

# Easy Options/ESPP Custom TM

# Valuation Guide with ASC 718 (FAS123R) Reporting

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Please note that screen-shots may reflect previous versions of Stox.

ASC 718 is a standard classification that supersedes/replaces FAS 123R.

# Prices

Prices database stores the information about fair values of the shares for each day in a year (that is, each working day, but you can enter values for non-working days).

System allows you to store share's high, low and market value. Based on the Preferences, system calculates actual Fair Market Value that will be used in transactions, as well as Exercise and Purchase values. You can choose between:

- High value entered,
- Low value entered,
- Average of high and low (high+low)/2,
- Market value entered, or
- Other value, specified in Preferences.

Purpose of Market field is to allow you to store whatever price you want for the FMV, if it is different from options offered above. It is similar for Other price (from Preferences layout), with one major distinction – Other price will be applied for all dates. System always shows your current settings for FMV, Exercise and Purchase values right to the Help button (under the Company abbreviation).

For evidence purposes, you can also enter share volume (number of shares traded on that date).

**Tip**: Update prices database regularly (daily) to avoid missing prices when entering new grants, exercises, purchases and other transactions that require share price.

If you change already stored price value, be aware that it will produce inconsistency in database records that have used that share price.

In order to sort price records by date, please click on **Date** column label.

To **add** a price record, press the **new record** button System automatically fills date according to the last price record. You can change it, if needed, and specify share volume and high, low and market prices.

To **delete** a price record for specific date, press the **delete record** button It is not recommended to delete price records that are already used in the system.

Press **FormView** button is to update prices table for a range of dates. You have to enter the High, Low and Market Value, Beginning Date (From), Ending Date (To), Share Volume, Price Increment and press the **Perform update** button. Starting from entered values for High, Low and Market price, system will increase values in succeeding dates for the amount specified as Price Increment. If the Price Increment is set to 0, same

values for High, Low and Market will be copied; negative increment will decrease values. If you check the Working Days Only, dates that fall on Saturdays and Sundays will be omitted. ADMIN

🛐 Filel	🗊 FileMaker Pro - [Prices.FP3]								
🚺 <u>F</u> ile	<u>E</u> dit <u>M</u> ode	<u>S</u> elect Forma <u>t</u>	S <u>c</u> ript <u>W</u> ind	ow <u>H</u> elp					X
Bac	k Forward	Home Em	ployee Emp. L	.ist Grant	Exercise Di	ispose Opt. L	ist Currency	Reports A	CME 📥
Pr	ices				#155 of 46 records	<sup>50</sup> 🖌 🖊	• • 6	<b>왕 ?</b> FI	MV is Market, Exercise is
Day	Date	Volume	High	Low	Market	FMV	Exercise	Purchase	
We	Mar 1, 2000	3,600	\$14.6000	\$14.4000	\$14.5000	\$14.5000	\$14.6000	\$14.4000	
Thu	Mar 2, 2000	3,600	\$14.5850	\$14.3850	\$14.4850	\$14.4850	\$14.5850	\$14.3850	
Fri	Mar 3, 2000	3,600	\$14.5700	\$14.3700	\$14.4700	\$14.4700	\$14.5700	\$14.3700	
Sat	Mar 4, 2000	3,600	\$14.5550	\$14.3550	\$14.4550	\$14.4550	\$14.5550	\$14.3550	
Sun	Mar 5, 2000	3,600	\$14.5400	\$14.3400	\$14.4400	\$14.4400	\$14.5400	\$14.3400	
Mon	Mar 6, 2000	3,600	\$14.5250	\$14.3250	\$14.4250	\$14.4250	\$14.5250	\$14.3250	
Tue	Mar 7, 2000	3,600	\$14.5100	\$14.3100	\$14.4100	\$14.4100	\$14.5100	\$14.3100	
We	Mar 8, 2000	3,600	\$14.4950	\$14.2950	\$14.3950	\$14.3950	\$14.4950	\$14.2950	
Thu	Mar 9, 2000	3,600	\$14.4800	\$14.2800	\$14.3800	\$14.3800	\$14.4800	\$14.2800	
Fri	Mar 10, 2000	3,600	\$14.4650	\$14.2650	\$14.3650	\$14.3650	\$14.4650	\$14.2650	
Sat	Mar 11, 2000	3,600	\$14.4500	\$14.2500	\$14.3500	\$14.3500	\$14.4500	\$14.2500	
Sun	Mar 12, 2000	3,600	\$14.4350	\$14.2350	\$14.3350	\$14.3350	\$14.4350	\$14.2350	
Mon	Mar 13, 2000	3,600	\$14.4200	\$14.2200	\$14.3200	\$14.3200	\$14.4200	\$14.2200	
Tue	Mar 14, 2000	3,600	\$14.4050	\$14.2050	\$14.3050	\$14.3050	\$14.4050	\$14.2050	
We	Mar 15, 2000	3,600	\$14.3900	\$14.1900	\$14.2900	\$14.2900	\$14.3900	\$14.1900	
Thu	Mar 16, 2000	3,600	\$14.3750	\$14.1750	\$14.2750	\$14.2750	\$14.3750	\$14.1750	
Fri	Mar 17, 2000	3,600	\$14.3600	\$14.1600	\$14.2600	\$14.2600	\$14.3600	\$14.1600	•
100	Browse	+ +							Þ
									1

#### Figure 1 – Prices List Layout

#### System Tasks

#### **Import Records**

First you have to choose how the program will treat records that you want to import, but they already exist in database. You can either overwrite existing data or skip these records.

Note that *exist* means that key fields from records to be imported are same as those stored in database. For Prices database key field is **Date**.

Then, you will be prompted to enter import file name and type.

At the end you have to select and match fields from records you want to import with fields in the database.

After the import, you can run Import Status Report and find out if there were rejected imports. Report shows rejected records with reject reason. Use the content of this field to correct records you want to import. Then, run import procedure once again, but this time only for those previously rejected records. This means you first need to remove successfully imported records from your import database and then start import procedure for the second time. If you do not remove previously imported records, there is a chance to duplicate some records in your database. System does take a thorough check procedure while importing records, but it also depends of the content of your data whether this procedure will be completed successfully or not (error possibility is greater if you import incomplete records - without primary key field, for example).

#### Export Records ADMIN

You have to choose between Default and Custom export.

Default export order:

Date High Value Low Value Market Value Share Volume Price (FMV) Exercise Value Purchase Value

If you choose custom export order, you can add or remove database fields from the export order list.

Before system starts export procedure, you will be prompted to enter export file name and choose export file type.

#### **Report: Fair Values**

Report shows list of price records, with: **Date**, **Day** in week, **Share Volume**, share's **High**, **Low**, **Market** and calculated **Fair Market Value** (**FMV**). FMV is calculated based on the system preferences.

You can specify range of dates by entering **From** and **To** dates.

After you specify additional report parameters please press the **Find** button **to** generate the report.

Press the **Find All** button 🔟 to clear additional report parameters and find all records.

Records are sorted by Date.

There is a trailing grand summary report part, showing minimal, average and maximal Fair Market Values for the records listed.

Report format is Letter, orientation is Portrait.

Report subtitle shows actual minimal and maximal dates from the records in the current found set, and shows Fair Market Value calculation (based on the system preferences).

Press the **Preview** button is to see how the report will look printed on paper. You can browse through the report pages using the **book tool**. Press the **Continue** button to exit from the preview mode.

Press the **Print** button it to print this report. Print dialog will be shown, allowing you to select: printer, change its properties, mark if you want to print in the file, define print range (all pages or page subset), define page numbering starting page, select number of copies and collate settings.

Press the **Jump To Record List** button if you want to filter records. After you finish, please press the **Back** button to return to this report.

You can browse through the record list using the record navigation buttons: go to previous, next, first and last record in the current found set.

Press the **Jump Back** 🚧 button to close this report.

FAIR V From 12/21/20 FMV is Marke	ALUE 100 to 12 t	S /31/2000	Arme Company, In ID: 12-126 Street Name Goes H City, State, Zip	c. ere		
Date	Day	<u>Share Volume</u>	<u>High</u>	Low	<u>Market</u>	<u>FMV</u>
12/21/2000	Thu	4,200	\$28.6500	\$28.4500	\$28.6000	\$28.6000
12/22/2000	Fri	4,200	\$28.8070	\$28.6070	\$28.7570	\$28.7570
12/23/2000	Sat	4,200	\$28.9640	\$28.7640	\$28.9140	\$28.9140
12/24/2000	Sun	4,200	\$29.1210	\$28.9210	\$29.0710	\$29.0710
12/25/2000	Mon	4,200	\$29.2780	\$29.0780	\$29.2280	\$29.2280
12/26/2000	Tue	4,200	\$29.4350	\$29.2350	\$29.3850	\$29.3850
12/27/2000	Wed	4,200	\$29.5920	\$29.3920	\$29.5420	\$29.5420
12/28/2000	Thu	4,200	\$29.7490	\$29.5490	\$29.6990	\$29.6990
12/29/2000	Fri	4,200	\$29.9060	\$29.7060	\$29.8560	\$29.8560
12/30/2000	Sat	4,200	\$30.0630	\$29.8630	\$30.0130	\$30.0130
12/31/2000	Sun	4,200	\$30.2200	\$30.0200	\$30.1700	\$30.1700
					Min	\$28.6000
					Avg	\$29.3850
					Max	\$30.1700

Figure 2 - Fair Values List

# Report: Price Volatility

Report calculates price volatility for the specified date range of fair values (**From** and **To** fields). You may specify annual number of periods or days. Default is set to 255 working days per year.

After you specify these required report parameters please press the **Find** button is to generate the report. Volatility calculation needs at least three price records found. Prices that fall on weekends are omitted.

Fields shown are: **Date**, **Day** in week, **Fair Market Value** and calculated fields: FMV's natural logarithm, change from previous date (delta logarithm) and squared Deviation from average of delta logarithms.

Records are sorted by Date.

There is a trailing grand summary report part, showing **daily** and **annual** price volatility (in percentages) for the records listed.

System calculates volatilities based on daily prices, which are normally stored in the database. If you want to calculate volatilities based on monthly prices, you have to enter monthly prices in the successive price records, (giving them virtual dates – some dates in the future, for example), then specify those dates in the **From** and **To** fields, enter 12 as annual number of periods (12 months per year), and press the **Find** button to generate report.

After you got annual price volatility, you can use **Create Forecast** button to create new forecast record. Forecast record will have Name and **Model** as specified, **Volatility** as calculated, **Dividend rate** as entered (annual rate) or calculated by specifying quarterly dividend amount over current market price, and with **Interest rate** as entered, or you can press button to look-up values on treasury.gov.

Report format is Letter, orientation is Portrait.

Report subtitle shows starting and ending dates for the specified period, annual number of periods or days, and Fair Market Value calculation (based on the system preferences).

Press the **Preview** button is to see how the report will look printed on paper. You can browse through the report pages using the **book tool**. Press the **Continue** button to exit from the preview mode.

Press the **Print** button it to print this report. Print dialog will be shown, allowing you to select: printer, change its properties, mark if you want to print in the file, define print range (all pages or page subset), define page numbering starting page, select number of copies and collate settings.

Press the **Jump To Record List** button if you want to filter records. After you finish, please press the **Back** button to return to this report.

You can browse through the record list using the record navigation buttons: go to previous, next, first and last record in the current found set.

Press the **Jump Back** 🔤 button to close this report.

PRICE Y	VOLATI	LITY	Acme Company, Inc. ID: 12-126			
From 12/1/200 FMV is Marke	00 to 12/31/2 ft	2000	Street Name Goes Here City, State, Zip			
Date	Day	<u>FMV</u>	Ln(FMV)	<u>∆Ln(FMV)</u>	<b>Deviation</b> <sup>2</sup> from $\overline{\Delta Ln}$	(FMV)
12/01/2000	Fri	\$25.4600	3.237109			
12/04/2000	Mon	\$25.9310	3.255439	0.018331	0.000107	
12/05/2000	Tue	\$26.0880	3.261475	0.006036	0.000004	
12/06/2000	Wed	\$26.2450	3.267475	0.006000	0.000004	
12/07/2000	Thu	\$26.4020	3.273440	0.005964	0.000004	
12/08/2000	Fri	\$26.5590	3.279369	0.005929	0.000004	
12/11/2000	Mon	\$27.0300	3.296947	0.017579	0.000092	
12/12/2000	Tue	\$27.1870	3.302739	0.005792	0.000005	
12/13/2000	Wed	\$27.3440	3.308497	0.005758	0.000005	
12/14/2000	Thu	\$27.5010	3.314222	0.005725	0.000005	
12/15/2000	Fri	\$27.6580	3.319915	0.005693	0.000005	
12/18/2000	Mon	\$28.1290	3.336801	0.016886	0.000080	
12/19/2000	Tue	\$28.2860	3.342367	0.005566	0.000006	
12/20/2000	Wed	\$28.4430	3.347902	0.005535	0.000006	
12/21/2000	Thu	\$28.6000	3.353407	0.005505	0.000006	
12/22/2000	Fri	\$28.7570	3.358881	0.005474	0.00006	
12/25/2000	Mon	\$29.2280	3.375127	0.016246	0.000069	
12/26/2000	Tue	\$29.3850	3.380484	0.005357	0.000007	
12/27/2000	Wed	\$29.5420	3.385813	0.005329	0.000007	
12/28/2000	Thu	\$29.6990	3.391113	0.005300	0.000007	
12/29/2000	Fri	\$29.8560	3.396386	0.005272	0.000007	
Daily Volat	ility =	0.4788%				
Annual Volatility =		<b>7.6456</b> %				

Figure 3 – Price Volatility

# **Report: Prices Data Check**

Report shows if there are errors in the Prices database. You can start Data Check procedure from the System Maintenance layout or from the Reports list.

Fields shown are: Date, Day in week, fair Market Value and Error Description.

There is a trailing grand summary report part, showing total number of records listed.

If there are no errors found, appropriate message is shown and all Error Description fields are empty.

If there are errors found, you will be prompted to choose if you want to print this report. After you review Error Description fields, please correct the errors in the database.

Report format is *Letter*, orientation is *Portrait*.

# Forecasts

Forecasts store basic valuation information -- volatility, interest rate, dividend yield, and post-vesting termination rate for up to 10 years. They are used in Option and Purchase valuations.

Forecast name is primary key (ID) and must be unique.

**Volatility**, **Dividend**, **Interest**, post-vesting **Termination rate** (FAS 123R), and unvested **Forfeiture rate** (FAS123R) store raw percentage (0-100%). Raw means the numbers entered are as published in the papers, i.e. percentages, not as continuously compound rates that are used in Black-Scholes formula.

**Pricing Model**: You can choose Black-Scholes Single Option, Black-Scholes Multiple Option, or Binomial valuation model approach (compliant with FAS 123R).

Forecasts	]	<u>            </u>	▲ 🗂 #2 c reco	of 5 Inds		3 2 ?
Forecast Q1 bin	Year	Volatility	Dividend Yield	Interest Rate	PV Term.Rate	Forfeit. Rate
Pricing Model	1 [	35.000%	3.000%	5.940%	3.000%	3.000%
O Black-Scholes Single Option	2	35.000%	3.000%	6.350%	3.000%	3.000%
O Black-Scholes Multiple Option	3	31.000%	3.000%	6.570%	3.500%	3.000%
Binomial	4	31.000%	3.000%	6.690%	4.000%	3.000%
	5	31.000%	3.000%	6.750%	4.000%	3.000%
Notes	6	31.000%	3.000%	6.790%	4.000%	3.000%
based on year 1996	7	31.000%	3.000%	6.880%	4.500%	3.000%
	8	31.000%	3.000%	6.940%	5.000%	3.000%
	9	31.000%	3.000%	6.950%	6.000%	3.000%
	10	31.000%	3.000%	6.960%	6.500%	3.000%

You can click on **Forecast** label to sort records by forecast name.

Figure 4 – Forecasts CardView Layout

To **add** a new forecast, press the **new record** button D Forecast name is the mandatory field.

To **delete** a forecast, press the **delete record** button It is not recommended to delete forecast already used for option/purchase valuations.

If you modify forecast record, changes will affect all future valuation calculations that use this forecast and therefore produce inconsistency with previously valued options/purchases.

For the **Volatility** rate you may run **Prices Volatility** report and use **Annual Volatility** percentage calculated at the bottom of report.

For the post-vesting **Termination** rate you may run **Post-vesting Terminations** report and use percentage calculated at the bottom of report. This is an additional input proposed by the FAS 123R.

For the unvested **Forfeiture** rate you may run **Unvested Forfeitures** report and use percentage calculated at the bottom of report. This is an input for the FAS123R compliant Expense Allocation report.

For the variable valuation/accounting scenario, you need to include keyword "vv" in the forecast name. Also, you need to put date in a form of "mm/dd/yyyy" at the end of forecast name (see example screenshot). You need to create forecast record on each valuation date. Please read more in the Option Valuation paragraphs of this guide.

## System Tasks

#### Import Records ADMIN

First you have to choose how the program will treat records that you want to import, but they already exist in database. You can either overwrite existing data or skip these records.

Note that *exist* means that key fields from records to be imported are same as those stored in database. For Forecasts database key field is **Forecast Name**.

Then, you will be prompted to enter import file name and type.

At the end you have to select and match fields from records you want to import with fields in the database.

After the import, you can run Import Status Report and find out if there were rejected imports. Report shows rejected records with reject reason. Use the content of this field to correct records you want to import. Then, run import procedure once again, but this time only for those previously rejected records. This means you first need to remove successfully imported records from your import database and then start import procedure for the second time. If you do not remove previously imported records, there is a chance to duplicate some records in your database. System does take a thorough check procedure while importing records, but it also depends of the content of your data whether this procedure will be completed successfully or not (error possibility is greater if you import incomplete records - without primary key field, for example).

# **Export Records**

You have to choose between Default and Custom export.

Default export order: Forecast Name Notes Forecast data table (in percents, for 10 years): Volatility Dividend Interest Rate

If you choose custom export order, you can add or remove database fields from the export order list.

Before system starts export procedure, you will be prompted to enter export file name and choose export file type.

# **Report: Forecasts**

Report shows list of forecast cards. Single card contains: **Forecast** name, Pricing **Model** (Black-Scholes Single, Black-Scholes Multiple or Binomial), **Notes** and forecast table for 10 years, with **Volatility**, **Dividend Yield** and **Interest Rate** (all in percentages) for each year.

Report format is Letter, orientation is Portrait.

Press the **Preview** button is to see how the report will look printed on paper. You can browse through the report pages using the **book tool**. Press the **Continue** button to exit from the preview mode.

Press the **Print** button it to print this report. Print dialog will be shown, allowing you to select: printer, change its properties, mark if you want to print in the file, define print range (all pages or page subset), define page numbering starting page, select number of copies and collate settings.

Press the **Jump To Record List** button if you want to filter records. After you finish, please press the **Back** button to return to this report.

You can browse through the record list using the record navigation buttons: go to previous, next, first and last record in the current found set.

Press the **Jump Back** 💬 button to close this report.

## Report: Forecasts Data Check

Report shows if there are errors in the Forecasts database. You can start Data Check procedure from the System Maintenance layout.

Fields shown are **Forecast** name and **Error Description**.

There is a trailing grand summary report part, showing total number of records listed.

If there are no errors found, appropriate message is shown and all Error Description fields are empty.

If there are errors found, you will be prompted to choose if you want to print this report. After you review Error Description fields, please correct the errors in the database.

Report format is *Letter*, orientation is *Portrait*.

# FORECASTS

Acme Company, Inc. ID: 12-126 Street Name Goes Hare City, State, Zip

Forecast	Q1	Year	Volatility	Dividend Yield	Interest Rate
<b>Pricing Model</b>	Black-Scholes Single Option	1	35.00%	3.00%	5.94%
		2	35.00%	3.00%	6.35%
Notes		3	31.00%	3.00%	6.57%
based on year 19	996	4	31.00%	3.00%	6.69%
		5	31.00%	3.00%	6.75%
		6	31.00%	3.00%	6.79%
		7	31.00%	3.00%	6.88%
		8	31.00%	3.00%	6.94%
		9	31.00%	3.00%	6.95%
		10	31.00%	3.00%	6.96%
Forecast	Ql bin	Year	Volatility	Dividend Yield	Interest Rate
<b>Pricing Model</b>	Binomial	1	35.00%	3.00%	5.94%
		2	35.00%	3.00%	6.35%
Notes		3	31.00%	3.00%	6.57%
based on year 19	96	4	31.00%	3.00%	6.69%
· · · · · · · · · · · · · · · · · · ·		5	31.00%	3.00%	6.75%
		6	31.00%	3.00%	6.79%
		7	31.00%	3.00%	6.88%
		8	31.00%	3.00%	6.94%
		9	31.00%	3.00%	6.95%
		10	31.00%	3.00%	6.96%
Forecast	Q1 BS multi	Year	Volatility	Dividend Yield	Interest Rate
<b>Pricing Model</b>	Black-Scholes Multiple Option	1	35.00%	3.00%	6.79%
		2	35.00%	3.00%	6.79%
Notes		3	31.00%	3.00%	6.79%
		4	31.00%	3.00%	6.79%
		5	31.00%	3.00%	6.80%
		6	31.00%	3.00%	6.79%
		7	31.00%	3.00%	6.79%
		8	31.00%	3.00%	6.79%
		9	31.00%	3.00%	6.79%
		10	31.00%	3.00%	6.79%

Figure 5 – Forecasts

# Options

# Working with existing options

There are two views you can use for browsing through existing options: *List View* and *Card View*.

🗊 FileMaker Pro - [Options.FP3]	
🛐 Eile Edit Mode Select Format Script Window Help	<u>_8×</u>
Back Forward Home Employee Emp. List Grant Exercise Dispose Opt. List Price R	leports ACME
Options	<b>9</b> ? Options
Grant ID     Plan 99A - 1     Name, ID     Young, Tom, D.     A4001       Shares     1,500     Type     NQ     Date     May 1, 1999     Price     \$5.0000	
Grant ID Plan 99A - 2 Name, ID Smith, John, Z. AA002 Shares 2,000 Type NQ Date May 1, 1999 Price \$5.0000	
Grant ID Plan 99A - 3 Name, ID Fisher, Anna, S. AA003 Shares 1,000 Type NQ Date May 1, 1999 Price \$5.0000	
Grant ID Plan 99A - 4 Name, ID Baker, Muriel, W. AA004 Shares 1,000 Type NQ Date May 1, 1999 Price \$5.0000	
Grant ID Plan 99A - 5 Name, ID Ericsson, Frederick, G. AA005 Shares 5,000 Type ISO Date May 1, 1999 Price \$5.0000	
Grant ID         Plan 99B - 6         Name, ID         Smith, John, Z.         AA002           Shares         1,000         Type         NQ         Date         Oct 1, 1999         Price         \$6.2500	
Grant ID Plan 99B - 7 Name, ID Young, Tom, D. AA001 Shares 1,000 Type ISO Date Oct 22, 1999 Price \$7.0000	
Grant ID         Plan 99B - 8         Name, ID         Smith, John, Z.         AA002           Shares         900         Type         NQ         Date         Dec 17, 1999         Price         \$13.3500	
Grant ID Plan 99A - 9 Name, ID Baker, Muriel, W. AA004 Shares 2,500 Type NQ Date Dec 31, 1999 Price \$15,4500	
Grant ID         Plan 99A - 10         Name, ID         Young, Tom, D.         AA001           Shares         5,000         Type         NQ         Date         Dec 31, 1999         Price         \$15.4500	
Summary	
Total grants         10         min         \$5.0000         min         \$5.0000           Total shares granted         20,900         Option price         avg         \$8.2500         Fair value         avg         \$8.2500           Total option price         \$193,640.00         max         \$15,4500         max         \$15,4500	
Total fair value \$193,640.00 Period: from May 1, 1999 to Dec 31, 1999	
100 Browse V	<u> </u>

Figure 6 – Options List

#### **Options List Layout**

This layout shows a list of all existing options. Each option record occupies only two lines, showing the most basic information: **Grant ID**, optionee **Name** and **ID**, number of **Shares** granted, option **Type**, **Date** and **Price**.

Each record has a **Details** button, which activates the screen in which the option is fully shown, with a possibility to modify the option. However, you **never** have a possibility of modifying option records directly, but using the SCRATCH Options database. This guaranties much higher data security. Therefore, fields in the records listed are **not** modifiable and you can see that by the color of the fields -- light blue fields are read-only.

#### **Card View Layout**

This layout shows list of option cards. Also, this is the place where various operations over options can be performed.

Layout contains buttons for performing various operations over option records. In addition, operations that can be performed over a GROUP of options are grouped in a set of buttons below which stands a check box reading *Perform the above for ALL the records in the current set*. This allows you to easily find a record or a group of records and then apply the desired operation.

Press **Valuation** button to enter/modify valuation data for the current option. *Valuation* layout will be shown. Right to the button is information if the option is already valued or not.

If you check **Perform the above for ALL the records in the current set** and press the **Valuation** button, *Group Valuation* layout will be shown. It provides valuation of multiple grants in a single task.

🖸 FileMaker Pro - [Options.FP3]						
🔞 <u>F</u> ile <u>E</u> dit <u>M</u> ode <u>S</u> ele	ect Forma <u>t</u> S <u>c</u> ript <u>W</u> indow <u>H</u> elp	_ 8 ×				
Back Forward Ho	me Employee Emp. List Grant Exercise Dispose Opt. List	Price Reports ACME				
Options	□ □ □ Σ #3 of 10 records	1 🗿 🧕 ? Options				
Employee ID	AA003 Name Fisher, Anna, S. Modify	Delete				
Shares	1,000 Grant ID Plan 99A - 3 Cancelation	Reprice				
Grant Date Ma	ay 1, 1999 Option Plan Plan 99A ▼ Valuation	Valued2 No				
Market Price	\$5.0000 Vest Schedule  4yr 25% on vest					
Option Price	\$5.0000 Total Price \$5,000.00 Print Option	on Agreement				
Option Type NQ (N	Non-Qualified Stock Option)  SAR 🗞 100 Perform the abo	ove for ALL				
Vest from Date Ma	ay 1, 1999 Shares Vest Date Availability the options in the	he current set				
Expires on Ma	w 1, 2009 1 250 May 1, 2000 On Vest Date Exercises	Status				
Blocked from	2 250 May 1, 2001 On Vest Date					
Blocked till	3 250 May 1, 2002 Un Vest Date					
Enabled Yes Confirme	ed No 5					
Custom Data	6					
<b>I</b>						

Figure 7 – Options CardView Layout

# **Options Valuation**

The purpose of the valuation procedure is to provide a single value, *valuation* or the *fair value* for each option; these values are used in reports required by the IRS. An option is valued based on certain option parameters and additional parameters specified by the user (some of which apply to a single option only, and others apply to whole groups of options), using standardized option pricing models.

## **Black-Scholes Valuation Model**

The option pricing model used is the Black-Scholes model, with two variants: *BS Single Option* and *BS Multiple Option*. Both are based on the BS (Black-Scholes) formula.

In order to perform a valuation of an option, the following parameters are needed:

- S: Fair Value of the stock at the date of grant. Example: S=\$45.0000
- X: Option Price at the date of grant (commonly X=S)

- t: Expected term of the option. This is an estimated number of years that the option will "live," i.e. an estimation of the number of years (a rational number) that will elapse from the date of grant till the date of exercise. Cannot be less than the vesting period nor greater than the maximum option life. Usually is (subjectively) determined according to

historical behavior. For example, if the option vests two years after the grant, and expires six years after the grant, and the optionees, on the average, wait 1.7 years from vest date before they exercise shares, the expected term might be given as 3.7 years, but cannot be less then 2 nor greater than 6. The system implements a couple of reports that provide data for analysis and estimation of future behavior based on historical behavior. Example: t=2.20 years

- v: Volatility of stock, i.e. the rate that attempts to depict oscillation of the fair value of stock in future. There is a report in system that calculates this value for past fair values, which the user can assume that will apply in the future.

Example: v=0.31 (31%)

- **r**: Interest rate: Example: r=0.0679 (6.79%)

- d: Dividend yield: Example: r=0.02 (2%)

S and X are part of the option record; the others are specified by the user, whereas for t and v there are auxiliary reports that aid in their determination. r and d are specified from publicly available tables.

**Note**: interest rates and dividend rates as required by the BS model should be *continuously compound* rates, whereas the figures published for interest rates are simple annual rates (R) and for dividends are quarterly dividend rates (D). So the user will typically enter R and D which the system must convert to r and d, respectively. The conversion formulas are:

r = ln(1 + R)d = 4 \* ln(1 + D/4)

#### **Forecast tables**

Of the six parameters needed for the Black-Scholes valuation, two are found in the option record, one (term) is specified per option, and the other three are read from a special table called *forecast*.

A forecast is a table with three columns -- interest rate, dividend rate and volatility, and with ten rows, for ten subsequent years (1 to 10). So, instead of specifying the v,d,r directly, the user specifies the forecast to be used (there is a separate database of forecasts). For the specified term, the nearest row is used to read the rates (for example, if t=4.33, 4th row will be read; if t=6.79, 7th row will be read).

The interest and dividend rates in a forecast are specified as R, D, respectively, and the programs performs the conversion to r, d as described above.

In addition, each forecast record contains the information which of the two BS models will be used.

For the FAS 123R compliance, there is additional forecast column – termination rate. Please read more in the Binomial model explanation.

#### **BS Single Option**

Under BS Single Option approach, the BS formula is applied verbatim, regardless of the *structure* of the option (i.e. its vesting schedule). The only correction may occur for t, if the user specifies a term which would be out of the allowed boundaries:

t = min(max(T, (LastVestDate - OptionDate)/365), (ExpireDate-OptionDate)/365)

where T is the term specified by the user. Volatility, Interest, and Dividend rates are used for the "round(T)"-th year from the specified forecast, using the formula

```
(v, R, D) = Forecast[min(max(round(T, 0), 10), 1)]
```

#### **BS Multiple Option**

The BS multiple option approach is a lot more complicated.

Under BS Multiple Option, each vesting increment is treated like a separate option, and the valuation for an increment is computed using the regular Black-Scholes formula, except that the *expected term* parameter is obtained as the sum of the term specified by the user plus the duration of the increment (<Increment's Vest Date> - <Option Date>). The resulting BS value is multiplied by the number of shares vesting in the increment, and so for each increment. These *total increment valuation* values are finally summed up and divided by the total number of shares.

However, the above scheme is applied only for increments of type *On Vest Date* or for increments whose duration is less than one year. For non *On Vest Date* increments that last for more than year, a set of sub-increments is created, so that each sub-increment is exactly one year long, except for the *first* one, which may be less than one year if the original increment spans a period whose duration is not an integer multiple of one-year periods. For each such sub-increment the number of shares that vest in that increment is calculated, and the increment is treated as if it were a user-defined increment in the computation of the final *fair value*.

The same restrictions for reading forecast rows (min=1, max=10) is applied.

Here is an **example**: suppose that an option, granted on 1/1/97, vests as follows:

	Shares	Vest Date	Vest Type	Duration
1.	1,000	1/1/1998	On Vest Date	1.00 yrs
2.	3,000	7/1/1999	Monthly	1.50 yrs
3.	4,000	10/1/2000	On Vest Date	1.25 yrs

Increment #2 is non-"On Vest Date" and lasts for 18 months, so this schedule is logically transformed to

	Shares	Vest Date	Vest Type	Duration
1.	1,000	1/1/1998	On Vest Date	1.00 yrs
2.	1,000	7/1/1998	Monthly	0.50 yrs
2'.	2,000	7/1/1999	Monthly	1.00 yrs
3.	4,000	7/1/2000	On Vest Date	1.25 yrs

So, if the user specified T=2.20 years as "expected term", and if the forecast specified is "F", following will be the BS parameters:

	Shares	Term	(v,R,D)
1.	1,000	3.20	F[3]
2.	1,000	2.70	F[3]
2'.	2,000	3.20	F[3]
3.	4,000	3.45	F[4]

The resulting valuation for this option will be

 $c = \frac{1,000 * c(\#1) + 1,000 * c(\#2) + 2,000 * c(\#2') + 4000 * c(\#3)}{1,000 + 1,000 + 2,000 + 4,000}$ 

# **Implementation of Option Valuation**

Valuations are not stored in separate database; instead, each valuation is part of the pertinent option record. Non-valued options are labeled accordingly, though it is supposed that each option will be valued.

Consequently, no more than one valuation can be created for a single option. However, the user can effectively make several valuations at once since forecasts are used instead of individual valuation parameters, and up to 5 forecasts are allowed per valuation. So, to check whether BS Single or BS Multiple is more appropriate, the user would set *Single* in the forecast used by a set of options, run the report, and then set *Multiple* in the forecast and run the report again.

For the full FAS 123R compliance<sup>\*</sup> you should use Binomial model.

**Valuation** button is accessible from *Card View*. Each option record has one **Valuation** button and a label, *Valued*? displaying *Yes/No* (i.e. the contents of the **Valued** field which tracks whether Forecast[1] and Term[1] are empty or not); the latter lets you to find non-valued options.

Clicking on the button activates the valuation screen; this operation can be *group* or *single*:

1) If the operation is *single*, screen *Valuation - Single* is shown. Then, all non-empty valuation rows (of the five possible) are calculated.

2) If the operation is *group*, screen *Valuation* - *Group* is shown, with only **Forecast** and **Term** columns. This screen does not perform any valuation, it just sets valuation parameters for a group of option record.

An option is *valued* if at least one Forecast-Term combination is specified. The screen may inform the user about how many options are selected, and which portion of it is already valued.

# Single Valuation Layout

This is a valuation screen for single option record (has nothing to do with BS Single vs. Multiple approach). Here you have an opportunity to perform individual valuations.

The screen consists of basic employee/option data, vesting table, and a valuation forecast table. The valuation forecast table consists of five rows (for five possible valuations), and i-th row consists of:

<sup>\*</sup> applicable to all system releases after the 1.45.315

1. **Forecast** drop-down list. In order to show forecast details, please click the preceding row number. If the forecast name in the field near the button is empty, all forecasts are shown (which opens for possibility to add new forecasts if none exist).

2. **VPrice** that shows Fair Value on grant date for non-variable valuation/accounting scenarios, or price from the Prices table on VDate (specific valuation date) for variable valuation/accounting forecasts (that have keyword "vv" in its name).

3. **Term** in years. It is expected term for Black-Scholes and non- FAS 123R compliant Binomial models. It is contractual term for FAS 123R compliant Binomial model. If the variable valuation scenario is used this field should reflect term as of starting point, since further valuations will modify (decrease) the term. By default, term cannot be less than full vesting period length. For example, if vesting is four years, and you specify term of 3.5 system will use 4 years. If you want system to use term as specified then please specify keyword "FET" in the valuation notes, save valuation parameters, and open/run valuation again.

Valuation							
Optionee: Young, Tom, D., AA001							
Grant ID Plan 99A - 1 Date May 1, 1999 Expires	Shares May 1, 2009 Fair Value	1,500 Type	NQ \$5,0000				
Shares Availability 1 375 On Vest Date	Vest Date VTerm May 1, 2000	Expire Date May 1, 2009 VPrice	5/1/1999 \$5.0000				
2 375 On Vest Date 3 375 On Vest Date 4 375 On Vest Date 5	May 1, 2001 May 1, 2002 May 1, 2003	May 1, 2009 May 1, 2009 May 1, 2009	Save Cancel				
			Clear All				
Forecast	VPrice Term	Exerc. Factor press	Valuation				
1 Q1 👻	\$5.0000 5.50		\$1.5134				
2 Q1 bin ▼ 3 Q1 BS multi ▼	\$5.0000 5.50 \$5.0000 5.50	Calculate Calculate	\$1.6079 \$1.7216				
4 <del>•</del> 5 •		Calculate					
Notes	Sensitivity Analysis	Valuation number					
	Term Interest Bate	FILL (15)					
	Volatility, from	to ( )					
	Dividends		Analyze				

Figure 8 – Options Valuation Layout

4. Suboptimal **Exercise Factor**, which is a FAS 123R input for the Binomial model. It is an estimated multiple of option price at which the optionee will likely exercise his/her shares.

5. **Calculate** button, which, when pressed, performs calculation for the row, based on the input fields.

6. **Valuation**, where the result of the valuation is stored.

For the Black-Scholes multiple valuation model you may use **VTerm** column to specify terms per vesting periods. In this case system will strictly use specified terms. Forecast record will be read from the first row and then sequentially for the each new vesting period. This means system will not use term to determine which row to use, as it is described before (see Forecast tables).

There are also command buttons:

Clear All, which clears the table,

Save, which stores the new data into record, and

**Cancel**, which merely goes back.

**Note**: Under the Clear All button there is a check-box called **Do Not Calculate**. By default it is off (cleared) and should stay off in normal usage. If it is checked system will not calculate valuation using the inputs provided, it will simply retain last calculated result.

If you want to enter external valuation per share, please check **Do Not Calculate** first, then click inside Valuation column, specify value, and **Save**.

FAS123R requires special procedure related to option valuation for repriced grant. System values new grant using its valuation inputs, and then subtracts value that is calculated using new valuation inputs but original option price. If you want system to use just option value of new grant then please specify keyword "NIE" in the valuation notes.

If you have grant modification that requires expense adjustment, it is possible to specify keyword "EAD" in the Valuation Notes, specify new Valuation per share, and Save. When running expense allocation report, system will take grant with EAD keyword into account and calculate period expense as Shares Outstanding \* CF Value, even if grant is fully vested or canceled before report start date.

## Sensitivity Analysis

Sensitivity Analysis allows user to specify range of valuation parameters. Based on that, system calculates option valuations and presents it in a form of table. User may specify three different dividends, plus beginning and ending volatility rates, which are used to create ten volatilities. So, as a result system shows table with ten rows and three columns, containing valuations for each dividend/volatility pair.

Sensitivity analysis parameters can be specified at the Single Valuation Layout. In order to do so, user has to locate option record and press Valuation button (Options CardView layout, with "Perform the above for ALL options in the current set" not checked). System shows Valuation layout with currently saved valuation parameters (up to five). If you did not value this grant, please do it before starting sensitivity analysis.

First you need to specify valuation number, typing the number and pressing the **Fill** button. System will use selected valuation forecast to initially fill parameters for sensitivity analysis. Term and interest rate will be copied verbatim. Volatility from the forecast will be used to fall in the middle of the period (from and to volatility percents). Step between two volatilities is set to be 1%. Dividend from the forecast will be copied into second dividend, first and third are 0.15% smaller and bigger, respectively.

You can change starting and ending volatilities, and any of three dividends.

Press the **Analyze** button to begin sensitivity analysis process. System will calculate 30 option valuations and show results in the separate report. You may print the report or export resulting table, in order to present results graphically in the Microsoft Excel.

## Group Valuation Layout

Group Valuation will store same valuation date for all the options in the current found set. If an option is already valued, previous valuation data will be overwritten.

At the top of screen, there is information about number of options selected and number of options already valued.

This layout is much like previous, except that it contains only input fields (forecasts and terms), which are assigned to all of the current options at once.

### Binomial Valuation Model / ASC 718 (FAS 123R) Compliance

In addition to the Black-Scholes valuation models (both single and multiple options approach), we have implemented Binomial Valuation model as well.

If you want to apply this valuation model, please select it in the Forecast record you plan to use for an option valuation.

Our Binomial valuation model is FAS 123R compliant in all releases after the 1.45.315. It assumes that you have specified additional valuation input parameters: suboptimal exercise factor and post-vesting termination rate.

Suboptimal exercise factor is a multiple of the original option price at which optionee will likely to exercise. You may run Suboptimal Exercise Factor report to help you define this factor and supply it to the model.

Post-vesting termination rate is a yearly rate calculated as a number of shares that are canceled as a result of optionee termination, after they have been fully vested, divided by the total number of shares granted. You may run Post-vesting Terminations report to help you provide this rate to the Forecast record used in your valuation scenario.

If you do not specify suboptimal exercise factor and post-vesting termination rate you will get valuation results very similar to the Black-Scholes Single valuation results (about 5% error margin).

Please **note** that FAS 123R compliant Binomial model requires contractual option term in years, instead of expected term supplied to the Black-Scholes and non- FAS 123R compliant Binomial valuation models.

## **Monte-Carlo Custom Valuation**

We offer custom Monte-Carlo models for performance share with market conditions / TSR valuation. Please contact us for all cases where Black-Scholes cannot be applied, like when you need to model performance criteria based on market conditions, or when you have TSR grant that have performance criteria met if Total Shareholders Return compared to peer-group performance. We will implement the model as a separate tool and you will use valuation results back in the Stox system.

#### Report: Expected Term By Class

Report calculates expected option terms using historical exercises behavior, option cancellations, and expected exercises from outstanding options.

As the name implies, this report is to be used for providing "expected term" values when **Black-Scholes Single Option** approach is used.

You can specify date period for option dates (**From** and **To** dates) and specify additional filtering criteria (class of options or company departments) using two user defined fields from option record. If you check **Canceled after vest** system will treat canceled grants as canceled after full vest date.

Press the **Find** button **t** to generate the report.

Press the **Find All** button 🔟 to clear report parameters and find all records.

Each option row consists of: option id, grant date, vest from date, expiration date, number of shares granted, number of transaction shares (exercised, canceled, or outstanding), user data fields 1 and 2, contractual life, term, and rate.

Reports are grouped by Transaction Type.

There are trailing summary report parts, showing weighted average of expected term for the options listed.

There is a grand summary report part showing final result of the report - weighted average of expected term for the options listed.

After the report is generated and you have estimate for expected term, you can press **Price Volatility** button to run Price Volatility report for the period that corresponds to the expected term years in the past.

Report format is *Letter*, orientation is *Landscape*.

Report subtitle reflects report parameters you specified.

You may press the **Export** button to export report data.

Press the **Preview** button it to see how the report will look printed on paper. You can browse through the report pages using the **book tool**. Press the **Continue** button to exit from the preview mode.

Press the **Print** button it to print this report. Print dialog will be shown, allowing you to select: printer, change its properties, mark if you want to print in the file, define print range (all pages or page subset), define page numbering starting page, select number of copies and collate settings.

Press the **Jump To Record List** button if you want to filter records. After you finish, please press the **Back** button to return to this report.

You can browse through the record list using the record navigation buttons: go to previous, next, first and last record in the current found set.

Press the **Jump Back** button to close this report.

### Report: Expected Term - BS Single

Report calculates expected option terms based on historical exercise behavior. For each option record, the procedure that generates the report analyzes its exercises and calculates distances of exercise dates from the option date, and, taking into account the number of shares exercised by each exercise, the expected term for an option is calculated.

As the name implies, this report is to be used for providing "expected term" values when **Black-Scholes Single Option** approach is used.

You can specify date period for option dates (From and To dates) and specify how many % of the shares must be exercised for an option to be included in the report (min % exercised field).

Press the **Find** button **b** to generate the report.

Press the **Find All** button 🔟 to clear report parameters and find all records.

Each option row consists of: optionee name, option id, option date, number of shares granted, number of shares exercised and calculated value of expected term (based on option date).

Press the **Plan**  $\blacksquare$  or **Type**  $\blacksquare$  button to sort records by plan name or option type, respectively.

There are trailing summary report parts if the records are sorted by plan or type and grand summary, showing weighted average of expected term for the options listed.

Report format is Letter, orientation is Portrait.

Report subtitle reflects report parameters you specified.

Press the **Preview** button it to see how the report will look printed on paper. You can browse through the report pages using the **book tool**. Press the **Continue** button to exit from the preview mode.

Press the **Print** button it to print this report. Print dialog will be shown, allowing you to select: printer, change its properties, mark if you want to print in the file, define print range (all pages or page subset), define page numbering starting page, select number of copies and collate settings.

Press the **Jump To Record List** button if you want to filter records. After you finish, please press the **Back** button to return to this report.

You can browse through the record list using the record navigation buttons: go to previous, next, first and last record in the current found set.

Press the **Jump Back** button 💬 to close this report.

EXPECTED TERM	(SINGLE OPTION)
---------------	-----------------

From: 1/1/1999 To: 12/31/1999

Acme Company, Inc. ID: 12-126 Street Name Goes Here City, State, Zip

Optionee	Option ID	Option Date	Shares Granted	Shares Exercised	Expected Term from Option Date
Options granted under pl	an " <b>Plan 99A</b> "				
Ericsson, Frederick, G.	Plan 99A - 11	Jun 1,1999	1,000	500	0.99
Fisher, Anna, S.	Plan 99A - 3	May 1, 1999	1,000	210	9.82
Ericsson, Frederick, G.	Plan 99A - 5	May 1, 1999	5,000	250	30.63
		Weighted average for pl	an "Plan 99.	A" options:	10.64
		Weighted avera	ge for all op	tions listed:	10.64

Figure 9 - Expected Term (Single Option)

Please **note** that for ASC 718 (FAS 123R) compliance you need to provide expected term estimate based on exercises, cancellations, and expected exercises (outstanding shares).

### **Report: Expected Term - BS Multiple**

Report calculates expected option terms based on historical exercise behavior. For each option record, the procedure that generates the report analyzes its exercises and calculates distance in years from the vest date of the increment(s) whose shares were exercised to the date of exercise.

As the name implies, this report is to be used for providing "expected term" values when **Black-Scholes Multiple Option** approach is used.

You can specify date period for option dates (From and To dates) and specify how many % of the shares must be exercised for an option to be included in the report (min % exercised field).

Press the **Find** button **b** to generate the report.

Press the **Find All** button 🔟 to clear report parameters and find all records.

Each option row consists of: optionee name, option id, option date, number of shares granted, number of shares exercised and calculated value of expected term (based on vest date).

Press the **Plan**  $\blacksquare$  or **Type**  $\blacksquare$  button to sort records by plan name or option type, respectively.

There are trailing summary report parts if the records are sorted by plan or type and grand summary, showing weighted average of expected term for the options listed.

Report format is Letter, orientation is Portrait.

Report subtitle reflects report parameters you specified.

Press the **Preview** button it to see how the report will look printed on paper. You can browse through the report pages using the **book tool**. Press the **Continue** button to exit from the preview mode.

Press the **Print** button it to print this report. Print dialog will be shown, allowing you to select: printer, change its properties, mark if you want to print in the file, define print range (all pages or page subset), define page numbering starting page, select number of copies and collate settings.

Press the **Jump To Record List** button if you want to filter records. After you finish, please press the **Back** button to return to this report.

You can browse through the record list using the record navigation buttons: go to previous, next, first and last record in the current found set.

Press the **Jump Back** button 🔤 to close this report.

EXPECTED TERM (MU	LTIPLE OPTION)
-------------------	----------------

From: 1/1/1999 To: 12/31/1999

Acme Company, Inc. ID: 12-126 Street Name Goes Here City, State, Zip

Optionee	Option ID	Option Date	Shares Granted	Shares Exercised	Expected Term from Vest Date
Options granted under pl	an " <b>Plan 99A</b> "				
Ericsson, Frederick, G.	Plan 99A - 11	Jun 1,1999	1,000	500	0.50
Fisher, Anna, S.	Plan 99A - 3	May 1, 1999	1,000	210	0.08
Ericsson, Frederick, G.	Plan 99A - 5	May 1, 1999	5,000	250	0.53
		Weighted average for pl	an "Plan 99.	A" options:	0.42
		Weighted average	ge for all op	tions listed:	0.42

Figure 10 – Expected Term (Multiple Option)

Please **note** that for ASC 718 (FAS 123R) compliance you need to provide expected term estimate based on exercises, cancellations, and expected exercises (outstanding shares).

### **Report: Post-vesting Terminations**

Report calculates post-vesting termination rate based on historical behavior. It finds records granted within specified period of dates that are fully vested and canceled, as a result of optionee termination, as of specified date or number of months after it fully vests (whichever date comes later). Termination ratio per record is calculated as a number of shares terminated divided by the total number of shares.

This report is to be used for providing estimate for the termination rate, entered into the Forecast record for the FAS 123R compliant Binomial valuation model.

You have to specify date period for option dates (**From** and **To** dates), and **Terminated As Of** date. You may specify number of **months** after option fully vests to be used as a comparison date. If you specify option **Type** from the drop-down list only grants of that type will be listed. You can specify option plans to use by checking them in the option plans list. By default (empty list) system will use all plans.

Press the **Find** button **t** to generate the report.

Each option row consists of: option id, option date, number of shares granted, full vest date, termination date, number of shares canceled, and calculated termination ratio.

There is a trailing summary report part, showing total number of shares granted, total number of shares canceled as a result of termination, average termination rate for the options listed (for the whole reporting period), and **yearly termination rate** in percents that you need to supply in the Forecast record.

Report format is *Letter*, orientation is *Portrait*. Report subtitle reflects report parameters you specified.

Press the **Preview** button is to see how the report will look printed on paper. You can browse through the report pages using the **book tool**. Press the **Continue** button to exit from the preview mode.

Press the **Print** button it to print this report. Print dialog will be shown, allowing you to select: printer, change its properties, mark if you want to print in the file, define print range (all pages or page subset), define page numbering starting page, select number of copies and collate settings.

Press the **Jump To Record List** button if you want to filter records. After you finish, please press the **Back** button to return to this report.

You can browse through the record list using the record navigation buttons: go to previous, next, first and last record in the current found set.

Press the **Jump Back** button to close this report.

#### **Report: Unvested Forfeitures**

Report calculates forfeiture rate based on historical behavior. It finds records granted within specified period of dates that are canceled as of specified date or number of months before it fully vests (whichever date comes first). Forfeiture ratio per record is calculated as a number of shares forfeited while unvested divided by the total number of shares.

This report is to be used for providing estimate for the forfeiture rate, entered into the Forecast record for the FAS 123R compliant Expense Allocation reports.

You have to specify date period for option dates (**From** and **To** dates), and **Forfeited As Of** date. You may specify number of **months** before option fully vests to be used as a comparison date. If you specify option **Type** from the drop-down list only grants of that type will be listed. You can specify option plans to use by checking them in the option plans list. By default (empty list) system will use all plans. You can specify to **Process unvested grants** for the **last X years** before **Forfeited As Of date**.

Press the **Find** button **t** to generate the report.

Each option row consists of: option id, option date, number of shares granted, full vest date, forfeiture date, number of shares forfeited, and calculated forfeiture rate.

There is a trailing summary report part, showing total number of shares granted, total number of shares forfeited while unvested, average forfeiture rate for the options listed (for the whole reporting period) and **yearly forfeiture rate** in percents that you need to supply in the Forecast record.

After you have got estimated unvested forfeiture rate, you can press **Update Forecasts** button and system will update all forecasts that have supplied keyword(s) in forecast names with new forfeiture rate. This is irreversible process.

Report format is Letter, orientation is Portrait.

Report subtitle reflects report parameters you specified.

Press the **Preview** button is to see how the report will look printed on paper. You can browse through the report pages using the **book tool**. Press the **Continue** button to exit from the preview mode.

Press the **Print** button it to print this report. Print dialog will be shown, allowing you to select: printer, change its properties, mark if you want to print in the file, define print range (all pages or page subset), define page numbering starting page, select number of copies and collate settings.
Press the **Jump To Record List** button if you want to filter records. After you finish, please press the **Back** button to return to this report.

You can browse through the record list using the record navigation buttons: go to previous, next, first and last record in the current found set.

## **Report: Suboptimal Exercise Factor**

Report calculates suboptimal exercise factor based on historical behavior. It finds records exercised within specified period of dates and calculates exercise factor by dividing exercise value with the option price. Exercise factor is a multiple of option price at which optionee will likely exercise its shares.

This report is to be used for providing estimate for the exercise factor, entered at the Option Valuation screen for the FAS 123R compliant Binomial valuation model.

You have to specify range of exercise dates (From and To dates).

Press the **Find** button **t** to generate the report.

Press the **Find All** button 🔟 to clear report parameters and find all records.

Fields shown are: Option ID, Option Type, Exercise Date, Exercise Type, number of Shares Exercised, Share Price (at grant), Exercise Value, and Exercise Factor.

There is a trailing summary report part, showing totals for number of shares exercised, average exercise ratio, and weighted average exercise ratio (with respect to number of shares exercised).

Records are sorted by exercise date.

Report format is Letter, orientation is Portrait.

Report subtitle reflects report parameters you specified.

Press the **Preview** button it to see how the report will look printed on paper. You can browse through the report pages using the **book tool**. Press the **Continue** button to exit from the preview mode.

Press the **Print** button it to print this report. Print dialog will be shown, allowing you to select: printer, change its properties, mark if you want to print in the file, define print range (all pages or page subset), define page numbering starting page, select number of copies and collate settings.

Press the **Jump To Record List** button if you want to filter records. After you finish, please press the **Back** button to return to this report.

You can browse through the record list using the record navigation buttons: go to previous, next, first and last record in the current found set.

## **Report: Option Valuation**

Report lists options within the specified range of dates and displays valuation for each record.

You have to enter range of dates (**From** and **To** option dates) and the valuation number (**1..5**, there are up to five valuation parameters stored with option record).

In addition, you may select system to calculate and show valuation based on the shares: Granted, Unvested, Vested, Canceled, Expired, Outstanding, Outstanding Vested, Outstanding Unvested, Vested or Exercised, and Exercised Unvested. If you leave **From** date empty, system will calculate numbers based on **To** date (as of), otherwise it will give you period calculations.

If you want to show records under specific option plans only, please select them from the list. By default list is empty, which will include all plans.

Press the **Find** button **b** to generate the report.

Each option row consists of: option id, option date, employee id, number of shares granted, fair value on option date, share price, forecast used, expected term, valuation model used, calculated share value (valuation) and total valuation.

Records are sorted by option id.

There is a trailing grand summary report part, showing total number of shares granted, total valuation, and weighted averages for: price, fair value, total term, and valuation.

Report format is *Letter*, orientation is *Landscape*.

Report subtitle reflects report parameters you specified.

Press the **Preview** button is to see how the report will look printed on paper. You can browse through the report pages using the **book tool**. Press the **Continue** button to exit from the preview mode.

Press the **Print** button it to print this report. Print dialog will be shown, allowing you to select: printer, change its properties, mark if you want to print in the file, define print range (all pages or page subset), define page numbering starting page, select number of copies and collate settings.

Press the **Jump To Record List** button if you want to filter records. After you finish, please press the **Back** button to return to this report.

You can browse through the record list using the record navigation buttons: go to previous, next, first and last record in the current found set.

Press the **Jump Back** button 💬 to close this report.

OPTION V From 1/1/1999 to Valuation number	ALUATION 12/31/1999 1				Acme Comp ID: 12-126 Street Name City, State, 2	<b>any, Inc</b> . Goes Here Z <del>ip</del>		
Option ID	Option Bate Employee ID	Shares <u>Grantel</u>	<u>Fair Value</u>	<u>Price</u> Forecast	Expected <u>Term</u>	Valuation <u>Model</u>	Value	Total <u>Valuation</u>
Plan 99A - 1	May 1,1999 AA001	1,500	\$5,0000	\$5,0000 Q1	55	BS Single	\$1.5134	\$2,270.10
Plan 99A - 3	May 1, 1999 AA003	1,000	\$5,0000	\$5.0000 Q1	10	BS Single	\$1.8321	\$1,832.10
SUMMARY		2,500				w.wg.	\$1.6409	\$4,102.20

Figure 11 – Option Valuation

You may press the **Export** button to export valuation data. Default export order is:

Date, Option ID, Employee ID, Total Shares, Price, FMV on grant date, Vesting Schedule, computed Valuation, Term in years, Volatility Rate, Interest Rate, Dividend Rate, post vesting Termination Rate (if exists), and suboptimal Exercise Factor (if exists).

It is easy to add or remove fields to export – simply select it on the left pane and press the >>**Move**>> button.

Records are initially sorted by grant **Date**, and then by **Option ID**.

If you need different sort order, use the Sort item from the Records menu.

#### Report: Sensitivity Analysis

Report shows option valuation sensitivity analysis data. User specifies sensitivity analysis parameters at the Single Valuation Layout.

Upper part of the report shows: grant date, option date, option plan, option price, exercise price (FMV), valuation model, term in years, dividend, volatility, interest rate, and calculated valuation for these parameters.

Sensitivity analysis table consists of three columns and ten rows. Columns are for different dividends, rows for volatilities. System calculates 30 valuations, one for each volatility/dividend pair.

Press the **Export** button if you want to export sensitivity analysis table into the html file. Exported data can be used in other programs, like Microsoft Excel, to present it graphically.

Report format is *Letter*, orientation is *Portrait*.

Press the **Print** button 🖆 to print this report. Print dialog will be shown, allowing you to select: printer, change its properties, mark if you want to print in the file, select number of copies and collate settings.

Please select and print only one (current) page (record).

## SENSITIVITY ANALYSIS



Grant date	May 1, 1999
Option type	Non-Qualified Stock Option
Option plan	Plan 99A
Option price	\$5.0000
Exercise price	\$5.0000
Valuation model	Black-Scholes Single Option
Term	5.50
Dividend	3.000%
Volatility	31.000%
Interest rate	6.790%
Valuation	\$1.5134

Sensitivity Analysis		Div	idend yields	
	Volatility	2.850%	3.000%	3.150%
	27.000%	\$1.4090	\$1.3833	\$1.3579
	28.000%	\$1.4416	\$1.4159	\$1.3905
	29.000%	\$1.4741	\$1.4484	\$1.4230
	30.000%	\$1.5067	\$1.4810	\$1.4556
	31.000%	\$1.5392	\$1.5134	\$1.4880
	32.000%	\$1.5717	\$1.5459	\$1.5204
	33.000%	\$1.6041	\$1.5782	\$1.5527
	34.000%	\$1.6364	\$1.6105	\$1.5849
	35.000%	\$1.6686	\$1.6426	\$1.6170
	36.000%	\$1.7007	\$1.6747	\$1.6490

Figure 12 – Sensitivity Analysis

#### **Report: Option Revaluation**

Report shows repriced options during the specified period with revaluation credit, grouped by optionees. Company is entitled for such a credit because option is repriced before its expiration (expected term is not reached).

You have to enter range of dates (From and To option dates) and the valuation number (1..5, there are up to five valuation parameters stored with option record).

Press the **Find** button **b** to generate the report.

Each option row consists of: option id, option date, replacement option id, cancel date, fair value on option date, share price, number of shares canceled, forecast used, option term, valuation model used, calculated revaluation credit.

Records are sorted by option id.

There is a trailing grand summary report part, showing totals for number of shares canceled and revaluation credit.

Report format is *Letter*, orientation is *Landscape*.

Report subtitle reflects report parameters you specified.

Press the **Preview** button is to see how the report will look printed on paper. You can browse through the report pages using the **book tool**. Press the **Continue** button to exit from the preview mode.

Press the **Print** button it to print this report. Print dialog will be shown, allowing you to select: printer, change its properties, mark if you want to print in the file, define print range (all pages or page subset), define page numbering starting page, select number of copies and collate settings.

Press the **Jump To Record List** button if you want to filter records. After you finish, please press the **Back** button to return to this report.

You can browse through the record list using the record navigation buttons: go to previous, next, first and last record in the current found set.

## Report: Expense Allocation BS Single/Binomial

Report calculates expense amounts allocated with option records when Black-Scholes Single valuation or Binomial models are used.

You have to specify: reporting period, by entering range of dates (**From** and **To**), valuation number (**1..5**, since there are up to five valuation parameters stored with option record), and allocation **method** from the drop-down list (Straight Line, Plain Straight Line, Fin28, Ratable, and Vest Line).

If check-box **Use Expense Details for BSS/Bin** is selected, system will use expense amounts previously stored in the Option Expense Details table and sum it in the Prior Amortized column.

If check-box **Read Expenses** is selected, system will read stored expense amounts from the Expense Details table for the selected reporting period. Please make sure you are reading data for the reporting period that are saved in the database. For example, if you are saving expenses quarterly please use same dates for reading expenses, or use from and to dates that exist in the Expense Details table.

If check-box **Save Expenses** is selected, system will store expense amounts for the selected reporting period in the Option Expense Details table.

Starting from version 3.84.919 system also stores report settings used to calculate period expenses. You can review by pressing Expenses button next to the grant details.

You can also override report settings by specifying keywords in the Valuation Notes in each individual grant record. Keywords recognized are:

STL - straight-line PSL - plain straight line FIN28 - fin28 method PMV - prefer min vested UUA - use unamortized VFD - use vest from date

Press the **Find** button is to generate the report. System finds option records granted before reporting period's end date, and valued using either Black-Scholes Single valuation model or Binomial valuation method. Option records canceled before reporting period's start date are omitted.

Note: Please specify right valuation number (that corresponds to valuation model used).

After the report is generated you may click on the Unamortized radio-button in order to view future projection for the unamortized expenses. By default, system will show expenses for each year that follows report end date. Up to 10 future period expenses can be shown and exported.

There are several allocation methods available. **Ratable** method takes particular number of shares per vesting period into account; **Vest Line** allocates expenses proportionally to the number of shares vested during reporting period; **Plain Straight Line** method divides total valuation amount evenly across the whole vesting period, while **Straight Line** method is modified according to rule in paragraph 42 of FAS 123R, which states, "The amount of compensation cost recognized at any date must at least equal the portion of the grant-date value of the award that is vested at that date."; **Fin28** method uses graded vesting approach and treats each vesting period as a separate grant.

For ASC 718 compliance please use Straight Line or Fin28 (graded vesting) allocation methods only.

Starting from Stox 3.84.128 there is a change in expenses calculation – system now divides reporting period into two parts – from report start date to last vest date (if within period), and from last vest date to report end date. This is to encompass grants with large vesting that may occur at the beginning of the reporting period.

If you have grant modification that requires expense adjustment, it is possible to specify keyword "EAD" in the Valuation Notes, specify new Valuation per share, and Save. When running expense allocation report, system will take grant with EAD keyword into account and calculate period expense as Shares Outstanding \* CF Value, even if grant is fully vested or canceled before report start date.

If you have grants that you forgot to cancel in the previous period and do that in the current period, in order to include it in the expenses calculation please specify keyword "EADC" in the Valuation Notes.

Please **note** that if you are using Expense Details table **do not** change allocation methods (Straight Line to Plain Straight Line or vice versa) between report runs.

Additional report inputs are:

**Granted From** – **To**: if you want to include only grants with date within specific period, then specify it here. If you leave this empty, system will fill To date equal to report To date;

Type: choose only grants of specific option type;

**Plans**: select only records that belong to specific option plan. Multiple plan selection is possible;

**Omit RS**: exclude restricted stock from the report;

**Only RS**: only include restricted stock in the report;

**Include Vested Outstanding**: include all grants that have vested and outstanding shares as of report end date, even if they do not have period expense;

Include All: include all grants in the report;

Next three settings work only with Straight Line allocation method:

**Use Vest From Date**: if checked system will use Vest From Date as a start date instead of grant date. This affects total number of days until full vest date, and therefore expense calculation.

**Use Unamortized**: If checked, system will calculate expenses based on unamortized expense from report start date to full vest date. If cleared, system will use total expense amount and number of days in the reporting period divided by the total days of vesting.

**Prefer Min Vested**: If checked, system will calculate minimal expense as of latest vest date within reporting period to be proportional to the shares vested as of that date, and then will calculate expenses based on straight line from that date to the report end date. It may report \$0 period expense if there were no shares vested within the reporting period, but total amortized amount as of report end date is at least proportional to the number of shares vested as of report end date.

**Tax Rate** field, if specified as report input or at each grant User Data 4 field, will be applied to Net Period Expense and added to Export only.

Each report row contains: option id, option date, optionee name, number of shares granted, unvested outstanding, and outstanding, total valuation amount, inherited amount, prior amortized expense amount, unamortized expense amount, adjustment date, adjustment reason, period expense amount, actual expense amount, carry forward amount, expense adjustment amount, and net period expense amount.

**Total Valuation** amount incorporates Unvested Forfeiture Rate as specified in Forecast record used for the option valuation.

**Inherited Amount** (options created as a result of repricing only): equal to Carry Forward amount of parent (repriced) option. If you do not want Inherited Amount, please specify keyword "NIA" in the Valuation Notes field.

**Prior Amortized**: expense amount already amortized before reporting period start date (from grant date).

**Unamortized Expense**: amount to be amortized after reporting period end date (until Last Vest Date).

Period Expense: grant's expense allocation amount within the reporting period.

Actual Expense (options canceled manually or by optionee termination or vested inside the reporting period): corrected Amortized Expense amount (at reporting period end date) as a result of cancellation or vesting. For certain type of grants there is no reverse back of amortized amounts if grant is canceled. Please specify keyword "NEA" in the grant Valuation Notes to achieve this.

**Expense Adjustment** amount: Prior Amortized plus Period Expense minus Actual Expense. Negative amount means system will add expenses to the previously calculated amount.

Resulting **Net Period Expense** amount is Period Expense amount minus Expense Adjustment amount. **This is the amount to report/use as your period expense**.

Records are sorted by option id.

If you want to group by Custom Data field 1 or 2, which may be your division or department code, and to effectively group expenses per your company divisions / departments, then you may click on button that shows your Custom Data 1 or 2 labels.

After that, please press the **Preview** button

When you press sort by Custom Data field 2 for the first time system will sort by Custom Data 2 field only. If you press it for the second time you will get records sorted and grouped by Custom Data field 1 and then Custom Data field 2.

There is a trailing grand summary report part, showing totals for: number of shares granted, valuation, inherited amount, prior amortized expense, unamortized expense, period expense, carry forward amount, actual expense, and expense adjustment amount.

Net Expense Allocated amount is a sum of Period Expenses minus sum of Expense Adjustments.

Report format is *Letter*, orientation is *Landscape*.

Report subtitle reflects report parameters you specified.

Press the **Preview** button it to see how the report will look printed on paper. You can browse through the report pages using the **book tool**. Press the **Continue** button to exit from the preview mode.

Press the **Print** button it to print this report. Print dialog will be shown, allowing you to select: printer, change its properties, mark if you want to print in the file, define print range (all pages or page subset), define page numbering starting page, select number of copies and collate settings.

Press the **Jump To Record List** button if you want to filter records. After you finish, please press the **Back** button to return to this report.

You can browse through the record list using the record navigation buttons: go to previous, next, first and last record in the current found set.

Press the **Jump Back** button to close this report.

From 9/1/1999 to 8 Black-Scholes Singl Valuation number: 1	ALLOCATION /31/2000 le and Binomial valuation mod ; Allocation method: Ratable	dels					Acme Company, Inc. ID: 12-126 Street name Goes Here City, State, Country, ZIP			
Option ID / Date	Optionee	Shares <u>Granted</u>	Total Valuation / <u>Inherited Amount</u>	Prior <u>Amortized</u>	Unamortized <u>Expense</u>	Cancel Date / <u>Reason</u>	Period Expense / <u>Carry Forward</u>	Actual <u>Expense</u>	Expense <u>Adjustment</u>	
Plan 99A - 1 5/ 1/1999	Young, Tom, D.	1,500	\$2,270.10 \$0.00	\$189.18	\$1,512.88		\$568.04 \$0.00	\$0.00	\$0.00	
Plan 99A - 2 5/ 1/1999	Smith, John, Z.	2,000	\$3,247.80 \$0.00	\$270.65	\$2,164.46		\$812.69 \$0.00	\$0.00	\$0.00	
Plan 99A - 3 5/ 1/1999	Fisher, Anna, S.	1,000	\$1,513.40 \$0.00	\$126.12	\$1,008.59		\$378.69 \$0.00	\$0.00	\$0.00	
Plan 99A - 4 5/ 1/1999	Baker, Muriel, W.	1,000	\$1,655.90 \$0.00	\$137.99	\$1,103.56		\$414.35 \$0.00	\$0.00	\$0.00	
Plan 99A - 11 6/ 1/1999	Eriesson, Frederick, G.	1,000	\$1,746.60 \$0.00	\$1,746.60	\$0.00		\$0.00 \$0.00	\$0.00	\$0.00	
Plan 99B - 6 10/ 1/1999	Smith, John, Z.	1,000	\$1,819.40 \$0.00	\$0.00	\$0.00	12/12/1999 Repricing	\$89.48 \$1,729.92	\$0.00	\$0.00	
Plan 99B - 7 10/22/1999	Ericsson, Frederick, G.	1,000	\$2,545.10 \$0.00	\$0.00	\$1,999.22		\$545.88 \$0.00	\$0.00	\$0.00	
Plan 99A - 21 11/ 1/1999	Eriesson, Frederick, G.	2,500	\$4,300.25 \$0.00	\$0.00	\$3,407.30		\$892.95 \$0.00	\$0.00	\$0.00	
Plan 99B - 8 12/17/1999	Smith, John, Z.	900	\$3,497.49 \$1,729.92	\$0.00	\$4,429.97		\$797.44 \$0.00	\$0.00	\$0.00	
Plan 99A - 9 12/31/1999	Baker, Muriel, W.	2,500	\$12,072.75 \$0.00	\$0.00	\$8,048.50		\$4,024.25 \$0.00	\$0.00	\$0.00	
Plan 99C - 14 5/31/2000	Fisher, Anna, S.	1,000	\$6,241.30 \$0.00	\$0.00	\$2,727.36		\$3,513.94 \$0.00	\$0.00	\$0.00	
Plan 99C - 15 5/31/2000	Fisher, Anna, S.	1,000	\$4,630.60 \$0.00	\$0.00	\$2,023.51		\$2,607.09 \$0.00	\$0.00	\$0.00	
Plan 99C - 16 6/ 1/2000	Fisher, Anna, S.	500	\$2,943.20 \$0.00	\$0.00	\$1,288.15		\$1,655.05 \$0.00	\$0.00	\$0.00	
SUMMARY		16,900	\$48,483.89	\$2,470.54	\$29,713.50		\$16,299.85	\$0.00	\$0.00	
Net Expense Alloca	ated \$16,299.85		\$1,729.92				\$1,729.92			

#### Figure 13 – Expense Allocation BS Single/Binomial – Ratable method

You may press the **Export** button to export report data. Default export order is:

Date, Option ID, Employee ID, Employee Name, Total Shares, Outstanding Shares, Total Valuation, Inherited Amount, Prior Amortized Expense, Unamortized Expense, Period Expense, Carry Forward Amount, Actual Expense, Expense Adjustment, Net Period Expense, Adjustment Date, Adjustment Reason, and User Data.

It is easy to add or remove fields to export – simply select it on the left pane and press the >>**Move**>> button.

Records are initially sorted by **Option ID**.

If you need different sort order, use the Sort item from the Records menu.

If any of sort by Custom field buttons are pressed before Export button system will ask if you want summary only info, or detailed export.

If you switch to Unamortized report following information is shown: option **id**, option **date**, **optionee name**, number of **shares granted** and **outstanding**, **unamortized expense** amount, **remaining years** to vest, and future **expense** amounts for up to ten periods.

EXPENSE 4 From 9/1/1999 to 8. Black-Scholes Singl Valuation number: 1	ALLOCATION /31/2000 e and Binomial valuation mod ; Allocation method: Straight	lels Line					<b>Acme Con</b> ID: 12-126 Street name City, State,	n <b>pany, Ir</b> e Goes H Country,	<b>ıc.</b> ere , ZIP
Option ID / Date	Optionee	Shares <u>Granted</u>	Total Valuation / <u>Inherited Amount</u>	Prior <u>Amortized</u>	Unamortized <u>Expense</u>	Cancel Date / <u>Reason</u>	Period Expense / <u>Carry Forward</u>	Actual <u>Expense</u>	Expense <u>Adjustment</u>
Plan 99A - 1 5/ 1/1999	Young, Tom, D.	1,500	\$2,270.10 \$0.00	\$191.12	\$1,511.85		\$567.14 \$0.00	\$0.00	\$0.00
Plan 99A - 2 5/ 1/1999	Smith, John, Z.	2,000	\$3,247.80 \$0.00	\$273.43	\$2,162.98		\$811.39 \$0.00	\$0.00	\$0.00
Plan 99A - 3 5/ 1/1999	Fisher, Anna, S.	1,000	\$1,513.40 \$0.00	\$127.41	\$1,007.90		\$378.09 \$0.00	\$0.00	\$0.00
Plan 99A - 4 5/ 1/1999	Baker, Muriel, W.	1,000	\$1,655.90 \$0.00	\$139.41	\$1,102.80		\$413.69 \$0.00	\$0.00	\$0.00
Plan 99A - 11 6/ 1/1999	Eriesson, Frederick, G.	1,000	\$1,746.60 \$0.00	\$1,746.60	\$0.00		\$0.00 \$0.00	\$0.00	\$0.00
Plan 99B - 6 10/ 1/1999	Smith, John, Z.	1,000	\$1,819.40 \$0.00	\$0.00	\$0.00	12/12/1999 Repricing	\$89.66 \$1,729.74	\$0.00	\$0.00
Plan 99B - 7 10/22/1999	Ericsson, Frederick, G.	1,000	\$2,545.10 \$0.00	\$0.00	\$1,998.10		\$547.00 \$0.00	\$0.00	\$0.00
Plan 99A - 21 11/ 1/1999	Eriesson, Frederick, G.	2,500	\$4,300.25 \$0.00	\$0.00	\$3,405.47		\$894.78 \$0.00	\$0.00	\$0.00
Plan 99B - 8 12/17/1999	Smith, John, Z.	900	\$3,497.49 \$1,729.74	\$0.00	\$4,252.79		\$974.44 \$0.00	\$0.00	\$0.00
Plan 99A - 9 12/31/1999	Baker, Muriel, W.	2,500	\$12,072.75 \$0.00	\$0.00	\$8,042.99		\$4,029.76 \$0.00	\$0.00	\$0.00
Plan 99C - 14 5/31/2000	Fisher, Anna, S.	1,000	\$6,241.30 \$0.00	\$0.00	\$5,454.73		\$786.57 \$0.00	\$0.00	\$0.00
Plan 99C - 15 5/31/2000	Fisher, Anna, S.	1,000	\$4,630.60 \$0.00	\$0.00	\$4,047.02		\$583.58 \$0.00	\$0.00	\$0.00
Plan 99C - 16 6/ 1/2000	Fisher, Anna, S.	500	\$2,943.20 \$0.00	\$0.00	\$2,576.31		\$366.89 \$0.00	\$0.00	\$0.00
SUMMARY		16,900	\$48,483.89	\$2,477.97	\$35,562.94		\$10,442.99	\$0.00	\$0.00
Net Expense Alloca	ated \$10,442.99		\$1,729.74				\$1,729.74		

#### Figure 14 - Expense Allocation BS Single/Binomial – Plain Straight Line method

## Report: Expense Allocation BS Multiple

Report calculates expense amounts allocated with option records when Black-Scholes Multiple valuation model is used. System divides option records into its vesting periods and treats them as separate grants in the expense allocation calculations.

You have to specify: reporting period, by entering range of dates (**From** and **To**), valuation number (**1..5**, since there are up to five valuation parameters stored with option record), and allocation **method** from the drop-down list (Fin28 or Normal).

If check-box **Use Expense Details for BS Multiple** is selected, system will use expense amounts previously stored in the Option Expense Details table and sum it in the Prior Amortized column.

If check-box **Read Expenses** is selected, system will read stored expense amounts from the Expense Details table for the selected reporting period. Please make sure you are reading data for the reporting period that are saved in the database. For example, if you are saving expenses quarterly please use same dates for reading expenses, or use from and to dates that exist in the Expense Details table.

If check-box **Save Expenses** is selected, system will store expense amounts for the selected reporting period in the Option Expense Details table.

Press the **Find** button is to generate the report. System finds option records granted before reporting period's end date, and valued using the Black-Scholes Multiple valuation model. Option records canceled before reporting period's start date are omitted.

Note: Please specify right valuation number (that corresponds to valuation model used).

There are two allocation methods: Fin28 and Normal.

**Fin28** method calculates expense allocations based on the Vest From date. It allocates most of the expenses in the early stages of grant's vesting and takes future increments into calculation. **Normal** allocation method is based on the Grant date. It divides total period's valuation amount evenly across the whole vesting period and does not include future increments into calculation.

Additional report inputs are:

**Granted From** – To: if you want to include only grants with date within specific period, then specify it here. If you leave this empty, system will fill To date equal to report To date;

Type: choose only grants of specific option type;

**Plans**: select only records that belong to specific option plan. Multiple plan selection is possible;

**Omit RS**: exclude restricted stock from the report; **Only RS**: only include restricted stock in the report;

**Use Vest From Date**: if checked system will use Vest From Date as a start date instead of grant date. This affects total number of days until full vest date, and therefore expense calculation.

**Use Unamortized**: If checked, system will calculate expenses based on unamortized expense from report start date to full vest date. If cleared, system will use total expense amount and number of days in the reporting period divided by the total days of vesting.

**Include Vested Outstanding**: include all grants that have vested and outstanding shares as of report end date, even if they do not have period expense.

Include All: include all grants in the report.

**Tax Rate** field, if specified as report input or at each grant User Data 4 field, will be applied to Net Period Expense and added to Export only.

Each report row contains: option id, option date, optionee name, number of shares granted and outstanding, total valuation amount, inherited amount, prior amortized expense amount, unamortized expense amount, adjustment date, adjustment reason, period expense amount, actual expense amount, carry forward amount, expense adjustment amount, and net period expense amount.

**Total Valuation** amount incorporates Unvested Forfeiture Rate as specified in Forecast record used for the option valuation.

**Inherited Amount** (options created as a result of repricing only): equal to Carry Forward amount of parent (repriced) option. Please note that newly created option currently must have at least the same number of vesting periods as its parent option. Otherwise, system will not calculate inherited amounts correctly. If you do not want Inherited Amount, please specify keyword "NIA" in the Valuation Notes field.

**Prior Amortized**: expense amount already amortized before reporting period start date (from grant date).

Unamortized Expense: amount to be amortized after reporting period end date (until period Vest Date).

Period Expense: grant's expense allocation amount within the reporting period.

Actual Expense (options canceled manually or by optionee's termination only): corrected Amortized Expense amount (at reporting period end date) as a result of cancellation.

**Expense Adjustment** amount: Prior Amortized plus Period Expense minus Actual Expense. Negative amount means system will add expenses to the previously calculated amount.

Resulting **Net Period Expense** amount is Period Expense amount minus Expense Adjustment amount. **This is the amount to report/use as your period expense**.

Records are sorted by option id.

If you want to group by Custom Data field 1 or 2, which may be your division or department code, and to effectively group expenses per your company divisions/departments, then you may click on dutted button that shows your Custom Data 1 or 2 label. After that, please press the **Preview** button

When you press sort by Custom Data field 2 for the first time system will sort by Custom Data 2 field only. If you press it for the second time you will get records sorted and grouped by Custom Data field 1 and then Custom Data field 2.

There is a trailing grand summary report part, showing totals for: number of shares granted, valuation, inherited amount, prior amortized expense, unamortized expense, period expense, carry forward amount, actual expense, and expense adjustment amount.

**Net Expense Allocated** amount is a sum of Period Expenses minus sum of Expense Adjustments.

Report format is *Letter*, orientation is *Landscape*.

Report subtitle reflects report parameters you specified.

Press the **Preview** button is to see how the report will look printed on paper. You can browse through the report pages using the **book tool**. Press the **Continue** button to exit from the preview mode.

Press the **Print** button it to print this report. Print dialog will be shown, allowing you to select: printer, change its properties, mark if you want to print in the file, define print range (all pages or page subset), define page numbering starting page, select number of copies and collate settings.

Press the **Jump To Record List** button if you want to filter records. After you finish, please press the **Back** button to return to this report.

You can browse through the record list using the record navigation buttons: go to previous, next, first and last record in the current found set.

You may press the **Export** button to export report data. Default export order is:

Date, Option ID, Employee ID, Employee Name, Total Shares, Shares Outstanding, Total Valuation, Inherited Amount, Prior Amortized Expense, Unamortized Expense, Period Expense, Carry Forward Amount, Actual Expense, Expense Adjustment, Net Period Expense, Adjustment Date, Adjustment Reason (if exist), Unamortized related data, and User Data.

It is easy to add or remove fields to export – simply select it on the left pane and press the >>**Move**>> button.

Records are initially sorted by **Option ID**. If you need different sort order, use the Sort item from the Records menu.

If any of sort by Custom field buttons are pressed before Export button system will ask if you want summary only info, or detailed export.

If you switch to Unamortized report following information is shown: option **id**, option **date**, **optionee name**, number of **shares granted** and **outstanding**, **unamortized expense** amount, **remaining years** to vest, and future **expense** amounts for up to ten periods.

EXPENSE ALL From 10/1/2001 to 11/1/ Black-Scholes Multiple v Valuation number: 1; Fin	EXPENSE ALLOCATION From 10/1/2001 to 11/1/2001 Back-Scholes Multiple valuation model /aluation number: 1; Fin28 method									<b>Acme Company, Inc.</b> ID: 12-126 Street name Goes Here City, State, Country, ZIP		
Option ID / Date / <u>Optionee</u>	Shares <u>Granted</u>	Valuation	Inherited <u>Amount</u>	Prior <u>Amortized</u>	Unamortized <u>Expense</u>	Cancel Date / <u>Reason</u>	Period <u>Expense</u>	Carry <u>Forward</u>	Actual <u>Expense</u>	Expense <u>Adjustment</u>		
Plan 99A - 5	1,250	\$1,891.75	\$0.00	\$1,891.75	\$0.00		\$0.00	\$0.00	\$0.00	\$0.00		
5/ 1/1999	1,250	\$2,009.13	\$0.00	\$2,009.13	\$0.00		\$0.00	\$0.00	\$0.00	\$0.00		
Eriesson, Frederick, G.	1,250	\$2,104.25	\$0.00	\$1,695.30	\$347.51		\$61.44	\$0.00	\$0.00	\$0.00		
	1,250	\$2,180.75	\$0.00	\$1,318.00	\$814.98		\$47.77	\$0.00	\$0.00	\$0.00		
_	5,000	\$8,185.88	\$0.00	\$6,914.18	\$1,162.49		\$109.21	\$0.00	\$0.00	\$0.00		
Plan 99B - 18	500	\$3,371.05	\$0.00	\$3,371.05	\$0.00		\$0.00	\$0.00	\$0.00	\$0.00		
11/16/2000	250	\$1,805.45	\$0.00	\$1,572.97	\$74.20		\$158.28	\$0.00	\$0.00	\$0.00		
Ericsson, Frederick, G.	250	\$1,903.13	\$0.00	\$829.03	\$990.67		\$83.43	\$0.00	\$0.00	\$0.00		
	1,000	\$7,079.63	\$0.00	\$5,773.05	\$1,064.87		\$241.71	\$0.00	\$0.00	\$0.00		
SUMMARY	6,000	\$15,265.51	\$0.00	\$12,687.23	\$2,227.36		\$350.92	\$0.00	\$0.00	\$0.00		
Net Expense Allocated	\$350.9	2										

Figure 15 - Expense Allocation Black-Scholes Multiple Valuation Model - Fin28

EXPENSE AI From 10/1/2001 to 11/1 Black-Scholes Multiple Valuation number: 1; N	LLOCATI 1/2001 valuation mode formal method	ON el		Acme Co ID: 12-12 Street nan City, State	<b>mpany, Ir</b> 6 1e Goes H 2, Country,	n <b>c.</b> ere , ZIP				
Option ID / Date / <u>Optionee</u>	Shares <u>Granted</u>	Valuation	Inherited <u>Amount</u>	Prior <u>Amortized</u>	Unamortized <u>Expense</u>	Cancel Date / <u>Reason</u>	Period <u>Expense</u>	Carry <u>Forward</u>	Actual <u>Expense</u>	Expense <u>Adjustment</u>
Plan 99A - 5	1,250	\$1,891.75	\$0.00	\$1,891.75	\$0.00		\$0.00	\$0.00	\$0.00	\$0.00
5/ 1/1999	1,250	\$2,009.13	\$0.00	\$2,009.13	\$0.00		\$0.00	\$0.00	\$0.00	\$0.00
Ericsson, Frederick, G.	1,250	\$2,104.25	\$0.00	\$1,697.22	\$347.51		\$59.52	\$0.00	\$0.00	\$0.00
_	1,250	\$2,180.75	\$0.00	\$1,319.50	\$814.98		\$46.27	\$0.00	\$0.00	\$0.00
	5,000	\$8,185.88	\$0.00	\$6,917.60	\$1,162.49		\$105.79	\$0.00	\$0.00	\$0.00
Plan 99B - 18	500	\$3,371.05	\$0.00	\$3,371.05	\$0.00		\$0.00	\$0.00	\$0.00	\$0.00
11/16/2000	250	\$1,805.45	\$0.00	\$1,577.91	\$74.20		\$153.34	\$0.00	\$0.00	\$0.00
Eriesson, Frederick, G.	250	\$1,903.13	\$0.00	\$831.64	\$990.67		\$80.82	\$0.00	\$0.00	\$0.00
-	1,000	\$7,079.63	\$0.00	\$5,780.60	\$1,064.87		\$234.16	\$0.00	\$0.00	\$0.00
SUMMARY	6,000	\$15,265.51	\$0.00	\$12,698.20	\$2,227.36		\$339.95	\$0.00	\$0.00	\$0.00

Net Expense Allocated \$339.95

Figure 16 – Expense Allocation Black-Scholes Multiple Valuation Model – Normal

## Report: Expense Allocation APB25/Restricted Stock

Report calculates expense amounts allocated with discounted stock option records using the APB25 intrinsic value method on the grant date.

You have to specify: reporting period, by entering range of dates (**From** and **To**), and allocation **method** from the drop-down list (Fin28, Ratable, or Straight Line). Additionally, you may specify certain option **plan** from the drop-down list. You can choose to exclude Restricted Stock from reporting, or you can show only Restricted Stock, depending on the status of appropriate check-boxes.

Press the **Find** button is to generate the report. System finds option records granted before reporting period's end date, with option price less than a fair market value at grant date (discounted options). Option records canceled before reporting period's start date are omitted.

There are three allocation methods: Fin28, Ratable, and Straight Line.

**Fin28** method calculates expense allocations over the grant increments. Number of increments depends of vesting schedule used (for Monthly vest type it is 12 increments per year, for example). Fin28 calculation allocates most of the expenses in the early stages of grant's vesting. It takes future increments into calculation, while two other allocation methods do not. **Ratable** method takes particular number of shares per vesting period into account, while **Straight Line** method divides total compensation amount evenly across the whole vesting period.

Each report row contains: option id, option date, option type, optionee name, number of shares granted and outstanding at reporting period end date, total compensation amount, compensation per share, amortized expense amount, unamortized expense amount, period expense amount, cancel date, cancel reason, actual expense amount, and expense adjustment amount.

**Total Compensation** is Total Fair Value of shares at grant date minus Total Option Price.

Amortized Expense: expense amount amortized at reporting period end date.

**Unamortized Expense**: amount to be amortized after reporting period end date (until Last Vest Date).

**Period Expense**: grant's expense allocation amount within the reporting period.

Actual Expense (options canceled manually or by optionee's termination only): corrected Amortized Expense amount as a result of cancellation.

Expense Adjustment amount: Amortized Expense minus Actual Expense.

Records are sorted by option date and then by option id.

There is a trailing grand summary report part, showing totals for: number of shares granted/outstanding, compensation, amortized expense, unamortized expense, period expense, actual expense, and expense adjustment amount.

**Net Expense Allocated** amount is a sum of Period Expenses minus sum of Expense Adjustments. Use this result as an input for the set of seven weighted option outstanding reports (Dilution Summary, Fully Diluted Options Outstanding, Primary Diluted Options Outstanding, NQ Tax Benefit/Fully Diluted, NQ Tax Benefit/Primary Diluted, Anti-Dilution/Fully Diluted, Anti-Dilution/Primary Diluted).

Press the **Export** button if you want to export report data. Exported data can be used in other programs, like Microsoft Excel, to present it graphically.

Report format is *Letter*, orientation is *Landscape*.

Report subtitle reflects report parameters you specified.

Press the **Preview** button is to see how the report will look printed on paper. You can browse through the report pages using the **book tool**. Press the **Continue** button to exit from the preview mode.

Press the **Print** button it to print this report. Print dialog will be shown, allowing you to select: printer, change its properties, mark if you want to print in the file, define print range (all pages or page subset), define page numbering starting page, select number of copies and collate settings.

Press the **Jump To Record List** button if you want to filter records. After you finish, please press the **Back** button to return to this report.

You can browse through the record list using the record navigation buttons: go to previous, next, first and last record in the current found set.

EXPENSE ALLOO From 10/1/2003 to 10/31/2003 Allocation method: Fin28	CATION	APB25				C	<u>us</u>	L	m
Option ID / Date, Type Option	nee	Shares Granted / Outstanding	Compensation/ <u>Comp per share</u>	Amortized <u>Expense</u>	Unamortized <u>Expense</u>	Period <u>Expense</u>	Cancel Date / <u>Reason</u>	Actual <u>Expense</u>	Expense <u>Adjustment</u>
Plan 99A - 23 Young	, Tom, D.	2,000	\$20,512.40	\$12,989.60	\$7,522.80	\$574.52			
9/14/2002 DSO		2,000	\$10.2562						
SUMMARY		2,000	\$20,512.40	\$12,989.60	\$7,522.80	\$574.52		\$0.00	\$0.00
Net Expense Allocated	\$574.52	2 000							

Figure 17 – Expense Allocation APB25 – Fin28 method

Expe	NSE A LI	LOCATI	ON AP	B25

From 10/1/2003 to 10/31/2003 Allocation method: Ratable

Option ID / Date, Type	<u>Optionee</u>	Shares Granted / Outstanding	Compensation/ <u>Comp per share</u>	Amortized <u>Expense</u>	Unamortized <u>Expense</u>	Period <u>Expense</u>	Cancel Date / <u>Reason</u>	Actual <u>Expense</u>	Expense <u>Adjustment</u>
Plan 99A - 23 9/14/2002 DSO	Young, Tom, D.	2,000 2,000	\$20,512.40 \$10,2562	\$5,786.63	\$14,725.77	\$434.35			
SUMMARY		2,000	\$20,512.40	\$5,786.63	\$14,725.77	\$434.35		\$0.00	\$0.00
Net Expense Allocated	\$434.35	2,000							

#### Figure 18 - Expense Allocation APB25 - Ratable method

#### EXPENSE ALLOCATION APB25

From 10/1/2003 to 10/31/2003 Allocation method: Straight Line

<u>Option ID / Date, Type</u>	Optionee	Shares Granted / Outstanding	Compensation/ Comp per share	Amortized <u>Expense</u>	Unamortized <u>Expense</u>	Period <u>Expense</u>	Cancel Date / <u>Reason</u>	Actual <u>Expense</u>	Expense <u>Adjustment</u>
Plan 99A - 23	Young, Tom, D.	2,000	\$20,512.40	\$5,784.47	\$14,727.93	\$421.20			
9/14/2002 DSO		2,000	\$10.2562						
SUMMARY		2,000	\$20,512.40	\$5,784.47	\$14,727.93	\$421.20		\$0.00	\$0.00
Net Expense Allocated	\$421.20	2,000							

Figure 19 - Expense Allocation APB25 - Straight Line method

In the example above vesting used is: 500 shares on vest date after one year, 500 shares monthly in the second year, 500 shares weekly in the third year, and 500 shares daily in the last year.

## **Report: Options By Price**

Report shows options that have outstanding and exercisable shares as of specified date, with remaining life in years, grouped by option prices.

You have to enter **as of** date.

With a radio button you can specify if you want to run it for all outstanding options or for those outstanding vested as of end date plus expected to vest (ETV) using forfeiture rates specified in appropriate forecast record.

If you want to include only specific option plans, please select them from the list. By default that list is empty and system will use all option plans.

Press the **Find** button **(b)** to generate the report.

Each option row consists of: optionee **name** and **id**, option **id**, **type** and **date**, number of **shares** granted, outstanding and exercisable, **expiration date** and calculated **remaining option life** in years (with two decimal places).

Records are sorted by optionee name and then by option id.

There is a trailing grand summary report part, showing totals for number of shares canceled and revaluation credit.

Report format is *Letter*, orientation is *Landscape*.

Report subtitle reflects report parameter you specified.

Press the **Preview** button it to see how the report will look printed on paper. You can browse through the report pages using the **book tool**. Press the Continue button to exit from the preview mode.

Press the **Print** button it to print this report. Print dialog will be shown, allowing you to select: printer, change its properties, mark if you want to print in the file, define print range (all pages or page subset), define page numbering starting page, select number of copies and collate settings.

Press the **Jump To Record List** button if you want to filter records. After you finish, please press the **Back** button to return to this report.

You can browse through the record list using the record navigation buttons: go to previous, next, first and last record in the current found set.

<b>OPTIONS</b> 2 As of: 12/31/200	BY PRICE						Acme Comp ID: 12-126 Street Name City, State,	o <b>any, Inc</b> . Goes Here Zip			
Price \$6.0000 Optionee		ш	Option ID	Туре	Date	Graniel Shares	Ouistanding Shares	Exercisable Shares	Equire Date	Remai	ining Life (years)
Ericsson, Frederick,	, G.	AA005	Plan 99A - 11	NQA	6/1/1999	1,000	500	500	6/1/1999		8.19
hice \$6.0000	Total options 1				Total	1,000	500	500		avg.	8.19
Price \$5.0000											
Optionee		Ш	Option ID	Туре	Date	Graniel Shares	Outstanding Shares	Exercisable Shares	Equire Date	Remai	ining Life (vears)
Ericsson, Frederick,	, G.	AA005	Plan 99A - 5	ISO	5/1/1999	5,000	4,750	1,000	5/1/1999		8.10
Brice \$5,0000	Total options 1				Total	5,000	4,750	1,000		avg.	8.10
	Total options 2				Total	6,000	5,250	1,500		avg.	8.15

Figure 20 – Options by Price

## **Report: Option Activity Summary**

Report shows summary information for the option activity during the specified period, with weighted averages and ranges of exercise prices.

You have to specify **From** and **To** dates, **valuation** number, and up to five ranges of exercise prices. In each pair of prices, upper field is for the low price, and high price is in the bottom field. System treats low price with greater than or equal (>=) operator, and high price with the lower (<) operator. This allows you to specify ranges like: \$1-\$2, \$2-\$5, but you cannot specify range with same prices: \$1-\$1 (use \$0.9999-\$1 instead).

For the intrinsic value calculation, you need to specify share value on the report's end date, or press green Value button in order system to lookup from the Prices table.

Additionally, you can specify option **plans**, by selecting one or more from the list. In this case, only options under specified plans will be used.

You can choose to exclude Restricted Stock from reporting, or you can show only Restricted Stock, depending on the status of appropriate check-boxes.

Or, you can specify option types to include in the report by typing in list of types delimited by spaces or commas.

**Note**: Under the Exercise Price drop-down list, there is a possibility to specify if Exercise Price used in the first part of the report (where labeled) will be: Option Price (default), or FMV at grant, or calculated valuation. If no valuation data exist grant record will be omitted.

**Note**: If you leave empty all five ranges of exercise prices system will calculate ranges by dividing period from minimal exercise price to maximal exercise price into five equal parts. After you generate the report for the first time, you may correct these numbers and run the report again.

Press the **Find** button **b** to generate the report.

System calculates option activity summary information into several passes through the Options database.

First, it calculates options outstanding shares number and weighted average exercise price as of reporting period beginning date (From date).

Then, it calculates numbers for the end of reporting period (To date): options outstanding, number of shares outstanding and vested as of end date plus those expected to vest, and number of shares exercisable, with weighted average exercise prices.

Shares expected to vest are calculated using the appropriate unvested forfeiture rate from forecast table.

Following activity data are shown for the reporting period: number of shares Issued, Exercised, Canceled, and Expired.

Finally, system calculates numbers for specified ranges of exercise prices, plus data for options that are left "out of range".

For the outstanding shares, system shows number of shares outstanding per period, weighted average exercise price, and weighted average remaining contractual life.

For the exercisable shares, system shows number of shares exercisable per period, and weighted average exercise price.

Intrinsic values are calculated based on the exercise price and supplied share value as of end date, and it is presented for the shares exercised during the period. In order to show details for the intrinsic value summaries shown here, you may run Exercisable Gain report.

For the shares outstanding, then exercisable, and vested plus expected to vest, all as of report end date, system calculates Aggregate Intrinsic Value. You may run Aggregate Intrinsic Value report to review details.

Second page of the report is for the Non-vested roll-forward, which shows shares non-vested at the beginning of the period, issued (granted), forfeited, vested (or exercised, if your plan allows non-vested shares to be exercised), and non-vested as of end date. For each activity there is a Weighted Average Grant Date Fair Value attached, and for the non-vested shares as of end date there is also a Weighted Average Remaining Years to Vest.

In order to show details for the summaries for Grant Date Fair Values and appropriate activities, you may run Option Valuation report.

Press the **Export** button if you want to export summary information into the html file. Exported data can be used in other programs, like Microsoft Excel, to present it graphically.

Report format is Letter, orientation is Portrait.

Press the **Print** button it to print this report. Print dialog will be shown, allowing you to select: printer, change its properties, mark if you want to print in the file, select number of copies and collate settings.

Please select and print only one (current) page (record).

#### **OPTION ACTIVITY SUMMARY**

From 1/1/2005 to 12/31/2005 Option price used for the exercise price

	Shares	Weighted Average Exercise Price	Aggregate Intrinsic Value
Outstanding before 1/1/2000	22,900	\$9.0236	
Issued	5,500	\$19.7787	
Canceled	12,500	\$9.1284	
Expired	0		
Exercised	1,190	\$10.8763	\$48,544.26
Outstanding as of 12/31/2005	14,710	\$12.8059	\$571,687.56
Exercisable as of 12/31/2005	14,710	\$12.8059	\$571,687.56

Custom

Outstanding				
Range of Exercise Prices		Shares Outstanding	Weighted Average Exercise Price	Weighted Average Remaining Life
\$5.0000 -	\$10.0000	3,990	\$5.0000	3.33
\$10.0000 -	\$15.0000	900	\$13.3500	3.75
\$15.0000 -	\$16.0000	7,500	\$15.4500	4.00
\$16.0000 -	\$20.0000	2,320	\$17.4721	4.42
\$20.0000 -	\$25.0000			
out of ra	nge			
		14,710	\$12.8059	3.87

#### <u>Exercisable</u>

Range of Exercise Prices		Shares Exercisable	Weighted Average Exercise Price	Weighted Average Remaining Life
\$5.0000 -	\$10.0000	3,990	\$5.0000	3.33
\$10.0000 -	\$15.0000	900	\$13.3500	3.75
\$15.0000 -	\$16.0000	7,500	\$15.4500	4.00
\$16.0000 -	\$20.0000	2,320	\$17.4721	4.42
\$20.0000 -	\$25.0000			
out of ra	nge			
		14,710	\$12.8059	3.87

	Shares	Weighted Average Grant Date Fair Value	Weighted Average Remaining Years To Vest
Nonvested before 1/1/2000	22,400	\$2.9524	
Granted			
Forfeited	750	\$1.5134	
Vested	21,650	\$3.0022	
Nonvested as of 12/31/2005	0		

Figure 21 – Option Activity Summary

## /obsolete/ Report: APIC Pool

Report shows FAS123R deferred tax accounting – effects of non-qualifying stock option exercises, disqualifying iso option dispositions, and option cancellations (terminations) / expirations on APIC Pool.

You have to specify range of dates (**From** and **To** dates), and company tax rate in percents. For exercises, system tests if exercise date belongs to specified period; for option dispositions - disposition date.

System will include both BS Single/Binomial and BS Multiple valuation models, and corresponding Expense Allocations based on valuation number you specify.

Allocation method is by default set to Straight Line, for BSS/Bin Expense Allocation, and to Normal, for BS Multiple Expense Allocation.

Press the **Find** button **(b)** to generate the report.

Press the **Find All** button **D** to clear the reporting parameters and find all records.

Fields shown are: Option ID, Transaction Type (Exercise, Cancel/Expire, or Disposition), Transaction Date, Transaction Gain, Total Valuation, Period Expense, Tax Benefit, Deferred Tax Asset, Income Tax Reduction for ISO shares, APIC, and FAS123R APIC Pool effects.

Please note this report is obsolete since there is no more deferred tax per FASB ASC accounting.

Transaction Gain is W-2 Income for NQ exercises and disqualifying ISO option dispositions.

Total Valuation is total expense amount, prorated based on the number of transaction shares. It corresponds to Total Valuation column from appropriate Expense Allocation report (with effects of estimated unvested forfeiture rates), if expense is not adjusted, or to Actual Expense, if grant is fully vested/terminated, and adjusted.

Period Expense is for dates from-to, corresponds to Period Expense minus Expense Adjustment from appropriate expense allocation report, and is prorated based on the number of transaction shares.

Tax Benefit is amount calculated by applying tax rate on the gain.

Deferred Tax Asset is for NQ exercises only and it is calculated by applying tax rate on Period Expense.

For ISO shares:

If disqualifying disposition gain is greater than prorated total valuation: difference x tax rate goes to FAS 123R APIC pool as addition (+)

If disqualifying disposition gain is less than prorated total valuation: if there is a period expense then system reports reduction to income tax expense for ISO.

For NQ shares:

If exercise gain is greater than prorated total valuation: difference x tax rate will be added to FAS123R APIC pool (+);

If exercise gain is lower than prorated total valuation: difference x tax rate is debited from FAS123R APIC pool (-)

There are trailing summary report parts, one for each option type, and a grand summary. Records are sorted by option id, and then by transaction date.

Report format is *Letter*, orientation is *Landscape*, page break before every new option type..

Report subtitle reflects report parameters you specified.

Press the **Preview** button is to see how the report will look printed on paper. You can browse through the report pages using the **book tool**. Press the **Continue** button to exit from the preview mode.

Press the **Print** button it to print this report. Print dialog will be shown, allowing you to select: printer, change its properties, mark if you want to print in the file, define print range (all pages or page subset), define page numbering starting page, select number of copies and collate settings.

Press the **Jump To Record List** button if you want to filter records. After you finish, please press the **Back** button to return to this report.

You can browse through the record list using the record navigation buttons: go to previous, next, first and last record in the current found set.

#### **Report: Diluted Options Outstanding**

Report belongs to a set of weighted options outstanding reports (Dilution Summary, Diluted Options Outstanding, NQ Tax Benefit/Diluted Options, Unamortized Expense/Diluted Options, Anti-Dilution Report). These reports belong to ASC 260 and are used quarterly and annually, for Form 10-K and Form 10-Q.

Fields shown are: **Option ID**, option **Date**, option **Type**, **Cancel Date**, option **Price**, absolute number of **Shares Outstanding**, **Days** outstanding in the period, number of **Weighted Shares Outstanding**, **Weighted Total Price**, **Average Unamortized Expense**, number of equivalent **Buyback Shares**, **NQ Tax Benefit Shares**, and number of **Diluted Outstanding** shares.

You have to specify report parameters: period (**From** and **To** dates), **Ending Fair Market Value** (if you leave it empty, system will try to fill it from the Prices database), and Combined Corporate **Tax Rate** (in percents, for Tax Benefit calculations).

**/obsolete**/ Optional parameters are: **Adjustment** amount for an unamortized expense, and number of common shares **Outstanding** at the period end (if you supply this number, system will use it to decide if Modified Treasury Stock method should be used instead of a Treasury Stock method).

## Please run appropriate Expense Allocation report for the same period first, and system will pick up Unamortized Expenses from that report and use it here. Remember to specify correct Valuation number input (1..5)

Press the **Find** button is to generate the report. System will find option records with option dates as specified on the Expense Allocation report under the Granted From – To fields. System will ask you to specify if you want to process Complete grant and exercise history (default choice, most accurate), or you want to calculate outstanding shares number at the period's End date. Then, it will calculate number of shares outstanding for the found records. Records without outstanding shares during the period will be omitted. Next step is to weight absolute number of shares outstanding according to the number of days in the reporting period.

System uses Treasury Stock method to differentiate records into Dilutive and Anti-Dilutive. According to ASC 260, system sets Referring Fair Value to an ending fair market value (as of reporting period end date). Dilutive options are those with an option price less or equal to the referring fair value. If the price is greater than the referring fair value, such records are omitted from this report (those are anti-dilutive options).

If you check report input to include all outstanding shares then system will show all records on the report. They will have no impact on dilution calculation and stand for easier audit.

**Note:** You can specify the way system differentiate records into Dilutive and Anti-Dilutive by choosing between two possible Referring Fair Value calculations:

- 1) ending fair market value (default per ASC 260, uses specified ending FMV).
- 2) average fair market value within reporting period (from Prices database);

#### For the ASC 260 compliance please use first method, end fair market value.

If you do not have fully updated Prices table with daily values then you can specify referring fair market value as a report input.

Weighted Total Price is calculated by multiplying Weighted Shares Outstanding with the Option Price.

Weighted Value is calculated by multiplying Weighted Shares Outstanding with the Referring Fair Value.

Average Unamortized Expense is a mathematical average between Unamortized Expense at reporting period's begin and end date. You may press EPD button in order to review details behind Unamortized Expense calculation.

Weighted Total Price plus Average Unamortized Expense is divided with the Referring Fair Value to calculate number of equivalent Buyback Shares.

Gain is calculated as a difference between Weighted Value and Weighted Total Price.

Applying the combined corporate tax rate on the Gain, lowered by the Weighted Total Grant Date Fair Value, system calculates NQ Tax Benefit Shares.

At the end, number of Diluted Outstanding shares is a difference between Weighted Shares Outstanding, Buyback Shares and NQ Tax Benefit Shares.

Records are sorted by Option ID.

Press the **Plan**  $\blacksquare$  or **Type**  $\blacksquare$  button to sort records by option date, plan or type, respectively.

There is a trailing grand summary report part, showing totals for the option records listed. If the records are sorted by option plan or type, same summaries exist.

If you specify adjustment parameter, that amount is divided with the referring fair value to calculate equivalent number of shares. These shares are further subtracted from the total number of Diluted Outstanding shares to produce Total number of Diluted Outstanding Shares. You do not need to specify Adjustment if you are using Expense Allocation results, with Valuation Number input set to 1..5

Report format is *Letter*, orientation is *Landscape*.

Report subtitle reflects report parameters you specified.

There is a set of radio buttons, with abbreviations beside, each corresponding and leading to the appropriate report in the weighted options outstanding set. Please use PD for Diluted Options, TBPD for NQ Tax Benefit/Diluted options, ADPD for Anti-Dilutive Report, and EPD for Unamortized Expenses/Diluted Options.

In order to show Dilution Summary report, please press the **Summary** button **\Sigma**.

There is an Export button that will export report results into file.

Press the **Preview** button is to see how the report will look printed on paper. You can browse through the report pages using the **book tool**. Press the **Continue** button to exit from the preview mode.

Press the **Print** button it to print this report. Print dialog will be shown, allowing you to select: printer, change its properties, mark if you want to print in the file, define print range (all pages or page subset), define page numbering starting page, select number of copies and collate settings.

Press the **Jump Back** button 🔤 to close this report.

PRIMARY DILUTED OPTIONS OUTSTANDING   From 1/1/1999 to 12/31/1999 (365 days)   Ending Fair Market Value \$15   Combined Corporate Tax Rate 34%   Adjustment Value for Unamortized Expense \$15000							Acnee Company, Inc. ID: 12-126 Street Name Goes Here City, State, Zip 00				
Average fair market Option ID	t value \$8.0455 <u>Option Date</u>	Туре	<u>Cancel Date</u>	Frice	Shares <u>Outstanding</u>	Days	Weighted Outstanding	Weighted <u>Total Price</u>	Buyback <u>Shares</u>	NQ Tax <u>Benefit Shares</u>	Primary Dibuted Outstanding
Plan 99A - 1	5/ 1/1999	NQ		\$5,0000	1,500	245	1,006.85	\$5,034.25	625.73	129.58	251.54
Plan 99A - 2	5/ 1/1999	NQ		\$5,0000	2,000	245	1,342.47	\$6,71235	834.30	172.78	33539
Plan 99A - 3	5/ 1/1999	NQ		\$5,0000	790	245	530.27	\$2,65135	329.55	68.25	132.47
Plan 99A - 4	5/ 1/1999	NQ		\$5,0000	1,000	245	671.23	\$3,356.15	417.15	86.39	167.69
Plan 99A - 5	5/ 1/1999	ISO		\$5,0000	4,750	245	3,188.36	\$15,941.80	1,981.47	0.00	1,206.89
Plan 99B - 6	10/ 1/1999	NQ	12/12/1999	\$6,2500	900	73	180.00	\$1,125.00	139.83	13.66	26.51
Plan 99B - 7	10/22/1999	ISO		\$7.0000	1,000	71	194.52	\$1,361.64	169.24	0.00	25.28
Plan 99A - 11	6/ 1/1999	NQA		\$6.0000	500	214	293.15	\$1,758.90	218.62	2534	49.19
SUMMARY for op	ptions listed				12,440		7,406.85	\$37,941.44	4,715.89	496.00	2,194 96
									Adju	istment Shares -	1,864.00
								Total Bulb	Dibuted Oute	tanding Sharac	330.96

**Figure 22 – Diluted Options Outstanding** 

#### Report: Unamortized Expense/Diluted Options

Report shows detailed calculation of Average Unamortized Expense from the Diluted Options Outstanding. It belongs to a set of weighted options outstanding reports (Dilution Summary, Diluted Options Outstanding, NQ Tax Benefit/Diluted Options, Unamortized Expense/Diluted Options, Anti-Dilution Report). These reports belong to ASC 260 and are used quarterly and annually, for Form 10-K and Form 10-Q.

Fields shown are: Option ID, Option/Cancel Date, option Type, Cancel Date, option Price, absolute number of Shares Outstanding, Days outstanding in the period, number of Weighted Shares Outstanding, Shares Granted, Total Valuation, Prior Amortized amount, Unamortized Expense amount at period end date, and Average Unamortized **Expense** amount during the reporting period.

You have to run Diluted Options Outstanding report first and then to jump to this report in order to review Unamortized Expense calculation.

Unamortized Expense at period begin date is Total Valuation minus Prior Amortized amount.

Average Unamortized amount is therefore mathematical average between Unamortized Expense at period begin and end date.

Records are sorted by Option ID.

Press the **Plan** II or **Type** II button to sort records by option date, plan or type, respectively.

There is a trailing grand summary report part, showing totals for the option records listed. If the records are sorted by option plan or type, same summaries exist.

Report format is *Letter*, orientation is *Landscape*.

Report subtitle reflects report parameters you specified.

Press the Export button in order to export report results into file.

There is a set of radio buttons, with abbreviations beside, each corresponding and leading to the appropriate report in the weighted options outstanding set. Please use PD for Diluted Options, TBPD for NQ Tax Benefit/Diluted options, ADPD for Anti-Dilutive Report, and EPD for Unamortized Expenses/Diluted Options.

In order to show Dilution Summary report, please press the **Summary** button **Summary**.



Press the **Preview** button is to see how the report will look printed on paper. You can browse through the report pages using the **book tool**. Press the **Continue** button to exit from the preview mode.

Press the **Print** button it to print this report. Print dialog will be shown, allowing you to select: printer, change its properties, mark if you want to print in the file, define print range (all pages or page subset), define page numbering starting page, select number of copies and collate settings.

#### Report: NQ Tax Benefit/Diluted Options

Report shows detailed calculation of equivalent NQ Tax Benefit shares realized from the Diluted Options Outstanding. It belongs to a set of weighted options outstanding reports (Dilution Summary, Diluted Options Outstanding, NQ Tax Benefit/Diluted Options, Unamortized Expense/Diluted Options, Anti-Dilution Report). These reports belong to ASC 260 and are used quarterly and annually, for Form 10-K and Form 10-Q.

Fields shown are: Option ID, Option/Cancel Date, option Type, Cancel Date, option Price, absolute number of Shares Outstanding, Days outstanding in the period, number of Weighted Shares Outstanding, Weighted Total Price, Weighted Value, Gain realized, Weighted Grant Date Fair Value, NQ Tax Deduction amount, and number of NQ Tax Benefit Shares.

You have to specify report parameters: period (**From** and **To** dates), **Ending Fair Market Value** (if you leave it empty, system will try to fill it from the Prices database), and Combined Corporate **Tax Rate** (in percents, for Tax Benefit calculations).

Press the **Find** button is to generate the report. System will find option records with option dates as specified on the Expense Allocation report under the Granted From – To fields. System will ask you to specify if you want to process Complete grant and exercise history (default choice, most accurate), or you want to calculate outstanding shares number at the period's End date. Then, it will calculate number of shares outstanding for the found records. Records without outstanding shares during the period will be omitted. Next step is to weight absolute number of shares outstanding according to the number of days in the reporting period.

System uses Treasury Stock method to differentiate records into Dilutive and Anti-Dilutive. According to ASC 260, system sets Referring Fair Value to an ending fair market value (as of reporting period end date). Dilutive options are those with an option price less or equal to the referring fair value. If the price is greater than the referring fair value, such records are omitted from this report (those are anti-dilutive options).

**Note:** You can specify the way system differentiate records into Dilutive and Anti-Dilutive by choosing between two possible Referring Fair Value calculations:

- 1) ending fair market value (default per ASC 260, uses specified ending FMV).
- 2) average fair market value within reporting period (from Prices database);

#### For the ASC 260 compliance please use first method, end fair market value.

If you do not have fully updated Prices table with daily values then you can specify referring fair market value as a report input.

Weighted Total Price is calculated by multiplying Weighted Shares Outstanding with the Option Price.

Weighted Value is calculated by multiplying Weighted Shares Outstanding with the Referring Fair Value.

Realized Gain is calculated as a difference between Weighted Value and Weighted Total Price.

Weighted Grant Date Fair Value is calculated by multiplying Weighted Shares Outstanding with the calculated valuation on grant date (Black-Scholes or Binomial).

Applying the combined corporate tax rate on the Gain, lowered by the Weighted Grant Date Fair Value, system calculates NQ Tax Deduction.

Dividing NQ Tax Deduction with the Referring Fair Value calculates number of NQ Tax Benefit shares at the end.

Records are sorted by Option ID.

Press the **Plan**  $\blacksquare$  or **Type**  $\blacksquare$  button to sort records by option date, plan or type, respectively.

There is a trailing grand summary report part, showing totals for the option records listed. If the records are sorted by option plan or type, same summaries exist.

Report format is *Letter*, orientation is *Landscape*.

Report subtitle reflects report parameters you specified.

Press the Export button in order to export report results into file.

There is a set of radio buttons, with abbreviations beside, each corresponding and leading to the appropriate report in the weighted options outstanding set. Please use PD for Diluted Options, TBPD for NQ Tax Benefit/Diluted options, ADPD for Anti-Dilutive Report, and EPD for Unamortized Expenses/Diluted Options.

In order to show Dilution Summary report, please press the **Summary** button  $\Sigma$ .

# Press the **Preview** button it to see how the report will look printed on paper. You can browse through the report pages using the **book tool**. Press the **Continue** button to exit from the preview mode.

Press the **Print** button it to print this report. Print dialog will be shown, allowing you to select: printer, change its properties, mark if you want to print in the file, define print range (all pages or page subset), define page numbering starting page, select number of copies and collate settings.

NQ TA From 1/1/1999 Ending Fair M Combined Cor	X BENEFIT / 1 to 12/31/1999 (365 d arket Value \$15 porate Tax Rate 34%	PRIM lays)	IARY D	Value for Una	Acrae Company, Inc. ID: 12-126 Street Name Goes Here City, State, Zip						
Average fair m	riket value \$8.0455	<b>m</b>	<b>T</b> -1	Shares	<b>D</b>	Weighted	Weighted	Weightel	<b>C</b>	NQ Tax	NQ Tax
OPHON ID	opnon/cancer bare	Type	mce	<b>Outstanding</b>	Days	<u>ourstanoung</u>	Total Blice	vanie	Gam	Deficition	Revent 2vales
Plan 99A - 1	5/ 1/1999	NQ	\$5,0000	1,500	245	1,006.85	\$5,034.25	\$8,100.57	\$3,066.32	\$1,042.55	129.58
Plan 99A - 2	5/ 1/1999	NQ	\$5,0000	2,000	245	1,342.47	\$6,71235	\$10,800.78	\$4,088.43	\$1,390.07	172.78
Plan 99A - 3	5/ 1/1999	NQ	\$5,0000	790	245	530.27	\$2,65135	\$4,266.26	\$1,614.91	\$549.07	68.25
Plan 99A - 4	5/ 1/1999	NQ	\$5,0000	1,000	245	671.23	\$3,356.15	\$5,400.35	\$2,044.20	\$695.03	86.39
Plan 99B - 6	10/ 1/1999	NQ	\$6,2500	900	73	180.00	\$1,125.00	\$1,448.18	\$323.18	\$109.88	13.66
	12/12/1999										
Plan 99A - 11	6/ 1/1999	NQA	\$6.0000	500	214	293.15	\$1,758.90	\$2,358.53	\$599.63	\$203.87	2534
SUMMARY	r options listed			6,690	3	4,023.97	\$20,638.00	\$32,374.67	\$11,736.67	3,990.47	496.00

Figure 23 – NQ Tax Benefit from Diluted Options Outstanding
#### **Report: Anti-Dilution**

Report shows records that have been omitted from the Diluted Options Outstanding report. It belongs to a set of weighted options outstanding reports (Dilution Summary, Diluted Options Outstanding, NQ Tax Benefit/Diluted Options, Unamortized Expense/Diluted Options, Anti-Dilution Report). These reports belong to ASC 260 and are used quarterly and annually, for Form 10-K and Form 10-Q.

Fields shown are: **Option ID**, option **Date**, option **Type**, **Cancel Date**, option **Price**, absolute number of **Shares Outstanding**, **Days** outstanding in the period, number of **Weighted Shares Outstanding**, **Weighted Total Price**, and **Weighted Value**.

You have to specify report parameters: period (**From** and **To** dates), **Ending Fair Market Value** (if you leave it empty, system will try to fill it from the Prices database), and Combined Corporate **Tax Rate** (in percents, for Tax Benefit calculations).

**/obsolete**/ Optional parameters are: **Adjustment** amount for an unamortized expense, and number of common shares **Outstanding** at the period end (if you supply this number, system will use it to decide if Modified Treasury Stock method should be used instead of a Treasury Stock method).

Press the **Find** button is to generate the report. System will find option records with option dates as specified on the Expense Allocation report under the Granted From – To fields. System will ask you to specify if you want to process Complete grant and exercise history (default choice, most accurate), or you want to calculate outstanding shares number at the period's End date. Then, it will calculate number of shares outstanding for the found records. Records without outstanding shares during the period will be omitted. Next step is to weight absolute number of shares outstanding according to the number of days in the reporting period.

System uses Treasury Stock method to differentiate records into Dilutive and Anti-Dilutive. For the Diluted Options Outstanding, system sets Referring Fair Value to an average fair market value for the options outstanding within the reporting period. Anti-Dilutive options are those with option prices greater than the referring fair value.

**Note:** You can specify the way system differentiate records into Dilutive and Anti-Dilutive by choosing between two possible Referring Fair Value calculations:

- 1) ending fair market value (default per ASC 260, uses specified ending FMV).
- 2) average fair market value within reporting period (from Prices database);

#### For the ASC 260 compliance please use first method, end fair market value.

If you do not have fully updated Prices table with daily values then you can specify referring fair market value as a report input.

Weighted Total Price is calculated by multiplying Weighted Shares Outstanding with the Option Price.

Weighted Value is calculated by multiplying Weighted Shares Outstanding with the Referring Fair Value.

Records are sorted by Option ID.

Press the **Plan**  $\blacksquare$  or **Type**  $\blacksquare$  button to sort records by option date, plan or type, respectively.

There is a trailing grand summary report part, showing totals for the option records listed. If the records are sorted by option plan or type, same summaries exist.

Report format is *Letter*, orientation is *Landscape*.

Report subtitle reflects report parameters you specified.

Press the Export button in order to export report results into file.

There is a set of radio buttons, with abbreviations besides, each corresponding and leading to the appropriate report in the weighted options outstanding set. Please use PD for Diluted Options, TBPD for NQ Tax Benefit/Diluted options, ADPD for Anti-Dilutive Report, and EPD for Unamortized Expenses/Diluted Options.

In order to show Dilution Summary report, please press the **Summary** button  $\Sigma$ .

Press the **Preview** button is to see how the report will look printed on paper. You can browse through the report pages using the **book tool**. Press the **Continue** button to exit from the preview mode.

Press the **Print** button it to print this report. Print dialog will be shown, allowing you to select: printer, change its properties, mark if you want to print in the file, define print range (all pages or page subset), define page numbering starting page, select number of copies and collate settings.

Press the **Jump Back** button 💬 to close this report.

ANTI-DILUTION / PRIMARY DILUTED								Acme Company, Inc. ID: 12-126			
From 1/1/1999 to 12/31/1999 (365 days) Ending Fair Market Value \$15 Combined Corporate Tax Rate 34% Adjustment Value for Unamortized Expense \$1							00	Street Na City, Stat	ne Goes Here e, Zip		
Average fair market va Option ID	bie \$8.0455 Option Date	Туре	Cancel Date	Brice	Shares Outstanding	Days	Weighted Outstanding	Weighted Total Frice	Weighted Value		
Plan 99B - 8	12/17/1999	NQ	100-10-01-020	\$133500	900	15	36.99	\$493.82	\$297.60		
Plan 99A - 9	12/31/1999	NQ		\$15.4500	2,500	1	6.85	\$105.83	\$55.11		
Plan 99A - 10	12/31/1999	NQ		\$15.4500	5,000	1	13.70	\$211.67	\$110.22		
SUMMARY for options listed					8,400		57.54	\$81132	\$462.93		

Figure 24 – Anti-Dilution Report

# Report: Dilution Summary Report

Report presents summary information for the other weighted options outstanding reports (Diluted Options Outstanding, NQ Tax Benefit/Diluted Options, Unamortized Expense/Diluted Options, Anti-Dilution Report). These reports belong to ASC 260 and are used quarterly and annually, for Form 10-K and Form 10-Q.

Fields shown are: Weighted Shares Value, Weighted Shares Total Price, Weighted Grant Date Fair Value, Average Unamortized Expense, number of Weighted Shares outstanding, Buyback Shares, Equivalent Shares, NQ Tax Benefit Shares, Adjustment Shares, and Total Diluted Outstanding Shares.

You have to specify report parameters: period (**From** and **To** dates), **Ending Fair Market Value** (if you leave it empty, system will try to fill it from the Prices database), and Combined Corporate **Tax Rate** (in percents, for Tax Benefit calculations).

Press the **Find** button is to generate the report. System will find option records with option dates as specified on the Expense Allocation report under the Granted From – To fields. System will ask you to specify if you want to process Complete grant and exercise history (default choice, most accurate), or you want to calculate outstanding shares number at the period's End date. Then, it will calculate number of shares outstanding for the found records. Records without outstanding shares during the period will be omitted. Next step is to weight absolute number of shares outstanding according to the number of days in the reporting period.

System uses Treasury Stock method to differentiate records into Dilutive and Anti-Dilutive. For the Diluted Options Outstanding, system sets Referring Fair Value to an average fair market value for the options outstanding within the reporting period. Dilutive options are those with an option price less or equal to the referring fair value. If the price is greater than the referring fair value, such records are called Anti-Dilutive, excluded from the calculations, and their totals are shown at the report's end.

**Note:** You can specify the way system differentiate records into Dilutive and Anti-Dilutive by choosing between two possible Referring Fair Value calculations:

- 1) ending fair market value (default per ASC 260, uses specified ending FMV).
- 2) average fair market value within reporting period (from Prices database);

#### For the ASC 260 compliance please use first method, end fair market value.

If you do not have fully updated Prices table with daily values then you can specify referring fair market value as a report input.

Subtracting the Buyback Shares from the Weighted Shares outstanding, system calculates number of Equivalent Shares outstanding.

If you specify adjustment parameter, that amount is divided with appropriate referring fair value to calculate equivalent number of adjustment shares.

At the end, Total number of Diluted Outstanding Shares is a difference between appropriate Equivalent Shares, NQ Tax Benefit Shares, and Adjustment Shares.

Report format is *Letter*, orientation is *Landscape*.

Report subtitle reflects report parameters you specified.

There is a set of radio buttons, with abbreviations beside, each corresponding and leading to the appropriate report in the weighted options outstanding set. Please use PD for Diluted Options, TBPD for NQ Tax Benefit/Diluted options, ADPD for Anti-Dilutive Report, and EPD for Unamortized Expenses/Diluted Options.

In order to actually view this Summary Report, please press the **Preview** button D. You will also see how the report will look printed on paper. Press the **Continue** button to exit from the preview mode.

Press the **Print** button it to print this report. Print dialog will be shown, allowing you to select: printer, change its properties, mark if you want to print in the file, define print range (all pages or page subset), define page numbering starting page, select number of copies and collate settings.

Press the **Jump Back** button **to** close this report.

#### DILUTION SUMMARY

From 1/1/1999 to 12/31/1999 (365 days) Ending Fair Market Value \$15 Combined Corporate Tax Rate 34%

Adjustment Value for Unamortized Expense \$15000

Acme Company, Inc. ID: 12-126 Street Name Goes Here City, State, Zip

Diluted Options Outstanding Summary	Primary Diluted Options Outstanding Summary			
eater of average or ending fair market value \$15.0000	Average fair market value	\$8.0455		
Weighted Shares Value \$111,657.60	Weighted Shares Value	\$59,591.48		
Weighted Shares Total Price \$38,435.26	Weighted Shares Total Price	\$38,435.26		
Weighted Shares 7,443.84	Weighted Shares	7,406.85		
Buyback Shares - 2,562.36	Buyback Shares -	4,715.89		
Equivalent Shares = 4,881.48	Equivalent Shares =	2,690.96		
NQ Tax Benefit Shares - 901.73	NQ Tax Benefit Shares -	496.00		
Adjustment Shares - 1,000.00	Adjustment Shares	1,864.00		
otal Fully Diluted Outstanding Shares 2,979.75	Total Primary Diluted Outstanding Shares	330.96		

Anti-dibitive Weighted Shares 20.55 (excluded from the calculations) Anti-dilutive Weighted Shares 57.54 (excluded from the calculations)

Figure 25 – Dilution Summary Report

# Report: Compensation Actually Paid

Report is based on the SEC final rule Pay versus Performance 17 CFR Parts 229, 232, and 240 [Release Nos. 34-95607; File No. S7-07-15] Proxy report calculates total valuation at the end of previous and current fiscal year. Special forecast naming is required. User specifies previous and current fiscal year end dates. User can specify Include In Proxy? to filter employees by this criteria.

Let's say we have one grant of 1,000 shares with a date Jun 1, 2019 with price \$10 and fair market value same \$10, with three year vesting.

Valuation inputs are forecast named 19Jun1 and expected term 4 years.

That gives grant date valuation for example \$2

We want to run a report for the previous fiscal year end date 12/31/2021 and current fiscal year end date 12/31/2022

The system will process grants for employees that have marked Include in Proxy at their employee record (or all employees if you clear Include in Proxy at report input).

It will go grant by grant and show grant date total valuation \$2,000

It will then inspect the previous fiscal year 2021. Since the grant is neither vested nor canceled unvested in 2021 it will try to calculate valuation on 12/31/2021.

For that date you need to have price in the Prices table, forecast record with a name 19Jun1 12/31/2021 that will have volatility and interest rate inputs not for the original 4 years expected term but remaining term as of 12/31/2021 and that is 1.5 years (original 4 years minus time from Jun 1, 2019, which is 2.5 years)

If all is in place system will show total valuation at 12/31/2021

For 2022 there is a vesting event on Jun 1, 2022 and the system will look for a forecast named 19Jun1 6/1/2022 with inputs that reflects 1 year remaining expected term from the original 4 years.

If found it will show total valuation on 6/1/2022 and show that it is a vesting event.

Therefore, requirements are to have prices specified on fiscal year end dates and vest dates, and to have frecast record with naming pattern <original name> <fiscal end date\_or\_vest\_date>

Date specified has to be in the form of mm/dd/yyyy and specified as a second word in that forecast name.

For the RSP grants system is using outstanding share numbers as of yearend dates and fair market value at same dates.

System assumes the vested portion is exercised at vest date @vest date price, and that stays the same year over year, only outstanding shares are being updated as of fiscal year end dates

COMPENSA Previous FYE 12/2 Current FYE12/31	TION A 31/2002 /2003	ACTUALLY	( PAID				ez share bas			ftware
<b>Optionee</b> Young, Tom, D.		ID AA	001	Insider Type Not an insider		Include In Proxy?	×			
Option ID	Туре	Date	Price	Total Shares	Outstanding Shares	Grant Date Valuation	Prev FYE Valuation	Current FYE Valuation	Adjustment Date	Adjustment Reason
Plan 99A - 1	NQ	5/1/1999	\$5.0000	1,500	0	\$0.00	\$0.00	\$0.00	4/ 1/2002	Canceled
Plan 99A - 23	DSO	9/14/2002	\$21.0000	2,000	2,000	\$25,779.20	\$0.00	\$0.00		no value
			Total	3,500	2,000	\$25,779.20	\$0.00	\$0.00		
			Total	13,000	10,750	\$26,450.71	\$0.00	\$0.00		

Figure 26 - Compensation Actually Paid

# **Report: Options Data Check**

Report shows if there are errors in the Options database. You can start Data Check procedure from the System Maintenance layout or from the Reports list.

Fields shown are: Grant ID, Employee ID and Error Description.

There is a trailing grand summary report part, showing total number of records listed.

If there are no errors found, appropriate message is shown and all Error Description fields are empty.

If there are errors found, you will be prompted to choose if you want to print this report. After you review Error Description fields, please correct the errors in the database.

Report format is Letter, orientation is Portrait.

# **Purchase Valuations**

Purchase Valuations database holds purchase valuation records. Unlike Option valuation records, these records are not bound to purchase records. Purchase valuation records can be made per offering, or per purchase; further, each employee or group of employees can have its purchase valuation record.

Purchase Valuation uses the Black-Scholes Single Valuation model. It also utilizes the Forecasts database, only that a purchase valuation record uses only one forecast.

There is only one layout in this database, showing valuation records in a *Form View*, which means that there is one record per screen.

👩 FileMaker Pro -	Purchase Valu	ations.FP3]					- 🗆 🗙
🚺 <u>F</u> ile <u>E</u> dit <u>M</u> ode	<u>S</u> elect Forma	<u>t</u> S <u>o</u> ript <u>W</u> i	ndow <u>H</u> elp				<u>- 8 ×</u>
Back Forward	Home Er	mployee Pla	an Contrib. P	urchase Dispos	e Refunds F	Price Reports ACME	į 🔺
Purchase	Valuatio	ons 🗅		#1 of 1	4 + H	🗃 💐 ? ESPP	
Plan	1999		-	Adjus	ments		
Begin Date	5/1/1999	End Date	12/31/1999	Purch, Dates	Contributions		
Begin Value	\$5.0000	Discount	15.00%	10/31/1999	\$1,266.83		
Begin Price	\$4.2500	Valuation	\$1.3801				
Contribution	\$1,500.00	Total Val.	\$487.18				
Forecast	Q1		•				
Notes	sample 1						
	L						

Figure 27 – Purchase Valuations

#### **Entering and Modifying Valuation records**

- choose **Purchase Plan** from the drop down list. For each plan there are Plan Name and Plan Info, the latter shows offering length and discount %, so you can fill some of the remaining fields without looking into the plan record,

- enter the **Begin Date**, which is valuation period begin date (usually subscription date),

- enter the End Date, which is valuation period end date,

- modify **Begin Value**, if needed. By default this is the Fair Market Value at the beginning of the valuation period,

- enter the **Discount** percentage that applies on the share value,

- choose **Forecast** from the list. Note that the forecast selection between BS Single and BS Multiple does not apply for purchase -- it is always BS Single. For Forecast details click on the **Forecast** label,

- enter the estimated **Contribution** amount,
- fill in the **Notes**.

Based on the data you entered, program calculates valuation and total valuation, according to the contribution amount.

#### Valuation Adjustments

When the purchases occur, you will enter actual contributed amount for specific purchase date here. Adjustments are used for reporting purposes.

# System Tasks

### Import Records ADMIN

You will be prompted to enter import file name and type.

Then, you have to select and match fields from records you want to import with fields in the database.

After the import, you can run Import Status Report and find out if there were rejected imports. Report shows rejected records with reject reason. Use the content of this field to correct records you want to import. Then, run import procedure once again, but this time only for those previously rejected records. This means you first need to remove successfully imported records from your import database and then start import procedure for the second time. If you do not remove previously imported records, there is a chance to duplicate some records in your database. System does take a thorough check procedure while importing records, but it also depends of the content of your data whether this procedure will be completed successfully or not (error possibility is greater if you import incomplete records - without primary key field, for example).

# **Export Records**

You have to choose between Default and Custom export.

Default export order:

Purchase Valuation ID Purchase Plan Begin Date End Date Begin Value Begin Price Discount (percentage) Forecast Notes Contribution Amount (predicted) Valuation Total Valuation

Adjustments (up to 8) Actual Purchase Date Actual Contribution Amount

If you choose custom export order, you can add or remove database fields from the export order list.

Before system starts export procedure, you will be prompted to enter export file name and choose export file type.

# **Purchase Valuations Report**

Report shows list of purchase valuation records, which includes: **Purchase Plan**, **Begin** and **End** valuation dates, price **Discount** percentage, Begin share **Value** and **Price**, **Estimated Contributions** amount, **Volatility**, **Interest** rate, **Term** in years (all three parameters taken from forecast used) and calculated **Valuation** per Share and **Total Valuation**, based on estimated contributions amount.

You can specify additional report parameters, date period for the valuation begin date (**From** and **To** dates).

Press the **Find** button **b** to generate the report.

Press the **Find All** button D to clear report parameters and find all records.

There is a trailing grand summary report part, showing total valuation amount.

Report format is *Letter*, orientation is *Landscape*.

Report subtitle shows actual minimal and maximal valuation begin dates from the records in the current found set.

Press the **Preview** button it to see how the report will look printed on paper. You can browse through the report pages using the **book tool**. Press the **Continue** button to exit from the preview mode.

Press the **Print** button it to print this report. Print dialog will be shown, allowing you to select: printer, change its properties, mark if you want to print in the file, define print range (all pages or page subset), define page numbering starting page, select number of copies and collate settings.

Press the **Jump To Record List** button if you want to filter records. After you finish, please press the **Back** button to return to this report.

You can browse through the record list using the record navigation buttons: go to previous, next, first and last record in the current found set.

Press the **Jump Back** button to close this report.

<b>PURCHAS</b> Begin Date from 5	E VALUATIO	ONS					Acme Comp ID: 12-126 Street Name City, State,.	<b>any, In</b> c. Goes Here Zip		
Purchase Plan	Begin Date	End Date	Discount	Begin Value / Price	Estimated Contributions	Volatility	Interest	Dividend	Term	Valuation Per Share / Total Val.
1999	5/1/1999	12/31/1999	15.00%	\$5.0000 \$4.2500	\$1,500.00	0.3500	0.058	0.030	0.67	\$1.3210 \$466.31
¥2000	6/1/2000	9/1/2000	15.00%	\$17.5160 \$14.8886	\$100,000.00	0.3500	0.058	0.030	0.25	\$3.8590 \$25,920.90
								Total Va	luation	\$26,387.22

Figure 28 – Purchase Valuations List

# Purchase Valuation Adjustments Report

Report shows list of purchase valuation records, showing both estimated contributions and actual contributions and calculating the expense adjustments. Only the records with actual contributions entered will be shown.

Record fields shown are: **Purchase Plan**, **Begin** and **End** valuation dates, calculated **Valuation** per Share, **Estimated Contributions** amount, **Total Valuations** amount, **Purchase Date**, **Actual Contributions** amount on purchase date, calculated **Actual Valuations** on purchase date, based on actual contributions on purchase date and calculated **Expense Adjustment**. There are up to eight purchase dates and therefore up to eight actual contributions, valuations and expense adjustments, with summaries for these repeating fields in every valuation record.

You can specify additional report parameters, date period for the valuation begin date (**From** and **To** dates).

Press the **Find** button **t** to generate the report.

Press the **Find All** button D to clear report parameters and find all records.

There is a trailing grand summary report part, showing summaries for: estimated contributions, total valuations, actual contributions, valuations and expense adjustments.

Report format is *Letter*, orientation is *Landscape*.

Report subtitle shows actual minimal and maximal valuation begin dates from the records in the current found set.

Press the **Preview** button it to see how the report will look printed on paper. You can browse through the report pages using the **book tool**. Press the **Continue** button to exit from the preview mode.

Press the **Print** button it to print this report. Print dialog will be shown, allowing you to select: printer, change its properties, mark if you want to print in the file, define print range (all pages or page subset), define page numbering starting page, select number of copies and collate settings.

Press the **Jump To Record List** button if you want to filter records. After you finish, please press the **Back** button to return to this report.

You can browse through the record list using the record navigation buttons: go to previous, next, first and last record in the current found set.

Press the **Jump Back** button to close this report.

PURCHASE VALUATION ADJUSTMENTS	Acme Company, Inc. ID: 12-126
Begin Date 5/1/1999	Street Name Goes Here
	City, State, Zip

Purchase Plan / Begin, End Date	Begin Price	Valuation Per Share	Estimated Contributions	Total Purchase Valuations Date	Actual Contributions	Actual Valuations Ad	Expense justments
1999 5/1/1999, 12/31/1999	\$4.2500	\$1.3210	\$1,500.00	\$466.31 10/31/1999	\$1,266.83	\$393.66	-\$72.66
		8	\$1,500.00	\$466.31	\$1,266.83	\$393.66	-\$72.66
		Total	\$1,500.00	\$466.31	\$1,266.83	\$393.66	-\$72.66

**Figure 29 – Purchase Valuation Adjustments** 

# Purchase Valuations Data Check Report

Report shows if there are errors in the Purchase Valuations database. You can start Data Check procedure from the System Maintenance layout or from the Reports list.

Fields shown are: Purchase Valuation ID, Purchase Plan, valuation Begin and End Date and Error Description.

There is a trailing grand summary report part, showing total number of records listed.

If there are no errors found, appropriate message is shown and all Error Description fields are empty.

If there are errors found, you will be prompted to choose if you want to print this report. After you review Error Description fields, please correct the errors in the database.

Report format is *Letter*, orientation is *Portrait*.

This is the last page of Valuation Guide

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