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<td>35</td>
</tr>
</tbody>
</table>
Overview

This document provides a brief overview of the functionality of SmartInvestments, enabling new users to gain a basic understanding of the navigation, terminology, and logic of the module. For step by step navigation on how to perform a specific task, please consult the Online Help.

SmartInvestments is designed to provide investment advisors, agents, and broker dealers with a system to track clients’ investments and consolidated reports, and to provide a method for their clients to view the status of their investments with SmartView for Clients through the Internet. This is in addition to the ability to monitor and calculate asset allocations and performance measurements.

Investment advisors, agents, and broker dealers can track stocks, bonds, mutual funds, variable annuities, Cash, UITs, DPPs, bank accounts, real estate, personal property, notes receivable, and liabilities for an unlimited number of accounts. Each account can have an unlimited number of positions. Both accounts and positions can be viewed globally, individually, by household, by an advisor, or by a product. Furthermore, the security master stores all of the data pertinent for each security along with its price history.

Advisors can present consolidated client investment statements and reports through a variety of easy-to-understand formats. Investment reports can be filtered down to any combination of accounts, policies, or investments for one client or the entire household, and can be sorted by holding type or asset class.

User Management & Roles

SmartInvestments is a user-specific module in the suite of SmartOffice products. Users must set up access and rights from the User Setup menu option. Users can be set up with a Full role enabling the optimal ability to work – add, delete, and modify data. Also, as long as the user has the Full role, the utilities to link accounts to a contact and link positions to accounts will display from the side menu. The Read-Only role enables users to look up information. Without an access privilege, SmartInvestments is not available from the side menu. In addition, depending on the user’s role, the security types can be restricted through the setup on the User Preferences – Policy/Investment tab.

The following module licenses can be found from the main SmartInvestments under User Setup - User Management. The Investment Tracking option enables the rest of the selections to be operable. If any of the options are not selected, then the respective tab or side menu will not display from the Investment module.

1. Investment Tracking
2. Asset Allocation
3. Performance Calculations
4. Show Liability Screens
5. Show Link Accounts/Positions Side Menu
6. Show Investment Transactions
7. Show Investment Position History
For SmartView for Clients, refer to the *SmartView for Clients* section for details.

**Enterprise View**

The operation of the Enterprise view generally applies to SmartInvestments as it is in the Base System. The stream of data flows from the top downward. When the Enterprise view is activated, the higher office is allowed to see, add, modify, and validate data in the lower office as if the user is logged in to the lower office. Reports can also be run for all data that can be seen at the higher office.

For security reasons, investment securities entered at the lower office will not be visible at the higher office. Similarly, private records that are set at the lower office are not visible at the higher office. In addition, when the Enterprise view is turned on, the Account Merge and Albridge Web Services will not be available.

**Client Investment Level**

The Client Investment view contains two levels of tabs for all holding types except Variable Annuities, which has three. The Summary and Detail tabs at the account and position levels are basically identical. The difference is in the navigation and the display of the tabs. For example, to view all holdings belonging to a client, the navigation from the contact account master view displays all accounts belonging to the contact and then the positions within each account; the navigation from the position view displays all positions belonging to a contact.
Because of the different views, which permit much flexibility, the order of the display of tabs may be different. For instance, the account master view displays a summary of all accounts before the positions view. Hence, the Account Master Summary tab displays first, the Account Detail tab second, and then the Positions tab, etc. On the contrary, the navigation from the Positions View displays the Positions Summary tab first, the Position Detail second, and then the Account Detail, etc.

**Account Level**

**Account Master Summary**

The Account Master Summary displays all accounts for the selected contact in the office. If there is a large list of accounts (as is the case from the Global Account Master view), a user can refine the list by selecting only active accounts with a certain account type from the corresponding drop-down lists. To further streamline the selection, users can set up a filter; or before opening the Summary, the Account Master Search can be limited to display criteria using the applicable search fields.

**Account Detail**

All account information is recorded on the Account Detail. If the source of data is downloaded electronically, the Account Detail becomes a protected, read-only screen, leaving only the Interested Parties and Advisor Relationships areas modifiable. Downloaded Modifiable, on the other hand, has the same functionality as a Manually Entered data source.

The options on the Account Detail tab set the stage for the entire Investment area in terms of what fields to roll up, recalculate, or initialize. These options dictate whether the transactions or a liability will be summarized into the position total value, account master total value, contact total investments, and eventually, the household total investments. In addition, the field accessibility for manual data entry is also contingent upon the option selection.

**Account Options**

**Qualified Account:** This option is used to signify that the account is tax-deferred and supersedes the position level Tax Deferred option regardless of if the Tax-Deferred box is selected at the position level. Please note that selecting the qualified account on the Account Detail tab does not automatically select the position tax deferred box for the existing positions, but by default, all new positions will display with the checkmark on the Tax Deferred box at the position level.

Since the tax is deferred, the Cumulative Tax column on the Transaction tab will display a blank column, and the Tax Cost field on the Position Detail will be blank as well.
Roll Up Liabilities: This option is used to indicate the implications of the Loan Balance field on the Account Detail tab and is independent of the option on the Position Detail tab.

How validation rolls up liabilities at the account level:

1. If the Roll Up Liabilities option is not selected, then the Loan Balance field on the Account Detail tab is not protected and is accessible for manual data entry. Validation has no impact on the Loan Balance field on the Account Detail tab, even if there is a loan attached to the account on the Account Liability or Position Liability tabs.

2. If the Roll Up Liabilities option is selected, then the Loan Balance field on the Account Detail tab is protected and read-only. Validation will roll up the loan balance from the Position Detail Loan Balance field and any liability attached to the account on the Liability tab. It does not matter whether the Position Detail Loan Balance was manually entered or rolled up from the Position Liability tab. As long as there is a value on the Position Detail Loan Balance field, that value will be rolled up to the Loan Balance on the Account Detail tab.

3. The Liability tab at the account level displays the liabilities for the entire account, which include liabilities linked to the account and positions.

Roll Up Option: These options apply to all positions within the account. Thus, the selected option defaults to the Position Detail tab as a read-only field.

When validation is run from the account level, it will check the account options to determine what needs to be done. On the Account Detail tab, for every position, as long as the position value is available on the Position Detail tab, that value will be rolled up to the Account Detail Account Value field. Only the Do Not Roll Up option will not have anything rolled up to the Account Value. Thus, only when the option is set to Do Not Roll Up will the Account Value become accessible for manual data entry. Validation will recalculate or initialize the Net Value by taking the difference between the Account Value and the Loan Balance.
Please see the *Investment Validation* section of this document for detailed explanations of each of the roll up options and the implications that each has on the rolling up of the transaction data.

**Performance (Account Level)**

Investment Performance is the result of how an account or position has performed. The Performance tab at the account level contains the returns for the entire account along with the user-specified benchmarks, both standard and blended indices; whereas, the Performance tab at the position level contains the returns for the individual positions. Both spreadsheets show the monthly valuation and a summary of all of the transaction activities that occurred during each month. Advisors can see the returns with and without income.

Performance calculations are run at the account level. By clicking on the **Performance Calculations** button on the Account Summary or the Performance tab, performance will be calculated for the account and all of the positions linked to the account. Please note that performance is not calculated for Personal Holdings at this time. Prior to running performance, make sure that all of the prices and the transactions are updated. Check the Price History and Position History for accurate data. Performance is only as accurate as the data is.

**Performance Parameters**

- **Initial Performance Date:** This is a modifiable field. By default, the Initial Performance Date, which indicates the date when performance should be calculated for the account, is set to the Open Date in the Account Detail tab. However, the user may change it to any date. The date can be any day of the month including month-end. However, it is normally on a business day or a trading day, not a weekend or holiday. If the Open Date in the Account Detail is not specified, the default is Today’s Date.

- **Last Performance Date:** This field is protected and read-only. It tells the user what is the last month-end that performance was run. Whenever the Performance Calculation utility is run, this field is automatically updated with the date of the last performance record.

- **Last Updated Date:** This field is protected and read-only. This is the date that performance was last updated. This field is also in the Performance table so that each month record contains a Last Updated Date. It is important that the user knows when a record was last updated for rebalancing and audit purposes. Whenever the Performance Calculation Utility is run, this field is automatically updated with the system date.

- **Use Accrued Income in Calculations** option: GIPS compliance requirements for accrued income are as follows:
  a) Accrual accounting must be used for fixed-income securities and all other assets that accrue interest income.
  b) Accrual accounting must be used for dividends (as of ex-dividend date) for periods beginning 1/1/2005.
  c) In both the numerator and denominator, the market values of fixed income securities must include accrued income.

When the option to Use Accrued Income in Calculations is selected, it means that the amount of the income as of the Ex-Dividend Date is added into the Market Value. There is a date field called “Ex-Div. Date” in the Transaction dialog box for Dividend, Interest, Capital Gain, and Distribution transaction types. The Ex-Div Date must be filled out in order for the transaction to be processed and given the credit at the right time period. If it is not filled out, the transaction will be processed by the trade date when the income is received.
Indices Selection

Comparative Indices are market indicators that measure the ups and downs of the stock, bond, and commodities markets, reflecting the market prices and the number of shares outstanding for the companies in the index. Some of the most popular indices are S&P 500, Dow Jones, Consumer Price Index, Value Line, NY Composite, Lehman Brothers, and NASD. Indices are stored and tracked in the Security Master just like securities, and electronic downloads are activated in the same way. In the Security Master, in lieu of the Price History tab, is the Value/Return tab for a Comparative Index and Blended Index. The Investment Positions tab, which normally appears for other security types, is not visible for the Comparative Index and Blended Index.

Blended Indices can be created based on the standard comparative indices already set up in the Security Master. There is no limitation on how many indices can be combined together just as long as the Total equals 100%.

The columns available on the Indices Selection area are Index Name, Symbol, and CUSIP. Although the Add button from the Indices Selection calls the Security Master, only the Comparative Indices and Blended Indices display for selection. There is no limitation to the number of indices that can be selected in this section. Once an index has been selected, it is removed from the selection list. Every index selected from this section is displayed as a column in the Account Performance spreadsheet. The first five indices on the spreadsheet are the ones that are printed on the Performance Summary and the Performance Report.

Account Performance

This spreadsheet shows the return for the entire account. The user specifies the appropriate comparative indices. The default columns are Date, Value, Net Additions, Weighted Additions, Income Received, Weighted Income, Index with Income, Return with Income, and whatever the indices selections are. The spreadsheet is sorted in chronological order by Valuation Date. The Date hyperlink displays the Performance Detail, but the entire screen is protected and read-only.

Performance Calculation Options

This utility is similar to data validation in that it refreshes performance data based on all of the changes in the transaction, position history, and security master - price history tables.
Calculation Options

Each of the following options must have at least one account selected. One account, a group of accounts, or all accounts can be run at a time. Global Performance calculation is available from the side menu and it calculates performance for all accounts in the database. Performance is calculated for accounts with the account status of “Active” or “Open” only.

- **Month-end Performance Calculations**: Use this option at the end of each month to calculate performance after the position history, transactions are posted, and prices are updated. This option calculates performance for the previous month-end only.

- **Performance Calculations from Specific Date**: Use this option at any time during the month to recalculate an account, a group of accounts, or all accounts from a specific date through the current month-end.

- **Performance Calculations from Initial Date**: Use this option to calculate performance since inception of an account through the current month-end. Normally, this option is run for all accounts for the first time. After that, use the month-end option or the option to run from a specific date. The speed of this utility depends on the number of accounts and the number of years it has to calculate performance for each account. The more accounts and the number of years it has to go back, the longer the processing time.

Performance Calculations

The time-weighted rate of return is geometrically linked on a monthly basis using the Modified Dietz method. What this means is that we calculate a return for each month based on the transactions and position history and multiply (or chain link) them to derive at a return for a specified period. See below for the calculation formula and linking rates of return.

**Time-Weighted Rate of Return Calculation**

**Modified Dietz Method**

**Account Index Value w/Income**

Gain/Loss = Ending MV – Beg. MV – Net Additions + Income Received

Weighted Additions =

\[ \sum \left( \frac{(\text{Last day of period} - \text{trade date})}{\text{days in period}} \right) \times \text{Transaction Value} \]

Average Investment = Beg. MV + Weighted Additions + Weighted Income

Percent Gain = \( \frac{\text{Amount Gain/Loss}}{\text{Average Investment}} \times 100 \)

New Account Index = \( \text{*Previous Account Index} \times (1 + \text{Percent Return}) \)

*Note: The Previous Account Index (starting index) is 100.00 for new portfolios.
Account Index Value w/o Income

Gain/Loss = Ending MV – Beg. MV – Net Additions – Ending Accrued Inc. + Beg. Accrued Inc. – Income Received

Weighted Additions =
\[ \sum \left( \frac{\text{(Last day of period – trade date) / days in period}}{\text{Transaction Value}} \right) \]

Average Investment =
Beg. MV + Weighted Additions – Weighted Income – Beg. Accrued Inc.

Percent Gain = (Amount Gain/Loss / Average Investment) * 100

New Account Index = Previous Account Index * (1 + Percent Gain)

Linking Rates of Return

To get a return with a time span greater than one month, monthly returns must be geometrically linked or multiplied for the specified period. It is easier to explain with an example. Let us calculate a return for the quarter with the following monthly returns.

<table>
<thead>
<tr>
<th>Date</th>
<th>% Return</th>
<th>Account Index Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>12/31/XXXX</td>
<td>.00</td>
<td>100.00</td>
</tr>
<tr>
<td>1/31/XXXX</td>
<td>1.20</td>
<td>101.20</td>
</tr>
<tr>
<td>2/28/XXXX</td>
<td>2.00</td>
<td>103.22</td>
</tr>
<tr>
<td>3/31/XXXX</td>
<td>-1.48</td>
<td>101.69</td>
</tr>
</tbody>
</table>

If the account index values are given, most likely the monthly returns are already linked. The return is then very simple to calculate. Take the ending index value and divide it by the beginning index value, minus one, and then multiply by 100.

Quarter Return = \[ \left( \frac{\text{Ending Index Value}}{\text{Beg. Index Value}} \right) - 1 \] * 100

= \[ \left( \frac{101.69}{100.00} \right) - 1 \] *100

= 1.69

If the returns are given, follow the steps below:

1. Convert the % returns to a decimal form.

\[ \frac{1.20}{100} + 1 = 1.012 \]
\[ \frac{2.00}{100} + 1 = 1.020 \]
\[ \frac{-1.48}{100} + 1 = .985 \]

2. Multiply the returns together.

\[ 1.012 \times 1.020 \times .985 = 1.0169 \]
3. Subtract one and multiply by 100.

\[(1.169 - 1) \times 100 = 1.69\]

The return for the quarter is 1.69%. Repeat this procedure to link any specified periods.

**Comparative Index Calculations**

Given the index value, calculate the index return:

\[\text{Index Return Formula} = \left(\frac{\text{Current Index Value}}{\text{Previous Index Value}} - 1\right) \times 100\]

Example:

<table>
<thead>
<tr>
<th>Date</th>
<th>Index Value</th>
<th>Index % Return</th>
</tr>
</thead>
<tbody>
<tr>
<td>7/12/XXXX</td>
<td>8,684.53</td>
<td></td>
</tr>
<tr>
<td>7/15/XXXX</td>
<td>8,639.19</td>
<td>-.52</td>
</tr>
</tbody>
</table>

Index Return = \[\left(\frac{8,639.19}{8,684.53} - 1\right) \times 100\]
\[= \left(0.994779222 - 1\right) \times 100\]
\[= -0.005220778 \times 100\]
\[= -.52\]

Given the index return, calculate the index value:

**Note:** If the beginning index value is not given, then use 100.00 as the index base value.

\[\text{Index Value Formula} = \left(\frac{\text{Index Return}}{100} + 1\right) \times \text{Previous Index Value}\]

\[\text{Index Value} = \left(\frac{-0.52}{100} + 1\right) \times 100\]
\[= (-0.0052 + 1) \times 100\]
\[= 0.9948 \times 100\]
\[= 99.48\]

**Blended Index Calculations**

If an account is comprised of different types of investments, one individual index may not be a very good indicator of how the account has performed. Therefore, there is the capability to mix the different indices based on the percent that is comparative to the account.

Example: Calculate the index return with a blend of 60% S&P 500, 30% L/B GC, and 10% CPI

<table>
<thead>
<tr>
<th>Index Name</th>
<th>% Return</th>
</tr>
</thead>
<tbody>
<tr>
<td>Index #1</td>
<td>S&amp;P 500</td>
</tr>
<tr>
<td>Index #2</td>
<td>L/B GC</td>
</tr>
<tr>
<td>Index #3</td>
<td>CPI</td>
</tr>
</tbody>
</table>

Blended Index % Return = % of Index #1 + % of Index #2 + % of Index #3
\[= .60 (12.84) + .30 (3.59) + .10 (1.22)\]
\[= 7.70 + 1.08 + .122\]
\[= 8.90\]
Transaction Processing Examples

- To process a Buy, let us say that 100 shares of BioTech on 6/8/05 @ $20 price/share.

  The first record for this position would be 6/8/05, and the starting index is 100.00. Since there is no previous value to compare, there is no return for the first record. It would have the following summary:

  6/8/05
  Market Valuation $2,000.00
  Accrued Income 0.00
  Net Additions 2,000.00
  Weighted Additions 1,466.67 $[(30-6)/30) * 2,000]$
  Income Received 0.00
  Weighted Income 0.00
  Account Index Value w/inc. 100.0000
  Account Index Value w/o inc. 100.0000

- To process additional purchases, adding 50 more shares on 6/24/05 @ $22 price/share, assuming the month-end closing price for BioTech is $24.

  Any activities after the initial trade would be included in the month-end record 6/30/05. On 6/30/05, there is a total of 150 shares @ $24 ($3,600) and a net addition of $1,100 (50 shares @ $22).

  6/30/05
  Market Valuation $3,600.00
  Accrued Income 0.00
  Net Additions 1,100.00
  Weighted Additions 220.00 $[(30-24)/30) * 1,100]$
  Income Received 0.00
  Weighted Income 0.00
  Account Index Value w/inc. 122.5225 $[(3,600 - 2,000 - 1,100) / (2,000 + 220) * 100.00]$
  Account Index Value w/o inc. 122.5225

- To process a sell of 20 shares on 7/12/05 @ $25 with a month-end closing price of $24.20. On 7/31/05, there are 130 shares left @ $24.20 ($3,146.00), and a net withdrawal of $500 (20 shares @ $25).
Effect of Accrued Income Included in Calculation

- To process a dividend of .50 price/share with an Ex-Div-Date of 8/25/05 and payable date of 9/16/05, assuming August has a closing price of $25.

On 8/31/05, there are still 130 shares outstanding @ $25. We start to accrue $65 on Ex-Date 8/25/05 but since it is not paid until 9/16/05, there is still $65 in accrued income on 8/31/05. The accrued income is added into the market valuation, and the return should have an increase by the percent of the dividend.

9/30/05
Market Valuation $3,315.00
Accrued Income 0.00
Net Additions 0.00
Weighted Additions 50.00
Weighted Income 0.00
Income Received 0.00
Account Index Value w/inc. 130.9074
Account Index Value w/o inc. 128.3406

When the dividend is paid in September, the paid income is processed as follows, assuming there is no price fluctuation. Since the dividend was already accounted for in August, it should be just a posting memo when it is paid in September. The amount of paid income is transferred from the Accrued Income field to Income Received, and the transaction is weighted accordingly.
Calculation Without Accrued Income

- Using the same scenario above with the exception that there is no Ex-Div-Date (no accrued income), the dividend will be accounted for only when paid.

8/31/05

<table>
<thead>
<tr>
<th></th>
<th>Market Valuation</th>
<th>Accrued Income</th>
<th>Net Additions</th>
<th>Weighted Additions</th>
<th>Weighted Income</th>
<th>Income Received</th>
<th>Account Index Value w/Inc.</th>
<th>Account Index Value w/o Inc.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>$3,315.00</td>
<td>0.00</td>
<td>0.00</td>
<td>30.33</td>
<td>30.33</td>
<td>65.00</td>
<td>130.8437</td>
<td>128.3406</td>
</tr>
</tbody>
</table>

Account Index Value w/Inc. = 130.8437 \[\frac{(3,315 – 3,146)}{(3,146 + 30.33)} \times 124.2337\]

Account Index Value w/o Inc. = 128.3406 \[\frac{(3,315–3,146-65)}{(3,146 + 30.33 -30.33)} \times 124.2337\]

Calculation of Two Different Positions in the Same Security Type

<table>
<thead>
<tr>
<th></th>
<th>Stocks</th>
<th>BioTech Mfg.</th>
<th>IBM</th>
</tr>
</thead>
<tbody>
<tr>
<td>Market Valuation</td>
<td>200,000.00</td>
<td>50,000.00</td>
<td>150,000.00</td>
</tr>
<tr>
<td>Accrued Income</td>
<td>.00</td>
<td>.00</td>
<td>.00</td>
</tr>
<tr>
<td>Net Add.</td>
<td>200,000.00</td>
<td>50,000.00</td>
<td>150,000.00</td>
</tr>
<tr>
<td>Wghted Add.</td>
<td>100,000.00</td>
<td>25,000.00</td>
<td>75,000.00</td>
</tr>
<tr>
<td>Income Received</td>
<td>.00</td>
<td>.00</td>
<td>.00</td>
</tr>
<tr>
<td>Acct Index w/Inc.</td>
<td>112.789123</td>
<td>108.246800</td>
<td>116.741230</td>
</tr>
<tr>
<td>Acct Index w/o Inc.</td>
<td>112.789123</td>
<td>108.246800</td>
<td>116.741230</td>
</tr>
</tbody>
</table>

Notice that the sum of BioTech Mfg. and IBM equals the Stocks column for market valuation, accrued income, net addition, weighted addition, and income received. However, the account indexes with and without income are independently calculated by going through the time-weighted rate of return calculation.
Position Summary

The Position Summary displays all investments currently held in the selected client’s account, segregated, and subtotaled by the holding types. To display personal holdings, users must navigate from the Contact – Position view. Personal Holdings include Bank Accounts, Notes Receivable, Real Estate, and Personal Property.

A letter or a document can be attached to any position or liability. Information from this level can also be imported and exported. In addition, users can also run and print the transactions for the selected position without having to go into the Transaction tab.

Transactions (Account Level)

Every transaction activity that occurred for every position in this account displays on the Transaction tab. Tag a record on the Account Summary and then click the Transactions tab. All of the transaction records are displayed in chronological order; the cursor defaults to the latest transaction. Only printing can be performed from this Summary. Modifications must be performed from the Position Transaction view.

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Liability (Account Level)

A liability can be attached directly to an account. Tag an account from the Account Summary, click the Liability tab and then click the Add button to attach the liability. This view is not restricted and displays liabilities directly secured by the selected account and liabilities secured by a position within the account.

Position Level

Position Detail

The Position Detail tab stores important information pertaining to the position such as the position costs, shares, values, and more. For convenience purposes, there are hyperlinks to the contact, account, and security master areas. Transaction reports can also be generated from this view without entering the Transaction tab.

Performance (Position Level)

The Performance tab at the position level is functionally identical to the Account Performance with the exception of the returns shown only for the selected position. There is no benchmark comparison at the position level and performance reruns must be performed at the account level.

Position History

The Position History is used by clients to store accurate share balances of positions without all of the transactions. It is sorted by Date in chronological order just as in the Transaction tab. All records have a unique date; no duplicate or Null Date is allowed. One important difference between the Position History and the Transaction tab is that regardless of the number of transactions posted in a day, only one summarized record can be created in the Position History for any given day.
For manual entry using the Add button in the Position History tab, the minimum requirement to save a record is the entry of the Date field. Whenever there is a change in the Transaction tab, besides updating the Position Detail, the Position History will also be updated through Validation. When a new position is added from the Position Detail and only when the value in the Shares field is greater than zero, can a new record be created in the Position History after clicking the Save button. Whenever one of the following fields is changed in the Position Detail, an update will be made in the Position History, either a creation of a new record, or an overwrite of the existing record:

1. Shares
2. Shares Date
3. Price
4. Current Value
5. Tax Cost
6. Purchase Cost

Note: The Refresh Position History button applies to Downloaded Modifiable and Manually Entered records only. When activated, the system will bring the Position History in line with the data on the Transactions tab. The Roll Up options have no impact on the Position History.

The following rules apply for accessing the fields of the Position History dialog box based upon the Roll Up Option of the linked account.

<table>
<thead>
<tr>
<th>Roll Up Option</th>
<th>Date</th>
<th>Shares</th>
<th>Cost</th>
<th>Tax</th>
<th>Price</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Do Not Roll Up</td>
<td>Unprotected</td>
<td>Unprotected</td>
<td>Unprotected</td>
<td>Unprotected</td>
<td>Unprotected</td>
<td>Unprotected</td>
</tr>
<tr>
<td>Roll Up Everything</td>
<td>Unprotected</td>
<td>Unprotected</td>
<td>Unprotected</td>
<td>Unprotected</td>
<td>Read-only</td>
<td>Read-only</td>
</tr>
<tr>
<td>Roll Up Only Current Value</td>
<td>Unprotected</td>
<td>Unprotected</td>
<td>Unprotected</td>
<td>Unprotected</td>
<td>Read-only</td>
<td>Read-only</td>
</tr>
</tbody>
</table>

Transaction (Position Level)

At the position level, the Transaction tab displays only the transactions for the selected position. The transaction records are in chronological order and the cursor defaults on the last transaction that is highlighted. The options in the Account Detail determined which columns in the Transaction tab are calculated and which ones are intentionally left blank. To see all columns calculated, the Roll Up Everything option should be selected from the Account Detail.

Liability (Position Level)

A liability can be secured by a position. An example is Real Estate with a mortgage attached to it. The functionality here is identical to the account level.

Letter/Document

A letter or a document can be attached to any account or position for any contact; they can also be viewed from the contact area. A letter can be a mass correspondence or a new manually created letter for the specific position. A document can be a scanned document or a new manually created document for the specific position.
Activity/Mail

All activities and mail correspondences regarding an account or a position can be logged in the Activity/Mail tab. This can include anything from setting up an appointment with a client regarding the account for administrative work, to a mass mailing of a newsletter regarding an investment that the client is currently holding. There is no limit as to what can be logged.

Security Master Level

Security Summary

All investment securities are kept in the Security Master. The Security Summary displays all securities and security types in the database. Information pertinent to each security displays in the Detail tab and clients who owned a particular security are listed on the Positions tab. Every security price history can also be seen at this level. Due to the nature of the investment, Variable Annuities have a slightly different navigation.

From this view, every security for every security type can be displayed. To view a specific security type, select the appropriate security type from the Security Type drop-down list; or, before coming into the Security Summary, select the applicable security type from the Search Security Master dialog box.

Security Detail
The Security Detail stores important data about the security. The (Security) Information area is identical for every security type except the indices, while the Price Information and Other Information sections are specific to the individual security type. The Symbol/CUSIP field hyperlink to Quote.com offers the most convenient and simple method to look up information regarding the security, especially the latest price. Any price update from the Security Detail that is not already in the Price History will automatically be added to the Price History. Furthermore, the user has the option to update the changes to all of the positions at the client level that owned the selected security.

In order to use the Asset Allocation feature, the Sector and Asset Class fields must be assigned. Without them, the Asset Allocation spreadsheet will remain blank after a validation.

**Investment Positions**

Investment Positions shows all of the clients who own the selected security. This is one of the places to generate mass correspondence to everyone regarding the security or the client’s position. Although this is at the security master level, it is just as easy to navigate to the client level from here by clicking on the applicable Contact Name hyperlink. Display the Account Detail information by clicking on the applicable Account Name hyperlink. Position Transaction Reports can be generated from the Investment Positions tab.

Note that the Investment Positions tab which normally appears on the other security types is not visible for the Comparative Index and Blended Index.

**Price History**

Since only one price can be saved on any given day, prices in the Price History are assumed to be the prices at the end of the day closing prices. Prices can be downloaded electronically using the Internet Quote Service utility or they can be manually entered. Use the Add button to add a price. To modify a price, click the Price Date hyperlink. An unlimited number of prices can be added to the Price History.

Note that in lieu of the Price History is the Value/Return tab for Comparative Index and Blended Index security types.

**Variable Annuity Security Master**

**VA Detail**

The VA Detail tab contains the basic information regarding the Variable Annuity. All that is required to save the VA record is the VA Name and the Symbol. The Code field is optional for the securities that will be maintained manually. However, for electronically download data, in order for it to find a match, the security must have the Code field filled out.

Variable Annuities are tax-deferred securities; the user must mark the variable annuity as a tax deferred security at the initial setup. The effect of marking a security as tax deferred is that users will see at the client position level, in the Transaction tax, the Cumulative Tax column will not be calculated and in the Position Detail tab, the Tax Cost field will be blank.
VA Holders

Click a Variable Annuity hyperlink in the Security Summary to display the List of Holders. This tab displays all clients who owned the selected variable annuity regardless of the subaccount. There are several hyperlinks on this tab that conveniently provide information regarding the product, the contact and the contact’s account.

Subaccount Summary

Click a Variable Annuity hyperlink in the Security Summary to display the Subaccounts Summary tab. This tab displays all of the subaccounts for the selected variable annuity. Each subaccount must be unique in the CUSIP number, but there can be an unlimited number of subaccounts added to a variable annuity.

Subaccount Detail, Positions (List of Positions), Price History

After the Subaccount Summary, there is no difference between these tabs versus other security type tabs in navigations or views as described in the previous Security sections. A slight difference in the List of Positions is that it displays all of the clients who owned a particular Subaccount.
Security Master Utilities

Internet Quote Service

There are some very useful utilities in the Security Master. The Internet Quote Service is one of them. Currently, prices and comparative indices can be electronically downloaded from Yahoo.com and FT Interactive Data. Yahoo.com quote service is a free pricing provider of mutual funds, stocks, corporate bonds, and some major standard indices. The latest, daily, weekend, and month-end prices can be downloaded. Updating prices and indices from Yahoo.com is based on Security Symbols. Incorrect symbols will result in incorrect prices or no prices. Note that the following security types do not have real symbols: Cash & Equivalents, DPP, Variable Annuities, Fixed Annuities, and Bonds when the Bond Type does not equal Corporate. Therefore, these security types will not be processed. The same applies to securities with Fixed Price selected.

Prior to using FT Interactive Data, a subscription is required. This is because FT Interactive Data is a pay-per-use service that provides download pricing data on global equities, options, corporate bonds, and government securities; U.S. and Canadian agency securities; global commodity/futures contracts; U.S. municipal bonds; U.S. pass-through securities (GNMA, FNMA, FHLMC), collateralized mortgage obligations (CMOs), and asset-backed securities. Download the latest, daily, weekend, and month-end prices. Securities with the Fixed-Price option selected will not be processed.

FT Interactive Data has a variety of identifiers, but SmartOffice uses the CUSIP numbers to match on for downloads. If the selected security CUSIP number in the Detail tab of the security master is blank, this utility will skip it and nothing will download.

Note that prices for the following security types in SmartOffice are not available through FT Interactive Data and therefore, will be ignored during the download process: Direct Participation Programs, Variable Annuities, Cash, and Fixed Annuities.

Change Security Type

Occasionally, users mistakenly set up investment(s) under the incorrect security type (e.g., when a mutual fund is set up as a stock or a bond as a unit investment trust). This utility enables a user to change from one security type to another for all security types except Variable Annuities, Comparative Index, and Blended Index. This is a global update; therefore, all account masters, positions, transactions, and the security master linked to this investment will be affected by the change.

Please note that data on the Security Detail tab will be added or deleted depending on the availability of the field(s). Some areas may have the exact match, while others may be lost. For instance, if a user changes a bond security type to a stock, fields such as Coupon, Yield, Maturity Value, Maturity Date, Yield to Maturity, etc. are not available on the stock tab. Therefore, data from these fields will not be converted to the Stock tab. These fields will be completely deleted or initialized in the database.

Relink Subaccounts

This utility works only for variable annuities. Sometimes a user builds a subaccount under the wrong Variable Annuity or a VA company reclassifies its variable annuity products. Thus, this utility is needed. This utility enables a user to move a Subaccount from one VA to another VA. All of the account masters, positions along with their transactions, and liabilities linked to this subaccount must be re-linked and validated.
Investment Statistics

For any selected security, the Investment Statistics is an easy way to find out the total number of accounts, the total values, the total shares, and the total costs, etc. invested in the particular security. This functionality provides the information needed by management to make strategic decisions.

Corporate Actions

Merger/Acquisition

A merger is an acquisition or a consolidation of two or more companies in which only one of the companies survived as a legal entity. When such an event takes place, there is a need to consolidate the security in the Security Master. This is a global update; therefore, all account masters, positions, transactions, and the security master linked to this investment will be affected by the merger.

From the Security Master, this utility is found under More Features, and it pertains to Mutual Funds and Stocks only. If a user selects a security type other than a Mutual Fund or a Stock, a warning prompt displays. If the applicable security type is tagged and the user selects the Merger option, then the user is alerted that this operation will affect data throughout the entire database. If the user clicks “No,” it will take the user back to the Security Summary. If the user clicks “Yes,” the following dialog box displays for the user to select the security to perform a merge.

Definitions of the User Interface Fields

- **Merge From:** This is the security that the user tagged on the Security Summary. The Symbol, CUSIP, and Name of the security are displayed as a confirmation. All three fields are read-only.
- **Merge To:** This is the security that the user selects to be merged. The Symbol/CUSIP field is a hyperlink that triggers a Security Search for the selected security type.
- **Merge Date:** A user-defined date field that defaults to today’s date. This is the date that all of the shares from one security are transferred to another security.
• **Factor:** A user-defined numeric field with six decimal places. The default is blank. The user has to enter the factor by which the current quantity will be used to combine shares into a security. For example, a two for one merger is where two new shares of stock are issued for every one share of stock currently being held. The factor is entered as 2:1 (2). For a three for two merger, enter 3:2. For a one for three merger, enter 1:3.

**Example of a merge on 5/21/04 with a factor of 2:1.** What must occur:

1. A Sell transaction is created for the “Merge From” security using the Merge Date as the Trade Date. This is equivalent to a liquidation. All shares must be sold off. The last Cumulative Tax value is used as the Transaction Amount and the Cumulative Share as the number of shares to sell. Using these two pieces of information, the Price Per Share is calculated. See example #1 below. **Note:** Since the Sell transaction liquidates the Merge From security, a Liquidated Date is automatically set so that this position will display as a Closed position.

2. A Buy transaction is automatically created for the “Merge To” security using the Merge Date as the Trade Date. The Transaction Amount, Number of Shares, and Price to populate depends on the factor entered. See example #2 below. The Fund Source field is populated with the Symbol of the Merge From security. For example, the message would say “Merge from AAGFX.” **Note:** Validation must be performed to recalculate the position value, account value, and contact benefits value.

**Transactions of a “Merge From” Security - Sell**

<table>
<thead>
<tr>
<th>Date</th>
<th>Type</th>
<th>Shares</th>
<th>CumlShare</th>
<th>Price</th>
<th>Value</th>
<th>CumlCost</th>
<th>CumlTax</th>
</tr>
</thead>
<tbody>
<tr>
<td>2/10/2001</td>
<td>Buy</td>
<td>1,250.000000</td>
<td>1,250.000000</td>
<td>8.00</td>
<td>10,000.00</td>
<td>10,000.00</td>
<td>10,000.00</td>
</tr>
<tr>
<td>6/20/2002</td>
<td>Dividend</td>
<td>55.555600</td>
<td>1,305.555600</td>
<td>9.00</td>
<td>500.00</td>
<td>10,000.00</td>
<td>10,500.00</td>
</tr>
<tr>
<td>8/13/2003</td>
<td>Buy</td>
<td>1,000.000000</td>
<td>2,305.555600</td>
<td>10.00</td>
<td>10,000.00</td>
<td>20,000.00</td>
<td>20,500.00</td>
</tr>
<tr>
<td>5/21/2004</td>
<td>Sell</td>
<td>#1 2,305.555600</td>
<td>8.89</td>
<td>20,500.00</td>
<td>-500.00</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Transaction of a “Merge To” Security – Buy**

<table>
<thead>
<tr>
<th>Date</th>
<th>Type</th>
<th>Shares</th>
<th>CumlShare</th>
<th>Price</th>
<th>Value</th>
<th>CumlCost</th>
<th>CumlTax</th>
</tr>
</thead>
<tbody>
<tr>
<td>5/21/2004</td>
<td>Buy</td>
<td>4,611.111200</td>
<td>4,611.111200</td>
<td>4.45</td>
<td>20,500.00</td>
<td>20,500.00</td>
<td>20,500.00</td>
</tr>
</tbody>
</table>

**Stock Split**

Whenever a stock’s price grows too high, it is harder for a corporation to attract investors as some people may not be able to afford such a high price stock. To make it more affordable to a broader range of investors, a corporation may choose to “split” the stock. What that mean is that a corporation will lower the price and increase the shares volume without affecting the overall dollar value of the shareholder’s investment. This is a global update on our system. Therefore, all account masters, positions, transactions, and the security master linked to this investment will be affected.
From the Security Master, this utility is found under More Features, and it pertains to Mutual Funds and Stocks only. If a user selects a security type other than a Mutual Fund or a Stock, a message prompt appears. If the applicable security type is tagged and the user selects the Stock Split option, the user is alerted about the affect of this operation to the data throughout the entire database. If the user understands the procedure and clicks “Yes” to continue the process, the following dialog box is displayed for the user to select the security to perform a Split.

Example of a Split on 12/31/2000 with a Factor of 2:1. What must occur:

1. In the Security Master – Price History, all of the Prices on and before the Split Date are divided by the Factor.
2. At the Position level, all of the positions linked to this security and on the Transaction table are affected in the following ways:
   a. The Shares column is multiplied by the Factor starting on the transaction record having the date on and before the Split Date. Note that because of the change in the Shares column, the Cumulative Shares column also was updated to reflect the change.
   b. The Price column is divided by the Factor starting on the transaction record having the date on and before the Split Date. Note that the Dollar Value and the rest of the Cost columns remained unchanged.
Price History Before a Split:

<table>
<thead>
<tr>
<th>Symbol</th>
<th>Date</th>
<th>Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>AMGN</td>
<td>06/23/2001</td>
<td>60.600000</td>
</tr>
<tr>
<td>AMGN</td>
<td>05/31/2001</td>
<td>66.350000</td>
</tr>
<tr>
<td>AMGN</td>
<td>04/30/2001</td>
<td>61.140000</td>
</tr>
<tr>
<td>AMGN</td>
<td>03/30/2001</td>
<td>60.187500</td>
</tr>
<tr>
<td>AMGN</td>
<td>02/28/2001</td>
<td>72.062500</td>
</tr>
<tr>
<td>AMGN</td>
<td>01/31/2001</td>
<td>70.312500</td>
</tr>
<tr>
<td>AMGN</td>
<td>12/28/2000</td>
<td>63.337500</td>
</tr>
<tr>
<td>AMGN</td>
<td>12/20/2000</td>
<td>80.262500</td>
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<td>AMGN</td>
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<td>63.125000</td>
</tr>
<tr>
<td>AMGN</td>
<td>10/31/2000</td>
<td>57.531250</td>
</tr>
<tr>
<td>AMGN</td>
<td>09/30/2000</td>
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</tr>
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<td>08/31/2000</td>
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</tr>
<tr>
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<tr>
<td>AMGN</td>
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<td>08/31/1999</td>
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<td>07/30/1999</td>
<td>38.437500</td>
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<td>30.437500</td>
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</table>

Price History After a Split:

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<tr>
<th>Symbol</th>
<th>Date</th>
<th>Price</th>
</tr>
</thead>
<tbody>
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<td>AMGN</td>
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<tr>
<td>AMGN</td>
<td>04/30/2001</td>
<td>61.140000</td>
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<td>AMGN</td>
<td>03/30/2001</td>
<td>60.187500</td>
</tr>
<tr>
<td>AMGN</td>
<td>02/28/2001</td>
<td>72.062500</td>
</tr>
<tr>
<td>AMGN</td>
<td>01/31/2001</td>
<td>70.312500</td>
</tr>
<tr>
<td>AMGN</td>
<td>12/29/2000</td>
<td>31.968750</td>
</tr>
<tr>
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<td>40.132812</td>
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<tr>
<td>AMGN</td>
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<td>28.000000</td>
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<tr>
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<td>30.687500</td>
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<td>46.728125</td>
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</table>

Transactions before a Split:

<table>
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<tr>
<th>Date</th>
<th>Type</th>
<th>Shares</th>
<th>CumulShare</th>
<th>Price</th>
<th>Dollar Value</th>
<th>CumulCost</th>
<th>CumulTax</th>
</tr>
</thead>
<tbody>
<tr>
<td>01/01/1991</td>
<td>Buy</td>
<td>2,500.00</td>
<td>2,500.00</td>
<td>25.00</td>
<td>62,500.00</td>
<td>62,500</td>
<td>62,500</td>
</tr>
<tr>
<td>11/23/1991</td>
<td>Divid.</td>
<td>26.2857</td>
<td>2,526.28</td>
<td>58.00</td>
<td>1,520.00</td>
<td>62,500</td>
<td>62,500</td>
</tr>
<tr>
<td>02/13/1994</td>
<td>Buy</td>
<td>2,216.62</td>
<td>4,742.73</td>
<td>45.13</td>
<td>100,000.00</td>
<td>162,500</td>
<td>164,020</td>
</tr>
<tr>
<td>05/24/1995</td>
<td>Sell</td>
<td>694.44</td>
<td>4,047.29</td>
<td>72.00</td>
<td>50,000.00</td>
<td>112,500</td>
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</tr>
<tr>
<td>08/16/1997</td>
<td>Buy</td>
<td>491.62</td>
<td>4,539.46</td>
<td>50.65</td>
<td>25,000.00</td>
<td>137,500</td>
<td>171,659</td>
</tr>
<tr>
<td>09/08/2001</td>
<td>Buy</td>
<td>307.69</td>
<td>4,847.14</td>
<td>65.00</td>
<td>20,000.00</td>
<td>157,500</td>
<td>191,659</td>
</tr>
</tbody>
</table>

Transactions after a Split:

<table>
<thead>
<tr>
<th>Date</th>
<th>Type</th>
<th>Shares</th>
<th>CumulShare</th>
<th>Price</th>
<th>Dollar Value</th>
<th>CumulCost</th>
<th>CumulTax</th>
</tr>
</thead>
<tbody>
<tr>
<td>01/01/1991</td>
<td>Buy</td>
<td>5,000.00</td>
<td>5,000.00</td>
<td>12.50</td>
<td>62,500.00</td>
<td>62,500</td>
<td>62,500</td>
</tr>
<tr>
<td>11/23/1991</td>
<td>Divid.</td>
<td>52.4119</td>
<td>5,052.41</td>
<td>29.00</td>
<td>1,520.00</td>
<td>62,500</td>
<td>62,500</td>
</tr>
<tr>
<td>02/13/1994</td>
<td>Buy</td>
<td>4,432.13</td>
<td>9,484.54</td>
<td>22.56</td>
<td>100,000.00</td>
<td>162,500</td>
<td>154,020</td>
</tr>
<tr>
<td>05/24/1995</td>
<td>Sell</td>
<td>1,389.89</td>
<td>8,095.65</td>
<td>36.00</td>
<td>50,000.00</td>
<td>112,500</td>
<td>146,859</td>
</tr>
<tr>
<td>08/16/1997</td>
<td>Buy</td>
<td>983.2454</td>
<td>9,078.39</td>
<td>25.43</td>
<td>25,000.00</td>
<td>137,500</td>
<td>171,659</td>
</tr>
<tr>
<td>09/08/2001</td>
<td>Buy</td>
<td>307.6923</td>
<td>9,386.59</td>
<td>55.00</td>
<td>20,000.00</td>
<td>157,500</td>
<td>191,659</td>
</tr>
</tbody>
</table>
**Spin-Off**

A Spin-off is a form of corporate distribution whereby the shareholders received additional shares of another corporation’s stocks. This is a global update; therefore, all account masters, positions, transactions, and the security master linked to the selected investment will be affected by the Spin-off.

From the Security Master, this utility is found under More Features, and it pertains to Mutual Funds and Stocks only. If a user selects a security type other than a Mutual Fund or a Stock, a message prompt displays. If the applicable security type is tagged and the user selects the Spin-off option, the user is alerted that this operation will affect data throughout the entire database.

If the user understands the procedure and clicks “Yes” to continue the process, the following dialog box is displayed for the user to select the security to perform a Spin-Off.

![Spin-off dialog box]

**What must occur:**

A Buy transaction is automatically created with a checkmark by the Transfer button for all of the clients holding the “Spin-off From” security using the Spin-off Date as the Trade Date. **Note:** If a client does not already own the “Spin-off To” security, a new position will be created for the client.

1. The Shares of the “Spin-off From” multiplied it by the Factor, and this becomes the Shares of the “Spin-off To” security.
2. The Price Per Share becomes the Purchase Price of the “Spin-off To” security so the Shares is used to multiply the Price Per Share to get the Dollar Value of the Buy transaction.
3. The Fund Source field is populated with the Spin-off information, including where the security was spun-off from (e.g., Spin-off from AAGFX on 11/30/2004 @ $18.25 per share, factor = 2:1).
4. Validation must be performed to recalculate the position value, account value, and contact benefits value.
**Investment Validation**

In order to keep data in SmartOffice accurate and up-to-date, it is important to run validation. Validation recalculates the calculated columns of investments related to cost, basis and values; validation adds up transactions and liabilities of investments, updates prices for investment positions, and refreshes the Contact Benefits tab for the Contact and Household.

Investment Validation can be accessed from different areas for different application functions and for flexibility and convenience. However, the Roll Up Options and Roll Up Liabilities accessed from the account master level have significant affects on the validation. Please see the *Account Detail* section for a detailed explanation of the Roll Up Liabilities function.

An important note to remember is that Investment Validation operates from a top down methodology. In other words, if the Validation function begins from the account level, it will begin from the account and move down the ladder to the position and transaction for updates. If it is started from the position level, Validation will update only the position and transactions. Nothing will be updated for the account.

**Roll Up Options**

The roll up options are an account level setting that provides the user with flexibility in enabling data validation for specific fields and changes accessibility to the position fields accordingly. They tell the system what it should do with the transactions, whether to roll them up from the Transactions level to the Position, and from the Position to the Account level. These options have no impact on the validation at the Contact and Household levels. At the Contact and Household levels, as long as there is a value (Current Value on the Position Detail), that position value will be added to the Contact’s and Household’s Investment Total of the Benefits tab.

<table>
<thead>
<tr>
<th>Options</th>
<th>Roll up everything</th>
<th>Do not roll up</th>
</tr>
</thead>
<tbody>
<tr>
<td>Qualified Account</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Roll Up Liabilities</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Roll Up Option</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**How the Options are Used**

**Do Not Roll Up**

For accounts where the transactions are unreliable and the user does not want the transactions to roll up to the position and account levels, or if some of the positions within the account contained questionable share balance or value, and the user does not want the position to roll up to the account level, then the recommended setting is Do Not Roll Up. Another reason may be that the user’s preference is to manually maintain the account and does not want any value at the account or the position level to be overwritten.
This option disables data validation for the account. Running data validation (with the data validation button) on the account or any of the positions in the account will not result in any of the fields being recalculated. As they will not be recalculated through data validation, the following fields will become open fields that can be manually modified when the Roll Up Option for an account is set to Do Not Roll Up.

1. Account Detail Account Value
2. Position Detail Purchase Date
3. Position Detail Initial Cost
4. Position Detail Tax Cost
5. Position Detail Purchase Cost
6. Position Detail Shares
7. Position Detail Share Date
8. Position Detail Price
9. Position Detail Price Date
10. Position Detail Current Value

**Roll Up Everything**

For accounts where the transactions are reliable and the user would like to roll them up from the transaction to the position and from the position to the account, then the recommended option is Roll Up Everything. By default, the setting for DST data download is Roll Up Everything. However, if after the download and for some reasons, the data does not appear correct, the user has the option to temporarily change the roll up option from Roll Up Everything to Do Not Roll Up, do the necessary data clean up, and then switch back to Roll Up Everything.

This option enables data validation to recalculate the following fields:

1. Position Detail Purchase Date
2. Position Detail Initial Cost
3. Position Detail Tax Cost
4. Position Detail Purchase Cost
5. Position Detail Shares
6. Position Detail Shares Date
7. Position Detail Price
8. Position Detail Price Date
9. Position Detail Current Value
10. Position Detail Net Value

**Note:** Because these fields are being calculated, they will also become read-only.

**Roll Up Only Current Values**

For accounts where there is no transaction as in the case with Albridge Web Services download, or if the transactions are unreliable in terms of providing an accurate position balance or value, the recommended setting is Roll Up Only Current Value.
This option sets data validation to recalculate the position value and account value data based on the data from the position shares and position price data. The following fields will become open fields that can be manually modified as they will not be recalculated through data validation when the Roll Up Option for an account is set to **Current Values Only**:

1. Position Detail Purchase Date
2. Position Detail Initial Cost
3. Position Detail Tax Cost
4. Position Detail Purchase Cost
5. Position Detail Shares
6. Position Detail Share Date

**Roll Up Liabilities at the Account Level:** This option is used to indicate the implications of the Loan Balance field on the Account Detail tab and is independent of the option on the Position Detail tab. How validation rolls up liabilities at the account level:

1. If the Roll Up Liabilities option is not selected, then the Loan Balance field on the Account Detail tab is not protected and is accessible for manual data entry. Validation has no impact on the Loan Balance field on the Account Detail tab, even if there is a loan attached to the account on the Account Liability or Position Liability tabs.
2. If the Roll Up Liabilities option is selected, then the Loan Balance field on the Account Detail tab is protected and read-only. Validation will roll up the loan balance from the Position Detail Loan Balance field and any liability attached to the account on the Liability tab. It does not matter whether the Position Detail Loan Balance was manually entered or rolled up from the Position Liability tab. As long as there is a value on the Position Detail Loan Balance field, that value will be rolled up to the Loan Balance on the Account Detail tab.
3. The Liability tab at the account level displays the liabilities for the entire account, which include liabilities linked to the account and positions.

**Roll Up Liabilities at the Position Level:** Roll Up Liabilities is used to indicate the implications of the Loan Balance field on the Position Detail tab. This option is independent of the one on the Account Detail tab. Thus, if this option is selected on the Account Detail tab, the user can clear the selection on the Position Detail tab. How validation rolls up liabilities at the position level:

1. If the Roll Up Liabilities box is not selected, then the Loan Balance field on the Position Detail tab is not protected and is accessible for manual data entry. Validation has no impact on the Loan Balance field on the Position Detail tab, even if there is a loan entered on the Liability tab.
2. If the Roll Up Liabilities box is selected, then the Loan Balance field on the Position Detail tab is protected and read-only. Validation will roll up the loan balance from the position level Liability tab into the Position Detail Loan Balance field.
3. The Liability tab at the position level displays only the liabilities linked to a specific position. If the Tax Deferred box is checked, the Cumulative Tax column in the Transaction tab will be initialized; therefore, the Tax Cost field on the Position Detail tab will be blank.

In any case, the Current Value and the Net Value are always calculated fields. Current Value is calculated by taking Share x Price x Price Factor, and Net Value takes the difference between the Current Value and Loan Balance.
Personal Holdings Validation

Personal Holdings are special types of investments such as Bank Accounts, Notes Receivable, Personal Property and Real Estate. They do not have a security master. Their Account Detail and Position Detail tabs are combined together and they do not display a Transaction tab because they do not have transactions.

There is a Roll Up Liabilities option on the Position Detail tab. If it is checked and there is a liability entered in the Liability tab attached to the position, then this liability is rolled up to the Loan Balance field. If the Roll Up Liabilities option is not checked, then the Loan Balance field becomes accessible for manual data entry.

Note: Bank Accounts have a Qualified/Tax Deferred option, but it is for informational purposes only.

Contact Validation

Three ways to validate contact records:
1. Contact Detail (for a specific contact)
2. Contact Summary (for selected contact records)
3. Side Menu – Data Validation (for entire office)

Investment validation will call Account Master and Liabilities Validation to validate all account masters for a contact. Each Account Master validation will in turn call Position and Liabilities validation for every position in that Account Master.

Contact Benefit Tab

Investment validation will recalculate the Cost and Current Value columns on the Contact Benefit tab for each investment holding type (e.g., mutual funds, stocks, and bonds, regardless of the roll up options on the account master level). The cost and current value of each holding type is then summed up as Total Assets.

Other debts include any debt other than Real Estate, and it can be debt from the contact, account or position level. The business rules are as follows:
1. From the contact level, all unsecured liabilities are rolled up to the Contact Benefit – Other Debt area.
2. From the account level, roll up the Loan Balance from the Account Detail tab. It does not matter whether the Account Detail Loan Balance was manually entered or rolled up from the Account Liability tab. As long as there is a value in the Account Detail Loan Balance field, that value will be rolled up to the Contact Benefit - Other Debt area.
3. From the position level, roll up the Loan Balance from the Position Detail tab of all personal holdings (Bank Accounts, Notes Receivable and Personal Property).
In the lower left corner of the tab is a Validated As Of date. It displays when the data was last validated or updated. This information becomes useful when a user is unsure of whether the data has been refreshed or whether the account needs to be validated.

If there are multiple contacts associated with an Account Master record, SmartOffice will only post the investment information on the Contact Benefit tab of the Primary Contact.

**Household Validation**

Household validation can be opened from the Household Detail or Household Summary tab. From the Household Detail tab, click **Validate Current Household** to begin the validation. From the Household Summary tab, tag one or more household records and then select **Validate Tagged Households** from the More Features drop-down list.

Household Validation is the same as contact validation except that the total is for the entire household. When Household validation is run, SmartOffice will run validation for each member of the household and summarize the total for investments.

Note that above the Remarks area is a Validated As Of date. This displays when this data was last validated or updated.
Morningstar Export Utility

The Morningstar Export Utility is an interface that enables the export of data from the SmartOffice database to an XML file read by Morningstar’s Advisor Workstation and Principia Pro software. Both being popular in our investment-oriented market places, the Web-based Morningstar Advisor Workstation is equivalent to the Windows-based Morningstar Principia Pro.

Business Logic

Important aspects of the Morningstar structure that differ from the SmartOffice structure:

- The database structure has a Client record that is linked to several Portfolio records that are linked to several Holding records that are also linked to several Transaction records.
- The Transaction records are not actual transactions but position statement values as of a certain portfolio date.
- Subaccounts for Variable Universal Life Policies are tracked alongside other positions.
- Subaccounts for Variable Annuities are tracked alongside Mutual Funds and Stocks as positions with no record of the underlying Variable Annuity.
- Morningstar has only four security types but it has a feature that enables the user to identify or remove the unknown security types. SmartOffice exports several security types that will not fit into one of the available security types but enables the user to take care of the unknown security types from Advisor Workstation or Principia Pro.

When exporting positions, SmartOffice does not export information from the overall Variable Annuity level, only the information from the Subaccount level. The user is required to either export all of the Subaccounts in a VA account or none of them. Therefore, when information is being mapped from a Variable Annuity, the VA record information should be disregarded and an Advisor Workstation/Principia Pro Holding record will be created for each linked subaccount.
SmartOffice exports only variable products from the policy side and will not send any position records that do not have a linked security. This includes Bank Accounts, Personal Property, Real Estate, and Notes Receivable.

When exporting, SmartOffice enables the user to export all of the VUL’s where the contact is the Primary Contact, Owner, Insured, or to skip it altogether. This option is selected from the drop-down menu.

User Interface

Activated from the Account Master Summary

Exporting a contact record will create a client record in the Advisor Workstation/Principia Pro database with one account that contains all of the appropriate positions and the optional VUL subaccounts linked to the tagged Contact record from the SmartOffice database. Only one account may be exported at a time at this point.

1. Tag an account from the Contact – Account Master Summary, click the More Features button and then select Morningstar Export Utility from the expanded list to open the Morningstar Export Utility dialog box.

2. Enter the As of Date if today’s date is not the appropriate date. The user must also specify how to export the VULs, whether to skip them or pull the records where the contact is the Primary Contact, Owner, or Insured.

3. The XML file is created; the Contact - Account Master Summary displays.

Activated from the Position Summary

1. Tag one or more position records from the Position Summary, click the More Features button, and then select Morningstar Export Utility from the expanded list to open the Morningstar Export Utility dialog box.
2. Enter the Portfolio Name and the As of Date if today’s date is not the appropriate date. The user must also specify how to export the VULs, whether to skip them/exclude them or pull the records where the contact is the Primary Contact, Owner, or Insured.

3. The XML file is created; the Contact - Position Summary displays.

**Asset Allocation**

The Asset Allocation functionality tracks the allocation of client’s assets and alerts the advisor where the actual allocation deviates from the target allocation by a given variance based on the model allocation. The prerequisite for using the Asset Allocation is that the clients’ investment must have the Sector and Asset Class options already set up in the Security Detail.

The Asset Allocation tab is available at the Household, Contact and Account Master views. To get started, the user must set up the Model Allocations from the side menu. Each Risk Level that is used for comparison must have the selected Sectors and Asset Classes completed with the Target Allocation % and the allowable Variance %. These percentages are used to compare against the Actual Allocation. If the allowable Variance % is not set for an Asset Class, then the default of 10% Variance on the Asset Allocation tab will be used. Any asset class that falls below or over the allowable variance will be marked red. This serves as a warning signal for the advisor to rebalance the client’s asset allocations. Rebalancing is quick and easy. Please see the corresponding online tutorial for the steps on how to rebalance asset allocations.

Including or excluding a position from the asset allocation calculation is as easy as clicking a button. On the Position Detail tab is an Asset Allocation Member option. This option is selected and accessible by default regardless of the source of data. Since the default is checked, that means all positions are included in the asset allocation to begin with. To exclude a position, clear the Asset Allocation Member option and run the Validation on the Asset Allocation spreadsheet to remove the position.

The user has the option of working directly on the Asset Allocation tab to rebalance one household, contact, or account at a time, or to run the Asset Allocation Exception Report from the side menu to display all asset allocations that are out of balance. Either way, the user has the flexibility to print the spreadsheets and make adjustments later, or make adjustments instantaneously on the tab.

Likewise, Validation can be run for a household, a contact, or an account one at a time; it can also be run globally for all using the Asset Allocation Validation from the side menu. Please note that after the adjustments are made to the client’s investments, a Validation must be run in order to reflect the changes in the allocation of assets. It is through the Validation process that a position is included or excluded, position value get recalculated, and/or a position is re-linked from one sector or asset class to another.

To see a global list of all of the clients and their asset classes that are out of balance, run the Asset Allocation Except Report from the side menu. This report can be viewed by Household, Contact, and Account Master. This report can also be printed or exported to a spreadsheet for future analysis.

**SmartView for Clients**

SmartView for Clients, as the name suggests, is designed for the Advisor’s clients to view their investment assets and policies online anytime anywhere. The practical and easy-to-use features include the ability for clients to view and run Policy and Investment reports with graphs, send messages to the advisor, download/upload documents and update personal data. Advisors and clients can also set up their own quotes update and favorite links to other Web sites.
The advisor may choose to display the company’s logo alongside the SmartView logo. The logo can be added from the **Branding** option from the expanded **Miscellaneous** menu. Make sure to select the **SmartView for Clients Branding** tab, not the SmartOffice Branding tab. If there are any quotes or Web site links that the advisor would like the clients to have at all times, the advisor may set them up from the Branding tab as well. The Quotes symbol and Web site links set up on the Branding tab may not be removed by the clients using SmartView for Clients.

Advisors also have the option to select the reports that they want their clients to have access to. All of the Crystal Reports available in SmartOffice can be made available to clients on SmartView for Clients. In the Branding area, click the **SmartView for Clients Reports** tab. Click the **Add** button to see all of the available Crystal Reports that can be made as a report selection for SmartView users. All of the selected reports will appear on the Crystal Report Summary of the SmartView for Clients Reports tab, and whatever is on this tab will display as a report selection in SmartView for Clients.

To access SmartView for Clients, the advisor must select the **SmartView for Clients** option from **User Setup** in the Advanced Contact Management Features section. This enables the SmartView for Clients button from the Contact Summary – More Features area.

To enable access for a client to SmartView, the advisor or the administrator must create the user login and password for the client first. Select the next option from the Contact Summary – **More Features** – **Manage SmartView for Clients**. This option opens the selection to create a SmartView user. Specify the User Name, the maximum disk space allowed and the password. If a password is not specified, the system will generate one for the client. If the client is a contact in the database and an e-mail address is specified on the Contact Detail, upon completion of the client log in, an e-mail is sent to the client with the information needed to log on to SmartView for Clients. If the client forgets the password, the advisor can reset it by again selecting the option to **Manage SmartView for Clients**. After the initial setup, the option is defaulted to Generate Password. If the client does not like the assigned password or would like to change the password periodically for security reasons, the client may do so using the **Change Password** option in SmartView for Clients. If the client leaves the firm, the advisor can disconnect the client’s access by selecting the option to **Disable SmartView User**.

Please note that the advisor access to SmartView for Clients from SmartOffice has a slightly different view/display than the client logging in from a given URL; this is because the available options from the client’s view are meant for the client to communicate with the advisor, and the advisor has access to the information from SmartOffice. Information updated by the advisor or the client on either SmartOffice or SmartView for Clients is instantaneously updated on both systems; click the **Refresh** button to view the data that was recently changed.

**Investment Reports**

There are a variety of flexible and understandable investment crystal statements and reports that are accessible from different areas of the system. The four main groups of reports from the SmartInvestments are the Account Master Reports, Position Statements and Reports, Performance Reports, and Dynamic Reports. A disclaimer may be included for every report, and it can be as long as a page. Each group of reports may be run individually, selectively, or at the same time for one, all, or a selected group of households, contacts, accounts, or positions.
Account Master Reports

Account Master Reports can be generated from several different views, but they must be accessed from the Account Master Summary. The account master reports currently in production are Account Summary, Account Detail, and Summary of Client Accounts.

Both the Account Summary and Account Detail Reports contain a section with information about the account and a pie graph, including the account values from the Account Detail tab. As the name of the reports suggest, the Account Summary prints the summary values of the asset classes in the account, while the Account Detail displays all of the positions within each of the asset classes in the account. In addition, the Account Summary Report has a minimum of one page, while the Account Detail has a minimum of two pages.

The Summary of Client Accounts lists all of the accounts currently held by a client on one page. Besides the pie chart which sliced the pie based on the percentage of the account values, the report also lists the Account Name, Account #, Account Open Date, Account Type, and of course, the Account Value.

Position Statements and Reports

There are five position statements and reports available:

1. Asset Allocation
2. Balance Sheet – Bank Format
3. Balance Sheet – Investment Format
4. Position Summary Report
5. Investment Summary Report

These reports can be sorted to print by Asset Class or Holding. They can be generated from the side menu Contact Reports view or the Household Summary view under More Features. All of the position reports include a pie graph. The balance sheet statements do not have graphs.

Transaction Reports

The Investment Transaction Reports enable advisors to create and report on client investment activities such as the buying and selling of the client’s holdings like stocks, bonds, mutual funds, etc. These reports are SEC-compliant.

The Transaction by Security is also known as a Cross-Index or Posting report. It displays transactions arranged by the Investment Name along with the Account Name and Number for any specified date range.

The Client Transaction Report is also called a Brokers Book report. It prints the transactions of all types for the selected client for any specified date range. Transactions are listed for all types of investments in the order of date.

The Daily Blotter displays the Contact Name, Tax ID, Account #, Account Name and Investment Name; however, the latest federal regulations prohibited the display of the Tax ID together with the Account #. Therefore, the Tax ID was intentionally encrypted with xxx-xx-xxxx. The transactions print in chronological order for any date range.

Dynamic Reports

Users can develop and define their own reports through use of the user-definable Dynamic Reports feature. Users can customize investment reports by retrieving the data from the available columns in these tables: Account Master, Investment Positions, and Investment Transaction. Filters can also be set up to further streamline reporting.
Performance Reports

Along with the ability to view investment performance is the entire set of Performance Reports. Users can select a date range or as of a certain date depending on the nature of the report. These reports can be generated with or without income. In addition, applicable sorting options by the Holding Types, Asset Class, Market Value, Shares, or Returns are given to the selective report.

- **Performance Account Summary**: This report shows all of a client’s accounts, their account number, when it was opened, what type of account it is, how much is in it, and what the return is for the selected period. A pie chart graphically shows what portion of the pie is being invested by each of the accounts.

- **Performance Report**: This is a client’s performance report. It tells the client what is the beginning and the ending value, and it summarizes the activities that took place during the selected date range. Included are the Contributions, Withdrawals, Interests, Dividends, and the Change in account value. This report prints the account return of the selected date range and up to five benchmarks and their returns can be included as well.

- **Performance Detail**: This report prints all of the positions based on the holding type or asset class that a client currently holds. Users can easily tell how much is in each position and the account at the beginning and the end of the selected period. In addition to the return for each position, the account total return is also calculated.

- **Period-to-Date Returns**: This report contains the returns for each position and the account total return for the last month, last 3 months, quarter-to-date, year-to-date, and the last 12 months.

- **Top 10 Holdings**: Only the top 10 performers in the account are included on this report. The report shows the market value, the shares outstanding, and the return for each position.

- **Performance Summary**: This report displays the monthly and cumulative returns, the market value, net additions, and withdrawals of an account month by month. Up to five benchmarks can be assigned to print on this report also. This report can be run at the account and position levels. At the account level, it shows the performance for the entire account, whereas at the position level, the performance shown pertains only to the selected position.

- **Performance Valuation Summary**: This report displays all of the fields and their values in the performance table that the system uses to calculate the return on a monthly basis. If this report is printed from the Account Performance tab, then account data will be printed. If this report is printed from the position level, only the data of the selected position(s) will be printed on the report. This report can be used in an audit and analysis of the account or position returns. This report can be run at the account and position levels. At the account level, it displays the performance for the entire account, whereas at the position level, the performance shown pertains only to the selected position.