This Asset Allocation training manual walks you through the steps necessary to create a scenario in the Asset Allocation software.

A scenario is divided into the following sections:
- Creating a scenario profile
- Optimizing a client’s asset allocation
- Forecasting wealth
- Reallocation of portfolios, and
- Generating reports for the scenario.

The asset allocation process is started by entering basic information about the client in the Scenario Profile section.

The optimization section creates a target portfolio on the efficient frontier. It uses risk tolerance, client age, and an optional asset class constraints feature to create a target allocation.

The forecasting wealth section runs a Monte Carlo simulation assessing the potential growth of the target portfolio over the planning horizon.

The portfolio is then reallocated and presented to the client in the Reporting section.

In this training manual, we’ll be working with a fictional client called the Smith Family. Jerry Smith plans to work until he is 65, but Sarah Smith would like to examine the possibility of retiring early, at age 50. They also have two children, and want to account for the cost of sending both of their children to college.

The scenario we’ll create includes their existing portfolios. Before starting with the Asset Allocation module, we’ll create this client and a portfolio record in Principia’s Portfolio mode, so we can import it into Asset Allocation later.
Creating a client file

You’ll start by creating a client file for the Smith Family. When creating just the client record, all you need to do is save a .cli file named for the client.

In the exercise below, you’ll create a client file for the Smith Family. Do the following:

1. From the Principia toolbar, click the Portfolio Mode icon.
2. From the left-hand navigation pane, right-click on the Practice level and choose New Client. The Select Client File dialog box appears.

   Right click here, then select New Client….

3. In the File Name field, type Smith Family.
4. Click Open.

   Enter the client name, then click Open.

5. Click No when asked to create a portfolio.
Creating an unscheduled portfolio

The client file has been created. Now you can create an unscheduled portfolio for the funds they own.

Exercise 2

In this exercise, create an unscheduled portfolio for the Smith Family. Do the following:

1. Right-click on the client name Smith Family in the Advisor Palette.
2. Select New Portfolio, and then Unscheduled. The Add Holding dialog box appears.
3. Choose the funds below:
   - Gabelli ABC
   - T. Rowe Price US Bond Idx, and
   - Vanguard 500 Index.
4. After adding the securities, click **OK**. The Allocation dialog box appears.

5. Add the following allocations:
   - Vanguard 500 Index = **10,000**
   - Gabelli ABC = **5,000**, and
   - T. Rowe Price U.S. Bnd Idx = **10,000**.

6. Click **OK**. Principia defaults to Snapshot View.

7. From the toolbar, click the **Save** icon. The Save As dialog box appears.

8. In the Portfolio Name type, **Retirement**.

9. Click **Save**. The portfolio can now be used with the Asset Allocation module.
Creating a Scenario Profile

The first action when using the Asset Allocation tool is to create a scenario profile. You will need to do the following:

- Give the scenario a name, and define the start date for the scenario.
- Enter information about the client, such as gender, name, address and birth date.
- Select Style Analysis Methodology.
- View (and edit, if necessary) capital market assumptions.

A scenario needs basic client information like client name, spouse name, and gender information. Also, a client’s birth date is required in order to create the Risk Tolerance questionnaire. Finally, a Notes section is provided for you to review what occurred in the client meeting.

Notes do not appear on the output report.

In this exercise, you'll enter the scenario name, style analysis method, and scenario begin year. Space is also provided to type scenario notes. Do the following:

1. From the toolbar in Portfolio mode, click the Asset Allocation icon. The Principia Asset Allocation Module window appears.
2. In the Scenario Name space, type Smith Scenario.
3. In the Scenario Begin Year space, type the current year, or scenario start year.
4. Select Holdings Based Style Analysis or Returns Based Style Analysis.
5. In the Scenario Note space, enter client notes, if you wish.

You can click the Save icon from the toolbar at any time to save your work.
6. When finished, click **Client Information**, or **Next** to proceed.

When entering client information, note the following:

- The client birth date is mandatory, as it is used in creating the target allocation.
- The spouse can be selected or deselected depending on whether they are contributing salary or investments to the scenario.
- Employer, address and Email information is optional.

In this exercise, you will enter client and spouse information. Do the following:

1. Enter the following information for both the client and a spouse. Be sure to check the **Include Spouse** check box.

<table>
<thead>
<tr>
<th></th>
<th>Client</th>
<th>Spouse</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Name</strong></td>
<td>Jerry Smith</td>
<td>Sarah Smith</td>
</tr>
<tr>
<td><strong>Gender</strong></td>
<td>Male</td>
<td>Female</td>
</tr>
<tr>
<td><strong>Birth Date</strong></td>
<td>01/25/1972</td>
<td>01/02/1974</td>
</tr>
</tbody>
</table>

- Optionally, enter an address if you wish. Only the Birth Date field is required.

2. Click **Capital Mkt Assumptions**, or **Next** to proceed.
Birth Date information is required for a scenario.
You can see the following information on the Capital Mkt's Assumptions page:

- Pretax Returns
- Standard Deviation
- Yield, and
- Asset Class Correlations.

The values displayed here are used to construct the efficient frontier. Capital Market Assumptions are updated in the application once each year. You can do the following at any time:

- Edit the asset class assumptions
- Edit the inflation rate
- Remove an asset class, or
- Create a customized asset class.

Note that if you create a custom asset class, the correlations you enter to the other asset classes must be accurate.

In this exercise, you will learn how to edit the pre-tax returns, but we will not save the change (in order to not have it adversely affect our Wealth Forecast later). We will use the default Inflation rate of 2.3%.

Exercise 5

If you do not want to edit capital market assumptions, click Current Portfolios, or Next to proceed.
Do the following:

1. On the Capital Markets Assumptions page, click the **Pre-Tax Return** cell for the asset class Domestic Large Growth.

   ![Table](image)

<table>
<thead>
<tr>
<th>Asset Class</th>
<th>Pre-Tax Return</th>
<th>Standard Deviation</th>
<th>Yield</th>
<th>Turnover Rate</th>
<th>Short-Term Turnover Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Domestic Large Growth Stocks</td>
<td>10.4%</td>
<td>24.5%</td>
<td>1.30%</td>
<td>20.00%</td>
<td>0.0%</td>
</tr>
<tr>
<td>Domestic Large Value Estates</td>
<td>12.40%</td>
<td>16.91%</td>
<td>3.07%</td>
<td>20.00%</td>
<td>0.0%</td>
</tr>
<tr>
<td>Domestic Mid-Cap Stocks</td>
<td>13.24%</td>
<td>22.89%</td>
<td>1.73%</td>
<td>20.00%</td>
<td>0.0%</td>
</tr>
<tr>
<td>Domestic Small-Cap Stocks</td>
<td>15.30%</td>
<td>20.39%</td>
<td>1.37%</td>
<td>20.00%</td>
<td>0.0%</td>
</tr>
</tbody>
</table>

   Click in this cell to change its value.

2. Type **11.48** to change the Pre-Tax Returns for the Domestic Large Growth asset class.
3. Click **Reset** to change back to the default Pre-Tax Return value for the Domestic Large Growth asset class.
4. Click **Yes** when the confirmation message appears.
5. Click **Current Portfolios** from the left-hand navigation pane, or **Next** to proceed.
Entering Current Portfolios

In this section, you’ll enter client portfolios. Portfolios can be imported from Principia, or you can enter them directly into the Asset Allocation module. The Asset Class Breakdown is displayed in the Current Portfolios page.

Portfolios created in the Asset Allocation module can be exported back to Principia.

If you have an existing portfolio in the Advisor Palette, it can be imported directly into the Asset Allocation module. You can import up to 12 portfolios from Principia into the Asset Allocation module.

In this exercise, you will import a portfolio from Principia into the Smith Scenario. Do the following:

1. On the Current Portfolios page, click the **Import** button. The Import dialog box appears, listing all of your current Principia clients.
2. On the Import dialog box, double-click **Smith Family**. This will expand and display the client’s portfolios.
3. Double-click the **Retirement** portfolio. It automatically appears in the Portfolio Name field at the bottom of the Import dialog box.
4. From the Owner drop-down field, make sure **Client** is selected.
5. From the Type drop-down field, select **Defined Contribution**.

Assign an Owner and select a portfolio Type before importing into the Current Portfolios page.
6. Click the **Import** button. The asset allocation breakdown of the portfolio is displayed in the Current Portfolios page, as shown in the screenshot below.

Note the asset class breakdown here.
Adding a portfolio

If you have not created a portfolio in Principia, you can create one directly in the Asset Allocation module. You can also edit an existing portfolio within the Asset Allocation module. Note that you will have access to the portfolios you have entered in Principia’s Portfolio mode.

Exercise 7

In this exercise, you will add a new portfolio to the Smith Scenario. Do the following from the Current Portfolios page:

1. Click **Add**. The Add Holdings dialog box appears.

2. In the Find field, type **PIMCO All Asset A**.
3. Click **Add**.
4. To add the next security, click in the Find field and type **T. Rowe Price U.S. Bnd Idx**.
5. Click **Add**. The Total holdings should be 2.
6. Click **OK** to allocate assets to the portfolio. The Asset Allocation dialog box appears.

Use the From drop-down to access additional Principia databases.
7. In the $Value cell for PIMCO All Asset A, type **10,000**.
8. In the $Value cell for T. Rowe Price U.S. Bnd Idx, type **10,000**.

Portfolio values can be entered by dollar amount, share amount, or percent of assets. You can also enter the cost basis for a holding.

9. In the Portfolio Name field, type **Brokerage_Sarah**.
10. Click the Owner drop-down field and select **Spouse**.
11. From the Type drop-down field, make sure **Taxable** is selected.

A portfolio can be edited to update values, add/delete holdings, or to reassign an owner or portfolio type. Click the **Edit** button to make changes to a portfolio.

12. Click **OK**. The portfolio is added to Current Portfolios window.

13. Click **Optimize Asset Allocation** from the left-hand navigation panel, or **Next** to proceed.
Optimizing the Asset Allocation

In the Optimize Asset Allocation section, you will assign a target allocation on the efficient frontier. The target allocation is the result of determining the client’s risk type and asset class constraints placed on the target allocation.

The Optimization process begins with a 7-question Risk Tolerance Questionnaire. The questionnaire measures time horizon, and both short-term and long-term risk.

You can print a PDF version of the questionnaire for the client, if you wish.

In this exercise, you will assign a risk type for the client. Do the following:

1. In the Risk Tolerance Questionnaire page, select the second answer (from the top) for each question. Note that the first question’s answer has already been automatically selected based on the information you entered on the Client Information page.

To generate a PDF version of the questionnaire, click Resources...Risk Tolerance Questionnaire on the toolbar. An electronic copy is created and can be printed and given to your client.

2. After answering the questions, click Analysis in the left-hand navigation panel, or Next in the bottom right corner of the screen to view the Risk Type assigned to the client.
On the Analysis page, a risk type is assigned, summarized in the Description field. You can override the Risk Type, if needed. Alternatively, you can click Previous to return to the risk questionnaire and have the client reconsider some of their answers in light of the risk type they were assigned to.

A Notes area is also available on the Analysis page for commenting on client meetings or reviews.

 Notes do not appear on the output report.

In this exercise, you’ll override the default risk type. If you do not want to override the default risk type, click Constraints, or Next to proceed. Otherwise, do the following:

1. From the Analysis page, click the Override checkbox. The Risk Type field is enabled.
2. From the Risk Type drop-down, select Moderate Growth.

 A Notes section is provided if you want to summarize why you chose to overwrite the default risk type.

To override default risk type, click the Override check box. Then, select a new risk type.

3. Click Constraints, or Next to proceed to the Constraints page.
On the Constraints page, you can select the appropriate asset classes for the target portfolio. Additionally, you can assign minimum and maximum percentages to further customize the target allocation. A constrained portfolio provides a more realistic target allocation compared to an unconstrained portfolio. An unconstrained portfolio might not choose multiple asset classes or, may allocate a large percentage to one asset class.

In this exercise, you will enter constraints for the target allocation. You will also save the constraints as a model. Do the following:

1. From the Constraints page, under the Include? column, click to deselect the following Asset Classes:
   - Domestic Inflation-Protected Bonds
   - Non-Domestic Bonds
   - Commodities
   - REITs.

Deselect these check boxes.
2. To set the constraints for the remaining asset classes, type the minimum and maximum percentages you wish to allocate for each remaining asset class:

<table>
<thead>
<tr>
<th>Asset Class</th>
<th>Minimum</th>
<th>Maximum</th>
</tr>
</thead>
<tbody>
<tr>
<td>Domestic Large Growth Stocks</td>
<td>10%</td>
<td>20%</td>
</tr>
<tr>
<td>Domestic Large Value Stocks</td>
<td>10%</td>
<td>20%</td>
</tr>
<tr>
<td>Domestic Mid-Cap Stocks</td>
<td>10%</td>
<td>30%</td>
</tr>
<tr>
<td>Domestic Small-Cap Stocks</td>
<td>10%</td>
<td>30%</td>
</tr>
<tr>
<td>Non-Domestic Developed Stocks</td>
<td>0%</td>
<td>20%</td>
</tr>
<tr>
<td>Developing Markets Stocks</td>
<td>0%</td>
<td>10%</td>
</tr>
<tr>
<td>Domestic Investment-Grade Bonds</td>
<td>20%</td>
<td>70%</td>
</tr>
<tr>
<td>Domestic High-Yield Bonds</td>
<td>20%</td>
<td>70%</td>
</tr>
<tr>
<td>Cash</td>
<td>5%</td>
<td>100%</td>
</tr>
</tbody>
</table>

3. To save constraints as a model, click **Save Model...** and type **Moderate Growth Model**.

To apply a saved model, click the **Select Model Constraints** dropdown and choose the model appropriate for the scenario.
Choosing asset classes and setting constraints for your target allocation

Optimizing the Asset Allocation

4. Click Efficient Frontier, or Next to proceed.
The Efficient Frontier page displays the efficient frontier graph for the scenario. It uses the constrained asset classes you selected and set up, as well as the clients’ Risk Type. The efficient frontier is represented by the solid line on the graph. The clients’ current portfolio(s) are represented by a circled dot beneath the Efficient Frontier. Clicking anywhere on the solid line resets the asset allocation for the Target portfolio. Target allocations defined here can be saved as models and used in future scenarios.

In this exercise, you will assign a target asset allocation to the Smith Scenario. Do the following:

1. From the Efficient Frontier page, click anywhere on the dark blue line to select a Target Portfolio allocation.

2. Click the Set Target button to create the Target Allocation for the Smith Scenario. To save this allocation for future scenarios, click the Save Model button. In future scenarios, click the Select Model Allocation dropdown from this page to retrieve a previously saved model.

3. Click Current vs. Target from the left-hand navigation panel, or click Next to proceed.
The Current vs. Target page is a graphic depiction comparing the Current and Target allocations. This page cannot be modified or interacted with, but it is included on the PDF output report.

Click **Forecast Wealth** in the left-hand navigation panel, or **Next** to continue.

The Current portfolio is less heavily weighted to stocks than the Target portfolio.
Forecasting Wealth

Wealth forecasting takes into account the following assumptions:

- the client’s target asset allocation
- the value of their current portfolio(s)
- savings, and
- withdrawals.

The wealth forecast graph and table are generated using Monte Carlo simulation scenarios.

You will enter the retirement age for the client and spouse. Additionally, mortality information is displayed and can be edited.

In this exercise, you’ll enter the expected retirement age for the spouse. (The client’s retirement age defaults to 65, which we’ll use here.) Do the following:

1. From the Retirement page, in the Expected Retirement Age (years) field, type 50 for Spouse. Do not change any other inputs.

2. Click Income from the left-hand navigation panel, or Next.
In this section, current income and expected income growth are entered. You need to specify if the income is generated by the client or spouse. Note that the Income Growth Rate field here is calculated based on the Inflation Rate you entered on the Capital Markets Assumptions page, and the value you enter here for Income Growth Rate Above Inflation.

On the Social Security page, estimated social security benefits are entered.

In this exercise, enter current income for the client and spouse. You will also enter the age at which Social Security benefits will be collected. Do the following:

1. From the Income page, click the Add button twice. Two lines should now appear in the income spreadsheet, reflecting two sources of income you will enter for the Smith Scenario.

2. On the income spreadsheet, enter the following amounts for the client and spouse:

<table>
<thead>
<tr>
<th>Begin Year</th>
<th>End Year</th>
<th>Begin Year Income Before Tax</th>
<th>Begin Year Income After Tax</th>
<th>Income Growth Rate Above Inflation</th>
<th>Owner</th>
</tr>
</thead>
<tbody>
<tr>
<td>2007</td>
<td>2037</td>
<td>$100,000.00</td>
<td>$72,000</td>
<td>2.00%</td>
<td>Client</td>
</tr>
<tr>
<td>2007</td>
<td>2024</td>
<td>$120,000.00</td>
<td>$86,000</td>
<td>2.00%</td>
<td>Spouse</td>
</tr>
</tbody>
</table>

- Begin Year should be the current year. End Year is the expected year of retirement.

3. Click Social Security from the left-hand navigation panel, or Next to proceed.
4. In the Age to Collect (yrs) field for Spouse, type **62**.

   - The Default Age to Collect (yrs) is 65. This is an estimate and may not match client/spouse Social Security Statement.

5. Click the **Calculate Default Benefit** button.

6. Click **Savings** from the left-hand navigation panel or **Next** to proceed to next page.
On the Savings page, taxable and non-taxable savings for the clients and spouse are entered.

In this exercise, you will enter savings accounts for the client and spouse. Do the following:

1. On the Savings page, click the **Add** button three times, to create three lines of savings for the Smith Scenario.

2. Enter the following values for the client and spouse:

<table>
<thead>
<tr>
<th>Description</th>
<th>Owner</th>
<th>Portfolio</th>
<th>Begin Year</th>
<th>End Year</th>
<th>Value</th>
<th>Value based on</th>
</tr>
</thead>
<tbody>
<tr>
<td>401k_Jerry</td>
<td>Client</td>
<td>Defined Contribution</td>
<td>2007</td>
<td>2037</td>
<td>6,000.00</td>
<td>Current Dollars</td>
</tr>
<tr>
<td>Brokerage_Sarah</td>
<td>Spouse</td>
<td>Taxable</td>
<td>2007</td>
<td>2010</td>
<td>5,000.00</td>
<td>Current Dollars</td>
</tr>
<tr>
<td>401k_Sarah</td>
<td>Spouse</td>
<td>Defined Contribution</td>
<td>2007</td>
<td>2024</td>
<td>5,000.00</td>
<td>Current Dollars</td>
</tr>
</tbody>
</table>

3. Click **Withdrawals** from the left-hand navigation panel, or **Next** to proceed.
In the Withdrawals section, you can enter assumptions to cover the following:
- retirement
- education, and
- miscellaneous withdrawals.

In this exercise, you’ll enter expected retirement income as withdrawals. Two stages of withdrawals will be entered: the client will withdraw 80% of his pre-retirement income for the first 14 years of his retirement. Subsequently, the client will withdraw 70% of his income for retirement.

Do the following:
1. From the Retirement Needs page, click the Add button twice. You should have two lines on the spreadsheet.

2. Enter the following values in each line:

<table>
<thead>
<tr>
<th>Begin Year</th>
<th>End Year</th>
<th>Retirement Need</th>
<th>Needs Based On</th>
<th>Owner</th>
</tr>
</thead>
<tbody>
<tr>
<td>2037</td>
<td>2050</td>
<td>80.00</td>
<td>% of Income</td>
<td>Client</td>
</tr>
<tr>
<td>2051</td>
<td>2064</td>
<td>70.00</td>
<td>% of Income</td>
<td>Spouse</td>
</tr>
</tbody>
</table>

In the example above, a Retirement Need of 80% of Income for retirement was entered. As the client ages, % of Income was reduced to 70%.

3. After entering the Retirement Needs, click Education from the left-hand navigation panel, or Next to proceed.
In this exercise, you'll enter expected education expenses using current tuition rates. When entering tuition costs, you can forecast the price of college to increase above the rate of inflation. The inflation rate you entered on the Capital Market Assumptions page is automatically entered here to help calculate the Tuition Growth Rate.

Do the following:

1. From the Education page, click the **Add** button twice. You should have two lines in the Education spreadsheet.

2. For each student, enter the following expected education expenses:

<table>
<thead>
<tr>
<th>Student Name</th>
<th>Birth Year</th>
<th>Begin Year</th>
<th>End Year</th>
<th>School Name</th>
<th>Current Cost (Tuition/ Board)</th>
<th>Growth Rate Above Inflation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Jill</td>
<td>2000</td>
<td>2018</td>
<td>2022</td>
<td>State U</td>
<td>22,000.00</td>
<td>3.00%</td>
</tr>
<tr>
<td>John</td>
<td>2002</td>
<td>2020</td>
<td>2024</td>
<td>State U</td>
<td>22,000.00</td>
<td>3.00%</td>
</tr>
</tbody>
</table>

   Editing **Growth Rate Above Inflation** automatically calculates the assumption for Tuition Growth Rate.

3. After entering the Education expenses, click **Tax Rates** from the left-hand navigation panel, or **Next** twice to proceed. We will not enter anything on the Miscellaneous page.
On the Tax Rates page, current and expected tax rates are entered. Taxes are considered only if a taxable security is sold.

In this exercise, you will enter the current and expected tax rates. Do the following:

1. From the Tax Rates page, click the **Add** button twice. You should have two lines in the Tax Rates page.

2. Enter the following values:

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>2007</td>
<td>2037</td>
<td>28.00%</td>
<td>15.00%</td>
<td>15.00%</td>
<td>3.00%</td>
<td>3.00%</td>
</tr>
<tr>
<td>2038</td>
<td>2064</td>
<td>20.00%</td>
<td>10.00%</td>
<td>10.00%</td>
<td>3.00%</td>
<td>3.00%</td>
</tr>
</tbody>
</table>

   * In the second line of the spreadsheet, tax assumptions were reduced beginning in 2038, reflecting a lower tax rate during retirement.

3. After you have entered Tax Rates, click **Forecast** from the left-hand navigation panel or **Next** to proceed.
The Forecast page runs 1,000 separate simulations for each asset class in the target portfolio. The asset class value-weighted returns are calculated for taxable and tax-deferred accounts for the current portfolios entered in the scenario. The returns are then sorted and ranked by probability percentile (95th Percentile, Expected Value, and 5th Percentile) on the wealth table. They are also displayed on the Wealth Forecast graph.

The Wealth Table displays annualized returns for the following periods:

- 1 Year
- 3 Year
- 5 Year
- 10 Year, and
- 20 Year.

In this exercise, you’ll view the Wealth Forecast graph and generate the Wealth Forecast table. Do the following:

1. The Wealth Forecast graph should be showing on the screen. If not, click **Forecast** from the left-hand navigation panel.

   ![Wealth Forecast Graph](image)

   The Wealth Forecast graph contains four shades of green. These represent the different chances (5%, 25%, 75% and 95%) of having a certain amount of wealth at a given time. The lightest shade of green is the most conservative expectation, and the darkest green is the most optimistic possible outcome.

   You can also see two lines on the graph. The red line represents the median value of the portfolio using the proposed asset allocation. The blue line is the median value of the portfolio with the client’s existing asset allocation.
2. Place your mouse over any point on the bar graph. A pop-up appears, displaying the ending wealth value and the probability percentile of achieving that value for the given year.

![Wealth Forecast Graph]

Moving your mouse over the Wealth Forecast graph gives you a pop-up window for that year.

3. To view the Wealth Forecast table, click the **Wealth Table** button.

![Wealth Table]

Assumptions can be displayed as Current Dollars or as Future Dollars.

4. After viewing the Wealth Table, click **OK** to return to the Wealth Forecast graph. In this scenario the Median value of the proposed asset allocation - in conjunction with the client's current portfolio value, and savings rate - will most likely not be enough to last the client through his retirement. Before proposing a portfolio based on the asset allocation, we should be able to demonstrate that the asset allocation we are proposing will actually work. Let's return to some previous inputs to update them and see how that affects the Wealth Forecast graph.
Modifying the Client Scenario

In this section, you’ll see a couple of changes that can be made to a client’s scenario, to help them meet their goals.

With the current inputs, the Smith family will likely run out of money around the time Jerry retires in 2037.

To give the Smith family a better chance at making their money last, we’ll adjust Sarah’s retirement age, and also increase their savings rate. Once that is done, you can generate the Wealth Forecast again, and note the impact of the changes.

To enter the changes for the scenario, do the following:

1. In the left-hand navigation panel, click Retirement.
2. In the Spouse field, type 55. (We’ll delay Sarah’s retirement by just five years.)
3. In the left-hand navigation panel, click Savings.
4. Make the changes reflected in the table below.

<table>
<thead>
<tr>
<th>Description</th>
<th>Owner</th>
<th>Portfolio</th>
<th>Begin Year</th>
<th>End Year</th>
<th>Value</th>
<th>Value based on</th>
</tr>
</thead>
<tbody>
<tr>
<td>401k_Jerry</td>
<td>Client</td>
<td>Defined Contribution</td>
<td>2007</td>
<td>2037</td>
<td>10.00</td>
<td>% of Pre-Tax Income</td>
</tr>
<tr>
<td>Brokerage_Sarah</td>
<td>Spouse</td>
<td>Taxable</td>
<td>2007</td>
<td>2010</td>
<td>5,000.00</td>
<td>Current Dollars</td>
</tr>
<tr>
<td>401k_Sarah</td>
<td>Spouse</td>
<td>Defined Contribution</td>
<td>2007</td>
<td>2029</td>
<td>10.00</td>
<td>% of Pre-Tax Income</td>
</tr>
</tbody>
</table>
5. In the left-hand navigation panel, click **Forecast**.

With the revised scenario, the median return for the client now seems as if they will have enough money to live on in retirement. Also, the impact of Jill and John Smith going to college will not be nearly as dramatic as it was under the original plan.

6. From the left-hand navigation panel, click **Propose Portfolio**, or click **Next** to proceed.
Proposing a Portfolio

Now that you’ve optimized an allocation and run a wealth forecasting scenario to help meet the clients’ needs, you can propose a portfolio based on the target allocation. You can search for securities and add them to a current portfolio. Alternatively, you can create a model portfolio and replace the existing portfolio.

Model portfolios can be saved and applied to other scenarios you create.

On the Search for Securities screen, you can create an investment list to enhance the clients’ current portfolio holdings.

In this exercise, you will find securities, then build a proposed portfolio. Do the following:

1. From the Allocate page, click the Add button. The Search for Securities screen appears.
2. On the Search for Securities screen, click in the Find field.
3. Type T. Rowe Price Sm Stk.
4. Click **Go**. All share classes of the fund appear.

5. Select the **Adv** share class.
6. Click **Add**. The security is included in the Investment List for the proposed portfolio.

7. Repeat steps 2 through 4 for the following securities:
   - Amer Funds Bond Fund A
   - T. Rowe Price Balanced, and
   - General Electric.

   - To find General Electric, you will need to select **Stocks** from the **Universe** field.

8. After adding the securities, click **OK**.
Allocating the proposed portfolio

The Allocate page displays both the securities selected in the investment list and holdings from the current portfolio. You can manually allocate the proposed portfolio, or use the Auto Allocate button to find the most appropriate securities mix for the proposed portfolio.

In this exercise, you will create a proposed portfolio based on the target allocation you assigned on the Efficient Frontier page. Do the following:

1. On the Allocate page, click the **Auto Allocate** button. Using the investment list, the Auto Allocate feature selects securities with the lowest tracking error.

2. If you want to maximize alpha, move the **Auto Allocate slider** to the right.

3. The proposed portfolio has now been allocated. Turn to Exercise 23 on page 40 to see the Action Plan and Generate Reports pages.
Creating a Model Portfolio

Using a model portfolio allows you to replace an existing portfolio with a model allocation. Model Portfolios are assigned one of the five risk types. These are the same risk types used in the Risk Analysis section of the Asset Allocation workflow. If you plan to use a model portfolio, note that you will have access only to those models that match the Risk Analysis type for the client. That is, you cannot choose an Aggressive model portfolio for a Conservative client. To use a model portfolio, you’ll need to do the following:

- Create a securities list for the model portfolios, or load a saved securities list
- Assign a risk type to the model portfolio, and
- Assign the model portfolio to the client.

When creating a model portfolio, you may want to first create an investment list. The list can be saved and used as a model portfolio. To create an investment list, do the following:

1. From the Allocate page click Add. The Search for Securities screen appears.
2. At the bottom of the Search for Securities screen, click Remove All. This removes securities from the investment list.
3. At the top of the screen, in the Find field, type the **name** of the security you want to add to your list. Use the following securities:
   - Amer Funds Bond Fund A
   - Columbia Gt Ch B
   - T. Rowe Price Balanced, and
   - Vanguard Em Mkt Idx.

   Click the Field drop-down to switch between finding securities by Name or Ticker.

4. Highlight a security, then click the **Add** button. The security is included in the Investment list at the bottom of the screen.

5. Repeat steps 3-4 until you have entered all of the securities for your list. After you’ve found the securities, click **Save Investment List** at the bottom of the screen.

6. In the File Name field, type **Moderate Model** and then click **Save**. The file has been saved.

   To load the list for a future scenario, click the **Load Investment List** button at the top of the screen.
Creating a Model Portfolio

Creating a model portfolio from an investment list

After you have saved an investment list, you can allocate assets to it and save it as a model portfolio.

In this exercise, you will create a model portfolio using the saved securities in the Moderate Model portfolio Investment List. Do the following:

1. From the menu bar, select File... New.
2. If prompted to Save Changes, click Yes.
3. If prompted to save the scenario, type Smith Scenario and click Save.
4. In the left hand navigation pane, click Allocate.
5. From the Allocate page, click the Add button.
6. Click Load Investment List.
7. Select Moderate Model, then click Open.
8. Click OK. The Allocate page appears.
9. In the Allocation page spreadsheet, enter the allocations in the table below.

<table>
<thead>
<tr>
<th>Name</th>
<th>Allocation Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Amer Funds Bond Fund A</td>
<td>30%</td>
</tr>
<tr>
<td>Columbia Grt Ch B</td>
<td>40%</td>
</tr>
<tr>
<td>T. Rowe Price Balanced</td>
<td>20%</td>
</tr>
<tr>
<td>Vanguard Em Mkt Idx</td>
<td>10%</td>
</tr>
</tbody>
</table>
10. Click **Save As Model.**

11. In the Save As Model dialog, type **Moderate Model Portfolio.**

12. From the Risk Type dropdown, select **Moderate Growth.** The Moderate Model Portfolio can be used for any scenario with a Moderate Growth target allocation.

- Target allocations for scenarios are assigned in the Optimize Asset Allocation-Analysis section of the Scenario work flow.
Model portfolios can be assigned to a proposed portfolio. In the exercise above, the assigned Risk Type was Moderate Growth. The model can then be assigned to any scenario with a Moderate Growth Risk Type.

In this exercise, you will add a model portfolio to an existing scenario.

1. From the menu bar, select **File... Open**.
2. Select the **Smith Scenario**, then click **Open**.
3. In the left-hand navigation panel, click **Allocate** under Propose Portfolio.
4. From the Select Model Portfolio dropdown, choose **Moderate Model Portfolio**.
   
   ![Select Model Portfolio](image)

   Select the Smith Scenario, then click Open.

   From the Select Model Portfolio drop-down field, choose the appropriate model portfolio.

   In the Weight column, the Model Allocation percentages can be adjusted, if necessary.

5. **Click the Add button** if you wish to add additional securities to the model.
6. **The Moderate Model Portfolio has been added to the Proposed portfolio**. In this example, the client’s original portfolio was replaced by the model portfolio. Click **Next** to proceed to the Action Plan page.
The Action Plan displays what items need to be bought or sold to achieve the proposed portfolio. You can also export the proposed portfolio from Asset Allocation into Principia as an unscheduled portfolio.

In this exercise, you will export the proposed portfolio into Principia’s Advisor Palette.

1. From the Action Plan page, click Export to Principia. The Client Information dialog box appears.

2. In the Client file field, type Jerry Smith.
3. In the Portfolio name field, type Proposed.
4. Click Save.

5. Click OK when the confirmation message appears, indicating the action plan was successfully exported. Later, you can go to the Advisor Palette, and confirm that the proposed portfolio appears as an unscheduled portfolio.
6. Click Report Settings from the left-hand navigation panel, or Next to proceed.
Generating Reports

On the Reports Settings page, you can generate PDF reports to make presentations to your client. The report includes scenario information, as well as a customized cover page with your company logo.

Adding your company logo to the cover page is a great way to customize your report. The following file types can be used for company logos:

- .GIF
- .JPG
- .JPEG
- .BMP
- .PNG.

In this exercise, you will include a company logo on the cover page.

If you do not have a logo file to include, simply complete steps 1-4 below.

1. From the Report Settings page, click the check box next to All Pages. A check mark should appear next to all pages on the reports page.
2. Click the Edit Cover Page button.
3. In the Cover Page - Asset Allocation Report dialog box, enter the Prepared For and Prepared By information.
4. To include your company logo, click the **Include Company Logo** check box.

5. Click the **Browse** button. The Asset Allocation Cover Page Logo dialog box appears.

6. Using the **Look in** drop-down, navigate to and select your saved company logo.
7. Click **Open**.
8. Click **OK** to return to the Report Settings page.
After you have entered the Report Settings, a PDF report can be created. The output on the report reflects assumptions entered in the Scenario Profile, Optimization, Wealth Forecast and Proposed Portfolio sections.

In this exercise, you will generate a PDF report. Do the following:


2. You can save or print the PDF file.