

Detailed Overview

- 🔸 Use product attributes with part numbers
- 🔸 Minimum maintenance requirements
- 🔸 Define hierarchies of attributes
- 🔸 Define attribute families
- 🔸 Attribute matrix displays
- 🔸 Enquire and plan using attributes

Introducing Answer Extended Product Attribute Processing

This optional module extends the capabilities of the Answer Inventory, Sales, Purchasing and Planning modules.

It is designed to resolve, for those industries and businesses that require it, the issues between warehouse/picking personnel and purchasing/sales/planning personnel regarding part numbers.

Warehousing/picking personnel require a part number to putaway, pick and despatch against but the purchasing, sales and planning personnel think in part attributes i.e. styles, colours, sizes, seasons, shades, types, a combination of these and so on, not in part numbers.

Historically for every part number, Answer has always had 10 feature/attribute codes available with user definable prompts and values and all the necessary validation carried out during part set up. However, the set up would have been one part at a time and could be time consuming. For example, if you have 5 colours and 10 sizes all within 1 style there will be 50 parts to set up. This is no longer the case within the Extended Attributes Processing module.

This module ensures that these requirements are met with the absolute minimum of maintenance.

Define your attribute hierarchy

Is it Season/Style/Colour/Size, or Style/Type/Colour/Size, or Style/Colour/Size/Length, or any logical attribute combination that suits your business requirements.

A maximum of 10 different attributes can be defined and managed within Answer with a minimum of 2.

This attribute hierarchy is grouped within an overall Attribute Category, giving you the flexibility to have many different attribute hierarchies, if your business deals with a wide range of products that have no common hierarchies.

Each attribute has a level, a type, a description and a screen label/prompt.

Each attribute can have an unlimited number of values, all user defined or alternatively an attribute can be associated with an attribute group which itself contains multiple values.

Therefore, if the attribute were 'Season', it would be level 1, a description of 'Season Code' and a screen label of 'Season'.

It could have attribute values of:

Value	Description
Q103	Quarter 1 Year 2003
Q203	Quarter 2 Year 2003
Q303	Quarter 3 Year 2003
Q403	Quarter 4 Year 2003
SUM	Summer
WINT	Winter
AUT	Autumn
SPRN	Spring

You could create an attribute group called, say, 'SEASONS', that has the above values within itself. Therefore, if the previous data was going to be used multiple times there would be less maintenance activities.

In the following screen you can see a typical hierarchy definition:

The screenshot shows a software window titled 'Work with Product Attributes' with a sub-header 'IA01SD1 Work With Product Attributes' and a version number '0.000'. The 'Attribute Category' is set to 'GARMENTS' and the 'Description' is 'Ladies Garments'. There are three tabs: 'Hierarchy', 'Attribute Value Groups', and 'Part construction', with 'Hierarchy' selected. The 'Hierarchy Definition' table is as follows:

Level	Attribute Type	Description	Screen Label
1	SEASON	Season of the selling Year	Season
2	STYLE	Which Particular Style	Style
3	COLOUR	Colour	Colour
4	SIZE	Garment Size	Size

Below the hierarchy definition is an 'Attribute Values' table with four columns: 'Value', 'Description', 'Part Number Contribution', and 'Part Description Contribution'. The table is currently empty.

In the attribute category it has been decided, as per screen, to dynamically build the part number as follows:

The first two characters = 'LG' FIXED

The next six characters = Numeric and incremented starting from 10 by 1 each time

This means that the first Part Number generated by IA02P, Attribute Family Construction and Explosion, will be: LG000010

The zeros are in the Part Number because we set the Pad attribute using the checkbox. If the Pad checkbox was not checked the Part Number would look like this: LG10

Multiple definition methods of Part Number building are available; please refer to the documentation for IA01P, Work With Product Attributes, for a complete overview.

In the previous screen examples we have defined a 4 level hierarchy comprising of:

SEASON

STYLE

COLOUR

SIZE

Within an attribute category called 'GARMENTS'.

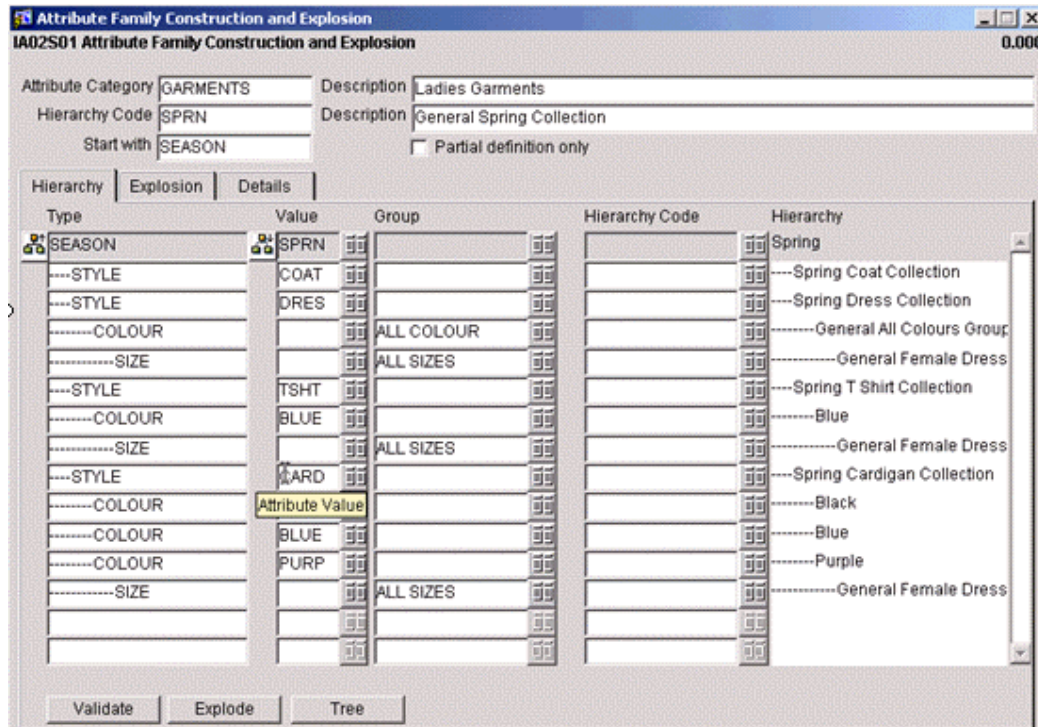
We have also defined the additional attribute groups with the following names and values:

All Colours	All Sizes
Blue	8
Pink	10
Green	12
Black	14
Orange	16
Purple	18
Lurex – Silver	20
Lurex – Gold	22

In a similar manner to the definition of the attribute group 'SEASONS'.

Define your attributes family

In this Attribute Family Construction process we now create the various values each attribute hierarchy element can have.



In the screen shown we have created the following:

Season	SPRN	Spring
Style	COAT	Spring Coat Collection
	DRES	Spring Dress Collection

These two styles are available in all colours and all sizes, as we have assigned the appropriate attribute groups.

Season	SPRN	Spring
Style	TSHT	Spring T-Shirt Collection

We have also created:

This style is only available in Blue but in all sizes. We have assigned a single colour attribute value but an attribute group for the size.

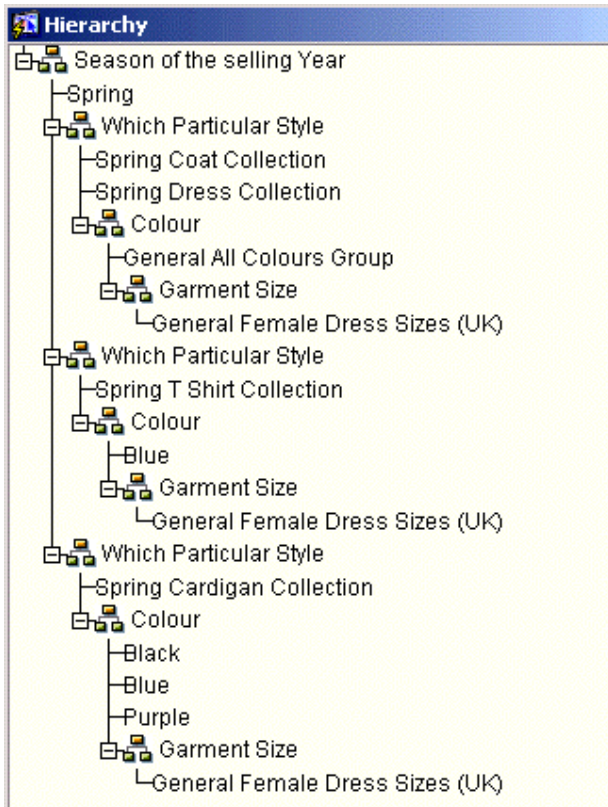
Season	SPRN	Spring
Style	CARD	Spring Cardigan Collection

We have also created:

This style is available in 3 colours, Black, Blue and Purple, but each colour is available in all sizes.

We have assigned three separate colour attribute values but an attribute group for the size.

If we create a Tree view of these details, it would look like the following:



The 'Validate' button ensures the structure(s) are complete and valid.

The 'Explode' button shows the number of different combinations that would be created based on the Season/Style/Colour/Size details defined.

Attribute Category: GARMENTS Description: Ladies Garments
 Hierarchy Code: SPRN Description: General Spring Collection
 Start with: SEASON Partial definition only

Product Description: Spring, Spring Cardigan Collection, Black, Size 10
 Part Number: LG000146

Include?	Generated?	Season	Style	Colour	Size
<input checked="" type="checkbox"/>	<input type="checkbox"/>	SPRN	CARD	BLCK	10
<input checked="" type="checkbox"/>	<input type="checkbox"/>	SPRN	CARD	BLCK	12
<input checked="" type="checkbox"/>	<input type="checkbox"/>	SPRN	CARD	BLCK	14
<input checked="" type="checkbox"/>	<input type="checkbox"/>	SPRN	CARD	BLCK	16
<input checked="" type="checkbox"/>	<input type="checkbox"/>	SPRN	CARD	BLCK	18
<input checked="" type="checkbox"/>	<input type="checkbox"/>	SPRN	CARD	BLCK	20
<input checked="" type="checkbox"/>	<input type="checkbox"/>	SPRN	CARD	BLCK	22
<input checked="" type="checkbox"/>	<input type="checkbox"/>	SPRN	CARD	BLCK	8
<input checked="" type="checkbox"/>	<input type="checkbox"/>	SPRN	CARD	BLUE	10
<input checked="" type="checkbox"/>	<input type="checkbox"/>	SPRN	CARD	BLUE	12
<input checked="" type="checkbox"/>	<input type="checkbox"/>	SPRN	CARD	BLUE	14
<input checked="" type="checkbox"/>	<input type="checkbox"/>	SPRN	CARD	BLUE	16
<input checked="" type="checkbox"/>	<input type="checkbox"/>	SPRN	CARD	BLUE	18

All of the possible combinations for our Season/Style/Colour/Size are exploded and displayed. Based on our previously defined combinations, 160 different part numbers would be created.

Once the explosion has been reviewed and any part numbers excluded and/or the Product Description changed, the 'Create Products' button may be used. This will then create all the part number data based on the model Inventory Centre/Part previously defined in IA01P, Work With Product Attributes, Part Construction screen.

This data based on the model part will cover Part Base/Root data, Production Control data, Purchasing data and/or Finished Goods data.

All data/attributes for each new part, other than Part Number and Product Description, is inherited from the model part.

Now that we have defined our attribute hierarchies and values and generated the Part Number(s), we are ready to utilise these constructs in the day to day operational processing.

We can check the status of our Attribute Family Construction and Explosion at any time by clicking the 'Details' button. This will display the following:

The screenshot shows a software window titled "Attribute Family Construction and Explosion" with a sub-header "IA02S01 Attribute Family Construction and Explosion" and a version number "0.000". The window contains several input fields and sections:

- Attribute Category:** GARMENTS
- Description:** Ladies Garments
- Hierarchy Code:** SPRN
- Description:** General Spring Collection
- Start with:** SEASON
- Partial definition only

Below these fields are three tabs: "Hierarchy", "Explosion", and "Details". The "Details" tab is selected and contains the following information:

- Created:**
 - Created at: 06-MAY-2003
 - Created by: WISDBA
- Maintained:**
 - Is the structure valid?: Y
 - Number of times maintained: 10
 - Last maintained at: 06-MAY-2003
 - Last maintained by: WISDBA
- Exploded:**
 - Has the current structure been exploded?: Y
 - Last exploded at: 05-AUG-2003
 - Last exploded by: WISDBA
- Generated:**
 - Have parts been generated?: N
 - Parts generated on: [empty field]
 - Parts generated by: [empty field]
 - Number of parts generated: [empty field]

This screen shows the Spring/T-Shirt details:

The screenshot shows a software window titled 'Attribute Matrix Display' with a subtitle 'IA10S01 Attribute Matrix Display' and a value of '0.000'. The window is divided into two main sections: 'Master' and 'Detail'.

Master Section:

- Attribute Category: GARMENTS
- Season: Spring
- Style: TSHT
- Item Name: Spring T Shirt Collect

SPRN	Season	Style	Item Name
SPRN	Spring	CARD	Spring Cardigan Coll
SPRN	Spring	COAT	Spring Coat Collectio
SPRN	Spring	DRES	Spring Dress Collecti
SPRN	Spring	TSHT	Spring T Shirt Collect

Detail Section:

Size

Colour	10	12	14	16	18	20	22	8
BLUE								

We can see from the previous screen examples that the ordering matrix in the lower region of the screen is always based on the lowest two elements of the attribute hierarchy defined.

Against the matrix, in the example Colour/Size, a quantity can be entered. The Quantity entry fields are disabled by colour coding where the attribute combination is invalid. Based on colour only, available attributes can be entered to create Sales and Purchase Orders.

From this ordering matrix all necessary Purchasing or Sales details will be prompted for appropriately, Vendor, Customer, Location and so on.

Once all quantities have been entered against each matrix level, a Customer/Delivery Location or Vendor/Location can be assigned and full validation carried out.

Once completed, the appropriate Purchase or Sales Order will be dynamically created and the user given the PO or SO Number allocated.

Enquiries using the attributes

Many of the standard Answer enquiries will have had a new 'front end' created so that they can be entered using the various elements and values of the defined attribute hierarchy.

A general stock summary by attribute enquiry is available as below:

Attributes	On Hand	Reserved	On Order
All	272	47	736
Fern Bedding	272	21	0
Full Set	262	21	0
Standard Pillowcases (10	0	0
Each	10	0	0
Blue	10	0	0

Attribute Category: BEDDING The Bedding Department

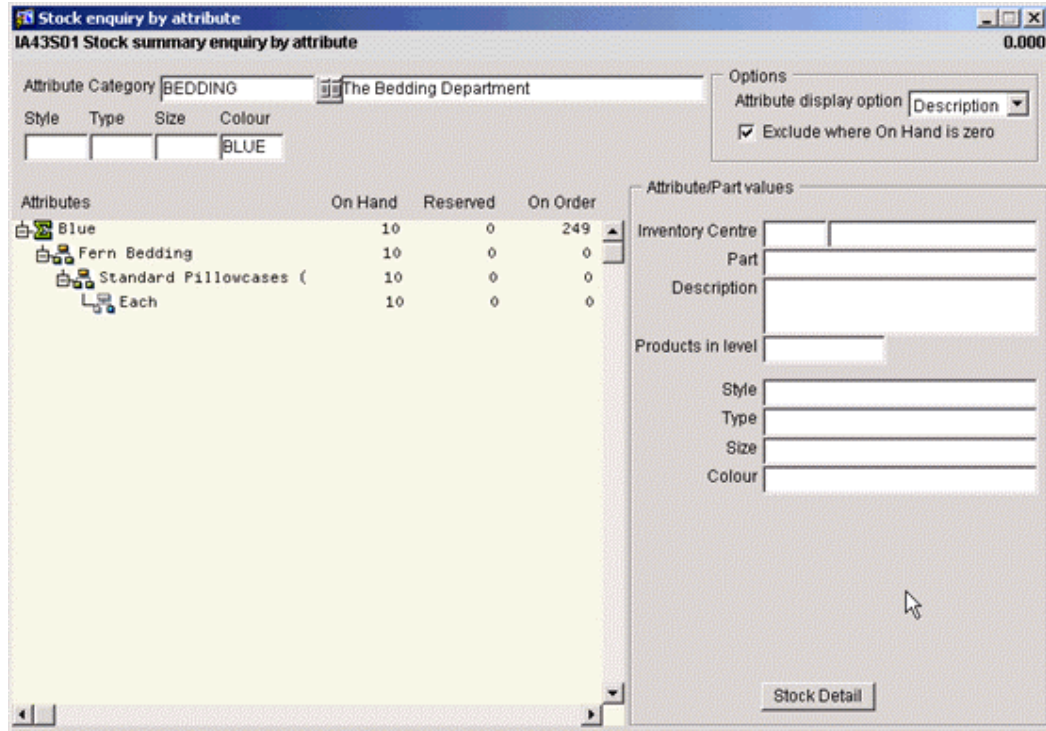
Options:
Attribute display option: Description
 Exclude where On Hand is zero

Attribute/Part values:
Inventory Centre: AM51 Answer Mfg. 5/1
Part: B/92FNSTPLEACHBLUE
Description: Fern Bedding, Standard Pillowcases (2), Each, Blue
Products in level: 1
Style: Fern Bedding
Type: Standard Pillowcases (2)
Size: Each
Colour: Blue

Stock Detail

In the previous screen, because we didn't enter any Style/Type/Size/Colour attributes, all stocks for the Attribute category 'Bedding' have been displayed.

If, for example, we entered the Colour attribute 'Blue', the following screen would be displayed:



By entering further Attribute values the stock enquiry can be delimited. For instance, we may want to only see all Cardigans.

The initial enquiries that will have new 'front end' linkage are:

- I43P, Stock Status Enquiry
- I80P, Location Detail Enquiry
- B51P, Purchase Order Enquiry
- C37P, Sales Order Enquiry

Additional enquiries will be enhanced on a rolling program from customer feedback.

The 'front end' selection criteria will either be similar to the Attribute Family hierarchy construction screen or the explosion screen. From there you will be able to drill off to the existing enquiries.

Planning process using the attributes

It is currently scheduled for development that 'Planning' %ages will be utilised against the various attribute levels, values, attribute groups within a hierarchy.

New screens will be created that will transform a requirement, say as follows:

SPRING COATS	10,000	01/06/2003
	15,000	15/06/2003
	25,000	30/06/2003

Into the allocated %ages for colour and size with the appropriate rounding rules.

This will build a standard Answer Forecast Demand table that can be utilised in the MPSP, MRP and CRP processes of Answer.