The input from the .csv file will be the name of a Block (Fixture), and the look-up will return the Block ID (BLK_ID) assigned to that block in the database.

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

Reviewing the Style-Block Link Table

The **Style-Block Link** table should be reviewed to establish which columns of data need to be populated.



All fields marked as not-null need to be populated.

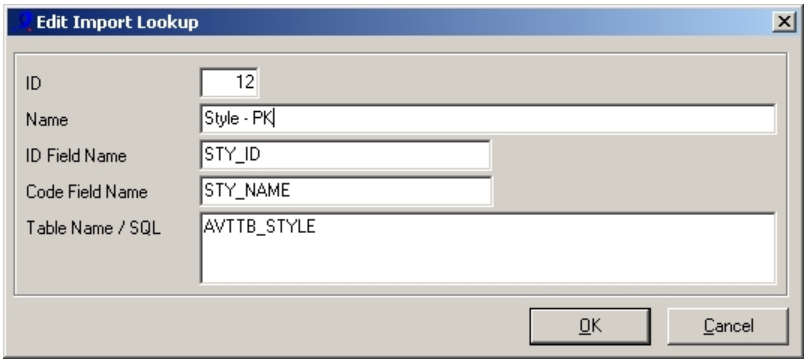
Two of the three fields will be read from other tables. Accordingly, as the required input information is listed, it will be necessary to identify which parent table the information is input into.

Field	Purpose	Data Type	Not Null	Default	Parent table	Form
STY_ID	Style ID	Int	Yes	No	AVTTB_STYLE	User Input /look -up
BLK_ID	Block ID	Int	Yes	No	AVTTB_BLOCK_DEFINITIO N	User Input /look -up
SBL_RANKIN G	Style Block Link Rankin g	Real	Yes	No	N/A	User Input

Populating this table will require two lookups: one in the **Style** table and one in the **Block Definition** table. It will also require information to be input for the Style Block Link Ranking.

STY_ID

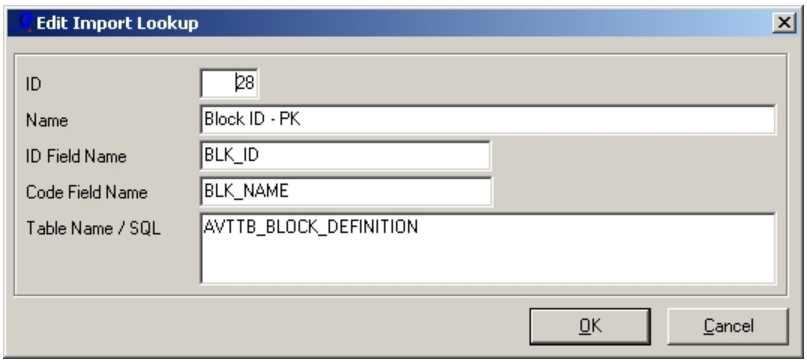
This look up is defined for the Style table.



The input from the .csv file will be the name of a Style (STY_NAME), and the look-up will return the Style ID (STY_ID) assigned to that Style in the database. More Info

BLK_ID

This look up is defined for the **Block Description** table.

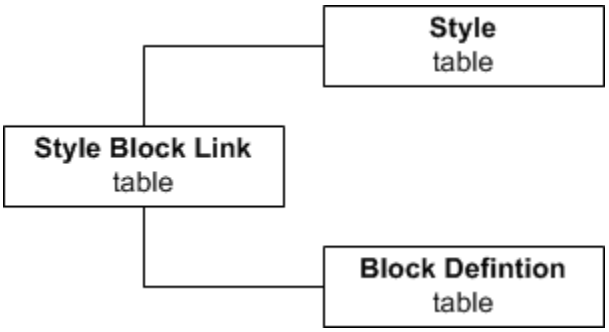


The input from the .csv file will be the name of a Block (Fixture), and the look-up will return the Block ID (BLK_ID) assigned to that block in the database.

> **Note**: For more information on this table see the *Oracle Retail Macro Space Planning Data Model.*

Fixtures and Styles in the Schema

The need to **look up a Style ID** provides a good example of why the schema needs to be understood in detail.



We need to add a Style ID (STY_ID) to the **Style Block Link** table. We will know the Style Name, and need to perform a Lookup on the **Style** table in order to return the value of the Style ID (STY_ID). The **Style** table will not be changed in any way - just used as a source of information to populate the **Style Block Link** table. Without this level of knowledge, we cannot populate the database with the correct values.

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

Reviewing the Block UDA Table

The **Block UDA** table holds information on the User Defined Attributes assigned to each block. It should be reviewed to establish which columns of data need to be populated.

Columns | Data | Indexes | Relationships | Constraints | Triggers | Partitio

Drag a column header here to group by that column

Column Name	Datatype	Key	Not Null	Default
BLK_ID	int	☑	☑	
BRU_VALUE1	nvarchar(32)	☐	☐	
BRU_VALUE2	nvarchar(32)	☐	☐	
BRU_VALUE3	nvarchar(32)	☐	☐	
BRU_VALUE4	nvarchar(32)	☐	☐	
BRU_VALUE5	nvarchar(32)	☐	☐	
BRU_VALUE6	nvarchar(32)	☐	☐	
BRU_VALUE7	nvarchar(32)	☐	☐	
BRU_VALUE8	nvarchar(32)	☐	☐	
BRU_VALUE9	nvarchar(32)	☐	☐	
BRU_VALUE10	nvarchar(32)	☐	☐	

The BLK_ID field marked as not-null needs to be populated. In additional, some nullable fields may require populating. This will depend on whether the specific UDA fields have been designated as mandatory when they were configured. This is quickly established by looking at the date in the **UDA Template** table.

Drag a column header here to group by that column

UDT_ID	UDT_NAME	UDT_TYPE	DAT_ID	UDT_MANDATORY	UDT_SEQUENCE
1	Purpose	0	0	☑	1
2	Departments	0	0	☐	2
3	Phased out in year:	0	1	☐	3
4	Manager	3	0	☐	1

UDT_TYPE type is Blocks (**Datatype** table). 'Purpose' is mandatory, while 'Departments' and 'Phased out in year:' are optional. The Data Type (DAT_ID) is found in the **Data Type** table: type 0 is string for example. The UDT Sequence describes the sequence the columns will be populated in the **Blocks UDA** table: 1 populating column one, etc. The Block ID (BLK_ID) will be read from another table: (**Block Definition**) via a look up.

Field	Purpose	Data Type	Not Null	Default	Parent table	Form
BLK_ID	Block ID	Int	Yes	No	AVTTB_BLOCK_DEFINITION	User Input /look-up
BRU_Value 1	Purpose	Text	Yes	No	N/A	User Input
BRU_Value 2	Department	Text	No	No	N/A	User Input
BRU_Value 3	Phased out in Year:	Integer	No	No	N/A	User Input

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

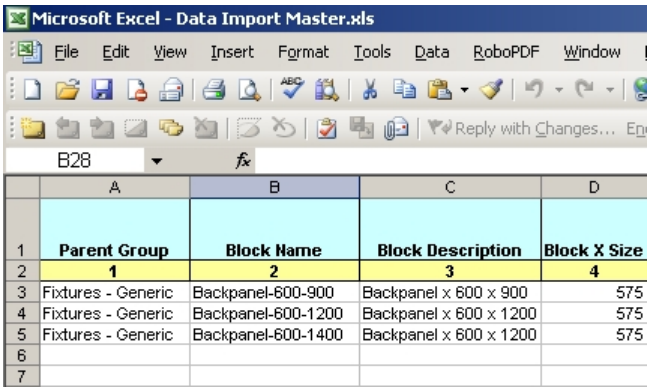
The Capture Spreadsheet

The Data Import Spreadsheet - Design

Before creating the Data Import spreadsheet, its **design** must be considered.

As errors in entering data into the spreadsheet, and errors extracting data from it, can lead to errors in importing data into the database, it is useful to design the spreadsheet in such a way that the possibility of error is minimized. There are several ways of achieving this:

- Labeling the spreadsheet columns clearly
- Numbering the spreadsheet columns
- Listing the tables and required fields
- Using lookups
- Validating Data input
- Labeling the spreadsheet columns clearly

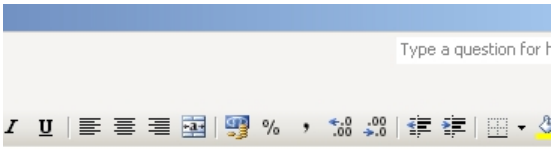


	A	B	C	D
1	Parent Group	Block Name	Block Description	Block X Size
2	1	2	3	4
3	Fixtures - Generic	Backpanel-600-900	Backpanel x 600 x 900	575
4	Fixtures - Generic	Backpanel-600-1200	Backpanel x 600 x 1200	575
5	Fixtures - Generic	Backpanel-600-1400	Backpanel x 600 x 1200	575
6				
7				

Column 1 of the spreadsheet can be read in during configuring data import. Clearly labelling the columns will make it easy to see the correct data is being selected during configuration.

Numbering the spreadsheet columns

In a large spreadsheet, it may be difficult to easily identify the correct column to reference. One way of overcoming this is to number the second row.



R	S	T	U	V
Style ID 2	Style Block Link Ranking 2	UDA Sequence	UDA-1: Purpose	UDA-2: Departments
18	19	20	21	22
Slatwall	2	1	Racking	Audio, Electrical
Slatwall	2	1	Racking	Audio, Electrical
Slatwall	2	1	Racking	Audio, Electrical

In the above example, we can see if we want information for UDA-2, we require column 22.

Listing the tables and required fields

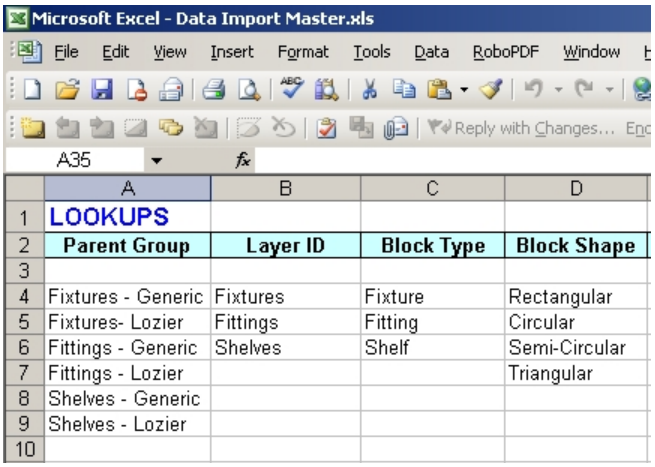
It is helpful to list the required tables and fields in a worksheet within the Data Import spreadsheet.

13				
14	TABLE INFORMATION			
15	TABLE		FIELD	COMMENT
16				
17	AVTTB_BLOCK_GROUP_LINK		BLG_ID	Primary/Foreign Key
18			BLK_ID	Primary/Foreign Key
19				
20				
21	AVTTB_BLOCK_DEFINITION		BLK_ID	Primary Key
22			BLK_NAME	
23			BLK_DESC	
24			BLK_XSIZ	
25			BLK_YSIZ	
26			BLK_ZSIZ	
27			LAY_ID	
28			BLT_ID	
29			MAN_ID	
30			BLS_ID	
31			BLI_ID	

Here, the required tables and fields are identified. Fields that are primary keys are identified, while non-nullable fields are in Bold. Listing data in this manner will also help if the configuration has to be altered at some point in the future.

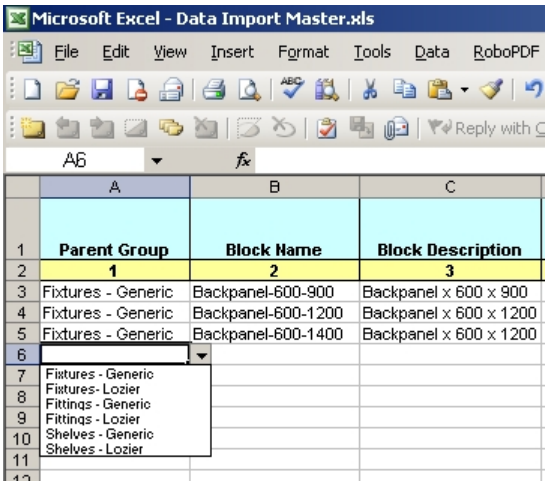
Using Lookups

It is sometimes useful to restrict the data that a user can enter to specific values. One way of restricting such values is by using lookups. Data can be entered in a list on one worksheet within the spreadsheet - in the example below lists of values appropriate to entering Fixture information are entered.



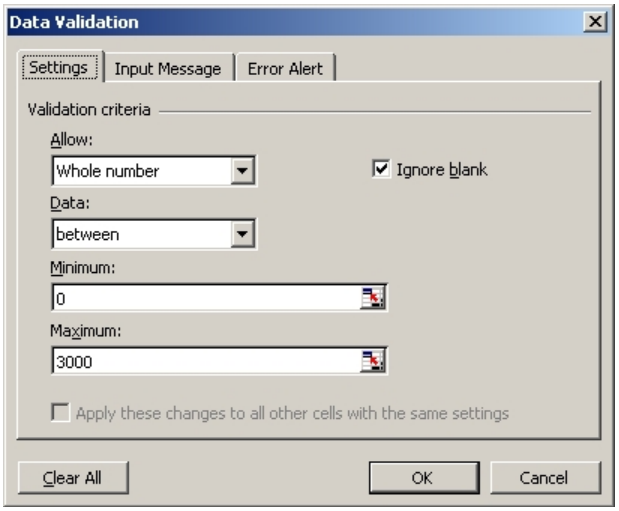
	A	B	C	D
1	LOOKUPS			
2	Parent Group	Layer ID	Block Type	Block Shape
3				
4	Fixtures - Generic	Fixtures	Fixture	Rectangular
5	Fixtures- Lozier	Fittings	Fitting	Circular
6	Fittings - Generic	Shelves	Shelf	Semi-Circular
7	Fittings - Lozier			Triangular
8	Shelves - Generic			
9	Shelves - Lozier			
10				

Input in the section of the spreadsheet used for importing data can then be restricted to those values defined in the look ups, only allowing the user to choose valid options.



Validating Data Input

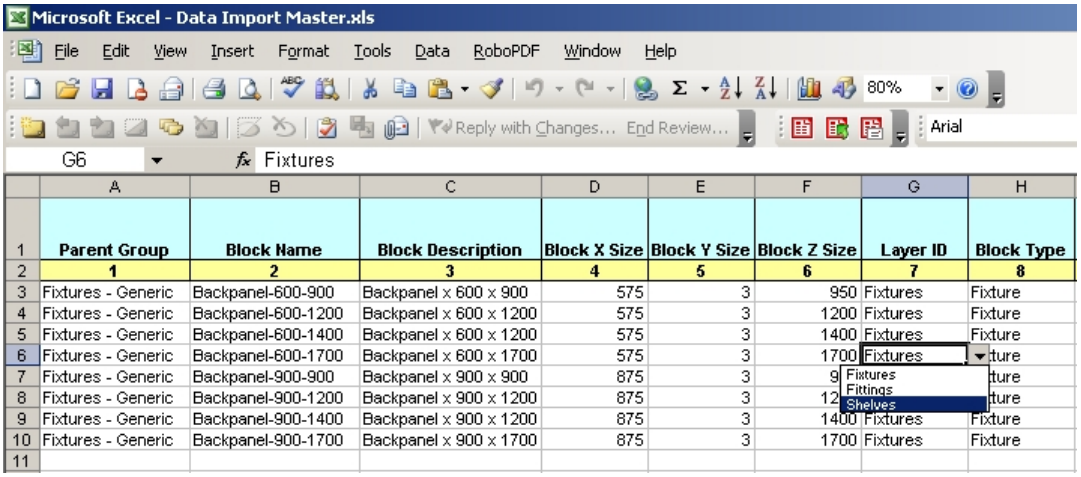
As well as restricting data to that contained in lookups, it is also possible to restrict data in other ways using data validation.



In the above example, data has been restricted to whole numbers between 0 - 3000. This would be useful in restricting (for example) dimensions to integers between specified values.

The Data Import Spreadsheet - Defining

The **Data Import spreadsheet** can then be set up.



	A	B	C	D	E	F	G	H
1	Parent Group	Block Name	Block Description	Block X Size	Block Y Size	Block Z Size	Layer ID	Block Type
2	1	2	3	4	5	6	7	8
3	Fixtures - Generic	Backpanel-600-900	Backpanel x 600 x 900	575	3	950	Fixtures	Fixture
4	Fixtures - Generic	Backpanel-600-1200	Backpanel x 600 x 1200	575	3	1200	Fixtures	Fixture
5	Fixtures - Generic	Backpanel-600-1400	Backpanel x 600 x 1200	575	3	1400	Fixtures	Fixture
6	Fixtures - Generic	Backpanel-600-1700	Backpanel x 600 x 1700	575	3	1700	Fixtures	ture
7	Fixtures - Generic	Backpanel-900-900	Backpanel x 900 x 900	875	3	9		ture
8	Fixtures - Generic	Backpanel-900-1200	Backpanel x 900 x 1200	875	3	12		ture
9	Fixtures - Generic	Backpanel-900-1400	Backpanel x 900 x 1200	875	3	1400	Fixtures	Fixture
10	Fixtures - Generic	Backpanel-900-1700	Backpanel x 900 x 1700	875	3	1700	Fixtures	Fixture
11								

The spreadsheet above has been set up with clear column names, and these column names have been arranged in sequence. For example, the earlier columns are for the Block Definition table, with columns associated with the Fixture Attribute come later. The columns are sequentially numbered to assist in identifying them. This will assist during configuring the import. Look-ups have been used to restrict data entry in a number of columns - for example the layer ID column is restricted to Fixtures, Fittings and Shelves. Data entry has also been restricted in other columns. For example the block name column has been restricted to a text length of 32 characters (as per the database), while the X, Y and Z Block Size columns have been restricted to integers between the range 0 - 3000.

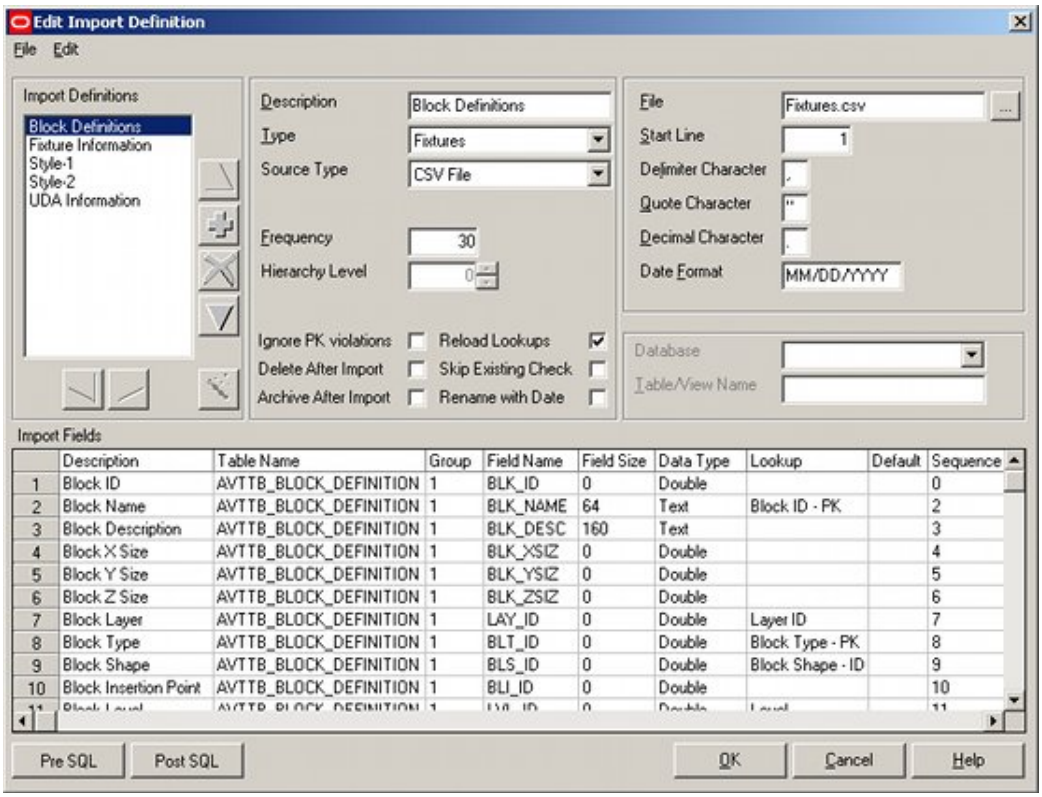
> **Note**: While these measures will not prevent errors in entering data into the spreadsheet, they can substantially cut down on the incidence.

Adding the Fixture Import Definitions

Setting up the Import Definitions

> **Note**: This import will not be covered in as much detail as the Fixture Hierarchy - only screen shots illustrating new facets of Import definitions will be discussed.

Five import definitions are required.



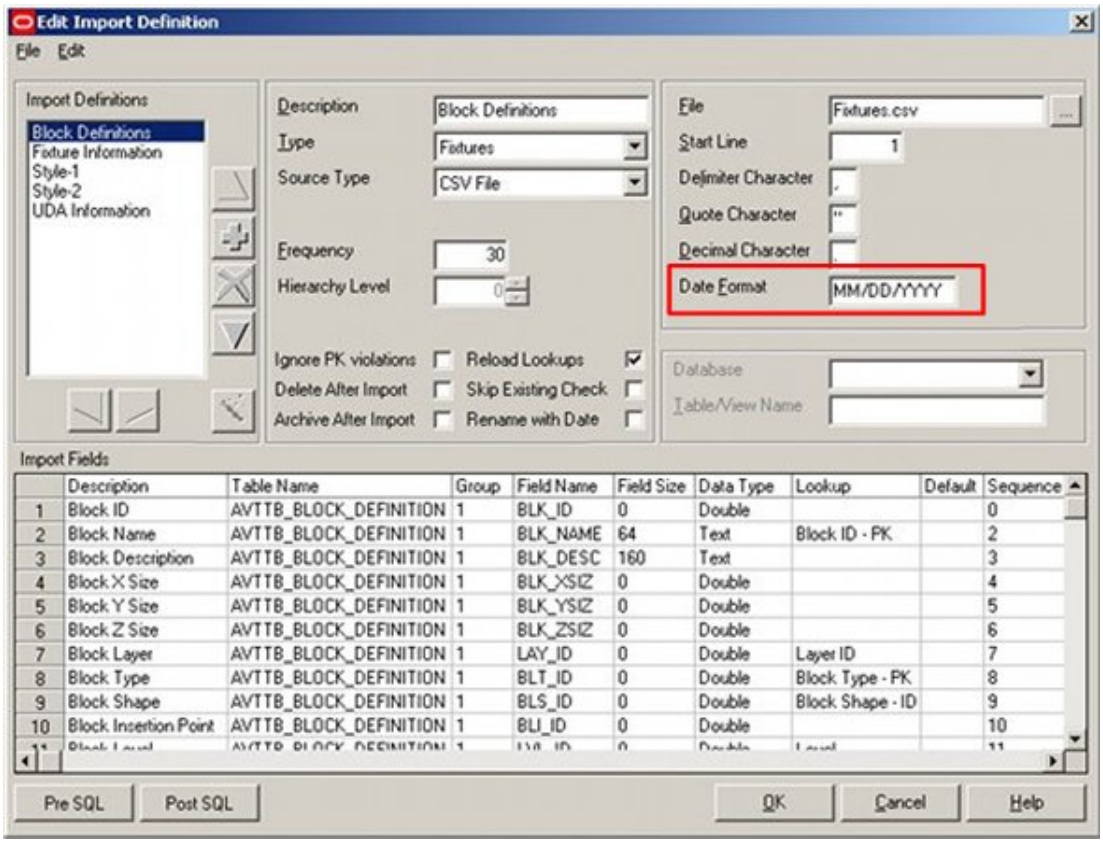
	Description	Table Name	Group	Field Name	Field Size	Data Type	Lookup	Default	Sequence
1	Block ID	AVTTB_BLOCK_DEFINITION	1	BLK_ID	0	Double			0
2	Block Name	AVTTB_BLOCK_DEFINITION	1	BLK_NAME	64	Text	Block ID - PK		2
3	Block Description	AVTTB_BLOCK_DEFINITION	1	BLK_DESC	160	Text			3
4	Block X Size	AVTTB_BLOCK_DEFINITION	1	BLK_XSIZ	0	Double			4
5	Block Y Size	AVTTB_BLOCK_DEFINITION	1	BLK_YSIZ	0	Double			5
6	Block Z Size	AVTTB_BLOCK_DEFINITION	1	BLK_ZSIZ	0	Double			6
7	Block Layer	AVTTB_BLOCK_DEFINITION	1	LAY_ID	0	Double	Layer ID		7
8	Block Type	AVTTB_BLOCK_DEFINITION	1	BLT_ID	0	Double	Block Type - PK		8
9	Block Shape	AVTTB_BLOCK_DEFINITION	1	BLS_ID	0	Double	Block Shape - ID		9
10	Block Insertion Point	AVTTB_BLOCK_DEFINITION	1	BLI_ID	0	Double			10

Block Definition will populate the **Block Definitions** table) and link with the parent Fixture Group in the **Fixture Block Link** table. Fixture Information will populate the **Fixture Info** table. Style-1 and Style-2 will populate the **Style Block Link** table to define the required styles. We are entering two styles, and using two definitions to do so. UDA Information will populate the **Block UDA** table.

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

Date Format

The **Date Format** has been set to MM/DD/YYYY.



This is because we are importing date in the US format of Month//Day/Year. Had we been importing UK dates, the DD/MM/YYYY format would have been required (Day/Month/Year).

Block Definitions

Adding Block Definitions

Adding to the **Block Definitions** table (and also adding to the **Block Group Link** table) is the largest import definition in this example.

> **Note**: It would have been perfectly valid to update the **Block Group Link** table using a separate Import Definition - it has been included in this Import Definition to illustrate the use of Groups.

The Block Definitions table is a large one - only part is shown below:

Columns | Data | Indexes | Relationships | Constraints | Triggers | Partit

Drag a column header here to group by that column

Column Name	Datatype	Key	Not Null	Def...
BLK_ID	int	☑	☑	
BLK_NAME	nvarchar(32)	☐	☑	
BLK_DESC	nvarchar(80)	☐	☐	
BLK_XSIZ	real	☐	☑	
BLK_YSIZ	real	☐	☑	
BLK_ZSIZ	real	☐	☑	
LAY_ID	int	☐	☑	
BLT_ID	smallint	☐	☑	(0)
MAN_ID	int	☐	☐	
BLS_ID	smallint	☐	☑	(0)
BLI_ID	smallint	☐	☑	(7)
LVL_ID	int	☐	☑	(3)
UNT_ID	int	☐	☑	
DIR_ID	int	☐	☑	(3)
SIZ_ID	int	☐	☐	
CTG_ID	int	☐	☐	
SCH_ID	int	☐	☐	
ICO_ID	int	☐	☑	(1)
BLK_ORIENTATION	real	☐	☑	(270)
BLK_MOUNTING	smallint	☐	☑	(0)
BLK_GRAPHICS	smallint	☐	☑	(0)

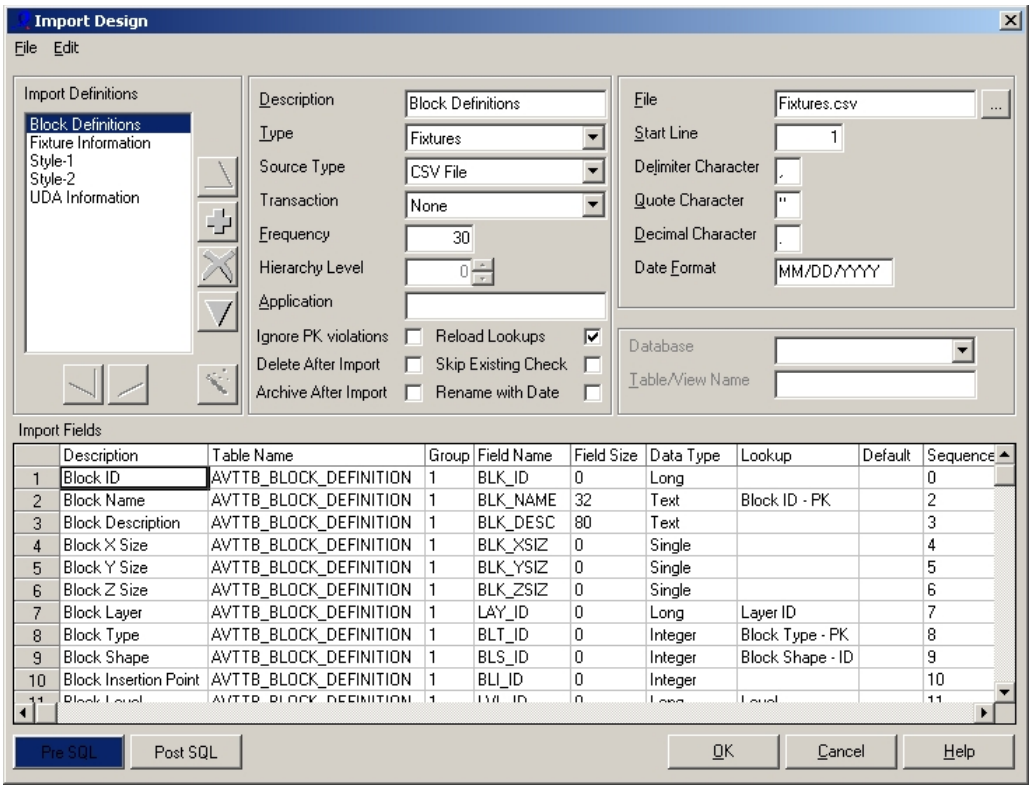
A significant number of fields in this table will be populated from the spreadsheet, both nullable and non-nullable. Some non-nullable fields will be populated by means of their defaults and will not require importing via Data Importer. The **Block Group Link** table is a smaller one.

Columns | Data | Indexes | Relationships | Constraints | Triggers | P

Drag a column header here to group by that column

Column Name	Datatype	Key	Not Null	Default
BLG_ID	int	☑	☑	
BLK_ID	int	☑	☑	

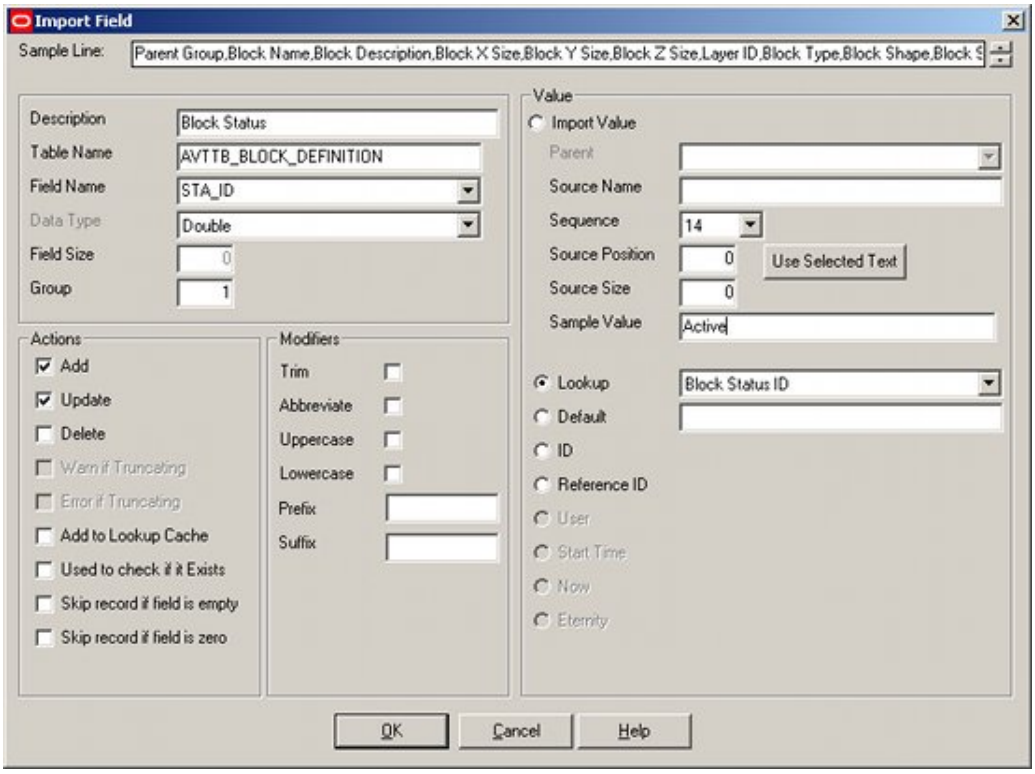
It is then possible to set up the Import Fields:



There are 21 Import fields to be defined - some of which provide illustrations of how to correctly use Data Importer. These are discussed in the next few topics.

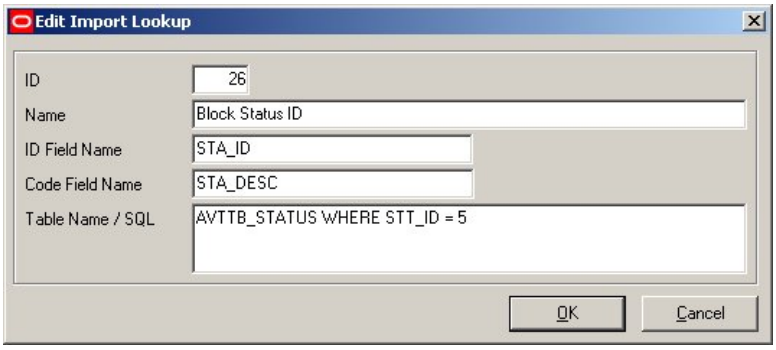
Configuring the Import Definition - Using SQL in the Lookup

There are **several points of interest** in the Block Definition Import Definition. One of these is in the Block Status Import Field.



Lookup using SQL

One requirement is to look up the Status for the block and convert it to a Status ID (STA_ID).



The status will be read in from the .csv file as a text string - for example Current. However, there are a number of status types so there may be several types of object that could have Current status. Accordingly, statuses have been assigned to Status Types - found in the **Status Type** table.

Columns | **Data** | Indexes | Relationships | Constraints | T

Drag a column header here to group by that column

STT_ID	STT_DESC
0	Store
1	Floor
2	Revision
3	Section
4	SectionOption
5	Block
6	Planogram
7	File
8	Product
9	Report

We can see blocks have been assigned a Status Type (STT_ID) of 5. Looking at the **Status** table shows us that there are several objects that can have a Current status assigned to them.

Columns | **Data** | Indexes | Relationships | Constraints | Triggers | Partitions |

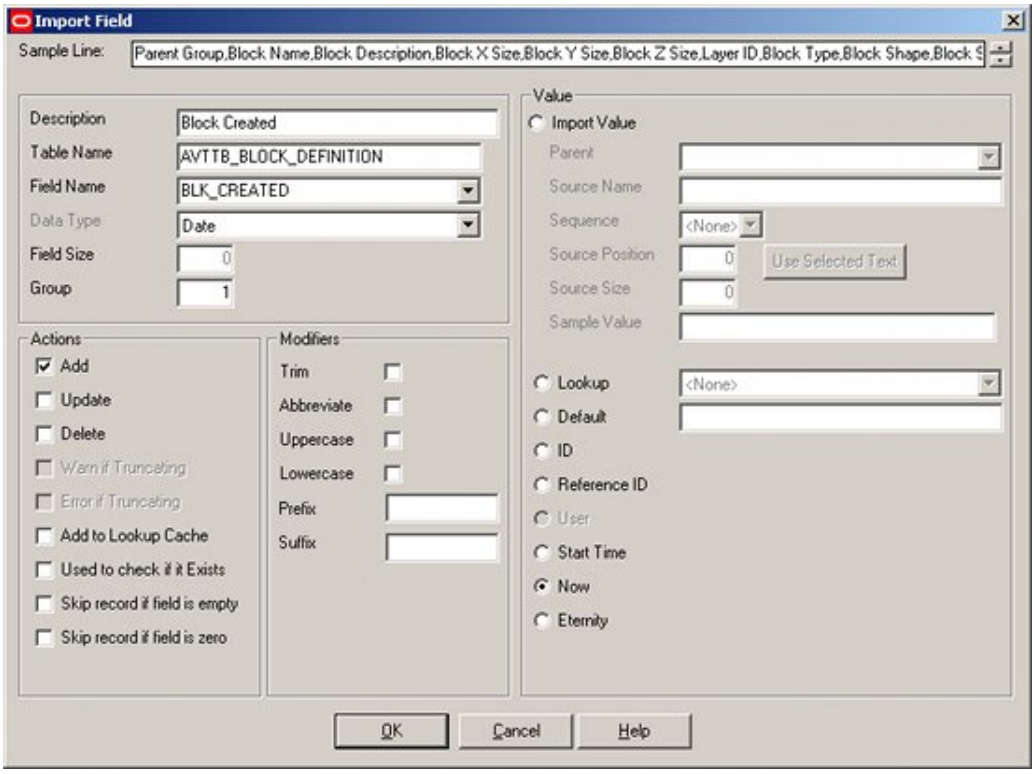
Drag a column header here to group by that column

STA_ID	STL_ID	STT_ID	STA_DESC	STA_ORDER	ST
27	2	8	Active	2	
52	2	9	Active	2	
22	4	2	Authorised	2	
25	4	7	Authorised	2	
15	3	0	Closed	4	
16	3	1	Closed	3	
9	2	2	Current	3	
10	2	3	Current	3	
12	2	5	Current	2	
13	2	6	Current	3	
14	2	7	Current	3	
18	3	3	Deleted	4	
17	3	2	Historical	4	
19	3	4	Historical	4	
24	3	7	Historical	4	
20	3	5	Old	3	
53	3	9	Old	3	
7	2	0	Open	2	

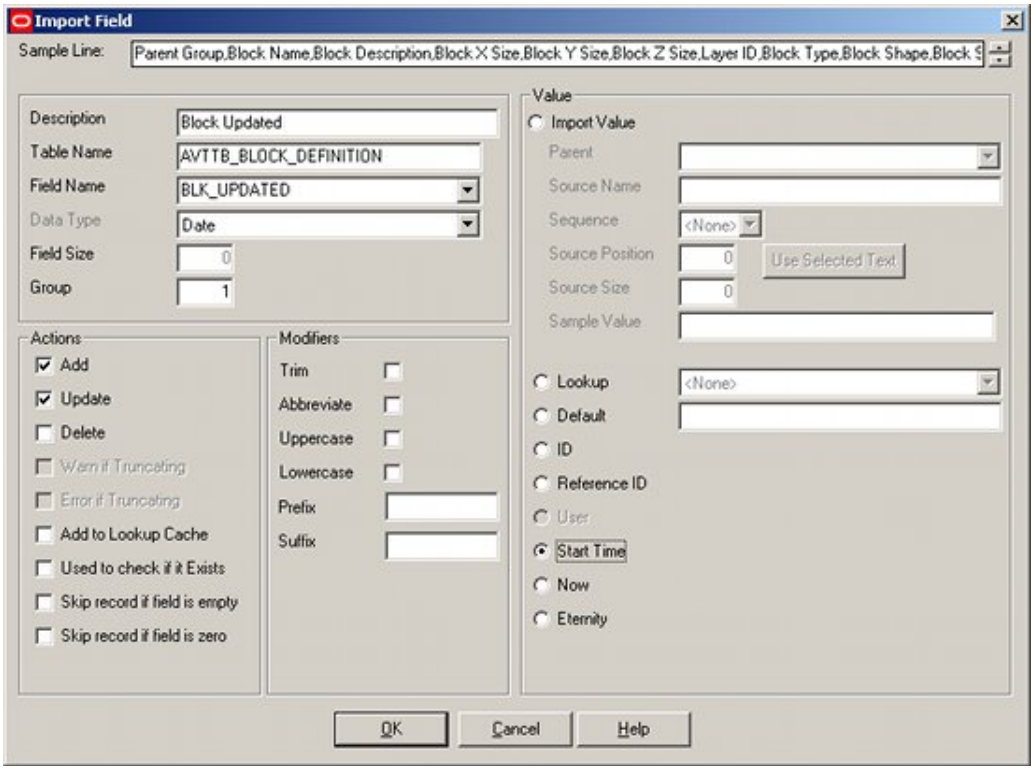
Accordingly, the Lookup looks in the **Status** table where STT_ID = 5 and returns the appropriate Status ID (STA_ID). This restricts the lookup to statuses associated with blocks, and prevents the lookup returning values associated with other objects such as Floors or Files.

Configuring the Import Definition - Using Dates

Using **Dates** requires some care.



In this example, we are adding a Block Created date (BLK_CREATED). As it is the creation date, we only select the Add option. We do not wish this field to change if the record is updated, so the Update option is left unchecked.

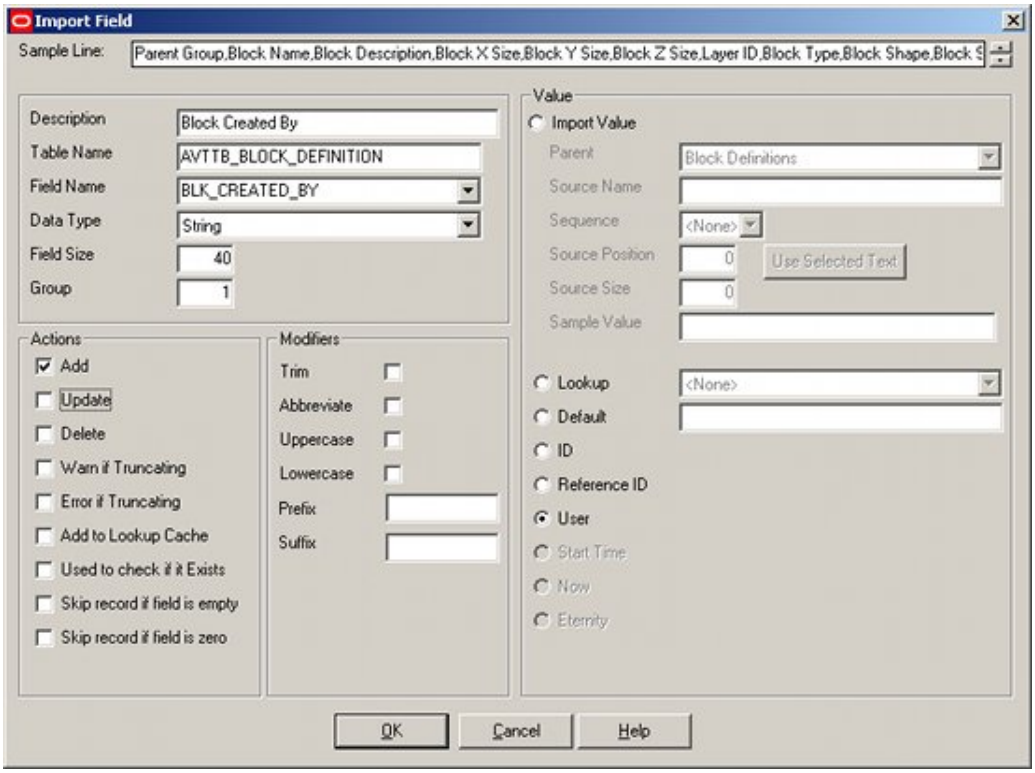


For the Block Updated field (BLK_UPDATED) we would select both Add and Update. This is because if we are adding a new record, we wish the block to have the Block

Updated field set to the same time as the Block Created field if the record is being added for the first time. If we are updating the record we wish the Block Updated field to be updated to the time the record was modified. There are two options for time - Start Time and Now. Start Time will result in the record being given the date and time the import process started, now will result in the record being given the date and time the specific record was actually imported.

Configuring the Import Definition - Using Users

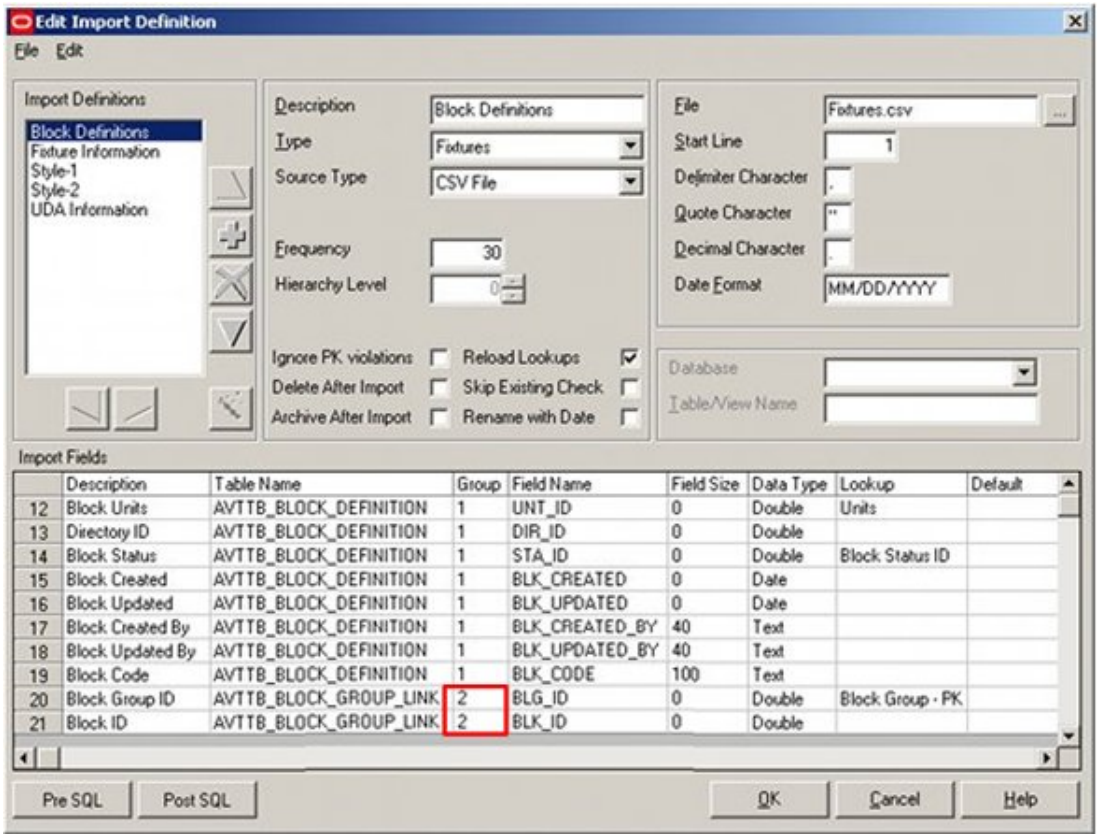
The **name of the user** importing the record can be appended to the record using the User option.



This will import the user name of the person carrying out the import into the pertinent table in the database.

Configuring the Import Definition - Using Groups

The **Block Definitions** Import definition provides an example of using Groups.

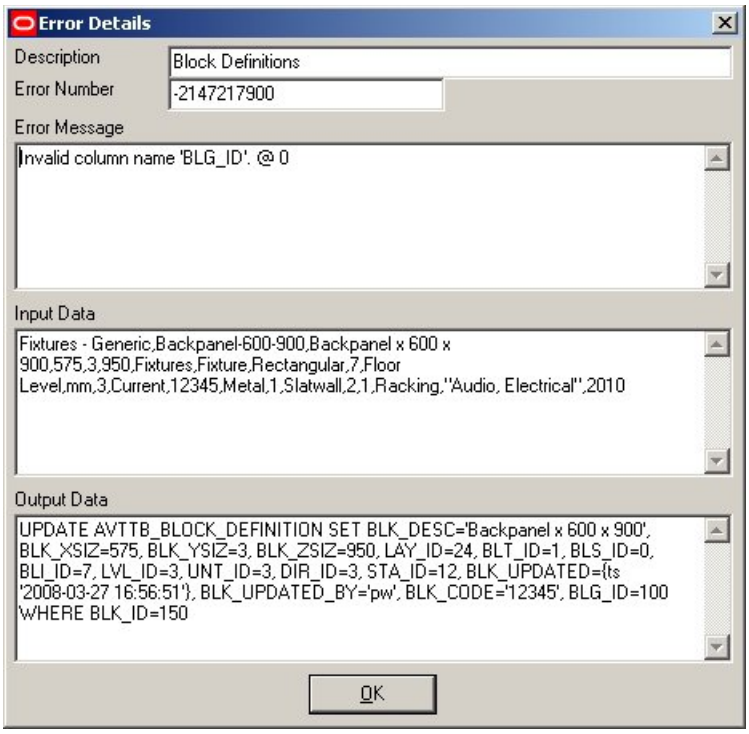


	Description	Table Name	Group	Field Name	Field Size	Data Type	Lookup	Default
12	Block Units	AVTTB_BLOCK_DEFINITION	1	UNT_ID	0	Double	Units	
13	Directory ID	AVTTB_BLOCK_DEFINITION	1	DIR_ID	0	Double		
14	Block Status	AVTTB_BLOCK_DEFINITION	1	STA_ID	0	Double	Block Status ID	
15	Block Created	AVTTB_BLOCK_DEFINITION	1	BLK_CREATED	0	Date		
16	Block Updated	AVTTB_BLOCK_DEFINITION	1	BLK_UPDATED	0	Date		
17	Block Created By	AVTTB_BLOCK_DEFINITION	1	BLK_CREATED_BY	40	Text		
18	Block Updated By	AVTTB_BLOCK_DEFINITION	1	BLK_UPDATED_BY	40	Text		
19	Block Code	AVTTB_BLOCK_DEFINITION	1	BLK_CODE	100	Text		
20	Block Group ID	AVTTB_BLOCK_GROUP_LINK	2	BLG_ID	0	Double	Block Group - PK	
21	Block ID	AVTTB_BLOCK_GROUP_LINK	2	BLK_ID	0	Double		

Towards the bottom of the list of definitions, the designated group has been changed from 1 to 2. This is because the table the data is being inserted into has changed from **Block Definition** to **Block Group Link** - each table for which data is being inserted into within a particular Import Definition must be assigned to a specific group. This is because Data Importer works by creating SQL Update statements which are then run against the database. As data is to be inserted into two different tables, two different SQL Update statements will be produced. Using Groups ensures that each update statement contains the data pertinent to the table the data will be inserted into.

Example of Errors

An error was deliberately created by changing the Group for the Block Group ID from 2 to 1. Data Importer then tried to insert the data into **Block Definition** table (Group 1) rather than the **Block Group Link** table (group 2). This produced the following error:

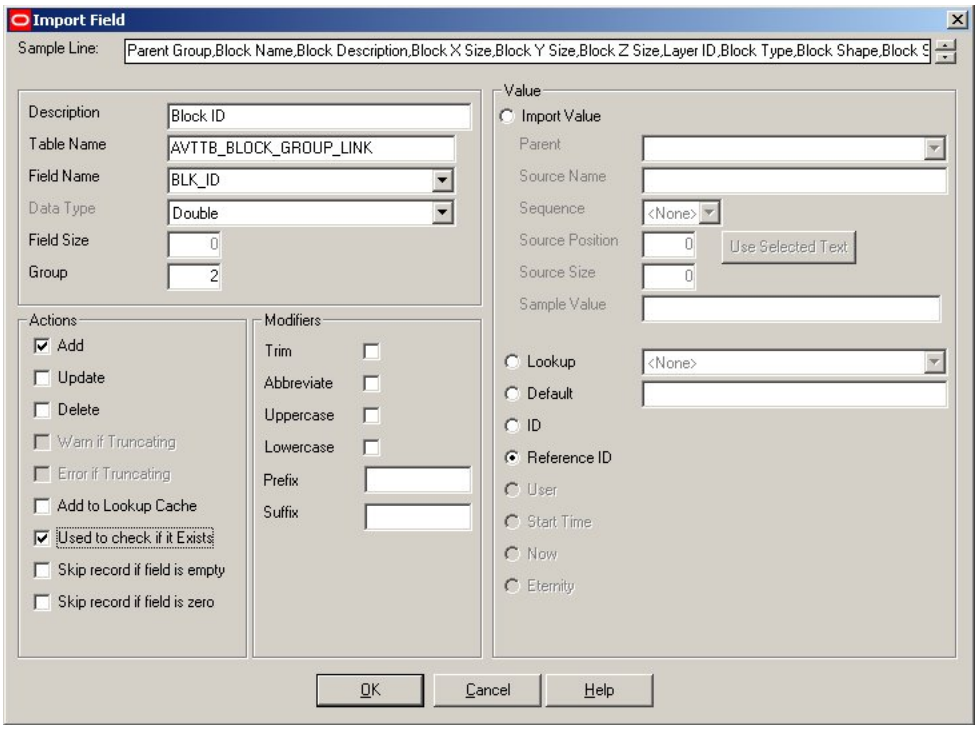


Data Importer tried to insert data into a BLG_ID column in the **Block Definition** table - and that column only exists in the **Block Group Link** table.

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

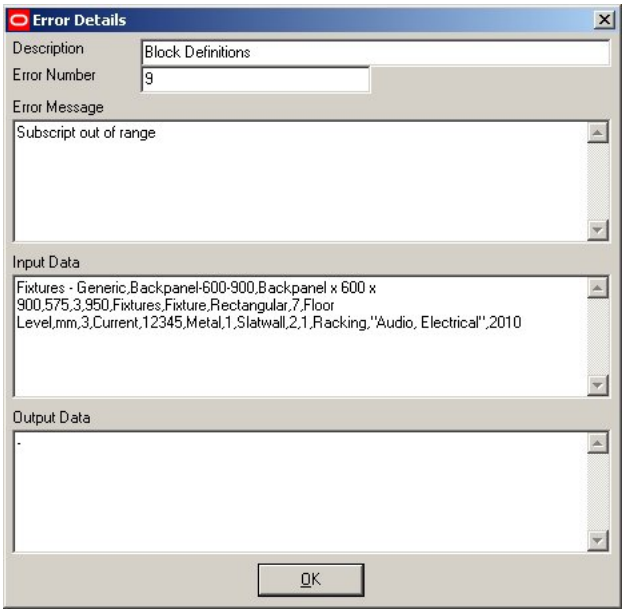
Configuring the Import Definition - Reference ID's

Reference ID's must be used when an ID has previously been looked up in a specific Import Definition.



In the example above we have previously used a lookup to convert a Block Name (BLK_NAME) into a Block ID (BLK_ID). This information is already available in this definition and using the lookup for a second time within the Block Definitions import definition will cause an error. (If it is necessary to use a lookup for Block name in another import definition [for example Fixture Information] then it may be used again for the first timer in that import definition, with a Reference ID being required for the second time of use in that import definition).

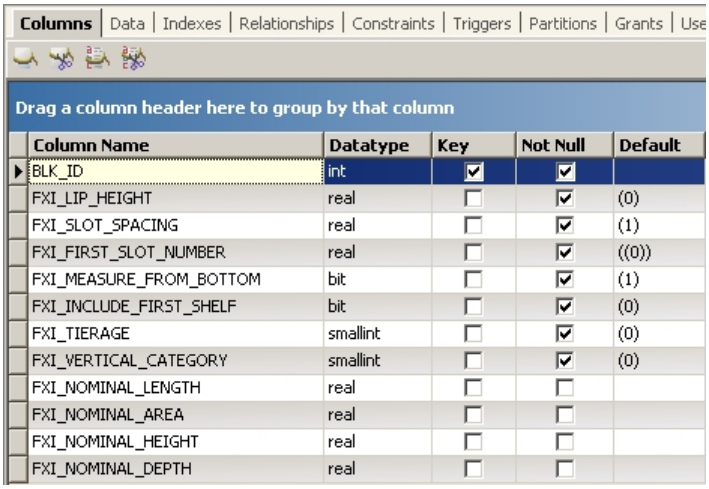
Note: A typical error message that might result from using a lookup for the second time instead of a Reference ID might look as follows:



Fixture Information

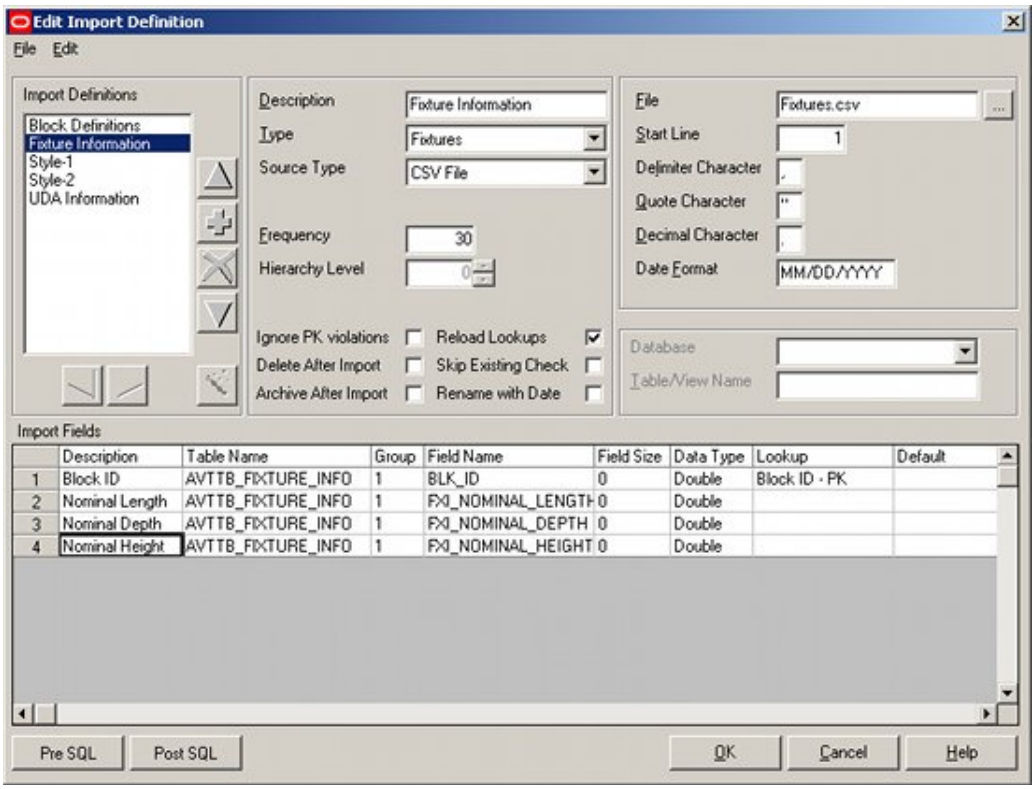
Adding Fixture Information

There are a number of columns in the **Fixture Info** table:

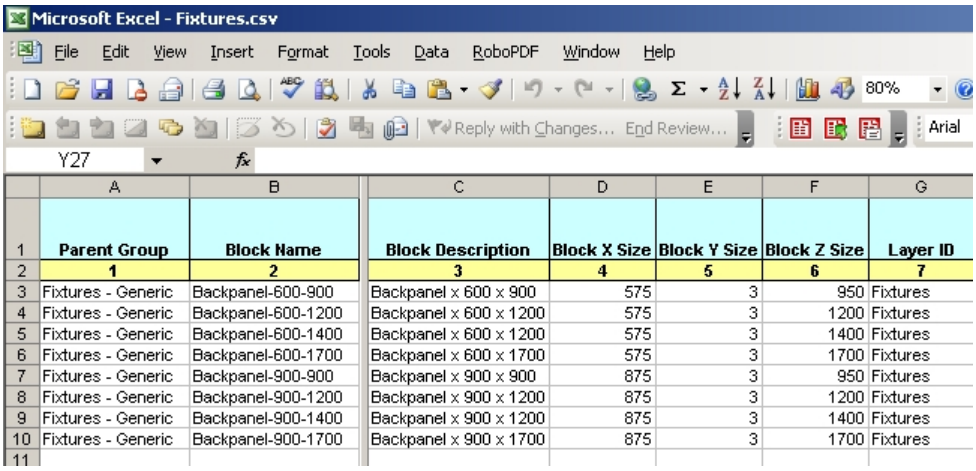


Column Name	Datatype	Key	Not Null	Default
BLK_ID	int	☑	☑	
FXI_LIP_HEIGHT	real	☐	☑	(0)
FXI_SLOT_SPACING	real	☐	☑	(1)
FXI_FIRST_SLOT_NUMBER	real	☐	☑	((0))
FXI_MEASURE_FROM_BOTTOM	bit	☐	☑	(1)
FXI_INCLUDE_FIRST_SHELF	bit	☐	☑	(0)
FXI_TIERAGE	smallint	☐	☑	(0)
FXI_VERTICAL_CATEGORY	smallint	☐	☑	(0)
FXI_NOMINAL_LENGTH	real	☐	☐	
FXI_NOMINAL_AREA	real	☐	☐	
FXI_NOMINAL_HEIGHT	real	☐	☐	
FXI_NOMINAL_DEPTH	real	☐	☐	

However, Data Importer is only going to be used to insert values into four of them, the other columns having default values that will be used.



In this instance, it has been chosen to insert values from columns 4, 5 and 6, duplicating the actual dimensions.

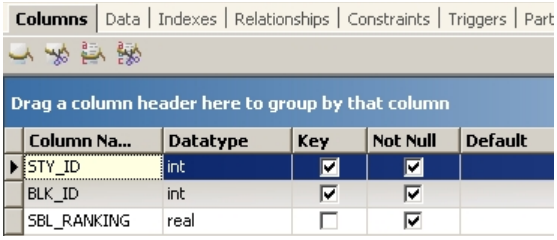


	A	B	C	D	E	F	G
1	Parent Group	Block Name	Block Description	Block X Size	Block Y Size	Block Z Size	Layer ID
2	1	2	3	4	5	6	7
3	Fixtures - Generic	Backpanel-600-900	Backpanel x 600 x 900	575	3	950	Fixtures
4	Fixtures - Generic	Backpanel-600-1200	Backpanel x 600 x 1200	575	3	1200	Fixtures
5	Fixtures - Generic	Backpanel-600-1400	Backpanel x 600 x 1200	575	3	1400	Fixtures
6	Fixtures - Generic	Backpanel-600-1700	Backpanel x 600 x 1700	575	3	1700	Fixtures
7	Fixtures - Generic	Backpanel-900-900	Backpanel x 900 x 900	875	3	950	Fixtures
8	Fixtures - Generic	Backpanel-900-1200	Backpanel x 900 x 1200	875	3	1200	Fixtures
9	Fixtures - Generic	Backpanel-900-1400	Backpanel x 900 x 1200	875	3	1400	Fixtures
10	Fixtures - Generic	Backpanel-900-1700	Backpanel x 900 x 1700	875	3	1700	Fixtures
11							

Style Relationships

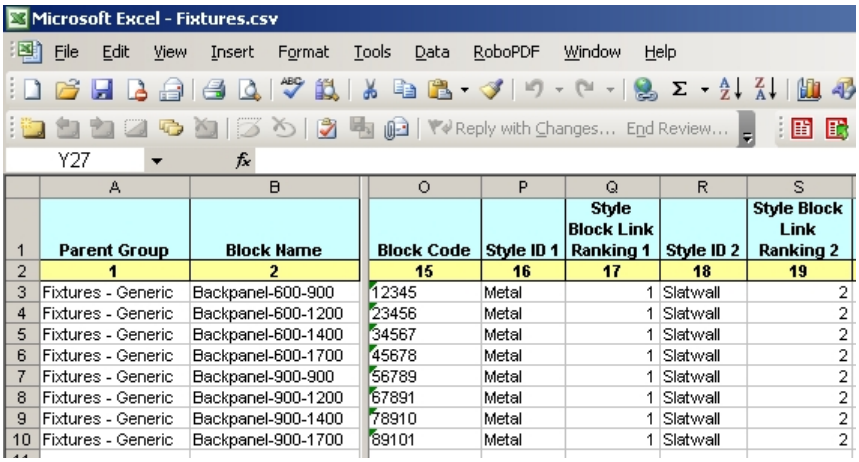
Adding Styles

Adding **Styles** is relatively straight forward. The **Style block Link** table contains just three columns:



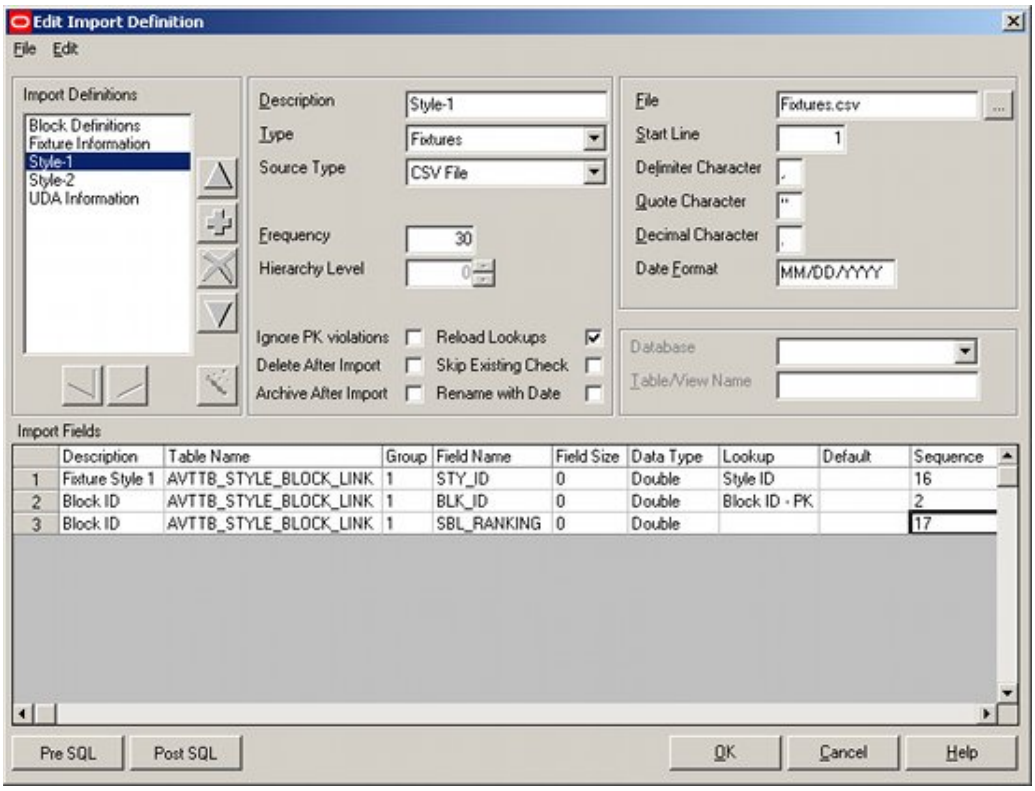
Column Na...	Datatype	Key	Not Null	Default
STY_ID	int	☑	☑	
BLK_ID	int	☑	☑	
SBL_RANKING	real	☐	☑	

However, it is possible to insert many styles for a specific fixture, each forming a record in the table. The spreadsheet is configured to add two styles for each block (columns 16 - 19).



	A	B	O	P	Q	R	S
1	Parent Group	Block Name	Block Code	Style ID 1	Style Block Link Ranking 1	Style ID 2	Style Block Link Ranking 2
2	1	2	15	16	17	18	19
3	Fixtures - Generic	Backpanel-600-900	12345	Metal	1	Slatwall	2
4	Fixtures - Generic	Backpanel-600-1200	23456	Metal	1	Slatwall	2
5	Fixtures - Generic	Backpanel-600-1400	34567	Metal	1	Slatwall	2
6	Fixtures - Generic	Backpanel-600-1700	45678	Metal	1	Slatwall	2
7	Fixtures - Generic	Backpanel-900-900	56789	Metal	1	Slatwall	2
8	Fixtures - Generic	Backpanel-900-1200	67891	Metal	1	Slatwall	2
9	Fixtures - Generic	Backpanel-900-1400	78910	Metal	1	Slatwall	2
10	Fixtures - Generic	Backpanel-900-1700	89101	Metal	1	Slatwall	2

Because we are inserting two separate records for each fixture, we require two separate import definitions, Style-1 and Style-2.



Each is straightforward, using a lookup to covert the block names and style names to their respective ID's, and bringing in a value from the spreadsheet.

> **Note**: It is possible to set up the spreadsheet for many styles - say five per fixture.

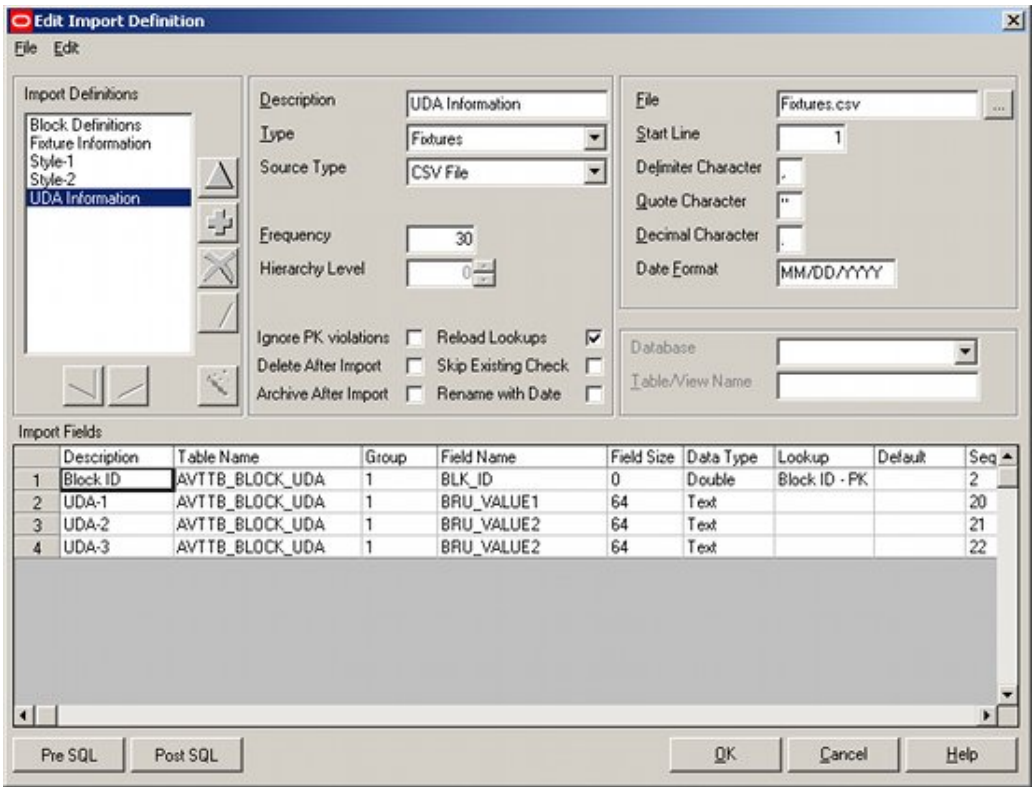
Five separate Style import definitions could then be set up (Style-1, Style-2, Style-3, etc). It would then be possible to use the Skip record if field is empty option in the Import Field definition to ignore records for fixtures with less than the maximum number of styles defined. For example, if a fixture only had the first three styles defined in the spreadsheet, Data Importer would skip importing Style-4 and Style-5.

> **Note**: For more information on this table see the *Oracle Retail Macro Space Management Data Model*.

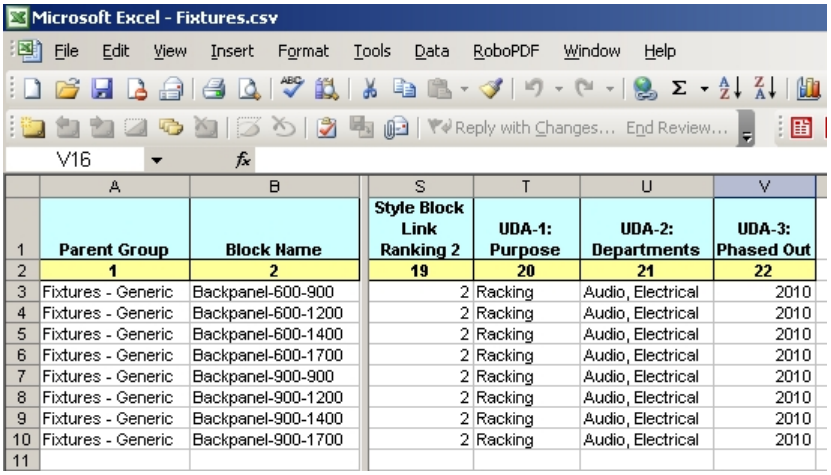
UDA Information

Adding UDA Information

The **UDA Definition** is straightforward for this example, containing just four Import fields. These will be used to insert information into the **Block UDA** table.



The first import field reads the Block Name from the 2nd column of the spreadsheet and converts it to a lookup to insert the Block ID (BLK_ID) into the **Block UDA** table. The second, third and fourth import fields read data from columns 20, 21 and 22 of the spreadsheet and insert it into the appropriate fields in the table (BRU_VALUE1, BRU_VALUE2 and BRU_VALUE3).



	A	B	S	T	U	V
1	Parent Group	Block Name	Style Block Link Ranking 2	UDA-1: Purpose	UDA-2: Departments	UDA-3: Phased Out
2	1	2	19	20	21	22
3	Fixtures - Generic	Backpanel-600-900	2	Racking	Audio, Electrical	2010
4	Fixtures - Generic	Backpanel-600-1200	2	Racking	Audio, Electrical	2010
5	Fixtures - Generic	Backpanel-600-1400	2	Racking	Audio, Electrical	2010
6	Fixtures - Generic	Backpanel-600-1700	2	Racking	Audio, Electrical	2010
7	Fixtures - Generic	Backpanel-900-900	2	Racking	Audio, Electrical	2010
8	Fixtures - Generic	Backpanel-900-1200	2	Racking	Audio, Electrical	2010
9	Fixtures - Generic	Backpanel-900-1400	2	Racking	Audio, Electrical	2010
10	Fixtures - Generic	Backpanel-900-1700	2	Racking	Audio, Electrical	2010
11						

Note: For more information on these tables see the *Oracle Retail Macro Space Management Data Model*.