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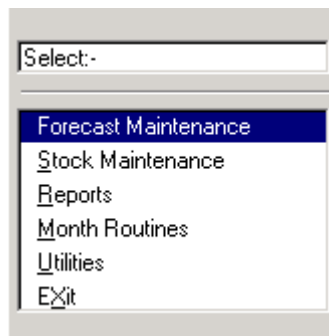
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## Introduction to Sales Forecasts



The Sales Forecasts module was developed by Economic Data Services (EDS) using the Sage Line 100 Retrieve 4GL language and is completely compatible with other Line 100 modules.

The module provides all the functions to maintain details of product forecasts

The module runs with the Sovman Bill of Materials (BOM) and Works Order modules and requires the Line 100 stock control module. Sales forecasts entered within the Sales Forecasts module are recorded as requirements within the Sovman Materials Planning module. These requirements can then generate requisitions or can be used to plan production.

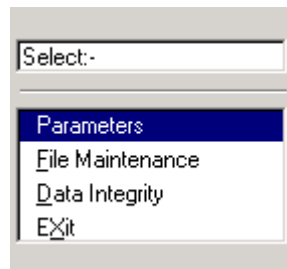
Each product must already exist on the Line 100 stock control file.

Sales Forecasts has the following features: -

- Display of past demand and sales forecast for items
- Selection of past demand to include actual sales, stock adjustments or issues to production
- Automatic generation of forecasts from past demand
- Manual input of sales forecasts
- Replicate forecast for a number of periods
- Ability to exclude items from forecasting.
- Forecast history file to compare actual sales with forecast.
- Automatic calculation of minimum and maximum stock and reorder levels from past demand

Sales forecasts can be used to generate production and material plans through the Sovman Materials Planning module. Forecasts can also be used to generate purchase orders using the Materials Planning module.

## Parameters



Use this program to set up the options and defaults of your Sales Forecasts module before you begin creating routing records. As with all Line 100 modules, the parameters are an important first step that must be taken before any further processing is attempted. Choosing the Utilities option on the opening menu gives access to this menu.

## Options

The following options simply require a single response: -

Round All Auto Generated Quantities (Y/N)	Set to Y - any sales forecasts generated automatically by the Sales Forecasts module are rounded up to integer. Set to N - no rounding is performed.
Round All Reorder/Max/Min Stock Levels (Y/N)	This parameter refers to the new levels calculated by sales forecasts. Set to Y - any reorder, maximum or minimum stock levels generated automatically by the Sales Forecasts module are rounded up to integer. Set to N - no rounding is performed.

## Product Groups

Options	Product Groups	Usage Exclusions	History Date																												
Code Product Group Name		Code ACCS Accessories																													
<table border="1"> <tr><td>ACCS</td><td>Accessories</td></tr> <tr><td>BORD</td><td>Panel Board</td></tr> <tr><td>BRCH</td><td>Brochure Dispensers</td></tr> <tr><td>BUND</td><td>Bundled Packages</td></tr> <tr><td>CABL</td><td>Cable</td></tr> <tr><td>CARP</td><td>Carpet</td></tr> <tr><td>CASE</td><td>Case with P.S.U.s.</td></tr> <tr><td>DRIV</td><td>Drives</td></tr> <tr><td>ELEC</td><td>Electrical Fittings</td></tr> <tr><td>EXHB</td><td>Exhibitions</td></tr> <tr><td>FAX</td><td>Fax/Modems</td></tr> <tr><td>FELT</td><td>Felt</td></tr> <tr><td>fg</td><td>finished goods</td></tr> <tr><td>FITG</td><td>Fittings - General</td></tr> </table>		ACCS	Accessories	BORD	Panel Board	BRCH	Brochure Dispensers	BUND	Bundled Packages	CABL	Cable	CARP	Carpet	CASE	Case with P.S.U.s.	DRIV	Drives	ELEC	Electrical Fittings	EXHB	Exhibitions	FAX	Fax/Modems	FELT	Felt	fg	finished goods	FITG	Fittings - General	Forecast Inputs Allowed? <input type="text" value="No"/> Manual/Automatic? <input type="text" value="Manual"/> Past Demand Weeks? <input type="text" value="1"/> Future Creation Weeks? <input type="text" value="1"/> Forecast/Sales Option? <input type="text" value="Accumulative"/> Usage on Sales History? <input type="text" value="Yes"/> Stock Level Changes? <input type="text" value="No"/> BOM Issues? <input type="text" value="No"/> Demand Based on <input type="text" value="Last 13 Wks"/> Reorder Safety Factor? <input type="text" value="0.00"/> % Minimum Stock Weeks? <input type="text" value="0"/> Maximum Stock Weeks? <input type="text" value="0"/>	
ACCS	Accessories																														
BORD	Panel Board																														
BRCH	Brochure Dispensers																														
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CABL	Cable																														
CARP	Carpet																														
CASE	Case with P.S.U.s.																														
DRIV	Drives																														
ELEC	Electrical Fittings																														
EXHB	Exhibitions																														
FAX	Fax/Modems																														
FELT	Felt																														
fg	finished goods																														
FITG	Fittings - General																														

Use this function to set parameters at product group level that determine how specific stock items are treated within the forecasting module. These parameters can also be set at individual item level through the BOM Stock Maintenance function.

Forecast Inputs Allowed? (Y/N)	Sales forecasts can only be created for items that have this parameter set to Yes, although the parameter may be over-riden for a specific items when creating a forecast.
Manual/Automatic?	Sales forecasts can be entered manually or calculated automatically from sales history by the forecasting module. Automatic forecasts can be manually amended. If this parameter is set to Manual, no automatic forecasts are produced for these items.
Past Demand Weeks?	When the automatic forecast is generated, a weekly forecast is calculated from past sales demand from the item stock history. This parameter determines how many past weeks demand is used to calculate the weekly forecast. When the automatic forecast run is performed, you may enter a finish date up to which past demand is obtained e.g. Past Demand Weeks = 10, Finish Date = 01/09/1998 will calculate a weekly forecast from sales history for the 10 weeks previous to 1st September 1998.
Future Creation Weeks?	When the automatic forecast is generated, a weekly forecast is calculated from past sales demand from the item stock history. This parameter determines how many future weeks this weekly forecast is applied for. When the automatic forecast run is performed, you may enter a start date from which this forecast commences.

Example:

Future Creation Weeks = 6, Start Date = 01/09/1998 will place a weekly forecast for the 6 weeks commencing 1st September 1998

Forecast /Sales Option	When the Materials Requirement Plan (MRP) is run from the Materials Planning module using the Stock Status Run, sales orders and/or sales forecasts are exploded to generate requirements for sub-assemblies/components. This parameter determines how forecasts and actual sales orders are used within any period: -
Accumulate	MRP uses the sum of both sales orders and forecasts
Forecast	MRP will use the sales forecast figure and ignore sales orders
Largest	MRP will take the greater of sales orders or sales forecasts

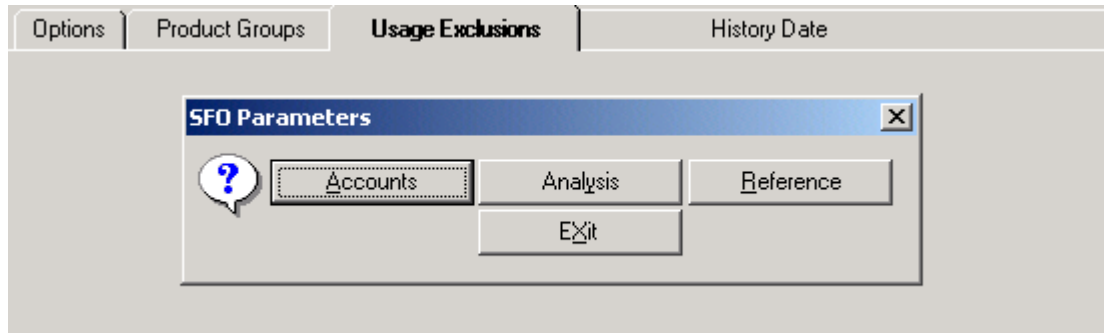
The following parameters determine what stock history transactions are used for analysing past demand: -

Usage on Sales History	Past demand will include actual sales transactions
Stock Level Changes	Past demand will include stock adjustments
BOM Issues	Past demand will include works order issues to production.

The following parameters are used for the automatic calculation of reorder, minimum and maximum stock levels: -

Demand Based on	This parameter displays the number of past weeks that are used to calculate from past demand. This parameter comes from the Analyse Usage by horizon within materials planning.
Reorder Safety Factor	The automatic calculation of reorder levels will multiply the lead time in weeks by the average weekly demand. You may add a % safety factor to this level e.g. lead time 4 weeks, average demand 50, reorder level = 200, safety factor 10%, reorder level = 120.
Minimum Stock Weeks	The minimum stock level is set to the average demand times this parameter e.g. one week.
Maximum Stock Weeks	The maximum stock level is set to the average demand times this parameter e.g. twelve weeks.

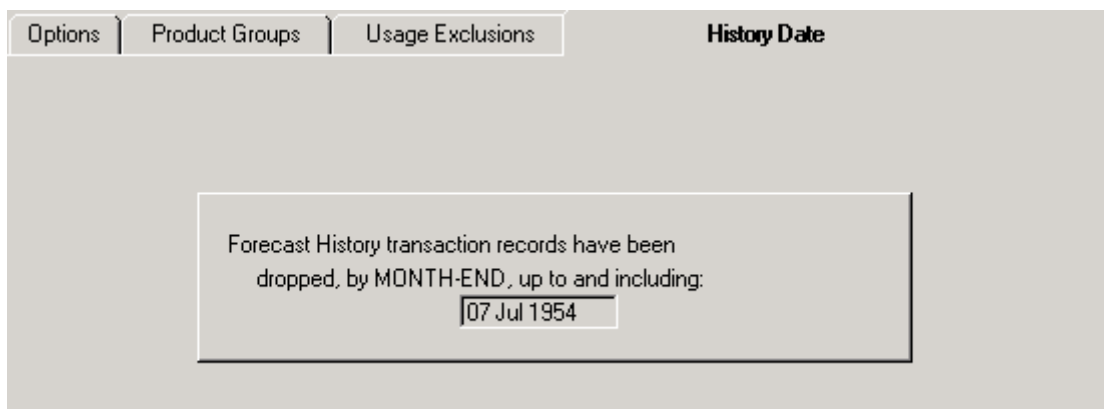
## Usage Exclusions



Use this parameter to exclude stock history transactions from the analysis of past demand. You may select: -

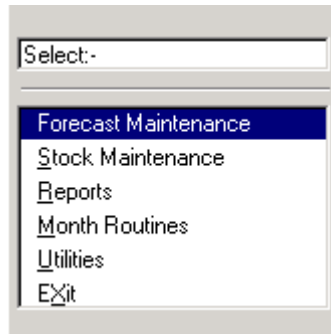
- |           |  |
|-----------|--|
| Accounts  | You can select a customer and options to exclude sales, stock adjustment or BOMs (works orders issues) transactions. |
| Analysis  | You may exclude stock transactions based on the analysis code.   |
| Reference | You may exclude specific history transactions using the transaction reference number.                                |

## History Start Date

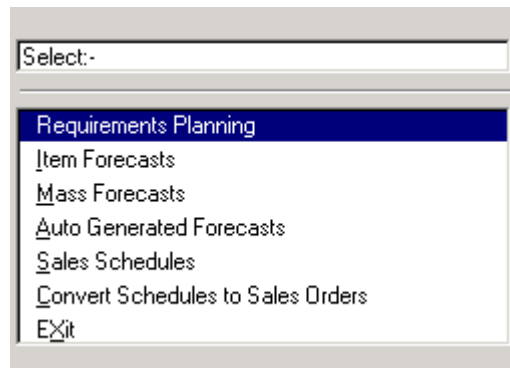


The forecasting module will remove past sales forecasts using the Month End Procedure. These forecasts are output to a history file where they can be used to compare actual sales with forecast. This procedure will display the selected date up to which forecast history transactions have been deleted within the Month End Procedure.

## Forecast Maintenance

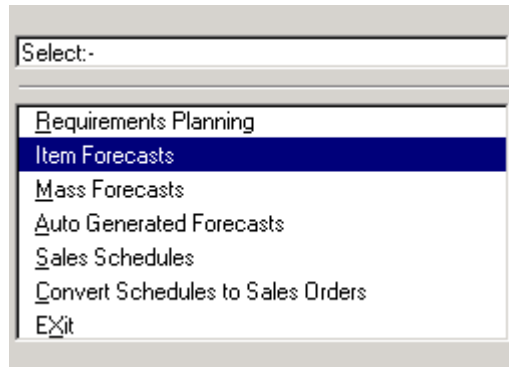


## Requirements Planning



This function takes you into the planning enquiry screen within the Sovman Materials Planning module (see the Materials Planning manual).

## Item Forecasts



Use this function to create and maintain the sales forecasts for your products. An item can only be forecast if it exists on the Line 100 stock control file.

You are presented with a display of the last item details.

The top window displays the following details of the item: -

**Item No, Description, Product Group, Stocked In, Bin Locations, Main Supplier, Alternative Supplier, Min and Max stock, Reorder Level, Lead Time, Order Quantity. All these fields come from the Line 100 stock control file.**

**Round, Round Value** If the item is a component within a BOM, it may be specified as having a quantity-per that is to be rounded up to a value e.g. boxes rounded to 1. This information is displayed from the Sovman BOM file.

**Top Up** This is the additional minimum reorder quantity to be used where the reorder quantity does not cover the requirements. The top up quantity is entered within the BOM Stock Maintenance within the Sovman BOM module.

The bottom half of the screen displays a graphical view of past sales demand by month. The months are displayed in reverse sequence for the previous 12 months. The initial month is taken from the month prior to the current month within today's date.

The sales demand comes from the Line 100 stock control transaction history. You may view the transaction details by selecting the 'History' option. You may view the details in customer account sequence or transaction date sequence. The transactions included will be based on the parameter settings within the product group or BOM stock maintenance sections and the Usage Exclusions.

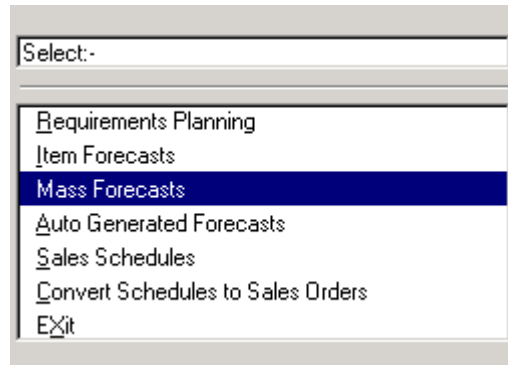
The right hand side of the screen displays average sales figures: -

This Month	This month's sales quantity.
3 Months	The average monthly sales quantity for the last 3 months.
6 Months	The average monthly sales quantity for the last 6 months.
12 Months	The average monthly sales quantity for the last 12 months.

The menu at the bottom of the screen enables the user to perform the following tasks: -

- |              |   |
|--------------|---|
| Another Item | Selection of this function allows other stock items to be selected and viewed. The '/' character may be used to search the Line 100 stock control file.   |
| Forecast     | <p>This option allows you to enter manual forecasts for an item or amend an existing forecast for the item. You can enter a quantity and an associated date (normally the last working day of the week). The module will display the actual calendar day for the date.</p> <p>You are then given the option to replicate the forecast for a number of periods i.e. weeks or days. The quantity entered is then copied for the selected number of periods.</p> |
| History      | This function displays the actual stock history transactions. You may view them in date or account sequence.  |

## Mass Forecasts



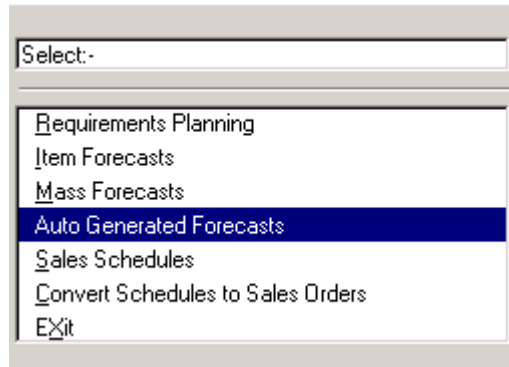
Use this function to create and maintain product forecasts on a 'mass' selection basis. You are presented with a list of product groups from the Line 100 stock control file.

Upon selection of a product group, you can select the first item number in the group or an item number to start from. You are then given a list of items to select. The forecast column indicates whether this item has a current sales forecast.

Once selected, you are then presented with the forecast maintenance screen within the item forecasts function (see above).

When you exit from this screen, you are given the next item in the list.

## Auto Generated Forecasts



The forecasting module will automatically generate product forecasts from past sales history. When you select this option, you are asked for: -

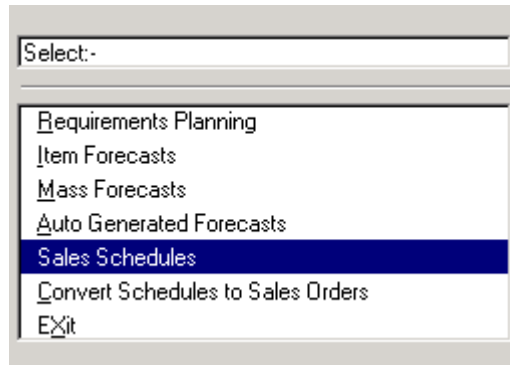
**Finish Date for Past Demand Horizon** The computed forecast is taken from the average weekly demand from the sales history for the item within the Line 100 stock transaction history. Only actual invoiced sales are used. The number of past weeks demand is specified within the product groups parameters and within the item BOM stock maintenance function.

This finish date is the date up to which past sales history is used e.g. a date of 01/07/00 for 10 weeks will calculate an average weekly forecast from the 10 weeks demand up to 01/07/00.

**Start Date for Forecast Creation Horizon** The computed forecast is applied to the item for a number of weeks specified within the product group parameters and within the item BOM stock maintenance function.

This start date is the date from which the computed forecast is applied e.g. a date of 01/10/00 for 6 weeks will place the computed forecast for 6 weeks from 01/10/00.

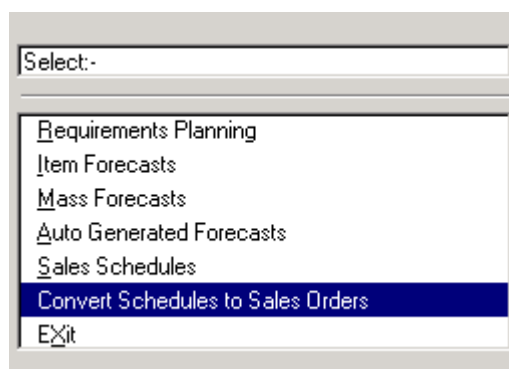
## Sales Schedules



You may enter customer scheduled orders using this function. These are schedules that may be modified by the customer before converting specific items to a sales order. You may enter as many schedules as you wish for an item and customer. The schedules are used as a forecast within the Sovman materials planning module to generate the requirements plan. The schedule requirements are accumulated with any sales forecast for an item.

**This option is not currently available.**

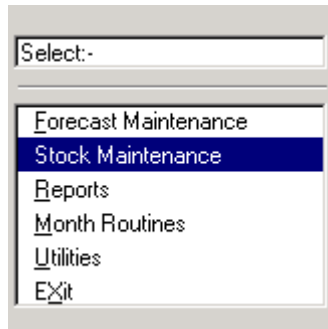
## Convert Schedules to Sales Orders



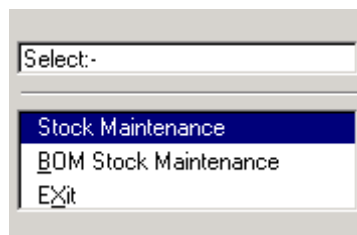
Customer sales schedules entered through the forecasting module may be converted into Line 100 sales orders using this function.

**This option is not currently available.**

## Stock Maintenance

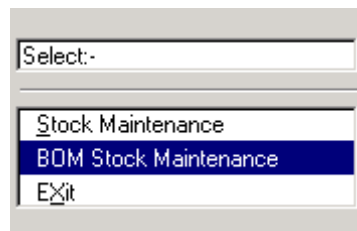


## Stock Maintenance



This function simply allows access to the Line 100 stock maintenance option to create stock records for use within the Sales Forecasts module.

## Bom Stock Maintenance

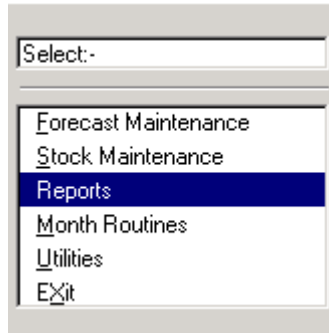


This function is used to amend the Sovman Bill of Material stock record to add the relevant data items required for the BOM, works order, materials planning, sales forecasts and capacity planning modules. After the stock record is located (the search function may be used), the following fields may be amended: -

Category	The category group that the item belongs to (see Utilities, Parameters)
Drawing	The drawing number of the component. The drawing number is accessed from the drawing register. The corresponding issue letter is displayed. This drawing number is used on every occurrence of this component on a BOM structure.
Reorder Qty	The reorder quantity (i.e. economic batch quantity for assemblies). This is the same as the stock control reorder quantity.
Top Up Qty	The additional minimum reorder quantity required when added to the reorder quantity to cover the requirement.

Assembly Bulk	An assembly may be treated as a bulk item i.e. Sovman will not control the stock of the item but stock will be issued/received manually.
Component Bulk	A component within a BOM may also be treated as a bulk item.
Omit Suggested	The Sovman Materials Planning module will create suggested orders from requisitions raised within the Stock Status run. If this parameter is set to Yes, then this item will be ignored for suggested orders.
Sub Contract	The Sovman works order module will handle sub-contract items through the BOM structure. This field identifies assembly items that are sub-contracted and not manufactured. The works order module will not generate works orders for a sub-contract item. The Sovman materials planning module also produces re-order lists for sub-contract items using this field.
Rounding	If the quantity required for this component is to be rounded up followed by the amount to be rounded up to.
Alternatives	If this item is to have alternatives if there is no free stock available when allocating through the Sovman works order module. The alternative item is picked up from the Line 100 stock control alternative items.
Planning Decs	This option determines the number of decimal places that will be displayed for requirements within the materials planning module. The option will determine the accuracy of netted requirements. The default 'D' picks up the materials planning module parameter default.
Works P/L Qtys	<p>This option is used by works orders to determine the quantity per pack unit that is used when printing the quantity required on the picking list. There are two possibilities, the base unit i.e. the stocked in unit, and the BOM unit i.e. the qty-per unit. Thus an item may be stocked in KG with a qty-per in grams. The picking list may therefore print the quantity required in grams or, if required, in KGs. This may be appropriate when the works order is produced from materials planning and the quantities are aggregated from many orders.</p> <p>The field may only be accessed if the item is a factored item within Line 100 stock control.</p>
Weekly Forecast	This is used by Materials Planning. The planning module takes the weekly forecast when exploding unless the forecast parameter is switched off.
Item Cost	This is the standard cost of the item on the Line 100 stock control file. When this is amended through the BOM function, the appropriate stock variance is calculated and posted to the nominal ledger using the default nominal codes set up within the Utilities section (see 2.2 above).
Forecast Information	The parameters associated with the product group may be amended here for a particular item.
Reorder levels	The parameters associated with the product group may be amended here for a particular item.
Hourly rates/percentages	The parameters associated with the product group may be amended here for a particular item.

## Reports

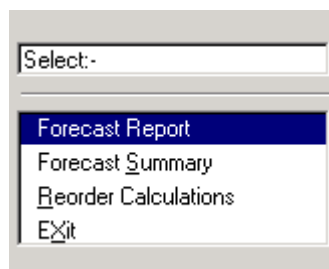


Use this section of Sales Forecasts to produce printouts, including details of the data stored in the sales forecasts files.

When a report is selected, a report template will be displayed. This works in exactly the same way as the standard Line 100 templates and allows selection and sequencing for the particular report.

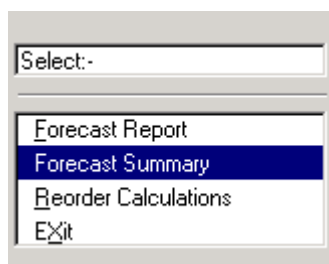
The mask facility may also be used to select specific characters within the appropriate field.

## Forecast Report



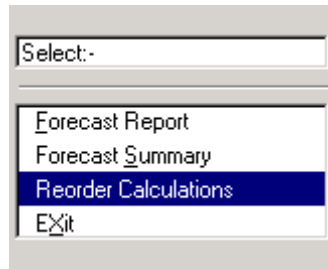
This function will print the details of sales forecasts for items. You are presented with a template to select items.

## Forecast Summary



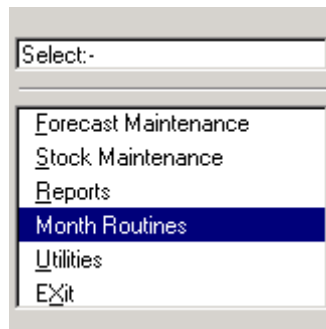
This function will print a summary of the forecast entries for each item. Totals are printed for each week for the next 15 weeks. The total forecast, sales schedules and actual sales orders are printed for each item. You are presented with a template to select items.

## Reorder Calculations



Sovman will calculate suggested reorder, minimum and maximum stock levels based on past demand/usage. These calculations use the parameters specified within the product groups. This function prints a report of old and new (proposed) levels. You are presented with a template to select items. If you wish to update these levels, this can be done with the file maintenance function.

## Month Routines

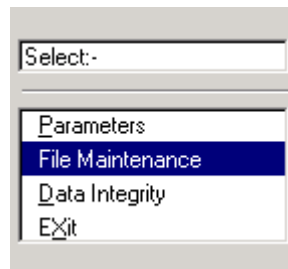


This function will remove past forecasts or carry them forward. You are asked to confirm to proceed.

You are then given two options: -

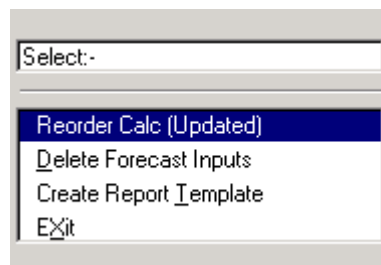
- |   |  |
|---|--|
| Roll forecast forward (Y/N) by ** weeks | Sales forecast may be rolled forward to future weeks using this option. Each weekly forecast entry is carried forward by the selected number of weeks. |
| Delete old forecasts                    | This parameter allows you to remove or delete any past forecast i.e. forecast entries before today's date. Past forecast is dropped to a history file. |

## File Maintenance



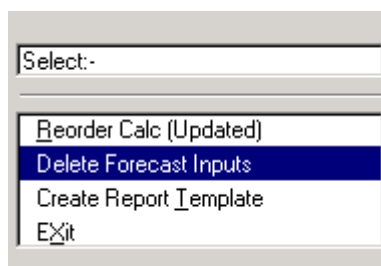
This option is within the Utilities section and provides special functions associated with the Sales Forecasts module.

## Reorder Calc (Updated)



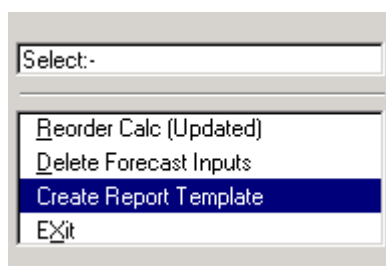
Use this function to automatically update the stock control reorder, minimum and maximum stock levels from the calculated levels. You are presented with a template to select a range of items.

## Delete Forecast Inputs



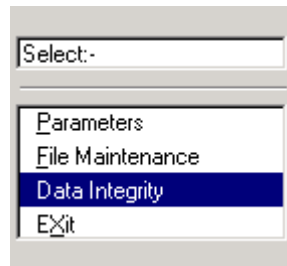
Use this function to delete sales forecasts. You may select all items or a range of stock codes or dates.

## Create Report Template



If the report templates that allow selection and sequencing of reports have been corrupted, this function will re-generate all the standard report templates. This function may also be required if Sales Forecasts has been added to the system at a later stage.

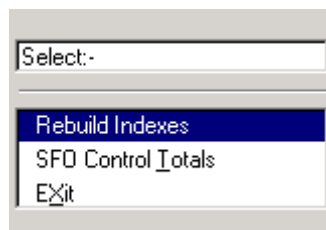
## Data Integrity



This section deals with the housekeeping utilities that are provided to ensure the integrity of your data files is maintained.

The functions include facilities to check the sales forecast's data files, to ensure that they contain data that properly balances, and special utilities for recovering from circumstances that might otherwise leave the data files inaccessible, perhaps as a result of a computer or power failure during processing.

## Rebuild Indexes

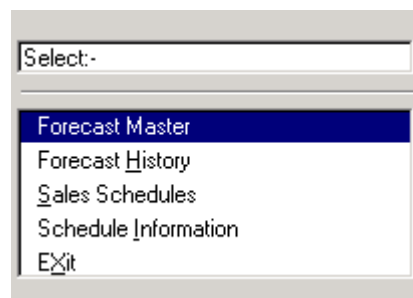


Use this program to recreate a corrupt sales forecasts index file. A symptom of a corrupt file may be one of the following error messages being displayed on the screen: -

- Index has not been created
- Index key not deleted
- Index key not found
- Index not positioned at a record

The routine will delete all or selective indexes and create new ones from existing data files.

When the option is selected, the screen will display a list of the sales forecasts files for which indexes may be corrupted: -



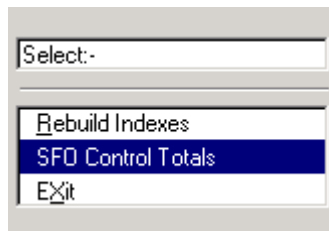
Simply select the file(s) to be re-indexed or exit to the menu.

Once the file has been selected, the screen will display a list of index names for that file. At the foot of the screen, the options are displayed to create all indexes or specified indexes only.

If you choose to recreate all indexes, the system will work sequentially through the index files, displaying each one as initialised when complete.

If you choose to recreate selected indexes, the screen will prompt you to reply Y or N against a 'Create?' prompt, displayed alongside each index name in turn. When all selected indexes have been recreated, press the space bar and the Data Integrity menu is redisplayed.

## SFO Control Totals



Use this program to display the file total details of the sales forecasts module, as normally displayed when you exit from the module main menu.

When selected, the screen displays number of records and the % file space used for each of the sales forecasts files.

To print the totals, select Print or exit to the menu.

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