navigation manual
version 6.2

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Chapter 1 – Getting Started **4**
Installing the Enterprise Sales and Operations Planning Tool 4
Overview of the Enterprise Sales and Operations Planning Tool 4
Installing the 5-Year or 30-Year Future Horizon Option 6
Using the Enterprise Sales and Operations Planning Tool 9
Chapter 2 - Company Data **11**
Using the Base Data Form 11
Setting up Foreign Currency Translation 17
Adding a New Family 20
Group Master Maintenance and Query 21
Aggregation Maintenance 22
Distribution Maintenance 23
Product Review 25
Chapter 3 - Product Review **25**
Chapter 4 – Demand Review **32**
Using the Demand Review 32
Demand Review - Units Worksheet 34
Demand Review - Value Worksheet 38
Demand Review - Waterfall 39
Demand Review - Bookings Value 40
Demand Review – Comments - Subfamily 42
Demand Review – Comments - General 43
Demand Review - Agenda 43
Demand Review - Action Items 45
Demand Review - Annual Totals 46
Chapter 5 - Supply Review **47**
Using the Supply Review 47
Supply Review - Units Worksheet 49
Supply Summary 52
Supply Review - Cost Worksheet 55
Supply Review - Resources 56
Supply Review - BOM (Bill of Material) 60
Supply Review - Waterfall 63
Supply Review - Current vs. Prior 64
Supply Review - Inventory Target 65
Supply Review - Comments - Subfamily 67
Supply Review - Comments - General 68
Supply Review – Agenda 69
Supply Review - Action Items 70
Supply Review - Inventory Value (Inventory Summary) 71
Chapter 6 - Financial Appraisal **72**
Using the Financial Appraisal Form 72
Financial Appraisal - Budget Worksheet 73
Financial Appraisal - Budget Cost 75
Financial Appraisal - Income Statement 76
Financial Appraisal - Comments - Subfamily 78
Financial Appraisal - Comments - General 79
Financial Appraisal - Agenda 80
Financial Appraisal - Action Items 81
Financial Appraisal – Finance Review 82
Financial Appraisal – Annual Totals 82
Financial Appraisal - Inventory $ (Inventory Summary) 82
Chapter 7 - Performance Measures **83**
Using the Performance Review Forms 83

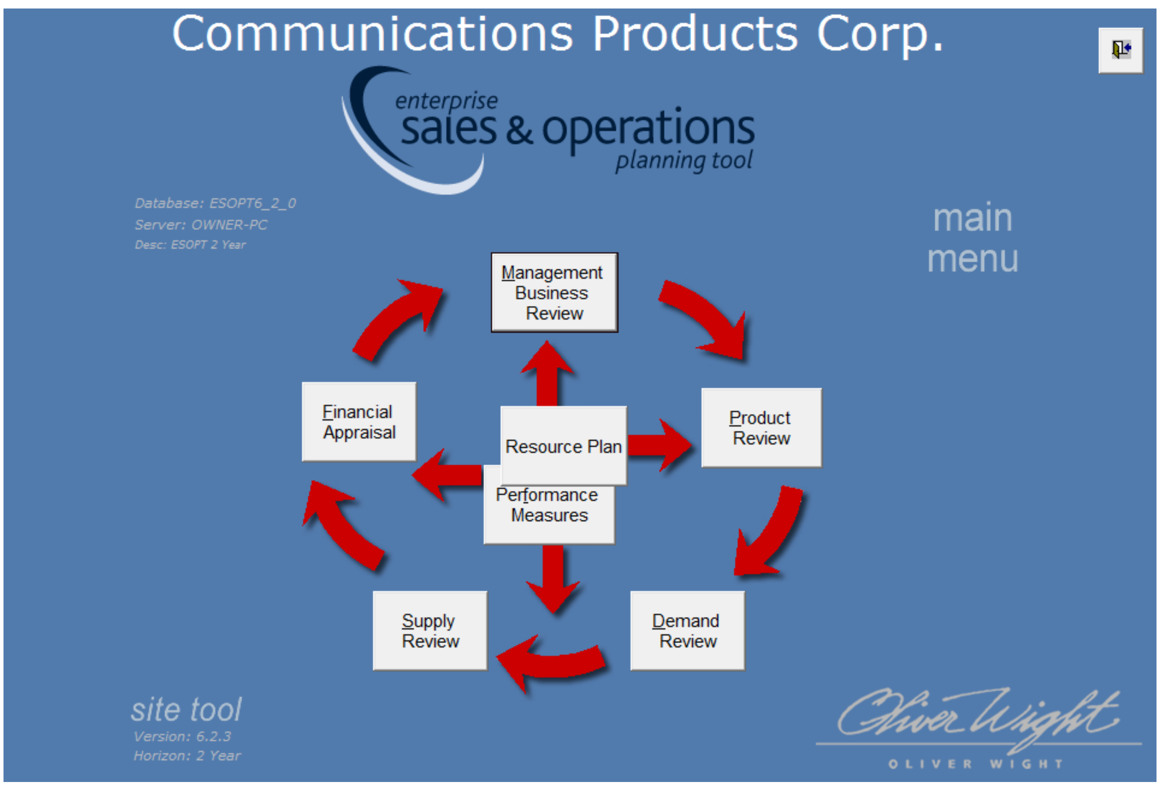
Company Totals - Annual Tab 84
Company Totals - Monthly 85
The Dashboard 86
The Performance Charts 87
The Performance Summary 90
Chapter 8 - Management Business Review 91
The Management Business Review 91
The Management Business Review - Special Issues 92
The Management Business Review - Performance Review 94
The Management Business Review - Demand/Supply Review 95
The Management Business Review - Product Review 108
The Management Business Review - Resource Plan 114
The Management Business Review - Finance Review 121
The Management Business Review - Finance Review - Annual Totals 125
The Management Business Review - Finance Review - Inventory $ 128
The Management Business Review - Strategic Initiatives Review 129
The Management Business Review - Process Critique 130
The Management Business Review - Agenda 132
Chapter 9 - Report Printing and Exporting 133
Printing and Exporting Reports 133
Chapter 10 - Tools 135
Data Management Tools 135
Roll Month 136
Import ESOPT Data Manager 138
Scenario Manager 144
Resource Plan Manager 146
Import Bill of Material (BOM) Manager 152
Import Calendar 155
Import Comments 158
Import Distribution 161
Export Manager 164
Pivot Table Menu 166
Database Utility 168
System Information 169
Data Tables 170
Global Supply Utilities 172
ESOPT Options 173
Chapter 11 – Group Master Fields 179
Group Master Fields 179
Chapter 12 – Formulas 183
Formulas 183
Chapter 13 – FAQS 186
FAQs 186
Chapter 14 - Glossary 190
ESOPT Terms & Definitions 190

Installing the Enterprise Sales and Operations Planning Tool

The Enterprise Sales and Operations Planning Tool is installed from a download obtained from Oliver Wight's Internet support site. The URL for the download site, license number, logon, and password are supplied by the Oliver Wight Support Team following a request by the Oliver Wight account representative. It may be installed as a stand-alone client application, a client-server application, or a server-based application. To determine your type of installation and review recommended guidelines for the minimum hardware and software configuration, please read ESOPT System Information document. If your company has a different hardware or software policy, please contact your Oliver Wight representative for more information.

Overview of the Enterprise Sales and Operations Planning Tool

The Enterprise Sales and Operations Planning Tool Main Menu is a graphical representation of the monthly Sales and Operations Planning cycle. The Main Menu guides you through the process of collecting and analyzing demand and supply information, reviewing the financial impact of the Sales and Operations Plan, and conducting the Management Business Review. There are seven main forms accessed from the Main Menu. Each of these forms contains related subforms and information. In addition to the Main Menu, there are utilities and reports which are accessed from the toolbar.



The Enterprise Sales and Operations Planning Tool provides:

- A structured implementation methodology
- Supportive, flexible, graphical tools
- A focus on proper levels
- Fast, consistent results

The following schedule may be used as a guideline for the monthly S&OP process.

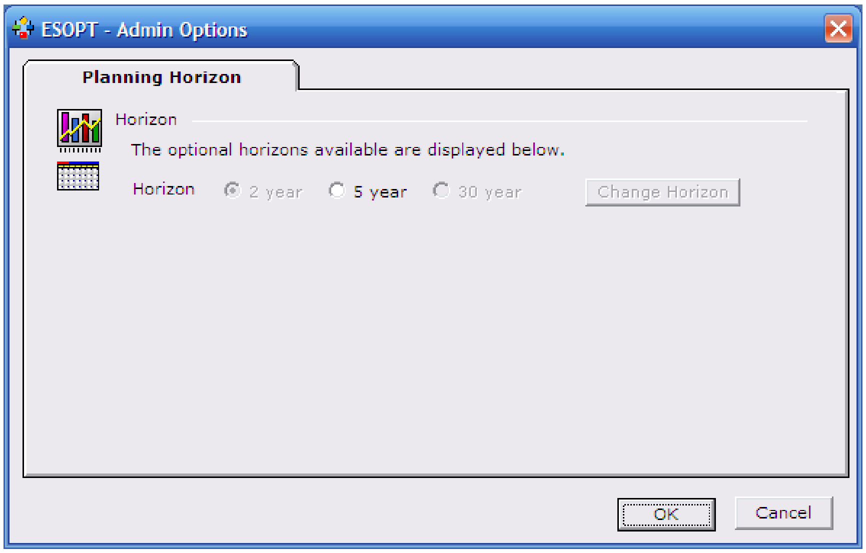
Monday	Tuesday	Wednesday	Thursday	Friday
1	2	3	4	5
Close Month (Mon–Tue)		Performance Measures	Review Fcst. w/ Sales Mgr Document Assumptions	Pre Demand Mtg
8	9	10	11	12
Supply Review of Changes (Mon–Tue) RCCP Review (Mon–Tue) Document Assumptions (Mon–Tue)		Pre Supply Mtg	Pre Finance Mtg	Distribute S&OP Pkg
15	16	17	18	19
S&OP Mtg	Distribute Minutes	Reconcile Detail/MPS (Wed–Thu)		DistributeAdjusted Fcst to Sales
22	23	24	25	26
DistributeAdjusted Fcst to Sales (Mon–Thu)				Receive Sales changes
29	30	1	2	3
Repeat Process				

Installing the 5-Year or 30-Year Future Horizon Option

If you purchased the 5-Year or 30-Year optional horizon, you may use the Admin Options to change the horizon of the database.   Multiple databases with different horizons may be used by configuring the ESOPT.ini file and switching between the databases from the Main Menu.

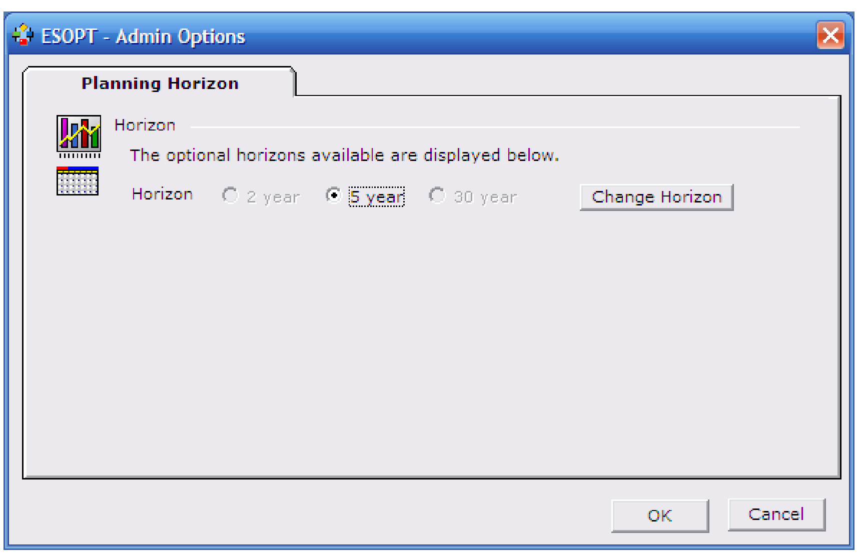
To access the Admin Options Utility:

- Select Tools>Admin Options from the Main Menu.
- When the form opens initially, the current horizon will be selected.

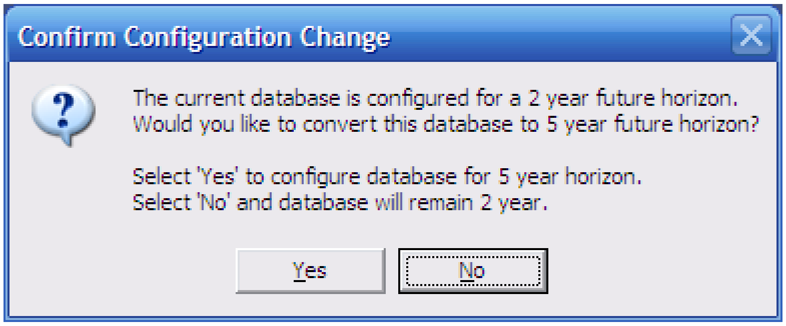


To change the horizon:

- Select 5 Year or 30 Year. Click the 'Change Horizon' Button.



- A confirmation message will appear.

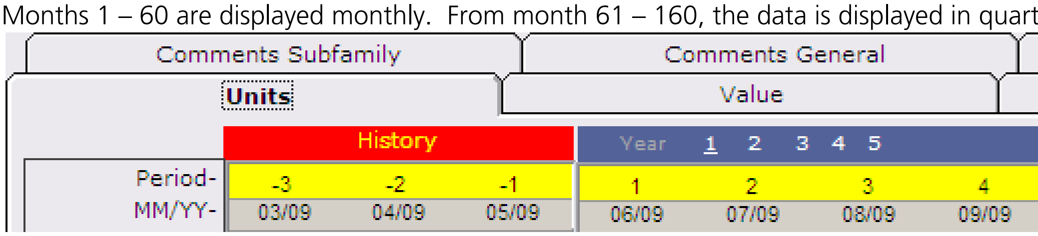


- Select 'Yes' to configure the database for the new horizon.
- Select 'No' to cancel the conversion.

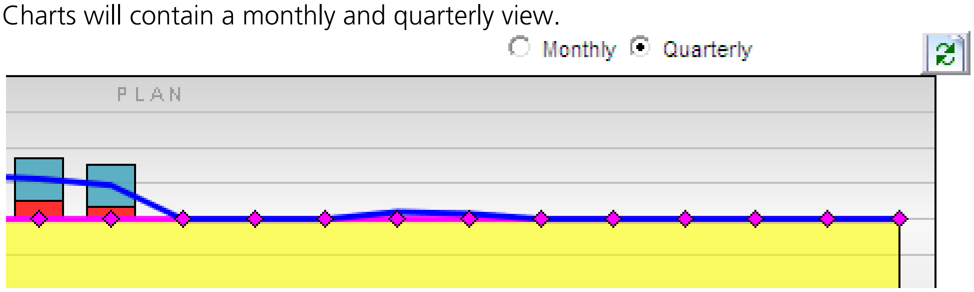
For modules Product, Demand, Supply, and Financial Appraisal as well as within the Management Business Review for Demand Supply Review and Product, there are year links provided to view the additional periods years in the grid. The charts will provide an additional quarterly view, and annual view for a 30 year plan horizon.

5 Year Horizon

Worksheets:
Months 1 – 60 are displayed monthly. From month 61 – 160, the data is displayed in quarterly buckets.

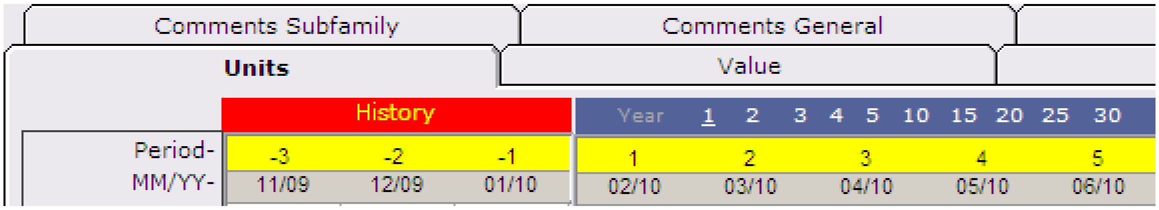


Charts:
Charts will contain a monthly and quarterly view.

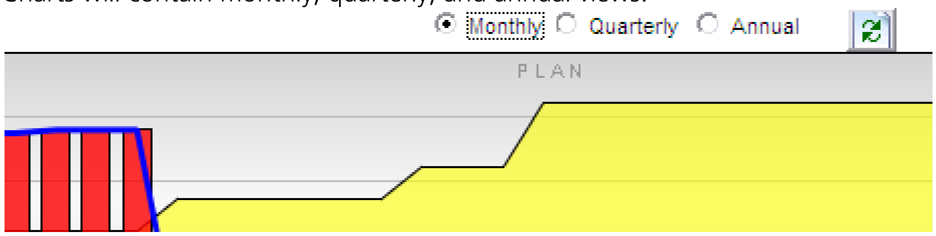


30 Year Horizon

Worksheets:
Months 1 – 60 are displayed monthly. From months 61 – 160, the data is displayed in quarterly buckets.



Charts:
Charts will contain monthly, quarterly, and annual views.



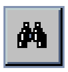
Using the Enterprise Sales and Operations Planning Tool

The Enterprise Sales and Operations Planning Tool has been developed using Visual Basic®. The following buttons are present on most forms and will help you navigate between records and forms.

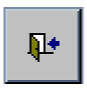
To move between forms:

The Main Menu and the Management Business Review Menu are composed of buttons that open an associated form. The forms may also be accessed from the toolbar by selecting 'Tools' and choosing the form from the drop-down list.

Click the tab located on the forms to access the subform.



The Search button will help you find an SBU, Family, or Subfamily record. Double click on the desired Subfamily to move to that record.

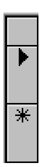


The exit button will close the form and return to the previous form or menu.

To move between records:
To go to another record:

- The First record button will move you to the first record in the database.
- The Previous record button will move to the previous record in the database.
- The Next record button will advance to the next record in the database.
- The Last record button will move you to the last record in the database.

To change records in a datasheet:
Some of the forms in the Tool contain a datasheet to use to add, delete, or modify records. The datasheet will contain a Record Selector, like the one below, to the left of the records. It is a small box or bar to the left of a record where you can click to select the entire record.



Using the record selector:
To show the status of the current record in a form or datasheet, the database displays one of the following symbols in the record selector.

Current record symbol: This is the current record; the record has been saved as it appears.

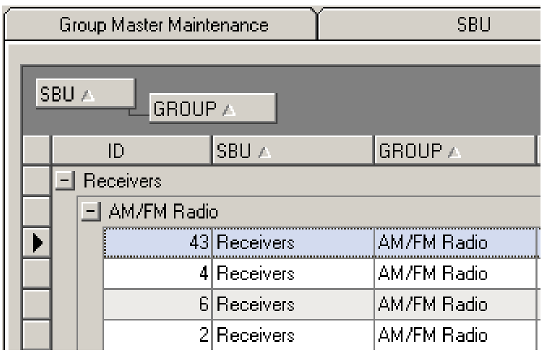
Pencil: You are editing this record; changes to the record are not yet saved.

Locked record: This record is locked by another user; you cannot edit it.

To sort, resize, or group columns in a datasheet:

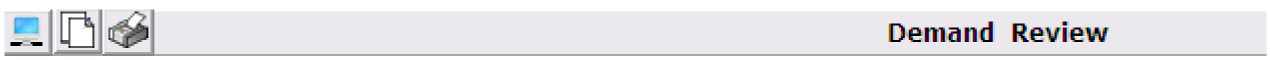
Datasheets may be **sorted** by clicking on the column heading. An arrow pointing up indicates the column is sorted in ascending order. An arrow pointing down indicates descending order.

To **resize** a column in a datasheet, place the mouse pointer in the column heading in between the field you wish to resize and the next column. The pointer will change to the resize pointer. Click and drag the mouse to the left to make the column smaller; the right to make the column larger.



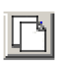
Some datasheets may have a **group** box at the top of the datasheet. To group records by a column, drag the column to the top of the datasheet. Use the + and – buttons to the left of the field to expand or condense a group. You may have as many groups as you like.

To capture or print charts for a report or presentation:



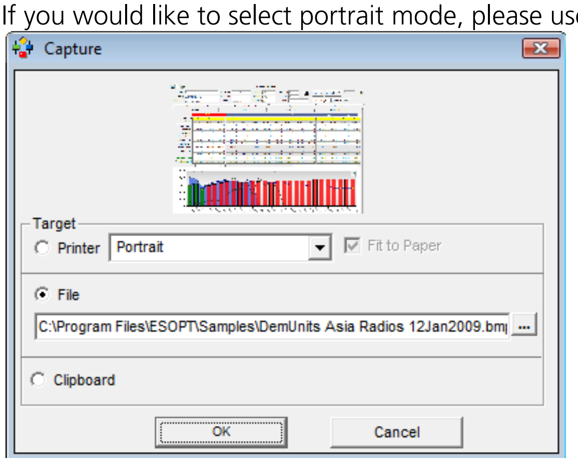
All charts contain a capture menu in the top left corner which allows several options. You can copy the chart onto the clipboard and paste it into a presentation, save the chart as an image, or print the chart in portrait or landscape format. The capture method used is different from the Windows 'Print Screen' or other capture utilities in that it copies only the ESOPT form, and not the entire windows screen, to the clipboard. This can save time by eliminating the need to crop extraneous data from the images for a presentation.

The Capture button will open a menu to select all options.



The Copy button will copy the contents of the form to the clipboard for pasting into a presentation.

The Print button will print directly to the printer in landscape mode.
If you would like to select portrait mode, please use the capture menu.



Select one of the following:

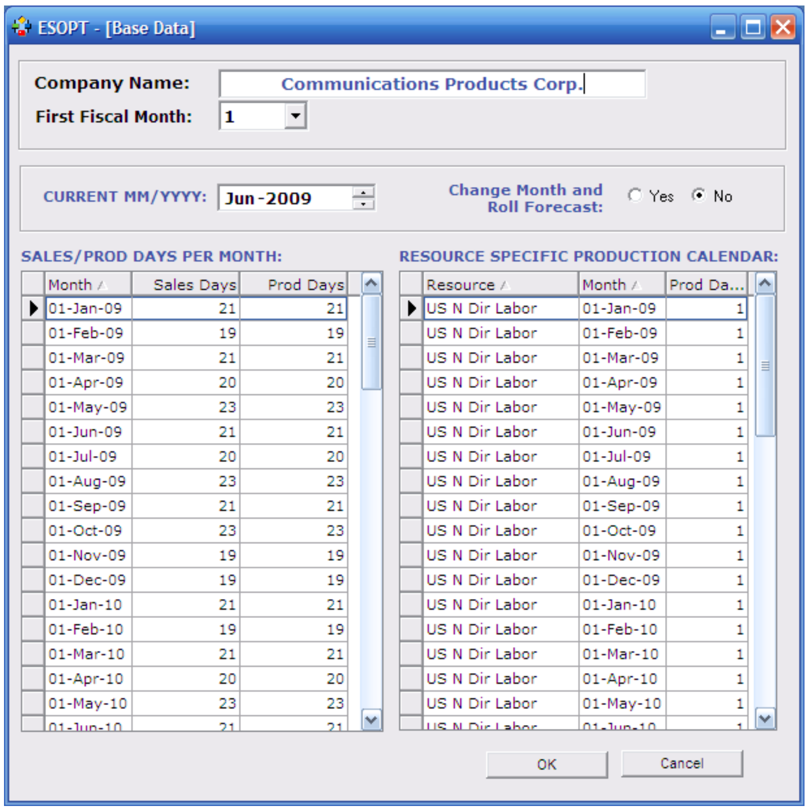
1. Printer.
2. File.
3. Clipboard.

Using the Base Data Form

The Base Data form is used to maintain Company Name, First Fiscal Month, Current Month, Sales and Production Days Per Month, and Resource Specific Production Calendar showing days per month. The Change Month and Roll Forecast option is also located on the form.

To access the Base Data form:

- From the Main Menu toolbar, select 'Tools' to display a drop-down menu.
- Select the 'Add/Edit/Delete Menu'.
- Select 'Base Data'.


ESOPT - [Base Data]

Company Name: Communications Products Corp.

First Fiscal Month: 1

CURRENT MM/YYYY: Jun-2009

Change Month and Roll Forecast: Yes No

SALES/PROD DAYS PER MONTH:

Month	Sales Days	Prod Days
01-Jan-09	21	21
01-Feb-09	19	19
01-Mar-09	21	21
01-Apr-09	20	20
01-May-09	23	23
01-Jun-09	21	21
01-Jul-09	20	20
01-Aug-09	23	23
01-Sep-09	21	21
01-Oct-09	23	23
01-Nov-09	19	19
01-Dec-09	19	19
01-Jan-10	21	21
01-Feb-10	19	19
01-Mar-10	21	21
01-Apr-10	20	20
01-May-10	23	23

RESOURCE SPECIFIC PRODUCTION CALENDAR:

Resource	Month	Prod Da...
US N Dir Labor	01-Jan-09	1
US N Dir Labor	01-Feb-09	1
US N Dir Labor	01-Mar-09	1
US N Dir Labor	01-Apr-09	1
US N Dir Labor	01-May-09	1
US N Dir Labor	01-Jun-09	1
US N Dir Labor	01-Jul-09	1
US N Dir Labor	01-Aug-09	1
US N Dir Labor	01-Sep-09	1
US N Dir Labor	01-Oct-09	1
US N Dir Labor	01-Nov-09	1
US N Dir Labor	01-Dec-09	1
US N Dir Labor	01-Jan-10	1
US N Dir Labor	01-Feb-10	1
US N Dir Labor	01-Mar-10	1
US N Dir Labor	01-Apr-10	1
US N Dir Labor	01-May-10	1

OK Cancel

Entering the Data Fields:

Company Name

- Enter the Company Name you would like to display on the menus and reports. You may modify the Company Name at any time.
- Enter your Company Name.

First Fiscal Month

- Enter the Month number representing the beginning month of the company's yearly accounting period.
- Tab to the next field.

Current MM/YY

- Enter the Current Month and Year. This field will also be used by the Roll Month function. See Utilities - Roll Month Function for an explanation of this function.

Change Month and Roll Forecast Box

- Select 'Yes' or 'No' to Change Month and Roll Forecast. See Utilities - Roll Month Function for an explanation of this function.

Calendars

There are two calendars located on the Base Data form. They are used to define the Sales and Production Days Per Month and the Resource Available Days Per Month. The calendar may be imported or entered as described below. To import the calendars, see Tools – Import Calendar.

Sales Production Days Calendar (Sales/Production Days Per Month)

Enter the number of Sales/Production Days Per Month. Enter the range of months that inclues at least 24 prior months plus a year greater than your planning horizon. For example; if you planning horizon is 2 years , enter the months corresponding to 2 years of history and 3 years in the future. 'Production days' will be used in the Resource Plan calculation of Demonstrated (DEMO), Maximum (MAX), and Planned (PLAN) capacity hours in a given month. Sales Days are used for converting a monthly plan to a daily plan in the 'Days of Inventory Calculation'.

Month	Sales Days	Prod Days
01-Jan-09	21	21
01-Feb-09	19	19
01-Mar-09	21	21
01-Apr-09	20	20
01-May-09	23	23
01-Jun-09	21	21
01-Jul-09	20	20
01-Aug-09	23	23
01-Sep-09	21	21
01-Oct-09	23	23
01-Nov-09	19	19
01-Dec-09	19	19
01-Jan-10	21	21
01-Feb-10	19	19
01-Mar-10	21	21
01-Apr-10	20	20
01-May-10	23	23
01-Jun-10	21	21

Month

- Enter the Month and Year in MM/YYYY format.

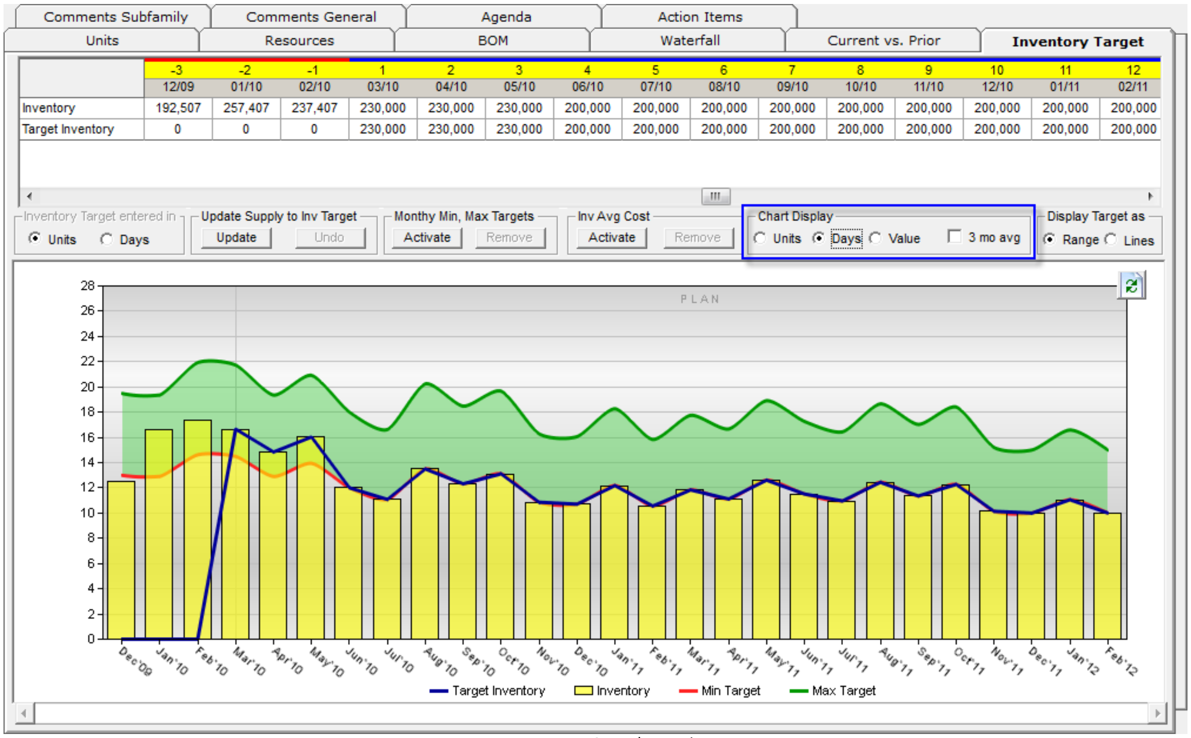
Sales Days (Demand)

- Enter the number of Sales or Demand days.

Prod Days (Production)

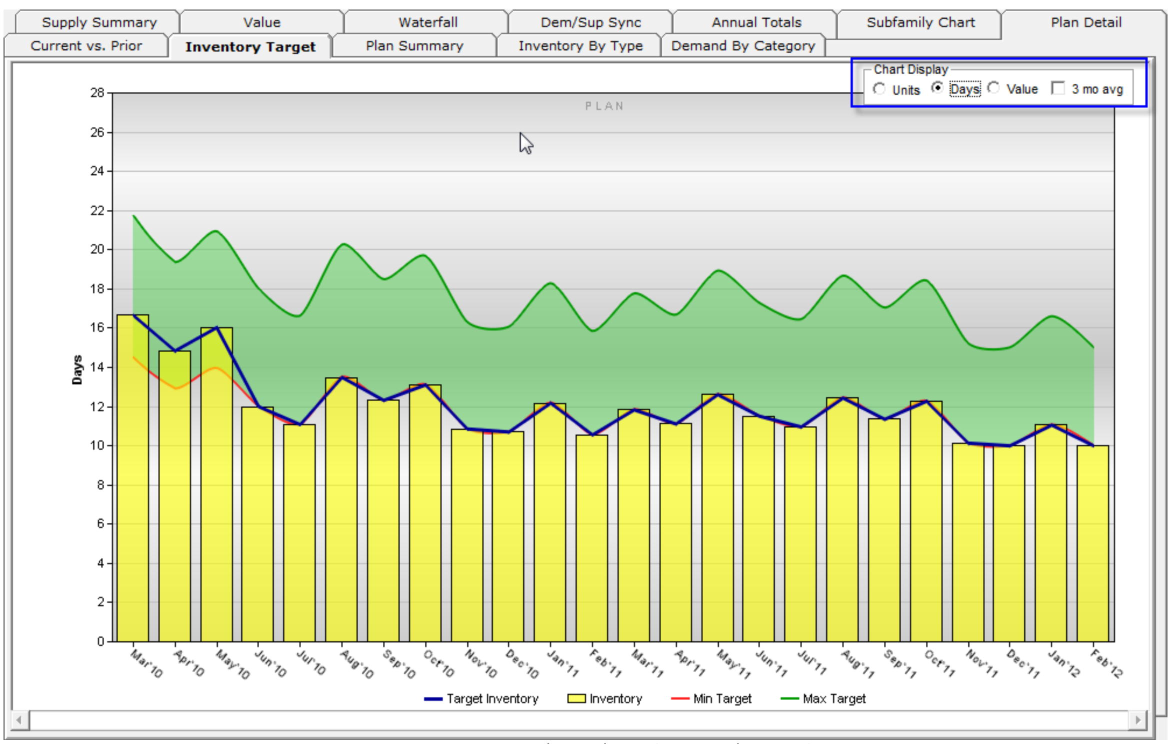
- Enter the number of Production days in each monthly period.

Example 1: The number of sales days are used to calculate days from units when the Inventory plan is displayed in 'Days.'



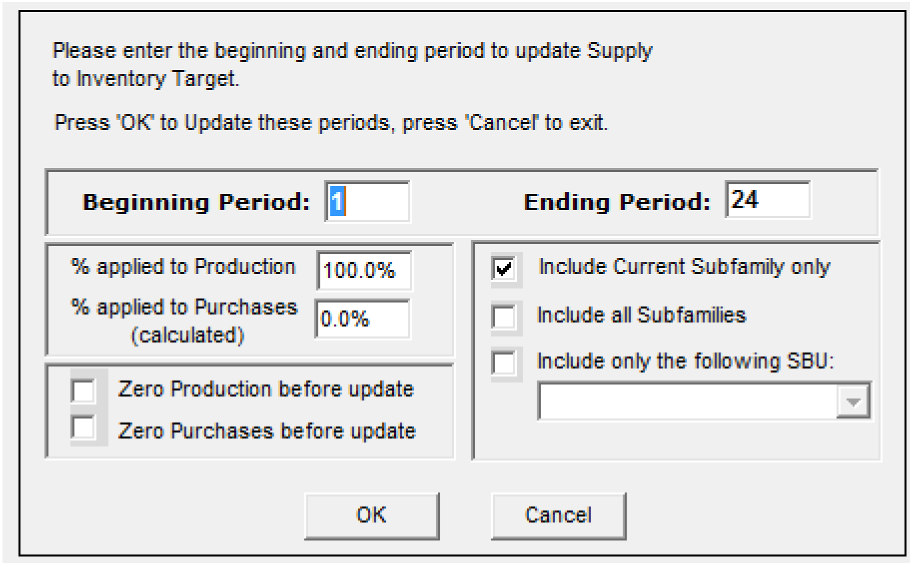
	-3	-2	-1	1	2	3	4	5	6	7	8	9	10	11	12
	12/09	01/10	02/10	03/10	04/10	05/10	06/10	07/10	08/10	09/10	10/10	11/10	12/10	01/11	02/11
Inventory	192,507	257,407	237,407	230,000	230,000	230,000	200,000	200,000	200,000	200,000	200,000	200,000	200,000	200,000	200,000
Target Inventory	0	0	0	230,000	230,000	230,000	200,000	200,000	200,000	200,000	200,000	200,000	200,000	200,000	200,000

Supply Review

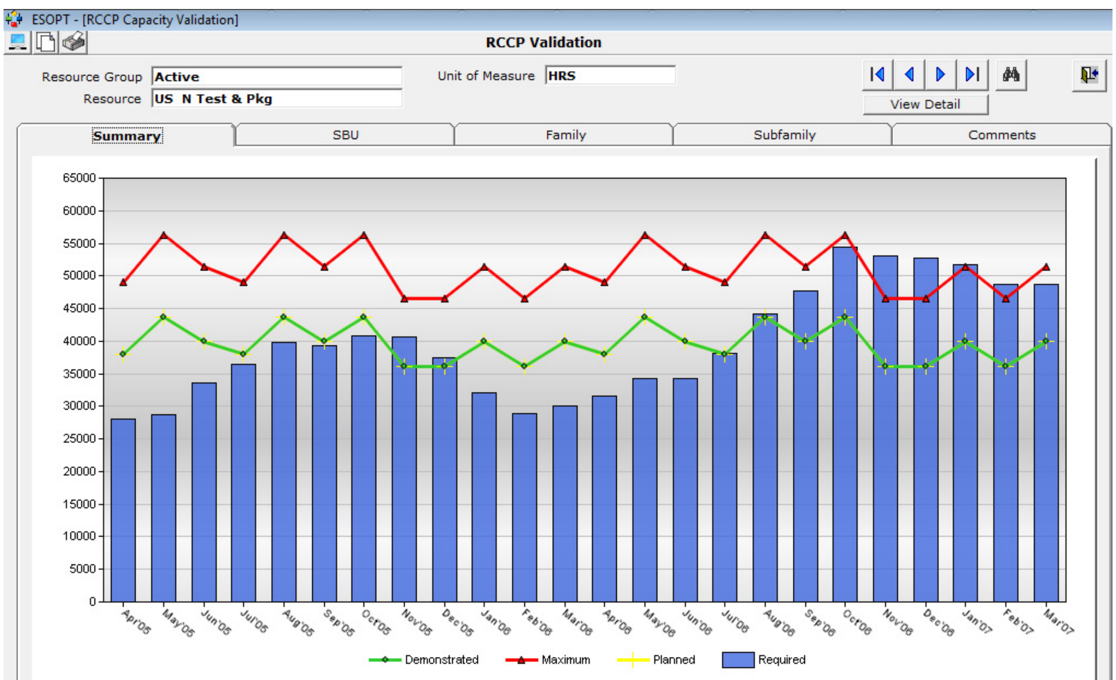


Demand/Supply Review, Product Review

Example 2: The number of sales days is used to calculate the units for the 'Set Supply to Inventory Target' utility when the Subfamily 'Inventory Target' is entered in days:



Example 3: The number of production days are used for the following: Resource Plan Capacity: Planned, Demonstrated, Maximum Capacity per month.



	1	2	3	4	5	6	7	8	9	10	11	12
Req	28053	28772	33647	36450	39739	39283	40754	40681	37442	32013	28859	30088
Dem	38000	43700	39900	38000	43700	39900	43700	36100	36100	39900	36100	39900
Plan	38000	43700	39900	38000	43700	39900	43700	36100	36100	39900	36100	39900
Max	49000	56350	51450	49000	56350	51450	56350	46550	46550	51450	46550	51450

	13	14	15	16	17	18	19	20	21	22	23	24
Req	31562	34287	34270	38145	44196	47666	54444	53081	52691	51771	48751	48751
Dem	38000	43700	39900	38000	43700	39900	43700	36100	36100	39900	36100	39900
Plan	38000	43700	39900	38000	43700	39900	43700	36100	36100	39900	36100	39900
Max	49000	56350	51450	49000	56350	51450	56350	46550	46550	51450	46550	51450

<u>Resource Specific Production Calendar</u>

The Resource Specific Production Calendar is used to override the production days for specific resources. It only should be entered if the resource's available production days are different from the company production days for a specific month. The number of available production days for each resource should be entered for the Month/Year period where it differs from the company calendar. If a Resource Specific Calendar is not populated, the company production days will be used for Resource Planning.

Resource

Used to uniquely identify each Resource: These Resources can be equipment, equipment groupings, departments, materials, etc.

- Select the Resource from the drop-down list of available Resources. Resources are defined in the Resource Master. (See Entering Supply Data, Resource Plan Data, Resources)

Month

- Enter the Month and Year in MM/YYYY format.

Production Days

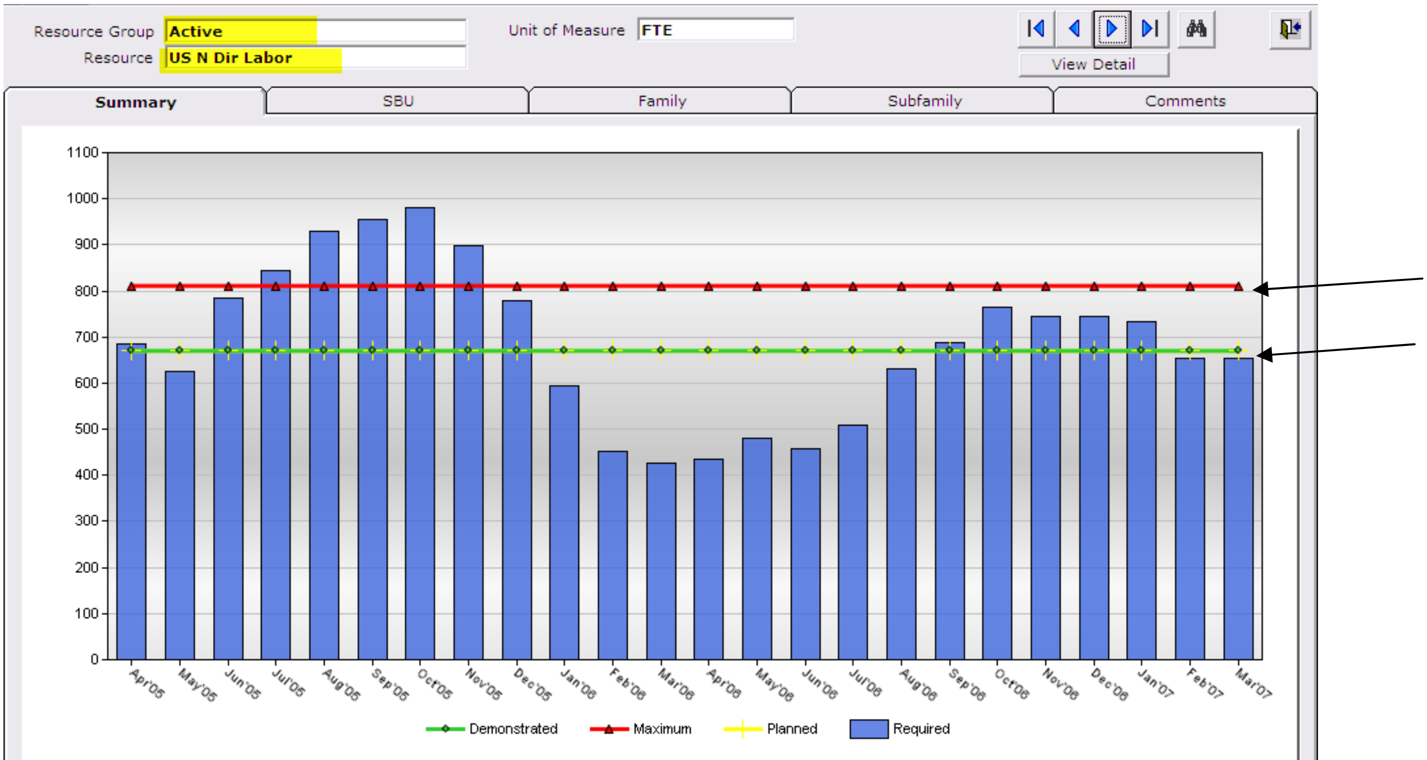
The number of days the Resource will be producing product: This number is multiplied by the Demonstrated hours per day, Planned hours per day, and Max hours per day to develop a monthly capacity for each Resource.

- Enter the number of available production days for the Resource in the monthly period.

Example: The Resource Specific Calendar has been used to specify the number of production days for the resource 'US N Dir Labor' that is different from the production days in the Sales/Production calendar. Entering the resource here will override the default days to calculate Planned, Demonstrated, and Maximum capacity per month.

Resource	Month	Prod Da...
US N Dir Labor	01-Jan-09	1
US N Dir Labor	01-Feb-09	1
US N Dir Labor	01-Mar-09	1
US N Dir Labor	01-Apr-09	1
US N Dir Labor	01-May-09	1
US N Dir Labor	01-Jun-09	1
US N Dir Labor	01-Jul-09	1
US N Dir Labor	01-Aug-09	1
US N Dir Labor	01-Sep-09	1
US N Dir Labor	01-Oct-09	1
US N Dir Labor	01-Nov-09	1
US N Dir Labor	01-Dec-09	1
US N Dir Labor	01-Jan-10	1
US N Dir Labor	01-Feb-10	1
US N Dir Labor	01-Mar-10	1
US N Dir Labor	01-Apr-10	1
US N Dir Labor	01-May-10	1
US N Dir Labor	01-Jun-10	1

The Minimum, Maximum, and Demonstrated capacity per day entered for the Resource 'US N Dir Labor' in the Resource Master is multiplied by one production day to equal the monthly capacity.



	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
Req	685	626	784	846	929	954	979	897	778	593	453	427	434	479	457	508	632	687	766	743	744	732	654	654
Dem	670	670	670	670	670	670	670	670	670	670	670	670	670	670	670	670	670	670	670	670	670	670	670	670
Plan	670	670	670	670	670	670	670	670	670	670	670	670	670	670	670	670	670	670	670	670	670	670	670	670
Max	811	811	811	811	811	811	811	811	811	811	811	811	811	811	811	811	811	811	811	811	811	811	811	811

Setting up Foreign Currency Translation

The Foreign Currency Translation is used in the Management Business Review - Financial Review - to enable viewing of values in Local Currency and Primary Currency.

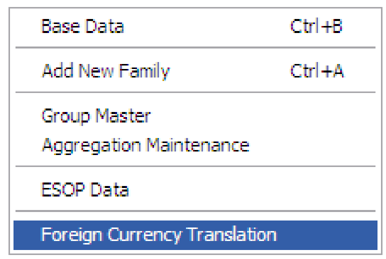
There are two steps to setting up foreign currency translation; setting up the currency and assigning the currency to the Subfamily. If the company and local reporting currency are the same, no action is needed, and you may skip this section. Even if your Local Currency is different from your company's Primary Currency, you may not be using this feature. If you are unsure, check with your Oliver Wight Consultant or ESOPT administrator.

Primary Currency: The primary currency is the reporting currency of your company or corporation.
Local Currency: The local currency is the reporting currency of your site or division.

Step 1) Add a Local Currency

<u>To access Foreign Currency Translation Maintenance:</u>

- From the Main Menu toolbar, select Tools Menu to display a drop-down menu.
- Select the Add/Edit/Delete Menu.
- Select Foreign Currency Translation.

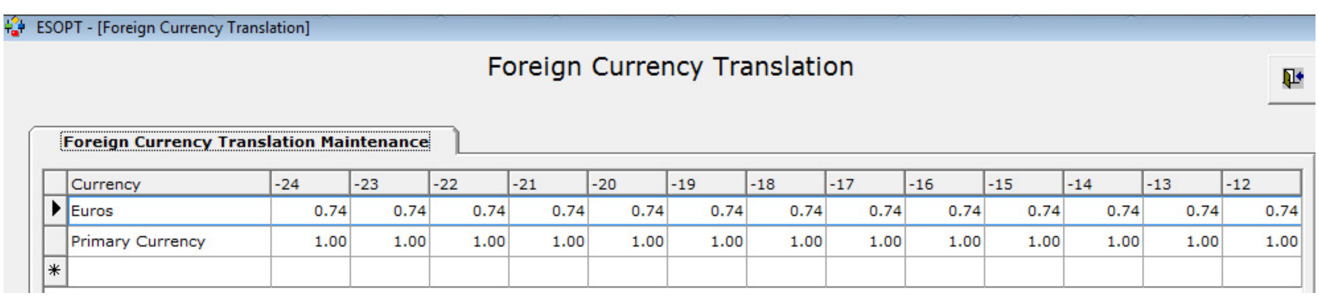


<u>To add a new Local Currency:</u>
Enter the following information:

<u>Description</u>
- The description of the Local Currency, for example: Euro

<u>Periods -24 to 60</u>
- Enter the value in percent of the Primary Currency.

Example:
If your company's reporting currency is 'Dollar', the Local Currency is 'Euro,' and one Dollar equals .74 Euros, the values are entered as shown below. The Primary Currency record should always be present and always be a value of 1.0. When adding a new subfamily, select 'Euro' in the foreign currency translation field.


ESOPT - [Foreign Currency Translation]

Foreign Currency Translation

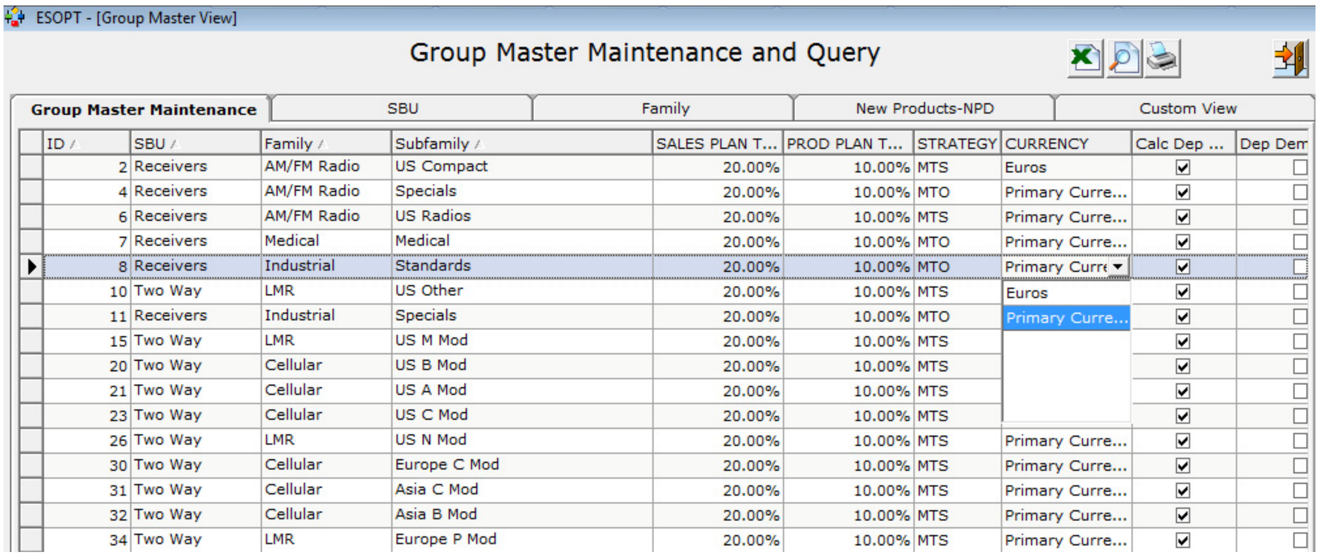
Foreign Currency Translation Maintenance

Currency	-24	-23	-22	-21	-20	-19	-18	-17	-16	-15	-14	-13	-12
Euros	0.74	0.74	0.74	0.74	0.74	0.74	0.74	0.74	0.74	0.74	0.74	0.74	0.74
Primary Currency	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Step 2) Assign Currency to Subfamily

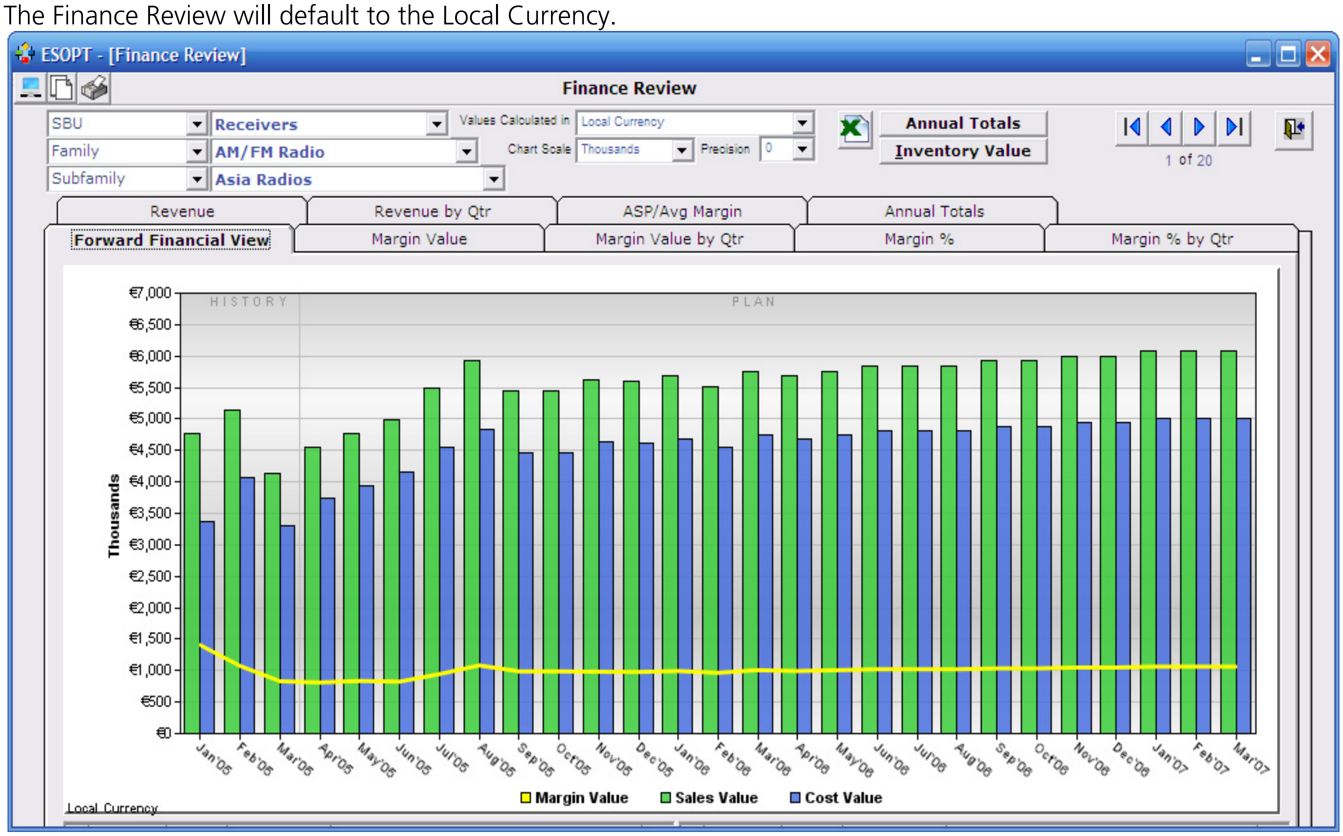
<u>To access the Group Master Maintenance Form:</u>

- From the Main Menu toolbar, select the Tools Menu to display a drop-down menu.
- Select the Add/Delete/Edit Menu.
- Select Group Master.
- Modify the currency for the Subfamily.

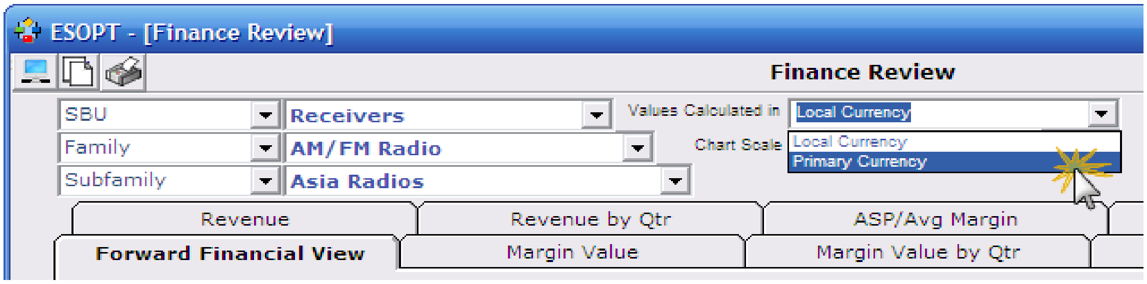


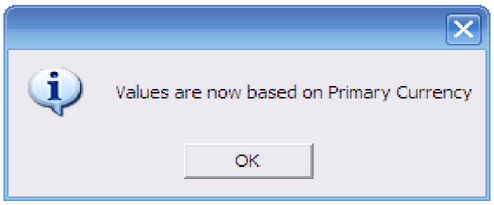
ID	SBU	Family	Subfamily	SALES PLAN T...	PROD PLAN T...	STRATEGY	CURRENCY	Calc Dep ...	Dep Dem
2	Receivers	AM/FM Radio	US Compact	20.00%	10.00%	MTS	Euros	☑	☐
4	Receivers	AM/FM Radio	Specials	20.00%	10.00%	MTO	Primary Curre...	☑	☐
6	Receivers	AM/FM Radio	US Radios	20.00%	10.00%	MTS	Primary Curre...	☑	☐
7	Receivers	Medical	Medical	20.00%	10.00%	MTO	Primary Curre...	☑	☐
8	Receivers	Industrial	Standards	20.00%	10.00%	MTO	Primary Curre	☑	☐
10	Two Way	LMR	US Other	20.00%	10.00%	MTS	Euros	☑	☐
11	Receivers	Industrial	Specials	20.00%	10.00%	MTO	Primary Curre...	☑	☐
15	Two Way	LMR	US M Mod	20.00%	10.00%	MTS		☑	☐
20	Two Way	Cellular	US B Mod	20.00%	10.00%	MTS		☑	☐
21	Two Way	Cellular	US A Mod	20.00%	10.00%	MTS		☑	☐
23	Two Way	Cellular	US C Mod	20.00%	10.00%	MTS		☑	☐
26	Two Way	LMR	US N Mod	20.00%	10.00%	MTS	Primary Curre...	☑	☐
30	Two Way	Cellular	Europe C Mod	20.00%	10.00%	MTS	Primary Curre...	☑	☐
31	Two Way	Cellular	Asia C Mod	20.00%	10.00%	MTS	Primary Curre...	☑	☐
32	Two Way	Cellular	Asia B Mod	20.00%	10.00%	MTS	Primary Curre...	☑	☐
34	Two Way	LMR	Europe P Mod	20.00%	10.00%	MTS	Primary Curre...	☑	☐

The Finance Review will default to the Local Currency.



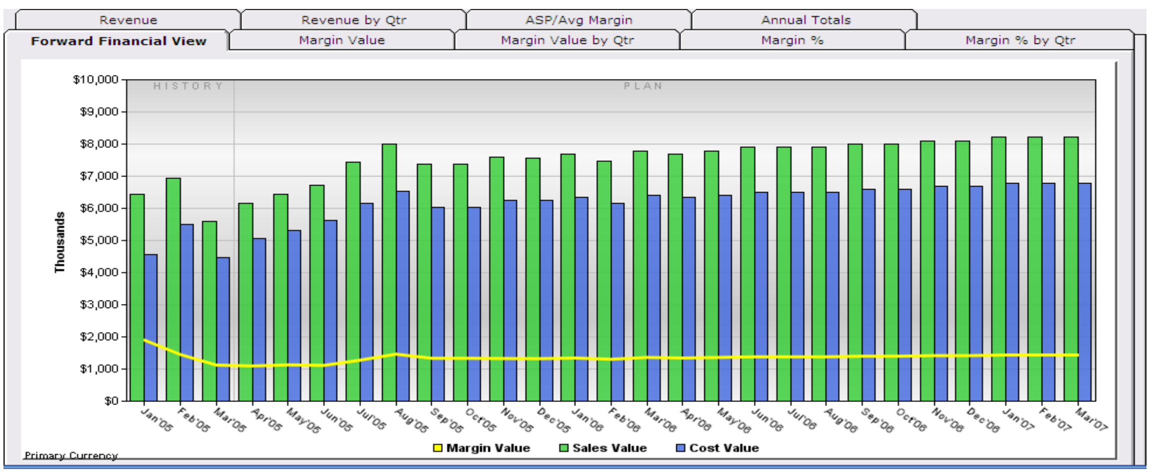
To display the primary currency, click the drop down called ‘Values Calculated in.’



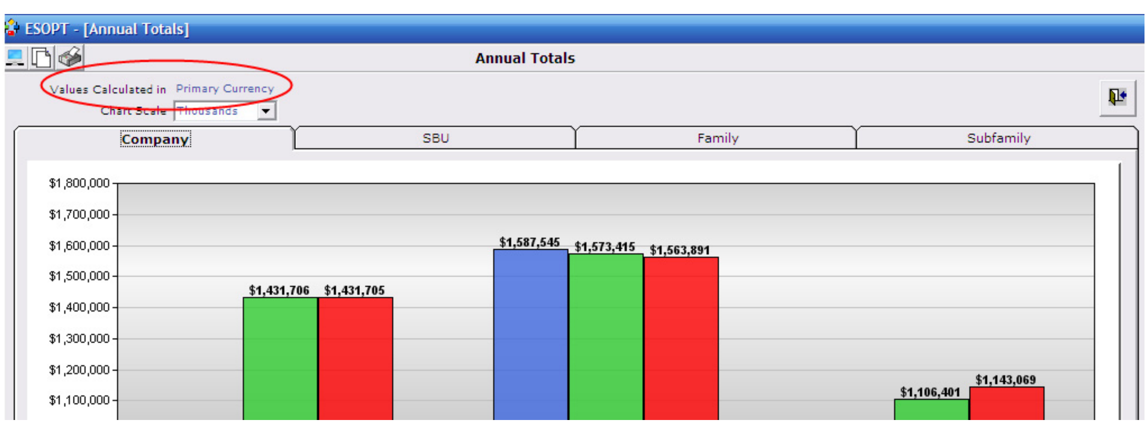


The popup indicates the value calculation has completed. Wait a few seconds for the screen to refresh.

The Finance Review charts are now displayed in the selected currency.



The currency selected will also be displayed in the Annual Totals when accessed from the Finance Review.

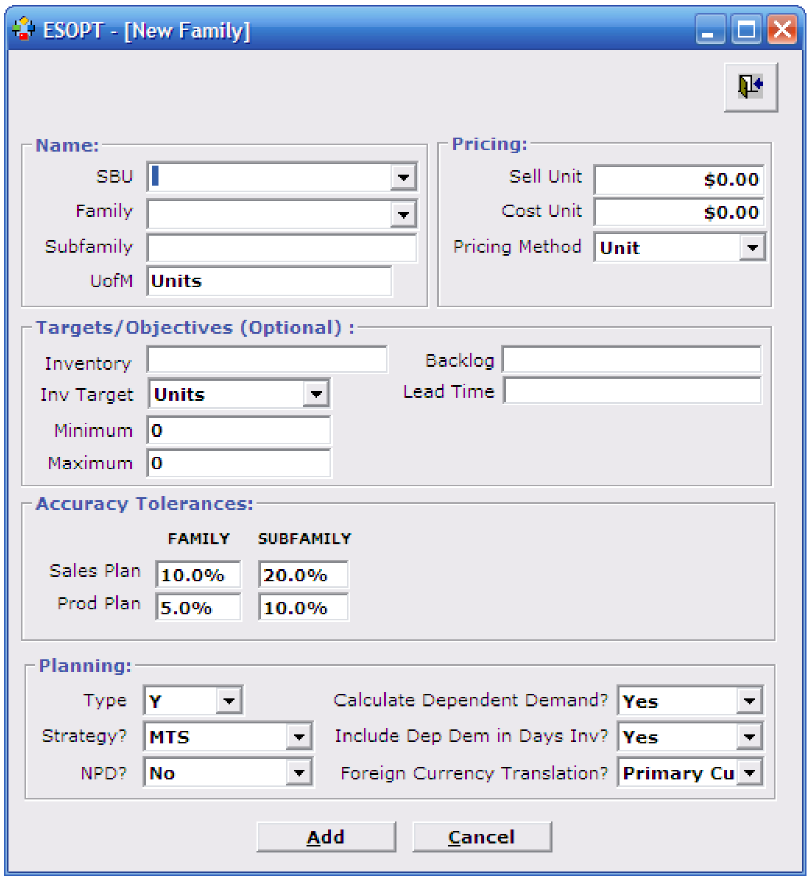


Adding a New Family

The New Family form is used to add a New SBU, Family, or Subfamily. It is also used to enter Inventory Targets, pricing data, and tolerances. Additional fields are available in the Group Master Maintenance Form.

<u>To access the add New Family form:</u>

- From the Main Menu toolbar, select the Tools menu to display a drop-down menu.
- Select the Add/Edit/Delete menu.
- Select Add New Family.


ESOPT - [New Family]

Name:
SBU
Family
Subfamily
UofM: Units

Pricing:
Sell Unit: $0.00
Cost Unit: $0.00
Pricing Method: Unit

Targets/Objectives (Optional) :
Inventory
Inv Target: Units
Minimum: 0
Maximum: 0
Backlog
Lead Time

Accuracy Tolerances:

	FAMILY	SUBFAMILY
Sales Plan	10.0%	20.0%
Prod Plan	5.0%	10.0%

Planning:
Type: Y
Strategy?: MTS
NPD?: No
Calculate Dependent Demand?: Yes
Include Dep Dem in Days Inv?: Yes
Foreign Currency Translation?: Primary Cu

Add   Cancel

<u>To add a new SBU, Family, or Subfamily:</u>

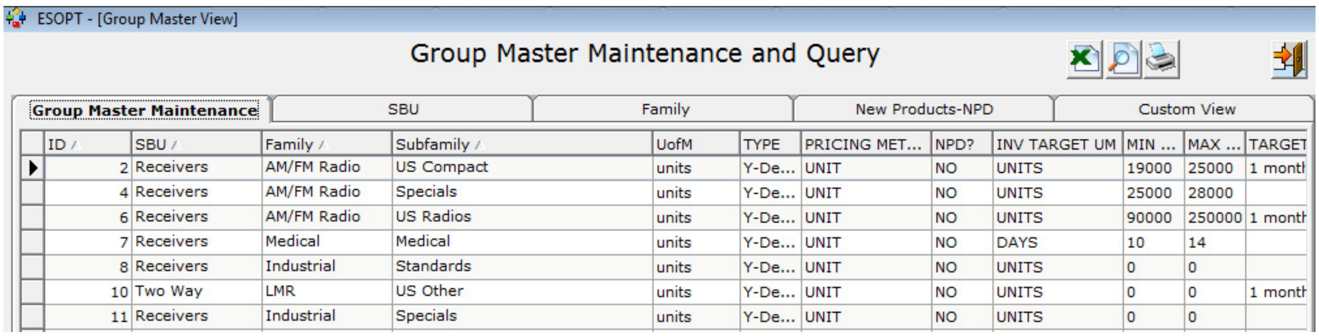
- Enter the information in the fields provided. See <u>Chapter 11-Group Master Fields for a description of the fields</u>.
- Click the 'Add' button to add the Subfamily
- Click the 'Cancel' button to cancel.

Group Master Maintenance and Query

The Group Master form is used to modify and query the Group Master. See Chapter 11- Group Master Fields for a description of the fields.

To access the Group Master Maintenance form:

- From the Main Menu toolbar, select the Tools Menu to display a drop-down menu.
- Select the Add/Delete/Edit Menu.
- Select Group Master.



ID	SBU	Family	Subfamily	UofM	TYPE	PRICING MET...	NPD?	INV TARGET UM	MIN ...	MAX ...	TARGET
2	Receivers	AM/FM Radio	US Compact	units	Y-De...	UNIT	NO	UNITS	19000	25000	1 montl
4	Receivers	AM/FM Radio	Specials	units	Y-De...	UNIT	NO	UNITS	25000	28000	
6	Receivers	AM/FM Radio	US Radios	units	Y-De...	UNIT	NO	UNITS	90000	250000	1 montl
7	Receivers	Medical	Medical	units	Y-De...	UNIT	NO	DAYS	10	14	
8	Receivers	Industrial	Standards	units	Y-De...	UNIT	NO	UNITS	0	0	
10	Two Way	LMR	US Other	units	Y-De...	UNIT	NO	UNITS	0	0	1 montl
11	Receivers	Industrial	Specials	units	Y-De...	UNIT	NO	UNITS	0	0	

To edit a record (edit available only in Tab 1-Group Master):

- Click in the field you want to edit. Enter the data directly or select from the drop-down menu of available options.

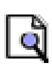
- The SBU, Family, New Products, and Custom View are informational only. The data on these pages cannot be edited. The view of each corresponding page can be modified by clicking on a heading and the page will be toggled between ascending and descending sorts.

To delete a Subfamily:

- Click on the Record Selector to select a record. The Record Selector should display an arrow next to the record that will be deleted.
- Press the 'Delete' key on your computer keyboard.
- Select 'Yes" or "No" to confirm deletion of the record.

Using the Group Master Query Tools

The SBU, Family, NPD, and Custom View provide queries for sorting and grouping the Group Master. You may also print the query you have created.

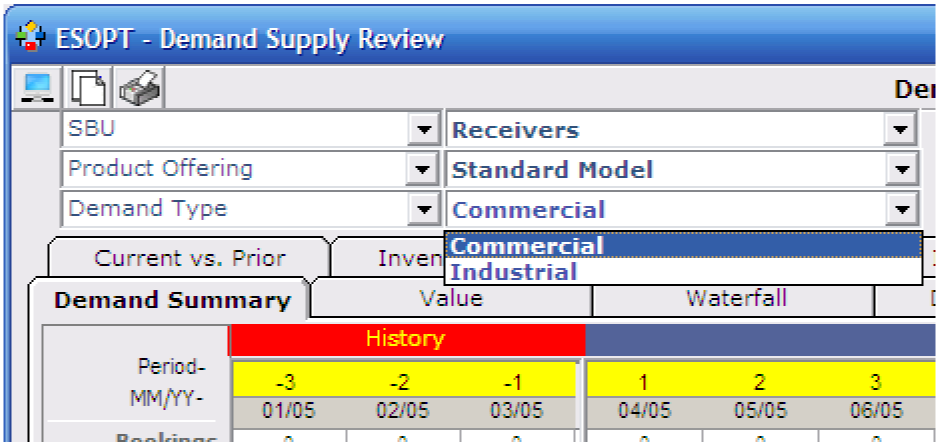
 The Print Preview button will display a preview of the query.

 The Printer button will print the query.

 The Spreadsheet button will export the data to a spreadsheet from the Group Master Maintenance tab.

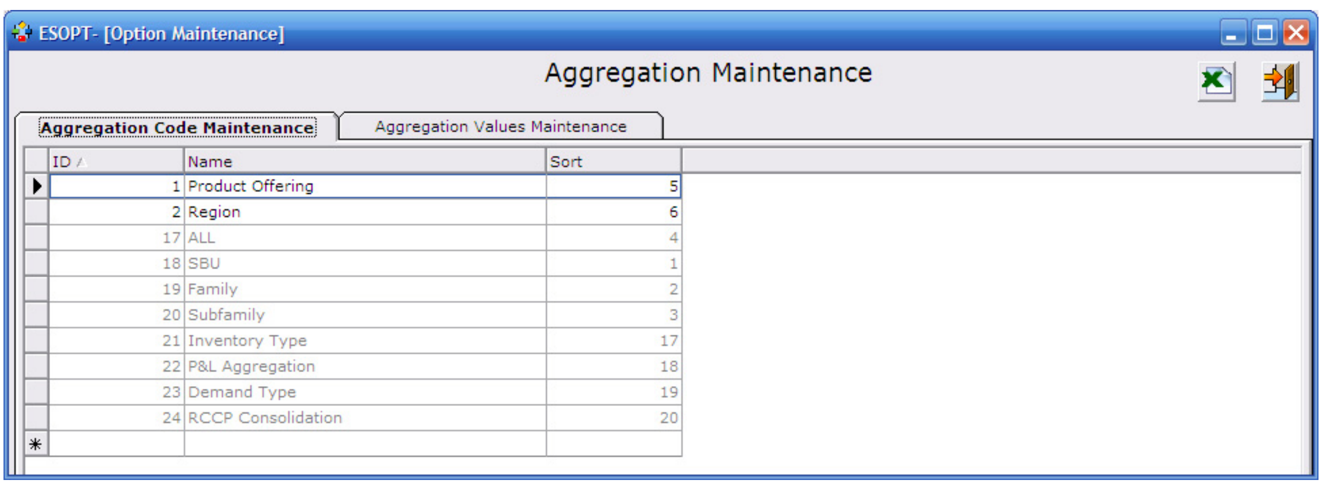
Aggregation Maintenance

The Aggregation form is used to create and modify the aggregation of data and their sort order. Aggregation Codes 1-12 may be user defined. Codes 17 and greater are system defined and may not be changed. The Aggregation codes are assigned to the Subfamily and used in Demand/Supply Review, Product Review, Finance Review, and Resource Plan to group and analyze data. Up to 3 levels of aggregation and any combination or order may be selected.



<u>To Access the Aggregation Maintenance Form:</u>

- From the Main Menu toolbar, select the Tools Menu to display a drop-down menu.
- Select the Add/Delete/Edit Menu.
- Select Aggregation Maintenance.



<u>Entering the Information:</u>

ID

- Enter the ID number. Valid numbers are 1-12.

Name

- Name of the Aggregation field

Sort

- Order number in which the field will be sorted.

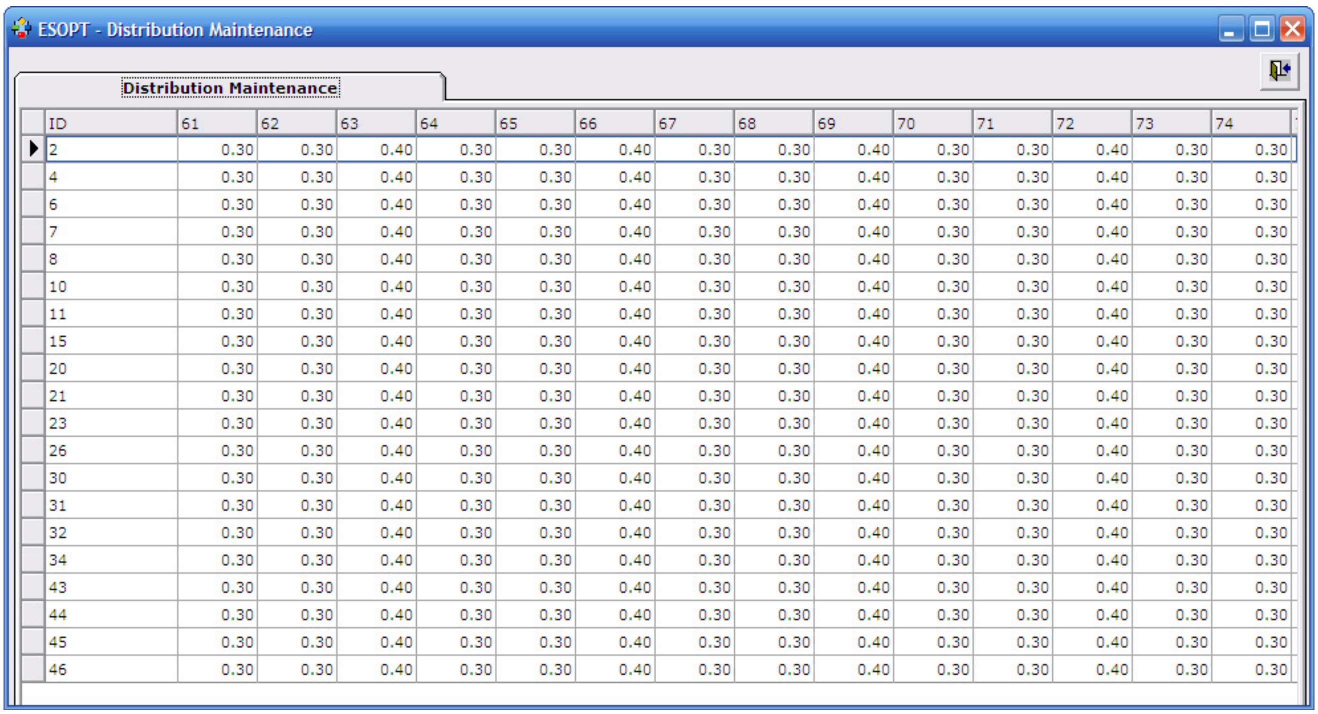
The Spreadsheet button will export the data to a spreadsheet.

Distribution Maintenance

The Distribution Table is used when the 30 year horizon option is in effect. The purpose of the distribution table is to extend the monthly calculations to planning years 6 and 7 which are maintained in quarterly buckets. This allows a full 5 years of volume in monthly buckets when using the Bill of Material or Resource Plan lead-time offset. When a Bill of Material or Resource plan calculation contains a negative lead time, the distribution table will move any quarterly volume into the appropriate month within the 5 year horizon. It is also used to transition between months to quarters when rolling to a new month and the months first quarterly period (61) overlaps with the monthly periods (59 and 60).

The month volume is calculated by multiplying the percent of distribution for the monthly period it represents to the quarterly volume in the associated fiscal quarter.

For each Group Master ID, the Distribution Table maintains the percent of the fiscal quarter of each month within that quarter for the months 61 to 84, or years 6 and 7. This distribution can be entered or updated in the Distribution Maintenance or through the Import Distribution in the Utility Menu. See Data Management Tools chapter for more details on the Import.



ESOPT - Distribution Maintenance

Distribution Maintenance

ID	61	62	63	64	65	66	67	68	69	70	71	72	73	74
2	0.30	0.30	0.40	0.30	0.30	0.40	0.30	0.30	0.40	0.30	0.30	0.40	0.30	0.30
4	0.30	0.30	0.40	0.30	0.30	0.40	0.30	0.30	0.40	0.30	0.30	0.40	0.30	0.30
6	0.30	0.30	0.40	0.30	0.30	0.40	0.30	0.30	0.40	0.30	0.30	0.40	0.30	0.30
7	0.30	0.30	0.40	0.30	0.30	0.40	0.30	0.30	0.40	0.30	0.30	0.40	0.30	0.30
8	0.30	0.30	0.40	0.30	0.30	0.40	0.30	0.30	0.40	0.30	0.30	0.40	0.30	0.30
10	0.30	0.30	0.40	0.30	0.30	0.40	0.30	0.30	0.40	0.30	0.30	0.40	0.30	0.30
11	0.30	0.30	0.40	0.30	0.30	0.40	0.30	0.30	0.40	0.30	0.30	0.40	0.30	0.30
15	0.30	0.30	0.40	0.30	0.30	0.40	0.30	0.30	0.40	0.30	0.30	0.40	0.30	0.30
20	0.30	0.30	0.40	0.30	0.30	0.40	0.30	0.30	0.40	0.30	0.30	0.40	0.30	0.30
21	0.30	0.30	0.40	0.30	0.30	0.40	0.30	0.30	0.40	0.30	0.30	0.40	0.30	0.30
23	0.30	0.30	0.40	0.30	0.30	0.40	0.30	0.30	0.40	0.30	0.30	0.40	0.30	0.30
26	0.30	0.30	0.40	0.30	0.30	0.40	0.30	0.30	0.40	0.30	0.30	0.40	0.30	0.30
30	0.30	0.30	0.40	0.30	0.30	0.40	0.30	0.30	0.40	0.30	0.30	0.40	0.30	0.30
31	0.30	0.30	0.40	0.30	0.30	0.40	0.30	0.30	0.40	0.30	0.30	0.40	0.30	0.30
32	0.30	0.30	0.40	0.30	0.30	0.40	0.30	0.30	0.40	0.30	0.30	0.40	0.30	0.30
34	0.30	0.30	0.40	0.30	0.30	0.40	0.30	0.30	0.40	0.30	0.30	0.40	0.30	0.30
43	0.30	0.30	0.40	0.30	0.30	0.40	0.30	0.30	0.40	0.30	0.30	0.40	0.30	0.30
44	0.30	0.30	0.40	0.30	0.30	0.40	0.30	0.30	0.40	0.30	0.30	0.40	0.30	0.30
45	0.30	0.30	0.40	0.30	0.30	0.40	0.30	0.30	0.40	0.30	0.30	0.40	0.30	0.30
46	0.30	0.30	0.40	0.30	0.30	0.40	0.30	0.30	0.40	0.30	0.30	0.40	0.30	0.30

The table below shows how the quarterly volume and monthly distribution percent calculate the monthly volume in years 6 and 7.

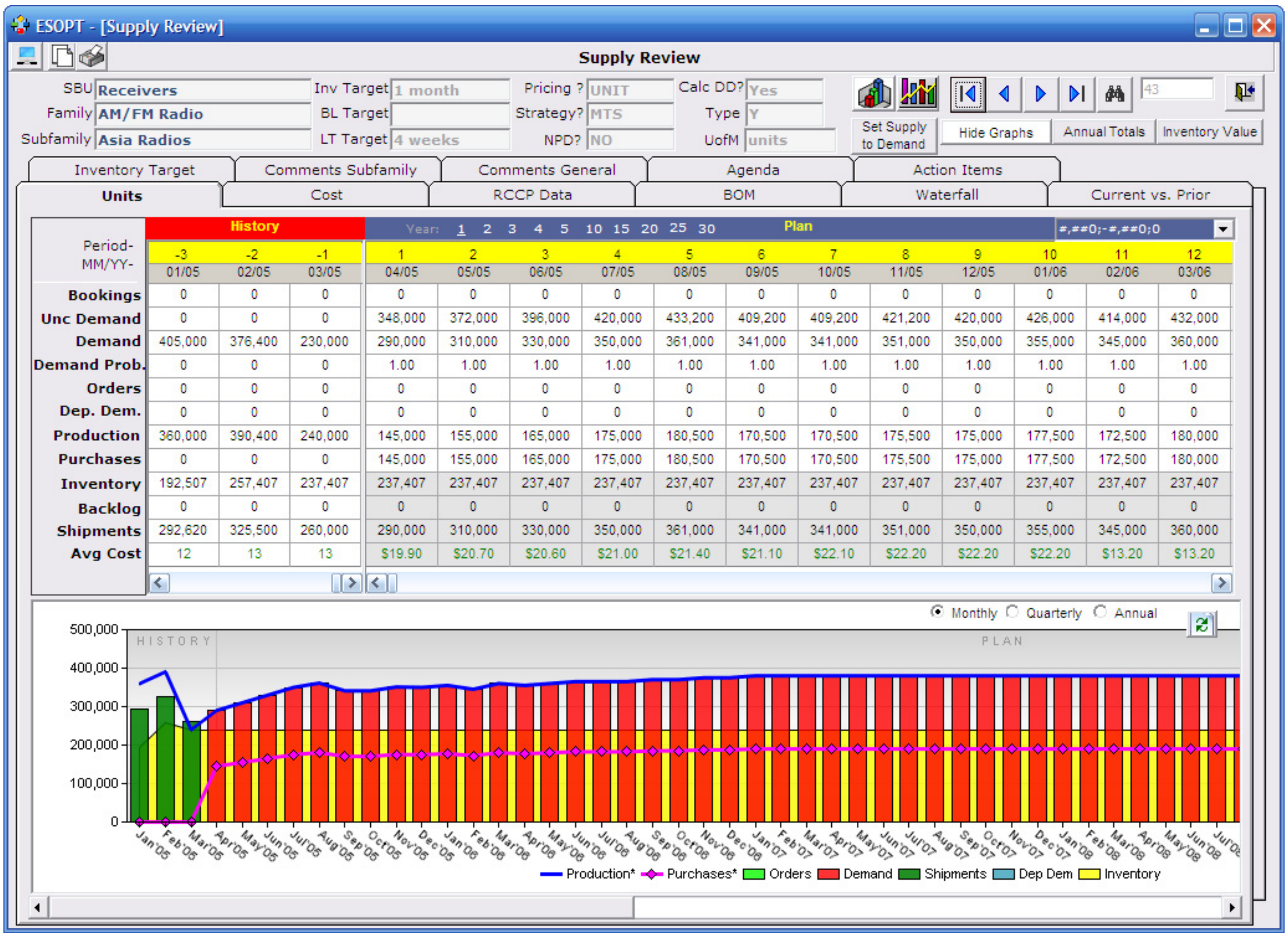
Quarter (Period)	61	61	61	62	62	62	63	63	63	64	64	64	65	65	65	66	66	66	67	67	67	68	68	68
Quarter Volume		100			200			250			100			200			250			200			100	
Month (Period)	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84
Distribution	30%	30%	40%	30%	40%	40%	30%	30%	40%	33%	33%	33%	33%	33%	33%	33%	33%	33%	33%	33%	33%	33%	33%	33%
Monthly Volume	30	30	40	60	80	80	75	75	100	33	33	33	66	66	66	82.5	82.5	82.5	66	66	66	33	33	33

The following example shows the specific distribution of demand.

The current month is August of 2009 and the second period of the third fiscal quarter. The first fiscal month is January.
Period 61 contains a fiscal quarter (July, August, and September). You will notice that July is contained in both periods 60 and 61. The distribution table will be used to provide a transition for the third quarter of 2014 by applying the distribution percentage to quarter 61 for the month of July. 380,000 * .3 = 114,000.

If the month is rolled and the current month is September 2009, months August and September of 2014 would be updated as shown above. When the current month is the first month of a fiscal quarter, no updates occur.

The rows updated are: Bookings, Unconstrained Demand, Demand, Orders, Production, and Purchases.



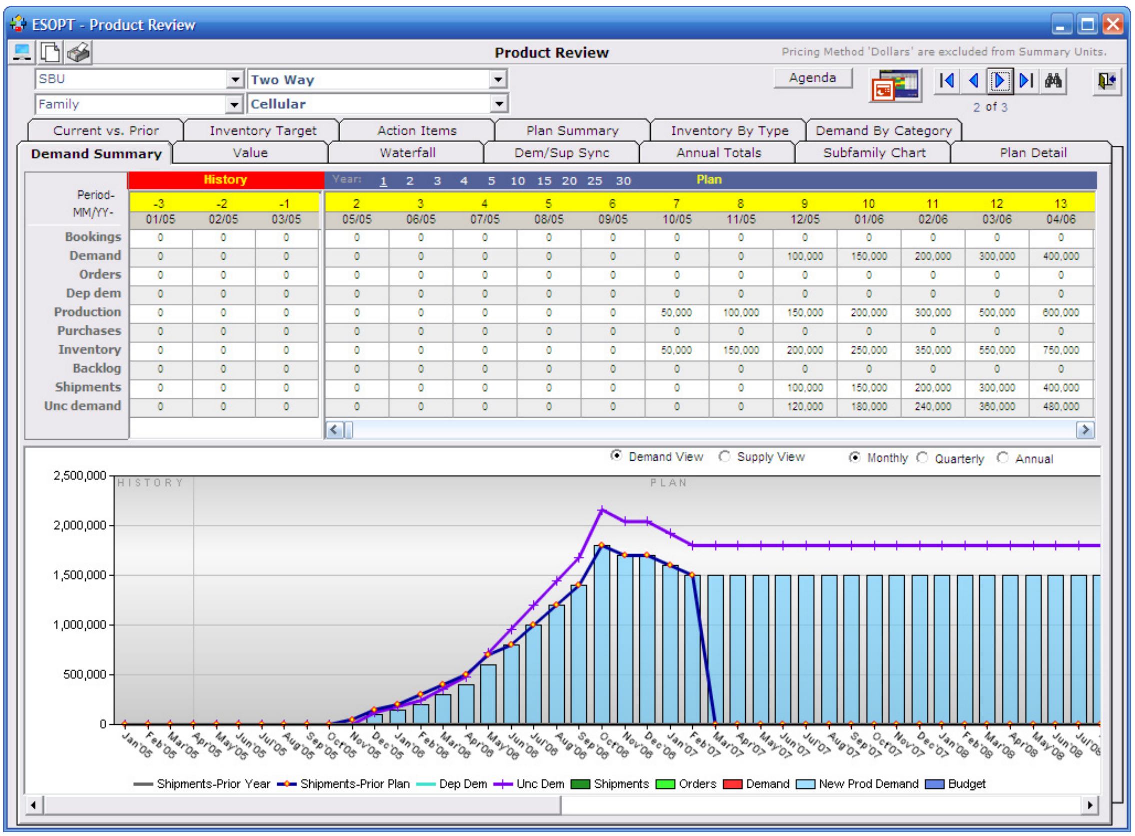
Period- MM/YY-	-3 01/05	-2 02/05	-1 03/05	1 04/05	2 05/05	3 06/05	4 07/05	5 08/05	6 09/05	7 10/05	8 11/05	9 12/05	10 01/06	11 02/06	12 03/06
Bookings	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Unc Demand	0	0	0	348,000	372,000	396,000	420,000	433,200	409,200	409,200	421,200	420,000	426,000	414,000	432,000
Demand	405,000	376,400	230,000	290,000	310,000	330,000	350,000	361,000	341,000	341,000	351,000	350,000	355,000	345,000	360,000
Demand Prob.	0	0	0	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Orders	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Dep. Dem.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Production	360,000	390,400	240,000	145,000	155,000	165,000	175,000	180,500	170,500	170,500	175,500	175,000	177,500	172,500	180,000
Purchases	0	0	0	145,000	155,000	165,000	175,000	180,500	170,500	170,500	175,500	175,000	177,500	172,500	180,000
Inventory	192,507	257,407	237,407	237,407	237,407	237,407	237,407	237,407	237,407	237,407	237,407	237,407	237,407	237,407	237,407
Backlog	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Shipments	292,620	325,500	260,000	290,000	310,000	330,000	350,000	361,000	341,000	341,000	351,000	350,000	355,000	345,000	360,000
Avg Cost	12	13	13	$19.90	$20.70	$20.60	$21.00	$21.40	$21.10	$22.10	$22.20	$22.20	$22.20	$13.20	$13.20

Product Review

The Product Review form provides information to review the plan and budget information at a Family level as well as review any assumptions noted in the Demand Review, Supply Review, and Financial Appraisal meetings. Only Families identified as NPD will appear on these forms.

To access the New Product Review Forms:

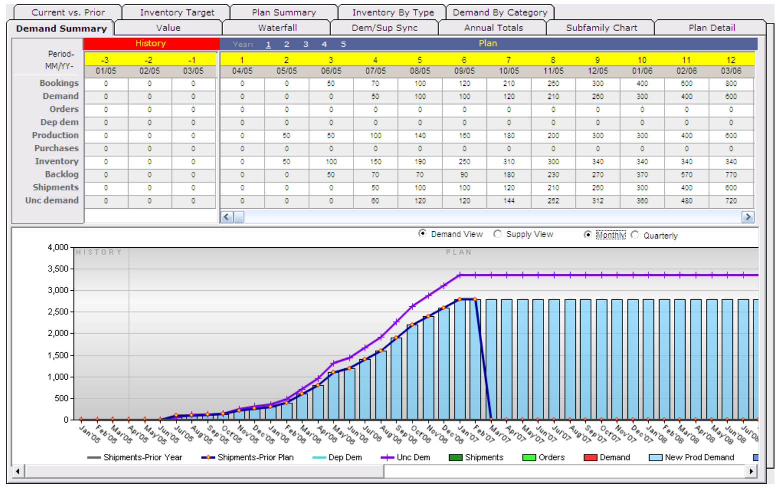
- From the Main Menu, select the Product Review button
  or
- Press ALT + P on the keyboard.



Period- MM/YY-	-3 01/05	-2 02/05	-1 03/05	2 05/05	3 06/05	4 07/05	5 08/05	6 09/05	7 10/05	8 11/05	9 12/05	10 01/06	11 02/06	12 03/06	13 04/06
Bookings	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Demand	0	0	0	0	0	0	0	0	0	0	100,000	150,000	200,000	300,000	400,000
Orders	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Dep dem	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Production	0	0	0	0	0	0	0	0	50,000	100,000	150,000	200,000	300,000	500,000	600,000
Purchases	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Inventory	0	0	0	0	0	0	0	0	50,000	150,000	200,000	250,000	350,000	550,000	750,000
Backlog	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Shipments	0	0	0	0	0	0	0	0	0	0	100,000	150,000	200,000	300,000	400,000
Unc demand	0	0	0	0	0	0	0	0	0	0	120,000	180,000	240,000	360,000	480,000

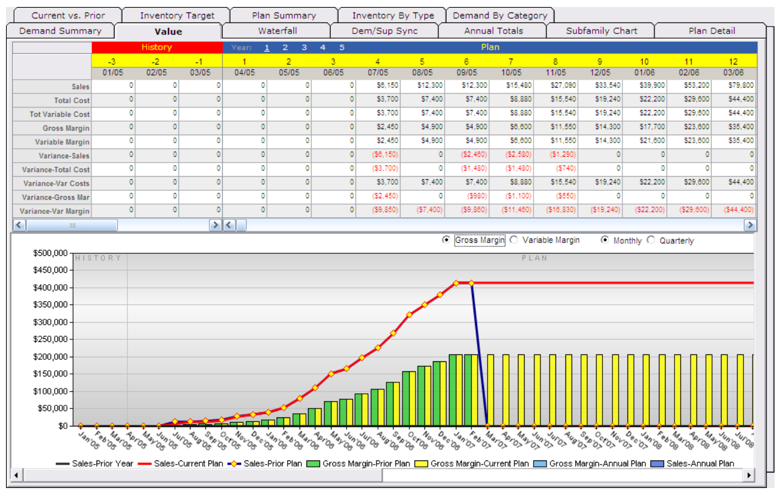
The Product may be navigated through the SBU, Family, Subfamily, and ALL levels by the scroll buttons or the drop-down boxes. The drop-down box may also be used to summarize by SBU, Family, and Total Company by using the 'ALL' selection.

For the 30 year horizon database, on the Demand Summary and Value tabs, the 30 years are available in the grid, and the graphs have Monthly, Quarterly, and Annual selections for viewing.



Demand Summary

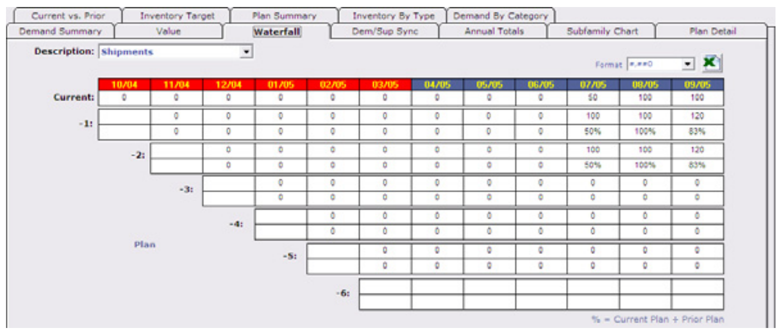
This form provides Demand information in units for New Products (Products defined as NPD=Yes), Total Demand, and Annual Plan or Budgeted Demand by Family.



Value

The Value tab provides Sales Dollars, Cost, Total Variable Cost, Gross Margin Dollars, Variable Margin, Variance-Sales, Variance-Total Cost, Variance-Var Costs, Variance-Gross Margin, Variance-Var Margin based on the Average Sales $ and Average Cost. The worksheet displays the variance from last month's plan. The graph displays the Gross Margin or the Variable Margin.

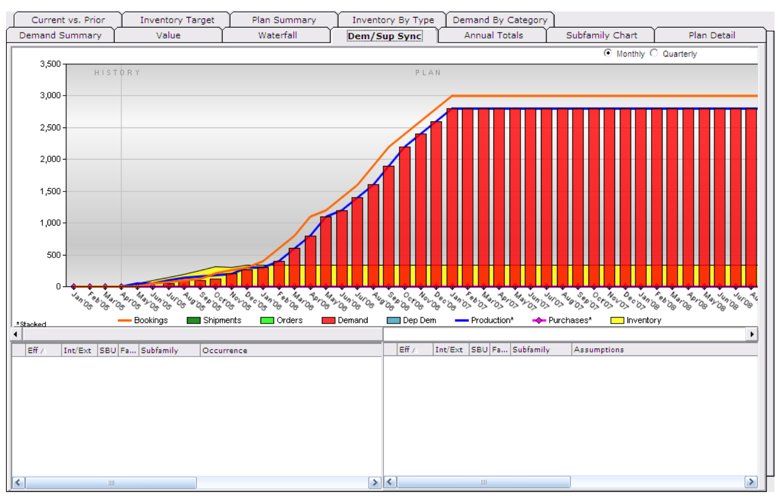
Waterfall
The Waterfall Analysis provides an analytical review process. From the drop-down list, select the type of data you would like to view in the analysis: Bookings, Demand, Orders, Dep Dem, Production, Purchases, Inventory, Backlog, Shipments, Sales, Total Cost, Gross Margin, Inventory Value, Average Fixed Cost, Average Other Cost, Average Variable Cost, Avg Total Cost, Avg Gross Margin, Avg Variable Margin, Avg Gross Margin %, or Avg Variable Margin. The Monthly Roll process saves the current data for up to six months. This screen compares the Forecast to Actual from the six prior months to determine where the actuals have deviated from the prior plan. The data is summarized for all Subfamilies contained in the Summary Table.



	10/04	11/04	12/04	01/05	02/05	03/05	04/05	05/05	06/05	07/05	08/05	09/05
Current:	0	0	0	0	0	0	0	0	0	50	100	100
-1:		0	0	0	0	0	0	0	0	100	100	120
		0	0	0	0	0	0	0	0	50%	100%	83%
-2:			0	0	0	0	0	0	0	100	100	120
			0	0	0	0	0	0	0	50%	100%	83%
-3:				0	0	0	0	0	0	0	0	0
				0	0	0	0	0	0	0	0	0
-4:					0	0	0	0	0	0	0	0
					0	0	0	0	0	0	0	0
-5:						0	0	0	0	0	0	0
						0	0	0	0	0	0	0
-6:												

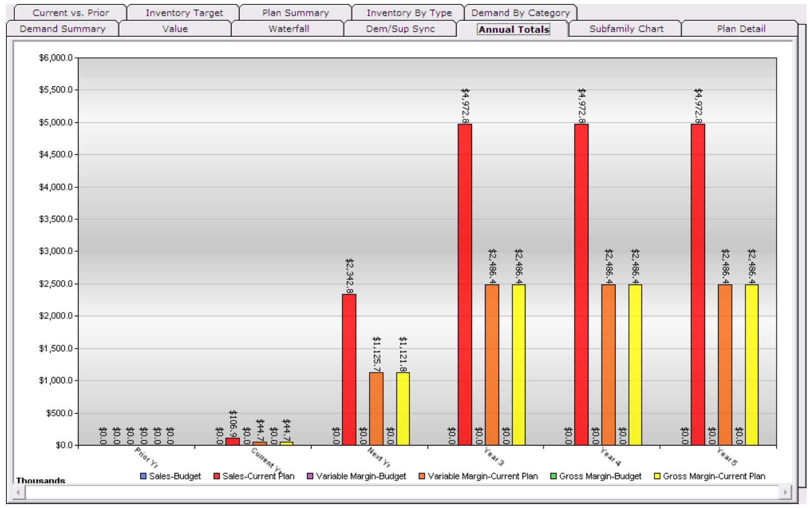
The Spreadsheet button will export the data to a spreadsheet.

Demand/Supply Synchronization
This form provides a graphical depiction of the "balanced" nature of the plan at the Family level. The comments section is used to review assumptions for the future plan and occurrences for the history. The comments displayed here were previously entered in the Demand Review, Sutings forms, in the Commentsbfamily tab. In the graph, Dependent Demand is added to Total Demesented as a stacked bar for all dem (Orders, Demand, and Dependent Demand). Production and Purcha ar



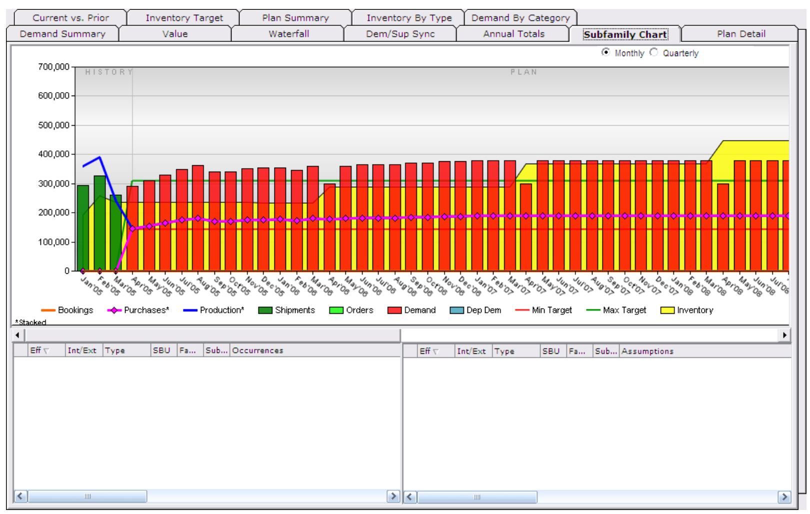
Annual Totals

The Annual Totals tab is used to review the Annual Totals for each Family for the Prior, Current, and Next year. The information is summarized to present the "marginal" profitability at the company level. The data is shown for Budget and Current Plan for Sales, Variable Margin, and Gross Margin. The chart is expressed in (000s).



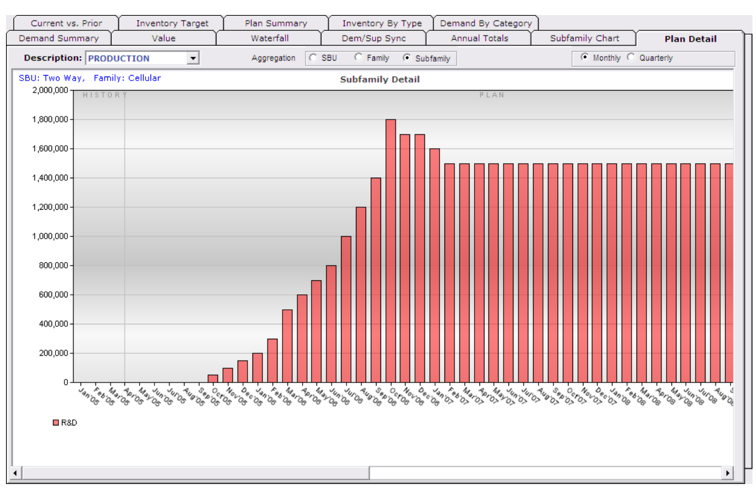
Subfamily Chart

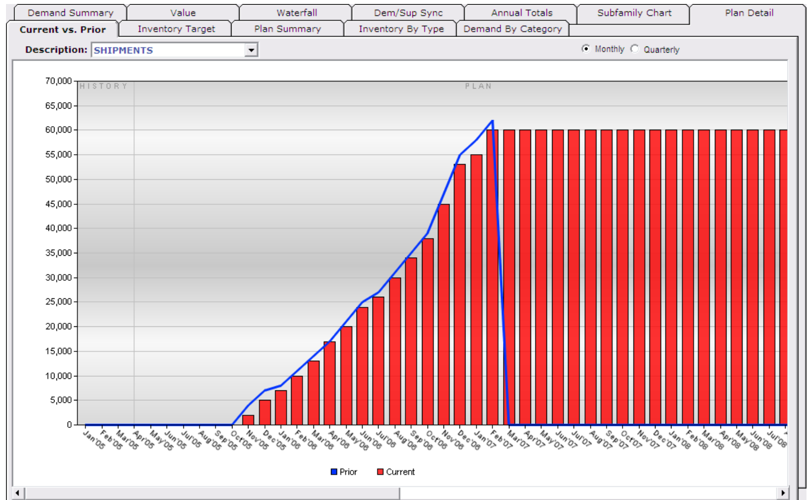
The Subfamily chart provides a graphical depiction of the "balanced" nature of the plan at the Subfamily level as well as the significant assumptions supporting the plan. Only comments flagged Print?="Yes" will appear here. In the graph, Dependent Demand is added to Total Demand and represented as a stacked bar for all demand (Orders, Demand, and Dependent Demand). Production and Purchases are stacked lines to represent Total Supply. The Comments section is used to review assumptions for the future plan and occurrences for the history.



Plan Detail

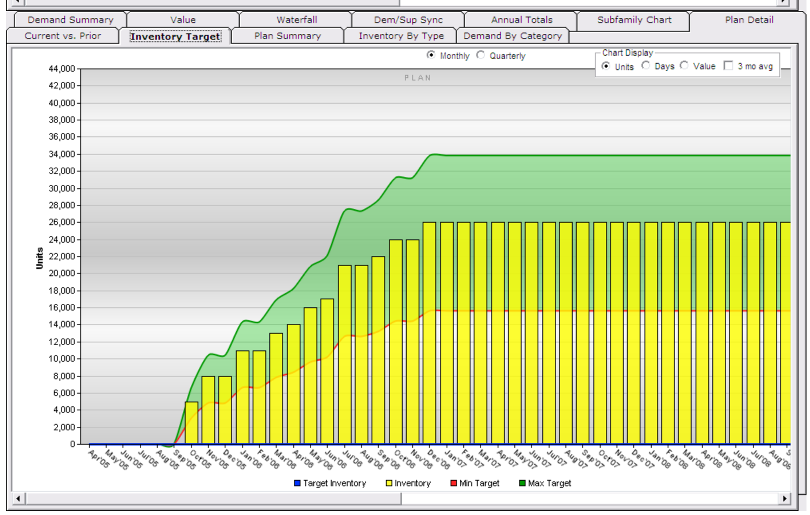
This chart provides a graphical depiction of the Supply and Demand factors by Subfamily. From the drop-down list, select the type of data you would like to view: Backlog, Bookings, Demand, Dependent Demand, Inventory, Orders, Production, Purchases, and Shipments.





Current vs. Prior

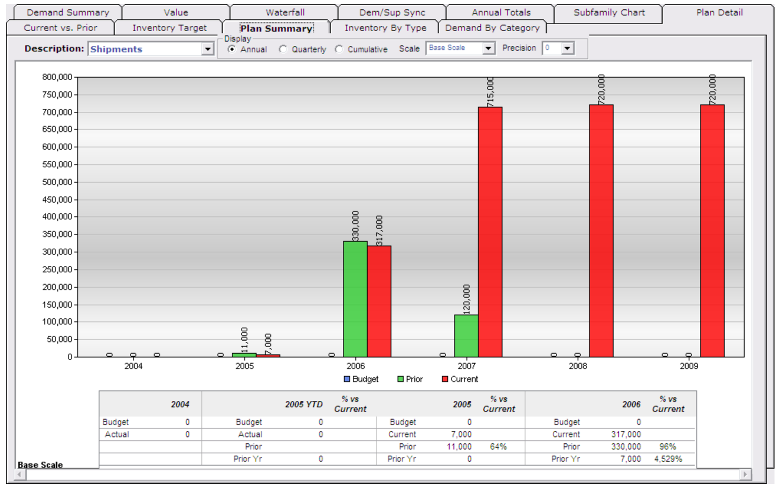
The Current vs. Prior chart compares the current month's data to the previous month's data for the Family. The information may be displayed for Bookings, Demand, Orders, Dependent Demand, Production, Purchases, Inventory, Backlog, and Shipments.



Inventory Target

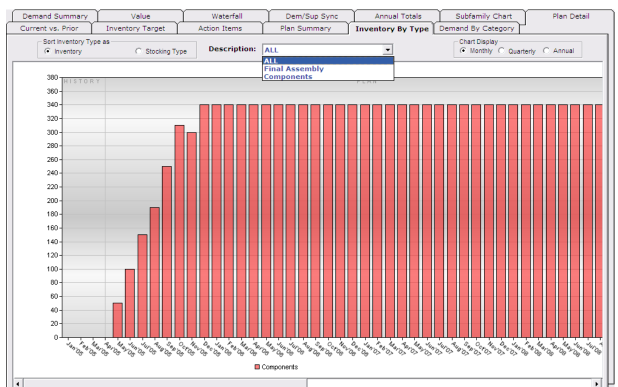
The Inventory Target chart aggregates the Inventory, Inventory Target, Minimum, and Maximum Targets. It may be displayed in Units, Days, or Value of Inventory by selecting the Chart option. Apply a three-month smoothing effect to the chart by selecting the 3 mo avg.

Plan Summary



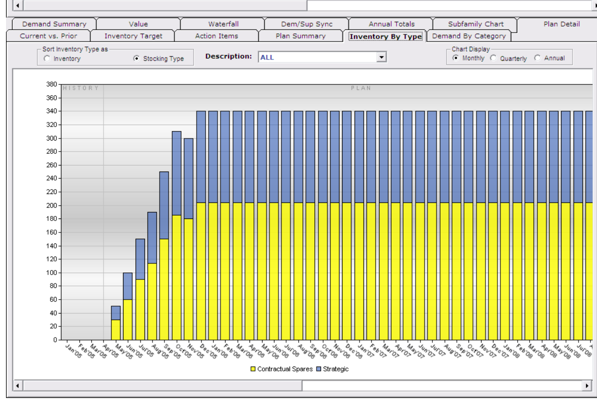
This form provides a graphical view to review totals for each Family for the Prior, Current, and Next Year. From the drop-down list of descriptions, select the type of information to be viewed: Backlog, Bookings, Demand, Demand Totals, Dependent Demand, Inventory Balance, Gross Margin, Orders, Production, Purchases, Sales, Shipments, Supply Total, Total Cost, Tot Fixed Cost, Tot Variable Cost, Variable Margin, Avg Total Cost, Avg Fixed Cost, Avg Variable Cost, Avg Other Cost, Avg Gross Margin, Avg Variable Margin, Avg Gross Margin %, Avg Variable Margin %, or Avg Sales Revenue. The information may be displayed Annually, Quarterly, or Cumulatively. The scale for the graph can be selected from the drop-down list of Base Scale, Thousands, or Millions. The Precision drop-down provides another level of detail to the amounts. The default value is zero with the option to select 1 to 3 digits to the right of the decimal point. The chart at the bottom of the page is the data for Prior Year, Current Year, and Next Year with the Budget, Actual, and % vs Current shown.

Inventory by Type:



This chart provides a comparison of the Inventories from the Site tools selected. The Inventory is averaged for quarterly and yearly view of the charts.

by Inventory Type: The Inventory is represented by the Inventory Type specified in the Group Master in a stacked bar. The inventory type values are defined in the Aggregaton Code maintenance. The types may be filtered using the drop-down box.

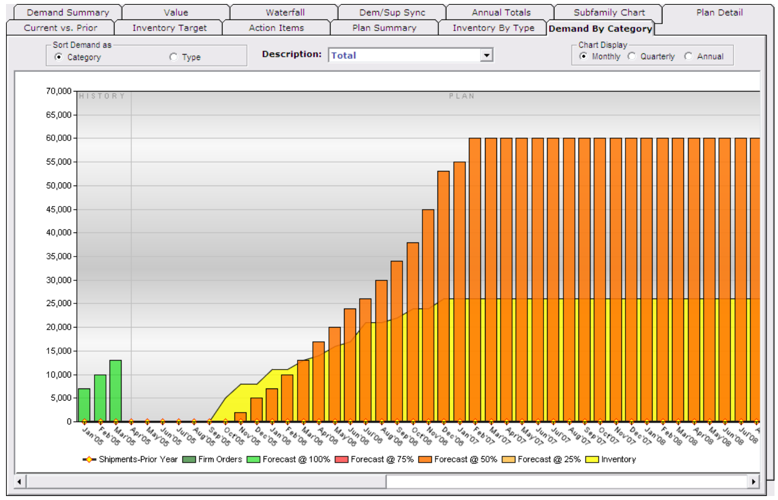


by Stocking Type: The Inventory is represented by the volume of inventory that is above or below the minimum inventory.

The type of inventory may be selected from the drop down- Contractual Spares, Strategic, or All.

Demand by Category:

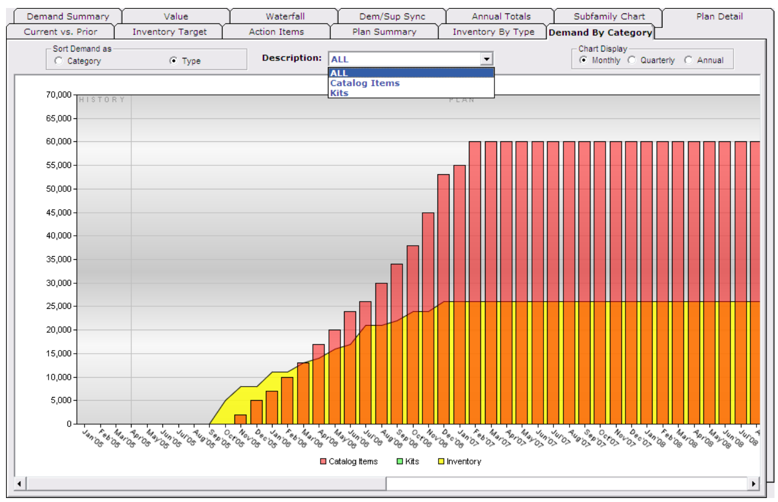
by Demand Probability



This chart displays sources of demand stacked by probability percentage. Demand Probability is assigned in the Demand Review form or may be imported using the Import Manager. It is defined by period.

The demand source may be selected from the drop down: Demand, Shipments, Unconstrained Demand, or Total

by Demand Type



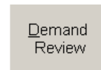
This chart displays demand stacked by Demand Type. The Demand Types are defined in the Aggregation Maintenance and assigned to the Subfamily.

The type of demand may be selected from the drop down.

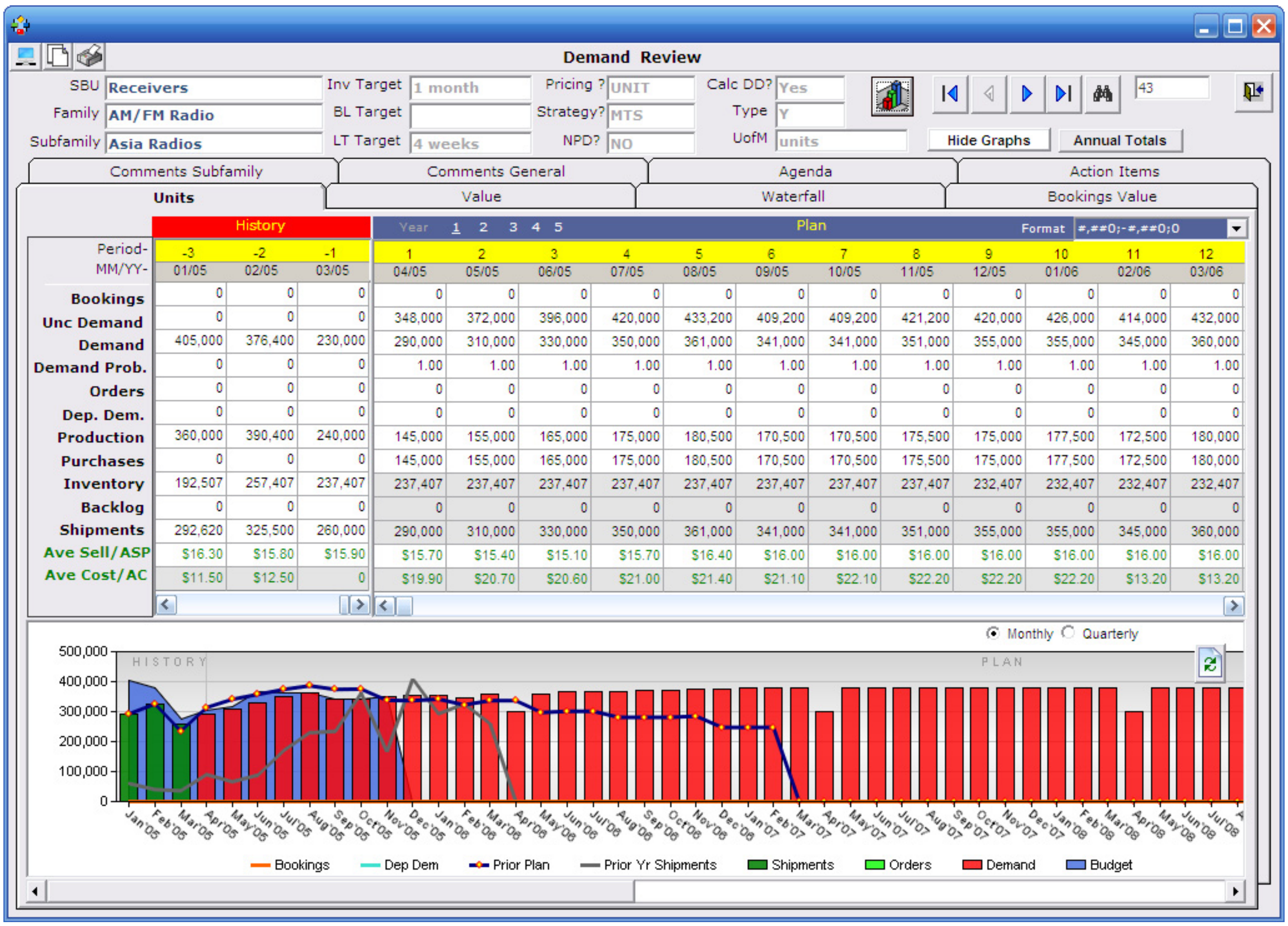
Using the Demand Review

The purpose of the Demand Review is to maintain the demand plan and demand history. The form contains all data relative to unconstrained demand and is grouped by SBU/Family/Subfamily. The Demand form is separated into the following categories of information: Demand Units, Dollars, Annual Totals, Waterfall, Comments, Pre-Demand Agenda, and Action Items.

To access the Demand Review:



- From the Main Menu, select the Demand Review Button
  or
- Press CTRL + D on the Keyboard



Period-	-3	-2	-1	1	2	3	4	5	6	7	8	9	10	11	12
MM/YY-	01/05	02/05	03/05	04/05	05/05	06/05	07/05	08/05	09/05	10/05	11/05	12/05	01/06	02/06	03/06
Bookings	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Unc Demand	0	0	0	348,000	372,000	396,000	420,000	433,200	409,200	409,200	421,200	420,000	426,000	414,000	432,000
Demand	405,000	376,400	230,000	290,000	310,000	330,000	350,000	361,000	341,000	341,000	351,000	355,000	355,000	345,000	360,000
Demand Prob.	0	0	0	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Orders	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Dep. Dem.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Production	360,000	390,400	240,000	145,000	155,000	165,000	175,000	180,500	170,500	170,500	175,500	175,000	177,500	172,500	180,000
Purchases	0	0	0	145,000	155,000	165,000	175,000	180,500	170,500	170,500	175,500	175,000	177,500	172,500	180,000
Inventory	192,507	257,407	237,407	237,407	237,407	237,407	237,407	237,407	237,407	237,407	237,407	232,407	232,407	232,407	232,407
Backlog	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Shipments	292,620	325,500	260,000	290,000	310,000	330,000	350,000	361,000	341,000	341,000	351,000	355,000	355,000	345,000	360,000
Ave Sell/ASP	$16.30	$15.80	$15.90	$15.70	$15.40	$15.10	$15.70	$16.40	$16.00	$16.00	$16.00	$16.00	$16.00	$16.00	$16.00
Ave Cost/AC	$11.50	$12.50	0	$19.90	$20.70	$20.60	$21.00	$21.40	$21.10	$22.10	$22.20	$22.20	$22.20	$13.20	$13.20

The Subfamily information displayed in the top portion of the screen such as Inventory Target, Backlog Target, Lead Time Target, and Pricing Method is defined for the Subfamily on the New Family form or Group Master Maintenance Form.

To locate a Subfamily record:

- Click the Record Navigation Bar  to locate the Subfamily.

<u>Display Graphs:</u>

The Display Graphs button Display Graphs is a toggle button. It is used to turn the graph, located on the lower portion of the screen, on and off. Turned off, you may see an improvement in response time while moving between Subfamily records.

- Click the Display Graphs button Display Graphs once to display the graphs.
- Click the Hide Graphs button Hide Graphs once to turn off the graphs.

Units

Demand Review - Units Worksheet

The Units Worksheet may be used to enter the following data: Projected Bookings, Demand, Orders, Production, and Purchases and also history for Bookings, Demand, Orders, Shipments, Inventory, and Beginning Backlog. The Sell Dollars may be entered as well. The data is entered for each Subfamily.

Initial Setup

When you are using the Tool for the first time or adding a new Subfamily, the data may be entered for 24 prior monthly periods and 24 future monthly periods. There are also utilities available to import this data for the first time. See **Utilities- Import Manager.**

Monthly Maintenance

Following the first monthly update using the Roll Month Function, you will only need to enter the previous month's actual data and review any changes to future plans. See **Utilities- Roll Month.**

Comments Subfamily | Comments General | Agenda | Action Items

Units | Value | Waterfall | Bookings Value

Year 1 2 3 4 5 — Format #,##0;-#,##0;0

	History			Plan											
Period-	-3	-2	-1	1	2	3	4	5	6	7	8	9	10	11	12
MM/YY-	01/05	02/05	03/05	04/05	05/05	06/05	07/05	08/05	09/05	10/05	11/05	12/05	01/06	02/06	03/06
Bookings	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Unc Demand	0	0	0	49,993	54,966	47,813	52,973	66,216	52,973	52,973	66,216	52,973	52,973	67,200	54,000
Demand	67,500	34,700	7,250	36,661	45,805	39,844	44,144	55,180	80,000	44,144	55,180	44,144	44,144	56,000	45,000
Demand Prob.	0	0	0	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Orders	0	1,000	2,000	5,000	0	0	0	0	0	0	0	0	0	0	0
Dep. Dem.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Production	39,954	55,000	37,000	40,000	45,000	40,000	45,000	55,000	45,000	45,000	55,000	45,000	45,000	56,000	45,000
Purchases	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Inventory	2,119	18,519	23,269	21,608	20,803	20,959	21,815	21,635	-13,365	-12,509	-12,689	-11,833	-10,977	-10,977	-10,977
Backlog	6,000	6,000	5,000	0	0	0	0	0	0	0	0	0	0	0	0
Shipments	40,000	38,600	32,250	41,661	45,805	39,844	44,144	55,180	80,000	44,144	55,180	44,144	44,144	56,000	45,000
Ave Sell/ASP	$2.90	$4.04	$4.02	$3.92	$3.92	$3.97	$3.97	$3.97	$3.97	$3.97	$3.97	$3.97	$3.97	$3.97	$3.97
Ave Cost/AC	$2.86	$2.65	0	$2.65	$2.64	$2.73	$2.73	$2.64	$2.62	$2.59	$2.57	$2.57	$2.57	$2.57	$2.57

Entering the Information:

Bookings

Bookings are orders received in a particular period. Typically in a make-to-stock environment, Bookings will be equal to Shipments. In a make-to-order environment, bookings may differ from the actual need date and, thus, the Demand date is also required.

- Click the Bookings field on the Units worksheet. Enter the Units with or without commas.
- Tab to the next field, or use the mouse to move from field to field.

Unconstrained Demand

Forecasted need for a particular product or component that is not constrained by capacity or materials.

- Click the Unc Demand field on the Units worksheet. Enter the Units with or without commas.
- Tab to the next field, or use the mouse to move from field to field.

Demand

Demand is a forecasted need for a particular product or component. The Demand could come from any number of sources, such as Customer Order History, Forecast, interplant, branch warehouse, or service part. Note: Should be stated net of consumed forecast.

- Click the Demand field on the Units worksheet. Enter the Units with or without commas.
- Tab to the next field, or use the mouse to move from field to field.

Demand Probability
The probability of the isdemand expressed in a percentage of .25, .50, .75, 1, or .30, .60, .90, 1. The values entered in the Demand Probability should be consistent with the Demand Probability field in the Company Settings. If the field is zero, it is assumed to be 1 (100%). If the Subfamily contains Order in the period, it is also assumed to be 1 (100%) even though a different probabiliy is entered in the period.

- Click the Demand Probability field on the Units worksheet. Enter the percent as .25, .50, .75, .30, .60, .90, or 1
- Tab to the next field, or use the mouse to move from field to field.

Orders
Orders are the time-phased split of backlog. The sum of all open orders should be equal to the beginning backlog.

- Click the Orders field on the Units worksheet. Enter the Units with or without commas.
- Tab to the next field, or use the mouse to move from field to field.

Dependent Demand
The Dependent Demand Units field is a calculated field. There are units present if items in this Subfamily have dependent demand from another Subfamily. See BOM. The start period to begin updating dependend demand may be entered by Subfamily in the Group Master form in the Dependent Demand Start Period. Dependent Demand prior to the start period will not be updated.

The dependent demand calculation may be turned off for the Subfamily by setting the Calculate Dependent Demand? field to 'No' in the Edit Group Master form. If Calculate Dependent Demand? is set to 'No,' any demand generated from another Subfamily's BOM will not be calculated for this Subfamily. However, any demand generated by this Subfamily will continue to be generated using the BOM. If Calculate Dependent Demand? is set to 'No,' the Dependent Demand data row may be used to enter other Dependent Demand not calculated by a Bill of Material.

Production
The production units produced or planned to be produced:

- Click the Production field on the Units worksheet. Enter the Units with or without commas.
- Tab to the next field, or use the mouse to move from field to field.

Purchases
The units purchased or planned to be purchased from an outside source or plant:

- Click the Purchases field on the Units worksheet. Enter the Units with or without commas.
- Tab to the next field, or use the mouse to move from field to field.

Inventory
Enter previous month's Ending Inventory balance in the –1 period. Future months are calculated as follows:

Subfamily Type: Y, DI, SI, N
Pricing Method 'Units' = Beginning Inventory + Production + Purchases
- Dependent Demand – Shipments (Demand + Orders).

Pricing Method 'Dollars' = Beginning Inventory + Production + Purchases
- Dependent Demand – (Shipments * Average Cost).

Subfamily Type: SA
Pricing Method 'Units' = Beginning Inventory + Production + Purchases

Pricing Method 'Dollars' = Beginning Inventory + Production + Purchases

- Click the field on the worksheet frame of the screen. Enter the balance with or without commas.
- Tab to the next field, or use the mouse to move from field to field.

Backlog
The Backlog field is normally only entered during the initial setup of the plan. Enter the previous month's ending Backlog in the –2 period field. The period –1 field is calculated as the sum of future open orders. Current month and all future months are calculated by Beginning Backlog + Bookings – Shipments for Strategy Make-to-Order (MTO). Make-to-Stock (MTS) Strategy projected backlog is calculated as Beginning Backlog – Orders.

- Click the –2 field on the worksheet frame of the screen. Enter the Units with or without commas. The –1 to +24 backlog field is calculated.
- Tab to the next field, or use the mouse to move from field to field.

Shipments
Enter the Shipment history in the –1 period field. Future shipments are calculated by Demand (unconsumed forecast) + Orders.

- Click the Shipments field on the Units worksheet. Enter the Units with or without commas.
- Tab to the next field, or use the mouse to move from field to field.

Sell $ (ASP)
If the Pricing Method is Units, this quantity should be the average Sales Price per Unit of the items in the Subfamily. If the Pricing Method is Dollars, the quantity should be $1. If the Pricing Method is Fixed, this quantity should be equal to the total monthly Sales Dollars for the items in the Subfamily.

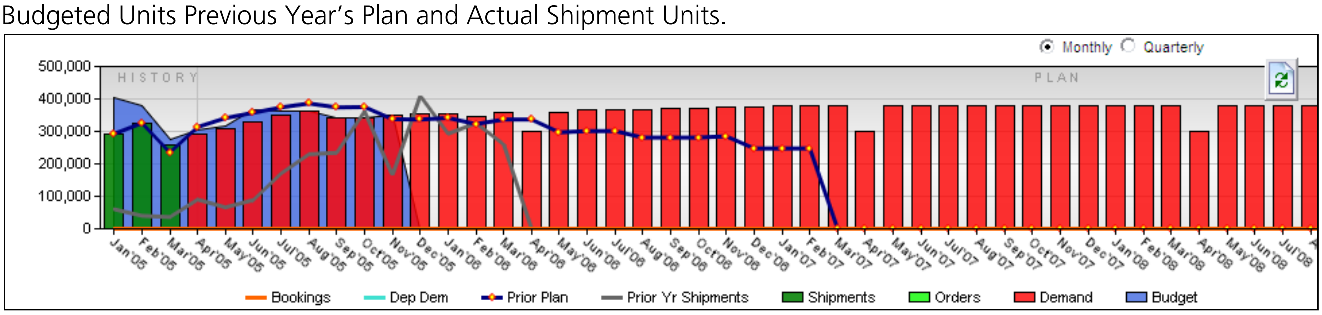
- Click the Sell $ field. Enter the Sales Quantity. You may enter up to 2 decimal places.
- Tab to the next field, or use the mouse to move from field to field.

Cost $ (AC)
Enter previous month's Cost balance in the –1 period. Future Costs from the Supply Review are displayed here. If the Pricing Method is Units, this quantity should be the average Cost per Unit of the items in the Subfamily. If the Pricing Method is Dollars, the quantity should be an amount, less than $1, that reflects the Cost of Sales as a percent of Sales dollars. If the Pricing Method is Fixed, this quantity should be equal to the monthly total Cost for the items in the Subfamily.

When you have completed entering data for a Subfamily;

- Click the next record button  to move to the next Subfamily, or
- Click the exit button  to return to the Main Menu.

<u>Demand Graph</u>
The Demand Graph represents the current Shipment Plan (Sum of Demand & Orders) in Units, compared to the Budgeted Units Previous Year's Plan and Actual Shipment Units.



Demand Graph 5 Year Horizon

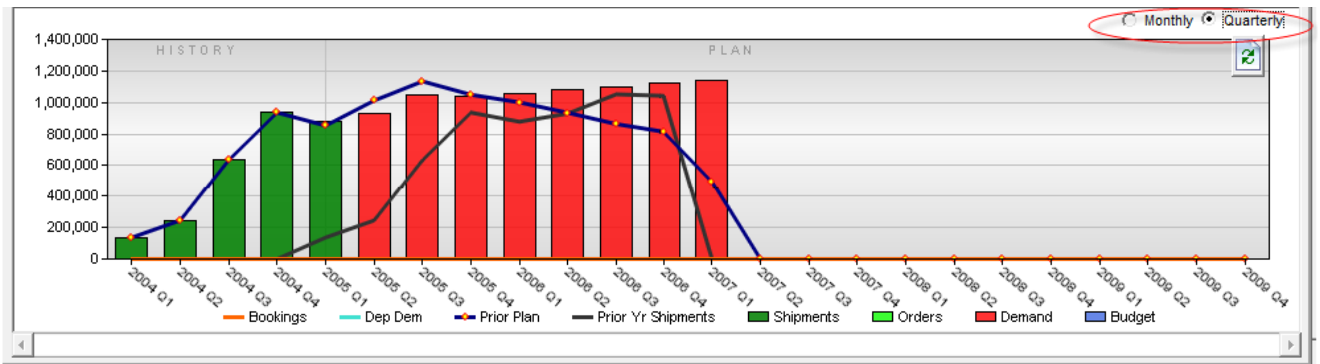
The Demand Graph in the 5 Year Horizon represents the same data but displays 5 years into the future and comes with additional options that the 2 Year does not have.

Monthly or Quarterly Toggle

The 5 Year Horizon edition allows you to toggle between monthly and quarterly. Quarterly is the default. Default can be changed in the Company Settings Tab under **ESOPT Options**.

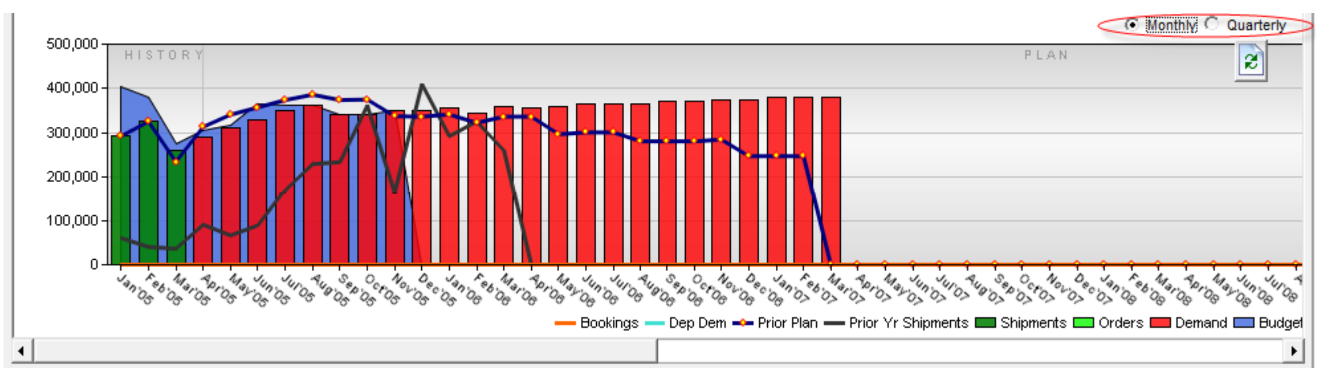
Quarterly Chart

Clicking on the quarterly radio button, the chart will display 24 quarters.



Monthy Chart

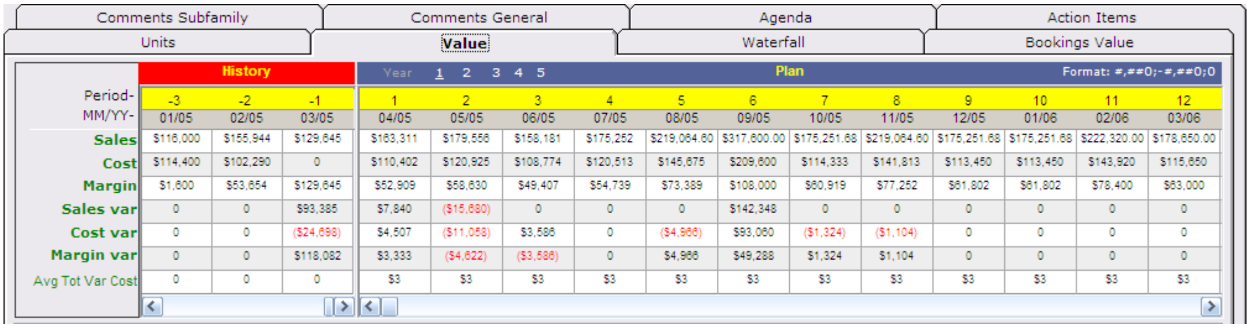
Clicking on the monthly radio button will display 60 months. In the monthly mode, the scroll bar will be enabled to allow you to scroll through all 60 months.



Value

Demand Review - Value Worksheet

The Value Worksheet of the Demand Review is used to view the Sales Dollars, Cost, and Margin Dollars based on the Average Sales $ and Average Cost entered in the Units Worksheet.



Period-	-3	-2	-1	1	2	3	4	5	6	7	8	9	10	11	12
MM/YY-	01/05	02/05	03/05	04/05	05/05	06/05	07/05	08/05	09/05	10/05	11/05	12/05	01/06	02/06	03/06
Sales	$116,000	$155,944	$129,645	$163,311	$179,556	$158,181	$175,252	$219,064.60	$317,600.00	$175,251.68	$219,064.60	$175,251.68	$175,251.68	$222,320.00	$178,650.00
Cost	$114,400	$102,290	0	$110,402	$120,925	$108,774	$120,513	$145,675	$209,600	$114,333	$141,813	$113,450	$113,450	$143,920	$115,650
Margin	$1,600	$53,654	$129,645	$52,909	$58,630	$49,407	$54,739	$73,389	$108,000	$60,919	$77,252	$61,802	$61,802	$78,400	$63,000
Sales var	0	0	$93,385	$7,840	($15,680)	0	0	0	$142,348	0	0	0	0	0	0
Cost var	0	0	($24,698)	$4,507	($11,058)	$3,586	0	($4,966)	$93,060	($1,324)	($1,104)	0	0	0	0
Margin var	0	0	$118,082	$3,333	($4,622)	($3,586)	0	$4,966	$49,288	$1,324	$1,104	0	0	0	0
Avg Tot Var Cost	0	0	0	$3	$3	$3	$3	$3	$3	$3	$3	$3	$3	$3	$3

Sales $

- If Pricing Method is set to 'Unit' or 'Dollars,' the Sales Dollars will be calculated by the Average Sales Price * Shipment Units. If Pricing Method is set to 'Fixed,' the Sales Dollars are equal to the Average Sales Price (ASP).

Cost $

- If Pricing Method is set to 'Units' or 'Dollars,' the Cost will be calculated by the Average Cost * Shipment Units. If Pricing Method is set to 'Fixed,' the Cost is equal to the Average Cost (AC).

Margin Dollars $

- Margin Dollars is calculated by the Sales $ – Cost $.

Sales $-Var

- The Sales $ Variance indicates the Sales dollars change from the prior period.

Cost $-Var

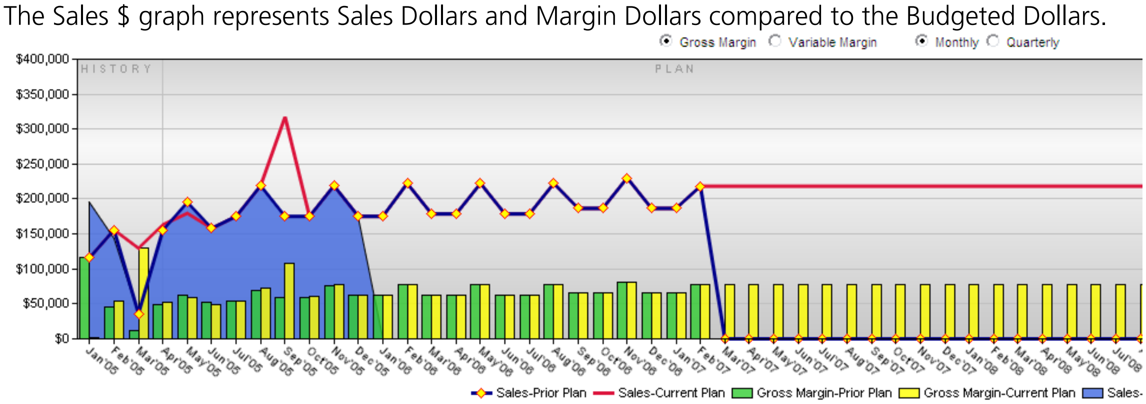
- The Cost $ Variance indicates the Cost dollars change from the prior period.

Mar $-Var

- The Margin $ Variance indicates the Margin dollars change from the prior period.

<u>Sales $ Graph</u>

- The Sales $ graph represents Sales Dollars and Margin Dollars compared to the Budgeted Dollars.



Waterfall

Demand Review - Waterfall

The Waterfall Analysis provides an analytical review process for each Subfamily. The Monthly Roll process saves the forecast for each month for up to six months. This screen compares the Forecast to Actual from the six prior months to determine where the actuals have deviated from the prior plan. The data may be displayed in Units or as a percent of plan.

Comments Subfamily | Comments General | Agenda | Action Items
Units | Value | Waterfall | Bookings Value

Description: Shipments | View % | Format #,##0

		10/04	11/04	12/04	01/05	02/05	03/05	04/05	05/05	06/05	07/05	08/05	09/05
Current:		361,460	165,000	409,560	292,620	325,500	260,000	290,000	310,000	330,000	350,000	361,000	341,000
Plan	-1:	200,400	165,000	470,000	405,000	376,400	235,000	313,500	341,000	357,500	374,000	386,100	374,000
	-2:		165,000	240,000	370,000	381,000	276,000	306,000	316,000	366,000	361,000	361,000	341,000
	-3:			245,000	240,000	330,000	276,000	306,000	316,000	366,000	361,000	361,000	341,000
	-4:				340,000	240,000	200,000	200,000	125,000	100,000	100,000	50,000	50,000
	-5:					290,000	185,000	185,000	115,000	115,000	90,000	50,000	70,000
	-6:						215,000	195,000	205,000	215,000	220,000	275,000	425,000

Comments Subfamily | Comments General | Agenda | Action Items
Units | Value | Waterfall | Bookings Value

Description: Shipments | View Units | Format #,##0

		10/04	11/04	12/04	01/05	02/05	03/05	04/05	05/05	06/05	07/05	08/05	09/05
Current:		361,460	165,000	409,560	292,620	325,500	260,000	290,000	310,000	330,000	350,000	361,000	341,000
Plan	-1:	180%	100%	87%	72%	86%	111%	93%	91%	92%	94%	93%	91%
	-2:		100%	171%	79%	85%	94%	95%	98%	90%	97%	100%	100%
	-3:			167%	122%	99%	94%	95%	98%	90%	97%	100%	100%
	-4:				86%	136%	130%	145%	248%	330%	350%	722%	682%
	-5:					112%	141%	157%	270%	287%	389%	722%	487%
	-6:						121%	149%	151%	153%	159%	131%	80%

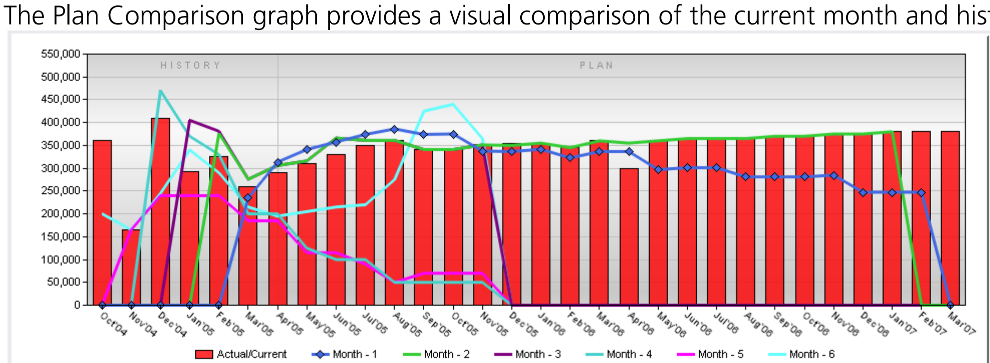
Description:

- Select the Information you would like to view from the drop-down list. Bookings, Demand, Orders, Dep Dem, Production, Purchases, Inventory, Backlog, Shipment, Inventory Value, Avg Fixed Cost, Avg Other Cost, Avg Variable Cost, Avg Gross Margin, Avg Variable Margin, Avg Gross Margin %, and Avg Variable Margin % are available.
- You may select the format for the Waterfall data using the format drop-down box. Format #,##0;-#,##0;0

The Spreadsheet button will export the Waterfall data to a spreadsheet.

Plan Comparison Graph

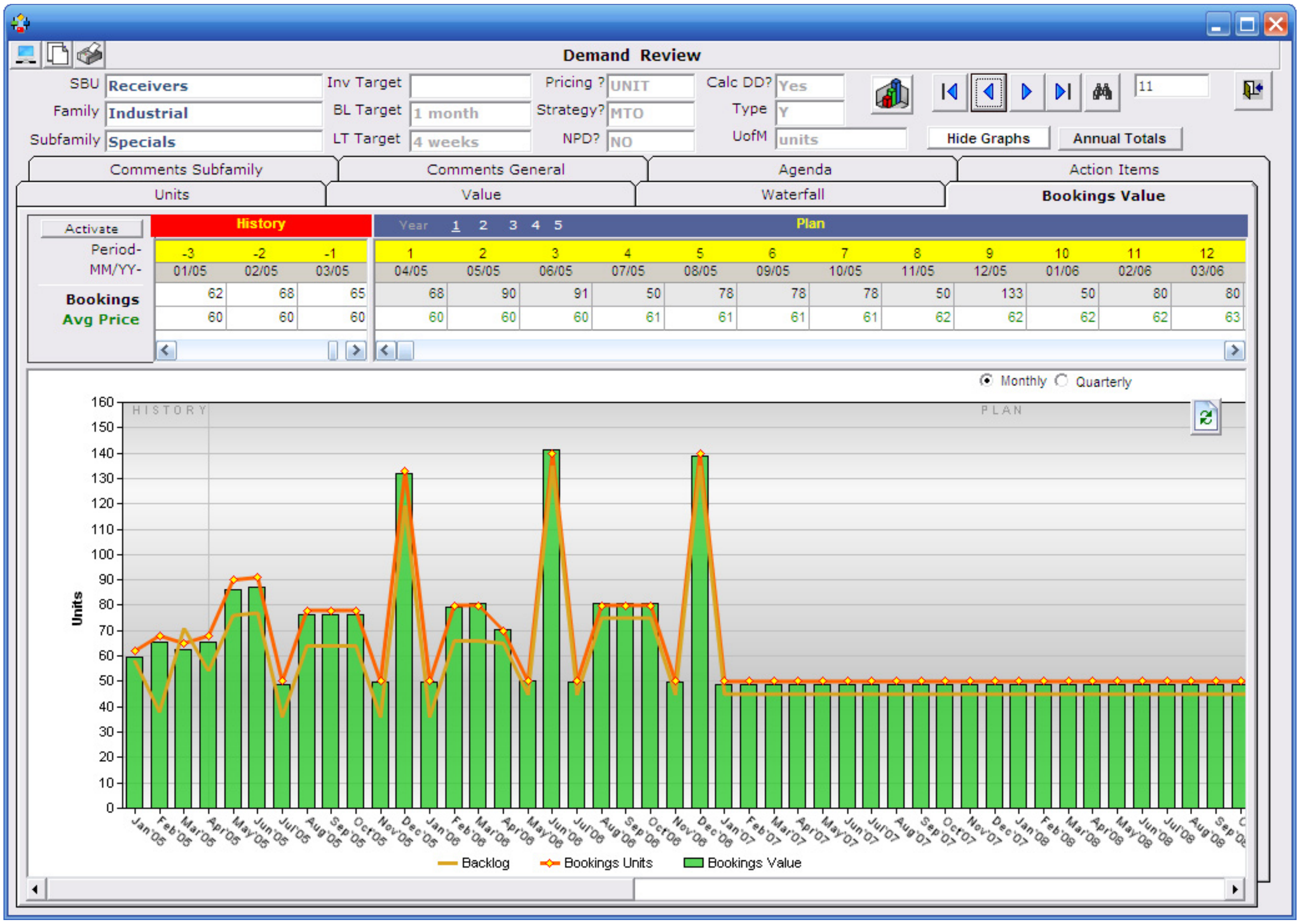
The Plan Comparison graph provides a visual comparison of the current month and historical data.



Bookings Value

Demand Review - Bookings Value

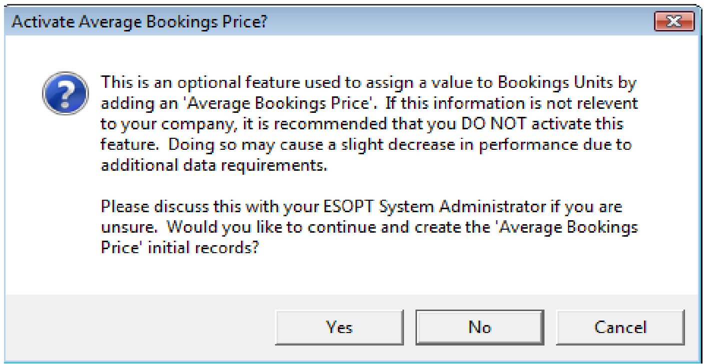
The Bookings Value form is used to enter an Average Bookings Price and display the Bookings Value chart. The Average Bookings Value is activated manually. If the information provided is valuable to the company, the Average Bookings Value may be activated. If this information does not apply to your company or is not beneficial, do not activate the Bookings Value.



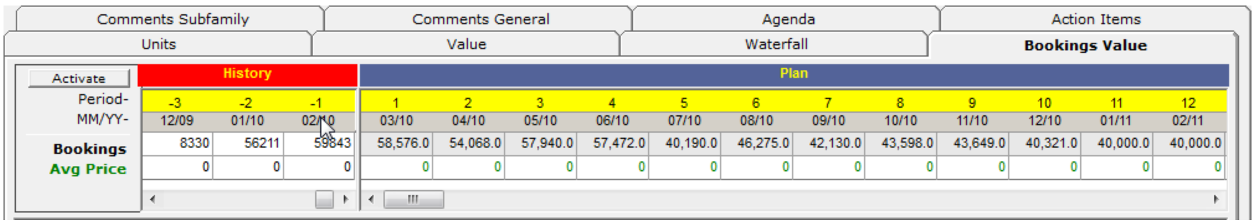
Period-	-3	-2	-1	1	2	3	4	5	6	7	8	9	10	11	12
MM/YY-	01/05	02/05	03/05	04/05	05/05	06/05	07/05	08/05	09/05	10/05	11/05	12/05	01/06	02/06	03/06
Bookings	62	68	65	68	90	91	50	78	78	78	50	133	50	80	80
Avg Price	60	60	60	60	60	60	61	61	61	61	62	62	62	62	63

To Active Bookings Value

- Click the 'Activate' button Activate on the top left-hand side directly above the Period date heading.



- Click 'Yes' to confirm activation or 'No' to cancel.



	History			Plan											
Period-	-3	-2	-1	1	2	3	4	5	6	7	8	9	10	11	12
MM/YY-	12/09	01/10	02/10	03/10	04/10	05/10	06/10	07/10	08/10	09/10	10/10	11/10	12/10	01/11	02/11
Bookings	8330	56211	59843	58,576.0	54,068.0	57,940.0	57,472.0	40,190.0	46,275.0	42,130.0	43,598.0	43,649.0	40,321.0	40,000.0	40,000.0
Avg Price	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Entering the Information:

Bookings

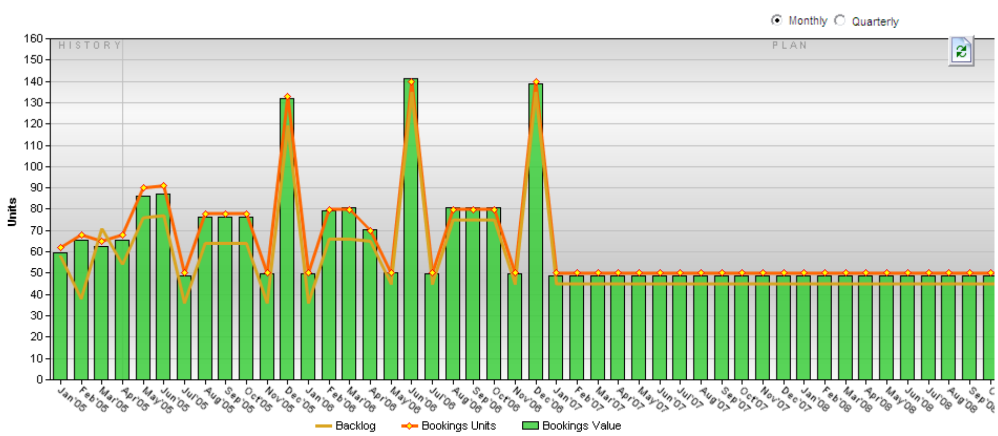
- This is an information read-only field.

Avg Booking Price

- Enter the Average Bookings Price for the Subfamily unit of measure.

Bookings Value Chart

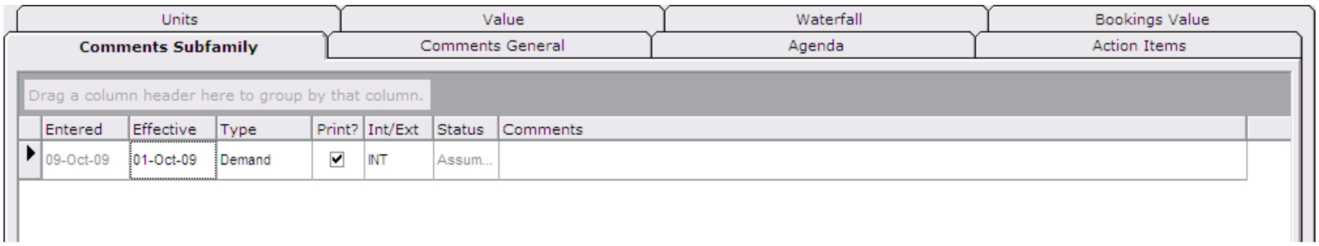
The Bookings Value chart displays the Bookings Value (calculated by Bookings * Average Bookings Price), Bookings, and Backlog.



Comments Subfamily

Demand Review – Comments - Subfamily

The Comments - Subfamily form is used to maintain comments for each Subfamily for the Demand Review, Supply Review, Financial Appraisal Meetings, and the Management Business Review. Comments may be maintained pertaining to Demand, Supply, or Finance for the Subfamily.



Entered	Effective	Type	Print?	Int/Ext	Status	Comments
09-Oct-09	01-Oct-09	Demand	☑	INT	Assum...	

<u>Entering the Information:</u>

Entered

- This date is entered by the system when the Comment is added.

Effective

- Enter the Date for which this Comment is effective in the format mm/dd/yyyy. It will be displayed as dd-mm-yy.

Type

The Comment type will determine where the Comment will be viewed in the Management Business Review forms and also where the Comment will print on the Demand Review, Supply Review, and Financial Appraisal Meetings, and Management Business Review kits. The comment type of 'Transfer' should be used if you are consolidating regional data into a corporate-level database.

- Select the type of information the Comment is related to: Demand, Supply, Finance, or Transfer.

Print?

- Select 'YES' if the Comment is to print on the S&OP Kit Reports. Select 'NO' if the Comment is not to print on the reports.

INT/EXT

Select Internal or External.

- Select INT if the Comment is dealing with an internal factor (influenced or affected by the company)
- Or EXT-external factor (the company has no influence and can only react).

Status

Occurrence or Assumption.

- The status is automatically determined by the effective date. If the effective date is prior to the current month, the status will be 'Occurrence'. If the Effective date is the current month or in the future, it will be an Assumption.

Comment

- Enter a Comment up to 255 characters.

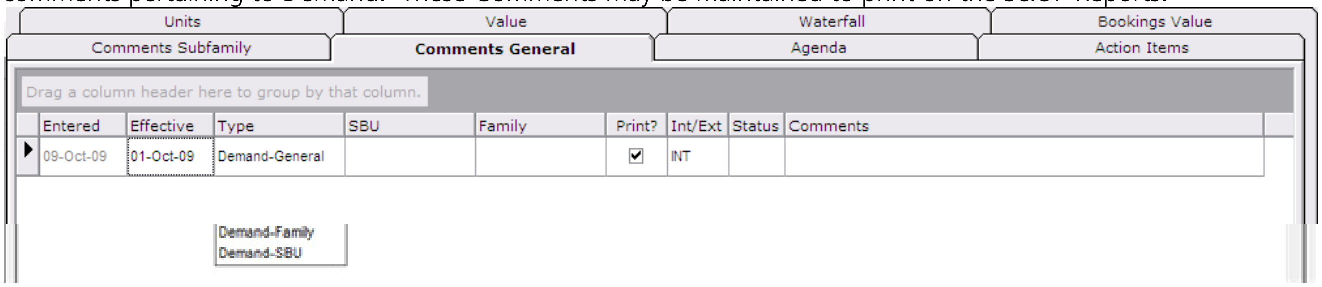
When you have completed entering a Comment:

- Click the new record button to add an additional Comment, or
- Click the exit button to return to the Main Menu.

Comments General

Demand Review – Comments - General

The Comments - General form is used to maintain general comments, SBU, and Family comments, and summary comments pertaining to Demand. These Comments may be maintained to print on the S&OP Reports.



Entering the Information:

Entered

- This date is entered by the system when the Comment is added.

Effective

- Enter the Date for which this Comment is effective in the format mm/dd/yyyy. It will be displayed as dd-mm-yy. The field will default to the current system date.

Type

- Enter the type of Comment; Demand-General or Demand-Summary. Summary Comments display on the Summary Demand/Supply Review. General Comments display on the Reports.

SBU

- When a Comment type of 'Demand-SBU' is selected, this field will be populated with the SBU of the Subfamily currently being viewed.

Family

- When a Comment type of 'Demand-SBU' is selected, this field will be populated with the Family of the Subfamily currently being viewed.

S&OP Print?

- Select 'YES' if the Comment is to print on the S&OP Kit Reports. Select 'NO' if the Comment is not to print on the reports.

INT/EXT

Select Internal or External.

- Select INT if the Comment is dealing with an internal factor (influenced or affected by the company)
- Or EXT- external factor (the company has no influence and can only react).

Status

Occurrence or Assumption.

The status is automatically determined by the effective date. If the effective date is prior to the current month, the status will be 'Occurrence'. If the Effective date is the current month or in the future, it will be an Assumption.

Comment

- Enter a Comment up to 255 characters.

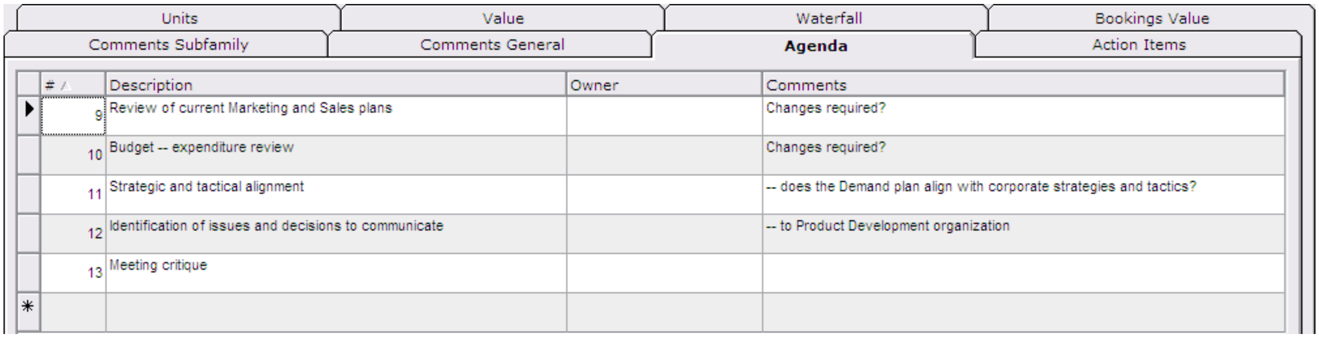
When you have completed entering a Comment:

- Click the new record button to add an additional Comment, or
- Click the exit button to return to the Main Menu.

Agenda

Demand Review - Agenda

The purpose of the Demand Agenda form is to provide a suggested agenda for the Demand Meeting. The agenda may be customized to meet your specific company's needs.



#	Description	Owner	Comments
9	Review of current Marketing and Sales plans		Changes required?
10	Budget -- expenditure review		Changes required?
11	Strategic and tactical alignment		-- does the Demand plan align with corporate strategies and tactics?
12	Identification of issues and decisions to communicate		-- to Product Development organization
13	Meeting critique		

Entering the Information:

Number (#)

- Enter the Agenda item number or order of the Agenda items to be discussed.

Description

- Enter the Description of the Agenda Item.

Owner

- Enter the person(s) or position of the person to lead the discussion for the agenda item.

Comments

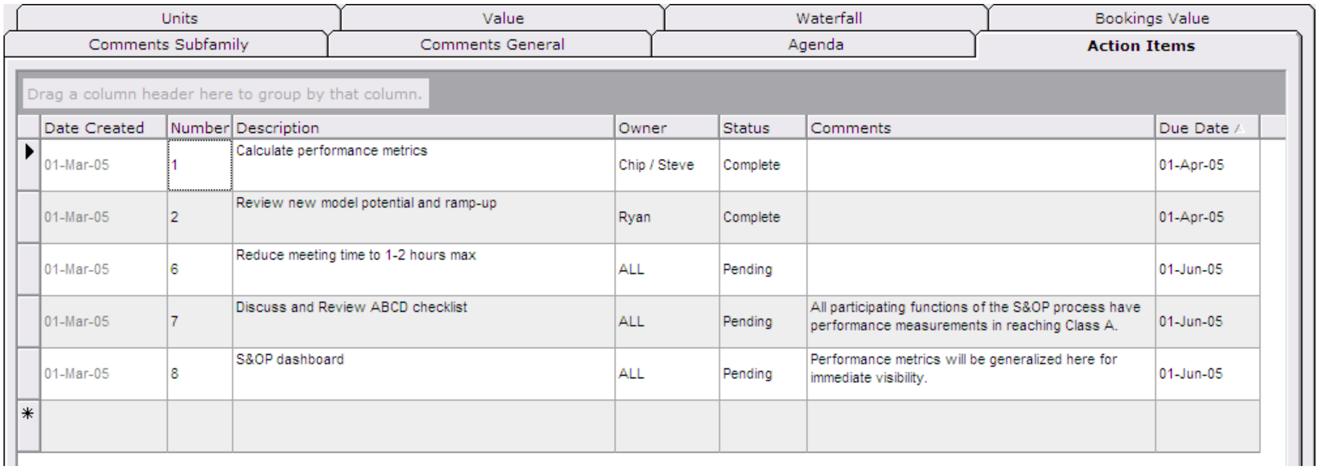
- Enter additional Comments or expected outcome.

When you have completed entering an Agenda Item:

- Click the new record button to add an additional item, or
- Click the exit button to return to the Main Menu.

Demand Review - Action Items

The Action Items form is used to maintain follow-up issues related to the Demand Meeting and the person responsible for the follow-up.



Date Created	Number	Description	Owner	Status	Comments	Due Date
01-Mar-05	1	Calculate performance metrics	Chip / Steve	Complete		01-Apr-05
01-Mar-05	2	Review new model potential and ramp-up	Ryan	Complete		01-Apr-05
01-Mar-05	6	Reduce meeting time to 1-2 hours max	ALL	Pending		01-Jun-05
01-Mar-05	7	Discuss and Review ABCD checklist	ALL	Pending	All participating functions of the S&OP process have performance measurements in reaching Class A.	01-Jun-05
01-Mar-05	8	S&OP dashboard	ALL	Pending	Performance metrics will be generalized here for immediate visibility.	01-Jun-05

<u>Entering the Information:</u>

Date Created

- This date is entered by the system when the Action Item is added.

Number

- Enter the Action Item number or order of the Action Item.

Description

- Enter the Description of the Action Item.

Owner

- Enter the person(s) or position of the person responsible for the Action Item.

Status

- Enter the current Status of the Action Item.

Comments

- Enter additional Comments related to the Action Item.

Due Date

- Enter the date the Action Item is due.

When you have completed entering an Action Item:

- Click the new record button to add an additional Action Item, or
- Click the exit button to return to the Main Menu.

Annual Totals

Demand Review - Annual Totals

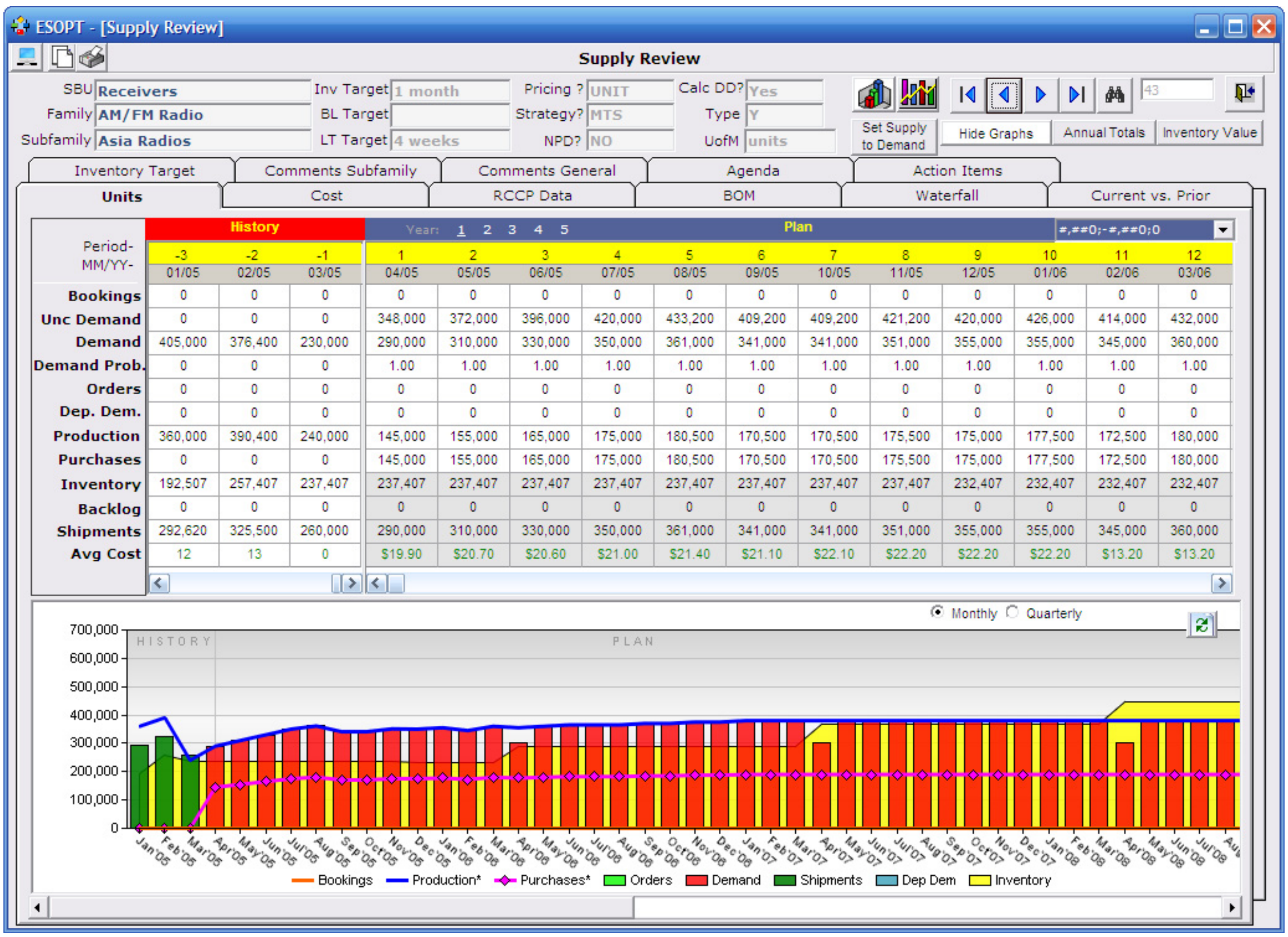
The Annual Totals button provides Annual Totals for the entire company for the Prior, Current, and Next Year. The information is summarized to compare the Actual/Plan to Budget for both current and prior periods. It allows a view of Previous, Current, and Budgeted Demand Plans. These charts are expressed in thousands (000s) as the default. The Chart Scale drop down allows for viewing in Base Scale, Thousands, and Millions. The tabs are Company, SBU, Family, Subfamily, and Subfamily Margin. Refresh totals must be clicked if changes have been made in any of the Units/Dollars worksheets.

Using the Supply Review

The Supply Review focuses on supporting the demand plan and managing the supply plan to affect the desired inventory/backlog levels. It also provides a workbench to determine various "what-if" scenarios needed to support the demand plan, in an environment that will not disrupt the execution of the MPS/MRP system. The Supply Review is separated into the following categories of information: Supply Units, Resource Plan Data, BOM, Waterfall, Current vs. Prior, Inventory Target, Comments, Agenda, and Action Items.

To access the Supply Review:

- From the Main Menu, select the Supply Review button Supply Review
  or
- Press CTRL + S on the keyboard.



Period- MM/YY-	-3 01/05	-2 02/05	-1 03/05	1 04/05	2 05/05	3 06/05	4 07/05	5 08/05	6 09/05	7 10/05	8 11/05	9 12/05	10 01/06	11 02/06	12 03/06
Bookings	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Unc Demand	0	0	0	348,000	372,000	396,000	420,000	433,200	409,200	409,200	421,200	420,000	426,000	414,000	432,000
Demand	405,000	376,400	230,000	290,000	310,000	330,000	350,000	361,000	341,000	341,000	351,000	355,000	355,000	345,000	360,000
Demand Prob.	0	0	0	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Orders	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Dep. Dem.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Production	360,000	390,400	240,000	145,000	155,000	165,000	175,000	180,500	170,500	170,500	175,500	175,000	177,500	172,500	180,000
Purchases	0	0	0	145,000	155,000	165,000	175,000	180,500	170,500	170,500	175,500	175,000	177,500	172,500	180,000
Inventory	192,507	257,407	237,407	237,407	237,407	237,407	237,407	237,407	237,407	237,407	237,407	232,407	232,407	232,407	232,407
Backlog	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Shipments	292,620	325,500	260,000	290,000	310,000	330,000	350,000	361,000	341,000	341,000	351,000	355,000	355,000	345,000	360,000
Avg Cost	12	13	0	$19.90	$20.70	$20.60	$21.00	$21.40	$21.10	$22.10	$22.20	$22.20	$22.20	$13.20	$13.20

The Subfamily information displayed in the top portion of the screen, such as Inventory Target, Backlog Target, and Lead Time Target, was previously defined for the Subfamily in the New Family or Group Master Maintenance.

To locate a Subfamily record:

- Click the Record Navigation Bar to change the Subfamily.

Display Graphs:

The Display Graphs button Display Graphs is a toggle button. It is used to turn the graph, located on the lower portion of the screen, on and off. Turned off, you may experience an improvement in response time while moving between Subfamily records.

- Click the Display Graphs button Display Graphs once to display the graphs.
- Click the Hide Graphs button Hide Graphs once to turn off the graphs.

Units

Supply Review - Units Worksheet

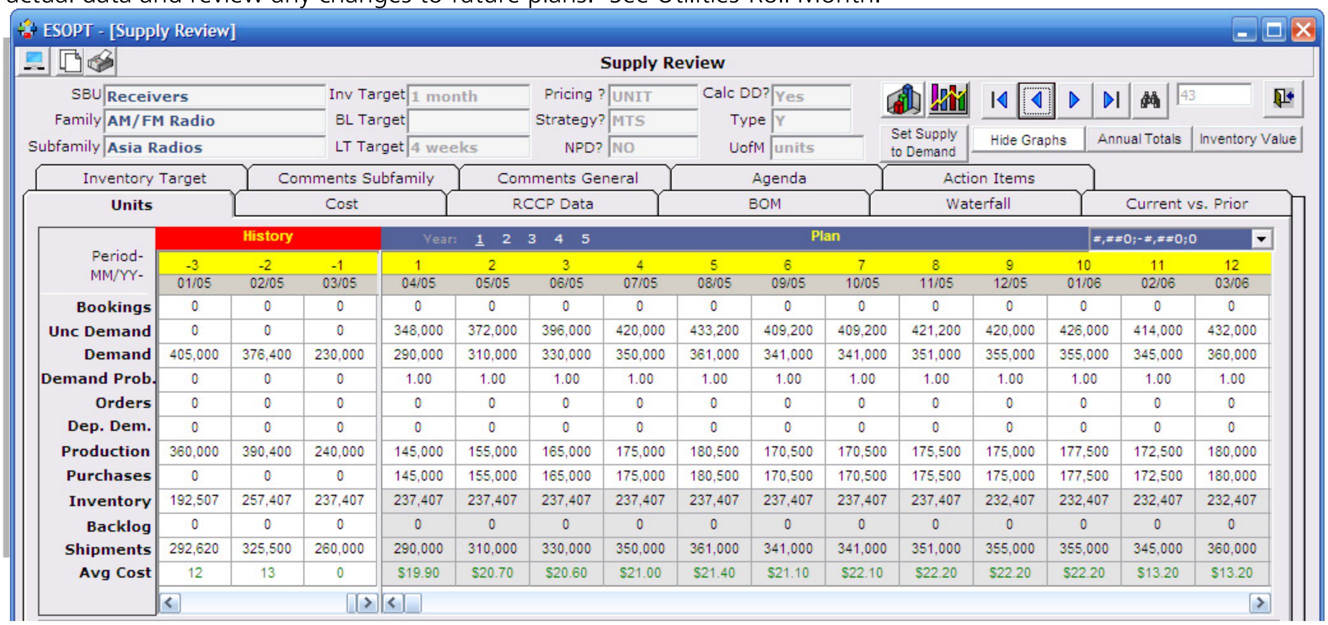
The Units Worksheet may be used to enter the following data: Bookings, Demand, Orders, Production, and Purchases and also history for Bookings, Demand, Orders, and Shipments, Inventory, and Beginning Backlog. Dependent Demand is a calculated field that requires no input. See Dependent Demand explanation below for more information. The data is entered for each Subfamily.

Initial Setup

When you are using the Tool for the first time or adding a new Subfamily, the data may be entered for 24 prior monthly periods and 24 future monthly periods. There are also utilities available to import this data for the first time. See Utilities-Import Manager.

Monthly Maintenance

Following the first monthly update using the Roll Month Function, you will only need to enter the previous month's actual data and review any changes to future plans. See Utilities-Roll Month.



Period- MM/YY-	-3 01/05	-2 02/05	-1 03/05	1 04/05	2 05/05	3 06/05	4 07/05	5 08/05	6 09/05	7 10/05	8 11/05	9 12/05	10 01/06	11 02/06	12 03/06
Bookings	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Unc Demand	0	0	0	348,000	372,000	396,000	420,000	433,200	409,200	409,200	421,200	420,000	426,000	414,000	432,000
Demand	405,000	376,400	230,000	290,000	310,000	330,000	350,000	361,000	341,000	341,000	351,000	355,000	355,000	345,000	360,000
Demand Prob.	0	0	0	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Orders	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Dep. Dem.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Production	360,000	390,400	240,000	145,000	155,000	165,000	175,000	180,500	170,500	170,500	175,500	175,000	177,500	172,500	180,000
Purchases	0	0	0	145,000	155,000	165,000	175,000	180,500	170,500	170,500	175,500	175,000	177,500	172,500	180,000
Inventory	192,507	257,407	237,407	237,407	237,407	237,407	237,407	237,407	237,407	237,407	237,407	232,407	232,407	232,407	232,407
Backlog	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Shipments	292,620	325,500	260,000	290,000	310,000	330,000	350,000	361,000	341,000	341,000	351,000	355,000	355,000	345,000	360,000
Avg Cost	12	13	0	$19.90	$20.70	$20.60	$21.00	$21.40	$21.10	$22.10	$22.20	$22.20	$22.20	$13.20	$13.20

<u>Entering the Information:</u>

Bookings

Bookings are orders received in a particular period. Typically in a make-to-stock environment, Bookings will be equal to Shipments. In a make-to-order environment, bookings may differ from the actual need date and, thus, the demand date is also required.

- Click the Bookings field on the Units worksheet. Enter the Units with or without commas.
- Tab to the next field, or use the mouse to move from field to field.

Demand

Demand is a forecasted need for a particular product or component. The demand could come from any number of sources such as customer order, forecast, interplant, branch warehouse, service part, or the need to manufacture the next higher level. Note: Should be stated net of consumed forecast. The Total Demand line on the respective chart is the total of net Demand and Orders.

- Click the Demand field on the Units worksheet. Enter the Units with or without commas.
- Tab to the next field, or use the mouse to move from field to field.

Orders
Orders are the time-phased split of backlog. The sum of all open orders should be equal to the period -1 backlog.

- Click the Orders field on the Units worksheet. Enter the Units with or without commas.
- Tab to the next field, or use the mouse to move from field to field.

Dependent Demand
The Dependent Demand Units field is a calculated field. There are units present if items in this Subfamily have dependent demand from another Subfamily. See BOM. The period to begin updating dependend demand may be entered in the Group Master form – 'Dependent Demand Start Period' field. Dependent Demand prior to the start period will not be updated.

The dependent demand calculation may be turned off for the Subfamily by setting the Calculate Dependent Demand? field to 'No' in the Edit Group Master form. If Calculate Dependent Demand? is set to 'No,' any demand generated from another Subfamily's BOM will not be calculated for this Subfamily. However, any demand generated by this Subfamily will continue to be generated using the BOM. If Calculate Dependent Demand? is set to 'No,' the Dependent Demand data row may be used to enter other Dependent Demand not calculated by a Bill of Material.

Production
The production units produced or planned to be produced:

- Click the Production field on the Units worksheet. Enter the Units with or without commas.
- Tab to the next field, or use the mouse to move from field to field.

Purchases
The units purchased or planned to be purchased from an outside source or plant. These units may be manually input or copied from another Subfamily. See Purchases Workbench below.

- Click the Purchases field on the Units worksheet. Enter the Units with or without commas.
- Tab to the next field, or use the mouse to move from field to field.

Inventory
Enter previous month's ending Inventory balance in the –1 period.   Future months are calculated as follows:

Pricing Method 'Units' = Beginning Inventory + Production + Purchases
- Dependent Demand – Shipments (Demand + Orders).

Pricing Method 'Dollars' = Beginning Inventory + Production + Purchases
- Dependent Demand – (Shipments * Average Cost).

- Click the field on the worksheet frame of the screen. Enter the balance with or without commas.
- Tab to the next field, or use the mouse to move from field to field.

Backlog
The Backlog field is normally only entered during the initial setup of the plan. Enter the previous month's ending backlog in the –2 period field. The –1 period field is calculated by the sum of future open orders. Current month and future months are calculated by Period –1 Backlog + Bookings – Shipments for MTO and Period –1 Backlog – Orders for MTS.

- Click the field on the worksheet frame of the screen. Enter the Units with or without commas.
- Tab to the next field, or use the mouse to move from field to field.

Shipments
Enter the Shipment history in units in the –1 period field. Future shipment are calculated by Demand (unconsumed forecast) + Orders.

- Click the Shipments field on the Units worksheet. Enter the Units with or without commas.
- Tab to the next field, or use the mouse to move from field to field.

Avg Cost
Enter previous month's ending Avg Cost in the –1 period.
If you have set your ESOPT application options to include additional costs, future cost calculations here are for display only and come from data entered into the Supply Review's Cost tab Cost lines. **(See Cost – Data**)

When you have completed entering data for a Subfamily:

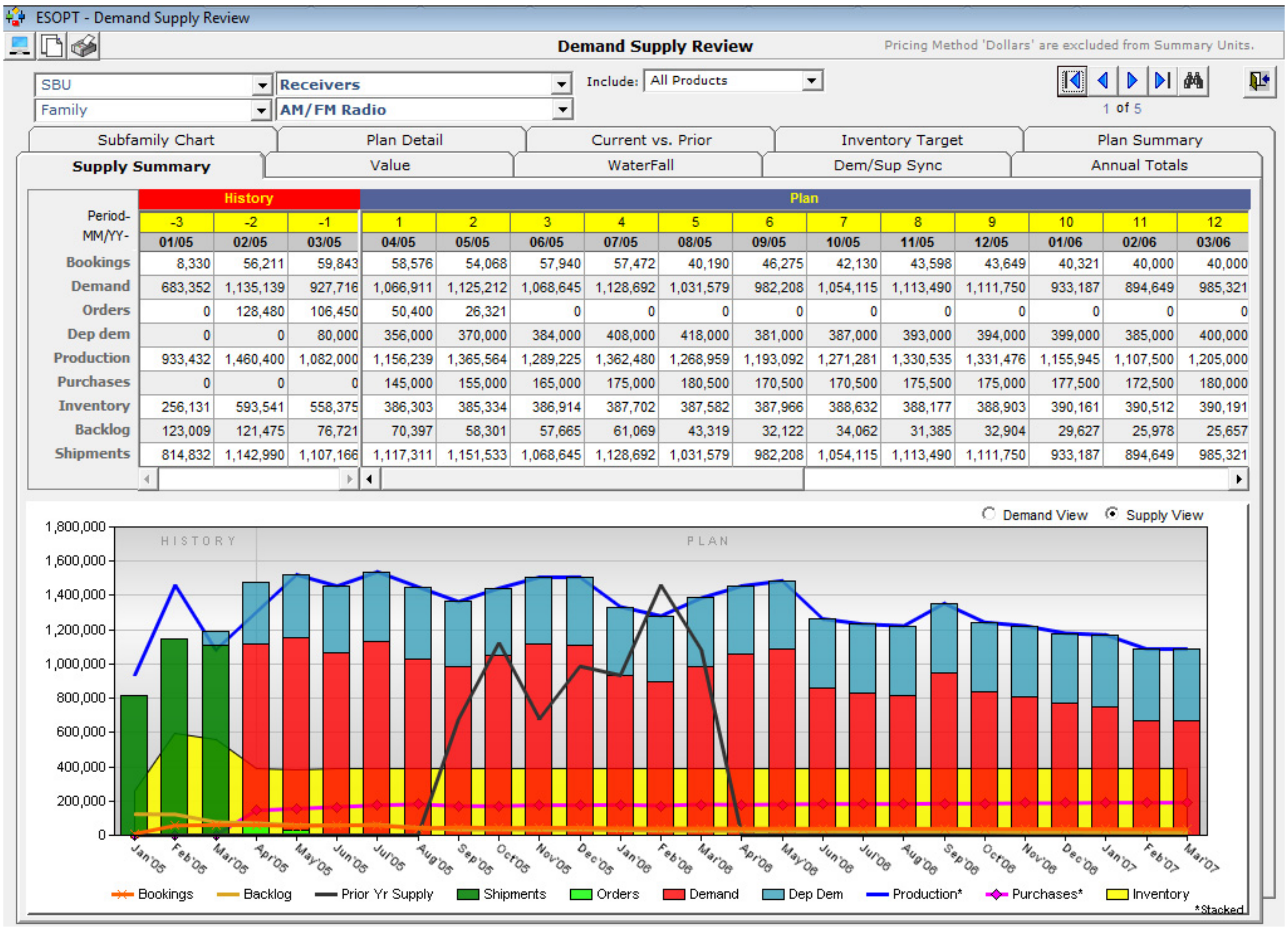
- Click the next record button  to move to the next Subfamily, or

- Click the exit button  to return to the Main Menu.

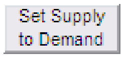
Supply Summary

To view the Supply Summary view, click on the Supply Summary View button.

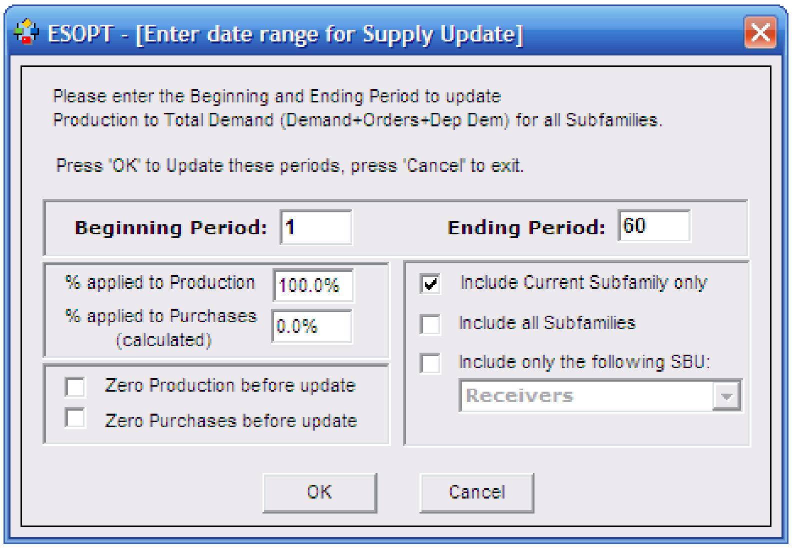
The Demand Supply Review displays with the Supply Summary tab shown. The Supply Summary tab provides information to review the plan and budget data at a Summary, SBU, and Family level. This is for information only and no data can be changed here. In the graph, Dependent Demand is added to Total Demand and represented as a stacked bar for all Demand (Orders, Demand, and Dependent Demand). Production and Purchases are stacked lines to represent Total Supply. See examples in the graphs below respectively. See Management Business Review – Demand Supply Review section for more details about each tab.



Period-	History			Plan											
	-3	-2	-1	1	2	3	4	5	6	7	8	9	10	11	12
MM/YY-	01/05	02/05	03/05	04/05	05/05	06/05	07/05	08/05	09/05	10/05	11/05	12/05	01/06	02/06	03/06
Bookings	8,330	56,211	59,843	58,576	54,068	57,940	57,472	40,190	46,275	42,130	43,598	43,649	40,321	40,000	40,000
Demand	683,352	1,135,139	927,716	1,066,911	1,125,212	1,068,645	1,128,692	1,031,579	982,208	1,054,115	1,113,490	1,111,750	933,187	894,649	985,321
Orders	0	128,480	106,450	50,400	26,321	0	0	0	0	0	0	0	0	0	0
Dep dem	0	0	80,000	356,000	370,000	384,000	408,000	418,000	381,000	387,000	393,000	394,000	399,000	385,000	400,000
Production	933,432	1,460,400	1,082,000	1,156,239	1,365,564	1,289,225	1,362,480	1,268,959	1,193,092	1,271,281	1,330,535	1,331,476	1,155,945	1,107,500	1,205,000
Purchases	0	0	0	145,000	155,000	165,000	175,000	180,500	170,500	170,500	175,500	175,000	177,500	172,500	180,000
Inventory	256,131	593,541	558,375	386,303	385,334	386,914	387,702	387,582	387,966	388,632	388,177	388,903	390,161	390,512	390,191
Backlog	123,009	121,475	76,721	70,397	58,301	57,665	61,069	43,319	32,122	34,062	31,385	32,904	29,627	25,978	25,657
Shipments	814,832	1,142,990	1,107,166	1,117,311	1,151,533	1,068,645	1,128,692	1,031,579	982,208	1,054,115	1,113,490	1,111,750	933,187	894,649	985,321

Set Supply to Demand 

The Set Supply to Demand button is used to set the Supply Units in future periods equal to the Demand for the Subfamily being displayed in the Supply Review, all Subfamilies, or a selected SBU. The Demand is defined as Demand + Orders + Dependent Demand – Existing Purchases – Existing Production. The Supply may be separated into % applied to Production and % applied to Purchases, totaling 100%.



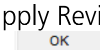
Note: <u>If Production is set to 100%</u>, the resulting plan will net existing Purchases, and Purchases will not be modified. The calculation is <u>Production = Demand + Orders + Dependent Demand – Purchases.</u>

If <u>Purchases is set to 100%</u>, the resulting plan will net any existing Production, and Production will not be modified. The calculation is <u>Purchases = Demand + Orders + Dependent Demand – Production.</u>

If <u>both Production and Purchases are set to a percent other than 100 or 0</u>, the resulting plan will disregard any existing values in Production and Purchases and replace both plans with the Required Supply * the % applied for net any existing Production, and Production will not be modified.

The calculation is Purchases = <u>(Demand + Orders + Dependent Demand) * (% Applied to Purchases)</u>
Production = <u>(Demand + Orders + Dependent Demand) * (% Applied to Production)</u>

To set Supply to Demand:

- Be sure the Subfamily which you would like to update is displayed.
- Select the 'Set Supply to Demand' button in the upper right corner of the Supply Review.
- Confirm that you would like to update Supply to Demand by clicking on the 

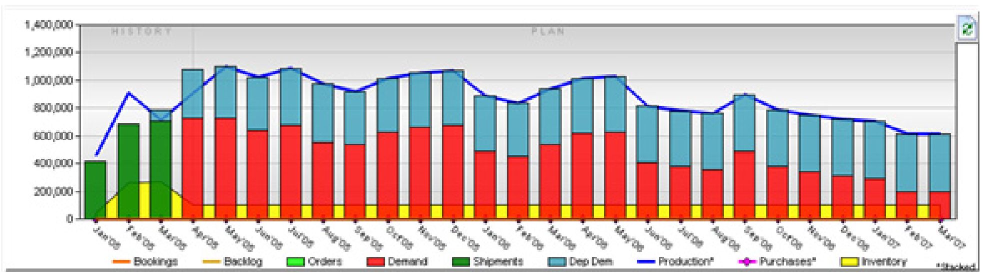
button.

Supply/Demand Graph

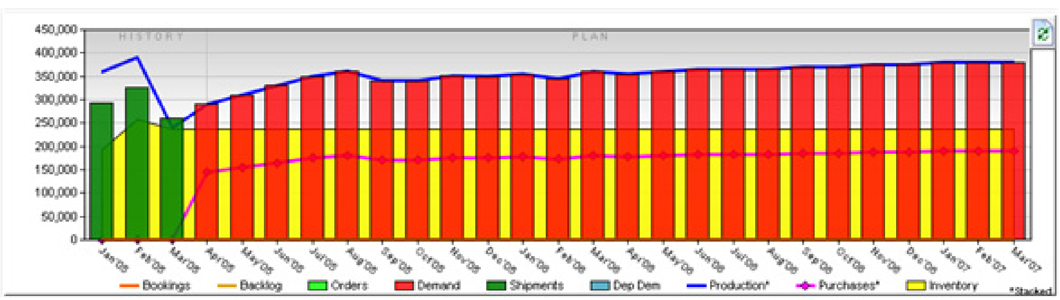
The Supply/Demand graph provides a graphical depiction of the “balanced” nature of the Supply and Demand Plan. This graph represents all Supply and Demand Information including: Inventory, Backlog, Bookings, Demand, Orders, Productions, Shipments, Dependant Demand, and Purchases.

To access the Supply/Demand Graph:

Select the Display Graphs [Display Graphs] button in the upper right corner of the Supply Review. In the graph, Dependent Demand is added to Total Demand and represented as a stacked bar for all Demand (Orders, Demand, and Dependent Demand). Production and Purchases are stacked lines to represent Total Supply. See examples in the graphs below respectively. Example shows Total Demand (Demand, Orders, and Dependent Demand)



Example shows Total Supply by Production and Purchases stacked.



- Click the Refresh Button to update the graph with any changes made in the worksheet.

Update Production with Total Demand

(Demand + Orders + Dependent Demand)

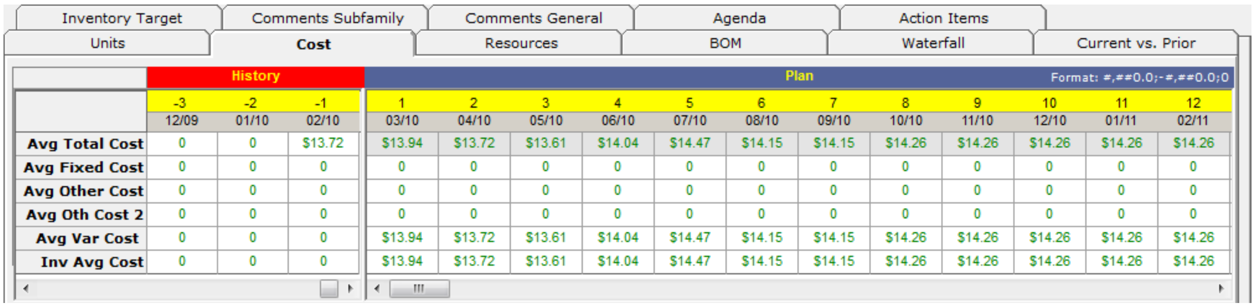
If you would like to automatically set the future production quantities to be equal to the total demand, you may use this utility.

To set Production quantities to Total Demand:

- From the toolbar, select the Tools Menu to display the drop-down menu.
- Select Management Business Review.
- Select Supply Review Menu.
- Select Set Production with Demand + Orders + Dep Demand (all Subfamilies).

Supply Review - Cost Worksheet

The Cost Tab is enabled by using the tool bar on the Main Menu and clicking on Tools > Options > Company Settings > Additional Cost button. Click Activate to enable the Other Cost option. **(See – Options)**



	History			Plan											
	-3	-2	-1	1	2	3	4	5	6	7	8	9	10	11	12
	12/09	01/10	02/10	03/10	04/10	05/10	06/10	07/10	08/10	09/10	10/10	11/10	12/10	01/11	02/11
Avg Total Cost	0	0	$13.72	$13.94	$13.72	$13.61	$14.04	$14.47	$14.15	$14.15	$14.26	$14.26	$14.26	$14.26	$14.26
Avg Fixed Cost	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Avg Other Cost	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Avg Oth Cost 2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Avg Var Cost	0	0	0	$13.94	$13.72	$13.61	$14.04	$14.47	$14.15	$14.15	$14.26	$14.26	$14.26	$14.26	$14.26
Inv Avg Cost	0	0	0	$13.94	$13.72	$13.61	$14.04	$14.47	$14.15	$14.15	$14.26	$14.26	$14.26	$14.26	$14.26

<u>Entering the Information:</u>

Avg TL Cost

Average Total Cost is caclucated in the future plan. The actual data may be entered in history.
Average Total Cost is calculated by: Averaged Fixed Cost + Average Other Cost + Average Variable Cost.

Average Fixed Cost

The Average Fixed Cost is the cost of the product which is fixed, such as overhead.

Average Other Cost (Average Other Variable Costs)

The Average Other Cost is an optional field. It is included in Total Variable Cost.

Average Other Cost 2 (Average Other Variable Costs)

The Average Other Cost 2 is a second optional field. It is included in Total Variable Cost.

Average Variable Cost

The Average Variable Cost is the portion of the cost that is variable, such as freight.

Note: Total Variable Cost = Average Variable Cost + Average Other Cost + Average Other Cost 2.

Inv Average Cost

The Inventory Average Inventory Cost is an optional field. If Inventory Cost is activated, this row will be displayed and the Inventory value will be calculated by Inventory Units * Avg Inventory Costs. If Inventory Cost is not enabled, Inventory Value is calculated by Inventory Units * Average Cost. Inventory Cost may be activated by Subfamily on the Inventory Target tab or globally using the Options form. Inventory Cost may be entered on the Inventory Target tab also.

Resources

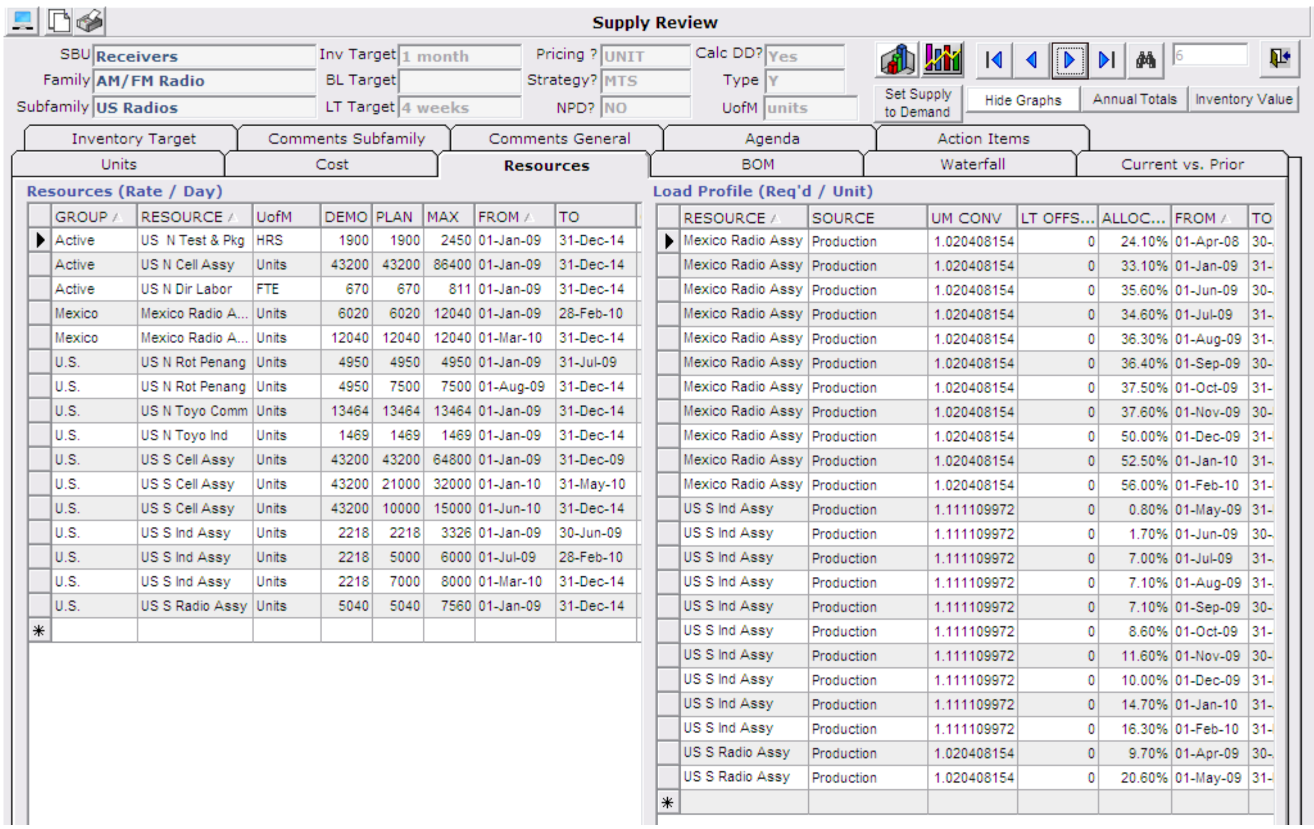
Supply Review - Resources

Rough-Cut Capacity Planning is the process of converting the production plan and/or the master production schedule into capacity needs for key resources: manpower, machinery, warehouse space, vendors' capabilities, and in some cases, money. Load profiles are often used to accomplish this. The purpose of rough-cut capacity planning is to evaluate the plan prior to exploding it through MRP, sometimes called Resource Requirements Planning.

To utilize Resource Planning, you will need to perform the following steps:

1. Set up or review Calendar (see Using the Base Data Form – Calendars).
2. Set up or review Resources (see Entering Resources in the Resource Master).
3. Set up or review Load Profiles (see Entering Data in the Load Profile Master).
4. Review Capacity Load graphs for reasonableness (see Resource Plan graphs).
5. Document assumptions.

The Resources tab is used to maintain the Global Resource Master and the Subfamily Load Profiles needed for Resource Planning.



GROUP	RESOURCE	UofM	DEMO	PLAN	MAX	FROM	TO
Active	US N Test & Pkg	HRS	1900	1900	2450	01-Jan-09	31-Dec-14
Active	US N Cell Assy	Units	43200	43200	86400	01-Jan-09	31-Dec-14
Active	US N Dir Labor	FTE	670	670	811	01-Jan-09	31-Dec-14
Mexico	Mexico Radio A...	Units	6020	6020	12040	01-Jan-09	28-Feb-10
Mexico	Mexico Radio A...	Units	12040	12040	12040	01-Mar-10	31-Dec-14
U.S.	US N Rot Penang	Units	4950	4950	4950	01-Jan-09	31-Jul-09
U.S.	US N Rot Penang	Units	4950	7500	7500	01-Aug-09	31-Dec-14
U.S.	US N Toyo Comm	Units	13464	13464	13464	01-Jan-09	31-Dec-14
U.S.	US N Toyo Ind	Units	1469	1469	1469	01-Jan-09	31-Dec-14
U.S.	US S Cell Assy	Units	43200	43200	64800	01-Jan-09	31-Dec-09
U.S.	US S Cell Assy	Units	43200	21000	32000	01-Jan-10	31-May-10
U.S.	US S Cell Assy	Units	43200	10000	15000	01-Jun-10	31-Dec-14
U.S.	US S Ind Assy	Units	2218	2218	3326	01-Jan-09	30-Jun-09
U.S.	US S Ind Assy	Units	2218	5000	6000	01-Jul-09	28-Feb-10
U.S.	US S Ind Assy	Units	2218	7000	8000	01-Mar-10	31-Dec-14
U.S.	US S Radio Assy	Units	5040	5040	7560	01-Jan-09	31-Dec-14

RESOURCE	SOURCE	UM CONV	LT OFFS...	ALLOC...	FROM	TO
Mexico Radio Assy	Production	1.020408154	0	24.10%	01-Apr-08	30-
Mexico Radio Assy	Production	1.020408154	0	33.10%	01-Jan-09	31-
Mexico Radio Assy	Production	1.020408154	0	35.60%	01-Jun-09	30-
Mexico Radio Assy	Production	1.020408154	0	34.60%	01-Jul-09	31-
Mexico Radio Assy	Production	1.020408154	0	36.30%	01-Aug-09	31-
Mexico Radio Assy	Production	1.020408154	0	36.40%	01-Sep-09	30-
Mexico Radio Assy	Production	1.020408154	0	37.50%	01-Oct-09	31-
Mexico Radio Assy	Production	1.020408154	0	37.60%	01-Nov-09	30-
Mexico Radio Assy	Production	1.020408154	0	50.00%	01-Dec-09	31-
Mexico Radio Assy	Production	1.020408154	0	52.50%	01-Jan-10	31-
Mexico Radio Assy	Production	1.020408154	0	56.00%	01-Feb-10	31-
US S Ind Assy	Production	1.111109972	0	0.80%	01-May-09	31-
US S Ind Assy	Production	1.111109972	0	1.70%	01-Jun-09	30-
US S Ind Assy	Production	1.111109972	0	7.00%	01-Jul-09	31-
US S Ind Assy	Production	1.111109972	0	7.10%	01-Aug-09	31-
US S Ind Assy	Production	1.111109972	0	7.10%	01-Sep-09	30-
US S Ind Assy	Production	1.111109972	0	8.60%	01-Oct-09	31-
US S Ind Assy	Production	1.111109972	0	11.60%	01-Nov-09	30-
US S Ind Assy	Production	1.111109972	0	10.00%	01-Dec-09	31-
US S Ind Assy	Production	1.111109972	0	14.70%	01-Jan-10	31-
US S Ind Assy	Production	1.111109972	0	16.30%	01-Feb-10	31-
US S Radio Assy	Production	1.020408154	0	9.70%	01-Apr-09	30-
US S Radio Assy	Production	1.020408154	0	20.60%	01-May-09	31-

Entering Resources in the Resource Master

Each Resource to be planned in Resource Planning is identified to the system by setting it up in the Resource Master. Resource Planning should be used for critical resources (equipment, equipment groupings for like equipment, departments, materials, etc.) that are potential constraints to satisfying the unconstrained demand forecast.

Entering the Information:

Group

The Resource Group may be used as a selection for reporting and also importing and exporting data between corporate and plants.

- Enter a new Resource Group

  or

- Select an existing Resource Group from the list.

Resource

The Resource is a unique group of labor or equipment where there is limited or constrained capacity, or any resource where monitoring the capacity load is needed. Examples are equipment, equipment groupings, departments, materials, etc.

- Enter the Resource description.

UofM

The Unit of Measure by which the resource is measured: For equipment and/or labor, it is typically hours.

- Enter the Unit of Measure.

Demo (Demonstrated Units Per Day)

The Demonstrated Units Per Day are the normal demonstrated units that the respective resource is available, manned, and capable of producing products. Normally it is the number of hours per shift * the number of shifts - the average down time for scheduled and unscheduled maintenance. This daily demonstrated capacity is multiplied by the number of production days to calculate the monthly demonstrated capacity.

- Enter the Demonstrated Units Per Day.

Plan (Planned Units Per Day)

The Planned Units refer to the planned units that the respective manufacturing resource is available, manned, and capable of producing product. Normally it is the demonstrated hours per day + or - any planned changes in the hours per shift * the number of shifts - the average down time for scheduled and unscheduled maintenance. This daily planned capacity is multiplied by the number of production days to calculate the monthly planned capacity.

- Enter the Planned Units Per Day.

Max (Maximum Units Per Day)

The Maximum Units are the units that the respective manufacturing resource is capable of producing product. Normally it is the hours per shift * the number of shifts + overtime hours. The daily max capacity is multiplied by the number of production days to calculate the monthly maximum capacity.

- Enter the Maximum Units Per Day.

From Date

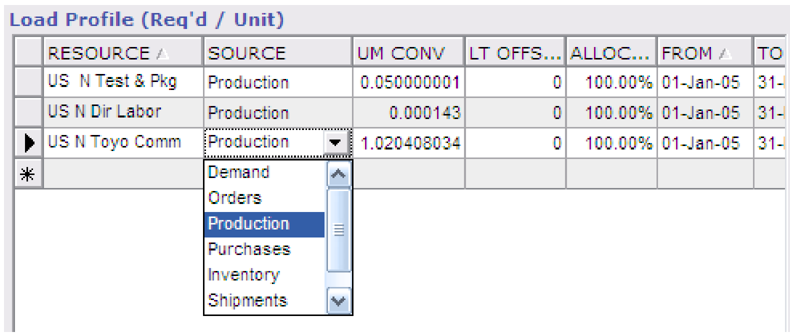
- Enter the beginning date of the capacity level in the format mm/dd/yyyy. It will be displayed as dd-mm-yy.

To Date

- Enter the ending date of the capacity level in the format mm/dd/yyyy. It will be displayed as dd-mm-yy.

Entering Data in the Load Profile Master

The Load Profile is a statement of the key resources required to manufacture one unit of a selected item. It is used to predict the impact of the item scheduled in the production plan and/or the master schedule on these resources. The Load Profile Master Table links the S&OP Subfamily to the resources defined in the Resource Master. If the resources and the load factors are the same for two or more Subfamilies, the entire Load Profile for one Subfamily may be copied to another.


Load Profile (Req'd / Unit)

RESOURCE	SOURCE	UM CONV	LT OFFS...	ALLOC...	FROM	TO
US N Test & Pkg	Production	0.050000001	0	100.00%	01-Jan-05	31-
US N Dir Labor	Production	0.000143	0	100.00%	01-Jan-05	31-
US N Toyo Comm	Production	1.020408034	0	100.00%	01-Jan-05	31-

Entering the Information:

In the top portion of the screen, use the Record Navigation Bar to select the SBU, Family, and Subfamily for which you would like to enter a Load Profile. Enter the following fields:

Resource

This is the Resource for which the current Subfamily requires capacity. The Resource should be defined in the Resource Master.

- Select the Resource from the drop-down box.

Source

The Source is a selection of 'Production,' 'Inventory,' 'Shipments,' or 'Purchases.' The selected plan will be used to calculate the required capacity on this resource for this Subfamily.

UM Conversion (UM Conversion Factor)

The UM Conversion Factor is used to convert the allocated % (mix) of this subgroup's production plan (pounds or gallons in thousands) into the capacity required of this Resource (hours for equipment or labor.) An example of how this factor can be calculated: if you know that the average output rate of production for a product in this subgroup is 4,700 pounds per hour when run on this Resource, then the conversion factor is 1/4.7 = .21.

- Enter the Unit of Measure Conversion Factor.

LT Offset

The Lead Time Offset Factor is used to move the calculated load forward or backward in time to align it within the month in which the resource is needed. This should be considered optional if your manufacturing lead times are less than 30 days. It is normally used for Finished and Intermediate Productions Plans.

- Enter the Lead Time Offset Factor in months. Use a positive number to move the load forward. Use a negative number to move the load backward to a previous month.

Alloc %
This is the percent of this subgroup's production plan volume to be used when calculating the required hours of capacity. For example, if only 40% of the mix of products included in this subgroup use this resource for some period of time, the ALLOC % is set to 40% and the FROM/TO DATES are set for that period. Then, only 40% of the production plan quantities will be converted to a load on this resource during the defined period.

- Enter the Allocation Percent.

From Date
This is the start date for the Allocation Percent, UM Conversion Factor, and/or Lead Time Offset values that is to be used by Resource Planning for this subgroup item:

- Enter the From Date in the format mm/dd/yyyy. It will be displayed as dd-mm-yy.

To Date
This is the ending date after which the Allocation Percent, UM Conversion Factor, and/or Lead Time Offset Values are no longer to be used by Resource Planning for this subgroup item.

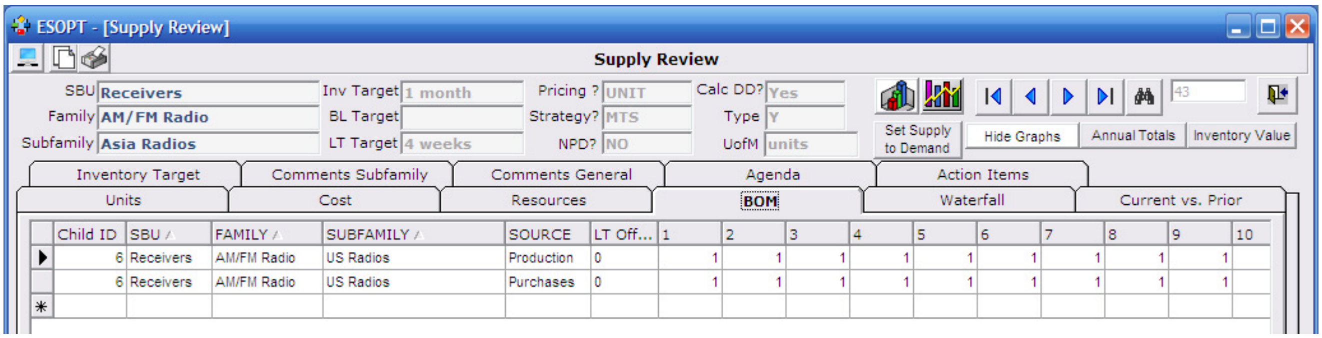
- Enter the To Date in the format mm/dd/yyyy. It will be displayed as dd-mm-yy.

UoM
The UoM in the Load Profile will be automatically populated with the Unit of Measure defined in the Resource Master. This field is protected.

BOM

Supply Review - BOM (Bill of Material)

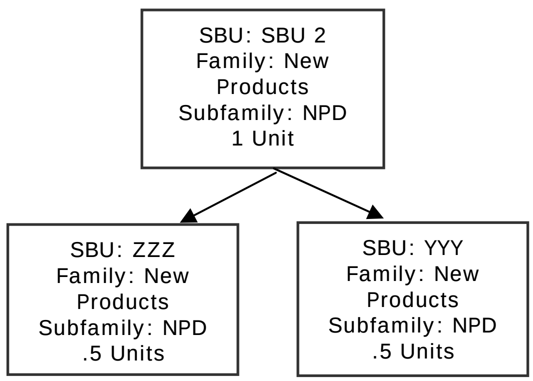
The BOM form provides the ability to link the production plan between Subfamilies. A link, established between the parent and child Subfamily, will generate Dependent Demand for the child's Subfamily demand plan when Calculate Dependent Demand is set to "Yes." The period to begin updating dependent demand in the parent Subfamily is defined in the 'Dependent Demand Start Period' in the Group Master.



Child ID	SBU	FAMILY	SUBFAMILY	SOURCE	LT Off...	1	2	3	4	5	6	7	8	9	10
6	Receivers	AM/FM Radio	US Radios	Production	0	1	1	1	1	1	1	1	1	1	
6	Receivers	AM/FM Radio	US Radios	Purchases	0	1	1	1	1	1	1	1	1	1	

Linking the Parent and Child Subfamilies

The following is an example of entering a BOM:



<u>Entering the Information:</u>

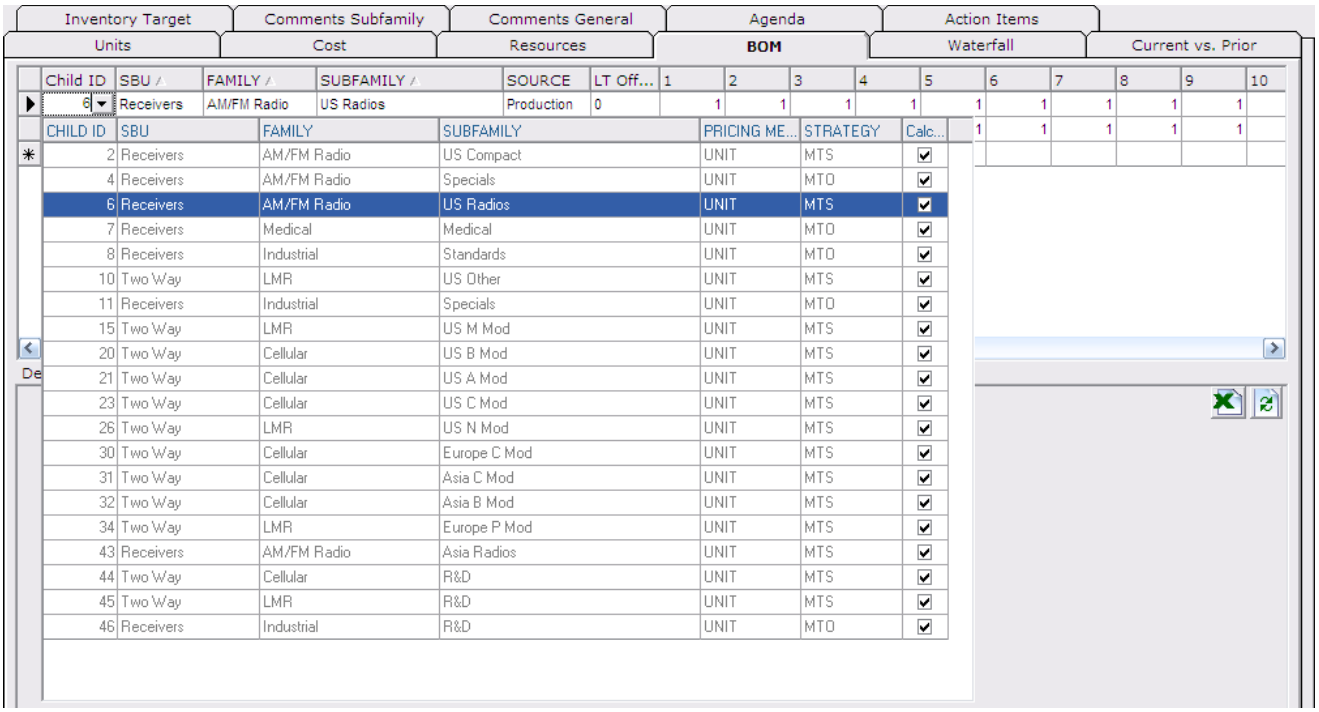
In the top portion of the screen, select the Parent SBU, Family, and Subfamily which will generate Demand to another Subfamily.

- Use the Record Navigation Bar  to locate the Parent SBU/Family/Subfamily.

BOM

Child ID

- Use the drop-down list in the Child ID field to select the Child SBU, Family, and Subfamily. Production demand will pass down to this Subfamily.



Child ID	SBU	FAMILY	SUBFAMILY	SOURCE	LT Off...	1	2	3	4	5	6	7	8	9	10
6	Receivers	AM/FM Radio	US Radios	Production	0	1	1	1	1	1	1	1	1	1	

CHILD ID	SBU	FAMILY	SUBFAMILY	PRICING ME...	STRATEGY	Calc...
2	Receivers	AM/FM Radio	US Compact	UNIT	MTS	☑
4	Receivers	AM/FM Radio	Specials	UNIT	MTO	☑
6	Receivers	AM/FM Radio	US Radios	UNIT	MTS	☑
7	Receivers	Medical	Medical	UNIT	MTO	☑
8	Receivers	Industrial	Standards	UNIT	MTO	☑
10	Two Way	LMR	US Other	UNIT	MTS	☑
11	Receivers	Industrial	Specials	UNIT	MTO	☑
15	Two Way	LMR	US M Mod	UNIT	MTS	☑
20	Two Way	Cellular	US B Mod	UNIT	MTS	☑
21	Two Way	Cellular	US A Mod	UNIT	MTS	☑
23	Two Way	Cellular	US C Mod	UNIT	MTS	☑
26	Two Way	LMR	US N Mod	UNIT	MTS	☑
30	Two Way	Cellular	Europe C Mod	UNIT	MTS	☑
31	Two Way	Cellular	Asia C Mod	UNIT	MTS	☑
32	Two Way	Cellular	Asia B Mod	UNIT	MTS	☑
34	Two Way	LMR	Europe P Mod	UNIT	MTS	☑
43	Receivers	AM/FM Radio	Asia Radios	UNIT	MTS	☑
44	Two Way	Cellular	R&D	UNIT	MTS	☑
45	Two Way	LMR	R&D	UNIT	MTS	☑
46	Receivers	Industrial	R&D	UNIT	MTO	☑

SBU, Family, and Subfamily

Once you have selected the ID, the SBU, Family, and Subfamily will be completed automatically.

Source

- Use the drop down to select the source of the demand to be generated. The selections are Production and Purchases. Subfamilies with a type of 'DN' will always generate Dependent Demand from the Shipments data regardless of this setting.

LT Offset

- The LT Offset is used to move the Dependent Demand requirements on the Child forward or backward. Enter 1 to move the Dependent Demand generated by this Parent forward one period. Enter 0 to generate the Dependent Demand in the same period; enter -1 to generate the Dependent Demand in the previous period.

1: 2: 3: 4: 5: 6: 7: …

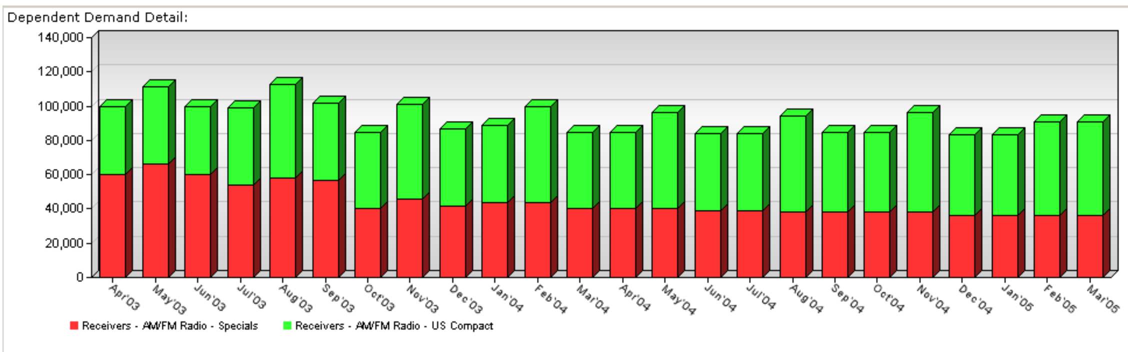
- Enter the multiplier, or quantity per assembly, that is required of the Child item to supply 1 unit of the Parent production demand. Enter this field for the future monthly periods 1 to 24.

Dependent Demand Detail Chart
The Dependant Demand Detail chart displays the dependent demand generated by the Parent Subfamily's Production Demand and the Bill of Material. Dependent Demand will display beginning in the Dependent Demand Start Period defined in the Group Master.

To review the link and the resulting demand generated:

- Use the Record Navigation Bar  to change the Child SBU/Family/Subfamily.
- Select the Display Graphs 

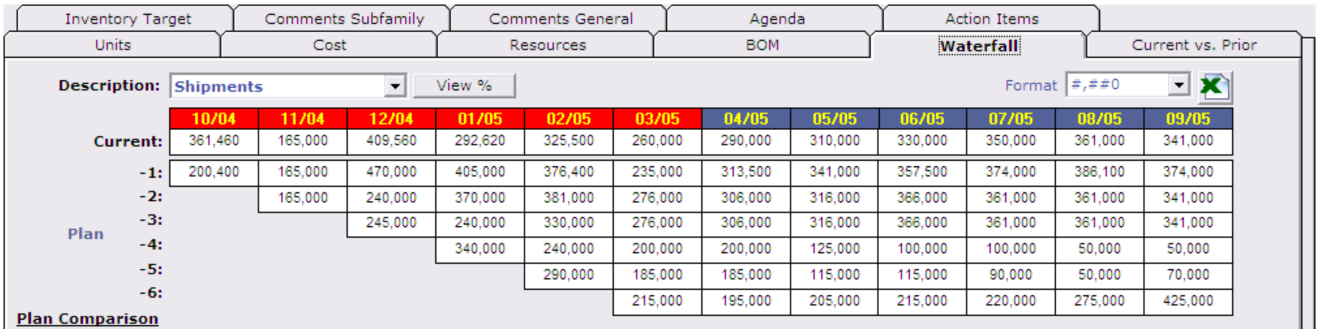
button in the upper right corner of the Supply Review.



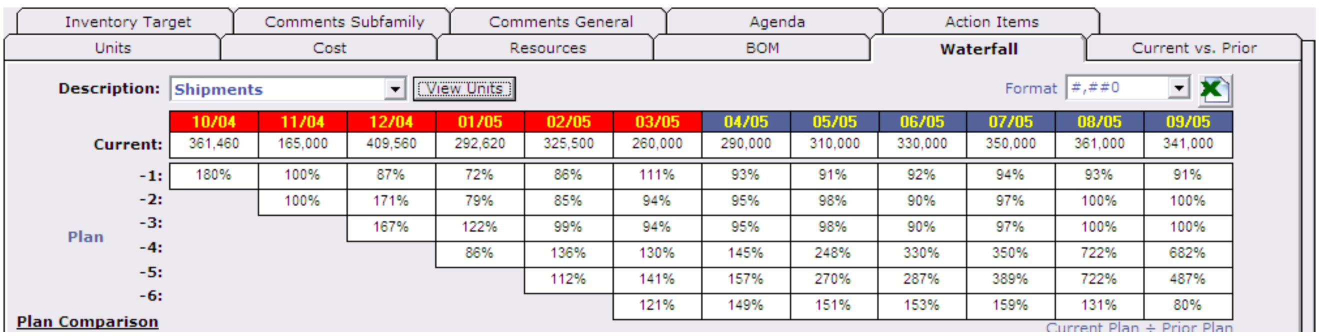
Waterfall

Supply Review - Waterfall

The Waterfall analysis provides an analytical review process of each Subfamily. The Monthly Roll process saves the forecast for each month for up to six months. This screen compares the Forecast to Actual from the six prior months to determine where the actuals have deviated from the prior plan. The data may be displayed in Units or as a percent of plan.



	10/04	11/04	12/04	01/05	02/05	03/05	04/05	05/05	06/05	07/05	08/05	09/05
Current:	361,460	165,000	409,560	292,620	325,500	260,000	290,000	310,000	330,000	350,000	361,000	341,000
-1:	200,400	165,000	470,000	405,000	376,400	235,000	313,500	341,000	357,500	374,000	386,100	374,000
-2:		165,000	240,000	370,000	381,000	276,000	306,000	316,000	366,000	361,000	361,000	341,000
-3:			245,000	240,000	330,000	276,000	306,000	316,000	366,000	361,000	361,000	341,000
-4:				340,000	240,000	200,000	200,000	125,000	100,000	100,000	50,000	50,000
-5:					290,000	185,000	185,000	115,000	115,000	90,000	50,000	70,000
-6:						215,000	195,000	205,000	215,000	220,000	275,000	425,000



	10/04	11/04	12/04	01/05	02/05	03/05	04/05	05/05	06/05	07/05	08/05	09/05
Current:	361,460	165,000	409,560	292,620	325,500	260,000	290,000	310,000	330,000	350,000	361,000	341,000
-1:	180%	100%	87%	72%	86%	111%	93%	91%	92%	94%	93%	91%
-2:		100%	171%	79%	85%	94%	95%	98%	90%	97%	100%	100%
-3:			167%	122%	99%	94%	95%	98%	90%	97%	100%	100%
-4:				86%	136%	130%	145%	248%	330%	350%	722%	682%
-5:					112%	141%	157%	270%	287%	389%	722%	487%
-6:						121%	149%	151%	153%	159%	131%	80%

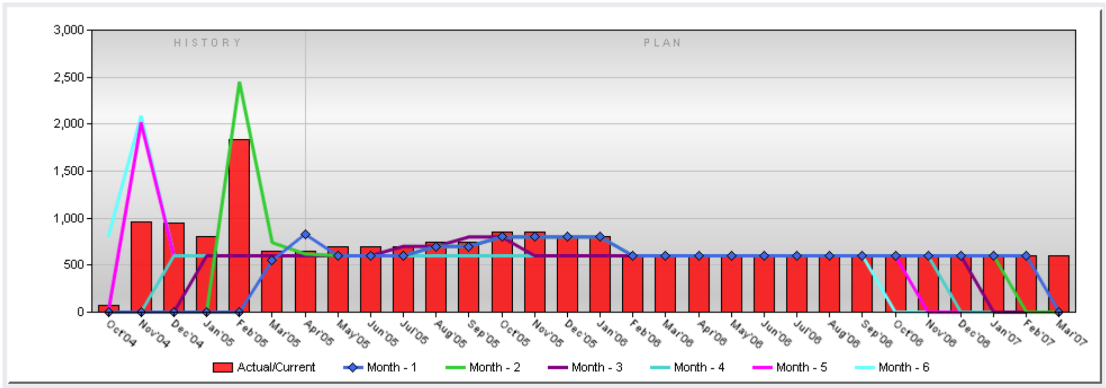
Description:

- Select the information you would like to view from the drop-down list: Bookings, Demand, Orders, Dep Dem, Production, Purchases, Inventory, Backlog, Shipments, Inventory Value, Avg Fixed Cost, Avg Other Cost, Avg Variable Cost, Avg Gross Margin, Avg Variable Margin, Avg Gross Margin %, and Avg Variable Margin % are available.
- You may select the format for the Waterfall data using the format drop-down box.

The Spreadsheet button will export the Waterfall data to a spreadsheet.

<u>Plan Comparison Graph</u>

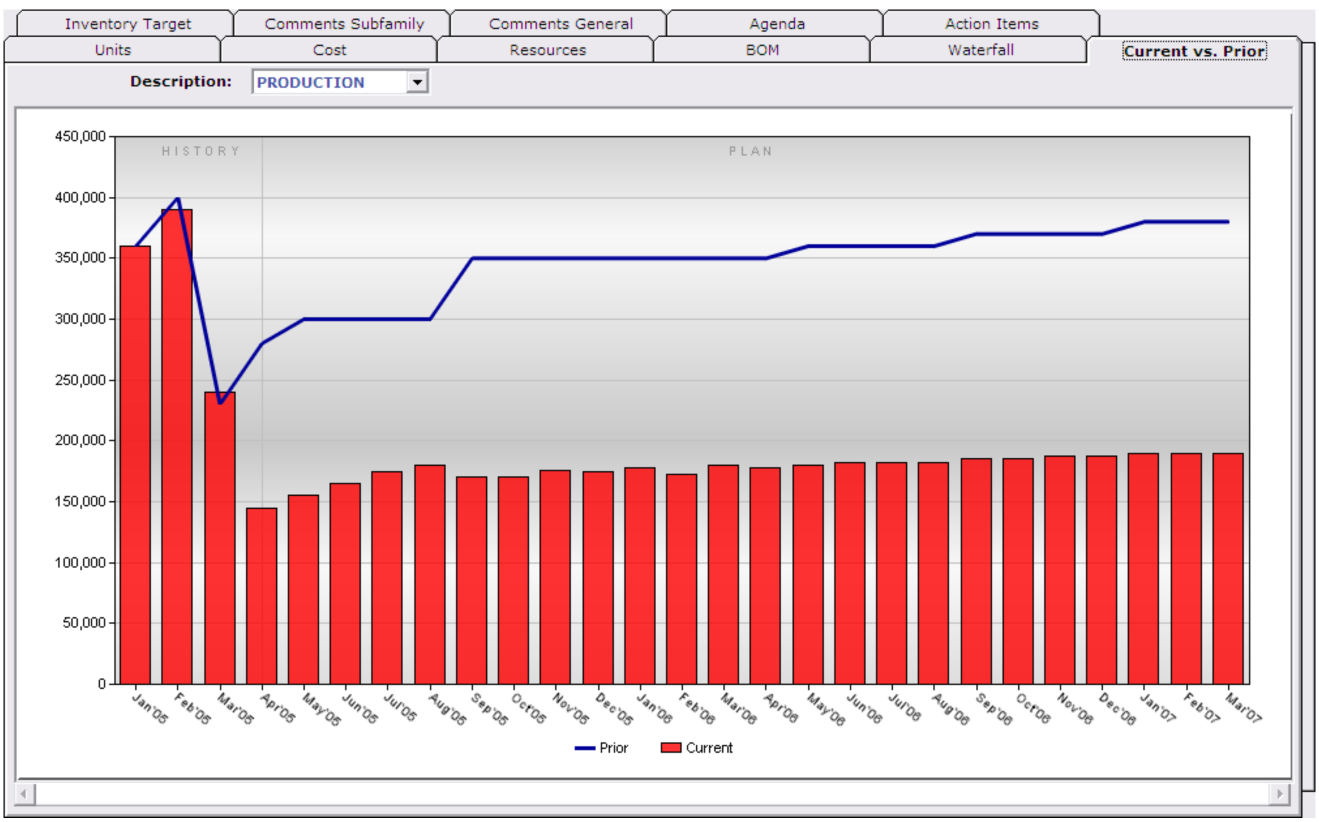
The Plan Comparison Graph provides a visual comparison of the current month and historical data.



Current vs. Prior

Supply Review - Current vs. Prior

The Current vs. Prior form compares the current month's data to the previous month's data. The information may be displayed for Bookings, Demand, Orders, Dependent Demand, Production, Purchases, Inventory, Backlog, Shipments.



To select the type of information you would like to review:

- Select the description from the drop-down list.

Inventory Target

Supply Review - Inventory Target

The Inventory Target form is used to enter an Inventory Target in Units or Days. The Subfamily Inventory Target Unit of Measure will determine how the target should be entered.

Inventory Target entered in
Units Days

The current Inventory Target Unit of Measure setting is indicated on the form. This setting may be modified using the Group Master Maintenance form.

Units | Cost | Resources | BOM | Waterfall | Current vs. Prior
Inventory Target | Comments Subfamily | Comments General | Agenda | Action Items

	-3	-2	-1	1	2	3	4	5	6	7	8	9	10	11	12
	01/05	02/05	03/05	04/05	05/05	06/05	07/05	08/05	09/05	10/05	11/05	12/05	01/06	02/06	03/06
Inventory	192507	257407	237407	237407	237407	237407	237407	237407	237407	237407	237407	237407	237407	237407	237407
Target Inventory	0	0	0	230000	230000	230000	200000	200000	200000	200000	200000	200000	200000	200000	200000
Min Target	0	0	0	200000	200000	200000	200000	200000	200000	200000	200000	200000	200000	200000	200000
Max Target	0	0	0	300000	300000	300000	300000	300000	300000	300000	300000	300000	300000	300000	300000

Monthy Min, Max Targets
Activate Remove

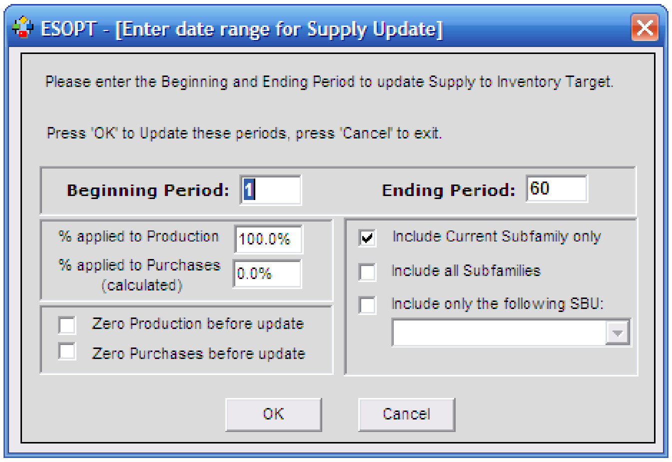
The ' New Family' and 'Group Master Maintenance' provide Minimum and Maximum Inventory Targets for the planning horizon. The ability to set the Minimum and Maximum Inventory Targets by period is available by activating this feature by Subfamily. Once activated, these targets will override the Inventory Target entered in the Group Master. You may remove the Monthly Minimum and Maximum Targets at any time.

Set Supply to Inventory Target

Update Supply to Inv Target
Update Undo

After you have entered Inventory Targets, you may choose to use the Inventory Target to calculate your production plan. Click the Update button to open the Options menu and perform the update.

The Set Supply to Inventory Target is used to set the Supply Units in future periods equal to the Demand + Inventory Target for the Subfamily being displayed in the Supply Review, all Subfamilies, or a selected SBU. The Demand is defined as Demand + Orders + Dependent Demand – Existing Purchases – Existing Production. The Supply may be separated into % applied to Production and % applied to Purchases, totaling 100%.



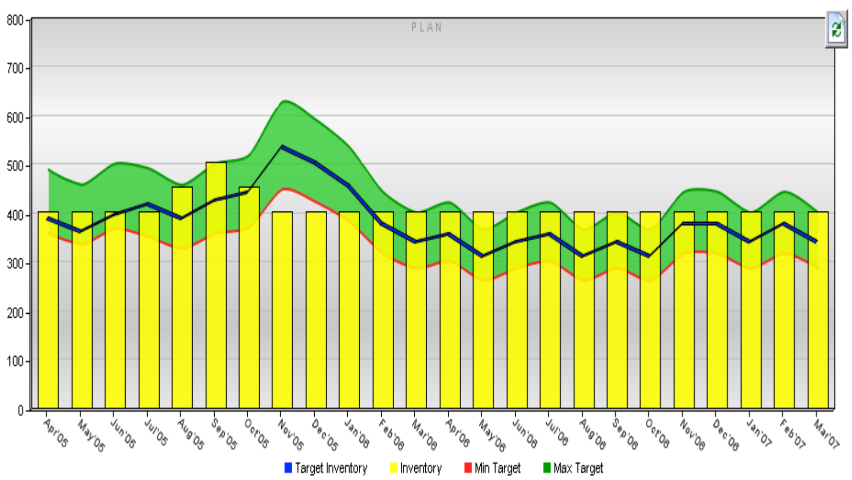
Note: If Production is set to 100%, the resulting plan will net existing Purchases, and Purchases will not be modified. The calculation is Production = Demand + Orders + Dependent Demand – Purchases.

If <u>Purchases is set to 100%</u>, the resulting plan will net any existing Production, and Production will not be modified. The calculation is <u>Purchases = Demand + Orders + Dependent Demand – Production.</u>

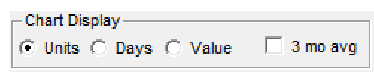
If <u>both Production and Purchases are set to a percent other than 100 or 0,</u> the resulting plan will disregard any existing values in Production and Purchases and replace both plans with the Required Supply * the % applied for net any existing Production, and Production will not be modified.

The calculation is:
Purchases = <u>(Demand + Orders + Dependent Demand) * (% Applied to Purchases).</u>
Production = <u>(Demand + Orders + Dependent Demand) * (% Applied to Production).</u>

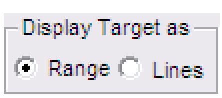
Actual Inventory vs Inventory Target Chart
This chart shows the Actual Inventory plan compared to the Inventory Target. You may display the chart in Units or Days of Inventory, regardless of Subfamily Inventory Unit of Measure.



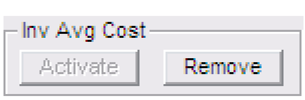
<u>Chart Display Options</u>



Select the option for the chart display by selecting either Units, Days, or Value. Apply a three-month smoothing effect to the chart by selecting the 3 mo avg.



<u>Display Target Option</u>
Display the Minimum and Maximum Target by a range or lines.

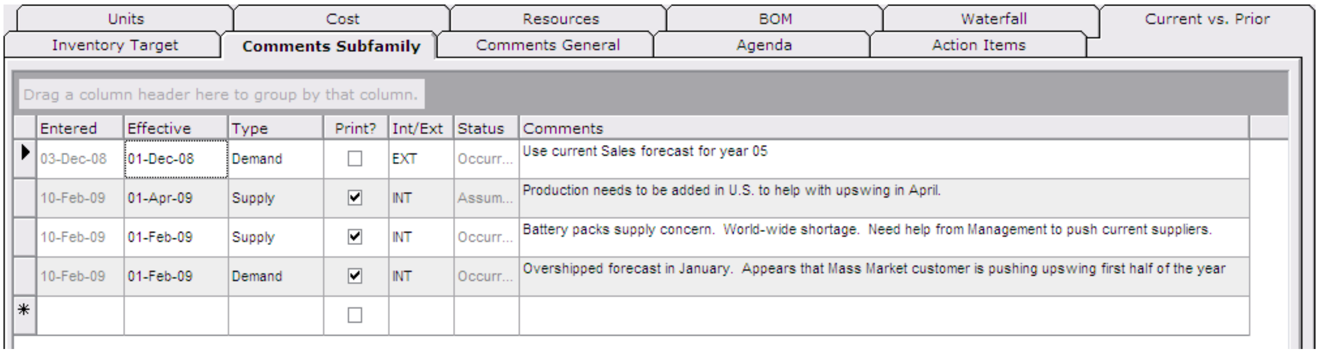


<u>Inventory Average Cost</u>
Inv Avg Cost is an optional feature used to assign an Inventory Average Cost for the selected Subfamily by clicking on the Activate button. After a Subfamily has Inventory Average Cost calculated, then there is the option to remove it by clicking on the Remove button.

Comments Subfamily

Supply Review - Comments - Subfamily

The Comments Subfamily form is used to maintain comments for each Subfamily for the Demand Review, Supply Review, Financial Appraisal Meetings, and the Management Business Review. Comments may be maintained pertaining to Demand, Supply, or Finance for the Subfamily.



Units | Cost | Resources | BOM | Waterfall | Current vs. Prior

Inventory Target | **Comments Subfamily** | Comments General | Agenda | Action Items

Drag a column header here to group by that column.

	Entered	Effective	Type	Print?	Int/Ext	Status	Comments
▶	03-Dec-08	01-Dec-08	Demand	☐	EXT	Occurr...	Use current Sales forecast for year 05
	10-Feb-09	01-Apr-09	Supply	☑	INT	Assum...	Production needs to be added in U.S. to help with upswing in April.
	10-Feb-09	01-Feb-09	Supply	☑	INT	Occurr...	Battery packs supply concern. World-wide shortage. Need help from Management to push current suppliers.
	10-Feb-09	01-Feb-09	Demand	☑	INT	Occurr...	Overshipped forecast in January. Appears that Mass Market customer is pushing upswing first half of the year
*				☐			

<u>Entering the Information:</u>

Entered

- This date is entered by the system when the Comment is added.

Effective

- Enter the Date this Comment is effective in the format of mm/dd/yyyy. It will be displayed as dd-mm-yy.

Type

The Comment type will determine where the Comment will be viewed in the Management Business Review forms and also where the Comment will print on the Demand Review, Supply Review, Financial Appraisal Meetings, and Management Business Review kits. The Comment type of ‘Transfer’ should be used if you are consolidating regional data into a corporate level database.

- Select the type of information the Comment is related to: Demand, Supply, Finance, Transfer, or Competitor.

INT/EXT

Select Internal or External.

- Select INT if the Comment is dealing with an internal factor (influenced or affected by the company)
- Or EXT-external factor (the company has no influence and can only react).

Status

Occurrence or Assumption.

- The status is automatically determined by the effective date. If the effective date is prior to the current month, the status will be ‘Occurrence’. If the Effective date is the current month or in the future, it will be an Assumption.

S&OP Print?

- Select ‘YES’ if the Comment is to print on the S&OP Kit Reports. Select ‘NO’ if the Comment is not to print on the reports.

Comment

- Enter a Comment up to 255 characters.

Comments General

Supply Review - Comments - General

The Comments - General form is used to maintain General Comments, SBU, and Family Comments, and Summary Comments pertaining to Demand. These Comments may be maintained to print on the S&OP Reports.

Units | Cost | Resources | BOM | Waterfall | Current vs. Prior
Inventory Target | Comments Subfamily | **Comments General** | Agenda | Action Items

Drag a column header here to group by that column.

	Entered	Effective	Type	SBU	Family	Print?	Int/Ext	Status	Comments
	14-Oct-08	01-Oct-08	Supply-General			☐	INT	Occu...	No production for the last week of December.
	14-Oct-08	01-Nov-08	Supply-General			☐	INT	Occu...	December production plan reflects 16 working days. Assumes no
	14-Oct-08	01-Nov-08	Supply-General			☐	INT	Occu...	Definitions of demonstrated capacity, planned capacity, maximum capacity,
	10-Feb-09	01-Feb-09	Supply-SBU	Receivers		☐	INT	Occu...	Need a transfer plan between solder Penang style to crimp Penang style.
▶	10-Feb-09	01-Feb-09	Supply-Family	Receivers	AM/FM Radio	☐	EXT	Occu...	North facility shop floor proposal scheduled to start 3/00 with completion
*						☐			

Entering the Information:

Entered

- This date is entered by the system when the Comment is added.

Effective

- Enter the Date this Comment is effective in the format of mm/dd/yyyy. It will be displayed as dd-mm-yy.

Type

- Enter the type of Comment; Supply-General, Supply-Summary, Competitor-General, Supply-Family, or Supply-SBU.

SBU

- When a Comment type of 'Supply-SBU' is selected, this field will be populated with the SBU of the Subfamily currently being viewed.

Family

- When a Comment type of 'Supply-SBU' is selected, this field will be populated with the SBU of the Subfamily currently being viewed.

S&OP Print?

- Select 'YES' if the Comment is to print on the Management Business Review Reports; Select 'NO' if the Comment is not to print on the Reports.

INT/EXT

- Select Internal or External. Select INT if the Comment is dealing with an internal factor (influenced or affected by the company) or EXT - external factor (the company has no influence and can only react).

Status

Occurrence or Assumption.

- The status is automatically determined by the effective date. If the effective date is prior to the current month, the status will be 'Occurrence'. If the Effective date is the current month or in the future, it will be an Assumption.

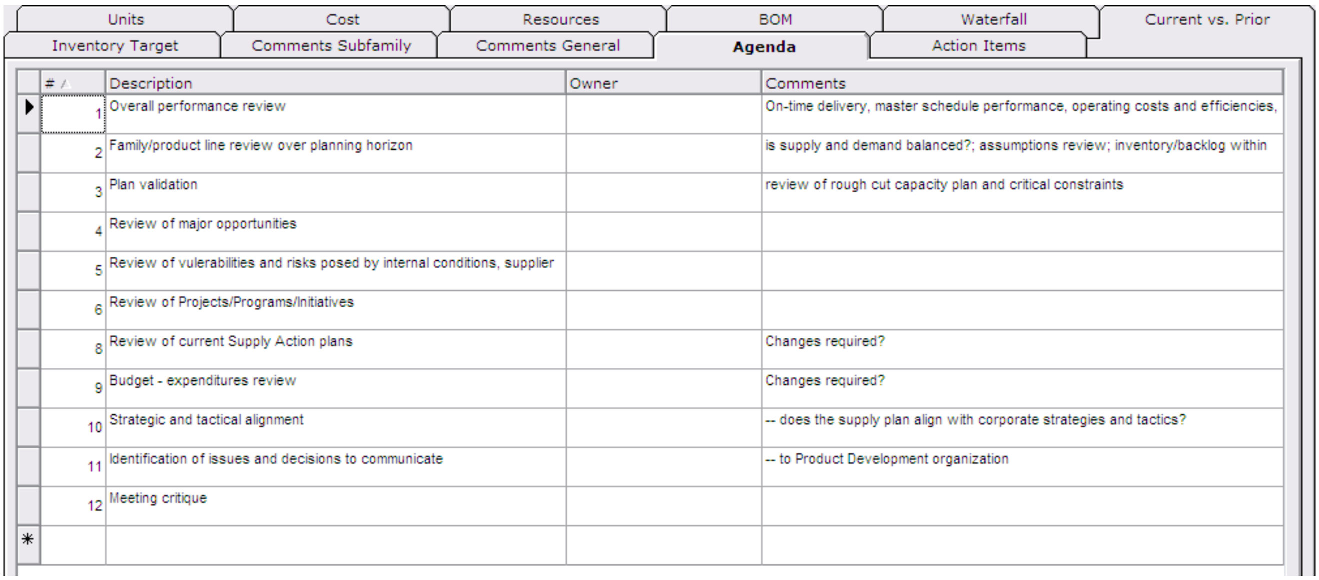
Comment

- Enter a Comment up to 255 characters.

Agenda

Supply Review – Agenda

The purpose of the Pre-Supply Agenda form is to provide a suggested agenda for the Pre-Supply Meeting. The agenda may be customized to meet your specific company's needs.



Units | Cost | Resources | BOM | Waterfall | Current vs. Prior
Inventory Target | Comments Subfamily | Comments General | **Agenda** | Action Items

#	Description	Owner	Comments
1	Overall performance review		On-time delivery, master schedule performance, operating costs and efficiencies,
2	Family/product line review over planning horizon		is supply and demand balanced?; assumptions review; inventory/backlog within
3	Plan validation		review of rough cut capacity plan and critical constraints
4	Review of major opportunities		
5	Review of vulerabilities and risks posed by internal conditions, supplier		
6	Review of Projects/Programs/Initiatives		
8	Review of current Supply Action plans		Changes required?
9	Budget - expenditures review		Changes required?
10	Strategic and tactical alignment		-- does the supply plan align with corporate strategies and tactics?
11	Identification of issues and decisions to communicate		-- to Product Development organization
12	Meeting critique		

<u>Entering the Information:</u>

Number (#)

- Enter the Agenda Item number or order of the Agenda Items to be discussed.

Description

- Enter the Description of the Agenda Item.

Owner

- Enter the person(s) or position of the person to lead the discussion for the Agenda Item.

Comments

- Enter additional comments or expected outcome.

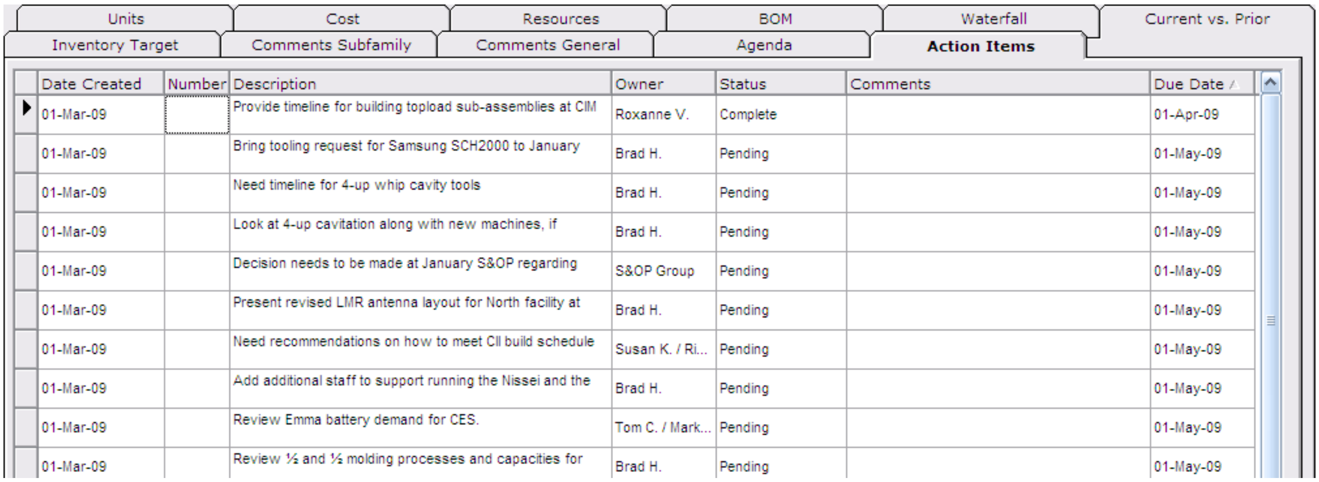
When you have completed entering an Agenda Item:

- Click the new record button to add an additional item, or
- Click the exit button to return to the Main Menu.

Action Items

Supply Review - Action Items

The Action Items form is used to maintain follow-up issues related to the Supply Meeting and the person responsible for the follow-up.



Date Created	Number	Description	Owner	Status	Comments	Due Date
01-Mar-09		Provide timeline for building topload sub-assemblies at CIM	Roxanne V.	Complete		01-Apr-09
01-Mar-09		Bring tooling request for Samsung SCH2000 to January	Brad H.	Pending		01-May-09
01-Mar-09		Need timeline for 4-up whip cavity tools	Brad H.	Pending		01-May-09
01-Mar-09		Look at 4-up cavitation along with new machines, if	Brad H.	Pending		01-May-09
01-Mar-09		Decision needs to be made at January S&OP regarding	S&OP Group	Pending		01-May-09
01-Mar-09		Present revised LMR antenna layout for North facility at	Brad H.	Pending		01-May-09
01-Mar-09		Need recommendations on how to meet CII build schedule	Susan K. / Ri...	Pending		01-May-09
01-Mar-09		Add additional staff to support running the Nissei and the	Brad H.	Pending		01-May-09
01-Mar-09		Review Emma battery demand for CES.	Tom C. / Mark...	Pending		01-May-09
01-Mar-09		Review ½ and ½ molding processes and capacities for	Brad H.	Pending		01-May-09

Entering the Information:

Date Created

- This Date is entered by the system when the Action Item is added.

Number

- Enter the Action Item number or order of the Action Item.

Description

- Enter the Description of the Action Item.

Owner

- Enter the person(s) or position of the person responsible for the Action Item.

Status

- Enter the current status of the Action Item.

Comments

- Enter additional Comments related to the Action Item.

Due Date

- Enter the Date this Action Item is due in format mm/dd/yyyy. It will be displayed as dd-mm-yy.

When you have completed entering an Action Item:

- Click the new record button to add an additional item, or
- Click the exit button to return to the Main Menu.

Inventory Value

Supply Review - Inventory Value (Inventory Summary)

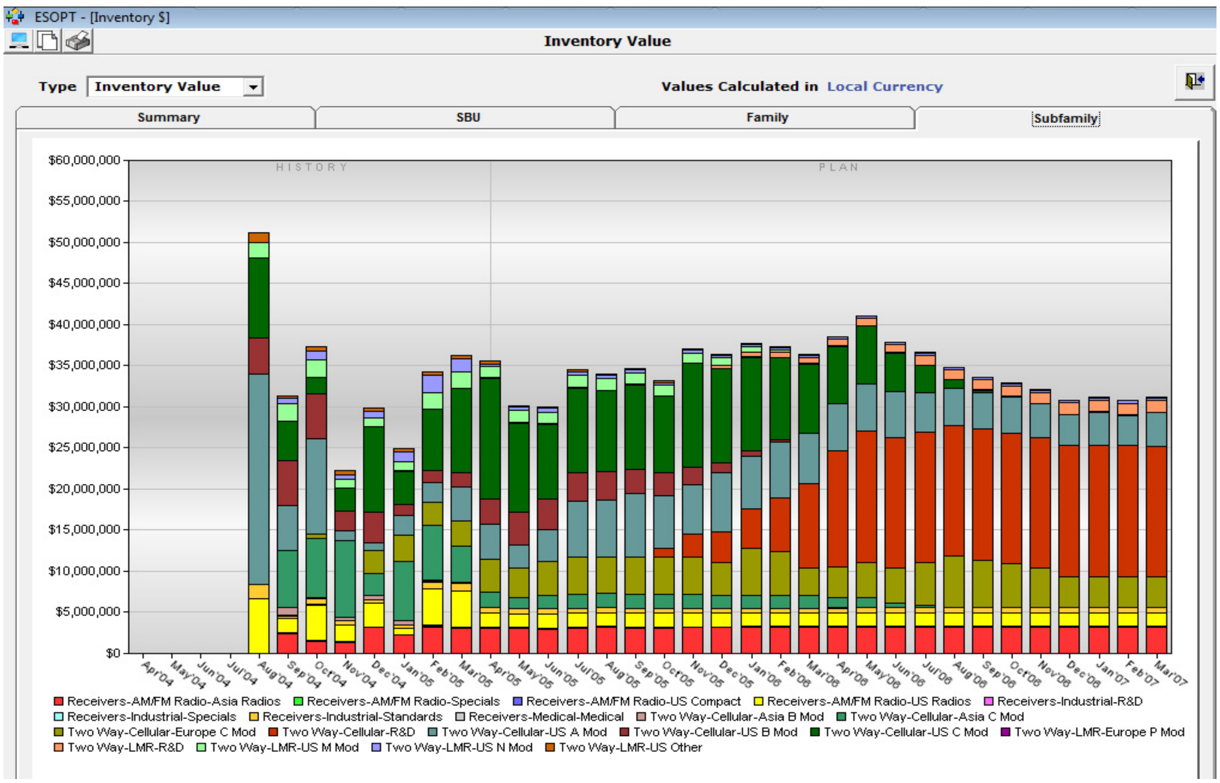
The Inventory Value graph depicts prior, current, and future projected Inventory Value. It is used to review aggregated inventory dollars resulting from the current actual/plan. The graphs may be viewed by total Company, SBU, Family, and Subfamily in a stacked bar format. The method of calculating inventory dollars is determined by the pricing method. The chart displays two types of inventory; Finished Goods Inventory and Asset Inventory.

If pricing method is:

Units, then Inventory Value is calculated by Inventory Units * Average Cost.
Fixed, then Inventory Value is equal to Average Cost.
Dollars, then Inventory Value is equal to Inventory Units.

To Access the Inventory Value Graph

- Click the Inventory Value button **Inventory Value** located in the upper right corner on the Supply Review.



- Select the type of inventory to display using the drop-down box
- Select the tab which represents the level of detail to be reviewed.

Inventory Value
Inventory Value
Asset Value

Summary	SBU	Family	Subfamily

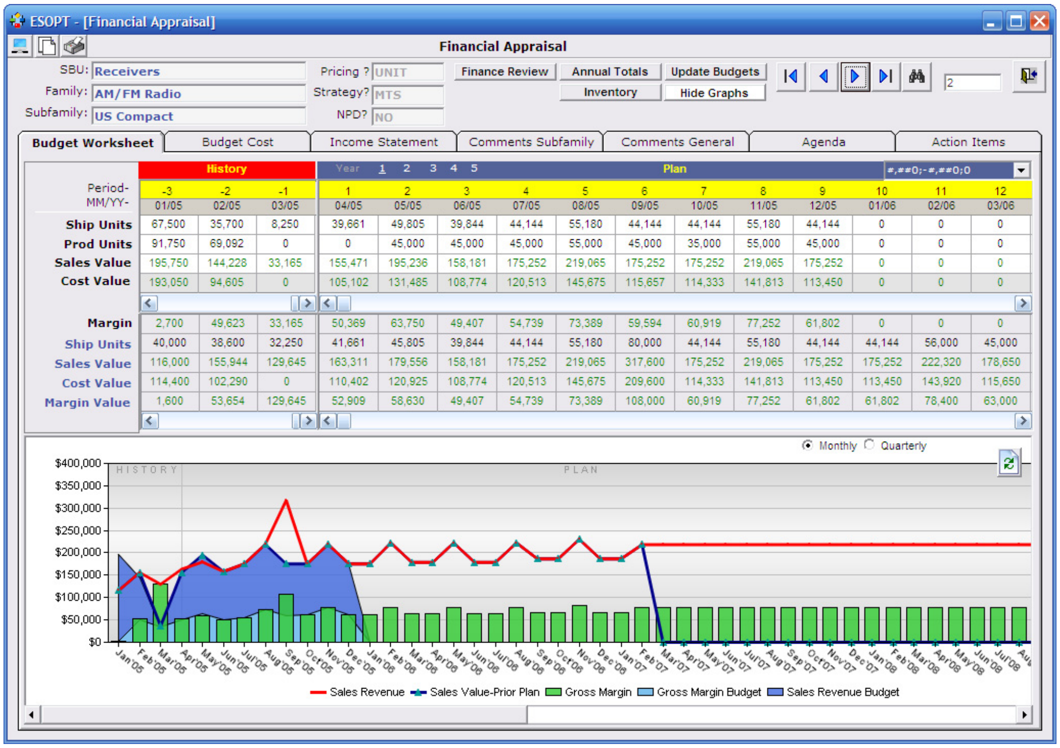
- Click the exit button to return to the Supply Menu.

Using the Financial Appraisal Form

The Financial Appraisal form is focused on monitoring the actual results to the Business Plan. An Income Statement is also provided in Microsoft Excel® to enable additional analysis.

To access the Financial Appraisal form:

- From the Main Menu, select the Financial Appraisal button [Financial Appraisal] or
- Press CTRL + F on the keyboard.



To locate a Subfamily record:

- Click the Record Navigation Bar to change the Subfamily.

Display Graphs:

[Display Graphs] The Display Graphs button is a toggle button. It is used to turn the Budget Variance graph, located on the lower portion of the screen, on and off. Turned off, you may see an improvement in response time while moving between Subfamily records.

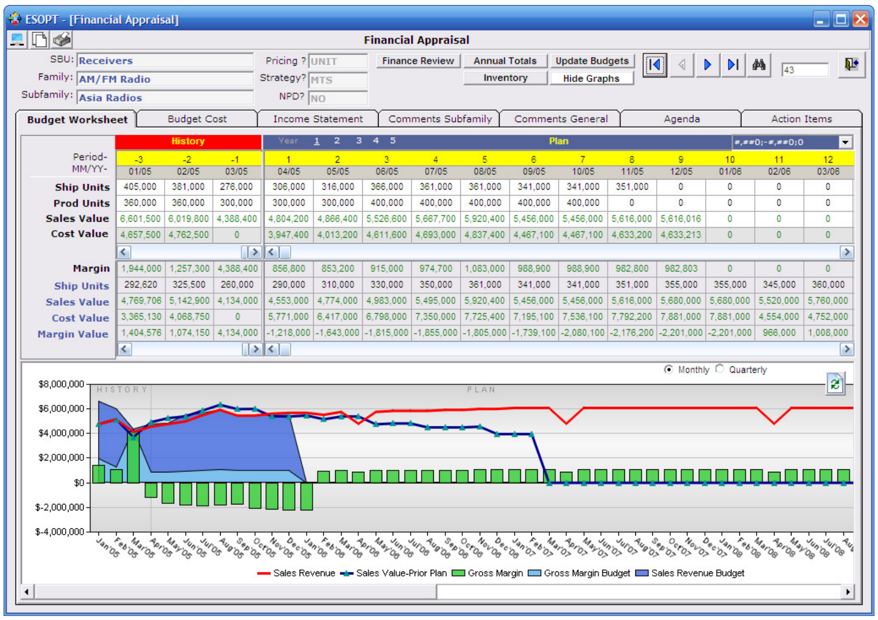
- Click the Display Graphs button [Display Graphs] once to display the graphs.
- Click the Hide Graphs button [Hide Graphs] once to turn off the graphs.

Budget Worksheet — Financial Appraisal - Budget Worksheet

The Budget Worksheet is used to maintain the budget for supply and demand by Subfamily. It is entered both in Units and Dollars. When an established S&OP process is in place, the Update Budgets button will convert the current plans to budgets for all Subfamilies.

Initial Setup

When you are using the S&OP Tool for the first time or adding a new Subfamily, the Budget data may be entered for 24 prior monthly periods and 24 future monthly periods. When an established S&OP process is in place, the Update Budgets button will convert the current plans to Budgets for all Subfamilies.



Entering the Information:

After selecting the correct Subfamily, enter the following data in the appropriate areas of the Budget Worksheet:

Ship Units

- Enter the projected Budgeted Units to be shipped by month.

Prod Units

- Enter the projected Budgeted Units to be produced by month.

Sales Value

- Enter the projected Budgeted Dollars to be sold by month.

Cost Value

- Enter the projected Budgeted Cost in dollars to produce the Production Units.

Margin

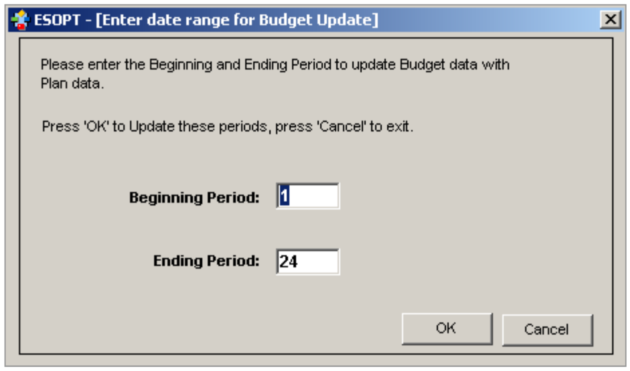
- The margin is calculated by subtracting Cost Value from the Sales Value

When you have completed entering the Budget Units for a Subfamily:

- Click the next record button to move to the next Subfamily, or
- Click the exit button to return to the Main Menu.

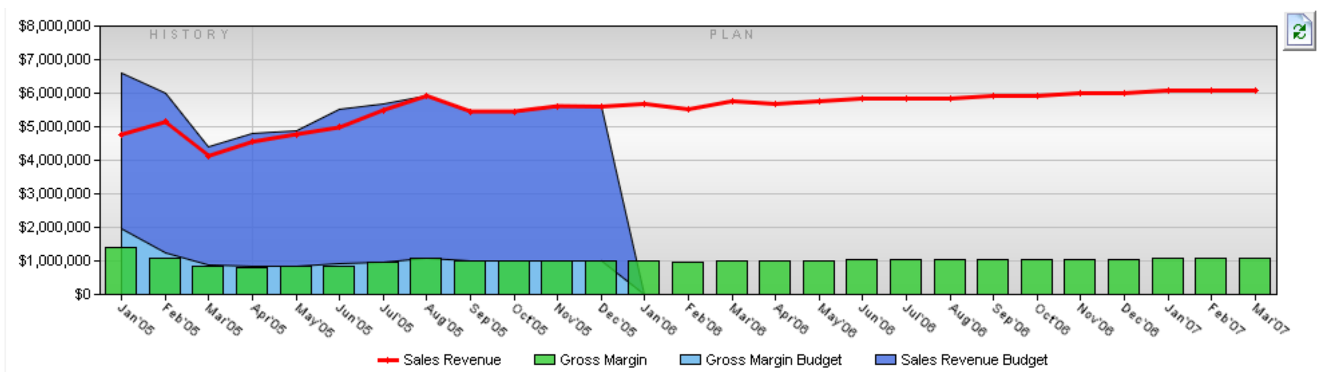
Update Budgets Update Budgets

Following an effective S&OP process, the Update Budgets button Update Budgets will convert the current plan to the budget for all Subfamilies. This function will update budgets for all Subfamilies. You may select the range or periods to update by specifying the Beginning and Ending Period.



Budget Variance Graph

The Budget Variance Graph represents the variance from the Budget to Plan for Margin Dollars and Sales Dollars. The Variance Dollars are calculated by Plan Dollars – Budget Dollars.



Budget Cost

Financial Appraisal - Budget Cost

The Budget Cost chart is used to maintain the Budget Cost for supply and demand by Subfamily. It is entered both in units and dollars. The Budget Cost tab will only appear if Additional Costs are activated. The Budget Cost tab is enabled by using the tool bar on the Main Menu and clicking on Tools > Options > Company Settings > Additional Cost button. Click Activate to enable the Other Cost option. **(See ESOPT Options)**

Budget Worksheet | Budget Cost | Income Statement | Comments Subfamily | Comments General | Agenda | Action Items

	History			Plan (Year: 1 2 3 4 5 10 15 20 25 30)											
	-3	-2	-1	1	2	3	4	5	6	7	8	9	10	11	12
	01/05	02/05	03/05	04/05	05/05	06/05	07/05	08/05	09/05	10/05	11/05	12/05	01/06	02/06	03/06
Tot Cost	4,657,500	4,762,500	3,505,200	3,947,400	4,013,200	4,611,600	4,693,000	4,837,400	4,467,100	4,467,100	4,633,200	4,633,213	0	0	0
Fixed Cost	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Other Cost	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Other Cost 2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Var Cost	0	0	0	3,947,400	4,013,200	4,611,600	4,693,000	4,837,400	4,467,100	4,467,100	4,633,200	4,633,213	0	0	0

Entering the Information:

After selecting the correct Subfamily, enter the following data in the appropriate areas of the Budget Worksheet:

Tot Cost

- The actual Total Cost Value may be entered in history. The Total Cost Dollars Plan Value is calculated. Total Costs Value is calculated by Fixed Cost + Variable Cost + Other Cost + Other Cost 2. The Other Cost rows may not be present if Other Cost is not activated using ESOPT options.

Fixed Cost

- Enter the projected Budgeted Fixed Cost Value.

Other Cost

- Enter the projected Budgeted Other Cost Value.

Other Cost 2

- Enter the projected Budgeted Other Cost 2 Value.

Var Cost

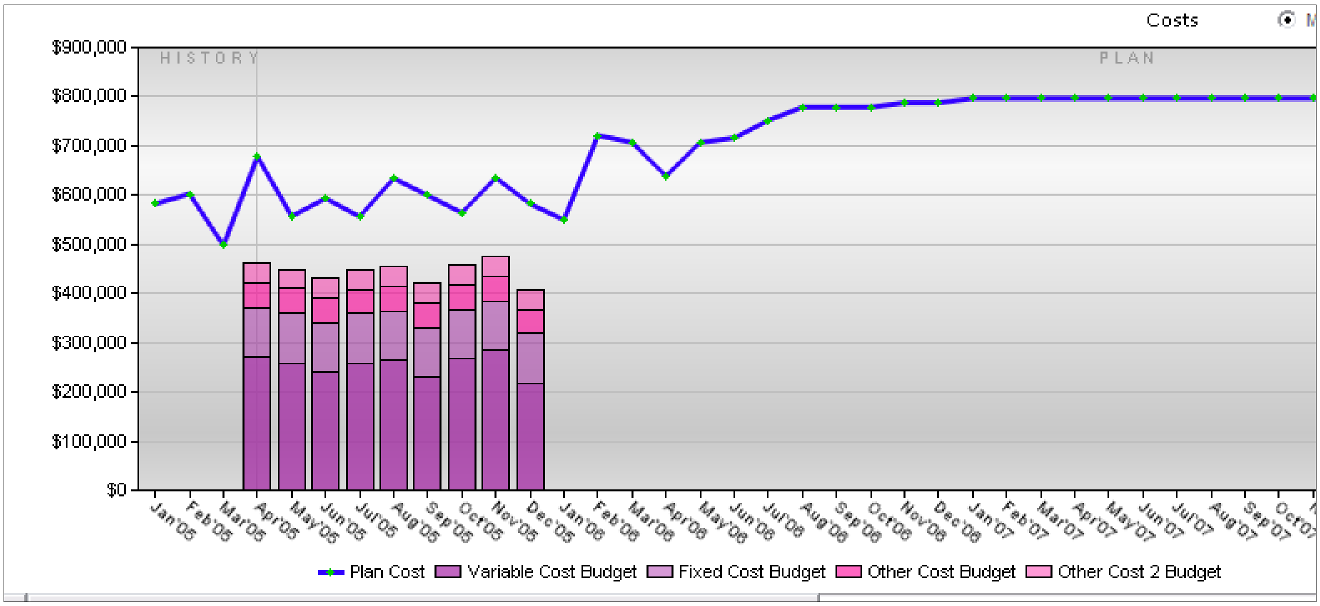
- Enter the projected Budgeted Variable Cost Value.

When you have completed entering the Budget Units for a Subfamily:

- Click the next record button to move to the next Subfamily, or
- Click the exit button to return to the Main Menu.

Budget Cost Graph

The Budget Cost graph represents the Plan Cost, Variable Cost Budget, Fixed Cost Budget, and Other Cost Budget.



Income Statement

Financial Appraisal - Income Statement

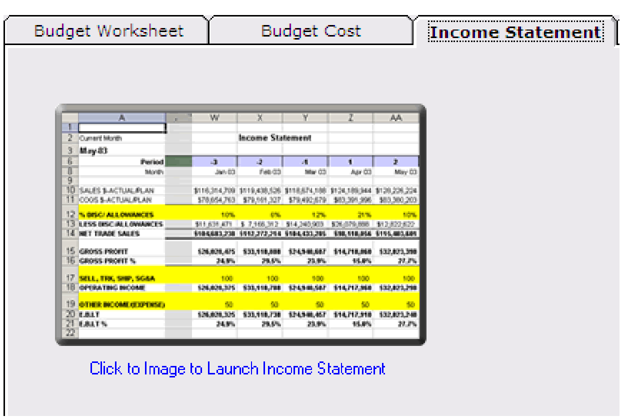
The Income Statement is used to maintain a Company Income Statement In Microsoft Excel® format.

Budget Worksheet | **Income Statement** | Comments Subfamily | Comments General | Agenda | Action Items

The Income Statement may be modified from row 12 down in the yellow shaded rows. Do not make any changes in rows 1 to 11. Rows 1 to 11 are linked automatically to the ESOP Tool.

To review/modify the Income Statement:

- From the Income Statement tab, click the picture of the Income Statement.



Data Fields (Rows):

Cost of Goods Sold (COGS) $-Actual/Plan

- This field is linked and updated from the Database.

Sales $-Actual/Plan

- This field is linked and updated from the Database.

Row 12 down can be modified within the spreadsheet. The rows are:

- % Disc/Allowances
- Less Disc/Allowances
- Net Trade Sales
- Gross Profit
- Gross Profit %
- Sell, Trk, Ship, SG&A
- Operating Income
- Other Income/(Expense)
- EBIT
- EBIT %

If you have updated the Income Statement:

- Select the File menu from the Toolbar to display the Excel File Menu.
- Click Save to save the changes.
- Click the Excel exit button to leave Excel and return to the database.
- Click the exit button to return to the Main Menu.

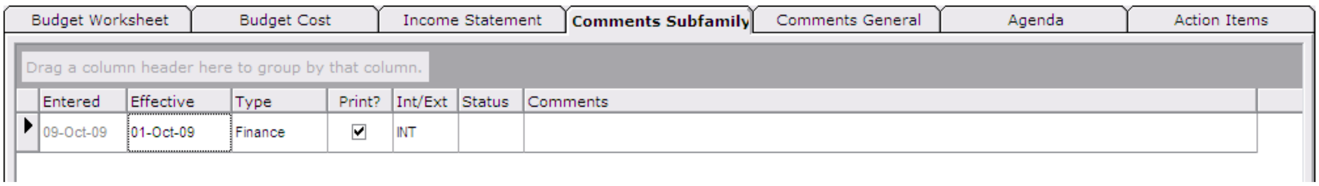
If you have reviewed the income statement and no changes have been made:

- Click the Excel exit button to leave Excel and return to the Database.
- Click the exit button to return to the Main Menu.

Comments Subfamily

Financial Appraisal - Comments - Subfamily

The Comments - Subfamily form is used to maintain Comments for each Subfamily for the Demand Review, Supply Review, Financial Appraisal Meetings, and the Management Business Review. Comments may be maintained pertaining to Demand, Supply, or Finance for the Subfamily.



Entering the Information:

Entered

- This date is entered by the system when the Comment is added.

Effective

- Enter the date this Comment is effective in the format of mm/dd/yyyy. It will be displayed as dd-mm-yy.

Type

The Comment type will determine where the Comment will be viewed in the Management Business Review forms and also where the Comment will print on the Demand Review, Supply Review, and Financial Appraisal Meetings and Management Business Review kits. The Comment type of 'Transfer' is used if you are consolidating regional data into a corporate-level database.

- Select the type of information the Comment is related to: Demand, Supply, Finance, Transfer or Competitor.

Print?

- Select 'YES' if the Comment is to print on the S&OP Kit Reports; select 'NO' if the Comment is not to print on the reports.

INT/EXT

- Select Internal or External. Select INT if the Comment is dealing with an internal factor (influenced or affected by the company) or EXT - external factor (the company has no influence and can only react).

Status

Occurrence or Assumption.

- The status is automatically determined by the Effective Date. If the Effective Date is prior to the current month, the status will be 'Occurrence'. If the Effective Date is the current month or in the future, it will be an Assumption.

Comments

- Enter a Comment up to 255 characters.

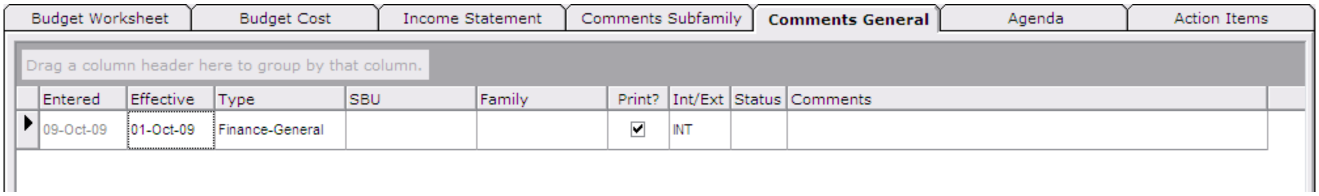
When you have completed entering a Comment:

- Click the new record button to add an additional Comment, or
- Click the exit button to return to the Main Menu.

Comments General

Financial Appraisal - Comments - General

The Comments - General form is used to maintain General Comments, SBU and Family Comments, and Summary Comments pertaining to Demand. These Comments may be maintained to print on the S&OP Reports.



Budget Worksheet | Budget Cost | Income Statement | Comments Subfamily | Comments General | Agenda | Action Items

Drag a column header here to group by that column.

Entered	Effective	Type	SBU	Family	Print?	Int/Ext	Status	Comments
09-Oct-09	01-Oct-09	Finance-General			☑	INT		

<u>Entering the Information:</u>

Entered

- This date is entered by the system when the Comment is added.

Effective

- Enter the Date this Comment is effective in the format of mm/dd/yyyy. It will be displayed as dd-mm-yy.

Type

- Enter the type of Comment; Finance-General, Finance-Summary, Competitor-General, Finance-Family, or Finance-SBU.

SBU

- When a Comment type of 'Finance-SBU' or 'Finance-Family' is selected, this field will be populated with the SBU of the Subfamily currently being viewed.

Family

- When a Comment type of "Finance-Family' is selected, this field will be populated with the Family of the Subfamily currently being viewed.

Print?

- Select 'YES' if the Comment is to print on the S&OP Kit Reports; select 'NO' if the Comment is not to print on the Reports.

INT/EXT

- Select Internal or External. Select INT if the Comment is dealing with an internal factor (influenced or affected by the company) or EXT - external factor (the company has no influence and can only react).

Status

Occurrence or Assumption.

- The status is automatically determined by the effective date. If the effective date is prior to the current month, the status will be 'Occurrence'. If the Effective date is the current month or in the future, it will be an Assumption.

Comment

- Enter a Comment up to 255 characters.

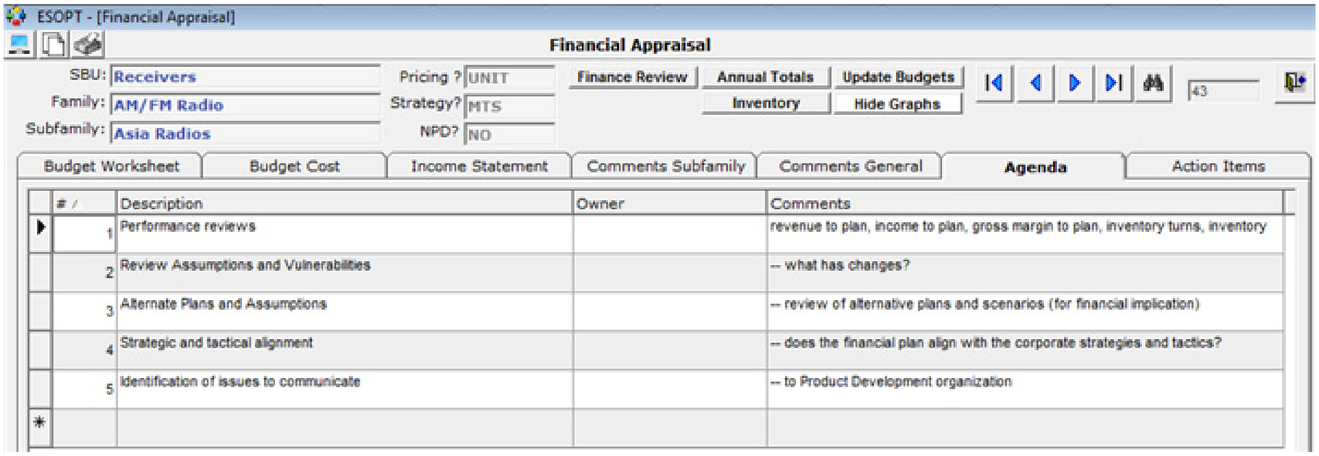
When you have completed entering a Comment:

- Click the new record button to add an additional Comment, or
- Click the exit button to return to the Main Menu.

Agenda

Financial Appraisal - Agenda

The purpose of the Agenda form is to provide a suggested Agenda for the Finance Meeting. The Agenda may be customized to meet your specific company's needs.



<u>Entering the Information:</u>

Number (#)

- Enter the Agenda item number or order of the Agenda items to be discussed.

Description

- Enter the Description of the Agenda item.

Owner

- Enter the person(s) or position of the person to lead the discussion for the Agenda item.

Comments

- Enter additional Comments or expected outcome.

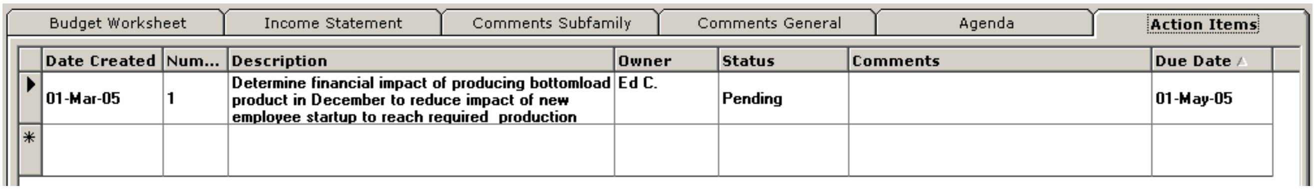
When you have completed entering an Agenda item:

- Click the new record button to add an additional item, or
- Click the exit button to return to the Main Menu.

Action Items

Financial Appraisal - Action Items

The Action Items form is used to maintain follow-up issues related to the Finance Meeting and the person responsible for the follow-up.



Date Created	Num...	Description	Owner	Status	Comments	Due Date
01-Mar-05	1	Determine financial impact of producing bottomload product in December to reduce impact of new employee startup to reach required production	Ed C.	Pending		01-May-05

<u>Entering the Information:</u>

Date Created

- This date is entered by the system when the Action Item is created.

Number

- Enter the Action Item number.

Description

- Enter the Description of the Action Item.

Owner

- Enter the person(s) or position of the person responsible for the Action Item.

Status

- Enter the current Status of the Action Item.

Comments

- Enter additional Comments related to the Action Item.

Due Date

- Enter the Due Date of the Action Item in the format of mm/dd/yyyy. It will be displayed as dd-mm-yy.

When you have completed entering an Action Item:

- Click the new record button to add an additional Action Item, or
- Click the exit button to return to the Main Menu.

Finance Review — Financial Appraisal – Finance Review

See Management Business Review – Finance Review

Annual Totals — Financial Appraisal – Annual Totals

See Management Business Review – Finance Review – Annual Totals

Inventory — Financial Appraisal - Inventory $ (Inventory Summary)

See Management Business Review – Finance Review – Inventory $

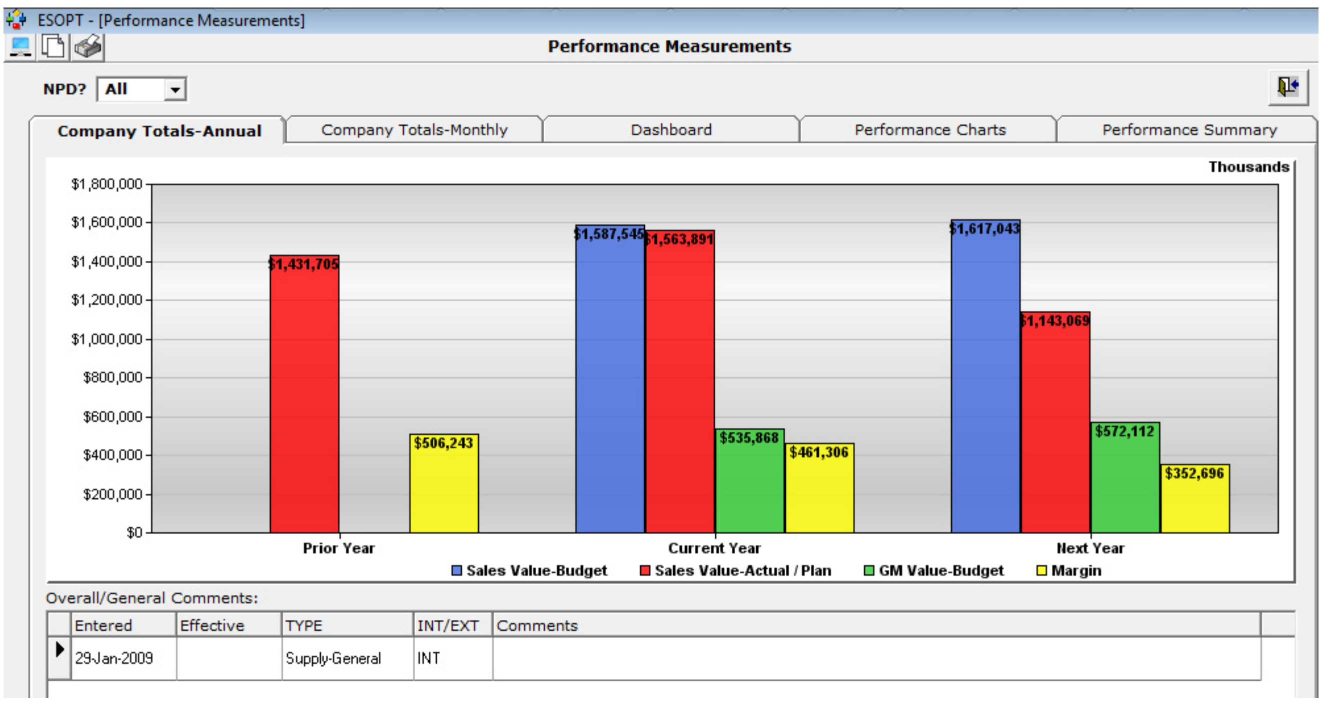
Using the Performance Review Forms

The Performance Review forms are focused on monitoring the actual results to the Budgeted Sales Plan. The charts are intended to show a quick picture to the meeting participants about the current plan's impact on profitability, prior to performing a family-by-family review. General comments may also be maintained and presented here. Five views are supported; 1) Company Totals-Annual tab, 2) Company Totals-Monthly tab, 3) Dashboard tab, 4) Performance Charts tab, and 5) Performance Summary tab.

To access the Performance Review Forms:

- From the Main Menu, select the Performance Measures button
  or

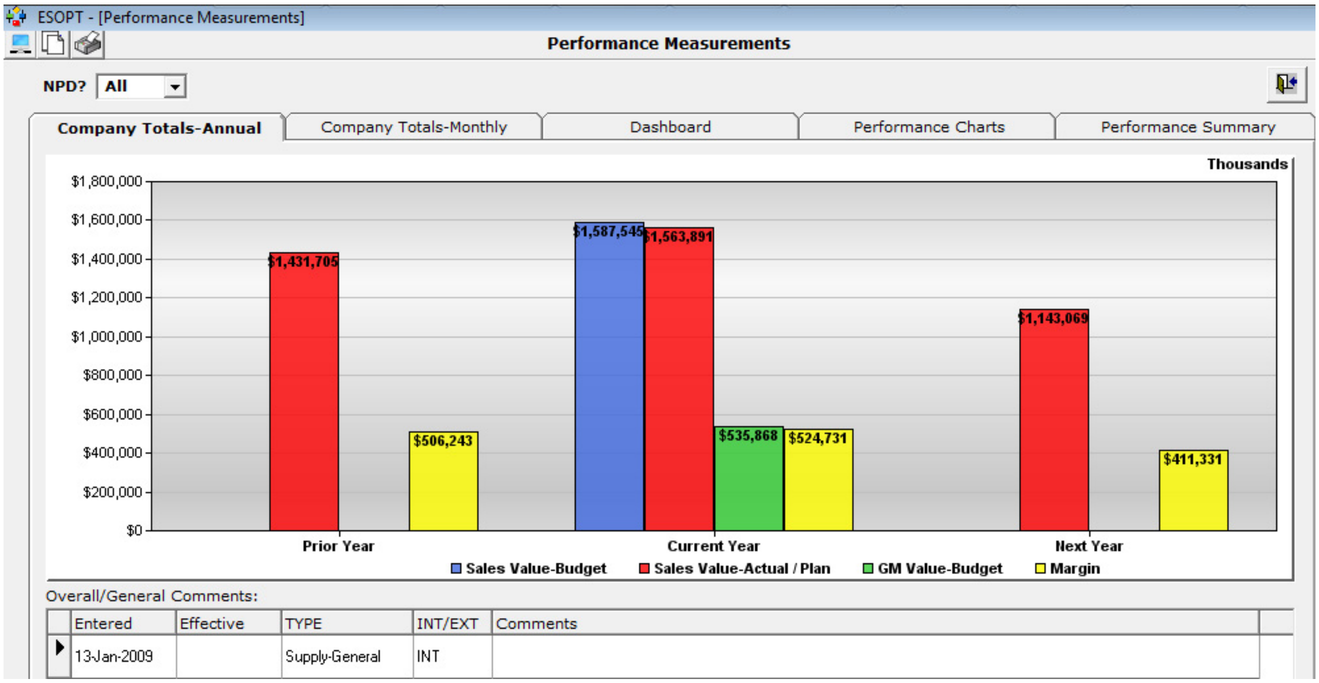
- From the toolbar, select Tools Menu to display the drop-down menu,
- Select Management Review, then Performance Measures.



together we make a difference

Company Totals-Annual | Company Totals - Annual Tab

The Company Totals – Annual tab is used to review the Annual Totals for the entire company for the Prior, Current, and Next Year. The information is summarized to present the "marginal" profitability at the company level. Sales Value – Budget, Sales Value – Actual/Plan, GM Value, and Margin are shown on the chart for comparison. The chart is expressed in (000s). The Comments displayed are any Comments with type "general' entered in the Demand, Supply, or Finance General Comments.



NPD?

The NPD field on the Company Totals form determines whether the Company Sales Annual and Monthly Total charts will include New Product Introductions. The NPD Flag is set by Subfamily. Three options are available for this field: All, Yes, or No.

To include all Subfamilies:

- Select the 'All' entry from the drop-down list. This is the default value.

To include only New Product Introduction Subfamilies:

- Select 'Yes' from the drop-down list.

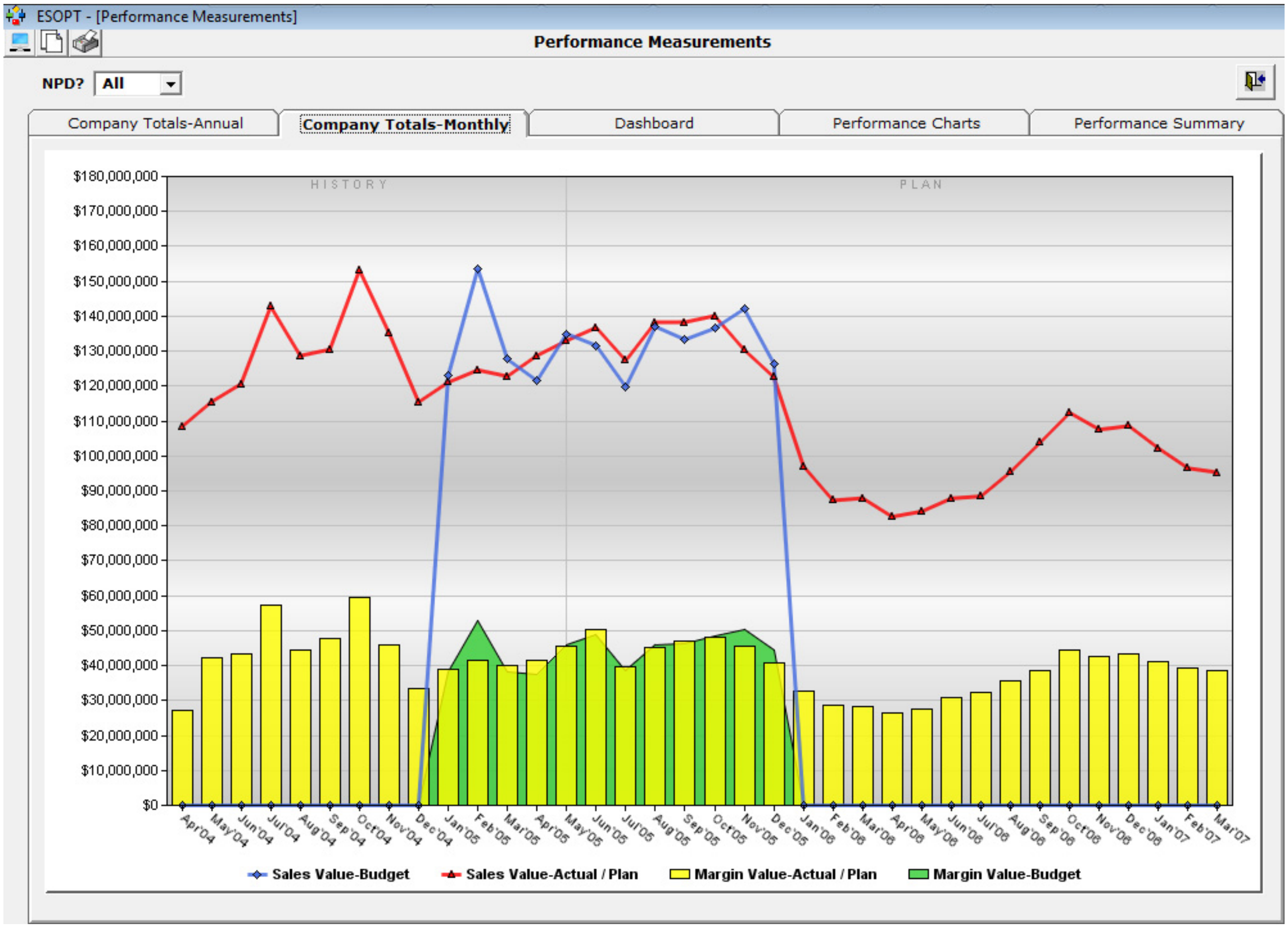
To exclude New Product Introduction Subfamilies:

- Select 'No' from the drop-down list.

Company Totals-Monthly

Company Totals - Monthly

The Company Totals – Monthly tab is used to review the monthly totals for the entire company for the prior 12 months and the following 24 months. Sales Value-Budget, Sales Value-Actual/Plan, Margin Value-Actual, Margin Value-Budget are shown in the graph for comparison. The chart is expressed in thousands (000s).



NPD?

The NPD field on the Company Totals form determines whether the information is, or is not, to be included for Families defined as New Product Introductions. See Entering your Company Data-Adding a New Family or see Entering Your Company Data-Maintain Group Master. There are three available options for this field: All, Yes, or No.

To include all Families:

- Select the 'All' entry from the drop-down list.

To include only New Product Introduction Families:

- Select 'Yes' from the drop-down list.

To exclude New Product Introduction Families:

- Select 'No' from the drop-down list.

Dashboard

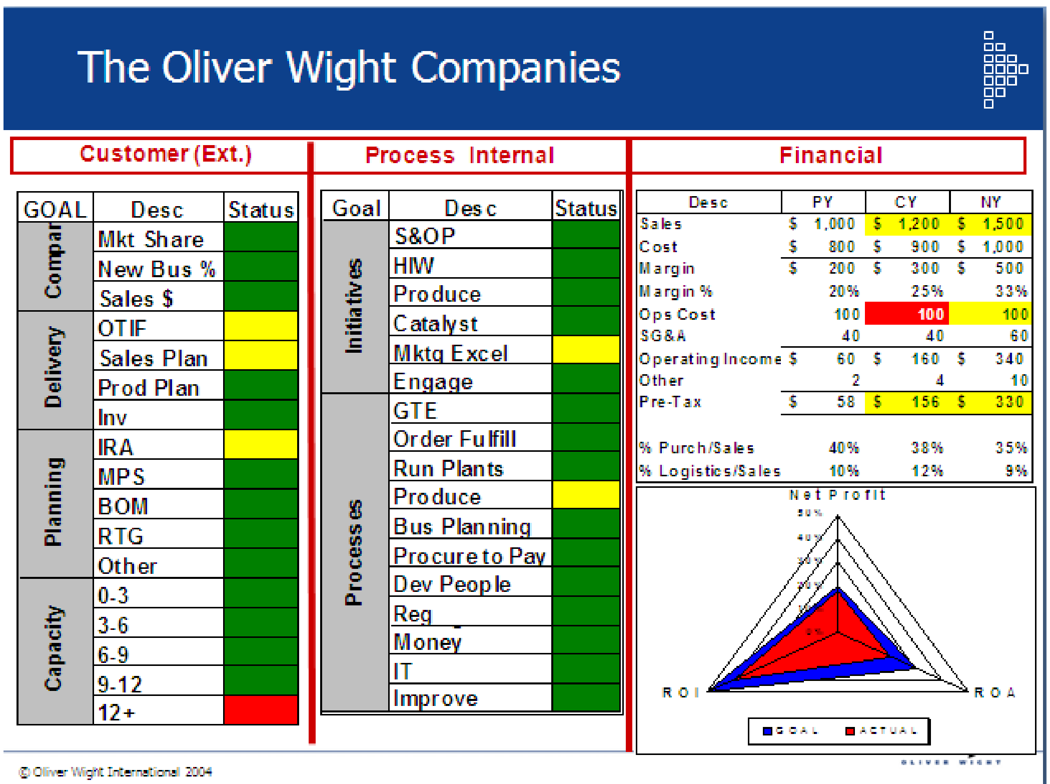
The Dashboard

The Dashboard tab is used to review the performance measures in a dashboard format. It is important to ensure that accountability is in place for Key Performance Indicators (KPIs) and that these KPIs are consistent with company strategies/business plans. The KPIs should be reviewed on an exception basis where period –1 materially varies from the goal, or there is a trend in need of review.

To access the Dashboard:

- Click the Dashboard tab on the Performance Measures form to launch Microsoft PowerPoint® and open the Dashboard document.

Any changes in the data should be updated manually and saved.



If you have updated the Dashboard:

- Select the File menu from the Toolbar to display the PowerPoint file menu.
- Click Save to save the changes.
- Click the PowerPoint exit button to leave PowerPoint and return to the ESOPT application.
- Click the exit button to return to the main menu.

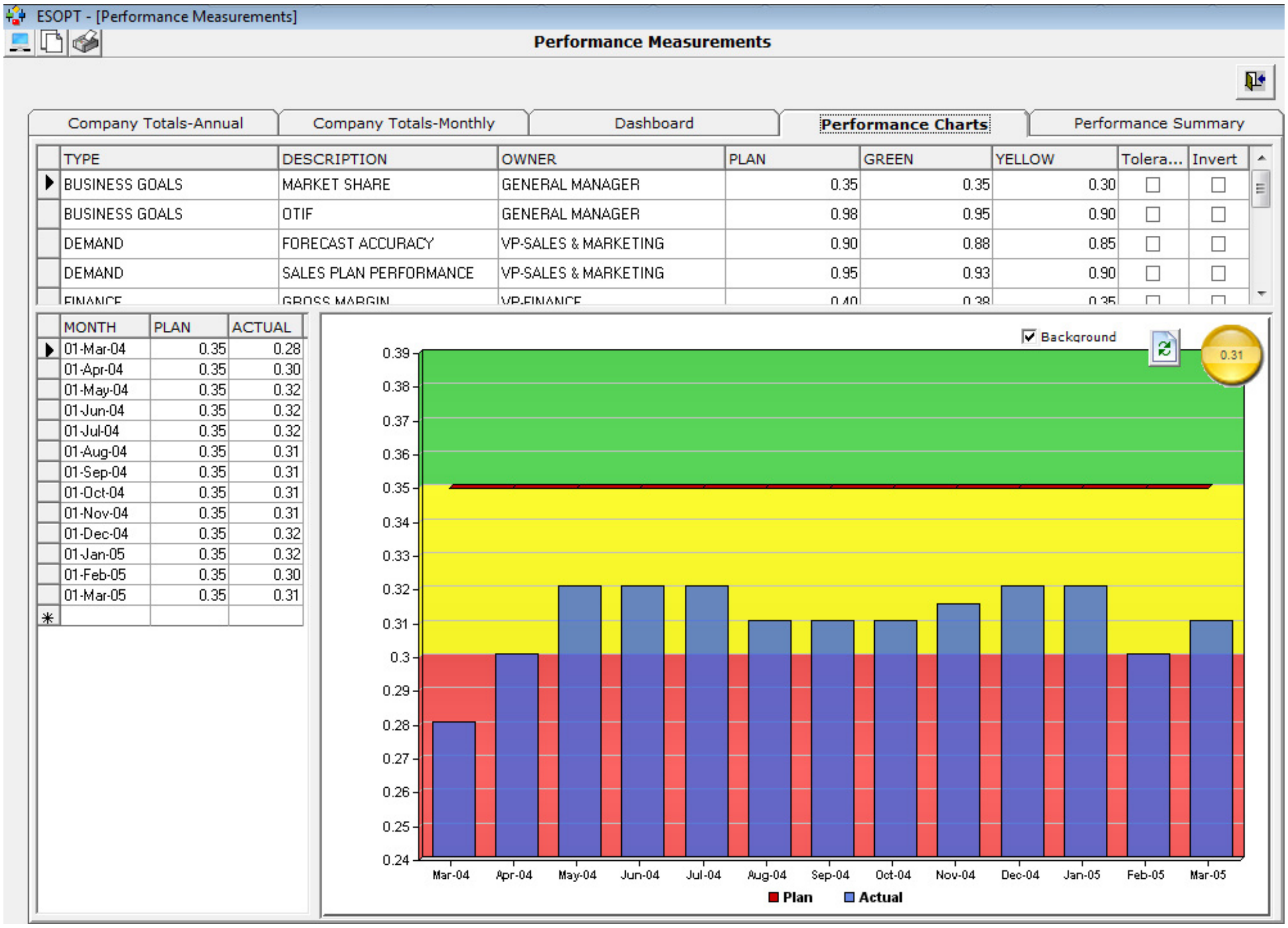
If you have reviewed the Dashboard and no changes have been made:

- Click the PowerPoint exit button to leave PowerPoint and return to the ESOPT application.
- Click the exit button to return to the main menu.

Performance Charts

The Performance Charts

The Performance Charts form is used to maintain the company's key performance measures and goals as well as tracking progress toward those goals. The chart graphically displays the scorecard information.



There are 2 steps to entering Performance Measurements:

1. Add the Type of Performance Measure you wish to track and the goal for the measure.
2. Enter the actual ratings obtained for the Performance Measure.

<u>1. Add a new Performance Measurement:</u>

- Scroll to the end of the Performance Measurement list and begin entering data in the empty row.
- Add the following fields:

Type

- Select the Type of Measurement from the drop-down list: Business Goals, Demand, Finance, or Operational or enter your own.

Description

- Enter the specific Type of Measurement you wish to track, i.e. cycle time, BOM accuracy, etc.

Owner

- Enter the department or group responsible for the Performance Measurement.

Plan

- Enter your Plan for the Performance Measurement.

Green

- Enter the value which the latest actual rating will indicate the trend is on track toward projection. Results are favorable, and the company is very comfortable with the current status.

- The value may be entered as a static value or as a percentage representing a range of values. For example, if the plan is 100% and an acceptable range is + or – 10%, enter .1 in this field.

Yellow

- Enter the Tolerance that will indicate the Performance Measurement is at a marginal level if the latest actual rating falls above, below, or in this range. A Yellow status indicates some uncertainty regarding cause of sustainability of favorable results or trend. There is awareness of future events that may impact trend. The current month's results are not moving as expected. Continue to monitor closely.

- The value may be entered as a static value or as a percentage representing a range of values. For example, if the Plan is 100% and an acceptable marginal range is + or – 20%, enter .2 in this field.

Red (This field is not entered)

- If the latest actual rating is above, below, or outside the marginal value, the Performance Measurement will be rated as 'Red' or below an acceptable level. A Red status indicates there is potential for a major impact on the company now or in the future. The situation is at a critical state.

Tolerance

- If the Tolerance is entered as a percentage representing a range of values, check this box. If the tolerance is an actual value and not a range of values represented as a percentage, do not check the box.

Invert

- If the Measurement is inverted, for example, if a lower number is more positive than a higher number, check this box. This box has no effect if a tolerance (percent) is being used.

2. Add Monthly Plan and Actual results:

Enter a starting and ending range of dates to track the Measurement in the form MM/DD/YYYY. It will be displayed as DD-MM-YY.

MONTH	PLAN	ACTUAL
01-Mar-08	0.90	0.80
01-Apr-08	0.90	0.86
01-May-08	0.90	0.80
01-Jun-08	0.90	0.80
01-Jul-08	0.90	0.86
01-Aug-08	0.90	0.86
01-Sep-08	0.90	0.87
01-Oct-08	0.90	0.87
01-Nov-08	0.90	0.85
01-Dec-08	0.90	0.84
01-Jan-09	0.90	0.82
01-Feb-09	0.90	0.84
01-Mar-09	0.90	0.89

Enter Monthly Plan and Actual results:

- Enter the Plan Ratings field for the month you would like to enter the rating.
- Enter the Actual Ratings field for the month you would like to enter the rating.

The Refresh button  will turn red after changes are made. Click the Refresh button to update the graph with the changes.

The status indictor shows the last month's status and the rating. 

☑ Background The Background checkbox provides the option to see the Green, Yellow, and Red ranges in the graph when checked. If not checked, then the range will not be shown on the graph.

To delete a Performance Measurement:

- Highlight the row by clicking the record selector, and press the 'Delete' button on your keyboard.

To delete a Monthly Actual rating record:

- Click on the record selector to the left of the record you would like to delete. An arrow will appear  .
- Press the Delete key on your keyboard.

Performance Summary

The Performance Summary

This Performance Summary contains all Performance Measurements and their latest Plan and Actual rating. Based on the values entered for the Measurement's Red, Yellow, and Green tolerance, the appropriate status indicator is displayed.

Company Totals-Annual | Company Totals-Monthly | Dashboard | Performance Charts | **Performance Summary**

	ACT	PLAN	TYPE	DESCRIPTION	OWNER
	0.310	0.350	BUSINESS GOALS	MARKET SHARE	GENERAL MANAGER
	0.900	0.950	BUSINESS GOALS	OTIF	GENERAL MANAGER
	0.890	0.900	DEMAND	FORECAST ACCURACY	VP-SALES & MARKETING
	0.910	0.950	DEMAND	SALES PLAN PERFORMANCE	VP-SALES & MARKETING
	0.330	0.400	FINANCE	GROSS MARGIN	VP-FINANCE
	0.100	0.120	FINANCE	Pre tax Income	VP-FINANCE
	0.960	0.950	OPERATIONAL	INVENTORY RECORD ACCURACY	VP-OPERATIONS
	0.950	0.950	OPERATIONAL	MASTER SCHEDULE PERFORMANCE	MASTER SCHEDULER
	0.960	0.980	OPERATIONAL	PRODUCTION PLAN PERFORMANCE	VP-OPERATIONS
	0.970	0.950	OPERATIONAL	ROUTING ACCURACY	VP-OPERATIONS

The Management Business Review

The Management Business Review provides a presentation menu for the logical flow of a Management Business Review. The information is presented for viewing only based on the data previously entered in the pre-meeting menus. The menu cannot be edited. However, the "Agenda" button will lead to an Agenda menu that can provide editing of the Management Business Review agenda included in the Management Business Review Reports.

A read-only version of the Management Business Review is also available as a separate application.

To access the Sales and Operations Planning Meeting Menu:

- From the Main Menu, select the Management Business Review Button.
  or
- Press Ctrl + m on the keyboard.

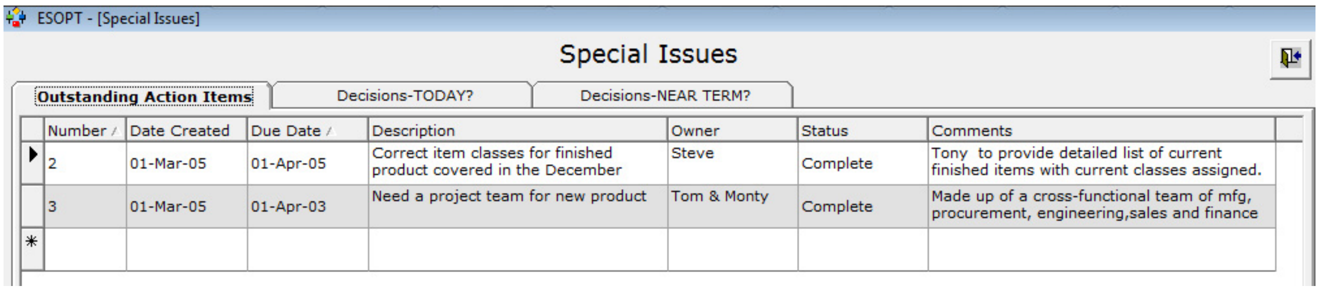
Special Issues

The Management Business Review - Special Issues

The Management Business Review is a decision-making session. The Special Issues form is used to document issues of special significance and ensure accountability throughout the process. There are three forms available to document outstanding action items, decisions needed today, and decisions needed in the near future. The issues can be distributed with minutes as a list of follow-up items. It is suggested that as items are completed with "status" set to "complete," and then be removed in subsequent months.

Special Issues

- From the Management Business Review Main Menu, select the Special Issues button.
  or
- Press CTRL + M on the keyboard.



ESOPT - [Special Issues]

Special Issues

Outstanding Action Items | Decisions-TODAY? | Decisions-NEAR TERM?

Number	Date Created	Due Date	Description	Owner	Status	Comments
2	01-Mar-05	01-Apr-05	Correct item classes for finished product covered in the December	Steve	Complete	Tony to provide detailed list of current finished items with current classes assigned.
3	01-Mar-05	01-Apr-03	Need a project team for new product	Tom & Monty	Complete	Made up of a cross-functional team of mfg, procurement, engineering,sales and finance

This worksheet, when used properly, will serve to alert participants, prior to the Management Business Review, of what issues will be addressed. After consensus has been reached in the meeting by Management Business Review participants, the Comments column should be completed prior to the conclusion of the meeting. The Decisions needed and Outstanding Action Items can be distributed with the Management Business Review minutes.

<u>To add or change an Outstanding Action Item: Enter the following fields:</u>

Number

- Enter the Action Item number.

Date Created

- This date is entered by the system when the Action Item is created.

Due Date

- Enter the Due Date of the Action Item in the format of mm/dd/yyyy. It will be displayed as dd-mm-yy.

Description

- Enter a description of the Action Item.

Owner

- Enter the person(s) or department responsible for the follow-up.

Status

- Enter the status; Pending or Complete.

Comments

- Enter any Comments to further describe the Action Item.

When you have completed entering an Action Item:

- Click the new record button to add an additional Action Item, or
- Click the exit button to return to the Management Business Review Menu.

To delete an Action Item:

- Right click on the record selector of the record you would like to delete.
- Press the Delete key on the keyboard.

Performance Measures

The Management Business Review - Performance Review

The Performance Review forms are focused on monitoring the actual results to the Budgeted Plans. Five views are supported;

1) Annual Totals
2) Monthly Totals
3) Dashboard
4) Performance Charts
5) Performance Summary.

The Performance Review information is available through the Main Menu as well as the Management Business Review Menu.

For detailed information on Performance Review, see the Performance Measurements chapter.

Demand/Supply Review

The Management Business Review - Demand/Supply Review

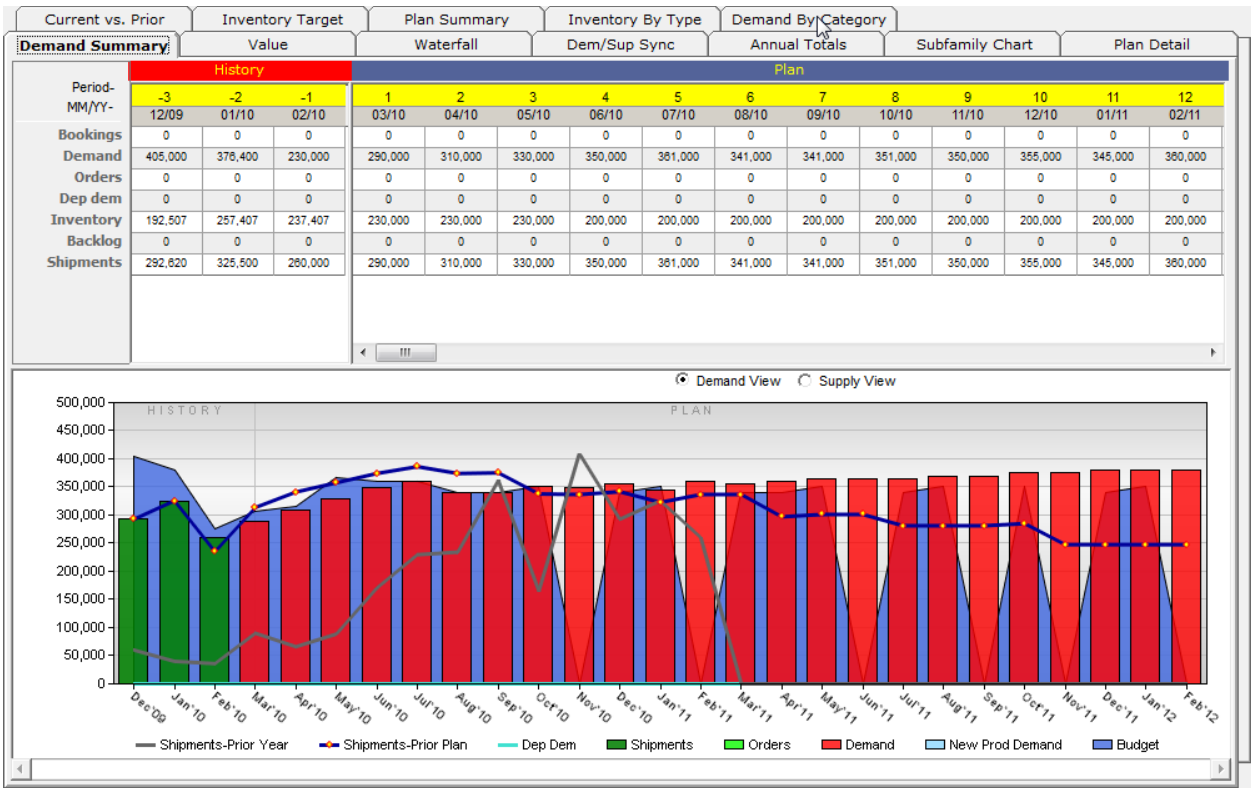
The Demand/Supply Review forms provide information to review the plan and budget information at a Summary, SBU, and Family level, as well as to review any assumptions noted in the Demand Review, Supply Review, and Financial Appraisal meetings.

To access the Demand/Supply Review Forms:

Management Business Review

- From the Main Menu, select the Management Business Review button.
- From the Management Business Review Menu, select the Demand/Supply Review button.

Demand/Supply Review



Period- MM/YY-	History			Plan											
	-3	-2	-1	1	2	3	4	5	6	7	8	9	10	11	12
	12/09	01/10	02/10	03/10	04/10	05/10	06/10	07/10	08/10	09/10	10/10	11/10	12/10	01/11	02/11
Bookings	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Demand	405,000	376,400	230,000	290,000	310,000	330,000	350,000	361,000	341,000	341,000	351,000	350,000	355,000	345,000	360,000
Orders	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Dep dem	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Inventory	192,507	257,407	237,407	230,000	230,000	230,000	200,000	200,000	200,000	200,000	200,000	200,000	200,000	200,000	200,000
Backlog	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Shipments	292,620	325,500	260,000	290,000	310,000	330,000	350,000	361,000	341,000	341,000	351,000	350,000	355,000	345,000	360,000

The Demand Supply Review may be navigated through the SBU, Family, Subfamily, and ALL levels by the scroll buttons or the drop-down boxes. The drop-down box may also be used to summarize by SBU, Family, and total company by using the 'ALL' selection. The Include drop-down list provides for selection of All Products, New Products Only, or Current Products Only.

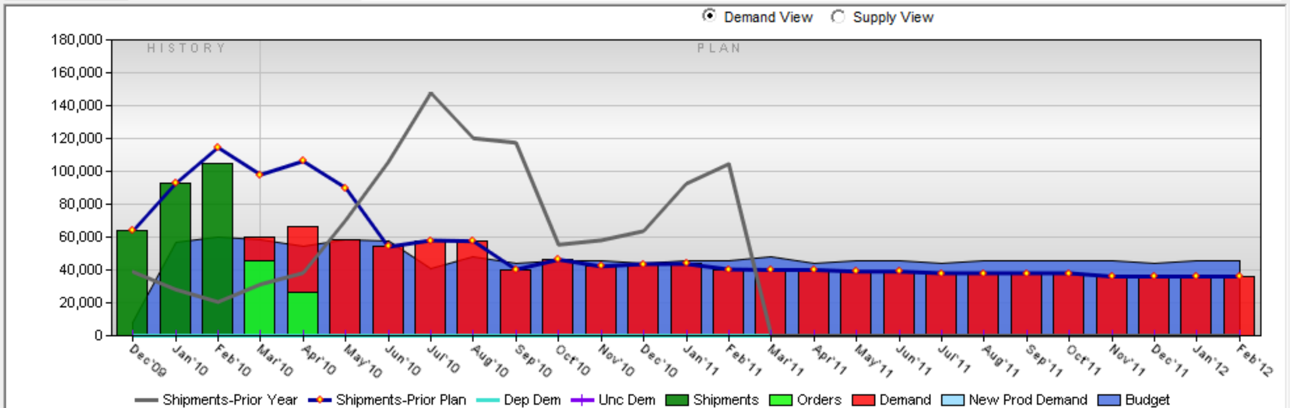
Demand Summary

This form provides Demand information in units for Current Products (Products not defined as NPD=yes), New Products (Products defined as NPD=Yes), Total Demand, and Annual Plan or Budgeted Demand. The option to see the Demand View, which is the default, or the Supply View is available. The units are shown for Bookings, Demand, Orders, Dep Demand, Production, Purchases, Inventory, Backlog, and Shipments.

Current vs. Prior | Inventory Target | Plan Summary | Inventory By Type | Demand By Category

Demand Summary | Value | Waterfall | Dem/Sup Sync | Annual Totals | Subfamily Chart | Plan Detail

	History			Plan											
Period-	-3	-2	-1	1	2	3	4	5	6	7	8	9	10	11	12
MM/YY-	12/09	01/10	02/10	03/10	04/10	05/10	06/10	07/10	08/10	09/10	10/10	11/10	12/10	01/11	02/11
Bookings	8,330	56,211	59,843	58,576	54,068	57,940	57,472	40,190	46,275	42,130	43,598	43,649	40,321	40,000	40,000
Demand	5,426	0	0	14,500	39,843	58,576	54,068	57,940	57,472	40,190	46,275	42,130	43,598	43,649	40,321
Orders	0	127,480	104,450	45,400	26,321	0	0	0	0	0	0	0	0	0	0
Dep dem	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Production	74,165	105,000	90,000	60,000	66,000	60,000	54,000	58,000	57,000	40,000	46,000	42,000	44,000	44,000	40,000
Purchases	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Inventory	19,088	51,638	27,188	27,288	27,124	28,548	28,480	28,540	28,068	27,878	27,603	27,473	27,875	28,226	27,905
Backlog	117,009	115,475	71,721	70,397	58,301	57,665	61,069	43,319	32,122	34,062	31,385	32,904	29,627	25,978	25,657
Shipments	63,643	92,450	104,450	59,900	66,164	58,576	54,068	57,940	57,472	40,190	46,275	42,130	43,598	43,649	40,321
Unc demand	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0



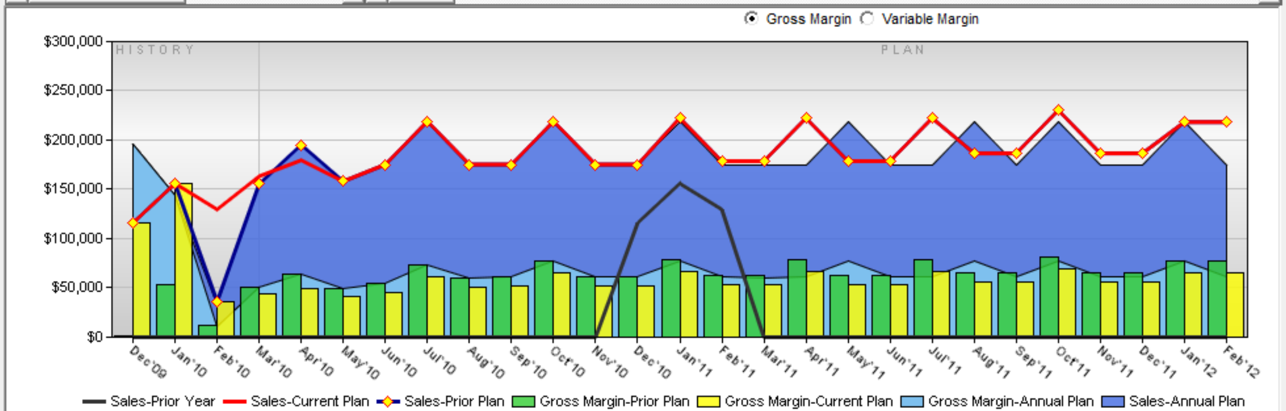
Value

The Value tab provides Sales Dollars, Cost, Total Variable Cost, Gross Margin Dollars, Variable Margin, Variance-Sales, Variance-Total Cost, Variance-Var Costs, Variance-Gross Margin, Variance-Var Margin based on the Average Sales $, and Average Cost. The worksheet displays the Variance from last month's plan. The graph displays the Gross Margin or the Variable Margin.

Current vs. Prior | Inventory Target | Plan Summary | Inventory By Type | Demand By Category

Demand Summary | **Value** | Waterfall | Dem/Sup Sync | Annual Totals | Subfamily Chart | Plan Detail

	History			Plan											
	-3	-2	-1	1	2	3	4	5	6	7	8	9	10	11	12
	12/09	01/10	02/10	03/10	04/10	05/10	06/10	07/10	08/10	09/10	10/10	11/10	12/10	01/11	02/11
Sales	$116,000	$155,944	$129,645	$163,311	$179,556	$158,181	$175,252	$219,065	$175,252	$175,252	$219,065	$175,252	$175,252	$222,320	$178,650
Total Cost	0	0	$94,202	$119,338	$130,782	$117,496	$130,176	$157,550	$124,777	$123,546	$153,406	$122,725	$122,725	$155,686	$125,104
Tot Variable Cost	0	0	0	$119,338	$130,782	$117,496	$130,176	$157,550	$124,777	$123,546	$153,406	$122,725	$122,725	$155,686	$125,104
Gross Margin	$116,000	$155,944	$35,443	$43,973	$48,773	$40,685	$45,075	$61,515	$50,474	$51,706	$65,659	$52,527	$52,527	$66,634	$53,546
Variable Margin	$116,000	$155,944	$129,645	$43,973	$48,773	$40,685	$45,075	$61,515	$50,474	$51,706	$65,659	$52,527	$52,527	$66,634	$53,546
Variance-Sales	0	0	$93,385	$7,840	($15,680)	0	0	0	0	0	0	0	0	0	0
Variance-Total Cost	($114,400)	($102,290)	$69,505	$14,236	($703)	$8,722	$9,663	$11,875	$9,120	$9,213	$11,593	$9,275	$9,275	$11,766	$9,455
Variance-Var Costs	0	0	0	$119,338	$130,782	$117,496	$130,176	$157,550	$124,777	$123,546	$153,406	$122,725	$122,725	$155,686	$125,104
Variance-Gross Mar	$114,400	$102,290	$23,880	($6,396)	($14,977)	($8,722)	($9,663)	($11,875)	($9,120)	($9,213)	($11,593)	($9,275)	($9,275)	($11,766)	($9,455)
Variance-Var Margin	0	0	$93,385	($111,498)	($146,462)	($117,496)	($130,176)	($157,550)	($124,777)	($123,546)	($153,406)	($122,725)	($122,725)	($155,686)	($125,104)



<u>**Waterfall**</u>

The Waterfall Analysis provides an analytical review process. From the drop-down list, select the type of data you would like to view in the analysis: Bookings, Demand, Orders, Dep Dem, Production, Purchases, Inventory, Backlog, Shipments, Sales, Total Cost, Gross Margin, Inventory Value, Average Fixed Cost, Average Other Cost, Average Variable Cost, Avg Total Cost, Avg Gross Margin, Avg Variable Margin, Avg Gross Margin %, or Avg Variable Margin %. The Monthly Roll process saves the current data for up to six months. This screen compares the Forecast to Actual from the six prior months to determine where the actuals have deviated from the prior plan. The data is summarized for all Subfamilies contained in the Summary Table.

Current vs. Prior | Inventory Target | Plan Summary | Inventory By Type | Demand By Category
Demand Summary | Value | **Waterfall** | Dem/Sup Sync | Annual Totals | Subfamily Chart | Plan Detail

Description: Shipments

Format #,##0

	09/09	10/09	11/09	12/09	01/10	02/10	03/10	04/10	05/10	06/10	07/10	08/10
Current:	551,525	661,914	516,595	418,569	686,440	710,466	725,750	729,564	640,225	680,480	557,459	539,592
-1:	561,484	588,800	429,051	205,426	724,039	690,466	715,750	719,564	640,225	680,480	557,459	539,592
	98%	112%	120%	204%	95%	103%	101%	101%	100%	100%	100%	100%
-2:		588,800	377,186	604,851	749,660	649,466	715,750	719,565	640,225	680,480	557,459	539,592
		112%	137%	69%	92%	109%	101%	101%	100%	100%	100%	100%
-3:			280,587	460,675	688,851	713,420	768,864	850,192	610,140	364,083	384,153	386,528
			184%	91%	100%	100%	94%	86%	105%	187%	145%	140%
-4:				232,500	556,800	527,426	362,134	364,135	384,176	386,551	438,660	494,301
				180%	123%	135%	200%	200%	167%	176%	127%	109%
Plan												
-5:					307,760	409,375	427,083	439,084	469,125	524,500	616,608	725,250
					223%	174%	170%	166%	136%	130%	90%	74%
-6:						318,229	356,146	346,147	372,396	393,750	389,219	416,354
						223%	204%	211%	172%	173%	143%	130%

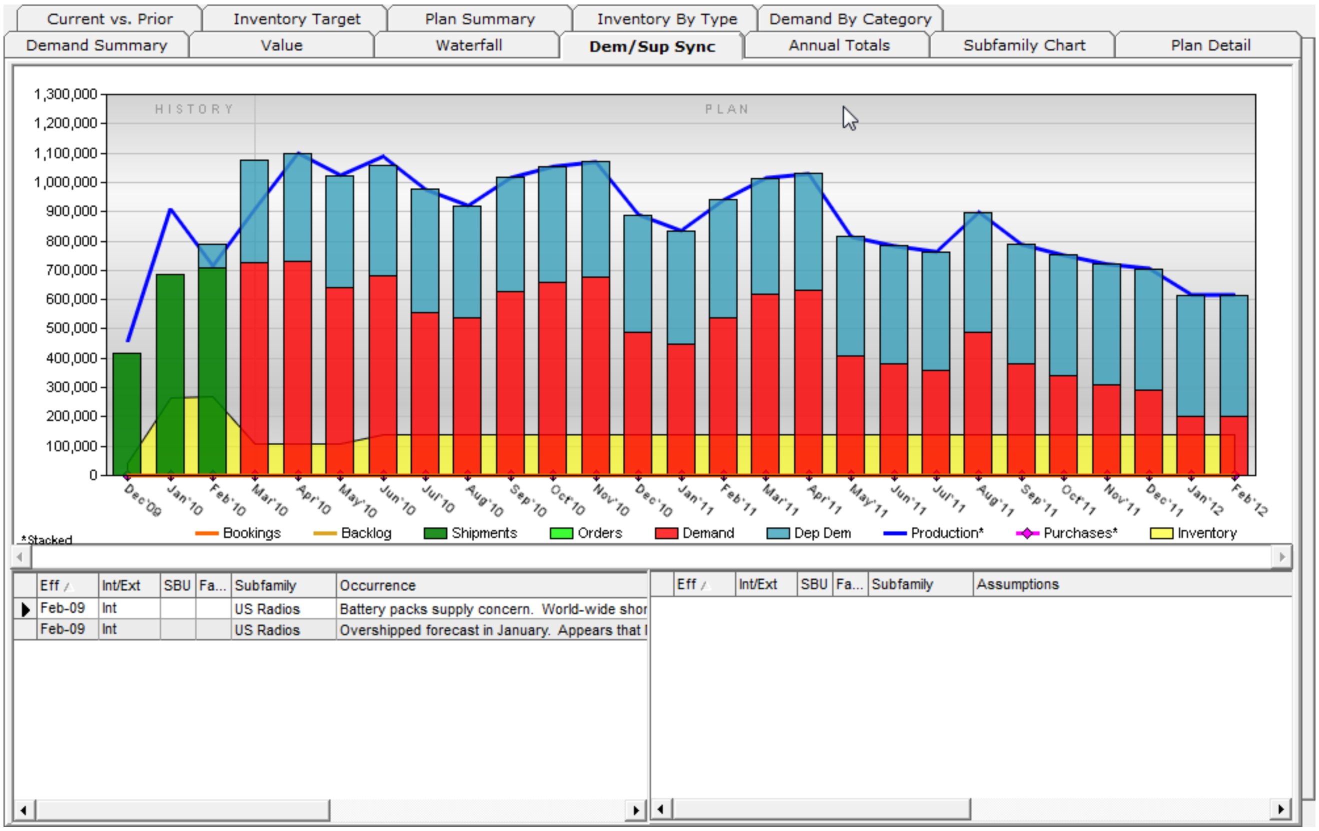
% = Current Plan ÷ Prior Plan

The Spreadsheet button will export the data to a spreadsheet.
Below is an example of the Waterfall exported file.

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
1	SBU	Family	Subfamily	Desc	Period	fldType	-6	-5	-4	-3	-2	-1	1	2	3
2	Summary 1-	Summary 2-	none	SHIPMENTS	Actual/Current	Units	551525.0000	661914.0000	516595.0000	418569.0000	686440.0000	710466.0000	725750.0000	729564.0000	640225.000
3	Summary 1-	Summary 2-	none	SHIPMENTS	Month -1	Units	.000000000	.000000000	.000000000	.000000000	.000000000	.000000000	690466.0000	715750.0000	719564.000
4	Summary 1-	Summary 2-	none	SHIPMENTS	Month -2	Units	.000000000	.000000000	.000000000	.000000000	724039.0000	649466.0000	715750.0000	719565.0000	640225.000
5	Summary 1-	Summary 2-	none	SHIPMENTS	Month -3	Units	.000000000	.000000000	.000000000	205426.0000	749660.0000	713420.0000	768864.0000	850192.0000	610140.000
6	Summary 1-	Summary 2-	none	SHIPMENTS	Month -4	Units	.000000000	.000000000	429051.0000	604851.0000	688851.0000	527426.0000	362134.0000	364135.0000	384176.000
7	Summary 1-	Summary 2-	none	SHIPMENTS	Month -5	Units	.000000000	588800.0000	377186.0000	460675.0000	556800.0000	409375.0000	427083.0000	439084.0000	469125.000
8	Summary 1-	Summary 2-	none	SHIPMENTS	Month -6	Units	561484.0000	588800.0000	280587.0000	232500.0000	307760.0000	318229.0000	356146.0000	346147.0000	372396.000
9	Receivers	AM/FM Rad	US Radios	SHIPMENTS	Actual/Current	Units	551525.0000	661914.0000	516595.0000	418569.0000	686440.0000	710466.0000	725750.0000	729564.0000	640225.000
10	Receivers	AM/FM Rad	US Radios	SHIPMENTS	Month -1	Units	.000000000	.000000000	.000000000	.000000000	.000000000	.000000000	690466.0000	715750.0000	719564.000
11	Receive	AM/FM Rad	US Radios	SHIPMENTS	Month -2	Units	.000000000	.000000000	.000000000	.000000000	724039.0000	649466.0000	715750.0000	719565.0000	640225.000
12	Receivers	AM/FM Rad	US Radios	SHIPMENTS	Month -3	Units	.000000000	.000000000	.000000000	205426.0000	749660.0000	713420.0000	768864.0000	850192.0000	610140.000
13	Receivers	AM/FM Rad	US Radios	SHIPMENTS	Month -4	Units	.000000000	.000000000	429051.0000	604851.0000	688851.0000	527426.0000	362134.0000	364135.0000	384176.000
14	Receivers	AM/FM Rad	US Radios	SHIPMENTS	Month -5	Units	.000000000	588800.0000	377186.0000	460675.0000	556800.0000	409375.0000	427083.0000	439084.0000	469125.000
15	Receivers	AM/FM Rad	US Radios	SHIPMENTS	Month -6	Units	561484.0000	588800.0000	280587.0000	232500.0000	307760.0000	318229.0000	356146.0000	346147.0000	372396.000
16															

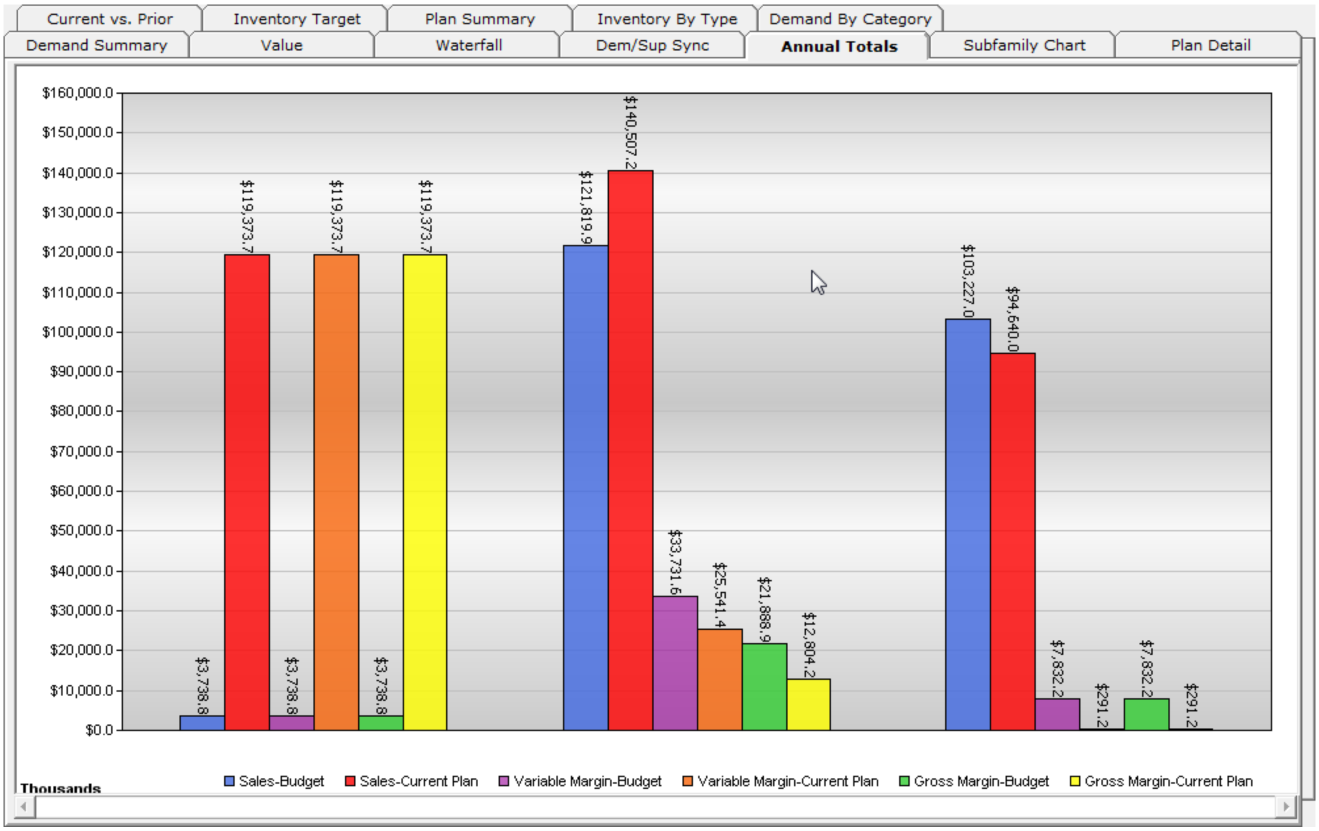
<u>Demand/Supply Synchronization</u>

This form provides a graphical depiction of the "balanced" nature of the plan at the Family level. In the graph, Dependent Demand is added to Total Demand and represented as a stacked bar for all Demand (Orders, Demand, and Dependent Demand). Production and Purchases are stacked lines to represent Total Supply. The Comments section is used to review assumptions for the future plan and occurrences for the history. These Comments displayed here were previously entered in the Demand Review, Supply Review, and Financial Appraisal Meeting forms in Comments-Subfamily tab.



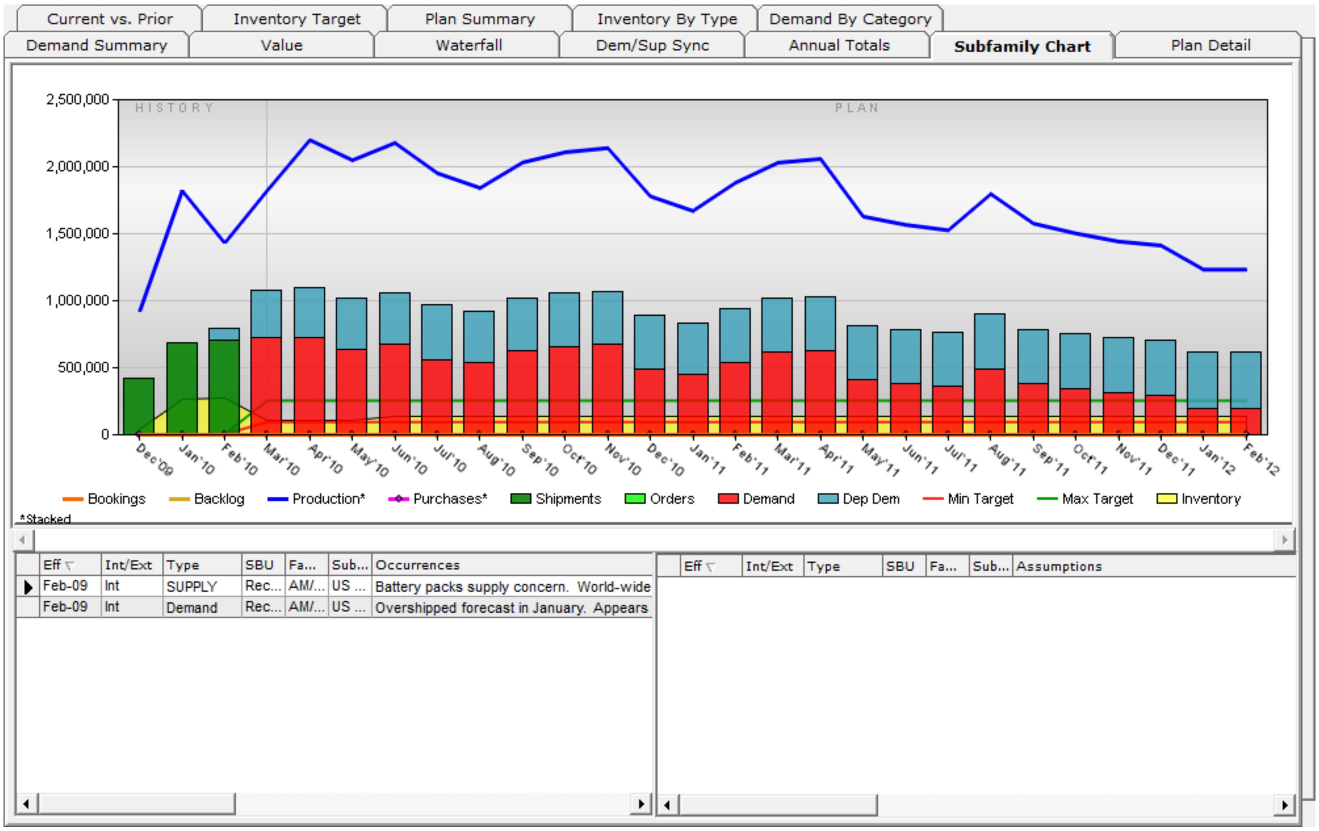
Annual Totals

The Annual Totals tab is used to review the annual totals for the Prior, Current, and Next Year. The information is summarized to present the "marginal" profitability at the Company level. The data is shown for Budget and Current Plan for Sales, Variable Margin, and Gross Margin. The chart is expressed in (000s).



Subfamily Chart

The Subfamily chart provides a graphical depiction of the "balanced" nature of the plan at the Subfamily level, as well as the significant assumptions supporting the plan. Only comments flagged SOP Print?="Yes" will appear here. In the graph, Dependent Demand is added to Total Demand and represented as a stacked bar for all Demand (Orders, Demand, and Dependent Demand). Production and Purchases are stacked lines to represent Total Supply. The Inventory Min and Max are displayed on the Chart. The Comments section is used to review assumptions for the future plan and occurrences for the history.



Plan Detail

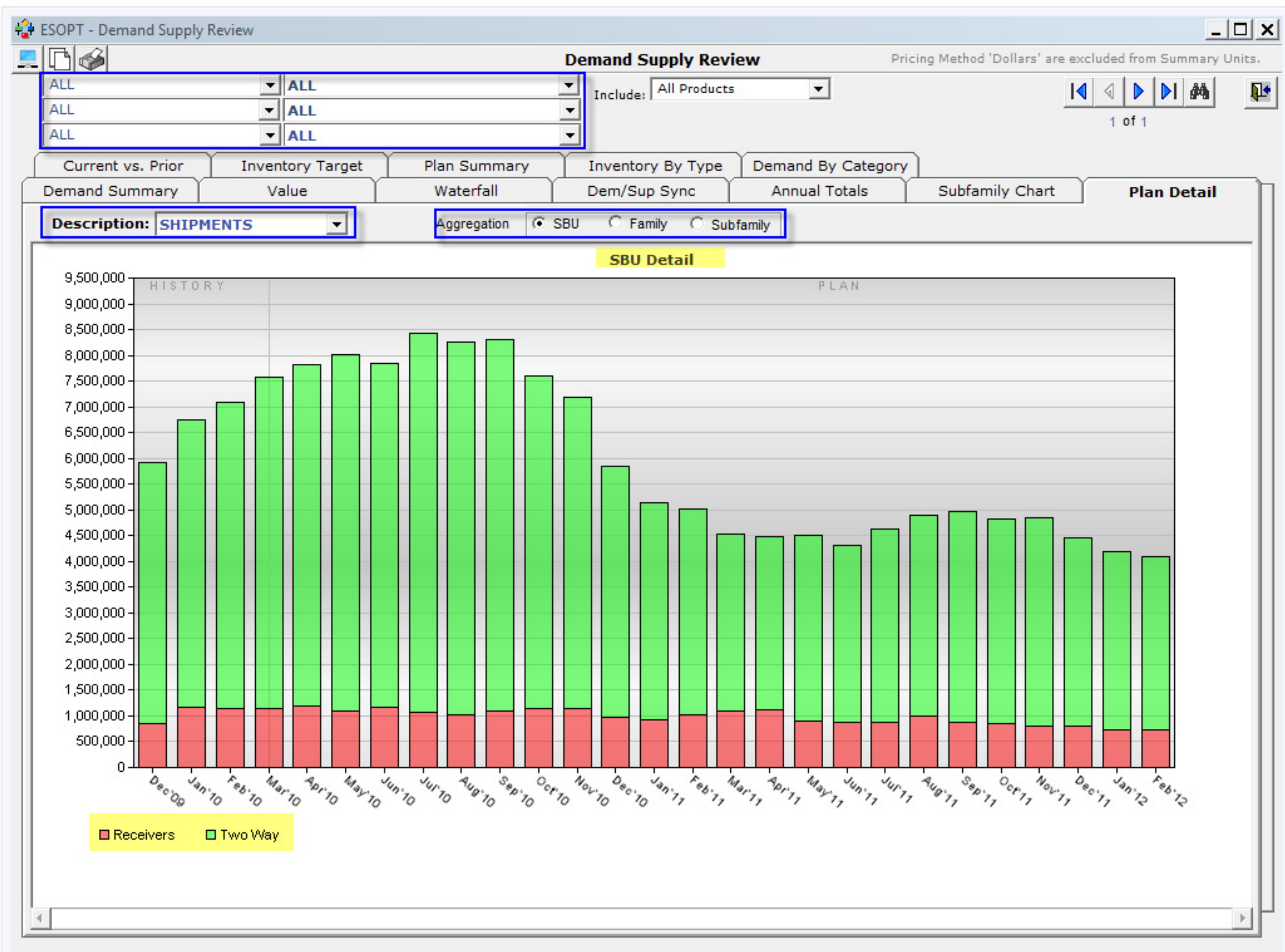
This chart provides a graphical depiction of the Supply and Demand factors by Company, SBU, Family and Subfamily.

The following 3 selections determine the data included and how it is summarized; SBU,Family or Subfamily.

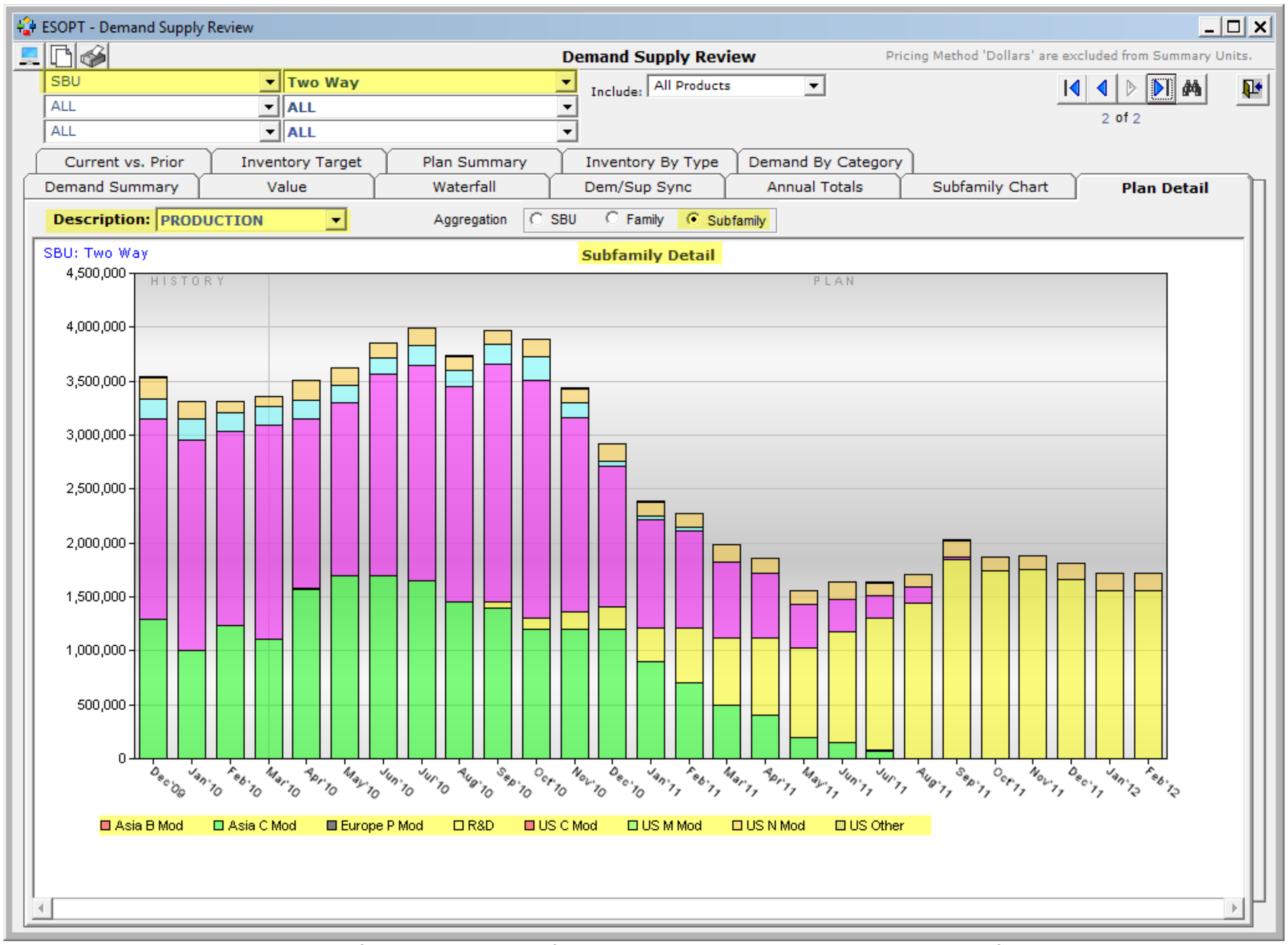
1) Select the scope / subfamilies to include using the drop down boxes at the top of the screen.
   Examples:
   ALL, ALL, ALL will include all subfamilies.
   SBU, ALL, ALL will include all subfamilies for the selected SBU.

2) From the drop-down list, select the type of data you would like to view: Backlog, Bookings, Demand, Dependent Demand, Inventory, Orders, Production, Purchases, and Shipments.

3) Select how you would like the data summarized by clicking the ‘Aggregation’ radio button selection. The data will be displayed in stacked bars by this selection.



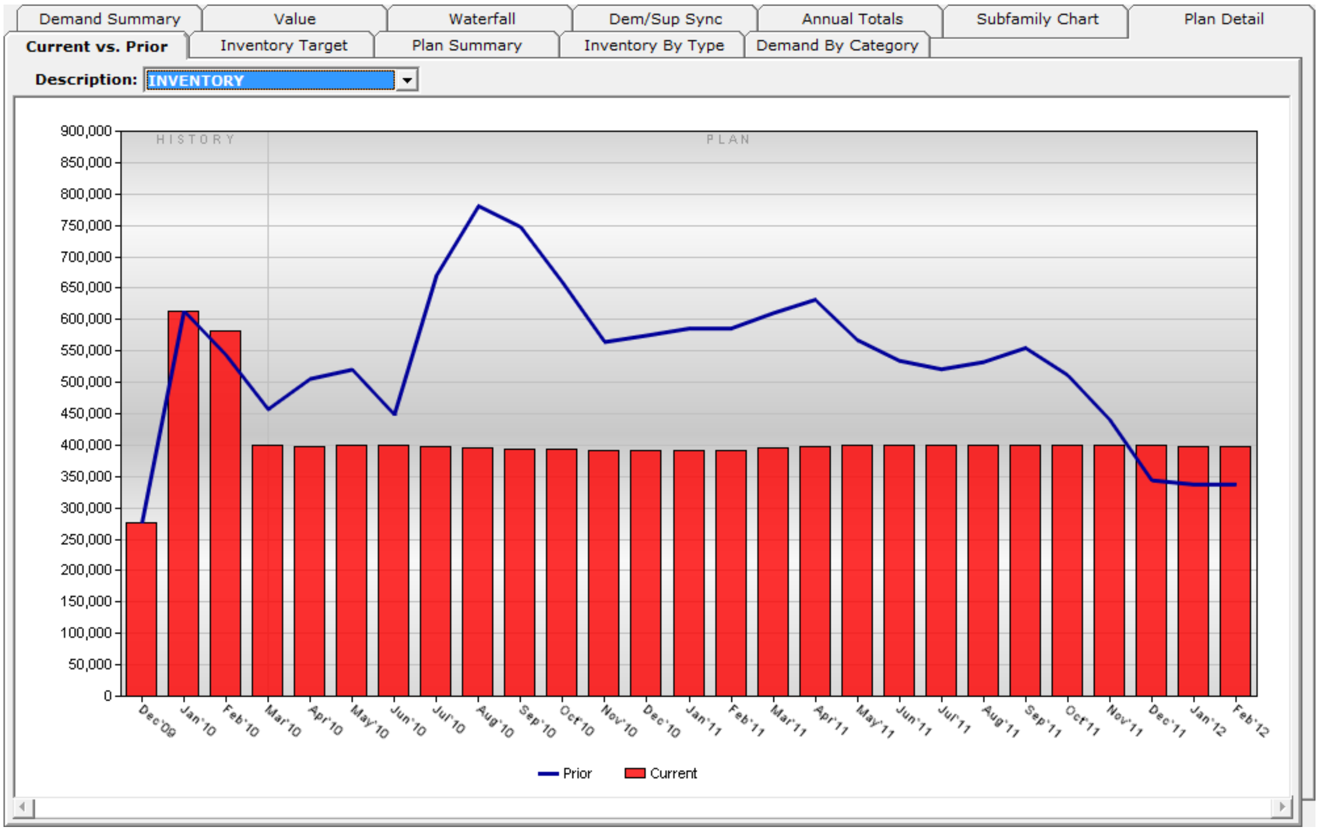
Example: All Subfamilies, Shipments aggregated by SBU



Example: Subfamilies with SBU of 'Two Way', Production summarized by Subfamily.

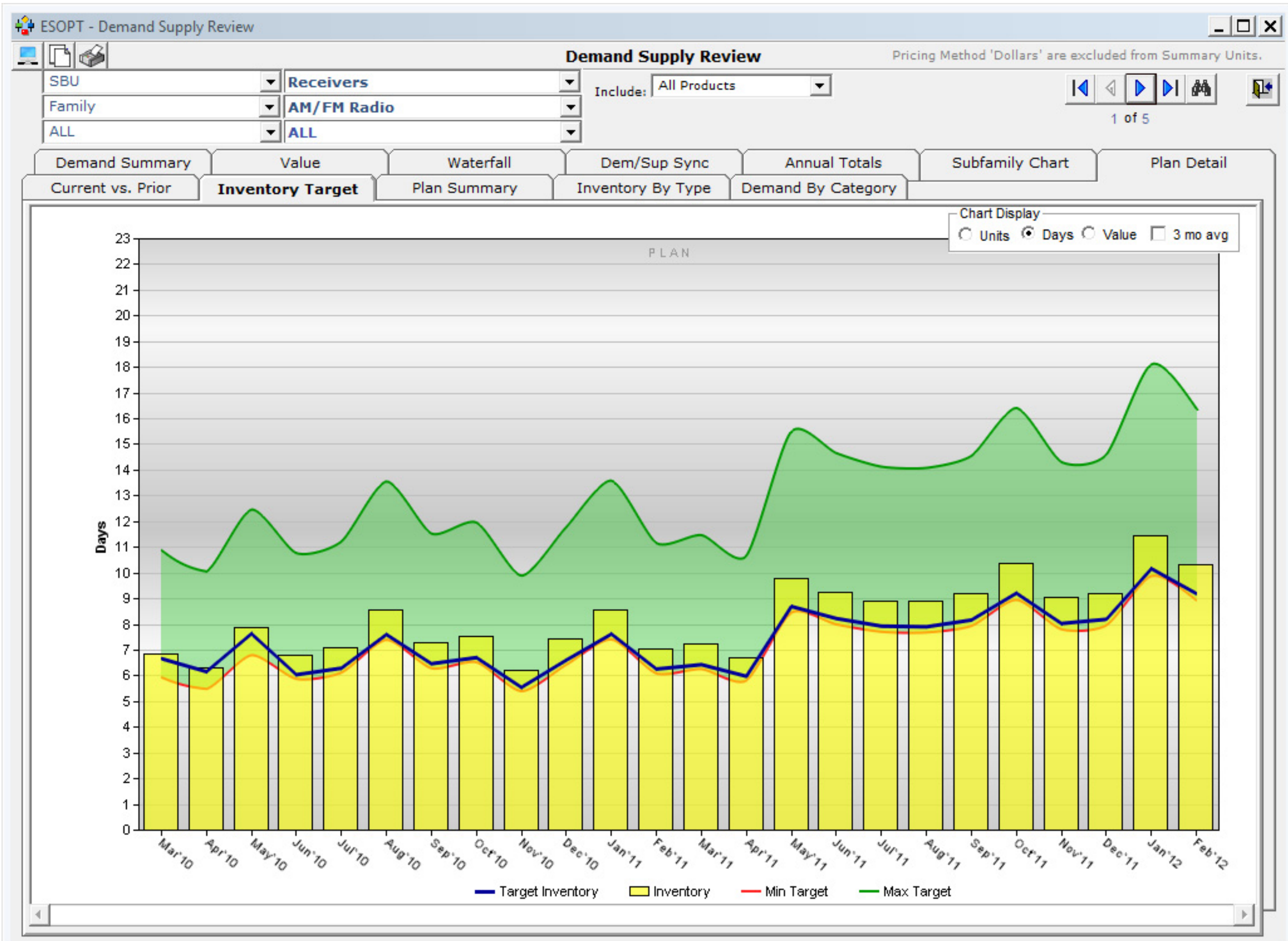
<u>Current vs. Prior</u>

The Current vs. Prior chart compares the current month's data to the previous month's data for the Family. The information may be displayed for Bookings, Demand, Orders, Dependent Demand, Production, Purchases, Inventory, Backlog, and Shipments.



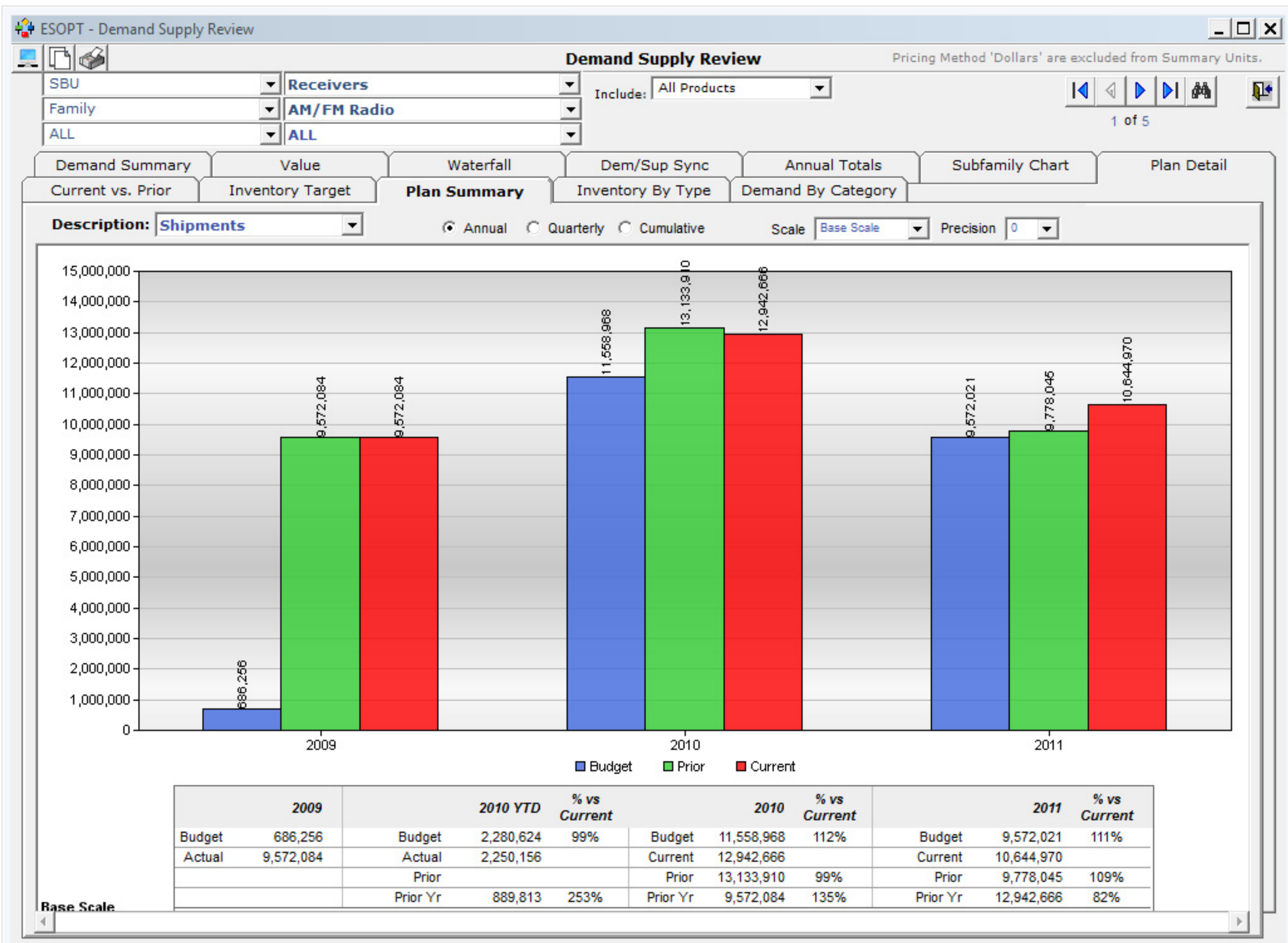
Inventory Target

The Inventory Target chart aggregates the Inventory, Inventory Target, Minimum, and Maximum Targets. It may be displayed in Units, Days, or Value of Inventory by selecting the Chart Option. Apply a 3-month smoothing effect to the chart by selecting the 3 mo avg.

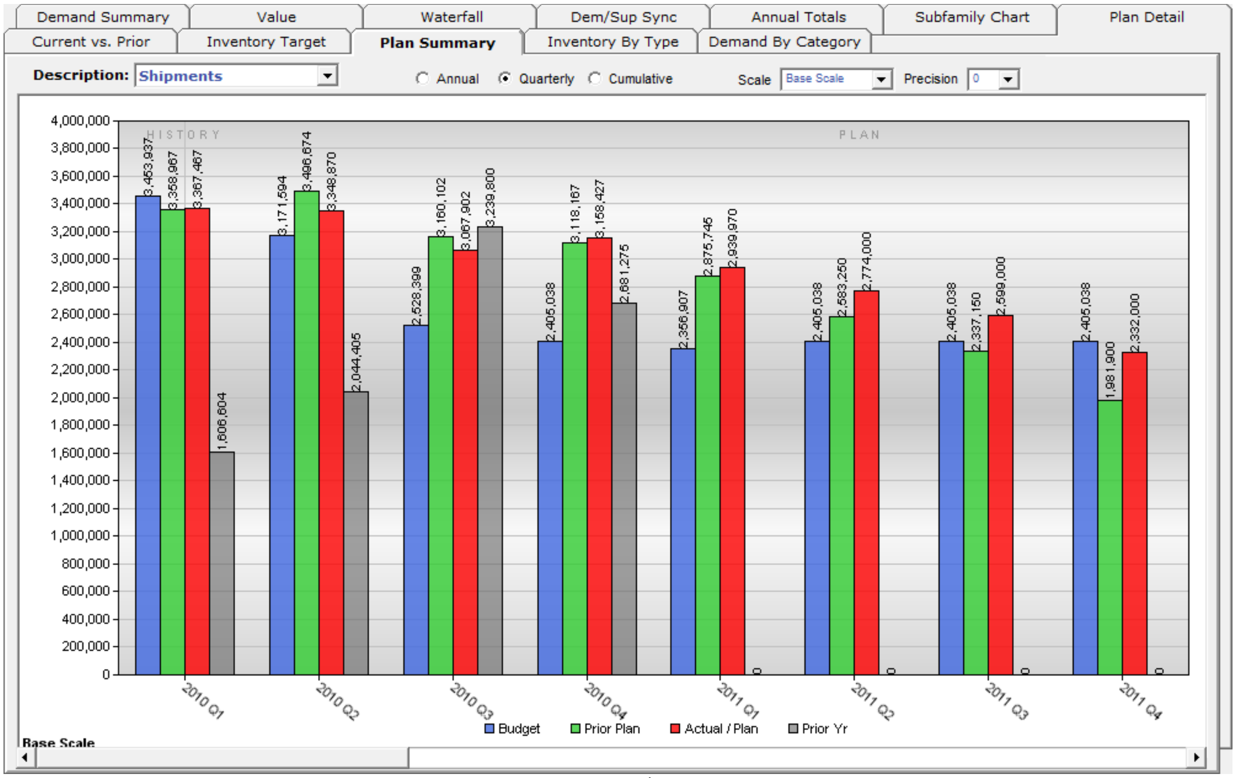


Plan Summary

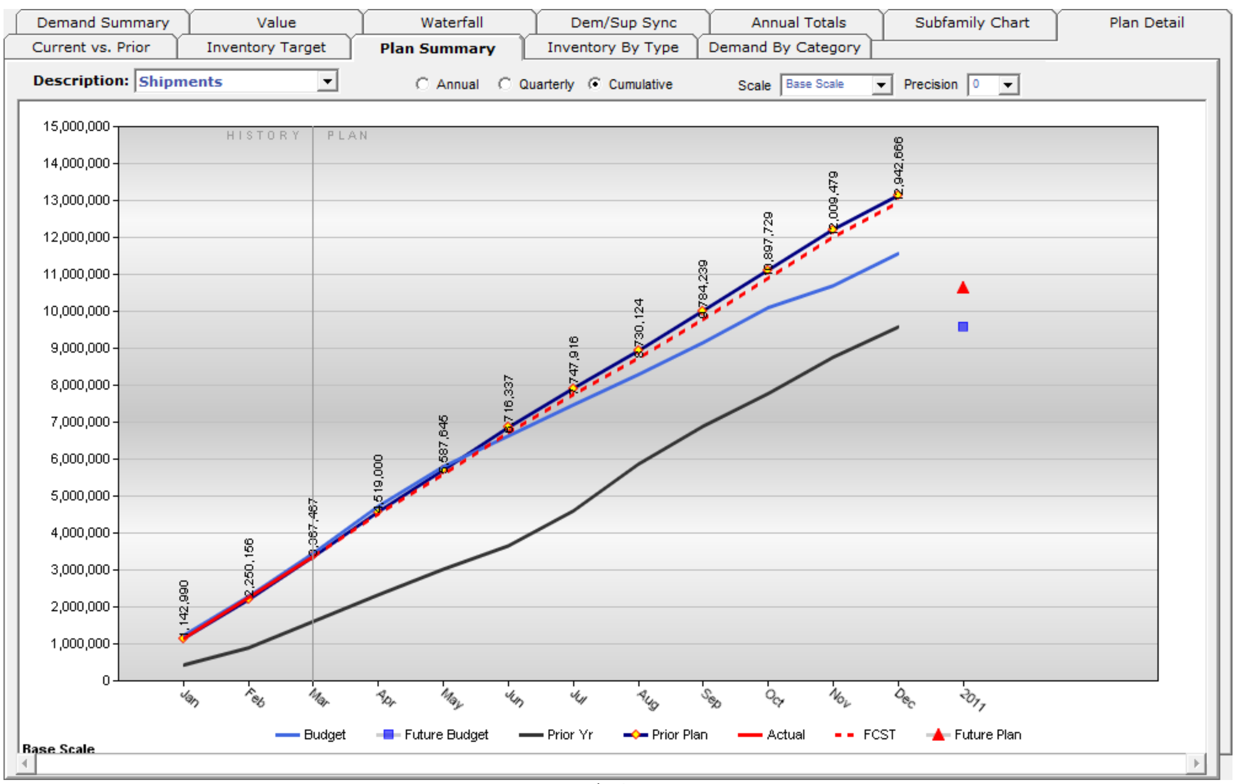
This form provides a graphical view to review totals for each Family for the Prior, Current, and Next Year. From the drop-down list of descriptions, select the type of information to be viewed: Backlog, Bookings, Demand, Demand Totals, Dependent Demand, Inventory Balance, Gross Margin, Orders, Production, Purchases, Sales, Shipments, Supply Total, Total Cost, Tot Fixed Cost, Tot Variable Cost, Variable Margin, Avg Total Cost, Avg Fixed Cost, Avg Variable Cost, Avg Other Cost, Avg Gross Margin, Avg Variable Margin, Avg Gross Margin %, Avg Variable Margin %, or Avg Sales Revenue. The information may be displayed Annually, Quarterly, or Cumulatively. The scale for the graph can be selected from the drop-down list of Base Scale, Thousands, or Millions. The Precision drop-down provides another level of detail to the amounts. The default value is zero with the option to select 1 to 3 digits to the right of the decimal point. The chart at the bottom of the page is the data for Prior Year, Current Year, and Next Year with the Budget, Actual, and % vs Current shown.



Annual



Quarterly



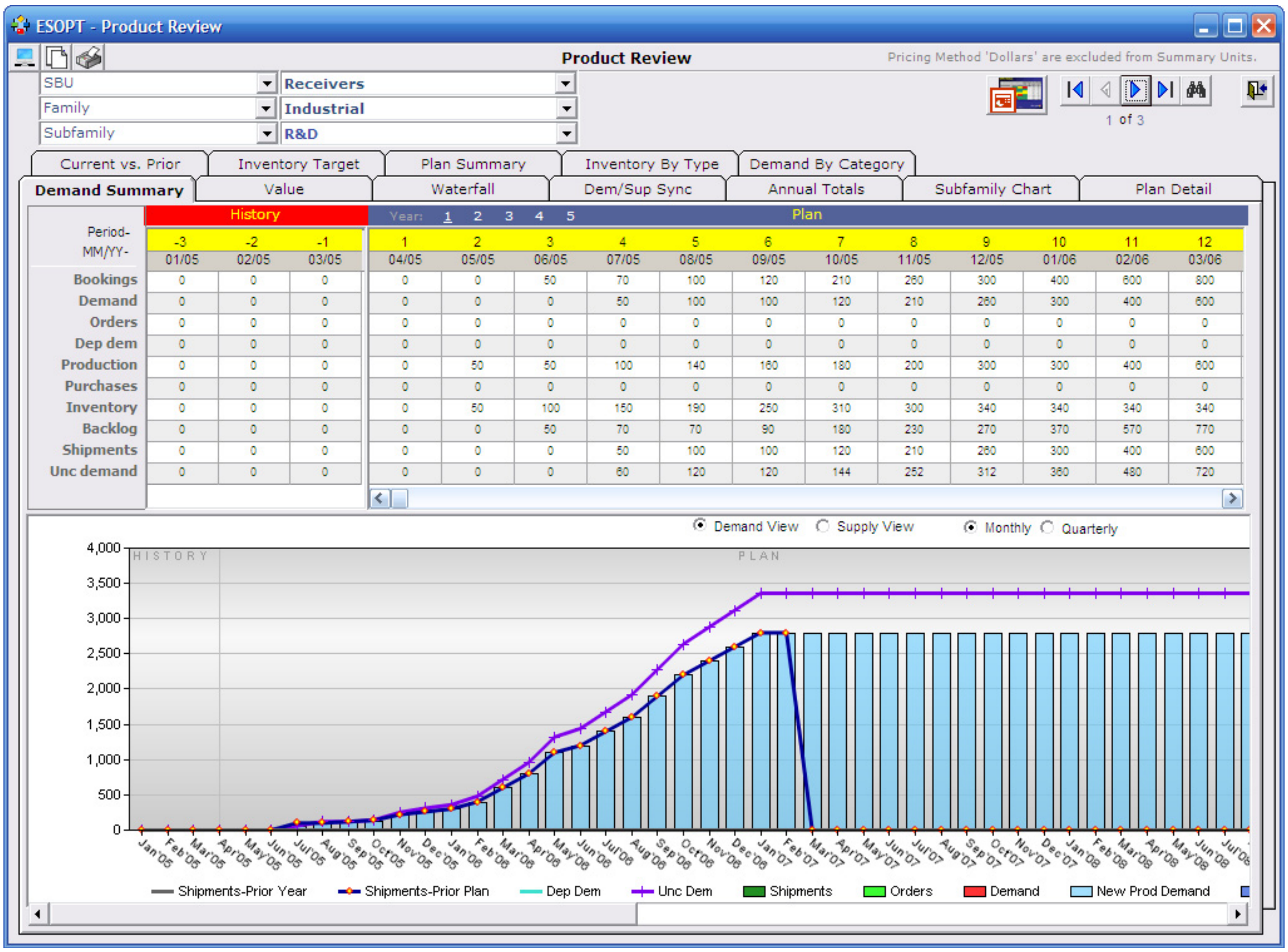
Cumulative YTD

The Management Business Review - Product Review

The Product Review form provides information to review the plan and budget information at a Family level as well as review any assumptions noted in the Demand Review, Supply Review, and Financial Appraisal meetings. Only Families identified as NPD will appear on these forms.

To access the New Product Review Forms:

- From the Main Menu, select the Management Business Review button.
- From the Management Business Review Menu, select the Product Review button.

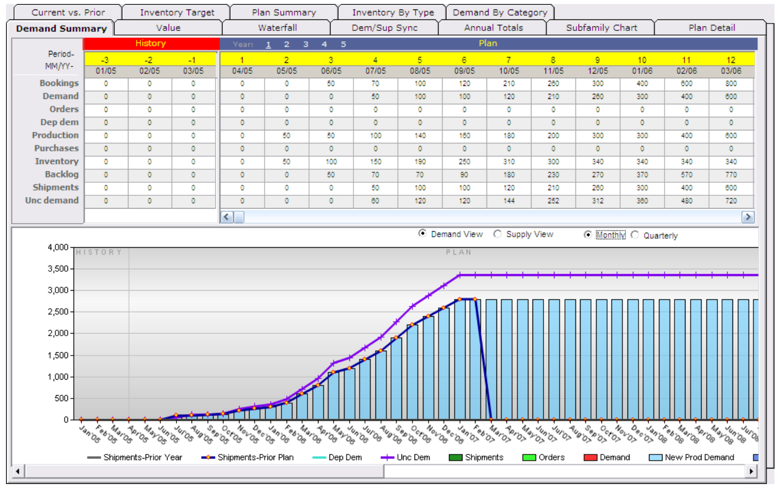


	History			Plan											
Period-	-3	-2	-1	1	2	3	4	5	6	7	8	9	10	11	12
MM/YY-	01/05	02/05	03/05	04/05	05/05	06/05	07/05	08/05	09/05	10/05	11/05	12/05	01/06	02/06	03/06
Bookings	0	0	0	0	0	50	70	100	120	210	260	300	400	600	800
Demand	0	0	0	0	0	0	50	100	100	120	210	260	300	400	600
Orders	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Dep dem	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Production	0	0	0	0	50	50	100	140	160	180	200	300	300	400	600
Purchases	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Inventory	0	0	0	0	50	100	150	190	250	310	300	340	340	340	340
Backlog	0	0	0	0	0	50	70	70	90	180	230	270	370	570	770
Shipments	0	0	0	0	0	0	50	100	100	120	210	260	300	400	600
Unc demand	0	0	0	0	0	0	60	120	120	144	252	312	360	480	720

The Product may be navigated through the SBU, Family, Subfamily and ALL levels by the scroll buttons or the drop-down boxes. The drop-down box may also be used to summarize by SBU, Family, and total company by using the 'ALL' selection.

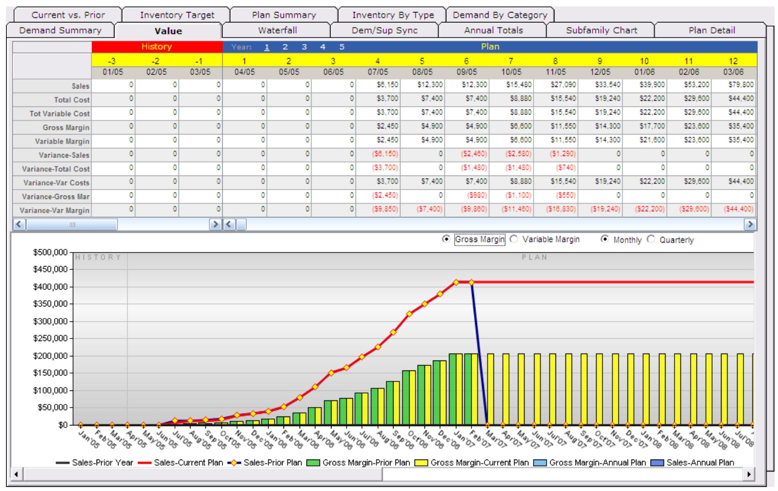
Demand Summary

This form provides Demand information in units for New Products (Products defined as NPD=Yes), Total Demand, and Annual Plan or Budgeted Demand by Family.



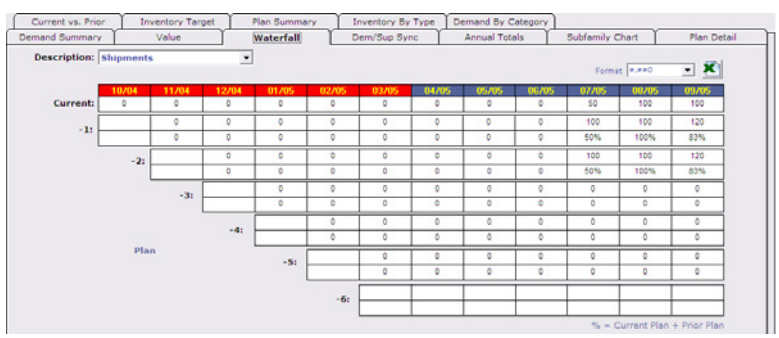
Value

The Value tab provides Sales Dollars, Cost, Total Variable Cost, Gross Margin Dollars, Variable Margin, Variance-Sales, Variance-Total Cost, Variance-Var Costs, Variance-Gross Margin, Variance-Var Margin based on the Average Sales $ and Average Cost. The worksheet displays the Variance from last month's plan. The graph displays the Gross Margin or the Variable Margin.



Waterfall

The Waterfall Analysis provides an analytical review process. From the drop-down list, select the type of data you would like to view in the analysis: Bookings, Demand, Orders, Dep Dem, Production, Purchases, Inventory, Backlog, Shipments, Sales, Total Cost, Gross Margin, Inventory Value, Average Fixed Cost, Average Other Cost, Average Variable Cost, Avg Total Cost, Avg Gross Margin, Avg Variable Margin, Avg Gross Margin %, or Avg Variable Margin. The Monthly Roll process saves the current data for up to six months. This screen compares the Forecast to Actual from the six prior months to determine where the Actuals have deviated from the prior Plan. The data is summarized for all Subfamilies contained in the Summary Table.



The Spreadsheet button will export the data to a spreadsheet.

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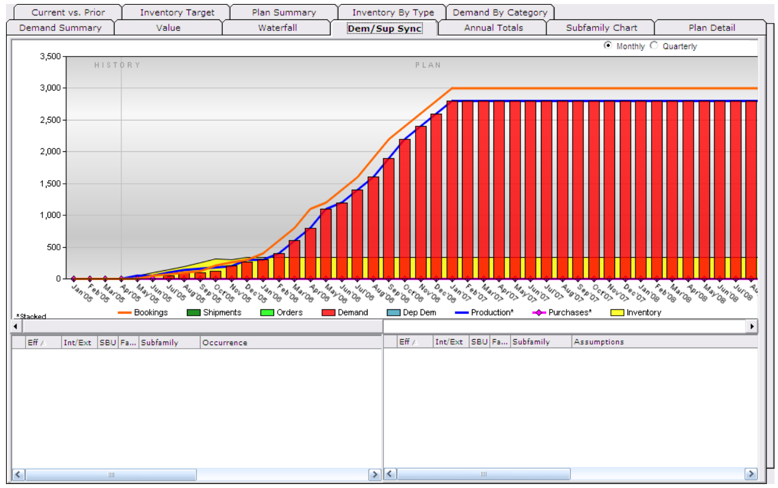
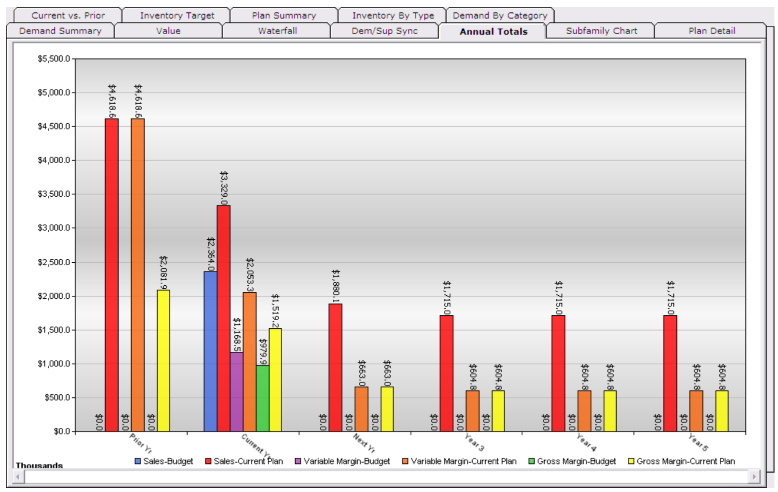
Demand/Supply Synchronization

This form provides a graphical depiction of the "balanced" nature of the plan at the Family level. The Comments section is used to review assumptions for the future plan and occurrences for the history. The Comments displayed here were previously entered in the Demand Review, Supply Review, and Financial Appraisal Meetings forms, in Comments-Subfamily tab. In the graph, Dependent Demand is added to Total Demand and represented as a stacked bar for all Demand (Orders, Demand, and Dependent Demand). Production and Purchases are stacked lines to represent Total Supply.



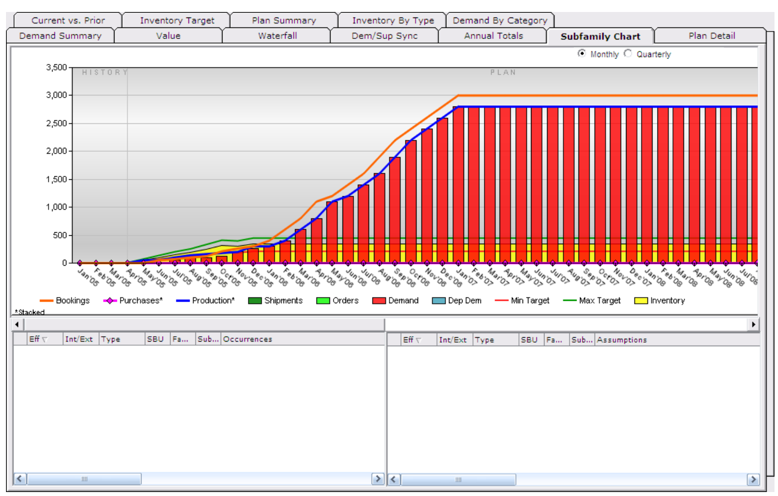
Annual Totals

The Annual Totals tab is used to review the annual totals for each family for the Prior, Current, and Next Year. The information is summarized to present the "marginal" profitability at the company level. The data is shown for Budget and Current Plan for Sales, Variable Margin, and Gross Margin. The chart is expressed in (000s).



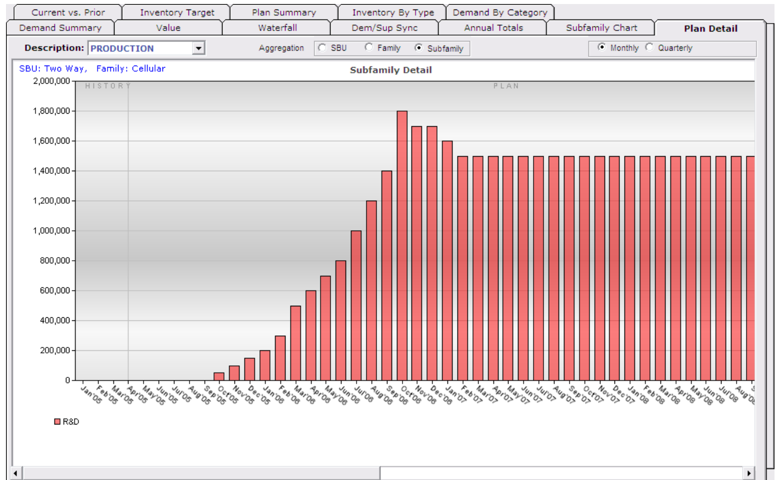
Subfamily Chart

The Subfamily chart provides a graphical depiction of the "balanced" nature of the plan at the Subfamily level as well as the significant assumptions supporting the plan. Only comments flagged Print?="Yes" will appear here. In the graph, Dependent Demand is added to Total Demand and represented as a stacked bar for all Demand (Orders, Demand, and Dependent Demand). Production and Purchases are stacked lines to represent Total Supply. The Comments section is used to review assumptions for the future plan and occurrences for the history.



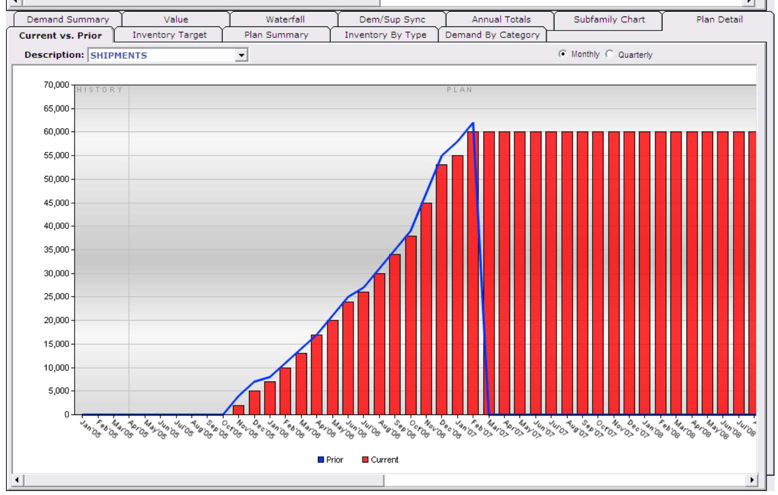
Plan Detail

This chart provides a graphical depiction of the Supply and Demand factors by Subfamily. From the drop-down list, select the type of data you would like to view: Backlog, Bookings, Demand, Dependent Demand, Inventory, Orders, Production, Purchases, and Shipments.



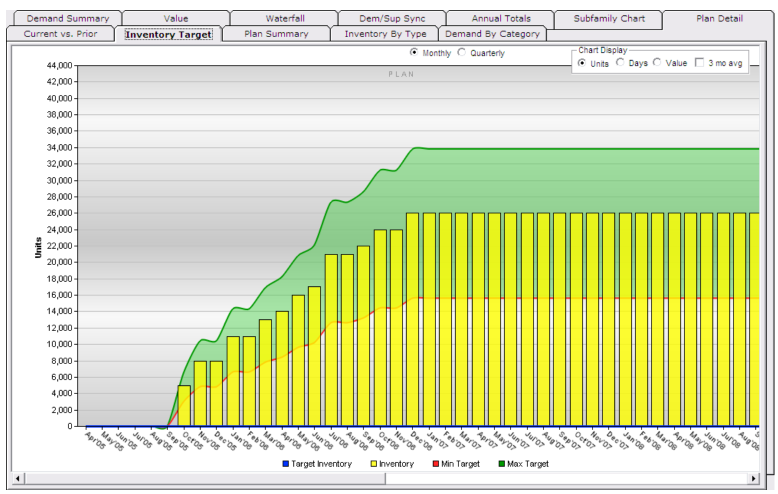
Current vs. Prior

The Current vs. Prior chart compares the current month's data to the previous month's data for the family. The information may be displayed for Bookings, Demand, Orders, Dependent Demand, Production, Purchases, Inventory, Backlog, and Shipments.



Inventory Target

The Inventory Target Chart aggregates the Inventory, Inventory Target, Minimum, and Maximum Targets. It may be displayed in Units, Days, or Value of Inventory by selecting the Chart Option. Apply a 3-month smoothing effect to the chart by selecting the 3 mo avg.



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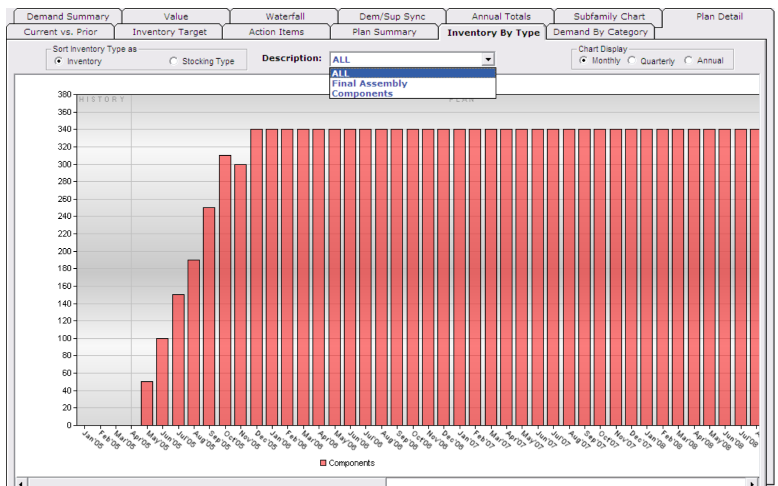
Plan Summary

This form provides a graphical view to review totals for each Family for the Prior, Current, and Next Year. From the drop-down list of descriptions, select the type of information to be viewed: Backlog, Bookings, Demand, Demand Totals, Dependent Demand, Inventory Balance, Gross Margin, Orders, Production, Purchases, Sales, Shipments, Supply Total, Total Cost, Tot Fixed Cost, Tot Variable Cost, Variable Margin, Avg Total Cost, Avg Fixed Cost, Avg Variable Cost, Avg Other Cost, Avg Gross Margin, Avg Variable Margin, Avg Gross Margin %, Avg Variable Margin %, or Avg Sales Revenue. The information may be displayed Annually, Quarterly, or Cumulatively. The scale for the graph can be selected from the drop-down list of Base Scale, Thousands, or Millions. The Precision drop-down provides another level of detail to the amounts. The default value is zero with the option to select 1 to 3 digits to the right of the decimal point. The chart at the bottom of the page is the data for Prior Year, Current Year, and Next Year with the Budget, Actual, and % vs Current shown.

	2004		2005 YTD	% vs Current		2005	% vs Current		2006	% vs Current
Budget	0	Budget	64,869	330%	Budget	577,241	129%	Budget	0	
Actual	831,330	Actual	214,108		Current	743,258		Current	473,568	
		Prior			Prior	862,562	86%	Prior	473,568	100%
		Prior Yr	87,435	245%	Prior Yr	831,330	89%	Prior Yr	743,258	64%

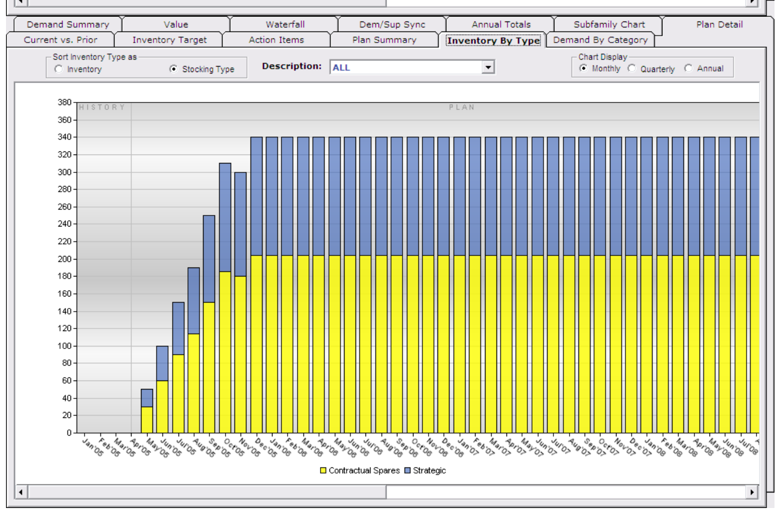
Inventory by Type:

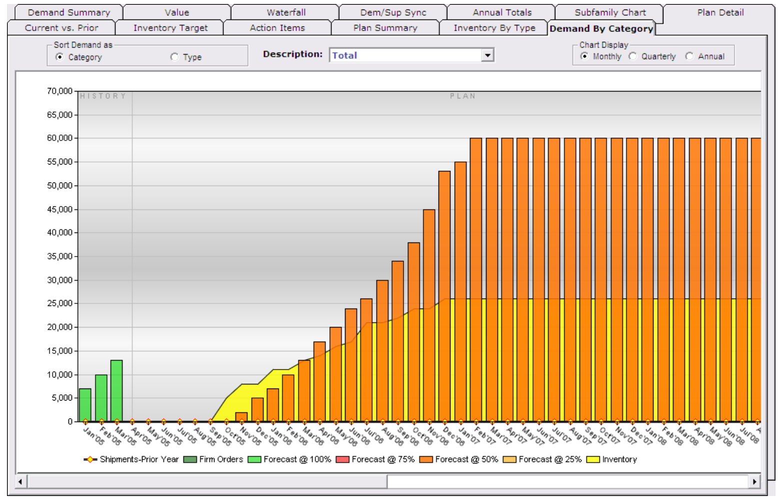
This chart provides a comparison of the Inventories from the Site tools selected. The Inventory is averaged for quarterly and yearly view of the charts.



by Inventory Type: The Inventory is represented by the Inventory Type specified in the Group Master in a stacked bar. The Inventory Types values are defined in the Aggregaton Code maintenance. The types may be filtered using the drop-down box.

by Stocking Type: The Inventory is represented by the volume of Inventory that is above or below the Minimum Inventory.
The Type of Inventory may be selected from the drop down- Contractual Spares, Strategic, or All.





Demand by Category:

by Demand Probability

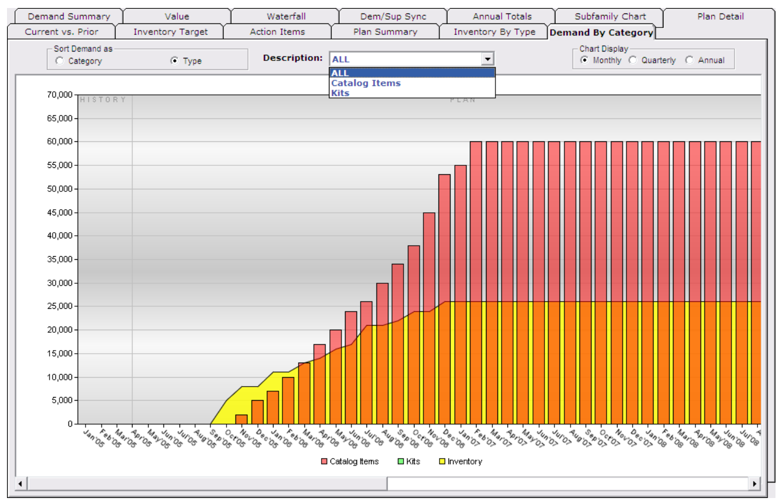
This chart displays sources of demand stacked by probability percentage. Demand Probability is assigned in the Demand Review form or may be imported using the Import Manager. It is defined by period.

The demand source may be selected from the drop down: Demand, Shipments, Unconstrained Demand.

by Demand Type

This chart displays Demand stacked by Demand Type. The Demand Types are defined in the Aggregation Maintenance and assigned to the Subfamily.

The type of demand may be selected from the drop-down.



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Resource Plan

The Management Business Review - Resource Plan

The Resource Plan provides graphs for reviewing Required, Demonstrated, Maximum, and Planned Capacity. The combination of Resource Group/Resource/UofM constitutes a unique resource load.

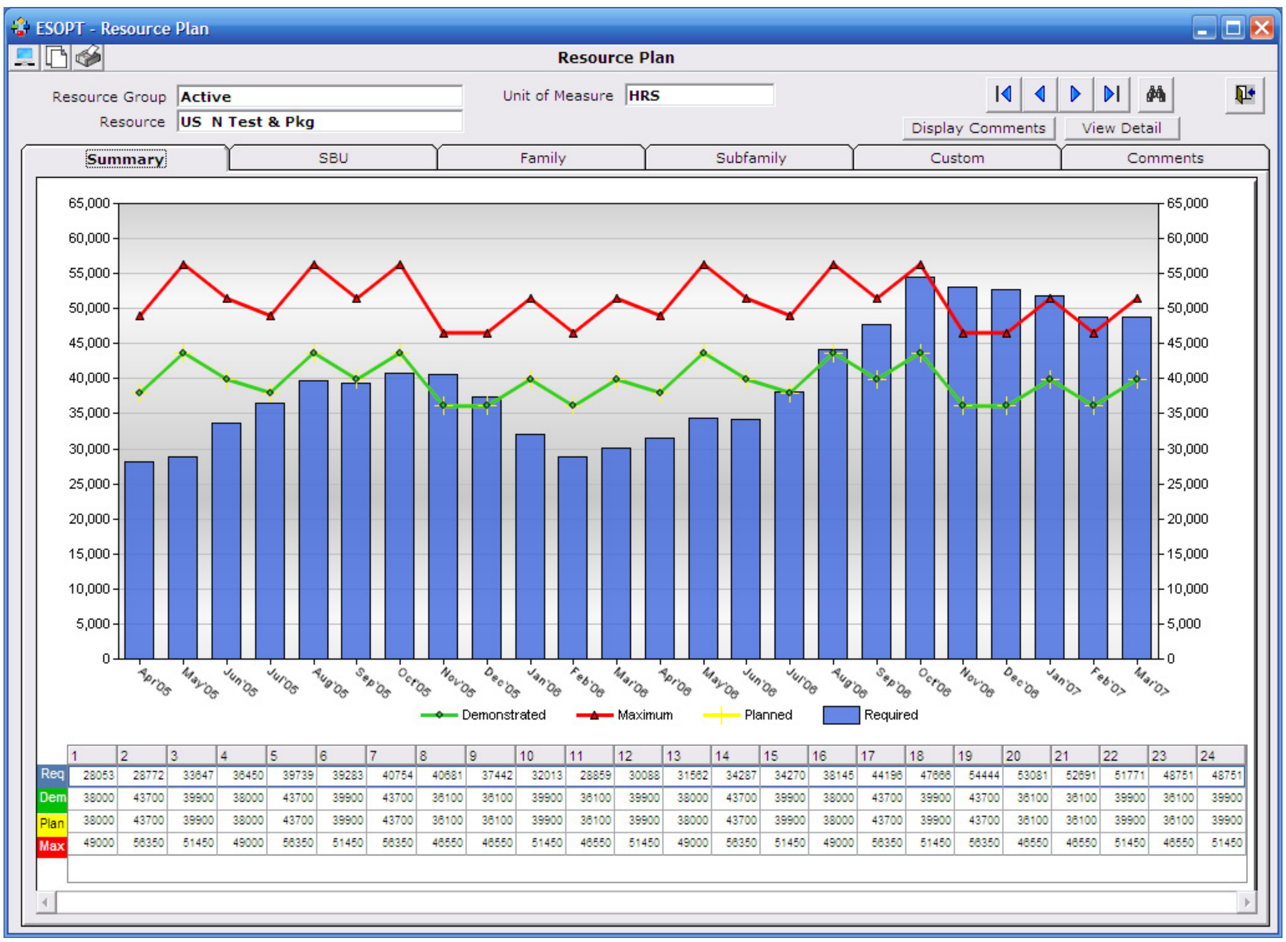
Resource Planning Chart Definitions:

- **Required Capacity** = (Total Production Units * Allocation %) * Conversion Factor.
- **Demand Capacity** = Daily demand or demonstrated capacity * Number of production days.
- **Planned Capacity** = Daily planned capacity * Number of production days.
- **Maximum Capacity** = Daily maximum capacity * Number of production days.

To access the Resource Plan Charts:

- From the Main Menu, select the Resource Plan button. Resource Plan
- From the Main Menu, select the Management Business Review button Management Business Review

  and the Resource Plan button. Resource Plan

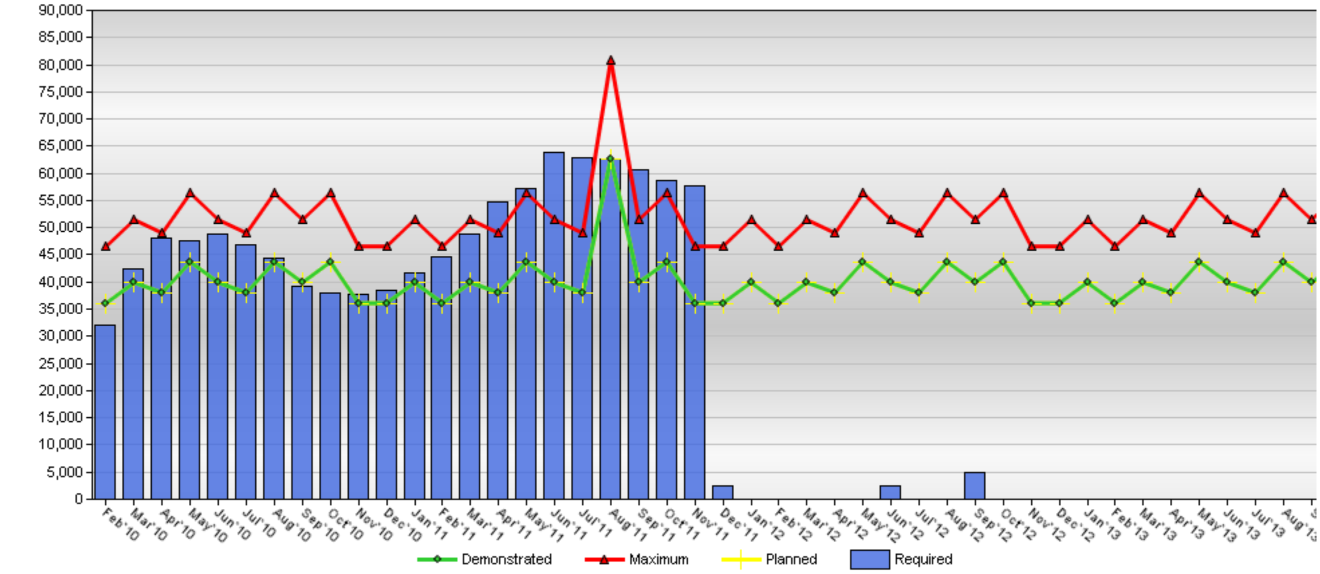


	1	2	3	4	5	6	7	8	9	10	11	12
Req	28053	28772	33647	36450	39739	39283	40754	40681	37442	32013	28859	30088
Dem	38000	43700	39900	38000	43700	39900	43700	36100	36100	39900	36100	39900
Plan	38000	43700	39900	38000	43700	39900	43700	36100	36100	39900	36100	39900
Max	49000	56350	51450	49000	56350	51450	56350	46550	46550	51450	46550	51450

	13	14	15	16	17	18	19	20	21	22	23	24
Req	31562	34287	34270	38145	44196	47666	54444	53081	52691	51771	48751	48751
Dem	38000	43700	39900	38000	43700	39900	43700	36100	36100	39900	36100	39900
Plan	38000	43700	39900	38000	43700	39900	43700	36100	36100	39900	36100	39900
Max	49000	56350	51450	49000	56350	51450	56350	46550	46550	51450	46550	51450

The charts are displayed in monthly, quarterly (for 5 year horizon) and Annually (for 30 year horizon)

Monthly chart

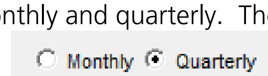


	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
Req	32112	42365	48020	47595	48872	46772	44387	39271	38049	37797	38498	41754	44733	48775	54676	57185	63797	62956	62534	60772
Dem	36100	39900	38000	43700	39900	38000	43700	39900	43700	36100	36100	39900	36100	39900	38000	43700	39900	38000	62700	39900
Plan	36100	39900	38000	43700	39900	38000	43700	39900	43700	36100	36100	39900	36100	39900	38000	43700	39900	38000	62700	39900
Max	46550	51450	49000	56350	51450	49000	56350	51450	56350	46550	46550	51450	46550	51450	49000	56350	51450	49000	80850	51450

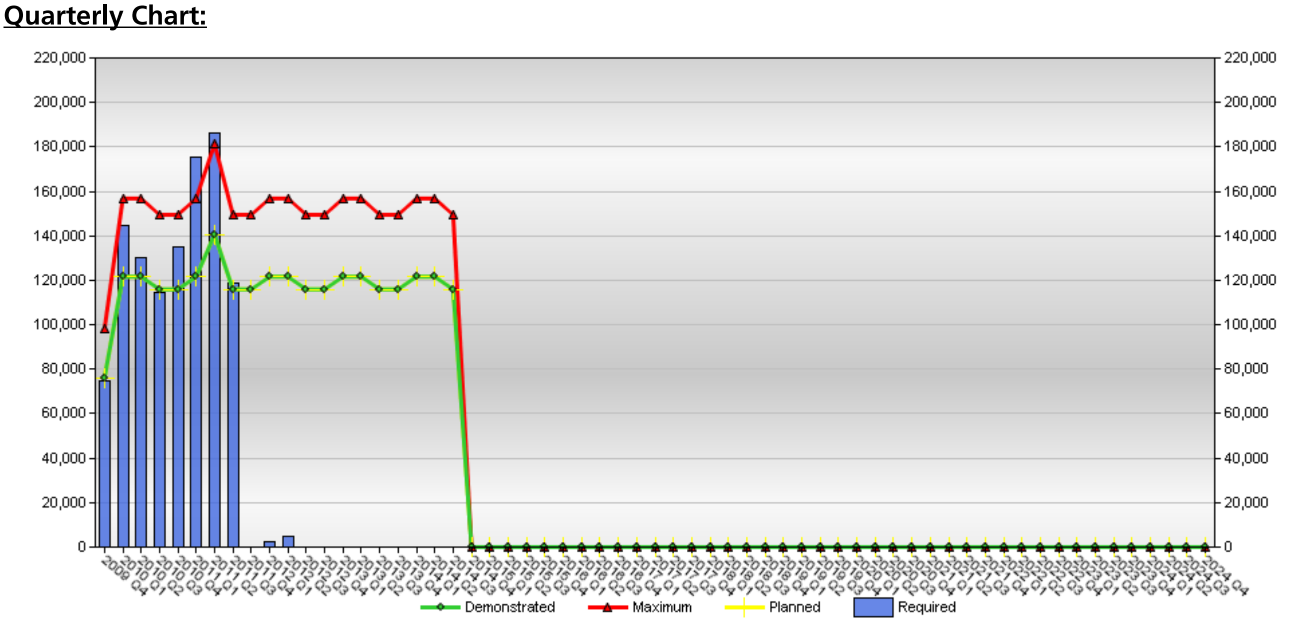
Resource Plan Summary Charts for the 5 Year Horizon

The Resource Plan Summary chart in the 5 Year Horizon edition expands out the data to 24 quarters or 60 months.

The 5 Year Horizon Summary Chart displays a Monthly or Quarterly toggle that allows you to select between monthly and quarterly. The default is Quarterly and may be changed to monthly in the Company Settings Tab.

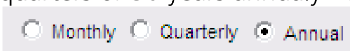


Quarterly Chart:

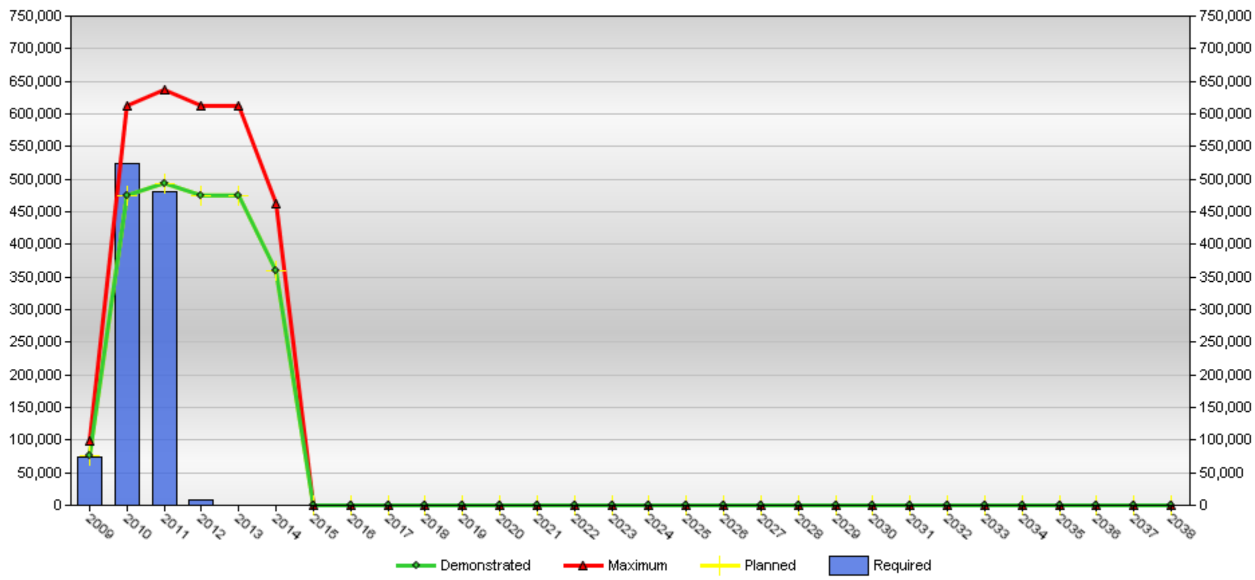


Resource Plan Summary Charts for the 30 Year Horizon

The Resource Plan Summary chart in the 30 Year Horizon edition expands out the Summary data to 15 years in quarters or 30 years annualy. The Monthly, Quarterly and Annual chart selection is available.

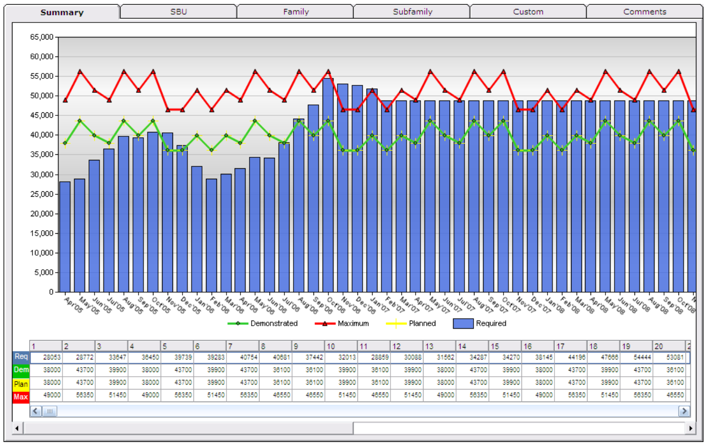


Annual Chart:



	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Req	74476	524...	480...	7500	0	0	0	0	0	0	0	0	0	0	0
Dem	76000	475...	494...	475...	475...	359...	0	0	0	0	0	0	0	0	0
Plan	76000	475...	494...	475...	475...	359...	0	0	0	0	0	0	0	0	0
Max	98000	612...	637...	612...	612...	463...	0	0	0	0	0	0	0	0	0

	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038
Req	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Dem	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Plan	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Max	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0



	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
Req	28053	28772	33647	36450	39739	39283	40754	40681	37442	32013	28859	30088	31562	34287	34270	38145	44196	47666	54444	53081
Dem	38000	43700	39900	38000	43700	39900	43700	36100	36100	39900	36100	39900	38000	43700	39900	38000	43700	39900	43700	36100
Plan	38000	43700	39900	38000	43700	39900	43700	36100	36100	39900	36100	39900	38000	43700	39900	38000	43700	39900	43700	36100
Max	49000	56350	51450	49000	56350	51450	56350	46550	46550	51450	46550	51450	49000	56350	51450	49000	56350	51450	56350	46550

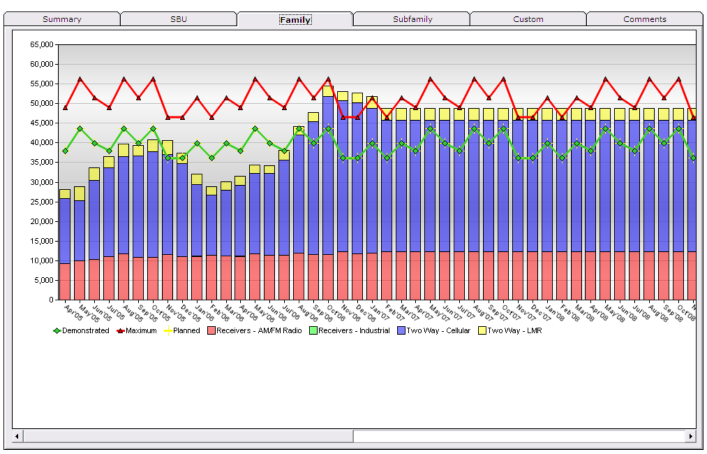
Summary Graph

The Summary Graph compares Required, Demonstrated, Maximum, and Planned Capacity. It may be reviewed for unlimited resources. The combination of Resource Group/Resource/UofM constitutes a unique resource load.

- Use the Record Navigation Bar to locate the Resource.

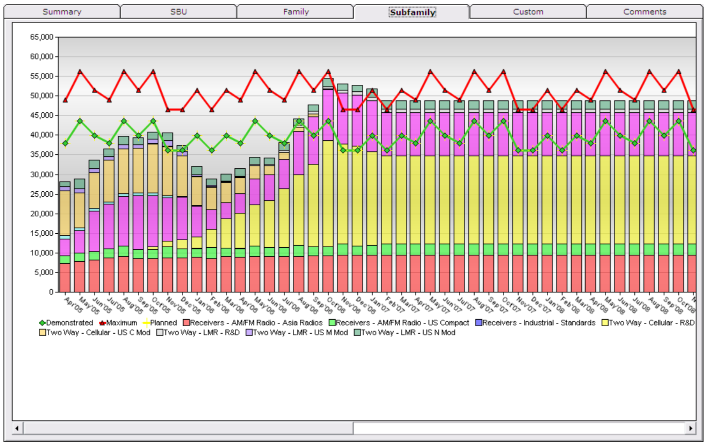
SBU Graph

The SBU Graph shows Demonstrated, Maximum, and Planned Capacity. Additionally. each of the SBU's values is shown as stacked for each month based on the Unit of Measure. Use the Record Navigation Bar to locate the Resource.



Family Graph

The Family Graph shows Demonstrated, Maximum, and Planned Capacity. Additionally, each of the Family values are shown as stacked for each month based on the Unit of Measure. Use the Record Navigation Bar to locate the Resource.



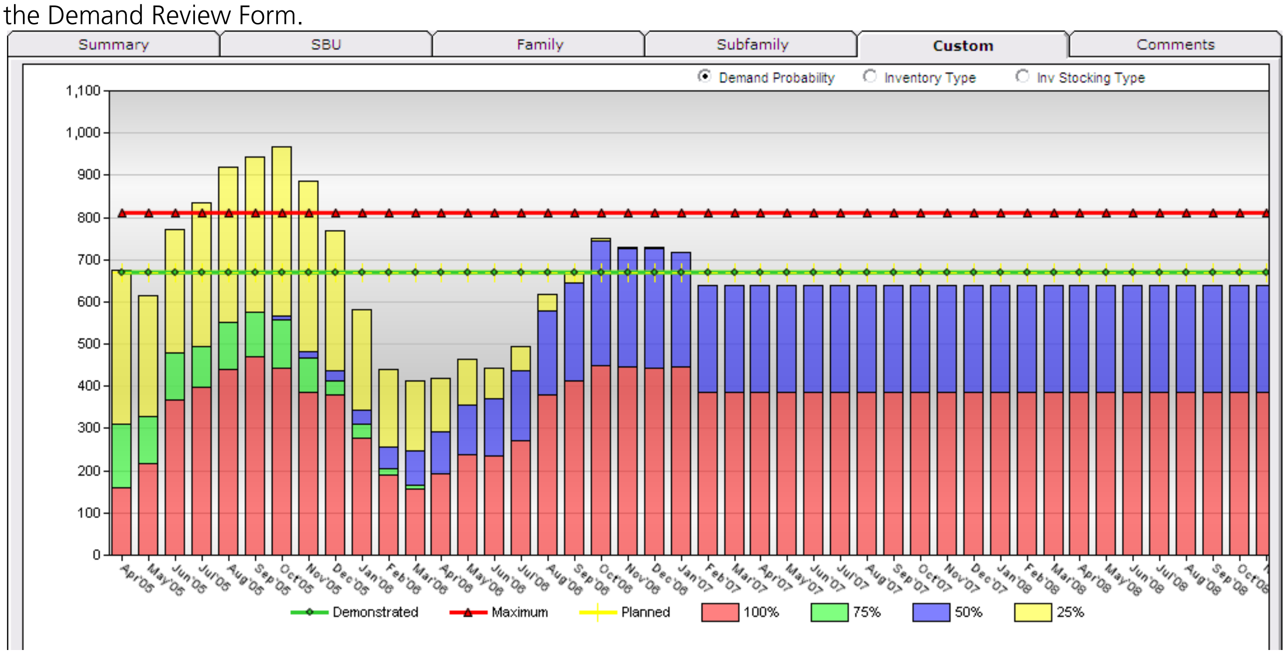
Subfamily Graph

The Subfamily Graph shows Demonstrated, Maximum, and Planned Capacity. Additionally, each of the Subfamily values are shown as stacked for each month based on the Unit of Measure.
Use the Record Navigation Bar to locate the Resource.

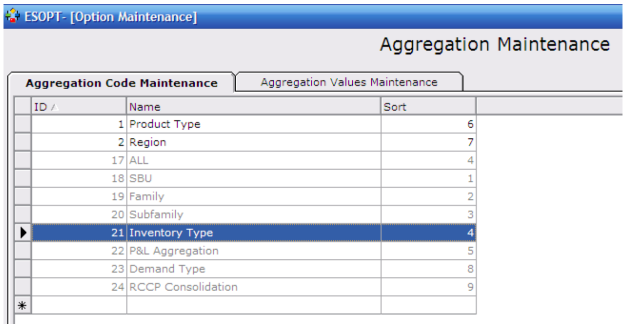
Custom Charts

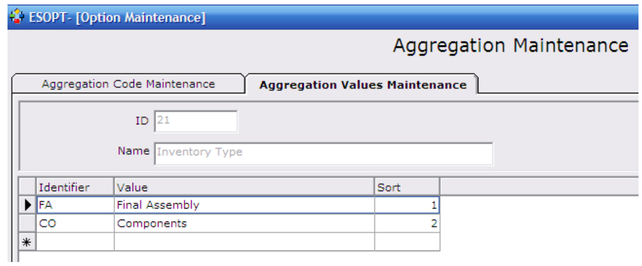
The Custom tab displays 3 different charts:

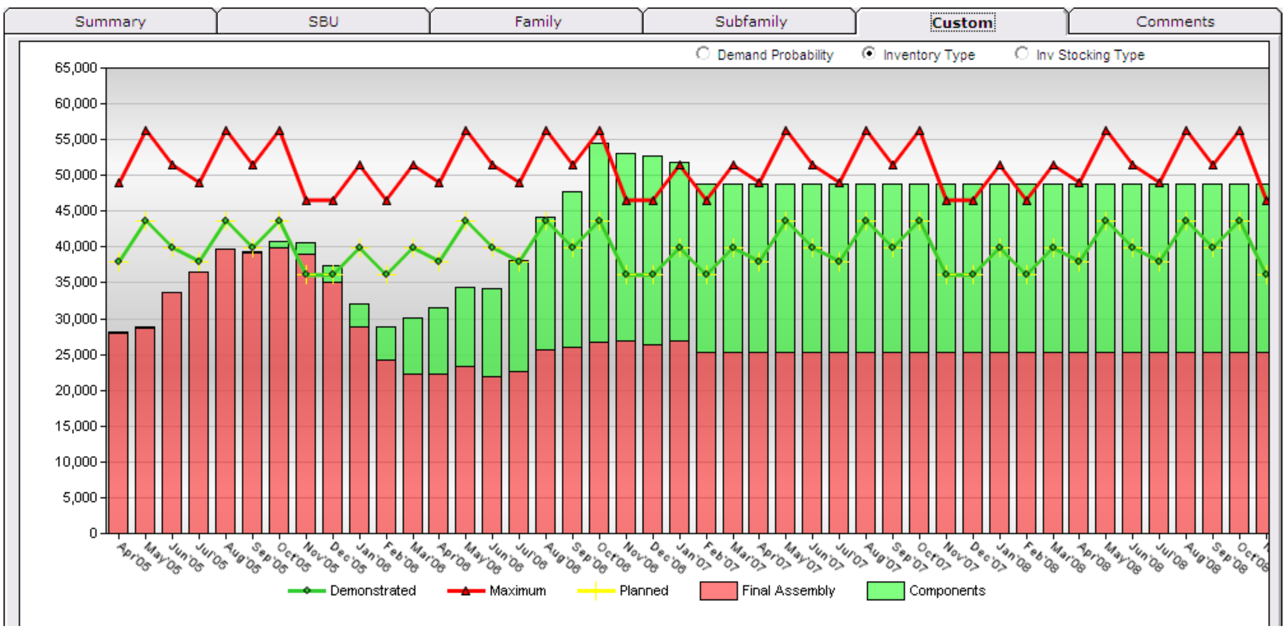
Demand Probability: The required capacity is separated into stacked bars representing the percent probability of the demand. The bars will be 100%, 75%, 50%, and 25% or 100%, 90%, 60%, and 30% depending on the Demand Probability company setting. The probability of the demand is defined in the Demand Probability row on the Demand Review Form.



Inventory Type: (Custom): The Inventory Type is completely customizablable. The required capacity is separated by the values defined in Aggregation Code 21. These codes are entered in the Inventory Type assigned to the Subfamily in the Group Master. The option name and values may be modified.







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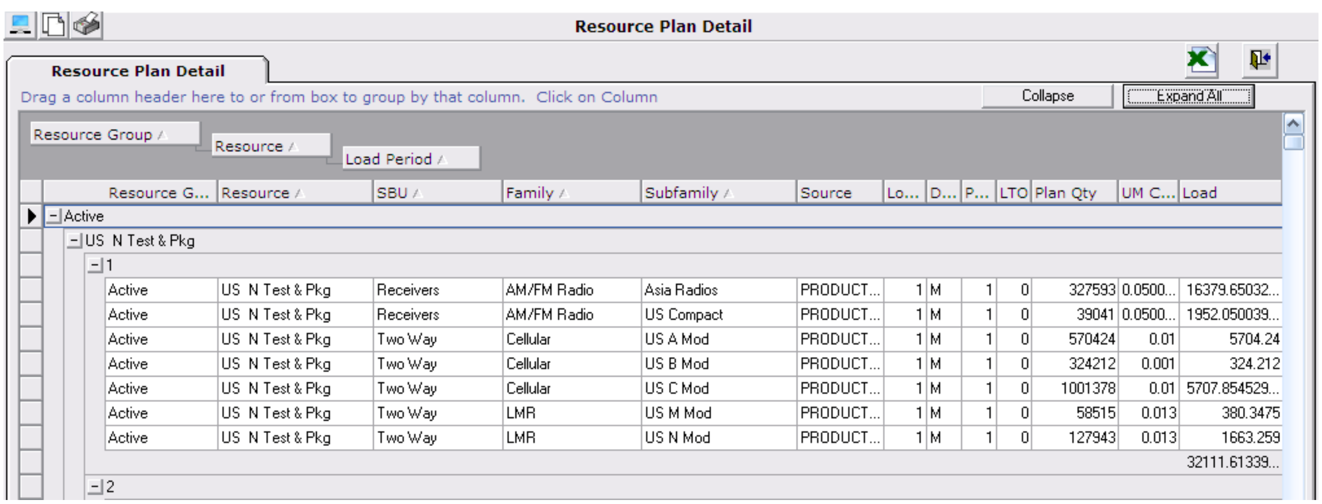
Inventory Stock Type: The Inventory Stock type is determined by the Minimum Inventory value for the Subfamily. The volume of Inventory below minimum is considered ‘Contractual Spares’. The Inventory above minimum is ‘Strategic’. Only the required capacity generated by the Inventory Row as the source is represented in the chart.

Detail Button View Detail

Click the Detail button to view or export the supporting detail of the current plan from which the Required Capacity was calculated. See Management Business Review – Resource Plan for more information.



Resource G...	Resource	SBU	Family	Subfamily	Source	Lo...	D...	P...	LTO	Plan Qty	UM C...	Load
Active												
US N Test & Pkg												
1												
Active	US N Test & Pkg	Receivers	AM/FM Radio	Asia Radios	PRODUCT...	1	M	1	0	327593	0.0500...	16379.65032...
Active	US N Test & Pkg	Receivers	AM/FM Radio	US Compact	PRODUCT...	1	M	1	0	39041	0.0500...	1952.050039...
Active	US N Test & Pkg	Two Way	Cellular	US A Mod	PRODUCT...	1	M	1	0	570424	0.01	5704.24
Active	US N Test & Pkg	Two Way	Cellular	US B Mod	PRODUCT...	1	M	1	0	324212	0.001	324.212
Active	US N Test & Pkg	Two Way	Cellular	US C Mod	PRODUCT...	1	M	1	0	1001378	0.01	5707.854529...
Active	US N Test & Pkg	Two Way	LMR	US M Mod	PRODUCT...	1	M	1	0	58515	0.013	380.3475
Active	US N Test & Pkg	Two Way	LMR	US N Mod	PRODUCT...	1	M	1	0	127943	0.013	1663.259
												32111.61339...
2												

The Management Business Review - Finance Review

The Finance Review form is focused on monitoring the actual financial results to the prior period and the Business Plan. Financial charts are provided for monthly and quarterly analysis of Revenue, Costs, and Margin. Only the Subfamilies contained in the Summary Table will be included in the Financial Summary Charts. Financial Summary Comments are displayed on each of the charts. The Annual Totals and Inventory Dollars charts are also accessible from the Finance Review form. The following financial charts are available.

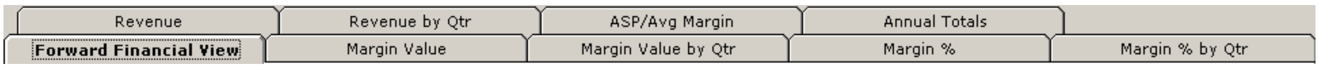


Chart Options:

1. The charts may be printed at any time by using the print  buttons.

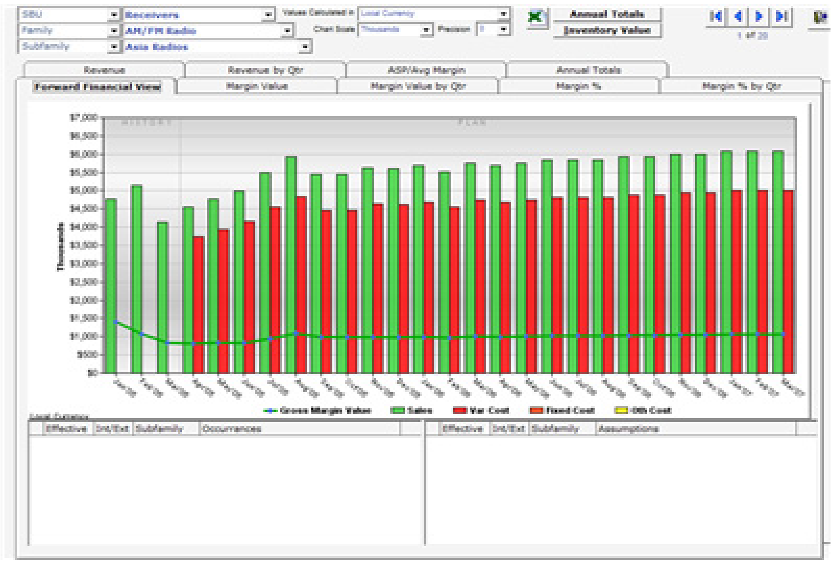
2. The charts may be displayed in any currency being used by clicking the drop-down selection.

3. The scale and decimal precision of most of the charts may be modified using the drop-down boxes.

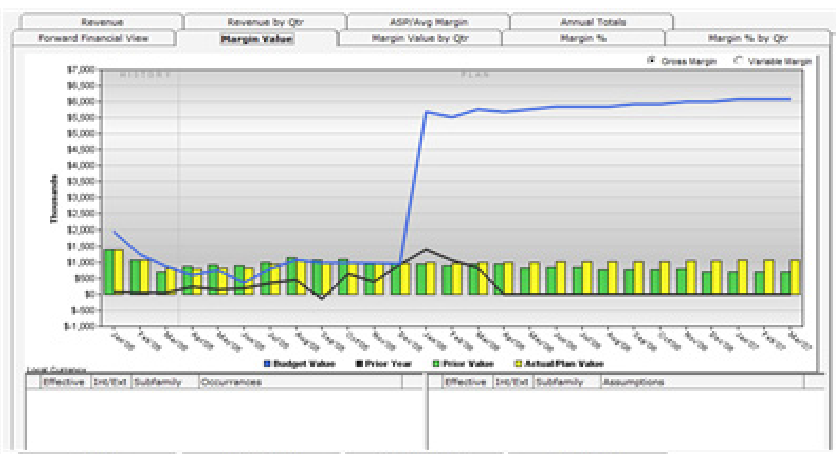
Definitions for Financial Charts:

Sales $	Shipments * Average Sales Price (ASP)
Cost $ (COGS)	Shipments * Average Cost (AC)
Margin $	Sales $-Cost $
Margin %	(Sales$-Cost$)/Sales $
ASP	Total Sales $/Total Shipments
Avg Margin	ASP/Revenue
Revenue	Sales $

Financial Charts

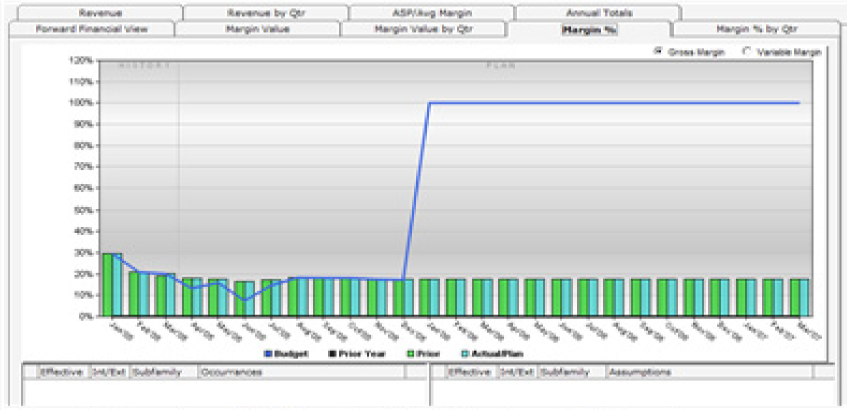


Forward Financial View: This chart displays Gross Margin Value, Sales $, Variable Cost, Fixed Cost, and Other Cost by month for each Subfamily.

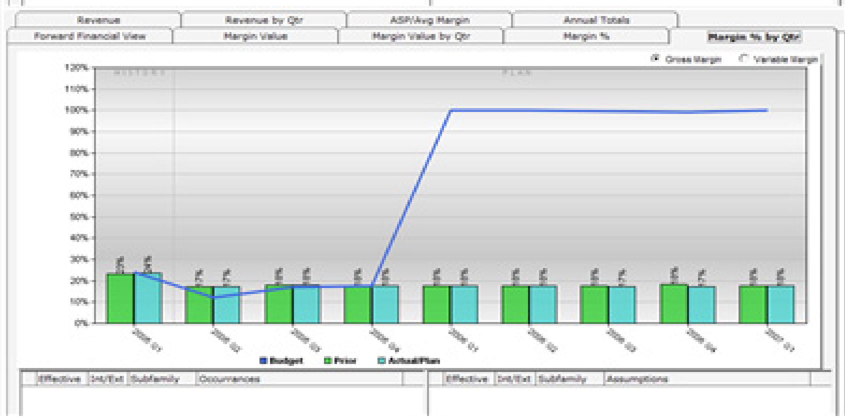


Margin Value Chart: This shows Actual/Plan Margin $, Prior Period Margin $, Prior Year Margin $, and Budgeted Margin $ by Month. Select Gross Margin (default) or Variable Margin.

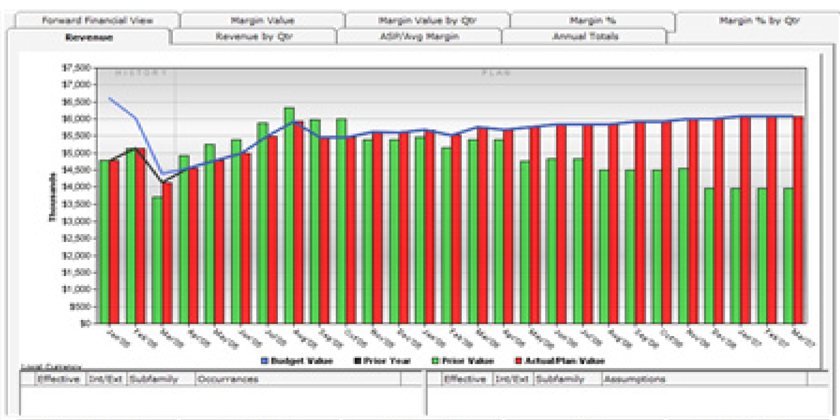
Margin $ by Qtr: This shows Actual/Plan Margin $, Prior Period Margin $, and Budgeted Margin $ by Quarter. Select Gross Margin (default) or Variable Margin.



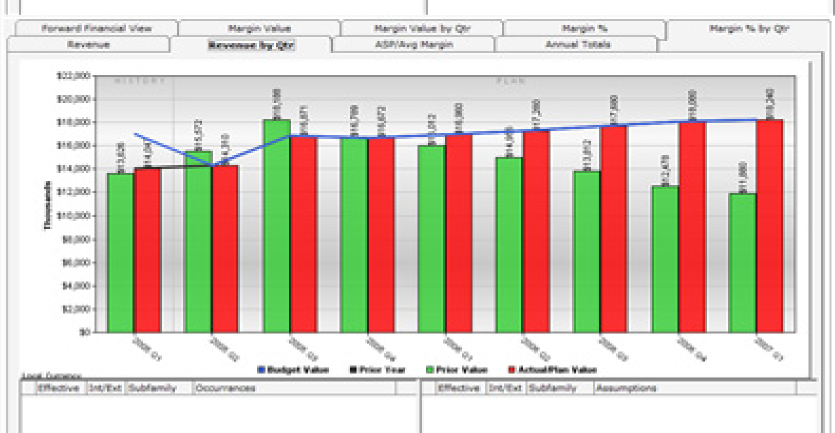
<u>Margin %</u>: This chart shows Actual/Plan Margin %, Prior Period Margin %, Prior Year Margin % and Budgeted Margin % by Month. Select Gross Margin (default) or Variable Margin.



<u>Margin % by Qtr:</u> This chart **shows** Actual/Plan Margin %, Prior Period Margin %, and Budgeted Margin % by Quarter. Select Gross Margin (default) or Variable Margin.

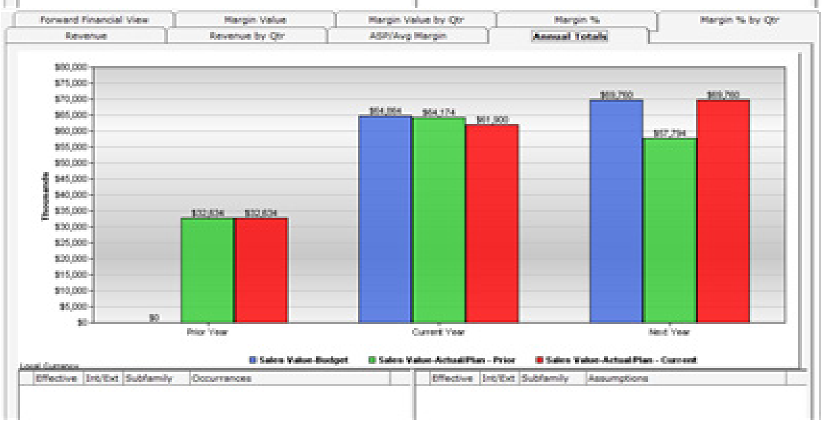


<u>Revenue:</u> Budget Revenue, Prior Year Revenue, Prior Period Revenue, and Actual/Plan Revenue by Month.



<u>Revenue by Qtr</u>: Here you can see Budgeted Revenue, Prior Year Revenue, Prior Period Revenue, and Actual/Plan Revenue by Quarter.

ASP/Avg Margin: This chart shows Average Sales Price (ASP) per Unit (Weighted), Average Gross Margin (Weighted), and Average Variable by Month.



Annual Total Sales $: This shows the Annual Total Sales for the Sales Value – Budget, Sales Value – Actual/Plan – Prior, and Sales Value – Actual/Plan – Current for Prior, Current, and Next Year.

Annual Totals

The Management Business Review - Finance Review - Annual Totals

The Annual Totals button provides annual totals for the entire company for the Prior, Current, and Next Year. The information is summarized to compare the Actual/Plan to Budget for both Current and Prior periods. It allows view of previous, current, and budgeted demand plans. These charts are expressed in (000s).

To access the Annual Totals Graphs:

Click the Annual Totals [Annual Totals] button located in the upper right corner of the Financial Appraisal.

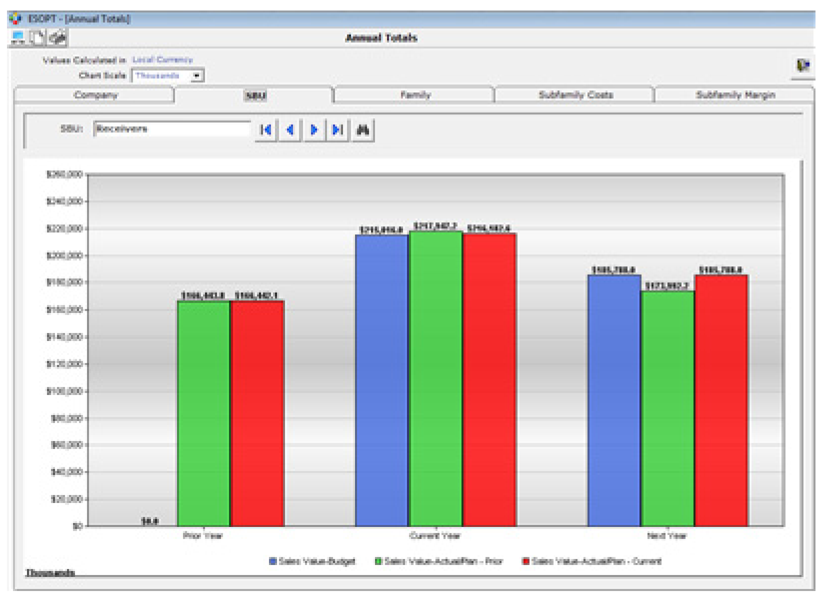
<u>Annual Totals – Company</u>

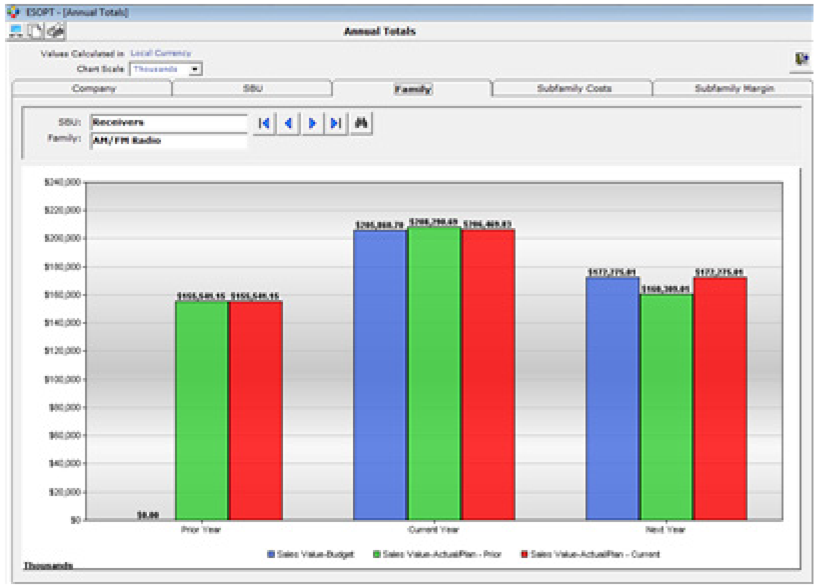
This chart provides Annual Sales Totals for the entire company for the Prior, Current, and Next Year.

<u>Annual Totals - SBU Totals</u>

This chart provides Annual Sales Totals for each SBU for the Prior, Current, and Next Year.

- Click the Record Navigation Bar to change the SBU.

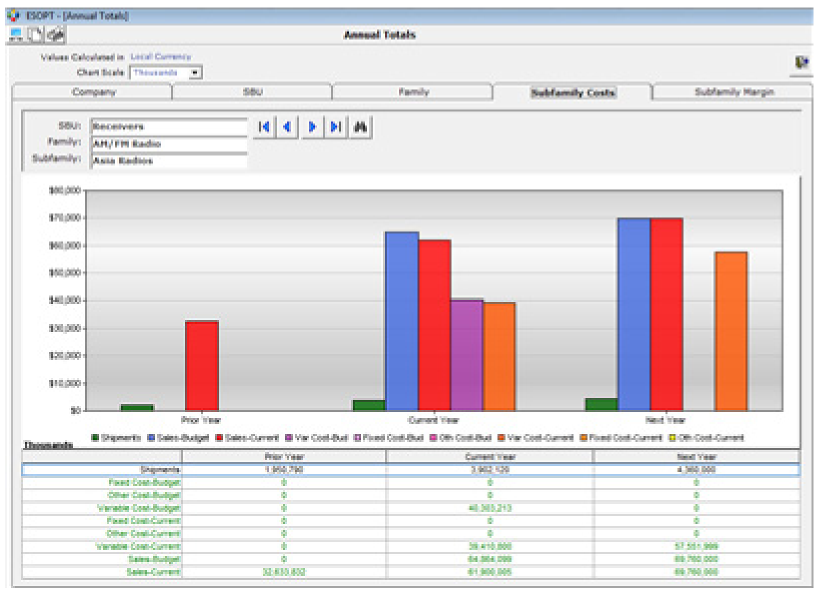




Annual Totals - Family Totals

This chart provides Annual Sales Totals for each Family for the Prior, Current, and Next Year.

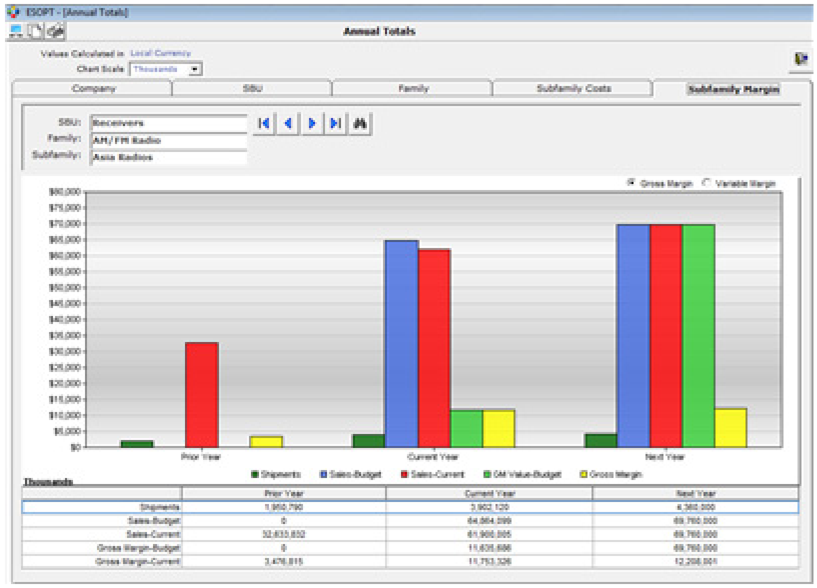
- Click the Record Navigation Bar  to change the Family.



Annual Totals - Subfamily Costs

This chart provides Annual Totals for each Subfamily for the Prior, Current, and Next Year. The costs shown are: Shipments, Sales-Budget, Sales-Current, Var Cost Budget, Fixed Cost Budget, Other Cost Budget, Var Cost Current, Fixed Cost Current, Other Cost Current.

- Click the Record Navigation Bar  to change the Subfamily.



Annual Totals- Subfamily Margin

Here you see Annual Totals for each Subfamily for the Prior, Current, and Next Year. Costs shown are: Shipments, Sales Budget, Sales Current, Gross Margin Budget, Gross Margin Current.

- Click the Record Navigation Bar to change the Subfamily.

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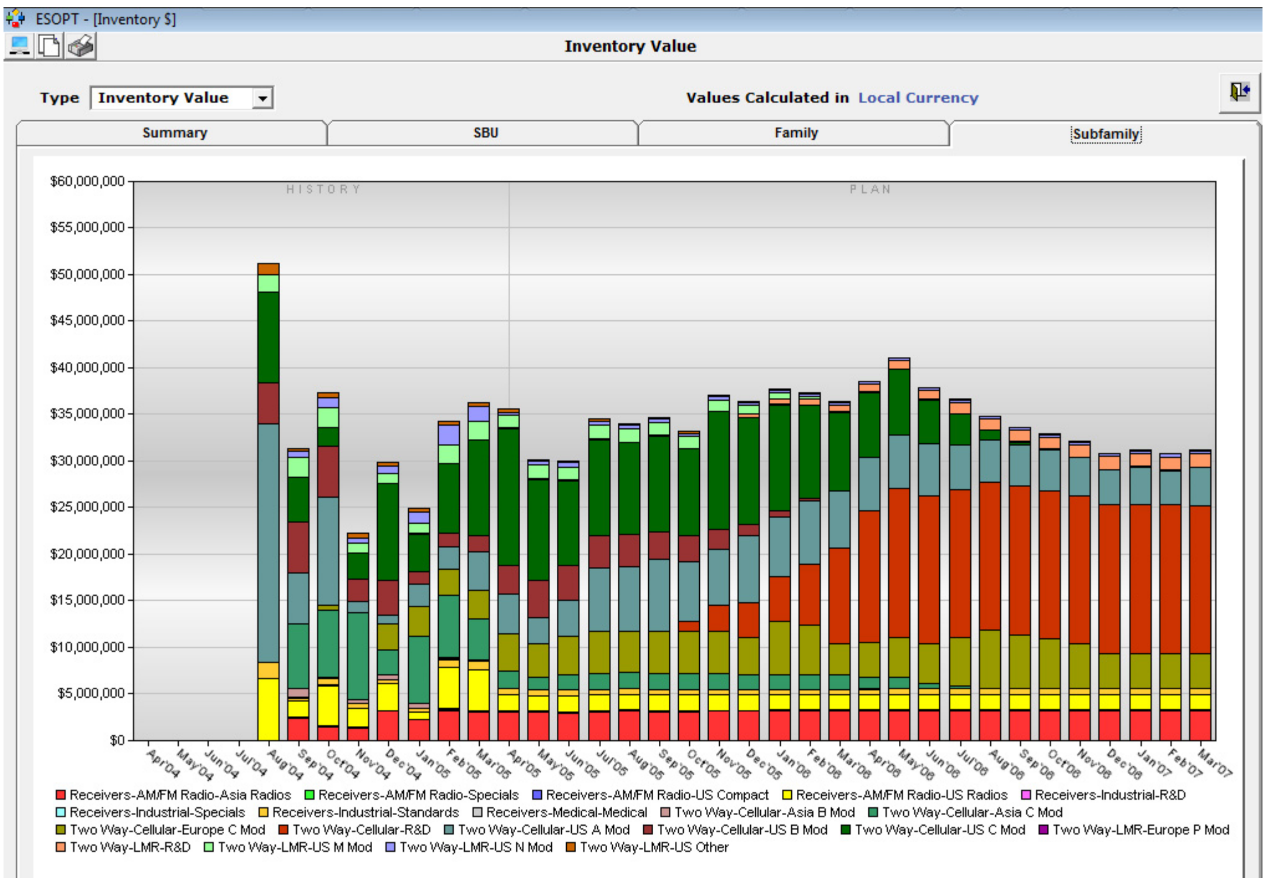
Inventory $ **The Management Business Review - Finance Review - Inventory $**

The Inventory Value graph depicts prior, current, and future projected Inventory Values. It is used to review aggregated Inventory Dollars resulting from the current actual/plan. The graphs may be viewed by total company, SBU, Family, and Subfamily in a stacked bar format. The method of calculating inventory dollars is determined by the Pricing Method and the Subfamily Type. If Pricing Method is:

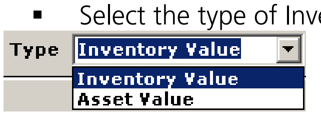
- Units, then Inventory $ are calculated by Inventory Units * Average Cost.
- Fixed, then Inventory $ are equal to Average Cost.
- Dollars, then Inventory $ are equal to Inventory Units.

To access the Inventory Dollars Graph:

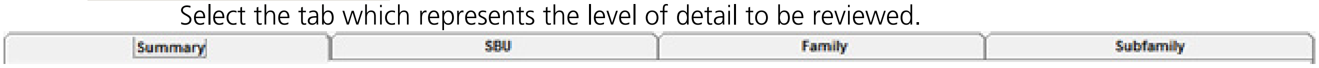
- Click the Inventory $ button Inventory $ located on the Finance Review form.



- Select the type of Inventory to be reviewed: Inventory Value or Asset Value.



Select the tab which represents the level of detail to be reviewed.



- Click the exit button to return to Finance Review.

The Management Business Review - Strategic Initiatives Review

The purpose of this screen is to provide visibility into the Management Business Review around initiatives greater than just the balance of supply and demand of products/services. As it is top management's responsibility to balance supply and demand for products/services, it is also their responsibility to balance resources for many initiatives within an organization. These other initiatives serve a much broader need and are typically linked to overall company strategy but, nonetheless, must be in balance to achieve their respective desired results. As such, the Management Business Review provides a good forum to bring all of these initiatives together.

To access the Strategic Initiatives Review forms:
From the Main Menu, select the Management Business Review button.

- Then select the Strategic Initiatives Review button, or
- From the toolbar, select Tools menu to display the drop-down menu.
- Select Management Business Review.
- Select Strategic Initiatives Review.

ESOPT - [Strategic Initiatives]

Strategic Initiatives

Strategic Initiatives

Type	Description	Owner	Status	Comments
STRATEGIC	Labor reporting with yields BOM accuracy and structure	Brad		
STRATEGIC	Standardization of tooling globally.	Brad / Tom		
STRATEGIC	Forcasting software selection	Mark / Chip		Resource Issue - DONE
STRATEGIC	Master Scheduling	Steve		Resource Issue
STRATEGIC	Inventory Record Accuracy	Steve /Brad		
STRATEGIC	ERP implemention	Tony /Tom		

<u>Entering the Information:</u>

Type
- Enter the Type of Initiative: Strategic or NPD.

Description
- Enter the Description of the Initiative.

Owner
- Enter the person(s) or position of the person responsible.

Status
- Enter the status of the Initiative of On Schedule, Ahead of Schedule, Behind Schedule, or Complete.

Comment
- Enter a Comment about the Initiative.

When you have completed entering a Strategic Initiative:
- Click the new record button to add an additional Initiative, or
- Click the exit button to return to the Management Business Review Menu.

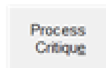
To Delete an Initiative:
- Highlight the row to be deleted by clicking on the column to the left of the initiative, and click the Delete key on your keyboard.

The Management Business Review - Process Critique

The Process Critique form maintains ratings for the Fifth Edition or Sixth Edition of the Oliver Wight ABCD Checklist for Operational Excellence. The Fifth Edition Chapter 5-2 or Sixth Edition Chapter 4 questions on Sales and Operations Planning have been pre-loaded for your company to enter its monthly ratings. This will provide you with the tools to evaluate your company's S&OP Process.

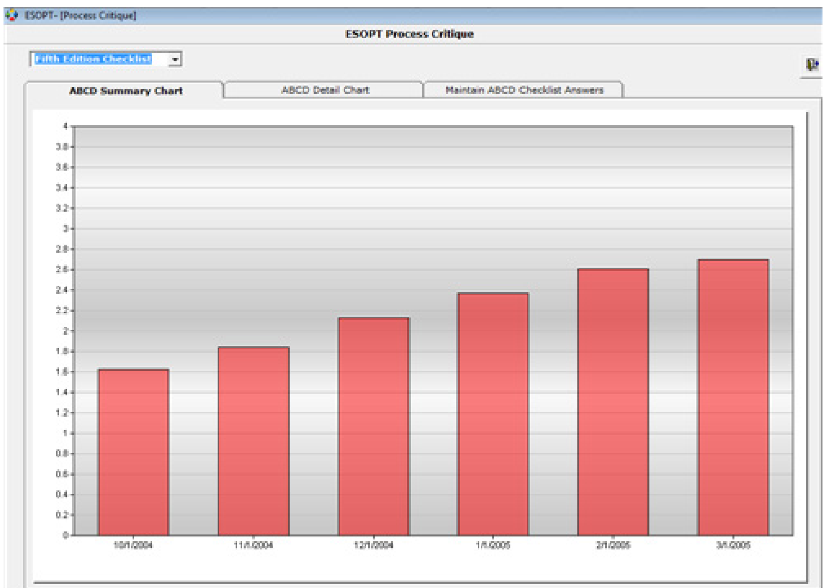
To access the Process Critique forms:

- From the Main Menu, select the Management Business Review button. 

- Then select the Process Critique button. 

or

- From the toolbar, select Tools menu to display the drop-down menu.
- Select Management Business Review.
- Select Process Critique button.



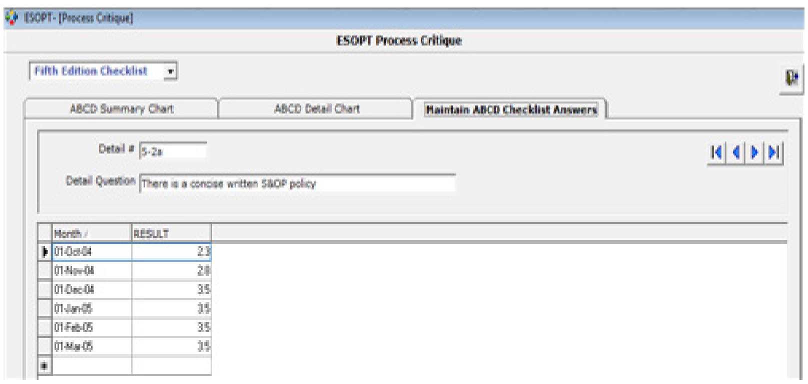
ABCD Summary Chart

The ABCD Summary chart graphically displays by month the average of all Fifth Edition Chapter 5-2 or Sixth Edition Chapter 4 questions combined. This will help review the progress that has been made toward achieving ***Class A*** status.

From the drop-down list, select Fifth Edition or Sixth Edition Checklist that your company is using to evaluate your S&OP process.

ABCD Detail Chart

The ABCD Detail Chart is used to review, in specific self-assigned ratings, the questions that make up the total chapter rating. The chart will aid the company in determining where specific improvement is needed. It is recommended that all relative questions from the chapter be considered during this meeting. Current month's ratings and the two prior are shown.



Month	RESULT
01-Oct-04	2.3
01-Nov-04	2.8
01-Dec-04	3.5
01-Jan-05	3.5
01-Feb-05	3.5
01-Mar-05	3.5

Maintain ABCD Checklist Answers

The Maintain ABCD Checklist Answers tab is used to input self-assigned ratings for the Fifth Edition Chapter 5-2 or Sixth Edition Chapter 4 questions chosen for monitoring by management.

To Update the ABCD Checklist Ratings:

- Click the Record Navigation Bar to select the question you wish to rate for the selected time period.
- Click on the drop-down list down arrow for the Month and Year, and select the appropriate date, or manually enter the Month, Day (01) and Year in the Month box.
- Enter the appropriate ratings for the selected question in the Answer box.

When you have completed entering Checklist Ratings:

- Click the exit button to return to Management Business Review.

Agenda

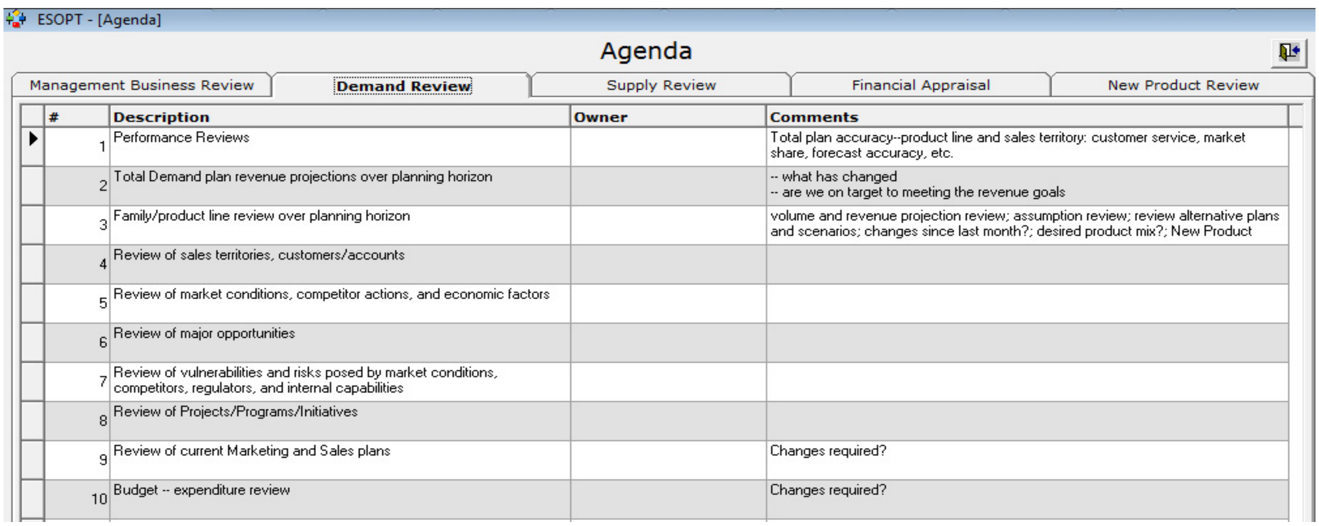
The Management Business Review - Agenda

The purpose of the Management Business Review Agenda form is to provide a suggested agenda for the Management Business Review, Demand Review, Supply Review, and Financial Appraisal meetings. Each agenda may be customized to meet your specific company's needs.

To access the Agenda forms:

Do one of the following:

- From the Main Menu, select the Management Business Review button. Management Business Review
- Then select the Agenda button Agenda
  or
- From the toolbar, select the Tools menu to display the drop-down menu.
- Select Management Business Review.
- Select Agenda.

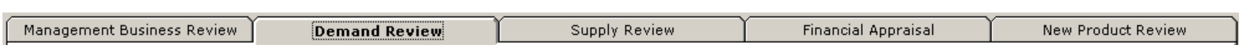

ESOPT - [Agenda]

Agenda

Management Business Review | Demand Review | Supply Review | Financial Appraisal | New Product Review

#	Description	Owner	Comments
1	Performance Reviews		Total plan accuracy--product line and sales territory: customer service, market share, forecast accuracy, etc.
2	Total Demand plan revenue projections over planning horizon		-- what has changed -- are we on target to meeting the revenue goals
3	Family/product line review over planning horizon		volume and revenue projection review; assumption review; review alternative plans and scenarios; changes since last month?; desired product mix?; New Product
4	Review of sales territories, customers/accounts		
5	Review of market conditions, competitor actions, and economic factors		
6	Review of major opportunities		
7	Review of vulnerabilities and risks posed by market conditions, competitors, regulators, and internal capabilities		
8	Review of Projects/Programs/Initiatives		
9	Review of current Marketing and Sales plans		Changes required?
10	Budget -- expenditure review		Changes required?

Select the tab for the meeting agenda you would like to review or change.



Entering the Information:

Number (#)

- Enter the Agenda Item number or order of the Agenda Items to be discussed.

Description

- Enter the Description of the Agenda Item.

Owner

- Enter the person(s) or position of the person to lead the discussion for the Agenda Item.

Comments

- Enter additional Comments or expected outcome.

When you have completed entering an Agenda Item:

- Click the New Record button to add an additional item, or
- Click the Exit button to return to the Management Business Review Menu.

Printing and Exporting Reports

The ESOP Tool provides the ability to print the Pre-Management Business Review Meeting kit and the Management Business Review Meeting kit. The Report selection menus also provide the ability to Print or to Export individual reports to be used for analysis of a specific area.

Printing the Management Business Review Toolkit

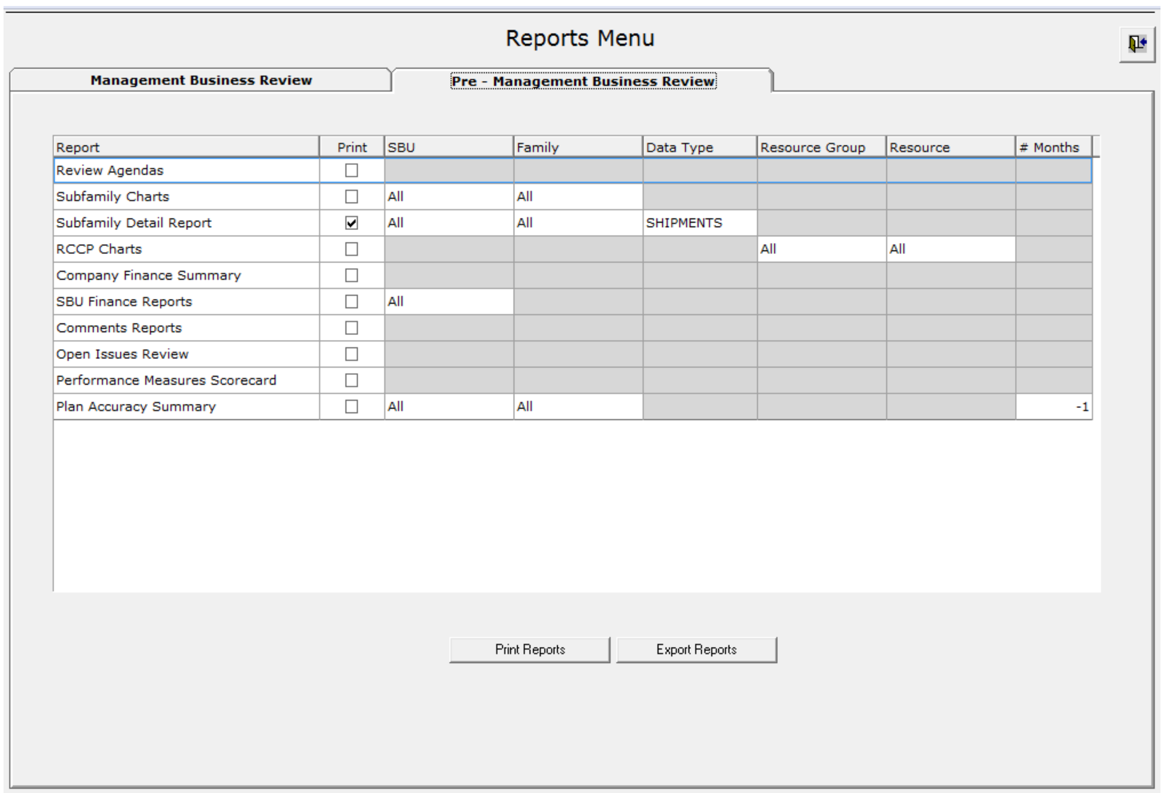
The reports can print to the printer, defined as the default printer for the Workstation, or be exported to several different file formats which may be saved to disk, e-mailed, or posted on a network or intranet.

To access the Reports Menu:

- From the toolbar, select Reports to launch the Reports module.
- Select either Management Business Review or Pre-Management Business Review.

Pre-Management Business Review & Management Business Review

The available reports are listed by category (Pre-Management Business Review or Management Business Review).



Report	Print	SBU	Family	Data Type	Resource Group	Resource	# Months
Review Agendas	☐						
Subfamily Charts	☐	All	All				
Subfamily Detail Report	☑	All	All	SHIPMENTS			
RCCP Charts	☐				All	All	
Company Finance Summary	☐						
SBU Finance Reports	☐	All					
Comments Reports	☐						
Open Issues Review	☐						
Performance Measures Scorecard	☐						
Plan Accuracy Summary	☐	All	All				-1

To Generate the Toolkit:

- Click on the appropriate tab to select the reports you wish to print or export.
- Place a check mark in the box beside the report you wish to print or export.
- Click the ‘Print Reports’ button or the ‘Export Reports’ button.

If you have selected ‘Export Reports,’ as each report is processed, you will be asked to select the export format and location of the file to create. The export formats are listed below.

- Adobe® Format (PDF)
- HTML 3.2
- HTML 4.0
- MS® Excel 97-2000
- MS® Excel 97-2000 (Data only)
- MS® Word
- Record style (columns no spaces)
- Record style (columns with spaces)
- Rich Text Format
- Separated Values (.csv)
- Tab-separated text
- Text
- XML

Note: When you export a report to a file format other than Adobe Format (.PDF), MS Word (.DOC), HTML (.HTM), or XML, you may lose some or all of the formatting that appears in your report. However, the program attempts to preserve as much formatting as the export format allows. An example of each report is available in the SampleReports.pdf located in the Application\Support\Folder.

Data Management Tools

The ESOP Tool provides various utilities to help manage the company's data contained in the database as well as the database itself.

Data Management Tools

Roll Month
Utility Menu
- Import ESOPT Data Manager
- Scenario Manager
- Import Resource Plan Data Manager
- Import BOM Data Manager
- Import Calendar Data Manager
- Import Comments
- Import Distribution
- Export Manager
- Pivot Table Menu
- Database Utility > Shrink Database
- System Information

Data Tables
- ESOP Data
- ESOPT Gap Report

Global Supply Utilities
- Global Set Production to Demand + Orders
- Global Set Production to Demand + Orders + Dep Demand - Pur Options
- Display Preferences
- Company Settings
- Pivot Table

Roll Month

The Roll Month process moves all monthly Supply, Demand, and Budget data to the previous monthly period. It should be performed each month following the Sales and Operations Planning meeting for the purpose of updating actual data and preparing for the next monthly Sales and Operations Planning review cycle.

The following is an outline of the steps which occur.

Prepare the Database

Perform a backup of the database file.

- Perform the Monthly Roll Function (see Performing the Roll Month Function).

Review Demand

1. Update Actual Data for Bookings, Orders, Shipments, Average Sell Price, and Average Cost.
2. Review Sales Plan performance accuracy.
3. Validate and update the Sales Plan (volume and pricing).
4. Review charts.
5. Review and document significant assumptions.

Review Supply

1. Update Actual data for Production and Ending Inventory.
2. Review Production Plan performance accuracy.
3. Review charts (Current vs. Plan to review for changes on Inventory/Backlog).
4. Validate plan (Production Plan, Inventory, and/or Backlog) as per objectives.
5. Review Resource Planning Charts.
6. Review and document significant assumptions.
7. Document options/alternatives.

Recommended Updates of Historical Data after Performing the Roll Month

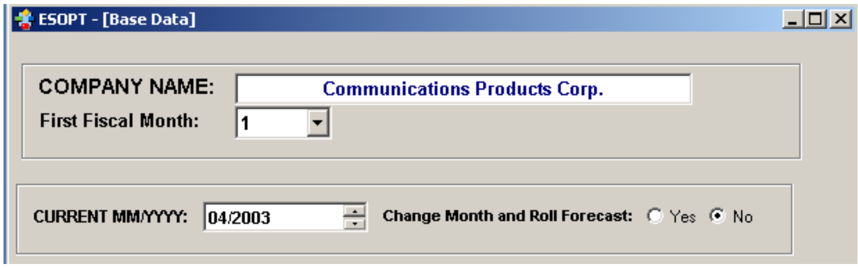
The following table represents the data that may be updated following the Roll Month process. The data will provide an accurate representation of history. Please discuss the plan for updating actual history with an Oliver Wight representative, as ESOP Tool structures and implementations may vary. Updates may be automated using the Import Menu and Ongoing Import.

Description	Period -1	Period -2
Bookings	Actual Orders (in units) booked during the month	No update needed
Demand	No update needed	No update needed
Orders	No update needed	No update needed
Dependant Demand	No update needed	No update needed
Production	Actual units produced during the month	No update needed
Purchases	Actual units purchased during the month	No update needed
Inventory	Actual inventory (in units) at the end of the month	No update needed
Backlog	No update needed	Actual backlog (in units) at the end of the month
Shipments	Actual units shipped during the month	No update needed
Sell $ (ASP)	Actual ASP during the month - total revenue/shipped units	No update needed
Cost $ (AC)	Actual avg. cost during the month - total cost/shipped units	No update needed

<u>Performing the Roll Month Function</u>

To access the Roll Month Function:

- From the Main Menu toolbar, select **Tools** to display a drop-down menu.
- Select the **Add/Edit/Delete Menu**.
- Select **Base Data**.



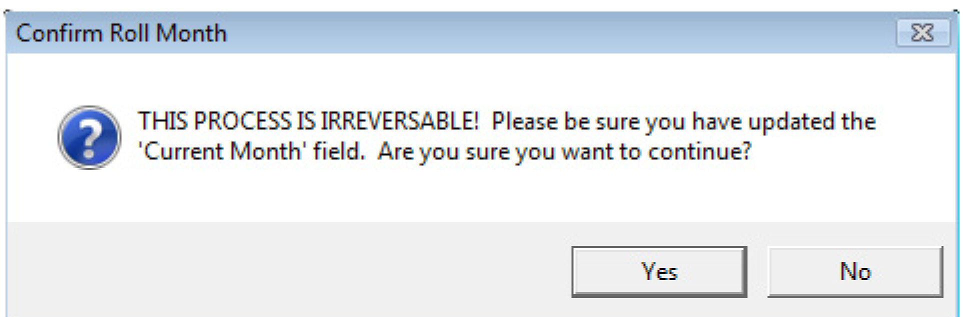
Enter the Following fields:

Current MM/YYYY

- Enter the Current Month and Year in the mm/yyyy format.

Change Month and Roll Forecast Box

- Check the Change Month and Roll Forecast box
- When you have checked the Change Month and Roll Forecast button, the following message will be displayed:



- Select Yes
- When the process is completed successfully, the following message is displayed.

- Select OK.
- Proceed with the Demand Review and Supply review steps indicated above.

Import ESOPT Data Manager

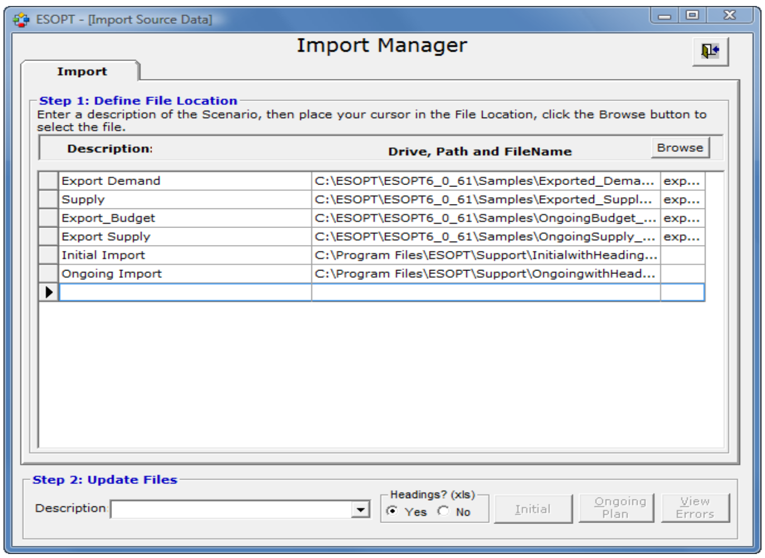
The Import ESOPT Data Manager provides a means of importing the company's initial data for startup of the Enterprise Sales and Operations Planning Tool and also importing data to the database on an ongoing basis. The data may be interfaced from another system such as an MRP/ERP system. See the Data Formats section below for the required format of the import data.

To access the Import Menu:

- From the Main Menu toolbar, select Tools to display a drop-down menu.
- Select the Utilities Menu.
- Select Import ESOPT Data Manager.

Step 1: Define file location

Step 1 must only be performed if you are defining a new Import file for the ESOP Tool. If you are using a predefined, existing file, skip to Step 2.



To define the Import file for the Tool:

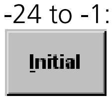
- Enter a description.
- Click in the Drive Path Filename field.
- Click Browse to select the file to import.

If a file has a designation of 'export,' this indicates the file was generated using the 'Export Manager.'

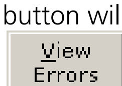
Step 2: Update Files

- From the drop-down list, select the description of the file you want to import.

Step 3: Select 'Initial' or 'Ongoing' import

To load initial start-up data in periods -24 to -1: ▪ Select the Initial Load button 	To maintain data on an ongoing basis: ▪ Select the Ongoing Plan button 

If errors were detected during the load, the 'View Errors' button will be activated.

- Select the View Errors button to view the errors. 

Data Format - General
The Import files may be Comma Delimited (.csv) or Spreadsheet (.xls) format. If the Spreadsheet format is used, the Worksheet name must be **'Initial'** for the Initial import and **'Ongoing'** for the Ongoing import. Column headings should not be included in either format.

Data Format – Initial Load
The following table represents the format (indicated in red) required to import records. The actual data which will be imported is noted in blue. This may be used to import historical data (periods –24 to –1) for the initial load of the database. Any SBU, Family, Subfamily combinations not currently existing in the Group Master will be added. The initial import may be used to automatically add Subfamilies.

Initial Load – import file format (28 columns)

DESC	SBU	FAMILY	SUBFAMILY	SORT	-24	-23	…	-3	-2	-1
BOOKINGS				**1**						
UNCONSTRAINED DEMAND				**35**						
DEMAND				**2**						
DEMAND PROBABILITY				**36**						
ORDERS				**3**						
PRODUCTION				**4**						
INVENTORY				**5**						
BACKLOG				**6**						
SHIPMENTS				**7**						
ASP (Average Selling Price)				**8**						
AC (Average Cost)				**9**						
BUDGET-SHIP UNITS				**10**						
BUDGET-PROD UNITS				**11**						
BUDGET-SALES $				**12**						
BUDGET-COGS $				**13**						
DEP DEM				**14**						
PURCHASES				**15**						
TARGET INVENTORY				**16**						
ABP (Average Booking Price) [1]				**17**						
MIN Target[2]				**18**						
MAX Target[2]				**19**						
INVCOST (Average Inventory Cost)[2]				**20**						
AFC (Average Fixed Cost)[3]				**27**						
AOC (Average Other Variable Cost) [4]				**28**						
BUDGET- Fixed Cost[3]				**29**						
BUDGET- Other Variable Cost [4]				**30**						
AVC (Average Variable Cost) [3]				**31**						
BUDGET- Variable Cost [3]				**32**						
AOC2 (Average Other Variable Cost 2) [4]				**33**						
BUDGET- Other Variable Cost 2[2]				**34**						

Data Format - Ongoing Maintenance

This table represents the format (indicated in red column headings) required to import records following the initial load of the database. This format may be used to maintain ongoing data. Notice the Projected Inventory, Backlog, and Shipment data in periods 1-24 will be replaced because they are calculated fields. Periods -1 to 24 are included in the Ongoing Import.

Ongoing Maintenance –Import File format (29 columns)

DESC	SBU	FAMILY	SUBFAMILY	SORT	-1	1	2	3	·	·	·	·	·	·	23	24
BOOKINGS				**1**												
UNCONSTRAINED DEMAND				**35**												
DEMAND				**2**												
DEMAND PROBABILITY				**36**												
ORDERS				**3**												
PRODUCTION				**4**												
INVENTORY				**5**												
BACKLOG				**6**												
SHIPMENTS				**7**												
ASP (Average Selling Price)				**8**												
AC (Average Cost)				**9**												
BUDGET-SHIP UNITS				**10**												
BUDGET-PROD UNITS				**11**												
BUDGET-SALES $				**12**												
BUDGET-COGS $				**13**												
DEP DEM				**14**												
PURCHASES				**15**												
TARGET INVENTORY				**16**												
ABP (Average Booking Price) [1]				**17**												
MIN Target[2]				**18**												
MAX Target[2]				**19**												
INVCOST (Average Inventory Cost)[2]				**20**												
AFC (Average Fixed Cost) [3]				**27**												
AOC (Average Other Variable Cost) [4]				**28**												
BUDGET- Fixed Cost [3]				**29**												
BUDGET- Other Variable Cost [4]				**30**												
AVC (Average Variable Cost) [3]				**31**												
BUDGET- Variable Cost [3]				**32**												
AOC2 (Average Other Variable Cost 2) [4]				**33**												
BUDGET- Other Variable Cost 2[2]				**34**												

The following rows are used for optional features:

1 May be imported if using Bookings Value. Bookings Value must be activated before importing Average Bookings Price.
2 May be imported if using Inventory Cost. Inventory Cost must be activated before importing.
3 May be imported if using Detailed Costs. (Fixed and Variable) Must activate Detailed Cost before importing.
4 May be imported if using Other Variable Costs. Must activate Other Cost before importing.

Description of Imported Data

DESC	SORT	
BOOKINGS	**1**	Bookings are orders received in a particular period. Typically in a make-to-stock environment, Bookings will be equal to Shipments. In a make-to-order environment, bookings may differ from the actual need date and, thus, the Demand date is also required.
UNCONSTRAINED DEMAND	**35**	Unconstrained Demand is a forecasted need for a particular product or component that is not constrained by Resources or Materials.
DEMAND	**2**	Demand is a forecasted need for a particular product or component. The Demand could come from any number of sources, such as customer order History, forecast, interplant, branch warehouse, or service part. Note: should be stated net of consumed forecast.
DEMAND PROBABILITY	**36**	Probability of the Demand represented in a percentage.
ORDERS	**3**	Orders are the time-phased split of Backlog. The sum of all open Orders should be equal to the beginning Backlog.
PRODUCTION	**4**	The Production Units produced or planned to be produced
INVENTORY	**5**	The previous month's ending Inventory balance may be entered in the -1 period. Future Inventory is calculated.
BACKLOG	**6**	Sales Order Units which have been received but not yet shipped. The Backlog field is normally only entered during the initial setup of the Plan in History. It is calculated in the -1 period as the sum of future orders and in future Plan. See Formulas.
SHIPMENTS	**7**	Enter the Actual prior month's Shipments, in Units, in the –1 period field. Future Shipments are calculated.
ASP (Average Selling Price)	**8**	The Average Sales Price per Unit (or unit of measure for the Subfamily) of the items in the Subfamily.
AC (Total Average Cost)	**9**	Enter previous month's ending Avg Cost in the –1 period. If you have set your ESOPT application options to include Additional Costs, future cost calculations here are displayed only and come from data entered into the Supply Review's Cost tab Cost lines. (See Cost – Data)
BUDGET-SHIP UNITS	**10**	Budgeted Units to be shipped by month.
BUDGET-PROD UNITS	**11**	Budgeted Units to be produced by month.
BUDGET-SALES $	**12**	Budgeted Sales Value by month, entered in the currency of the Subfamily.
BUDGET-COGS $	**13**	Budgeted cost (COGS) to produce the Production Units, entered in the currency of the Subfamily.
DEP DEM	**14**	The Dependent Demand Units field is a calculated field. See BOM. The Dependent Demand may be imported by setting 'Calculated Dependent Demand' to 'No' for the Subfamily.
PURCHASES	**15**	The Units purchased or planned to be purchased from an outside source or plant.
TARGET INVENTORY	**16**	The Target Inventory Represented in Days or Units. The Target Inventory Unit of Measure setting for the Subfamily determines whether the Target Inventory should be input in Days or Units.
ABP (Average Booking Price) [1]	**17**	Average Bookings Price for the Subfamily, used to calculate Bookings value.
MIN Target[2]	**18**	The Minimum Inventory Target represented in Days or Units. The Target Inventory Unit of measure setting for the Subfamily determines whether the Minimum Inventory should be input in Days or Units.

MAX Target[2]	**19**	The Maximum Inventory Target represented in Days or Units. The Target Inventory Unit of Measure setting for the Subfamily determines whether the Maximum Inventory Target should be input in Days or Units.
INVCOST (Average Inventory Cost)[2]	**20**	The Average Inventory Cost is an optional field. If Inventory Cost is activated, this row may be imported and used to calculate Inventory Value. If Inventory Cost is not enabled, Inventory Value is calculated by Inventory Units * Average Cost. Inventory Cost may be activated by Subfamily on the Inventory Target tab or globally using the Options form.
AFC (Average Fixed Cost)[3]	**27**	The Average Fixed Cost is the cost of the product which is fixed, such as overhead.
AOC (Average Other Variable Cost)[4]	**28**	Average Other Cost is an optional field. It may be used to track additional Variable Cost. Average Other Cost + Average Other Cost2 + Average Variable Cost = Average Total Variable Cost.
AOC2 (Average Other Variable Cost 2)[4]	**33**	Average Other Cost2 is an optional field. It may be used to track additional Variable Cost. Average Other Cost + Average Other Cost2 + Average Variable Cost = Average Total Variable Cost.
BUDGET- Fixed Cost[3]	**29**	Budgeted Fixed Cost Value. The cost of the product which is fixed, such as overhead.
BUDGET- Other Variable Cost[4]	**30**	Budgeted Other Variable Cost Value
BUDGET- Other Variable Cost 2[4]	**34**	Budgeted Other Variable Cost 2 Value
AVC (Average Variable Cost)[3]	**31**	Average Variable Cost is an optional field. It may be used to track Variable Cost. Average Other Cost + Average Variable Cost = Average Total Variable Cost.
BUDGET- Variable Cost[3]	**32**	Budgeted Variable Cost Value.

Imported Data

The screens below show the sort code (indicated in red) needed to import the data. After imported, the data may be reviewed and updated if needed. Some data elements may be displayed in more than one screen. The data in gray cells is either calculated data or data shown in the screen for inquiry only.

Demand Review / Supply Review – Units Tab

Units

	History				
Period-	-3	-2	-1	1	2
MM/YY-	01/05	02/05	03/05	04/05	05/05
1 Bookings	0	0	0	0	
2 Demand	405,000	376,400	230,000	290,000	310,00
3 Orders	0	0	0	0	
14 Dep. Dem.	0	0	0	0	
4 Production	360,000	390,400	240,000	145,000	155,00
15 Purchases	0	0	0	145,000	155,00
16 Inventory	192,507	257,407	237,407	237,407	237,40
6 Backlog	0	0	0	0	
7 Shipments	292,620	325,500	260,000	290,000	310,00
8 Ave Sell/ASP	$16.30	$15.80	$15.90	$15.70	$15.4
9 Ave Cost/AC	$11.50	$12.50	$12.70	$13.94	$13.7

Financial Appraisal – Budget Worksheet

Budget Worksheet | Budget Cost | Incom

	History			
	-3	-2	-1	1
Budget	01/05	02/05	03/05	04/05
10 Ship Units	405,000	381,000	276,000	306,0
11 Prod Units	360,000	360,000	300,000	300,0
12 Sales Value	6,601,500	6,019,800	4,388,400	4,804,2
13 Cost Value	4,657,500	4,762,500	3,505,200	3,947,4
Margin	1,944,000	1,257,300	883,200	856,8
Plan				
Ship Units	292,620	325,500	260,000	290,0
Sales Value	4,769,706	5,142,900	4,134,000	4,553,0
Cost Value	3,365,130	4,068,750	3,302,000	4,041,7
Margin Value	1,404,576	1,074,150	832,000	511,2

Supply Review – Cost Tab

Units | Cost

	History				
	-3	-2	-1	1	2
	01/05	02/05	03/05	04/05	05/0
Avg Total Cost 9	12	13	13	14	14
Avg Fixed Cost 27	0	0	10	10	10
Avg Other Cost 28	0	0	2	2	2
Avg Var Cost 31	0	0	2	2	2
Inv Avg Cost 20	0	0	0	13	13

Financial Appraisal – Budget Cost

Budget Worksheet | Budget Cost | Income Stateme

	History			Year: 1	2
	-3	-2	-1	1	2
	01/05	02/05	03/05	04/05	05/05
13 Tot Cost	4,657,500	4,762,500	3,505,200	3,947,400	4,013,20
29 Fixed Cost	0	0	0	0	0
30 Other Cost	0	0	0	0	0
33 Other Cost 2	0	0	0	0	0
32 Var Cost	0	0	0	3,947,400	4,013,20

Supply Review – Inventory Tab

Units | Cost
Inventory Target | Comments Subfamily | C

DESC		1	2	3	4
Inv Avg Cost	20	$12.90	$12.70	$12.60	
Target Inventory	16	230000	230000	230000	
Min Target	18	200000	200000	200000	
Max Target	19	300000	300000	300000	

Demand Review – Bookings Value Tab

Units | Value | Waterfall | Bookings Value

Activate	History			Plan											
Period-	-3	-2	-1	1	2	3	4	5	6	7	8	9	10	11	12
MM/YY-	01/05	02/05	03/05	04/05	05/05	06/05	07/05	08/05	09/05	10/05	11/05	12/05	01/06	02/06	03/06
Bookings	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Avg Booking 17 Price	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Scenario Manager

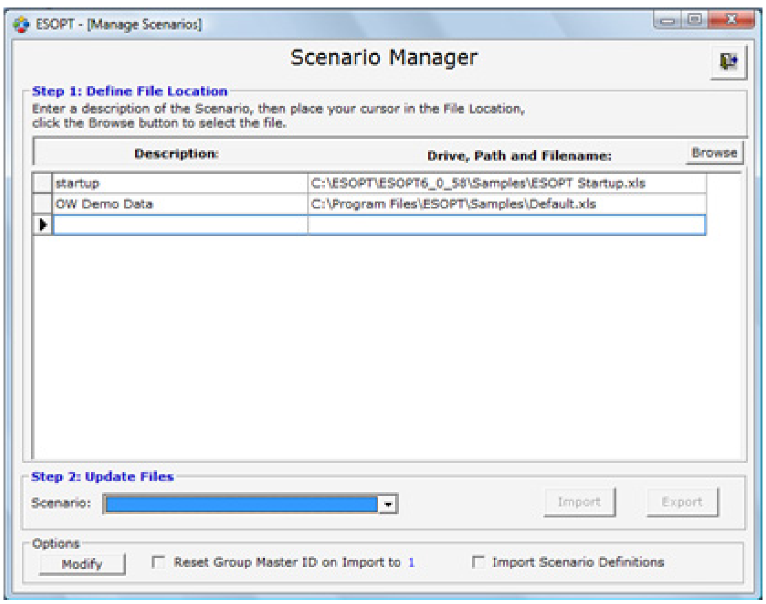
The Scenario Manager provides a means of managing “what-if” simulations. Plans may be imported and exported for review of the impact on financials and capacity. Unlimited scenarios may be maintained. The Scenario Manager may also be used to back up your data. If you are working in a shared database on a network, be sure that all users are out of the ESOP Tool before you import a Scenario. You may also want to Compact and Repair following a Scenario Import.

To access the Scenario Manager:

- From the Main Menu toolbar, select ‘Tools’ to display a drop-down menu.
- Select the Utilities Menu.
- Select Scenario Manager.

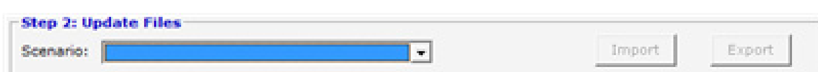
Managing Scenarios

The Scenario Manager imports and exports in Microsoft Excel® format. .csv and .xls formats are supported. The Import function will overwrite any existing data in the database. Export any data you wish to maintain and use the Import function with caution. The current data, or Scenario, you are working with should be saved by Exporting prior to new Scenarios being Imported.



Step 1: Define the file

- Enter a description of the Scenario.
- Click in the Drive, Path, and Filename field. If you are creating a new Scenario, enter the Drive, Path, and Filename with the .csv or .xls extension. If you are importing an existing Scenario, click the Browse button to select the file.



Step 2: Update Files

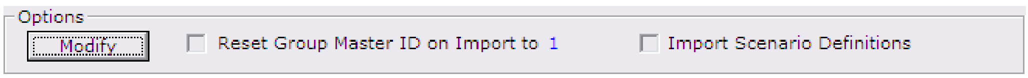
- From the drop-down list, select the description of the Scenario you will be Importing from or Exporting to.

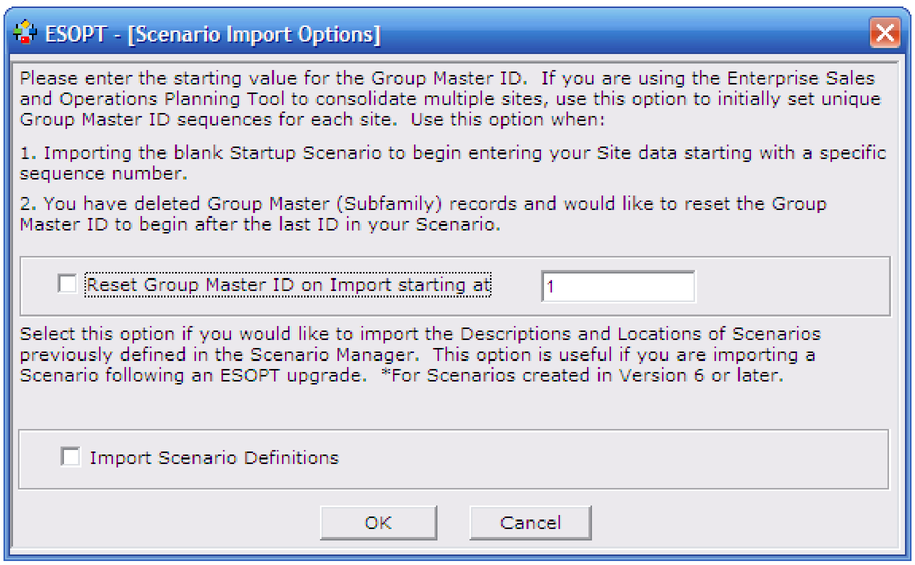
Step 3: Select 'Import' or 'Export'

To Import a Scenario, ▪ Select the Import button Import	To export a Scenario, ▪ Select the Export button Export. (An Excel file created will contain tabs that correspond to each of the Database Tables Exported).

Step 4: Select 'Options'

You have the option to Reset Group Master ID to 1 when you import the Scenarios and/or Import Scenario Definitions. You use either or both of these options by clicking on the Modify button. A secondary window appears so you can select these options. The Group Master ID can be set to 1 or any other numeric value to start the number of IDs.





Resource Plan Manager

The Resource Plan Manager provides a means of importing and exporting the Resource Master and the Load Profile data. The file should be created in a .csv or comma delimited format. Any software which supports the .csv format may be used to create or edit the file. The import allows for all Resource Groups and Resources or specific Resource Group and Resource to be selected. The Import will delete existing Resource Master or Load Profile Data and replace it with the data imported. If you experience problems with the Import, check the file in Notepad, Wordpad, or a basic text editor, to be sure there are no extraneous commas or characters which you may not be able to see in spreadsheet software. The data may be interfaced from another system such as an MRP/ERP system. See the **Data Formats** section below for the required format of the imported data.

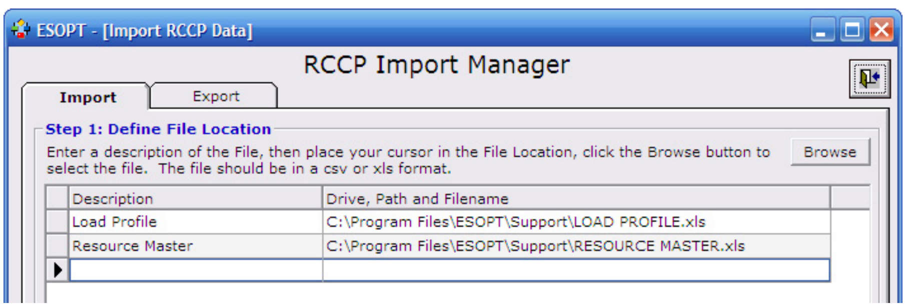
To access the Import Menu:

- From the Main Menu toolbar, select Tools to display a drop-down menu.
- Select the Utilities Menu.
- Select Resource Plan Manager.

Resource Plan Manager

Step 1: Define file location

Step 1 must only be performed if you are defining a new Import file for the ESOP Tool. If you are using a predefined, existing file, skip to Step 2.



To define the Import file for the Tool:

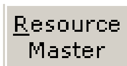
- Enter a description.
- Click in the Drive, Path, and Filename field.
- Click Browse to select the file to import.

Step 2: Select Resource Group and/or Resource

- From the drop-down list, select the Resource Group and/or the Resource. Selecting ALL will select all options under the Resource Group and/or Resource.

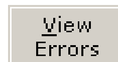
Step 3: Update Files

- From the drop-down list, select the description of the file you want to import.

Step 4: Select the Resource Master button	or: Select the Load Profile button
▪ 	▪ 

If errors were detected during the load, the 'View Errors' button will be activated.

- Select the View Errors button to view the errors.



Data Format

The following tables represent the format (indicated in red) required to import records. The format of the file can be Comma Separated Values .csv or Excel .xls. The actual contents of the file are noted below in blue. This may be used to import future data (periods 1 to 24) for the Resource Plan.

Requirements:

- .csv: No column headings
- .xls: No column headings; Worksheet name should be 'RESOURCE MASTER'

Resource Master

RESOURCE GROUP	RESOURCE	UM	DEM	PLAN	MAX	FROM	TO
Labor	Mexico Dir Labor	FTE	78	78	94	01/01/2002	12/31/2008
Active	US N Dir Labor	FTE	670	670	811	01/01/2002	12/31/2008
Labor	US S Dir Labor	FTE	395	395	478	01/01/2002	12/31/2003
Mexico	Mexico Radio Assy	Units	6020	6020	12040	01/01/2002	02/28/2003
Mexico	Mexico Radio Assy	Units	12040	12040	12040	03/01/2003	12/31/2008
Active	US N Test & Pkg	HRS	1900	1900	2450	01/01/2002	12/31/2008
Active	US N Cell Assy	Units	43200	43200	86400	01/01/2002	12/31/2008
U.S.	US N Rot Penang	Units	4950	4950	4950	01/01/2002	07/31/2003
U.S.	US N Toyo Comm	Units	13464	13464	13464	01/01/2002	12/31/2008
U.S.	US N Toyo Ind	Units	1469	1469	1469	01/01/2002	12/31/2008
U.S.	US S Cell Assy	Units	43200	43200	64800	01/01/2002	12/31/2003
U.S.	US S Ind Assy	Units	2218	2218	3326	01/01/2002	06/30/2003
U.S.	US S Radio Assy	Units	5040	5040	7560	01/01/2002	12/31/2008
U.S.	US N Rot Penang	Units	4950	7500	7500	08/01/2003	12/31/2008
U.S.	US S Ind Assy	Units	2218	5000	6000	07/01/2003	02/28/2004
U.S.	US S Ind Assy	Units	2218	7000	8000	03/01/2004	12/31/2008
U.S.	US S Cell Assy	Units	43200	21000	32000	01/01/2004	05/31/2004
U.S.	US S Cell Assy	Units	43200	10000	15000	06/01/2004	12/31/2008
U.S.	US S Dir Labor	FTE	385	200	240	01/01/2004	05/31/2004
U.S.	US S Dir Labor	FTE	385	100	120	06/01/2004	12/31/2008

Load Profile

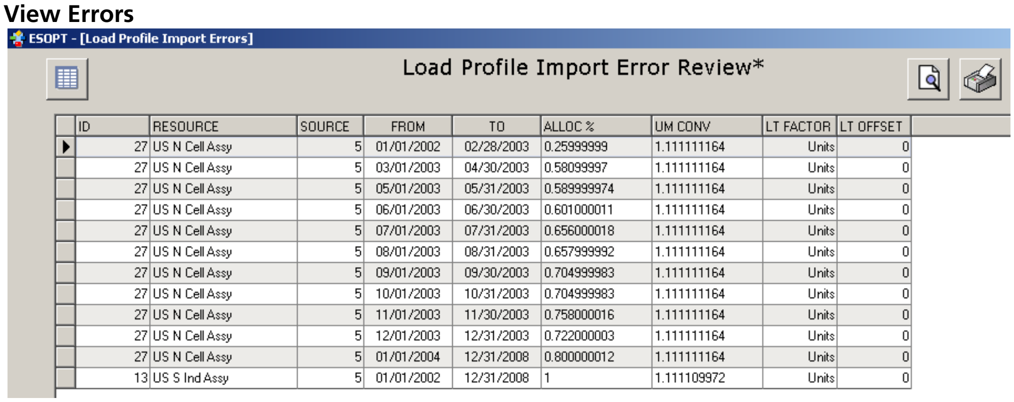
GROUP MASTER ID	RESOURCE	SOURCE*	FROM	TO	ALLOC %	UM CONV	UM FACTOR	LT OFFSET
6	Mexico Dir Labor	5	01/01/2002	12/31/2008	0.35	0.000426	FTE	0
6	Mexico Radio Assy	5	04/01/2003	04/30/2003	0.241	1.0204082	Units	0
6	Mexico Radio Assy	5	05/01/2003	05/31/2003	0.331	1.0204082	Units	0
6	Mexico Radio Assy	5	06/01/2003	06/30/2003	0.356	1.0204082	Units	0
6	Mexico Radio Assy	5	12/01/2003	12/31/2003	0.5	1.0204082	Units	0
6	Mexico Radio Assy	5	01/01/2004	01/31/2004	0.525	1.0204082	Units	0
6	Mexico Radio Assy	5	02/01/2004	12/31/2008	0.56	1.0204082	Units	0
2	US N Test & Pkg	5	01/01/2002	12/31/2008	1	0.05	HRS	0
8	US N Test & Pkg	5	01/01/2002	12/31/2008	0.02	0.03	HRS	0
15	US N Test & Pkg	5	01/01/2002	12/31/2008	0.5	0.013	HRS	0
20	US N Test & Pkg	5	01/01/2002	12/31/2008	1	0.001	HRS	0
21	US N Test & Pkg	5	01/01/2002	12/31/2008	1	0.01	HRS	0
23	US N Test & Pkg	5	01/01/2002	12/31/2008	0.57	0.01	HRS	0
26	US N Test & Pkg	5	01/01/2002	12/31/2008	1	0.013	HRS	0
44	US N Test & Pkg	5	01/01/2002	12/31/2008	1	0.015	HRS	0
45	US N Test & Pkg	5	01/01/2002	12/31/2008	1	0.016	HRS	0
15	US N Cell Assy	5	01/01/2002	12/31/2008	0.5	0.000107	Units	0
20	US N Cell Assy	5	04/01/2003	04/30/2003	0.548	1.0638298	Units	0
20	US N Cell Assy	5	08/01/2003	08/31/2003	0.499	1.0638298	Units	0
20	US N Cell Assy	5	09/01/2003	09/30/2003	0.475	1.0638298	Units	0
20	US N Cell Assy	5	10/01/2003	10/31/2003	0.569	1.0638298	Units	0

***Source:**

The Source code indicates what data will be used to calculate the requirements on the Resource. The following codes may be used:

5	**Production (default)**
7	**Inventory**
9	**Shipments**
6	**Purchases**

View Errors



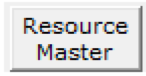
ESOPT - [Load Profile Import Errors]

Load Profile Import Error Review*

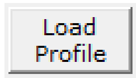
ID	RESOURCE	SOURCE	FROM	TO	ALLOC %	UM CONV	LT FACTOR	LT OFFSET
27	US N Cell Assy	5	01/01/2002	02/28/2003	0.25999999	1.111111164	Units	0
27	US N Cell Assy	5	03/01/2003	04/30/2003	0.58099997	1.111111164	Units	0
27	US N Cell Assy	5	05/01/2003	05/31/2003	0.589999974	1.111111164	Units	0
27	US N Cell Assy	5	06/01/2003	06/30/2003	0.601000011	1.111111164	Units	0
27	US N Cell Assy	5	07/01/2003	07/31/2003	0.656000018	1.111111164	Units	0
27	US N Cell Assy	5	08/01/2003	08/31/2003	0.657999992	1.111111164	Units	0
27	US N Cell Assy	5	09/01/2003	09/30/2003	0.704999983	1.111111164	Units	0
27	US N Cell Assy	5	10/01/2003	10/31/2003	0.704999983	1.111111164	Units	0
27	US N Cell Assy	5	11/01/2003	11/30/2003	0.758000016	1.111111164	Units	0
27	US N Cell Assy	5	12/01/2003	12/31/2003	0.722000003	1.111111164	Units	0
27	US N Cell Assy	5	01/01/2004	12/31/2008	0.800000012	1.111111164	Units	0
13	US S Ind Assy	5	01/01/2002	12/31/2008	1	1.111109972	Units	0

Resource Plan Manager- Export

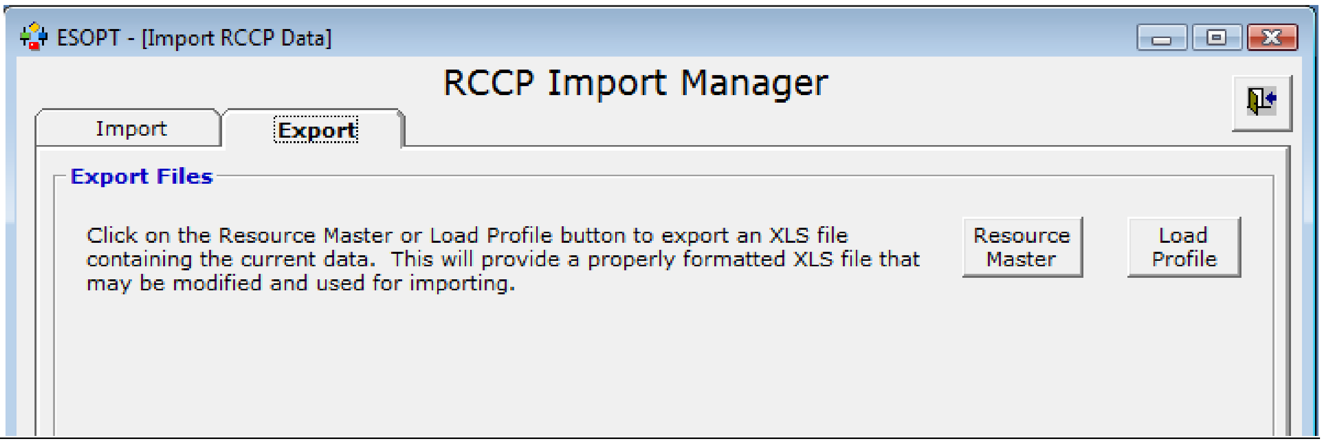
The exporting of Resource Manager or Load Profile will create an .xls file containing all of the current data. The file will provide a properly formatted .xls file that may be modified and used for importing back into the tool.

Select the Resource Master button 

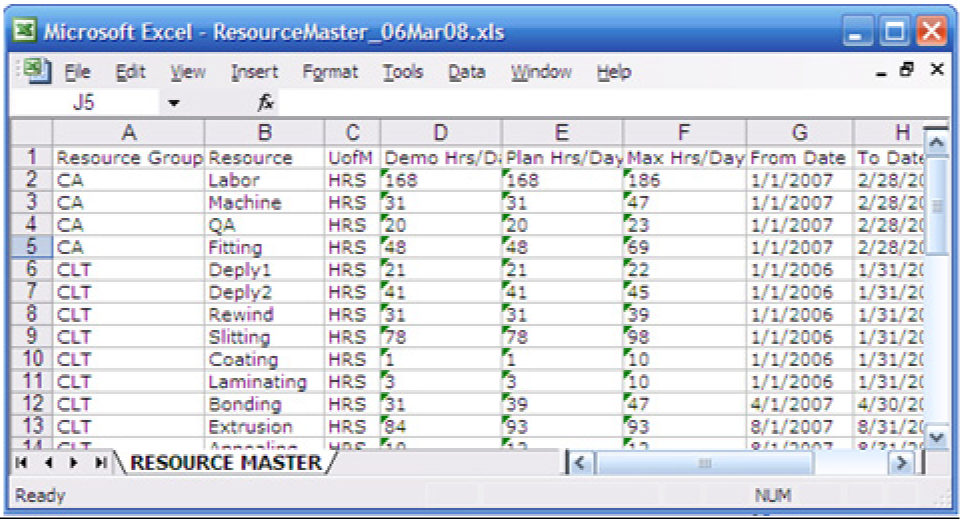
to export the Resource Master current data.

Select the Load Profile button 

to export the Load Profile current data.



Export Resource Master .xls file sample



Microsoft Excel - ResourceMaster_06Mar08.xls

File Edit View Insert Format Tools Data Window Help

J5

	A	B	C	D	E	F	G	H
1	Resource Group	Resource	UofM	Demo Hrs/D	Plan Hrs/Day	Max Hrs/Day	From Date	To Date
2	CA	Labor	HRS	168	168	186	1/1/2007	2/28/20
3	CA	Machine	HRS	31	31	47	1/1/2007	2/28/20
4	CA	QA	HRS	20	20	23	1/1/2007	2/28/20
5	CA	Fitting	HRS	48	48	69	1/1/2007	2/28/20
6	CLT	Deply1	HRS	21	21	22	1/1/2006	1/31/20
7	CLT	Deply2	HRS	41	41	45	1/1/2006	1/31/20
8	CLT	Rewind	HRS	31	31	39	1/1/2006	1/31/20
9	CLT	Slitting	HRS	78	78	98	1/1/2006	1/31/20
10	CLT	Coating	HRS	1	1	10	1/1/2006	1/31/20
11	CLT	Laminating	HRS	3	3	10	1/1/2006	1/31/20
12	CLT	Bonding	HRS	31	39	47	4/1/2007	4/30/20
13	CLT	Extrusion	HRS	84	93	93	8/1/2007	8/31/20

RESOURCE MASTER

Ready NUM

Import Bill of Material (BOM) Manager

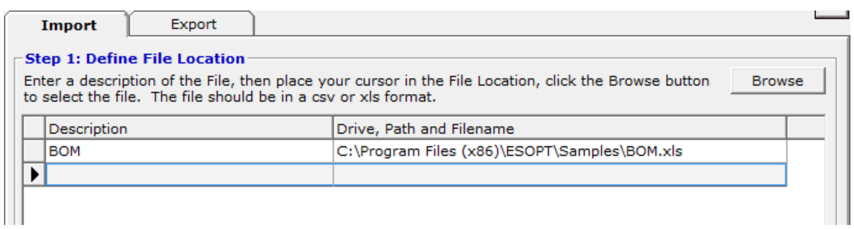
The Import BOM Manager provides a means of importing and exporting the Bill of Material structure. The format of the file may be Comma Separated Values .csv or Excel .xls. The Import allows for all Resource Groups and Resources or specific Resource Group and Resource to be selected. <u>The Import will delete existing BOM data and replace it with the file imported</u>. If you experience problems with the BOM Import, check the file in Notepad, Wordpad, or a basic text editor to be sure there are no extraneous commas or characters which you may not be able to see in spreadsheet software. The data may be interfaced from another system such as an MRP/ERP system. See the **Data Formats** section below for the required format of the imported data.

To access the Import Menu:

- From the Main Menu toolbar, select Tools to display a drop-down menu.
- Select the Utilities Menu.
- Select Import BOM Manager.

Step 1: Define file location

Step 1 must only be performed if you are defining a new import file for the ESOP Tool. If you are using a predefined, existing file, skip to Step 2.



To define the Import file for the Tool:

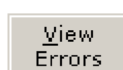
- Enter a description.
- Click in the Drive, Path and Filename field.
- Click Browse to select the file to import.

Step 2: Update Files

- From the drop-down list, select the description of the file you want to import.

Step 3: Select the Import BOM button.

If errors were detected during the load, the 'View Errors' button will be activated.
Select the View Errors button to view the errors.



Data Format – BOM Import

The following table represents the format (indicated in red) required to import records. No column headings should be included in the imported file. The actual contents of the file are noted in blue. This may be used to

together we make a difference

import future data (periods 1 to 24) for the Bill of Material. Any Parent or Child Group Master ID not present in the Group Master will be listed in the 'View Errors' form.

BOM Import

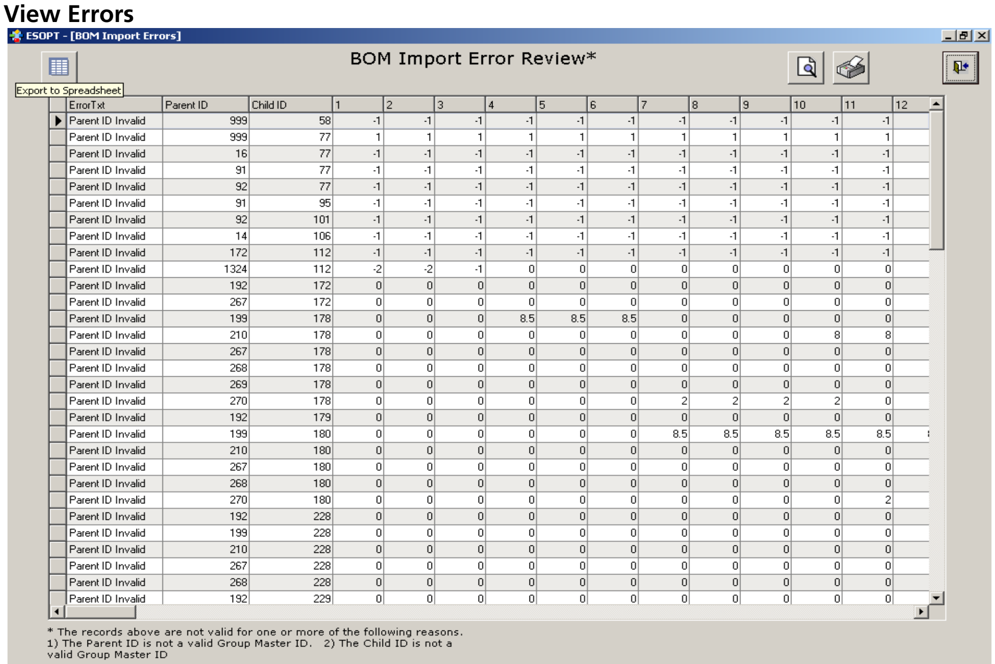
PARENT ID	CHILD ID	LT OFFSET	SOURCE	1	2	3	...	22	23	24
169	1423	0	5	0.1	0.1	0.11	0.11	0.11	0.12	0.11
169	1327	0	5	0.07	0.07	0.07	0.1	0.1	0.1	0.09
169	1389	0	5	0.01	0.01	0.01	0.01	0.01	0.01	0.01
169	1334	0	5	0.02	0.02	0.02	0.02	0.02	0.02	0.02
169	1328	0	5	0.09	0.09	0.09	0.08	0.08	0.08	0.07
169	1326	0	5	0.07	0.07	0.07	0.07	0.07	0.07	0.06
192	273	0	6	0.16	0.15	0.25	0.19	0.18	0.23	0.21
192	274	0	6	0.1	0.08	0.15	0.12	0.13	0.09	0.18
192	277	0	6	0.07	0.08	0.08	0.11	0.14	0.1	0.05
192	278	0	6	0.19	0.07	0.08	0.05	0.04	0.09	0.03
192	1390	0	6	0.04	0.04	0.05	0.08	0.1	0.07	0.05
192	1371	0	6	0.12	0.13	0.14	0.21	0.23	0.17	0.15
199	1512	0	6	0.13	0.15	0.14	0.11	0.09	0.07	0.07

***Source:**
The Source code indicates what data will be used to calculate the Dependent Demand. The following codes may be used:

2	**Demand**
3	**Orders**
5	**Production (default)**
6	**Purchases**
9	**Shipments***

*** Subfamilies with a type of 'DN' will use 'Shipments' regardless of the source code entered.**

View Errors



ESOPT - [BOM Import Errors]

BOM Import Error Review*

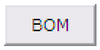
Export to Spreadsheet

ErrorTxt	Parent ID	Child ID	1	2	3	4	5	6	7	8	9	10	11	12
Parent ID Invalid	999	58	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	
Parent ID Invalid	999	77	1	1	1	1	1	1	1	1	1	1	1	
Parent ID Invalid	16	77	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	
Parent ID Invalid	91	77	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	
Parent ID Invalid	92	77	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	
Parent ID Invalid	91	95	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	
Parent ID Invalid	92	101	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	
Parent ID Invalid	14	106	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	
Parent ID Invalid	172	112	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	
Parent ID Invalid	1324	112	-2	-2	-1	0	0	0	0	0	0	0	0	
Parent ID Invalid	192	172	0	0	0	0	0	0	0	0	0	0	0	
Parent ID Invalid	267	172	0	0	0	0	0	0	0	0	0	0	0	
Parent ID Invalid	199	178	0	0	0	8.5	8.5	8.5	0	0	0	0	0	
Parent ID Invalid	210	178	0	0	0	0	0	0	0	0	0	8	8	
Parent ID Invalid	267	178	0	0	0	0	0	0	0	0	0	0	0	
Parent ID Invalid	268	178	0	0	0	0	0	0	0	0	0	0	0	
Parent ID Invalid	269	178	0	0	0	0	0	0	0	0	0	0	0	
Parent ID Invalid	270	178	0	0	0	0	0	0	2	2	2	2	0	
Parent ID Invalid	192	179	0	0	0	0	0	0	0	0	0	0	0	
Parent ID Invalid	199	180	0	0	0	0	0	0	8.5	8.5	8.5	8.5	8.5	
Parent ID Invalid	210	180	0	0	0	0	0	0	0	0	0	0	0	
Parent ID Invalid	267	180	0	0	0	0	0	0	0	0	0	0	0	
Parent ID Invalid	268	180	0	0	0	0	0	0	0	0	0	0	0	
Parent ID Invalid	270	180	0	0	0	0	0	0	0	0	0	0	2	
Parent ID Invalid	192	228	0	0	0	0	0	0	0	0	0	0	0	
Parent ID Invalid	199	228	0	0	0	0	0	0	0	0	0	0	0	
Parent ID Invalid	210	228	0	0	0	0	0	0	0	0	0	0	0	
Parent ID Invalid	267	228	0	0	0	0	0	0	0	0	0	0	0	
Parent ID Invalid	268	228	0	0	0	0	0	0	0	0	0	0	0	
Parent ID Invalid	192	229	0	0	0	0	0	0	0	0	0	0	0	

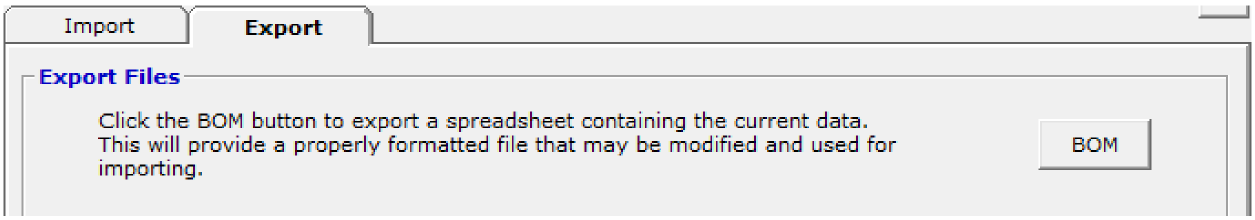
* The records above are not valid for one or more of the following reasons.
1) The Parent ID is not a valid Group Master ID.   2) The Child ID is not a valid Group Master ID

Export Bill of Material (BOM) Manager

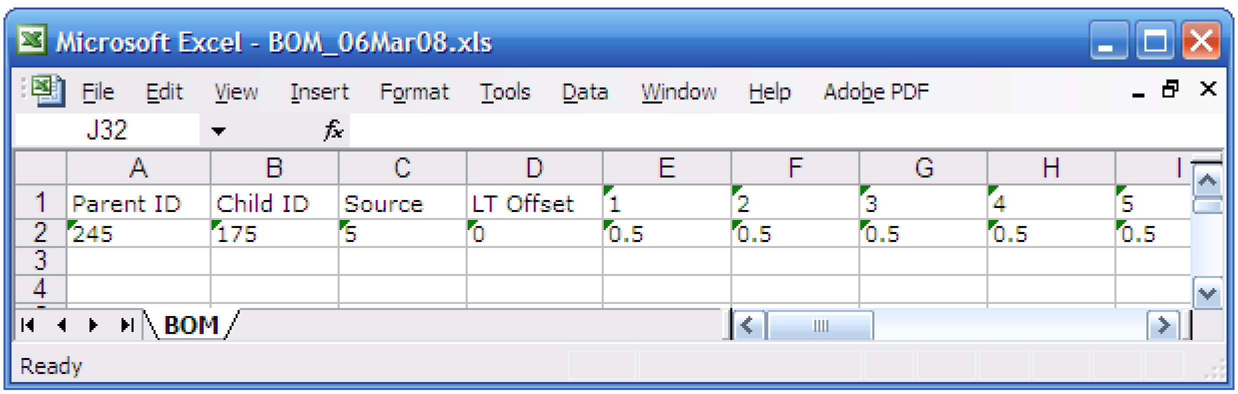
The exporting of BOM Manager will create an .xls file containing all of the current data. The file will provide a properly formatted .xls file that may be modified and used for importing back into the tool.

Select the BOM button 

to export the current BOM data.



Export Bill of Material (BOM) .xls file sample



	A	B	C	D	E	F	G	H	I
1	Parent ID	Child ID	Source	LT Offset	1	2	3	4	5
2	245	175	5	0	0.5	0.5	0.5	0.5	0.5
3									
4									

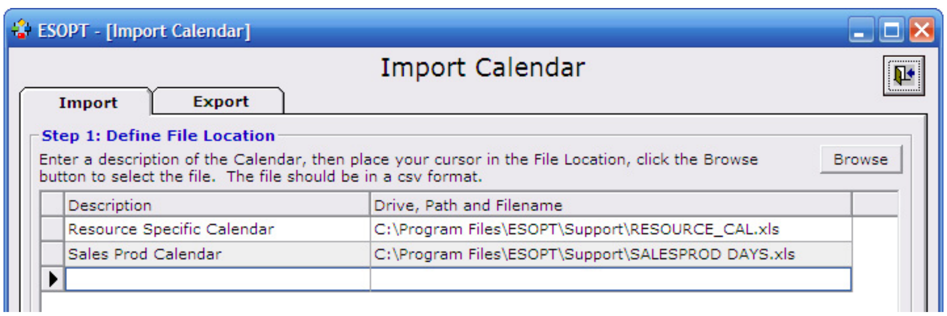
Import Calendar

The Import Calendar Manager provides a means of importing and exporting the Sales Production Calendar and the Resource Specific Production Calendar. The format of the file can be Comma Separated Values .csv or Excel .xls. The import allows for all Resource Groups and Resources or specific Resource Group and Resource to be selected. The import will delete the existing calendar with the file imported. If you experience problems with the import, check the file in Notepad, Wordpad, or a basic text editor to be sure there are no extraneous commas or characters which you may not be able to see in spreadsheet software. The data may be interfaced from another system such as an MRP/ERP system. See the **Data Formats** section below for the required format of the imported data.

To access the Import Menu:

- From the Main Menu toolbar, select Tools to display a drop-down menu.
- Select the Utilities Menu.
- Select Import Calendar.

Step 1: Define file location

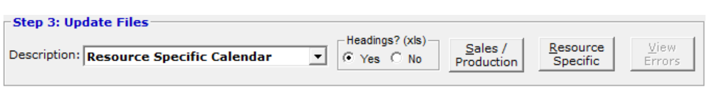


To define the Import File for the Tool:

- Enter a description.
- Click in the Drive Path Filename field.
- Click Browse to select the file to import.

Step 2: Select Resource Group and/or Resource

- From the drop-down list, select the Resource Group and/or the Resource. Selecting ALL will select all options under the Resource Group and/or Resource.



Step 3: Update Files

- From the drop-down list, select the description of the file you want to import.
- Select Yes or No if you have headings in the file you are importing.

Step 4: Select the Sales / Prod Calendar	**or: Select the Resource Specific Calendar**
▪ Sales / Production	▪ Resource Specific

If errors were detected during the load, the 'View Errors' button will be activated

- Select the View Errors button to view the errors. View Errors

Data Format – Calendar Import

The following table represents the format (indicated in red) required to import records. The actual contents of the file are noted in blue. This may be used to import future data (periods 1 to 24) for the Calendar.

Sales Production Days Calendar

MM/YYYY	SALES DAYS/ MONTH	PRODUCTION DAYS/ MONTH
01/2003	21	21
02/2003	21	21
03/2003	23	23
|	|	|
|	|	|
|	|	|
|	|	|
|	|	|
|	|	|
|	|	|
v	v	v
10/2008	19	16
11/2008	21	22
12/2008	19	20

The Sales Production Days must have 2 years or 24 previous periods and at least 2 years or 24 future periods at all times.

The format of the Month may be mm/yyyy or mm/01/yyyy.

Resource Specific Production Calendar

MM/YYYY	PROD DAYS/ MONTH	RESOURCE
01/2006	15	US S Cell Assy
02/2006	15	US S Cell Assy
03/2006	15	US S Cell Assy
04/2006	15	US S Cell Assy
05/2006	15	US S Cell Assy
06/2006	15	US S Cell Assy

The Resource Specific Production Calendar.

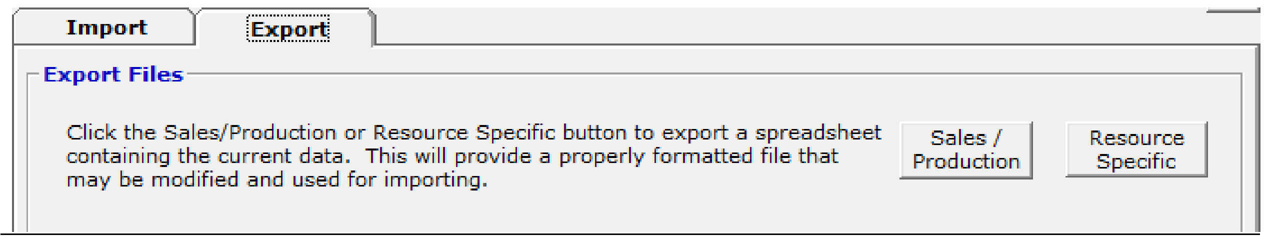
The format of the Month may be mm/yyyy or mm/01/yyyy.

Export Calendar Manager

The exporting of Calendar Manager provides a means of exporting the Sales/Production Calendar and the Resource Specific Production Calendar by creating an .xls file containing all of the current data. The file will provide a properly formatted .xls file that may be modified and used for importing back into the tool.

Select the Sales/Production button [Sales / Production] to export the current Sales/Production Calendar data.

Select the Resource Specific button [Resource Specific] to export the current Resource Specific Calendar data.



Export Sales/Production Calendar .xls file sample

	A	B	C	D	E
1	MM/YY	Sales Days	Production Days		
2	1/1/2009	21	21		
3	2/1/2009	19	19		
4	3/1/2009	21	21		
5	4/1/2009	20	20		
6	5/1/2009	23	23		
7	6/1/2009	21	21		
8	7/1/2009	20	20		
9	8/1/2009	23	23		
10	9/1/2009	21	21		
11	10/1/2009	23	23		
12	11/1/2009	19	19		
13	12/1/2009	19	19		
14	1/1/2010	21	21		
15	2/1/2010	19	19		
16	3/1/2010	21	21		
17	4/1/2010	20	20		
18	5/1/2010	23	23		
19	6/1/2010	21	21		
20	7/1/2010	20	20		
21	8/1/2010	23	23		

SALES PRODUCTION CALENDAR

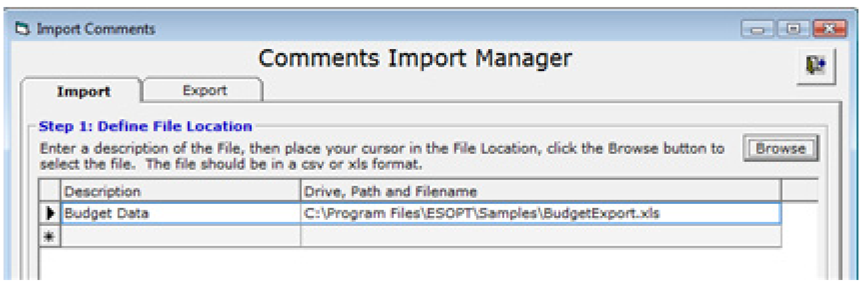
Import Comments

The Import Comments Manager provides a means of importing and exporting of the Comments. The format of the file can be Comma Separated Values .csv or Excel .xls. The import will delete the existing Comments with the file imported. If you experience problems with the Import, check the file in Notepad, Wordpad, or a basic text editor to be sure there are no extraneous commas or characters which you may not be able to see in spreadsheet software. The data may be interfaced from another system such as an MRP/ERP system. See the **Data Formats** section below for the required format of the imported data.

To access the Import Menu:

- From the Main Menu toolbar, select Tools to display a drop-down menu.
- Select the Utilities Menu.
- Select Import Comments.

Step 1: Define file location



To define the Import File for the Tool:

- Enter a description.
- Click in the Drive Path Filename field.
- Click Browse to select the file to import.

Step 2: Select Comment Type

- From the drop-down list, select the Comment Type. Selecting ALL will select all options under the Comment Type.

Step 3: Update Files

- From the drop-down list, select the description of the file you want to import.
- Select Yes or No if you have headings in the file you are importing.

Step 4: Select the Comments button. Comments	If errors were detected during the load, the 'View Errors' button will be activated. Select the View Errors button to view the errors. View Errors

Data Format – Comments Import
The following table represents the format (indicated in red) required to import Comments. The actual contents of the file are noted in blue. This may be used to import Comments.

Comments File Format Sample

ID	Current Date/Date Entered (Short Date)	Effective Date	Comments	Print	Type	Int/Ext	SBU	Family	Resource
0	01/12/2009	02/01/2009	Comment	-1	Demand -Family	Int	SBU	Family	
0	01/12/2009	02/01/2009	Comment	-1	Demand -SBU		SBU	Family	
1345	01/12/2009	02/01/2009	Comment	-1	Supply				
0	01/12/2009	02/01/2009		0	Resource				Resource

Fields
1) **ID:** If a Comment is a Subfamily-specific Comment, enter the Group Master ID; if not a Subfamily-specific Comment, enter 0.
2) **Current Date:** Date entered (Current Date) in Short Date format compatible with your local, regional settings:
   Example: English mm/dd/yyyy, Spanish dd/mm/yyyy
3) **Effective Date:** The month or period the Comment is associated with. Use 01 for day number, in Short Date format compatible with your local regional settings:
   Example: English mm/dd/yyyy, Spanish dd/mm/yyyy
4) **Comments:** The Comment.
5) **Print: -**1 = print, 0=do not print
6) **Type:** Comment Type; determines where the Comment is displayed.
7) **Int/Ent:** Internal or External
8) **SBU:** If the Comment is specific to an SBU, enter the SBU.
9) **Family**: If the Comment is specific to a Family, enter the Family. The SBU must also be entered.
10) **Resource:** If the Comment is a Resource Comment, enter the Resource name.

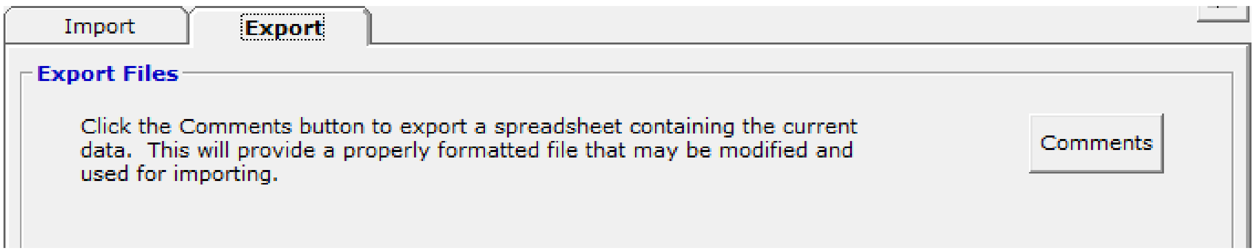
Comment Types
For Subfamily specific Comments, ID must also be entered.

Subfamily Comments	**General Comments**				
Demand Supply Finance	Demand-General Supply-General Finance-General	Demand-SBU Supply-SBU Finance-SBU	Demand-Family Supply-Family Finance-Family	Demand-Summary Supply-Summary Finance-Summary (Display in Summary Views)	Resource

Export Comments Manager

The Export Comments Manager will create an .xls file containing all of the current data. The file will provide a properly formatted .xls file that may be modified and used for importing back into the tool.

Select the Comments button Comments to export the current Comments data.



Export Comments .xls file sample

	A	B	C	D	E	F	G	H	I	J	K
1	ID	Current MMYY	MMYY	Comments	Print?	Type	Int or Ext	SBU	Family	Resource	Status
2	24	10/14/08	10/01/08	Panther platfor	0	Demand	EXT				O
3	24	10/14/08	10/01/08	Telson new prc	0	Demand	EXT				O
4	24	10/14/08	10/01/08	6/7 GP (Qualcc	0	Demand	EXT				O
5	20	10/14/08	10/01/08	Marketing proj	-1	Demand	EXT				O
6	20	10/14/08	10/01/08	End of Life for	-1	Demand	EXT				O
7	0	10/14/08	10/01/08	November- will	0	general	Int				O
8	21	10/14/08	10/01/08	Assumes Q1 2(	-1	Demand	Int				O
9	21	10/14/08	10/01/08	Reduced by 30	-1	Demand	EXT				O
10	0	10/14/08	10/01/08	November will	0	General	Int				O
11	0	10/14/08	10/01/08	December will	0	General	Int				O

Comments

Import Distribution

The Import Distribution Manager provides a means of importing and exporting of the Distribution. The format of the file can be Comma Separated Values .csv or Excel .xls. The import will delete the existing Distribution and replace with the file imported. If you experience problems with the Import, check the file in Notepad, Wordpad, or a basic text editor to be sure there are no extraneous commas or characters which you may not be able to see in spreadsheet software. See the **Data Formats** section below for the required format of the imported data.

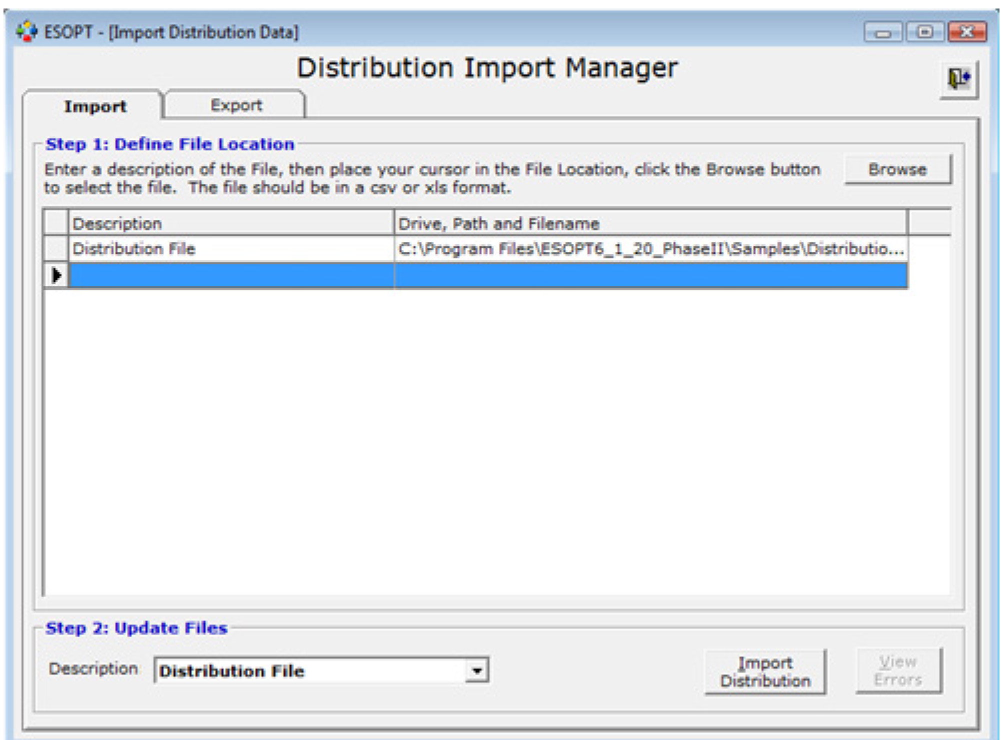
To access the Import Menu:

- From the Main Menu toolbar select Tools to display a drop-down menu.
- Select the Utilities Menu.
- Select Import Distribution.

Step 1: Define file location

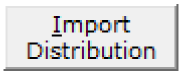
To define the Import File for the Tool:

- Enter a description.
- Click in the Drive Path Filename field.
- Click Browse to select the file to import.



Step 2: Update Files

- From the drop-down list, select the description of the file you want to import.

Step 3: Select the Import Distribution button.	If errors were detected during the load, the 'View Errors' button will be activated. Select the View Errors button to view the errors.
	

Data Format – Distribution Import
The following table represents the format required to Import Distribution. This may be used to Import Distribution.

Distribution File Format Sample

ID	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84
22	0.3	0.3	0.5	0.3	0.3	0.4	0.3	0.3	0.4	0.3	0.3	0.4	0.3	0.3	0.4	0.3	0.3	0.4	0.3	0.3	0.4	0.3	0.3	0.4
23	0.3	0.3	0.5	0.3	0.3	0.4	0.3	0.3	0.4	0.3	0.3	0.4	0.3	0.3	0.4	0.3	0.3	0.4	0.3	0.3	0.4	0.3	0.3	0.4
24	0.3	0.3	0.5	0.3	0.3	0.4	0.3	0.3	0.4	0.3	0.3	0.4	0.3	0.3	0.4	0.3	0.3	0.4	0.3	0.3	0.4	0.3	0.3	0.4
25	0.3	0.3	0.5	0.3	0.3	0.4	0.3	0.3	0.4	0.3	0.3	0.4	0.3	0.3	0.4	0.3	0.3	0.4	0.3	0.3	0.4	0.3	0.3	0.4
26	0.3	0.3	0.5	0.3	0.3	0.4	0.3	0.3	0.4	0.3	0.3	0.4	0.3	0.3	0.4	0.3	0.3	0.4	0.3	0.3	0.4	0.3	0.3	0.4
27	0.3	0.3	0.5	0.3	0.3	0.4	0.3	0.3	0.4	0.3	0.3	0.4	0.3	0.3	0.4	0.3	0.3	0.4	0.3	0.3	0.4	0.3	0.3	0.4
28	0.3	0.3	0.5	0.3	0.3	0.4	0.3	0.3	0.4	0.3	0.3	0.4	0.3	0.3	0.4	0.3	0.3	0.4	0.3	0.3	0.4	0.3	0.3	0.4
29	0.3	0.3	0.5	0.3	0.3	0.4	0.3	0.3	0.4	0.3	0.3	0.4	0.3	0.3	0.4	0.3	0.3	0.4	0.3	0.3	0.4	0.3	0.3	0.4
30	0.3	0.3	0.4	0.3	0.3	0.4	0.3	0.3	0.4	0.3	0.3	0.4	0.3	0.3	0.4	0.3	0.3	0.4	0.3	0.3	0.4	0.3	0.3	0.4

Fields

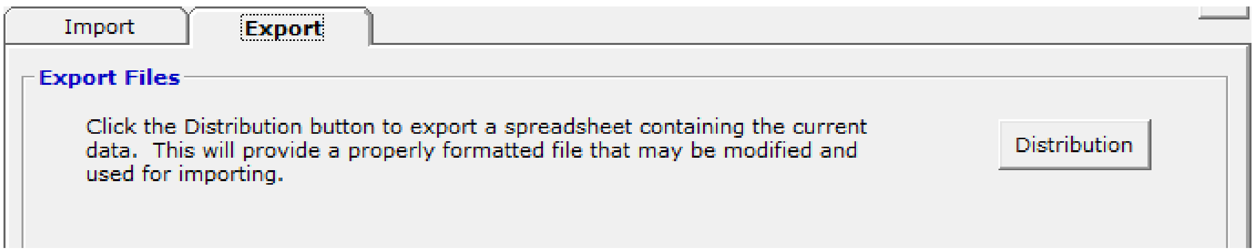
1) **ID:** Enter the Group Master ID.
2) **Month 61 - 84:** Enter the percent of distribution for the monthly period.

Export Distribution Manager

The Export Distribution Manager will create an .xls file containing all of the current data. The file will provide a properly formatted .xls file that may be modified and used for importing back into the tool.

Select the Distribution button 

to export the current Distribution data.



Export Distribution .xls file sample

ID	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84
22	0.3	0.3	0.5	0.3	0.3	0.4	0.3	0.3	0.4	0.3	0.3	0.4	0.3	0.3	0.4	0.3	0.3	0.4	0.3	0.3	0.4	0.3	0.3	0.4
23	0.3	0.3	0.5	0.3	0.3	0.4	0.3	0.3	0.4	0.3	0.3	0.4	0.3	0.3	0.4	0.3	0.3	0.4	0.3	0.3	0.4	0.3	0.3	0.4
24	0.3	0.3	0.5	0.3	0.3	0.4	0.3	0.3	0.4	0.3	0.3	0.4	0.3	0.3	0.4	0.3	0.3	0.4	0.3	0.3	0.4	0.3	0.3	0.4
25	0.3	0.3	0.5	0.3	0.3	0.4	0.3	0.3	0.4	0.3	0.3	0.4	0.3	0.3	0.4	0.3	0.3	0.4	0.3	0.3	0.4	0.3	0.3	0.4
26	0.3	0.3	0.5	0.3	0.3	0.4	0.3	0.3	0.4	0.3	0.3	0.4	0.3	0.3	0.4	0.3	0.3	0.4	0.3	0.3	0.4	0.3	0.3	0.4
27	0.3	0.3	0.5	0.3	0.3	0.4	0.3	0.3	0.4	0.3	0.3	0.4	0.3	0.3	0.4	0.3	0.3	0.4	0.3	0.3	0.4	0.3	0.3	0.4
28	0.3	0.3	0.5	0.3	0.3	0.4	0.3	0.3	0.4	0.3	0.3	0.4	0.3	0.3	0.4	0.3	0.3	0.4	0.3	0.3	0.4	0.3	0.3	0.4
29	0.3	0.3	0.5	0.3	0.3	0.4	0.3	0.3	0.4	0.3	0.3	0.4	0.3	0.3	0.4	0.3	0.3	0.4	0.3	0.3	0.4	0.3	0.3	0.4
30	0.3	0.3	0.4	0.3	0.3	0.4	0.3	0.3	0.4	0.3	0.3	0.4	0.3	0.3	0.4	0.3	0.3	0.4	0.3	0.3	0.4	0.3	0.3	0.4

Export Manager

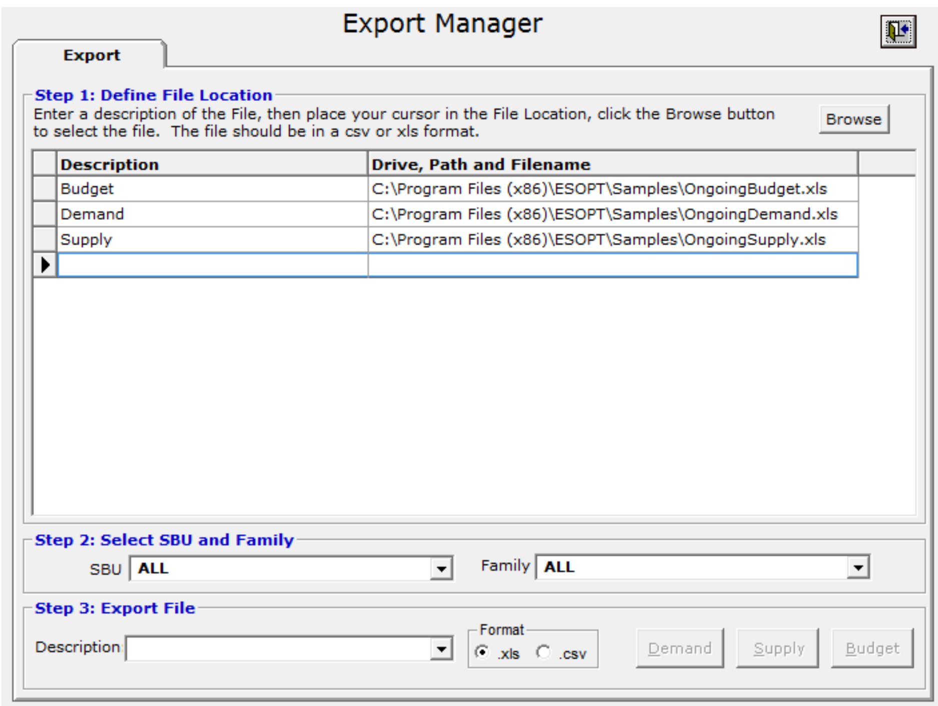
The Export Manager provides a means of exporting specific data to a standard .csv file format which may be used to import into another ESOP Tool Implementation. This method of transferring ESOP data is useful if your company has regions or sites that are located remotely and it is not feasible, from a technology standpoint, for the sites to share the same database. For example, a remote supply site may export and send their supply plan to the demand site to import. This is different from the ESOPT Consolidation Tool which allows for a corporate site to consolidate and review the data from all sites. The exports may be generated for all Subfamilies or for a specific SBU only.

To access the Export Menu:

- From the Main Menu toolbar, select Tools to display a drop-down menu.
- Select the Utilities Menu.
- Select Export Manager.

Step 1: Define file location

Step 1 must only be performed if you are defining a new file for the ESOP Tool. If you are using a predefined, existing file, skip to Step 2.

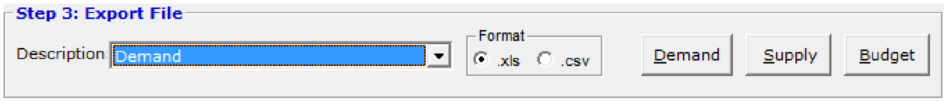


To define the Export File for the Tool:

- Enter a description.
- Click in the Drive Path Filename field.
- Click Browse to select the file to export.

Step 2: Select SBU

- From the drop-down list, select the SBU and/or Family you would like to export. To include all data, select 'ALL'.



Step 3: Export File

- From the drop-down list, select the description of the file you want to export.
- Click the button which represents the data you would like to export.

Bookings, Demand, Orders, Backlog, and Shipments.

Production, Purchases, Shipments.

Budget Sales Units, Budget Prod Units, Budget Sales $, Budget COGS $.

Data Format – Export
The format of the exported data is the same as the format for the import data.

Export file

DESC	SBU	FAMILY	SUBFAMILY	SORT	-24	-23	…	-3	-2	-1
BOOKINGS				**1**						
DEMAND				**2**						
ORDERS				**3**						
PRODUCTION				**4**						
INVENTORY				**5**						
BACKLOG				**6**						
SHIPMENTS				**7**						
ASP (Average Selling Price)				**8**						
AC (Average Cost)				**9**						
BUDGET-SHIP UNITS				**10**						
BUDGET-PROD UNITS				**11**						
BUDGET-SALES $				**12**						
BUDGET-COGS $				**13**						
DEP DEM				**14**						
PURCHASES				**15**						
TARGET INVENTORY				**16**						
ABP (Average Booking Price)				**17**						
MIN Target				**18**						
MAX Target				**19**						
INVCOST (Average Inventory Cost)				**20**						
AFC (Average Fixed Cost)				**27**						
AOC (Average Other Cost)				**28**						
BUDGET- Fix Cost				**29**						
BUDGET- Other Cost				**30**						
AVC (Average Variable Cost)				**31**						
BUDGET- Variable Cost				**32**						

Pivot Table Menu

An Excel Pivot Table report is an interactive table that you can use to quickly summarize large amounts of data. You can rotate its rows and columns to see different summaries of the source data, filter the data by displaying different pages, or display the details for areas of interest. The Pivot Table provides a flexible analytical tool for custom analysis of data.

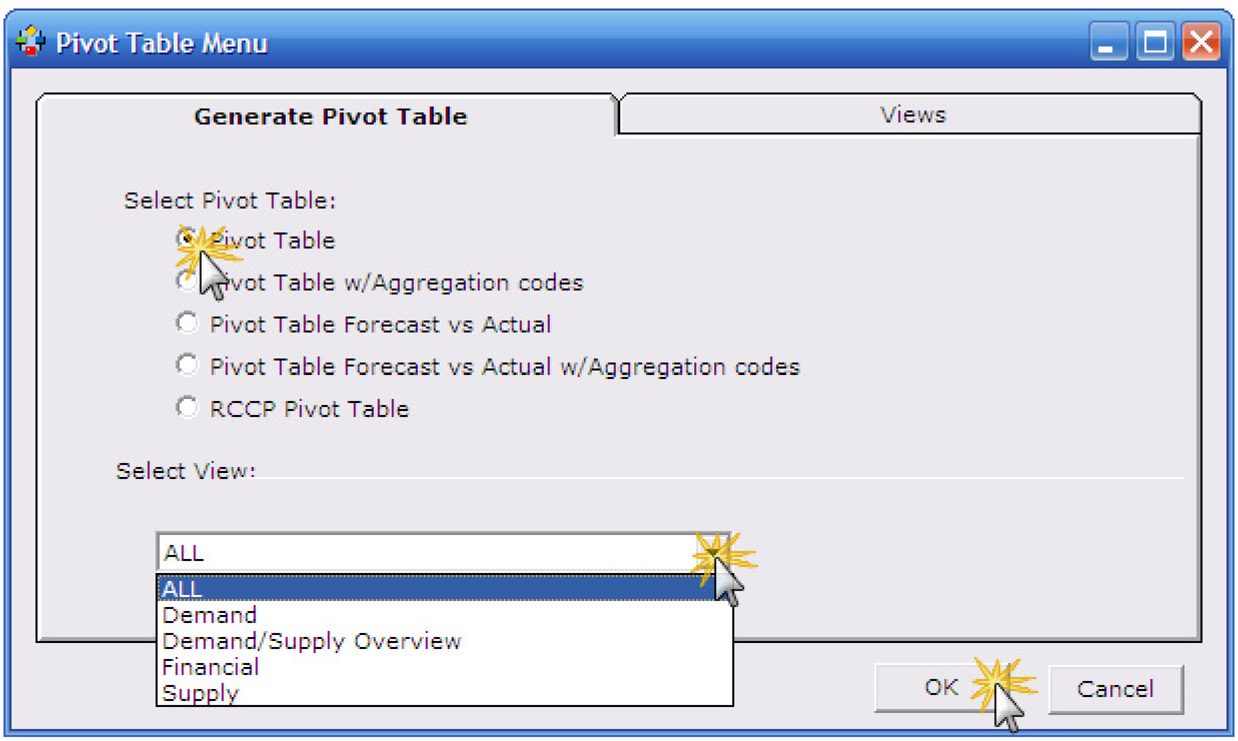
The Pivot Table Menu is used to select the data to include in the Excel pivot table and launch the pivot table to retrieve the data selected.

To access the Pivot Table Menu:

- From the Main Menu toolbar, select **Tools** to display a drop-down menu.
- Select the **Utility Menu**.
- Select **Pivot Table Menu**.

Generating the Pivot table:

1) Select the radio button next to the Pivot table you would like to view.
2) Select the Pivot Table 'View' selection from the drop-down menu. *See 'Defining Views' below.*
3) Click OK to launch the Pivot Table or Cancel to cancel and exit the menu.

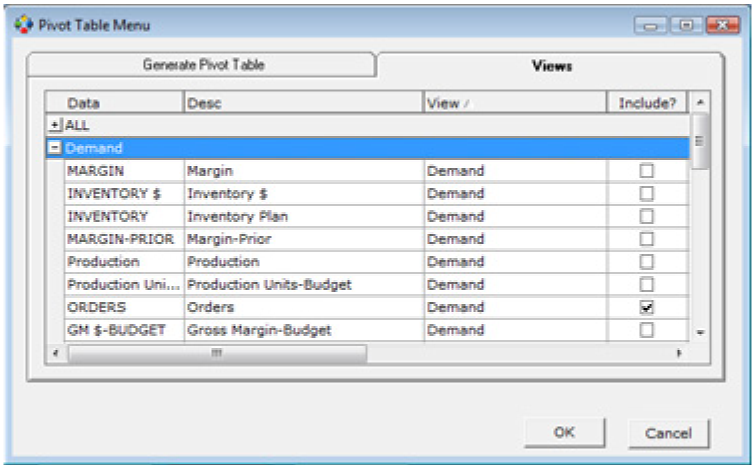


Pivot Table View Tab

A Pivot Table View tab is a selection of rows that may be used when generating the Pivot Table. The view determines the rows to be included in the Pivot Table.

Defining Views

To expand the view, click the plus sign next the the view name.



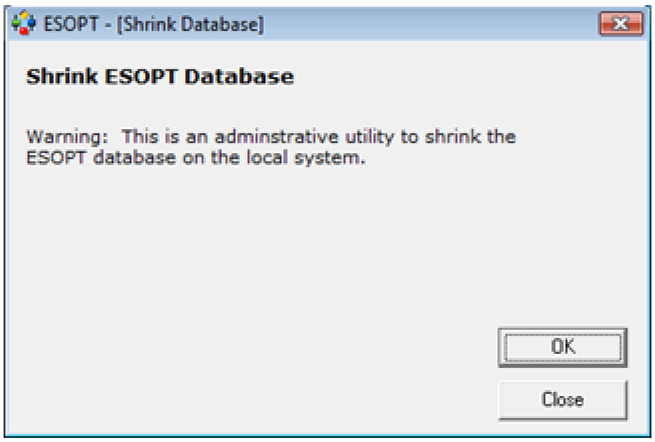
- To include the data, check the box.
- To exclude the data, uncheck the box.

Database Utility

The Database Utility allows you to shrink the database. This is a powerful utility, and you should consult with your Oliver Wight consulant or ESOPT Administrator before executing this utility. You must have sysadmin rights on the Database to run this utilit, or you can ask your Database Administrator to perform the 'Shrink Database' utility from SQL Management Studio.

To access the Database Utility:

- From the Main Menu toolbar, select **Tools** to display a drop-down menu.
- Select the **Utility Menu**.
- Select **Database Utilities**
- **Select Shrink Database**.

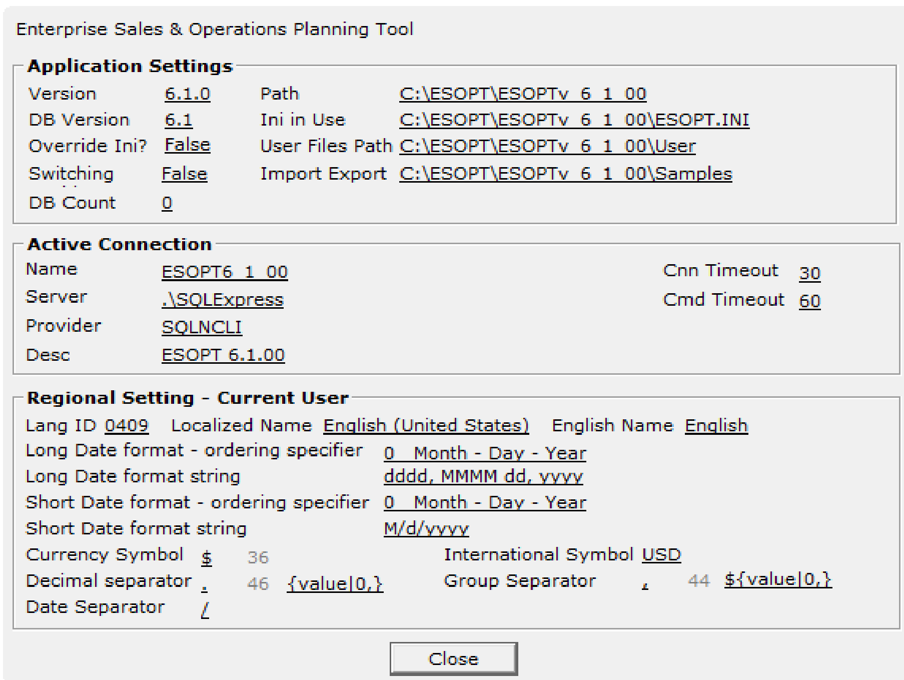


System Information

The System Information provides a means for viewing the settings and configuration for the ESOP tool. This is a read-only view. If any of the data needs to be updated, then that can be completed within the application or configuration file. There are three sections of information: Application Settings, Active Connection, and Regional Setting – Current User.

To access the System Information:

- From the Main Menu toolbar, select 'Tools' to display a drop-down menu.
- Select the Utilities Menu.
- Select System Information.



Enterprise Sales & Operations Planning Tool

Application Settings

Version	6.1.0	Path	C:\ESOPT\ESOPTv_6_1_00
DB Version	6.1	Ini in Use	C:\ESOPT\ESOPTv_6_1_00\ESOPT.INI
Override Ini?	False	User Files Path	C:\ESOPT\ESOPTv_6_1_00\User
Switching	False	Import Export	C:\ESOPT\ESOPTv_6_1_00\Samples
DB Count	0		

Active Connection

Name	ESOPT6_1_00	Cnn Timeout	30
Server	.\SQLExpress	Cmd Timeout	60
Provider	SQLNCLI		
Desc	ESOPT 6.1.00		

Regional Setting - Current User

Lang ID 0409 Localized Name English (United States) English Name English

Long Date format - ordering specifier 0 Month - Day - Year

Long Date format string dddd, MMMM dd, yyyy

Short Date format - ordering specifier 0 Month - Day - Year

Short Date format string M/d/yyyy

Currency Symbol $ 36 International Symbol USD

Decimal separator . 46 {value|0.} Group Separator , 44 ${value|0,}

Date Separator /

Close

Application Settings

The Application Setting shows the version of the ESOP application and the database manager. The path for the application is displayed.

Active Connection

The Active Connection displays information about the database connection. The Connection Timeout and Command Timeout are displayed as well. The timeouts are controlled from the information entered in the configuration file or the ini in use.

Regional Setting – Current User

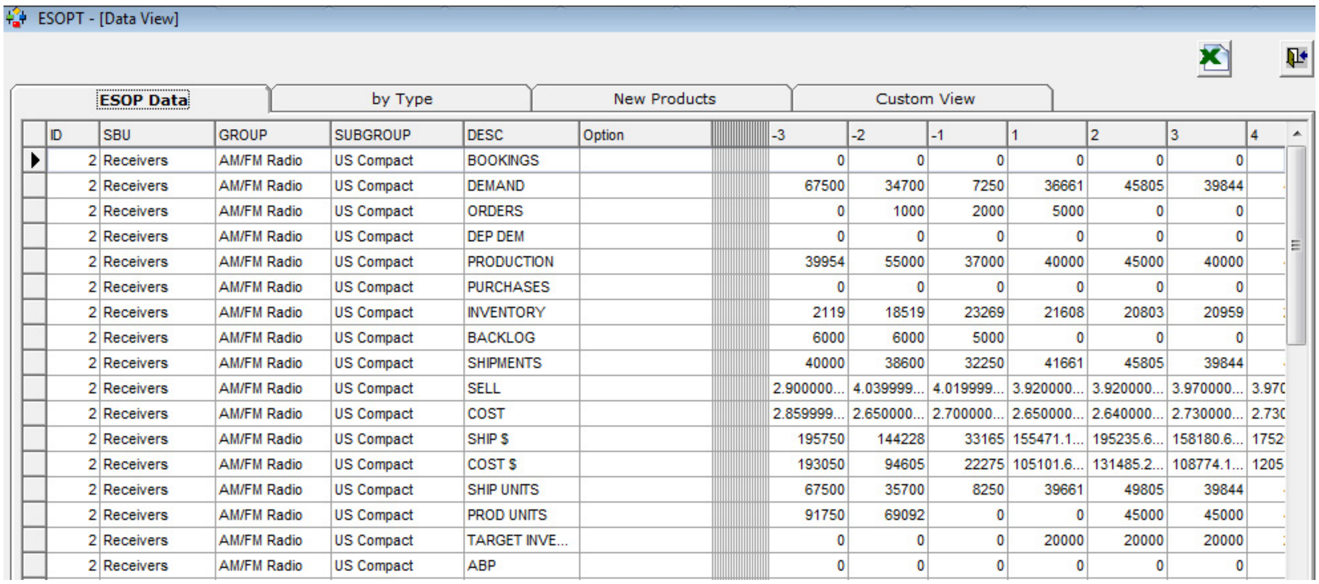
The Regional Setting displays the language code, formatting of data, and currency code.

Data Tables

The Data Table views provide a means for viewing the ESOPT data in a spreadsheet-like format to review. There is a view of the ESOPT Gap Report which displays the Budget, Plan, and the gap or difference between the two values for Year To Date (YTD), Current Year, and Next Year. This is a read-only view. If any of the data needs to be updated, then that can be completed within the application.

To access the Data Tables – ESOP Data:

- From the Main Menu toolbar, select 'Tools' to display a drop-down menu.
- Select Data Tables.
- Select ESOP Data



ID	SBU	GROUP	SUBGROUP	DESC	Option	-3	-2	-1	1	2	3	4
2	Receivers	AM/FM Radio	US Compact	BOOKINGS		0	0	0	0	0	0	
2	Receivers	AM/FM Radio	US Compact	DEMAND		67500	34700	7250	36661	45805	39844	
2	Receivers	AM/FM Radio	US Compact	ORDERS		0	1000	2000	5000	0	0	
2	Receivers	AM/FM Radio	US Compact	DEP DEM		0	0	0	0	0	0	
2	Receivers	AM/FM Radio	US Compact	PRODUCTION		39954	55000	37000	40000	45000	40000	
2	Receivers	AM/FM Radio	US Compact	PURCHASES		0	0	0	0	0	0	
2	Receivers	AM/FM Radio	US Compact	INVENTORY		2119	18519	23269	21608	20803	20959	
2	Receivers	AM/FM Radio	US Compact	BACKLOG		6000	6000	5000	0	0	0	
2	Receivers	AM/FM Radio	US Compact	SHIPMENTS		40000	38600	32250	41661	45805	39844	
2	Receivers	AM/FM Radio	US Compact	SELL		2.900000...	4.039999...	4.019999...	3.920000...	3.920000...	3.970000...	3.970
2	Receivers	AM/FM Radio	US Compact	COST		2.859999...	2.650000...	2.700000...	2.650000...	2.640000...	2.730000...	2.730
2	Receivers	AM/FM Radio	US Compact	SHIP $		195750	144228	33165	155471.1...	195235.6...	158180.6...	1752
2	Receivers	AM/FM Radio	US Compact	COST $		193050	94605	22275	105101.6...	131485.2...	108774.1...	1205
2	Receivers	AM/FM Radio	US Compact	SHIP UNITS		67500	35700	8250	39661	49805	39844	
2	Receivers	AM/FM Radio	US Compact	PROD UNITS		91750	69092	0	0	45000	45000	
2	Receivers	AM/FM Radio	US Compact	TARGET INVE...		0	0	0	20000	20000	20000	
2	Receivers	AM/FM Radio	US Compact	ABP		0	0	0	0	0	0	

ESOP Data Tab

The ESOP Data tab shows the data by ID, SBU, Group/Family, Subgroup/SubFamily for Bookings, Demand, Orders, Dep Dem, Production, Purchases, Inventory, Backlog, Shipments, Sell, Cost, Ship $, Cost $, Ship Units, Prod Units, Target Inventory, ABP, AFC, AOC, Fix Cost Budget, Oth Cost Budget, AVC, and Var Cost Budget for 3 months passed and 24 months into the future.

By Type Tab

The same data is displayed in a different order. The order of the data on the By Type tab is Type or Description so all of the Bookings are together within SBU, Group, and Subgroup.

New Products Tab

The New Products tab only shows the data for New Products (NPD) in order by type or description, then SBU, Group, and Subgroup.

Custom View Tab

The Custom View tab allows you to select the order of the data fields. The choices are ID, SBU, Group, Subgroup, and Type/Desc. Select the field you want to order the data by and drag it to the top line. A field can be removed by dragging it back to the heading line.

The Spreadsheet button will export the data to a spreadsheet from the ESOP Data tab.

ESOPT Gap Report

To access the Data Tables – ESOPT Gap Report:

- From the Main Menu toolbar, select 'Tools' to display a drop-down menu.
- Select Data Tables.
- Select ESOPT Gap Report.

ESOPT - [Gap Report]

ESOP Gap Report

Drag a column header here to group by that column.

SBU	GROUP	SUBGROUP	DESC	Aggregation	YTD Budget	YTD Plan	YTD Gap	Current Yr B...	Current Yr Plan	Current Yr Gap
Receivers	AM/FM Radio	Asia Radios	Gross Margin		$4,084,500	$3,310,726	$773,774	$12,710,603	$11,753,326	$957,277
Receivers	AM/FM Radio	Asia Radios	Sales		$17,009,700	$14,046,606	$2,963,094	$65,939,016	$61,900,005	$4,039,010
Receivers	AM/FM Radio	Asia Radios	Total Cost		$12,925,200	$10,735,880	$2,189,320	$53,228,413	$50,146,680	$3,081,733
Receivers	AM/FM Radio	Specials	Gross Margin		$220,218	$597,517	($377,299)	$814,740	$1,231,953	($417,213)
Receivers	AM/FM Radio	Specials	Sales		$573,930	$1,418,880	($844,951)	$2,363,970	$3,328,956	($964,986)
Receivers	AM/FM Radio	Specials	Total Cost		$353,712	$821,364	($467,651)	$1,549,230	$2,097,003	($547,773)
Receivers	AM/FM Radio	US Compact	Gross Margin		$63,213	$97,824	($34,611)	$614,434	$646,465	($32,031)
Receivers	AM/FM Radio	US Compact	Sales		$373,143	$401,589	($28,446)	$2,021,166	$2,041,772	($20,606)
Receivers	AM/FM Radio	US Compact	Total Cost		$309,930	$303,765	$6,165	$1,406,732	$1,395,307	$11,425
Receivers	AM/FM Radio	US Radios	Gross Margin		$2,051,847	$2,160,443	($108,596)	$8,813,732	$10,331,927	($1,518,196)
Receivers	AM/FM Radio	US Radios	Sales		$30,138,285	$32,838,115	($2,699,830)	$117,663,209	$139,199,099	($21,535,890)
Receivers	AM/FM Radio	US Radios	Total Cost		$28,086,438	$30,677,672	($2,591,234)	$108,849,478	$128,867,172	($20,017,694)

The ESOP Gap Report shows Year To Date, Current Year, and Next Year Budget and Plan, and the Gap or difference between the Budget and the Plan. The data shown in the comparison is Gross Margin, Margin Variable Budget, Sales, Tot Fixed Cost, Tot Other Var Cost, Tot Variable Cost, Total Cost, and Variable Margin. The data is sorted by SBU, Group, and Subgroup. If a different sort or view is desired, then you can drag and drop the column headings to the top line. To remove a field, drag and drop it back into the heading line.

The Spreadsheet button will export the data to a spreadsheet from the ESOP Gap Report tab.

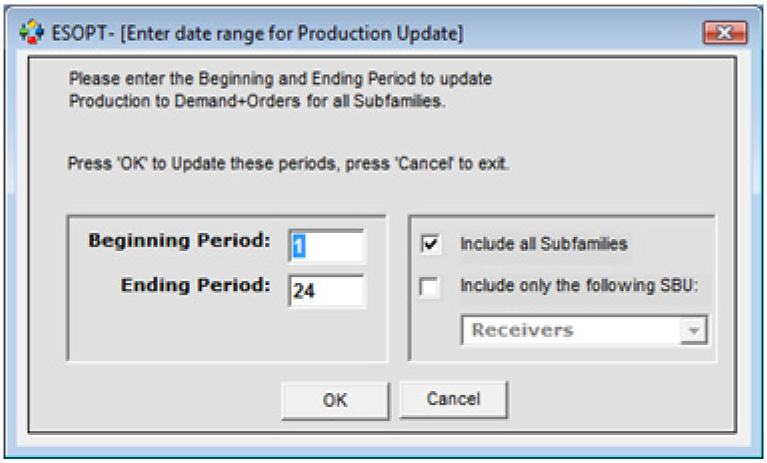
Global Supply Utilities

The Global Supply Utilities provide a means to set Production Value to:

- Demand + Orders
- Demand + Orders + Dep Demand – Purchases.

To access the Global Supply = Demand + Orders:

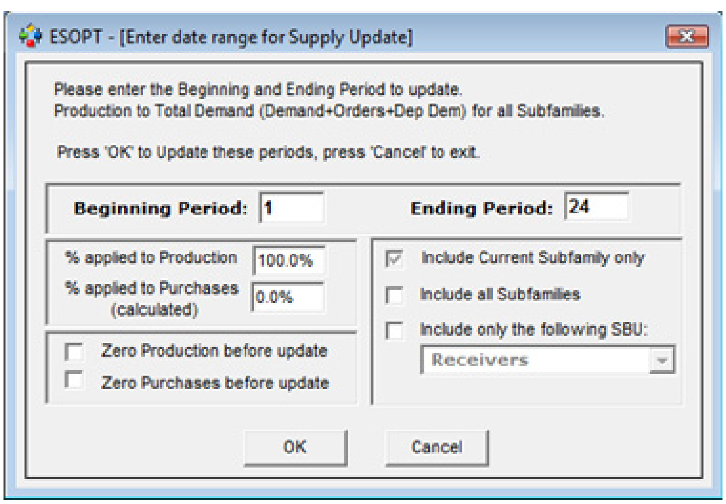
- From the Main Menu toolbar, select 'Tools' to display a drop-down menu.
- Select Global Supply Utilities.
- Select Global Set Production to Demand + Orders



To set Production to Demand + Orders, then select the Beginning and Ending Periods. The utility can be used for all Subfamilies and by SBU. Click the OK button to update the data.

To access the Global Supply = Demand + Orders + Dep Demand - Purchases:

- From the Main Menu toolbar, select 'Tools' to display a drop-down menu.
- Select Global Supply Utilities.
- Select Global Set Production to Demand + Orders + Dep Dem – Pur.

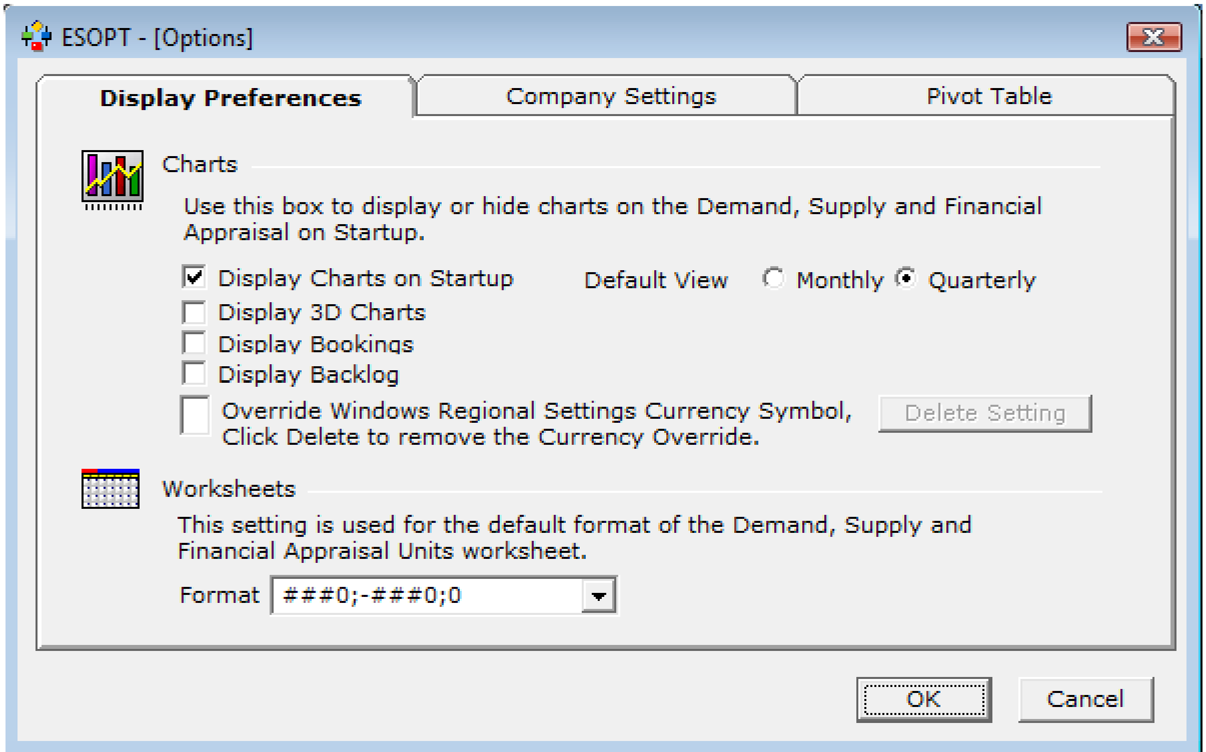


To set Production to Demand + Orders + Dep Demand - Purchases, then select the Beginning and Ending Periods. The utility can be used for all Subfamilies and by SBU. Click the OK button to update the data.

ESOPT Options

The ESOP Tool Options Menu allows you to set defaults in Display Preferences/Settings, Company Settings, and select the data to be exported in the Pivot Table analysis tools.

To access the Options Menu From the Toolbar, select Tools>Options



<u>Display Preferences Charts</u>

Display Charts on Startup: This option allows you to turn off the charts on the Demand and Supply Review. You may experience an improvement in performance with this option turned off, especially on a slow network. Charts may also be displayed or hidden using the button on the Demand Review and Supply Review forms. The default setting is: <u>on</u>.

- Check the 'Display Charts on Startup' to enable charts on startup.
- Uncheck the 'Display Charts on Startup' to hide/disable charts on startup.

Default View: The default chart view when using the 5 year and 30 year horizon option is ‘Quarterly’.

- Select ‘Monthly’ to display the charts Monthly.
- Select ‘Quarterly’ to display the charts Quarterly.

Display 3D Charts: Display or Remove three-dimensional effects from the charts. The default setting is: off.

- Check the 'Display 3D charts' box to display three-dimensional charts.
- Uncheck the 'Display 3D charts' box to display two-dimensional charts.

Display Bookings: Display or remove Bookings from the charts. Bookings will remain visible in the grid section. The default setting is: off.

- Check the 'Display Bookings' box to display Bookings in charts.
- Uncheck the 'Display Bookings' box to not display Bookings in charts.

Display Backlog: Display or remove Backlog from the charts. Backlog will remain visible in the grid section. The default setting is: off.

- Check the 'Display Backlog' box to display Backlog in charts.
- Uncheck the 'Display Backlog' box to not display Backlog in charts.

Override Windows Regional Settings Currency Symbol: The Currency Symbol displayed on the value charts and reports uses the 'Currency Symbol' setting located in the Windows Regional Settings. If you are using a currency in the tool which is different from your Regional Settings and do not wish to modify the Windows setting, you may override the Currency Symbol. You may delete this setting at any time. The default setting is: No currency override symbol, use Windows Regional setting.

To override the Windows Regional 'Currency Symbol,'

- Enter the 1 character Currency Symbol.

To delete the Currency Symbol and use the Windows Regional 'Currency Symbol,'

- Click the 'Delete Setting' button.

Worksheets

Format: You may select the default format of the numbers in the Demand, Supply, and Finance Review Units worksheets. The first set of numbers indicates the format for positive numbers; the second set indicates the format for negative numbers and the last is the format for a 0 or null field. Each format is separated by a semicolon. The example below shows the format available using the number 100,000.2456.

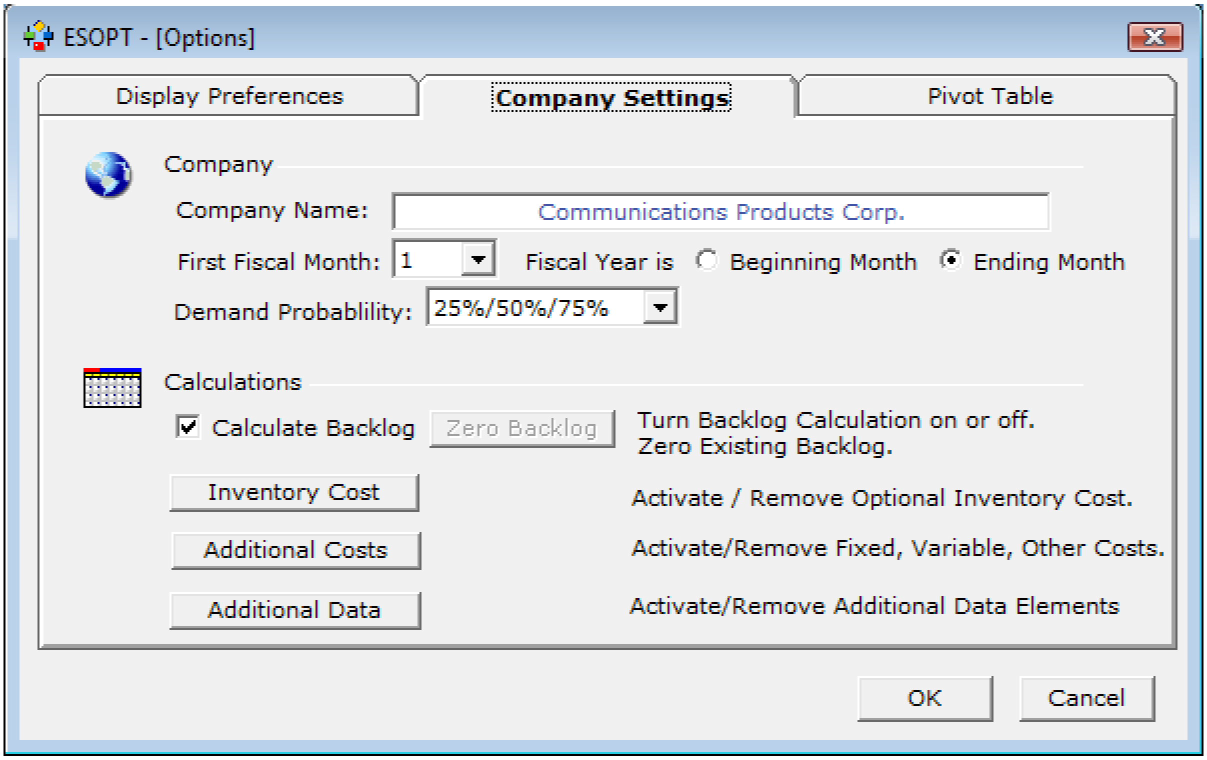
Format	Result	Desc
###0;-###0;0	100000	No Decimals or Comma Separator
#,##0;-#,##0;0	100,000	No Decimals use Comma Separator
###0.0;-###0.0;0	100000.2	Display 1 Decimal place, no Comma Separator
#,##0.0;-#,##0.0;0	100,000.2	Display 1 Decimal place, use Comma Separator
###0.00;-###0.00;0	100000.25	Display 2 Decimal places, no Comma Separator
#,##0,;-#,##0,;0	1,000	Display number in Thousands, use Comma Separator
General Number	1000000.2456	No Formatting

To change the default format for the Demand, Supply, and Finance Review Units worksheets,

- Click the drop-down box to select the default format.

Company Settings Tab

The Company Settings tab allows you to change the ESOPT global settings.



Company

Under Company, you can enter or change the name of the company and enter the first month of your fiscal calendar.

Company Name

- Enter the Company Name you would like to display on the menus and reports. You may modify the Company Name at any time.

First Fiscal Month

- Enter the Month number representing the beginning month of the company's yearly accounting period.

Fiscal Year is

- Select either Beginning Month or Ending Month for the Fiscal Year.

Demand Probability:

- Select the Demand Probability from the drop-down list of 25%, 50%, 75% or 30%, 60%, 90%.

Calculations

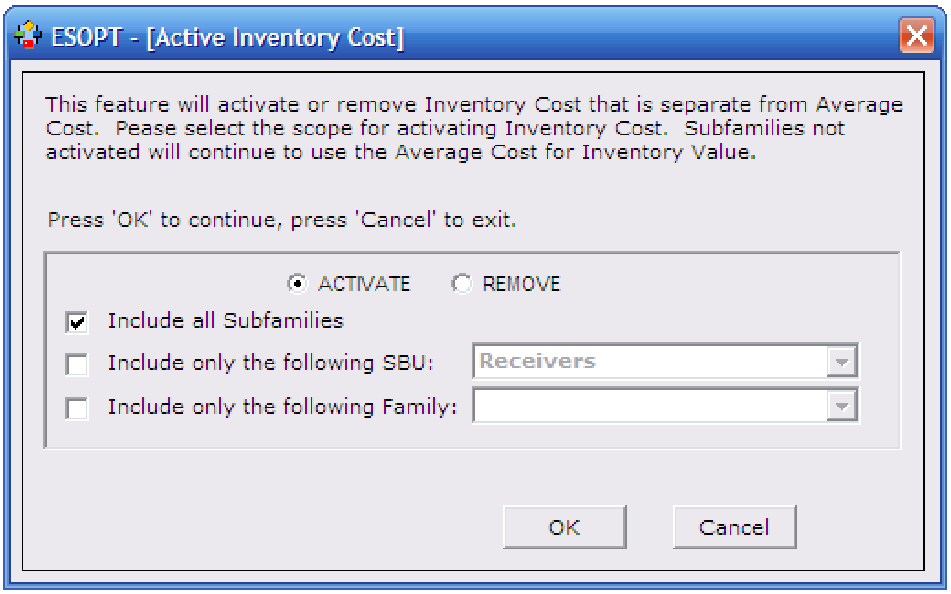
The Backlog calculation may be disabled globally by removing the check in the Calculate Backlog check box. Turning off the Backlog calculation will not remove current Backlog data. There is an option available to zero out the backlog by clicking on the Zero Out Backlog button.

- Check the 'Calculate Backlog' box to enable the -1 period beginning backlog calculation and the future backlog calculation in period 1 to 24.

- Uncheck the 'Calculate Backlog' box to disable the -1 period beginning backlog calculation and the future backlog calculation in period 1 to 24.

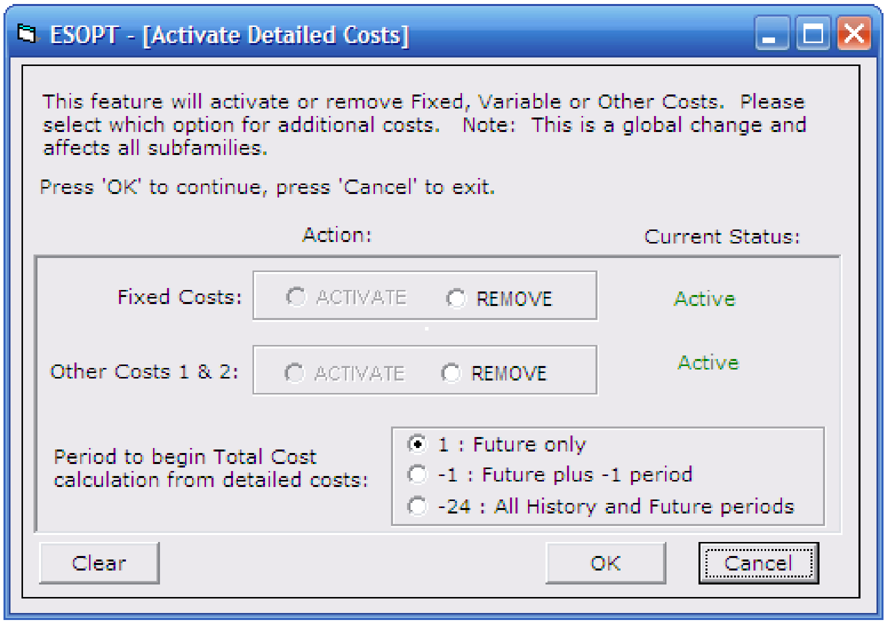
Inventory Cost
The Inventory Cost button is available to activate or remove Inventory Cost. This is separate from Average Cost Inventory. Select the Subfamilies to activate Inventory Cost. Inventory Cost may be loaded using the initial and ongoing imports or entering the data on the Inventory Target tab in the Supply Review module.

The Active Inventory Cost screen appears after clicking on the Inventory Cost button on the Company Settings tab. Enter the Inventory Cost information and click OK to Save.



Additional Costs

The Additional Costs button is available to activate or remove Fixed, Variable, or Other Costs. This allows you to break down your Avg Cost into Fixed, Variable, and Other Cost elements. These detailed cost lines will show up in the Cost tab of the Supply Review once it is activated. As noted on the screen, activation of additional cost affects all Subfamilies. **See (Cost – Data)** for instuctions on entering Additional Cost data in Supply Review.



The Activate Additional Detailed Costs screen appears after clicking on the Additional Costs button on the Company Settings tab. Select which costs you want to activate by clicking on the radio button. If you click on Other Costs, Fixed Costs will automaticly be activated. After you have selected the costs you want to activate, click OK.

<u>Period to Begin Total Cost calculation</u>

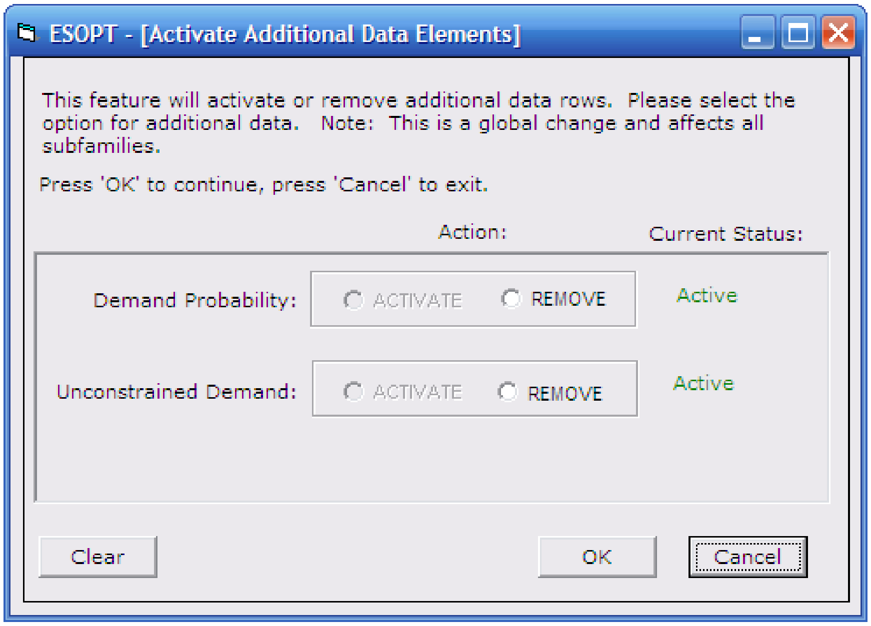
This field designates the first period to begin calculating Total Cost from the sum of the Detailed Cost. The setting applies to Total Budget Cost and Total Average Cost. The options are

- 1 Calculate future periods only.
- -1 Calculate the -1 period and future periods.
- -24 Calculate History and Future periods

After you have selected the costs you want to activate or remove, click OK.

Additional Data

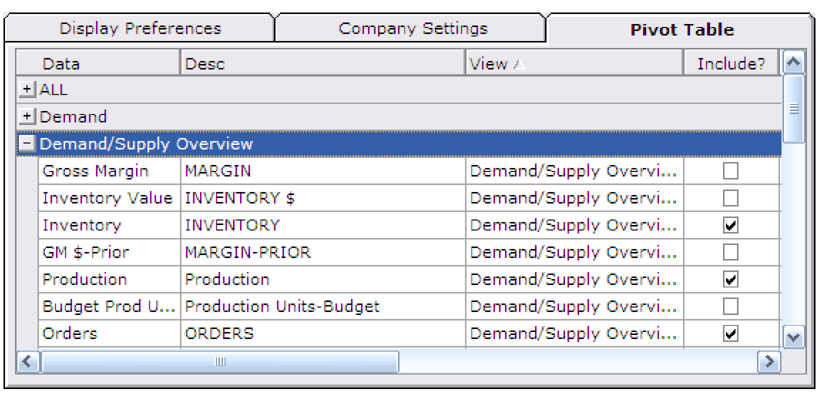
The Additional Data button is available to activate or remove Additional Data Elements of Demand Probability and Unconstrained Demand. These detailed cost lines will show up in the Units tab for Supply and Demand. As noted on the screen, activation of additional data affects all Subfamilies.



The Activate Additional Data Elements screen appears after clicking on the Additional Data button on the Company Settings tab.   Select which costs you want to activate or remove by clicking on the radio button. After you have selected the data you want to activate or remove, click OK.

Pivot Table

The Pivot Table tab allows you to select the data that will be included in the Pivot Table. This option may be used if you are exceeding the row limit in Excel.   You can make the selection of the data you want to see in the pivot table there as well.



- To include the data, check the box.

To exclude the data, uncheck the box.

Group Master Fields

Name

SBU (Maximum 50 characters). The single quote character is not permitted.

- The SBU or Strategic Business Unit is a grouping of families of products that are perceived in the market as having some similarities; i.e. pumps, health care products, stationery, etc. Some companies will use this to segment plants or direct distribution vs. distribution centers.
- Enter the SBU name or select from the drop-down list of previously-entered SBUs.

Family (Maximum 50 characters). The single quote character is not permitted.

- The families are major product lines within an SBU: i.e. shampoo, face cream, mascara, etc.
- Enter the Family name or select from the drop-down list of previously entered Families.

Subfamily (Maximum 50 characters). The single quote character is not permitted.

- The Subfamily is a further breakdown of the families to facilitate the loading of resources or because of price/cost structure (i.e. a family may have products that sell for $1 and others that sell for $1000).
- Enter the Subfamily name.

UofM

- The Subfamily Unit of Measure used for ESOPT planning.
- Enter the Unit of Measure.

Pricing

Sell/Unit

- The Sell/Unit entered in this field will be entered as the Default Sell $, or ASP, on the Demand form. This may be overridden, by month, in the Demand Form-Units Worksheet. If the Pricing Method is Units, this quantity should be the average Sales Price per Unit of the items in the Subfamily. If the Pricing Method is Dollars, the quantity should be $1. If the Pricing Method is fixed, this quantity should be equal to the total monthly Sales Dollars for the items in the Subfamily.
- Enter the Sales quantity.

Cost/Unit

- The Cost/Unit entered in this field will be entered as the Default Cost $, or AC, on the Demand form. This may be overridden, by month, in the Demand Form-Units Worksheet. If the Pricing Method is Units, this quantity should be the average Cost per Unit of the items in the Subfamily. If the Pricing Method is Dollars, the quantity should be an amount, less than $1, that reflects the Cost of sales as a percent of sales dollars. If the Pricing Method is fixed, this quantity should be equal to the monthly total Cost for the items in the Subfamily.
- Enter the Cost of the items in the Subfamily.

Pricing Method

- Select a Pricing Method of 'Fixed,' 'Unit,' or 'Dollars'. See Glossary of Terms for definition of Pricing Method.

Targets/Objectives

These targets are for reference only and are optional.
Enter the Inventory Target.
Enter the Backlog Target.
Enter the Lead Time Target.

Inventory Target

- Inventory Target Unit of Measure may be in Units or Days.
- Units represent a fixed number of units or the Subfamily planning unit of measure.
- Days represent the number of days of inventory, based on the monthly demand plan, divided by the number of sales days in the month.

Minimum Inventory Target

- Minimum Inventory Target may be entered in Units or Days, as defined by the Inventory Target Unit of Measure. The minimum target entered here will be used for all periods in the planning horizon. If the Subfamily does not have a Minimum Inventory, or monthly Minimum Targets, leave this entry 0.

Maximum Inventory Target

- Maximum Inventory Target may be entered in Units or Days, as defined by the Inventory Target Unit of Measure. The Maximum Target entered here will be used for all periods in the planning horizon. If the Subfamily does not have a Maximum Inventory, or monthly Maximum Targets, leave this entry 0.

Accuracy Tolerances

- The Accuracy Tolerances are used to determine the Sales Plan and Production Plan Accuracy in the Plan Performance Report.
- Enter the Family and Subfamily Sales Plan Tolerances.
- Enter the Family and Subfamily Production Plan Tolerances.

Subfamily Type

This field is used to specify the Type of Subfamily. The Subfamily Type is used for the following calculations and summarization:

1. To determine whether and how inventory is calculated
2. To determine required capacity
3. To determine whether and how a Subfamily is summarized at higher levels

Select a Type code from the drop-down list. The selections are defined in the table below.

Subfamily Type	Standard, Summarize ALL	Demand w/Inventory	Demand	Supply Asset Inventory	Supply FG Inventory	Standard, Summarize Family Only
Calculation	Y	DI	DN	SA	SI	N
Calculate Inventory*	Y	Y	N	Y	Y	Y
from	I1	I1	-	I2	I1	I1
Distribute BOM**	Y	Y	Y	N	N	Y
from	P	P	S	P	P	P
Aggregation***	Y	DI	DN	SA	SI	N
Demand Data						
Bookings	ALL	ALL	ALL	-	-	F
Orders	ALL	ALL	ALL	-	-	F
Demand	ALL	ALL	ALL	-	-	F
Dependent Dem	ALL	-	-	F	F	F
Shipments	ALL	ALL	ALL	-	-	F
Supply Data						
Production	ALL	-	-	ALL	ALL	F
Purchases	ALL	-	-	ALL	ALL	F
Inventory	ALL	ALL	-	-	ALL	F
Financials						
Financial Review-All Levels	ALL	ALL	ALL	-	-	-
Inventory Value	ALL	ALL	ALL	ALL-Assets	ALL	ALL
Annual Totals	ALL	ALL	ALL	F	F	F

*Inventory calculation

I1	Prior Inv+Production+Purchases-Dependant Demand-Shipments
I2	Prior Inv+Production+Purchases
-	Not Calculated

**Distribute BOM From

P	Production
S	Shipments
-	Not Distributed

***Aggregation of Data

ALL	All Levels (Company, Family, SBU, Total)
F	Family and Subfamily
-	Not Summarized

Calculate Dependent Demand?
This field is used to determine whether Dependent Demand will be calculated for this Subfamily if the Subfamily is referenced in the BOM structure of another Subfamily.

- Select 'Yes' to calculate Dependent Demand for this Subfamily. Select 'No' to not allow Dependent Demand to be calculated automatically for this Subfamily, thus allowing manual entry of Dependent Demand.

Dependent Demand Start Period
This field is used to define the beginning period to updated dependent demand. Dependent Demand periods prior to the start period will not be updated.

- Enter the perod to begin updating dependent demand.

Dependent Demand in Days of Inventory
This field is used to determine whether dependent demand is included in the 'Days of Inventory' calculation. The calculation is used in the Inventory charts when expressed in days and 'Set Supply to Inventory Target' utility when Inventory Target is entered in days. Valid settings are True or False indicated by a check box.

- Check the box to include Dependent Demand in 'Days of Inventory' calculation.
- Uncheck the box to exclude Dependent Demand from the 'Days of Inventory' calculation.

Strategy

- Select Make to Order/Make to Stock as the strategy used.

NPD?
The NPD, or New Product Definition, segments the way the data is presented in the S&OP portion of the Tool between Demand/Supply Review and New Product Review.

- Select Yes or No if the Subfamily is, or is not, a New Product Introduction.

Foreign Currency Translation?

- Select the currency for the subfamily from the drop down.

Demand Type
Demand Types may be used for Demand and Resource Load Analysis. The Demand Type code and description are a defined setup in the Aggregation Maintenance. Valid codes are 0-9. Enter the 1 digit code identifyer in the Demand Type field.

Inventory Type
Inventory Types may be used for Supply and Resource Load Analysis. The Inventory Type code and description are a defined setup in the Aggregation Maintenance. Valid codes are any 2 character identifier. Enter the 2 character identifyer in the Inventory Type field.

P/L Aggregation
The P/L aggregation codes are defined setup in the Aggregation Maintenance. It may be used to aggregate data in the Demand/Supply Review, Product Review, and Finance Review charts. Enter the 2 character identifyer in the P/L Aggregation field.

Formulas

Aggregate Average

Average Sales (per unit)

Sales Revenue / Shipments.

Average Cost (per unit)

Total Cost / Shipments.

Average Total Variable Cost (per unit)

Total Variable Cost / Shipments.

Average Fixed Cost (per unit)

Fixed Cost / Shipments.

Backlog

Period -1 Backlog

Sum of future open orders

Projected Backlog

Period -1 Backlog + Bookings – Shipments (MTO)
Period -1 Backlog - Orders (MTS)

Capacity

Demonstrated Capacity

Daily Demonstrated Capacity * Number of Production Days.

Required Capacity

Total Production Units * Allocation %) * Conversion factor.

Maximum Capacity

Daily Maximum Capacity * Number of Production Days.

Planned Capacity

Daily Planned Capacity * Number of Production Days.

Dependent Demand

Parent Item Plan[1] * Child BOM Conversion Factor (period adjusted by Child BOM offset). The Dependent Demand generated by each parent item is summarized for the total dependent demand for the child item, for each period.

[1] If Parent Item Subfamily type is DI or N, Plan is <u>Production Plan</u>
If Parent item Subfamily Type is Y or DN, Plan is <u>Shipments Plan</u>

Inventory Dollars

If Pricing method = Units, Inventory $ = Inventory Units * Average Cost
Fixed, Inventory $ = Average Cost (AC)
Dollars, Inventory $ = Inventory Units.

Inventory Plan

Subfamily Types

Y	Standard Functionality, Standard Aggregation	SA	Supply with Assets
DI	Demand with Inventory	SA	Supply with Inventory
DN	Demand, no Inventory	N	Standard Functionality, No Company SBU Aggregation

Subfamily types: Y, DI, SI, N
Beginning Inventory + Production + Purchases - Dependent Demand – Shipments

Subfamily type: SA
Beginning Inventory + Production + Purchases

Subfamily type: DN
Not Calculated

Net Shipments

Period -3 to -1 = Shipments
Period 1 to 24 = If Shipments < 0, then 0
If Shipments > 0, then
If Inventory > 0, then Shipments
If Inventory < 0, then
If Production + Purchases – Dep Dem <0 then 0
If Production + Purchases – Dep Dem + Positive Inventory (Inv>0)

Production Plan

Make-to-Stock:
Production Plan = Forecast + (Desired Ending FGI - Beginning FGI)

Make-to-Order:
Production Plan = Forecast - (Starting Backlog-Desired Ending Backlog)

Make-to-Stock / Make-to-Order:
Production Plan = Sales + (Inventory and/or Backlog) Adjustment

Sales Revenue

If Pricing Method is set to 'Unit' or 'Dollars,' the Sales Dollars = Average Sales Price * Shipment Units.
If Pricing Method is set to 'Fixed,' the Sales Dollars = Average Sales Price (ASP).

Shipments Plan

Demand (unconsumed forecast) + Orders

Cost Formulas

Fixed Cost

If Pricing Method is set to 'Unit' or 'Dollars,' Fixed Cost * Shipments.
If Pricing Method is set to 'Fixed,' Average Fixed Cost.

Margin

Gross Margin is calculated by the Sales Revenue – Total Cost.
Variable Margin is calculated by the Sales Revenue – Total Variable Cost.

Margin Percent %

Gross Margin percent is calculated by Gross Margin/Sales.
Variable Margin percent is calculated by Variable Margin/Sales.

Total Cost / Cost of Goods Sold

If Pricing Method is set to 'Unit' or 'Dollars',
Total Cost = Total Average Cost * Shipments.
If Pricing Method is set to 'Fixed',
Total Cost = Average Cost (AC).

Total Variable Cost

If Pricing Method is set to 'Unit' or 'Dollars,'
(Average Variable Cost + Average Other Costs) * Shipments.
If Pricing Method is set to 'Fixed,' Total Average Variable Cost.

Variable Cost

If Pricing Method is set to 'Unit' or 'Dollars,' Average Variable Cost * Shipments.
If Pricing Method is set to 'Fixed,' Average Variable Cost.

FAQs

The following questions are most commonly asked in new and existing ESOP Tool implementations. Most of the questions are related to where or how to enter data in the Tool.

- **How does the Scenario Manager work?**
  The Scenario Manager provides a means of managing "what-if" simulations. Plans may be imported and exported for review of the impact on financials and capacity. *See Utilities-Scenario Manager*.

- **What is the difference between Scenario Manager and Import Manager Data?**
  The Scenario Manager creates an exact copy of the entire Tool data into a spreadsheet or imports a scenario that replaces all data that is in the Tool.

  Import Manager is used to import specific plan data from a file into the Tool. This is used to interface with any software capable of producing a .csv or .xls file.

- **How do I enter a Resource?**
  Resources are entered in the Resource Master.
  See Entering Supply Data- Resources.

- **How do I find a Subfamily?**
  You can find a Subfamily by searching with the Search Tool.

- **How does the BOM/Dependent Demand function work?**
  Dependent Demand for a specific Subfamily is calculated or generated by entering a Bill of Material on that Subfamily from another Subfamily. See *Entering Supply Data-BOM*. The resulting dependent demand may be automatically transferred to the production plan or manually added to the Production units. *See Entering Supply Data-BOM-Update Production with Dependent Demand.*

- **Can I put the Tool on the server and have multi-user access?**
  Yes. See Getting Started- Installing the ESOP Tool.

- **How do I Copy and Paste?**
  You can copy and paste a field or group of fields using Ctrl-C to copy and Ctrl-V to paste. You can copy and paste an entire record by right clicking on the Record Selector and choosing copy and then paste. *See Getting Started - Using the Tool.*

- **How does the data in the Load Profile work (Conversion Factor, Allocation %, Lead-Time Offset, Conversion Factor)?**
  See Entering Supply Data-Resources -Entering Data in the Load Profile Master.

- **How does the system calculate the Resource Planning graphs?**
  The Resource Planning data is calculated from the Resource Master and the Load Profile Master. *See Entering Supply Data-Resources Graphs.*

- ### How does the system work when pricing in Dollars?
  If the company's sales plan is based on dollars rather than units (common with Spare Parts and Service Subfamilies), the amounts entered in the Units worksheets are dollar amounts. With the Pricing Method "Dollars," the quantity in the "Sell \$ (ASP)" should be \$1 for each month, the quantity in the "Cost \$ (AC)" should be an amount less than \$1 that reflects the Cost of Sales as a percent of Sales dollars. For each Sales Dollar shipped, the system relieves Inventory by the percentage on the "Cost \$ (AC)" field.

- **<u>How does the system work when Pricing is Fixed?</u>**
  If the company's sales plan is generated in a fixed dollar amount, the Pricing Method for the Subfamily should be set to 'Fixed'. When the Pricing Method is set to 'Fixed', the monthly Sales Dollars are equal to the amount entered in the "Sell $ (ASP)" field for that month.

- **<u>How do I display the Resource Planning Graphs?</u>**
  To access the Resource Planning Summary Graph, select the chart button in the upper right corner of the Supply Review.

- **<u>How does the system calculate the Backlog (both History and Plan)?</u>**
  The beginning Backlog, or the –1 period Backlog, is calculated as the sum of future open orders from the Order field. When the Roll Month function is performed, the history is saved for each month in the –2 to –24 period fields. The future Backlog is calculated by Beginning Backlog + Bookings – Shipments for MTO, and Beginning Backlog – Orders for MTS.

- **<u>Can I enter negative numbers?</u>**
  Yes, negative numbers can be entered with a preceding minus sign or enclosed in parentheses such as –150 or (150).

- **<u>What is the difference between Bookings, Orders, and Demand?</u>**
  Bookings are typically used in a Make-to-Order environment. They are only used in the Tool to calculate Backlog. <u>Bookings</u> are the orders you expect to receive in a certain period. For a Make-to-Order <u>and</u> a Make-to-Stock environment, the <u>Demand</u> is how many units you forecast to ship or how many are needed in a planned period. The <u>Orders</u> are how much of the current Backlog (or Open Orders) you expect to ship in a Planned period. Therefore, the projected shipments are equal to Demand + Orders.

- **<u>Can I electronically transfer data into the Tool?</u>**
  Yes, data may be initially loaded into the database as well as updated on an ongoing basis using the Import Utility. *See Utilities - Import Menu* for the layout needed for the imported data and instructions for using the utility.

- **<u>How can I get the Budget data into the Tool?</u>**
  The Budget can be entered in two ways: It may be entered in the Finance form-Units worksheet, or it can be automatically updated by the Update Budgets button. The Update Budgets button will copy the plan data to the budget. It may be used if there is an established S&OP process in place. See *Financial Appraisal - Budget Worksheet* and *Update Budgets.*

- **<u>How can I pull specific data out of the Tool into a spreadsheet?</u>**
  There are several ways to set up for exporting data to a spreadsheet.
  1. Export using the Scenario Manager. This will export all the data in the Tool.
  2. Export to the Pivot Table function. This creates an Excel Pivot Table with all the data.
  3. From the toolbar, select Tools>Add/Delete/Edit/>ESOP Data; click the 'Export to Spreadsheet' button at the top of the form.

- **<u>Can I capture the screens and charts to create a presentation?</u>**
  Yes, on the top left of each chart, there is a capture menu which allows several options. You can copy the chart into the clipboard and paste it into a presentation. You can save the chart as an image. You can print the chart in portrait or landscape format.

- **<u>How many Subfamilies can the system handle?</u>**
  The system can handle unlimited Subfamilies. You may see a reduction in performance as more records are added. To optimize performance in the database, compact the database on a regular basis, turn the

Autorecalc default off, *See Utilities-S&OP Options*, and turn the display graphs off while working within Units worksheets. If you are still experiencing performance issues, you may want to consider upgrading the memory in the workstation, or the workstation itself, to a faster processor or CPU.

- **When and how do I Roll the Month?**
  The Roll Month function should occur following the Management Business Review. This will enable you to enter the previous month's actuals and prepare new data for the next S&OP monthly pre-meetings. The Roll Month function is accessed from the toolbar, by S&OP→Base Data. *See Utilities-Roll Month.*

- **How do I know that I have the latest version of the Tool?**
  From the toolbar, select S&OP Menu, About S&OP for Windows 95/NT. This will give you the current version your company is using. You may verify this version with your Oliver Wight consultant.

- **Which cells on the Tool worksheets are entered and which are calculated?**
  The fields which are entered are prior and future Bookings, Demand, Orders, Purchases, Production, Average Sell Price, and Average Cost. Also Ending Inventory, Actual shipments in the –1 period field, and Beginning Backlog in the –2 period field. The fields which are calculated are future Inventory, Backlog and Shipments, Sales Dollars, Cost of Goods Sold or COGS, Margin $, Margin %, Inventory Dollars, Budgeted Ship Units, and Production Units.

- **I just installed the Tool. Why can't I see the whole screen (the tabs are cut off on the demand/supply review screens)?**
  Be sure your Display properties are set to at least 1024 x 768, using small fonts. These setting are located in the Control Panel > Display Properties

- **The Rough-Cut Capacity charts won't display, or I get an error message?**
  The Resource Planning loads are calculated by having a valid production plan and matching load profile present. Load profiles are recalculated from the Supply Review Menu (chart Icon in upper right-hand corner next to exit icon). When Resource Planning charts are displayed from the Management Business Review Menu (Resource Plan), it is presumed that the Resource Planning data has been refreshed prior to the Management Business Review and, therefore, only the current data is displayed. Possible causes are:
  1. The Load profiles have not been defined.
  2. The Production Plan has not been entered.
  3. The screen has not been refreshed from the Supply Review Menu.

- **Can I alter the agendas?**
  Yes. The pre-meeting agendas can be modified on the Supply, Demand, and Finance forms, and all agendas may be accessed using the Management Business Review-Agenda form. *See Management Business Review-Agenda.*

- **Can I have other than a calendar year-end?**
  Yes. This is maintained on the S&OP Menu→Add/Edit/Delete Menu→Base Data by changing the First Fiscal Month. *See Using the Base Data Form-Calendars.*

- **How are inventory dollars calculated?**
  The Inventory Dollars calculation is determined by the Pricing Method selected:
  If Pricing Method is Units, then Inventory $ are calculated by Inventory Units * Average Cost
  Fixed, then Inventory $ are equal to Average Cost Dollars, then Inventory $ are equal to Inventory Units.

- **Do the Inv Target, BL Target , and Lead Time Target have any impact on calculations?**
  No. They are there for display/text purposes only and to begin the conversation as to what these values should be in sizing the business.

- **<u>What does the "NPD?" Flag do?</u>**
  The NPD flag provides the ability to separately focus on New Product or NPD-related families by separating them for presentation in the Management Business Review Menu. Also, in the Management Business Review Menu→Performance Review, there is a flag which allows users to view the financial picture with or without the impact of NPD families for the financial graphs.

- **<u>How do I enter Process Critique data?</u>**
  This is a two-step process that first requires that the date be entered in "MM/YY" format (i.e. 09/99). Then begin entering scores for the process by question. This should represent the average of all the participants' view of the process, as graded by question. The screen doesn't allow for individual input of scores. *See Management Business Review-Process Critique.*

- **<u>Can I automatically set production equal to total demand?</u>**
  Yes. There are menu options that allow the user to manually do this as a one-step process. From the Toolbar select the Tools → Global Supply Utilities → Set Production to Total Demand (Dem+Ord+Dep Dem).

- **<u>Can I select which elements appear on the charts?</u>**
  No. The elements on the charts are predefined.

- **<u>Can I limit which comments are printed?</u>**
  Yes. Each of the Comments data entry forms will contain the field 'Print?'. Select 'Yes' to include in printing. Select 'No' to omit printing.

ESOPT Terms & Definitions

Bookings - Orders received in a particular period. Typically in a make-to-stock environment, bookings will be equal to Shipments. In a make-to-order environment, bookings may differ from the actual need date and, thus, the demand date is also required.

Business Plan - A statement of income projections, costs, and profits usually accompanied by budgets and a projected balance sheet as well as a cash flow (source and application of funds) statement. It is usually stated in dollars. The business plan and the production plan, although frequently stated in different terms, should be in agreement with each other.

Demand - A need for a particular product or component. The demand could come from any number of sources, i.e. customer order, forecast, interplant, branch warehouse, or service part. Note: Should be stated net of consumed forecast.

Demonstrated Capacity - Capacity calculated from actual performance data, usually expressed as average output per time period, accumulated over an appropriate period.

Dependent Demand - Demand is considered dependent when it comes from production schedules for other items. These demands should be calculated, not forecasted. A given item may have both dependent and independent demand at any give time. See INDEPENDENT DEMAND.

Family - The families are major product lines within an SBU, i.e. Shampoo, Face Cream, Mascara, etc.

Independent Demand - Demand for an item is considered independent when such demand is unrelated to the demand for other items. Demand for finished goods and service parts are examples of independent demand.

Lead-time Offset - A term used in MRP where a planned order receipt in one time period will require the release of that order in some earlier time period based on the lead time for the item. The difference between the due date and the release date is the lead-time offset.

Load - The amount of work scheduled for a manufacturing facility usually expressed in standard hours or units of production.

Load Factor - A factor used to translate standard units into gross units and compensates for all constraints that cause gross units and standard units not to be equal.

Load Profile - A statement of the key resources required to manufacture one unit of a selected item. Often used to predict the impact of the item scheduled in the production plan and/or the master schedule on these resources.

Make-to-Order Product - A product which is finished after receipt of a customer order. Frequently, long lead-time components are planned prior to the customer order arriving in order to reduce the delivery time to the customer.

Make-to-Stock Product - A product planned to be shipped routinely from finished goods, "off-the-shelf" and, therefore, finished prior to the customer order arriving.

Net Shipments - The sum of subfamily demands within each month with available product to ship – in the form of production, purchases, or inventory. It will differ from total shipments in any month when there is one or more subfamilies that have not synchronized total demand (demand + orders) with supply. When reviewing subfamily data, a negative inventory would indicate an unsynchronized subfamily.

Orders - The time-phased split of backlog. The sum of all open orders should be equal to the beginning backlog.

Pricing Method - Pricing method refers to the way the sales plan is generated in your company. The pricing method may be set to 'unit' or 'fixed' or 'dollars.' If pricing method is set to 'unit,' the sales dollars will be calculated by the average sales price * shipment units and cost will be calculated by the average cost/unit * shipment units. If pricing method is set to 'fixed,' the sales dollars equal the average sales price (ASP) and cost is equal to the cost $ (AC). If the company's sales plan is based on dollars rather than units (common with spare parts and service subfamilies), the amounts entered in the units worksheets are dollar amounts. With the pricing method "dollars," the quantity in the "sell $ (ASP)" should be $1 for each month. The quantity in the "cost $ (AC)" should be an amount less than $1 that reflects the cost of sales as a percent of sales dollars.

Production Plan - The overall level of manufacturing output planned to be produced. Usually stated as a monthly rate for each product family (group of products, items, options, features, etc.). Various units of measure can be used to express the plan: units, tonnage, standard hours, number of workers, and others. The production plan is management's authorization for the master scheduler to convert it into a more detailed plan, i.e. the master production schedule.

Resouce Planning / Rough-Cut Capacity Planning (RCCP) - The process of converting the production plan and/or the master production schedule into capacity needs for key resources: manpower, machinery, warehouse space, vendors' capabilities, and in some cases, money. Load profiles are often used to accomplish this. The purpose of rough-cut capacity planning is to evaluate the plan prior to exploding it through MRP, sometimes called Resource Requirements Planning.

Sales and Operations Planning - (Formerly called Production Planning) - The function of setting the overall level of manufacturing output (Production Plan) and other activities to best satisfy the current planned levels of sales (Sales Plan and/or Forecasts) while meeting general business objectives of profitability, productivity, competitive customer lead times, etc. as expressed in the overall Business Plan. One of its primary purposes is to establish production rates that will achieve management's objective of maintaining, raising, or lowering inventories or backlogs, while usually attempting to keep the work force relatively stable. It must extend through a planning horizon sufficient to plan the labor, equipment, facilities, material, and finances required to accomplish the production plan. As this plan affects many company functions, it is normally prepared with information from Sales, Marketing, Manufacturing, Engineering, Finance, Materials, etc.

Sales Plan - The overall level of sales expected to be achieved. Usually stated as a monthly rate of sales for a product family (group of products, items, options, features, etc.) It needs to be expressed in units identical to the Production Plan (as well as dollars) for planning purposes. It represents sales and marketing management's commitment to take all reasonable steps necessary to make the sales forecast (a prediction) accurately represent actual customer orders received.

SBU - The SBU or Strategic Business Unit is a grouping of families of products that are perceived in the market as having some similarities, i.e. pumps, health care, stationary, etc. Some companies will use this to segment plants or direct distribution vs. distribution centers.

Shipments - The actual amount shipped or amount projected to be shipped based upon the inventory/backlog %. In a make-to-stock environment, projected shipments are equal to bookings. In a make-to-order environment, shipments are a function of the production plan.

Subfamily -The subfamily is a further breakdown of the families to facilitate the loading of resources or because of price/cost structure (if a family has products that sell for $1 and others that sell for $1000).

Resource Plan Terms

Production Calendar - This calendar is used in the Resource Plan calculation of demonstrated (DEM), maximum (MAX), and planned (PLAN) capacity hours in a given month.

Production Days - The number of days the resource will be in producing products. This is multiplied times the DEM HRS/DAY, PLAN HRS/DAY, and MAX HRS/DAY (see Resource Master below) to develop a monthly capacity for each resource.

Resource - Used to uniquely identify each resource. These resources can be equipment, equipment groupings, departments, materials, etc.

Resource Master - Each resource to be planned in Resource Plan is identified to the system by setting it up in this Database table. Resource Planning should be used for critical resources (equipment, equipment groupings for like equipment, departments, materials, etc.) that are potential constraints to satisfying the unconstrained demand forecast. Each resource is identified with the following data:

> **Resource** - Used to uniquely identify each resource. These resources can be equipment, equipment groupings, departments, materials, etc.
>
> **From Date** - The beginning date of the capacity level.
>
> **To Date** - The ending date of the capacity level.
>
> **Demo Hrs/Day** - These are the normal demonstrated (proven) hours that the respective resource is up, manned, and capable of producing products. Typically, it is the number of hours per shift x the number of shifts manned minus the average down time for scheduled and/or unscheduled maintenance. This daily-demonstrated capacity is multiplied by the number of production days to calculate the monthly capacity.
>
> **Plan Hrs/Day** - These are the planned hours that the respective manufacturing resource is up, manned, and capable of producing product. Typically, it is the demonstrated hours/day +/- any planned changes in the hours per shift x the number of shifts manned less the average down time for scheduled and/or unscheduled maintenance. This daily planned capacity is multiplied by the number of production days to calculate the monthly capacity.
>
> **Max Hrs/Day** - These are the maximum hours that the respective manufacturing resource is capable of producing product. Typically, it is the hours/shift x the number of shifts manned + overtime hours. This daily planned capacity is multiplied by the number of production days to calculate the monthly capacity. Typically, this rate of capacity cannot be sustained over long periods of time even if it can be attained for brief periods.

Resource Planning / Rough-Cut Capacity Planning (RCCP) The process of converting the production plan and/or the master production schedule into capacity needs for key resources: manpower, machinery, warehouse space, vendors' capabilities, and in some cases, money. Load profiles are often used to accomplish this. The purpose of rough-cut capacity planning is to evaluate the plan prior to exploding it through MRP; sometimes called Resource Requirements Planning.

Load Profile Master This table links the S&OP subgroups to the planned resources defined in the above Resource Master. Each load profile record contains the following information:

Resource The resource that you are setting up this subgroup's load profile for.

From Date The start date that the allocation %, UM conversion factor, and/or lead time offset values are to be used by Resource Plan for this subgroup item.

To Date The ending date that the allocation %, UM conversion factor, and/or lead time offset values are no longer to be used by Resource Plan for this subgroup item.

Alloc % The percent of this subgroup's production plan to be used when calculating the required hours of capacity. For example: If only 40% of the mix of products included in this subgroup use this resource for some period of time, the ALLOC % is set to 40% and the FROM/TO DATES are set for that period. Then only 40% of the production plan quantities will be converted to a load on this resource during the defined period.

UM Conversion Factor This factor is used to convert the allocated % (mix) of this subgroup's production plan (pounds or gallons in thousands) into the capacity required of this resource (hours for equipment or labor.) An example of how this factor can be calculated: If you know that the average output rate of production for a product in this subgroup is 4,700 pounds per hour when run on this resource, then the conversion factor is 1/4.7 = .21.

UoM The unit of measure for stating the capacity of the resource. For equipment and/or labor, it is typically hours.

LT Offset The lead time offset factor is used to move the calculated load forward or backward in time to align it within the month in which it is most likely to occur. This should be considered optional if your manufacturing lead times are less than 30 days. It is normally only used for finished and intermediate productions plans.