

# Investit Decisions

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## **Instruction Manual** **USA Edition 1.1**

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## **INVESTIT DECISIONS. OVERVIEW**

Investit Decisions is a financial, capital budgeting, cost/benefit and engineering economic analysis software that can be easily adapted and applied to any industry and to non profit organization such as government, cities, hospitals and universities etc

Using Investit Decisions you can carry out;

1. Investment and cost/benefit analysis
2. Keep versus Replace analysis (Equipment replacement decisions)
3. Outsourcing analysis (Make or Buy decisions)
4. Buy versus Leasing of equipment
5. Real Estate Investment Analysis
6. Buy versus Lease analysis. Real Estate
7. Lease comparison analysis from a Landlord & Tenant perspective
8. Incremental or differential cash flow analysis

The following examples illustrate the versatility of Investit Decision.

### **Investment Analysis Examples**

1. A city is considering expanding a community center. What are the costs and benefits?
2. A company is considering replacing all their incandescent lights with CFL's (compact fluorescent lights). What is the payback period and return on investment?

Investit Decisions can be used to evaluate a wide variety of energy efficiency and conservation initiatives.

3. A cement company has to move the cement 300 yards from one silo to another. They can a) pump the cement through a pipeline or b) use a covered conveyor. Which is the most cost effective?
4. An organization is considering expanding their production facilities to generate more sales revenue.

The organization can spend \$11,000,000 to expand their New Jersey plant to increase the production and sales of Product A & B. What is there return on investment and is it acceptable?

For \$15,000,000 than can also add a new product called Product Z. In addition, if they spend \$15,000,000 they can lower the cost per unit cost of producing produce A and B resulting in additional savings.

Should the organization invest \$11,000,000 or \$15,000,000?

5. A company is considering relocating their plant. Possible locations are Tucson, Arizona or Austin, Texas. Which is the best location from an economic perspective?

### **Outsource (Make or Buy decisions) Examples**

1. A city is considering outsourcing the servicing and repair of plant and equipment. Should they continue to service repair the plant and equipment or outsource?
2. A manufacturer can invest in the equipment to make the cam shafts for a fork lift truck or they can outsource to China. Which is the most economical?
3. A pulp mill consumes a large amount of electricity. Should they continue to buy from the utility company or install their own generating equipment and sell the excess capacity?
4. A hospital is considering whether to continue processing the laundry or outsource to a laundry company.

### **Keep or Replace Decision Examples**

1. A hospital has an old X-Ray machine which breaks down on a regular basis. Should they replace the old equipment with a new, more productive X-Ray machine?
2. A city is continually repairing an aging wooden bridge. Should they;
  - a) Keep fixing the bridge?
  - b) Replace with a new wooden bridge?
  - c) Replace with a steel bridge?
3. A manufacturing organization is considering replacing aging production equipment used to produce plastic bottles with a more technologically advanced model which will result in;
  - Less rejected products resulting in lower manufacturing costs per unit
  - The new computerized system allows faster set up and less down time
  - Increase in sales because of increased production capacity
  - Lower labor costs per unit

Should they invest in the new equipment?

### **Buy Versus Lease Decision Example**

Should we buy or lease our forklift trucks?

### **Real Estate Investment Analysis Example**

Should we invest in real estate instead of leaving our money in the bank?

### **Buy versus Lease Real Estate Example**

Instead of leasing should we purchase our own building and sub-lease 45% of the space?

### **Lease Comparison Analysis Example**

Your organization has received proposals from three landlords to lease space in their buildings. Each offering different lease terms and conditions. In addition the cost of moving is different for each location. Which lease proposal is the best deal?

## INTRODUCTION TO INVESTIT DECISIONS

In order to quickly learn how to use Investit Decisions there are a few basic concepts and things you need to know. These can be learnt quickly.

Once you understand the basic concepts outlined in this manual **focus on learning how to use “Projection Wizard”** which is used project revenues and expenses. Projection Wizard is the heart of Investor Decisions.

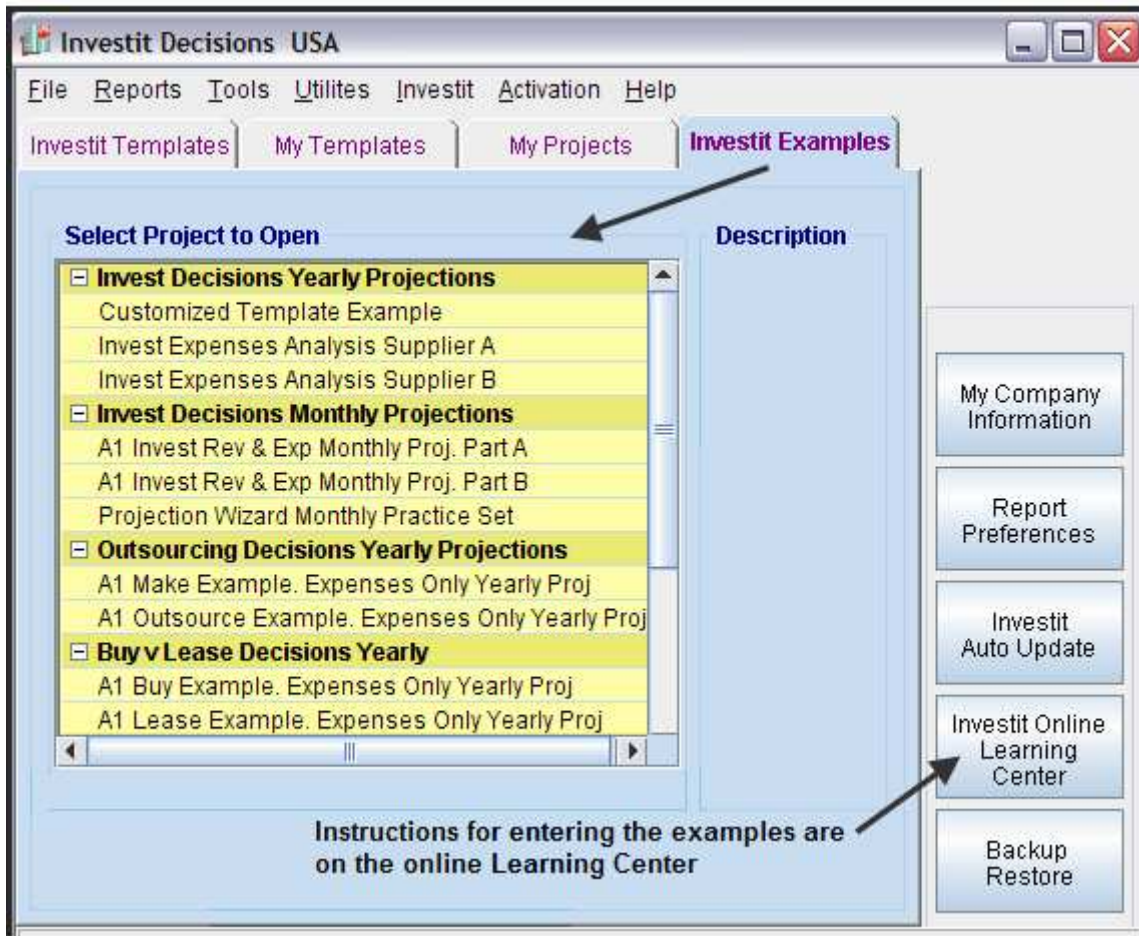
Once you have mastered Projection Wizard you can quickly enter simple or highly complex revenue and expenses projections and utilize the full power of Investor Decisions.

The Projection Wizard instruction manual is available on the Investit Decisions Learning Center.



### The fastest way to learn Investor Decisions

Investit Decisions come with a wide variety of examples, which are accessed from the Investit Panel by clicking on the 'Investit Examples' panel folder and then selecting and opening an example.



The input information with step by step instructions for each Investit example is available on the Investit Online Learning Center which can be accessed by clicking on the “Investit Online Learning Center” button on the Investit Panel.

**EXAMPLES**

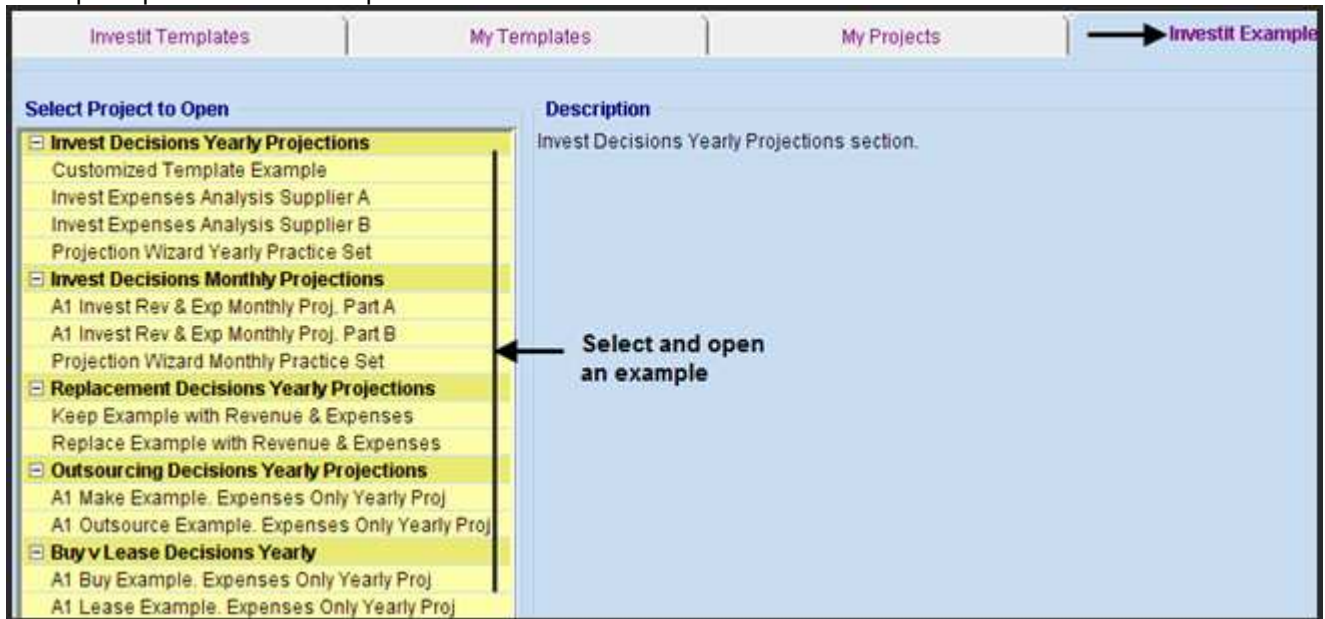
**Investit Decisions**

- **Learning Examples**
  - Customizing Templates
  - Project Wizard Yearly Examples
  - Project Wizard Mthly Examples
- **Invest Decisions**
  - Investment Analysis Yearly
  - Investment Analysis Monthly
- **Replacement Decisions**
  - Replacement Decisions
- **Outsource Decisions**
  - Outsource Decisions Example
- **Buy v Lease Decisions**
  - Buy versus Lease Equipment

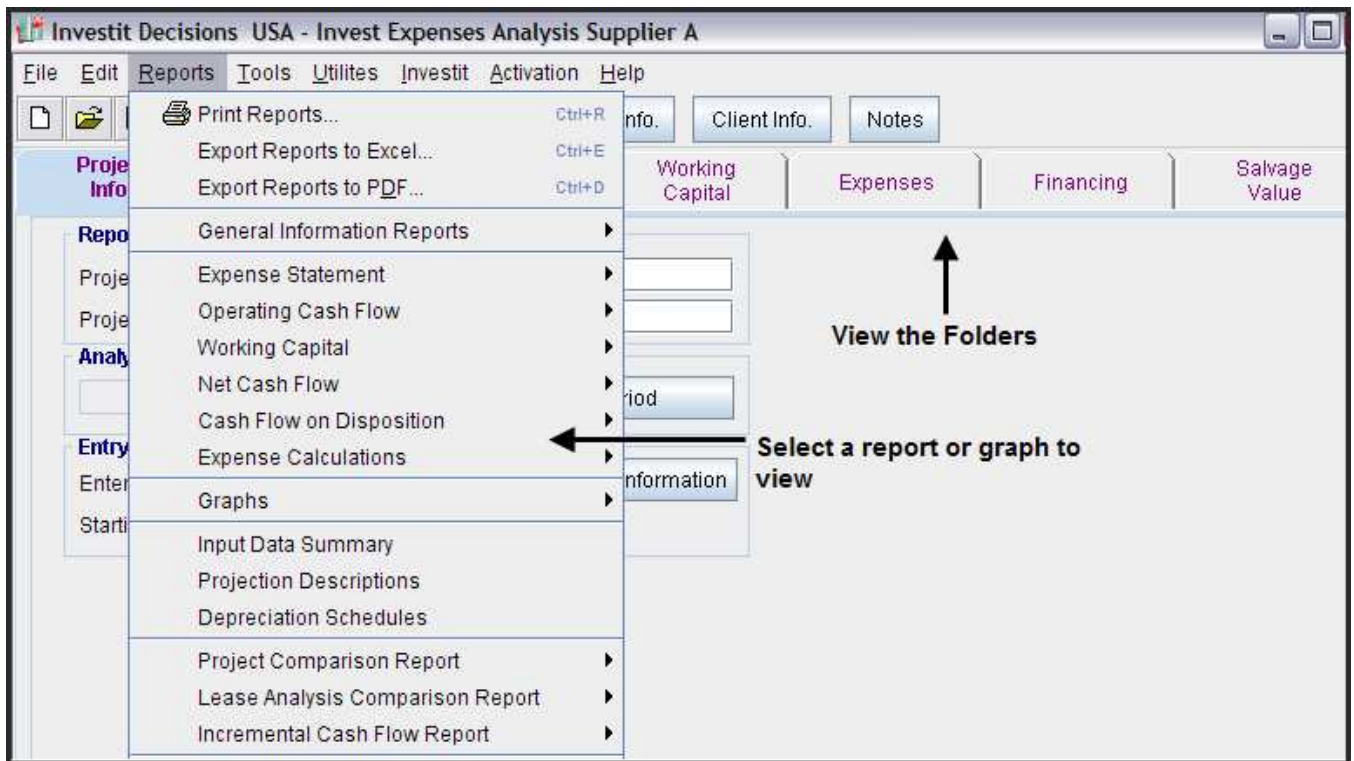
**Step by Step instructions  
for entering the examples**

A quick way to learn Investit Decisions is to;

1. Open up an Investit Example



2. View the folders and view the Reports and Graphs from the Report Menu



Then;

Go to the "Online Learning Center" and print out the corresponding example. The example includes all the input information followed by the step by step instructions on how to enter the project data.

Follow the steps outlined in the example and enter the information into a new template.



## DOWN LOADING, INSTALLATION, MY ACCOUNT & PASSWORD

### Downloading & installing Investit Decisions

If you haven't already downloaded Investit Decisions go to <http://www.investitdecisions.com/download> and save the Setup file to your desktop.

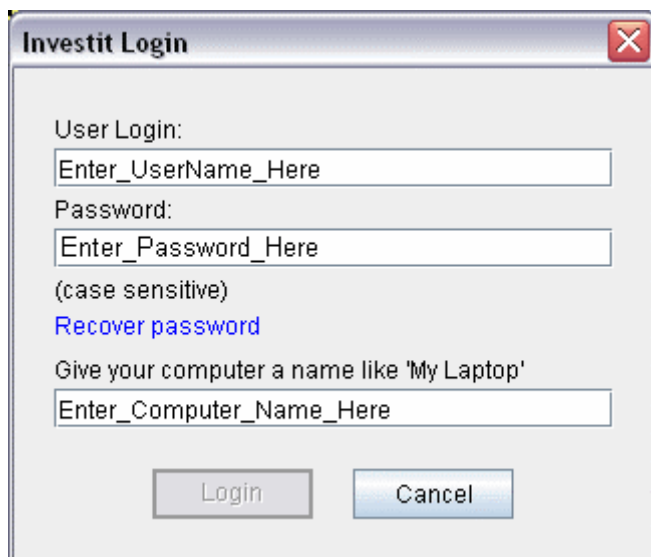
#### Installing Investit Decisions

1. Windows XP or earlier. Double click on the "Investit\_Setup.exe" and follow the installation instructions
2. Vista 32 & 64. Right click on the "Investit\_Setup.exe" select "Run as Administrator" and follow the installation instructions
3. During installation process select your country (USA or CND)

### Activation and Registration

Once Investit Decisions is installed you will have 21 days to Activate the program.

To start the activation process, simply click on the "**Activate**" menu and select "**Activate this Computer**". Enter your Username and Password in the Investit Login menu. You can activate up to 2 computers in this way without assistance from Investit support service.

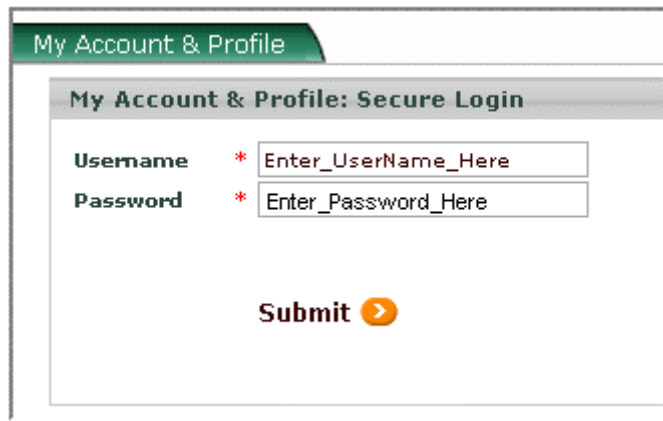


The image shows a screenshot of a Windows-style dialog box titled "Investit Login". The dialog box has a standard title bar with a close button (red X) in the top right corner. Inside the dialog, there are three text input fields. The first is labeled "User Login:" and contains the placeholder text "Enter\_UserName\_Here". The second is labeled "Password:" and contains the placeholder text "Enter\_Password\_Here". Below the password field, the text "(case sensitive)" is displayed, followed by a blue hyperlink that says "Recover password". The third input field is labeled "Give your computer a name like 'My Laptop'" and contains the placeholder text "Enter\_Computer\_Name\_Here". At the bottom of the dialog, there are two buttons: "Login" and "Cancel".

## My Account

To access your account;

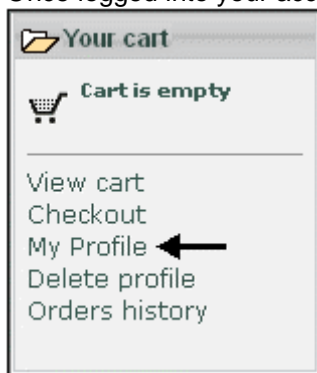
1. login on [www.investitdecisions.com](http://www.investitdecisions.com) and click on 'My Account'
2. Enter your Username & Password



The screenshot shows a web form titled "My Account & Profile: Secure Login". It features two input fields: "Username" with a red asterisk and a placeholder "Enter\_UserName\_Here", and "Password" with a red asterisk and a placeholder "Enter\_Password\_Here". Below the fields is a "Submit" button with an orange arrow icon.

## Changing your Password

Once logged into your account following the above procedure, click on the 'My Profile' link



Scroll down the page to entry fields marked 'Password'. Enter your new password and then enter it a second time in the 'Confirm Password' field. When finished click on Submit to save your changes.

## Changing your password. Example

### My Profile

---

#### Personal information

Title \*  ▼

First Name \*

Last Name \*

Company

---

#### Billing Address

Country \*  ▼

State \*  ▼

City \*

Address \*

Address (line 2)

Zip/Postal code \*

---

#### Contact Information

Phone \*

E-Mail \*

Fax

Web site

---

#### Username & Password

Username \* **Investit\_Software**

Password \*  ←

Confirm Password \*  ←

## INVESTIT DECISIONS PANEL

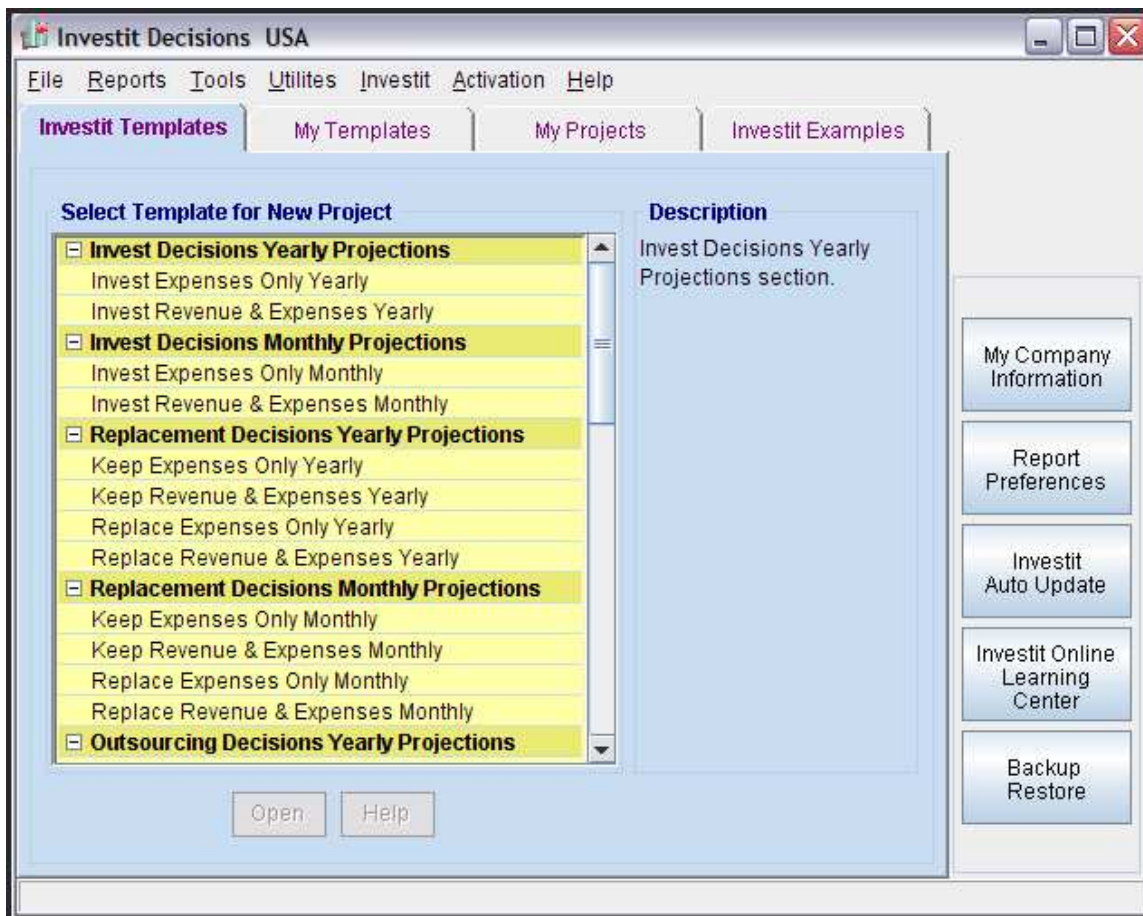
### Introduction

When you open Investit Decisions the first thing you see is the Investit Panel which allows you to;

1. Select an Investit Template and start a project
2. Select one of your own templates in the "My Template" folder
3. Select an Investit Example
4. Open a project that you have created and saved in "My Projects"

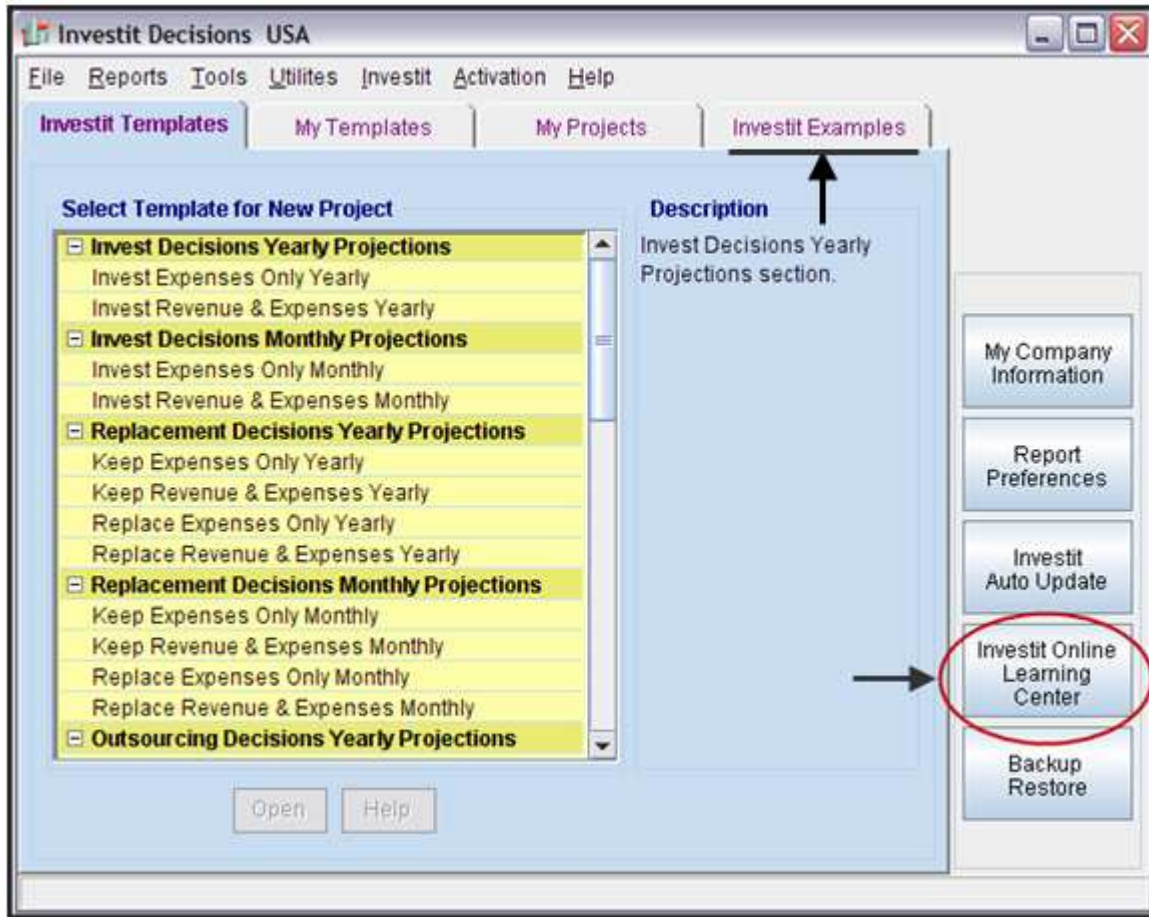
The Investit Panel provides quick access to;

1. Investit Auto Update
2. Company Information
3. Report Preferences
4. Investit Online Learning Center
5. Utilities such as Back Up and Restore



## Investit Decisions Online Learning Center

To help you learn how to use Investit Decisions quickly go to the Investit Online Learning Center by clicking on the "Investit Online Learning Center" button on the Investit Panel.



Following is the Investit Online Learning Center



The **Online Learning Center** consists of the following sections;

1. **Instruction Manuals** explaining how to use Investit Decisions. You are currently viewing an Investit Instruction Manual.
2. **Examples** which show the step-by-step examples on how to enter the Investit examples. This is a great way to learn Investit Decisions.
3. **Resources** contains articles on investment analysis and other topics.

## Auto Update

Investit continually adds new reports, graphs templates and features. Auto Update allows you to download the latest updates.

If you are connected to the web, and using Investit Decisions, you will be notified that an update is available and the text on the Auto Update date button will turn red when an Update is available.

## Setting up Company Information & selecting Report Preferences

Before you start entering projects you should:

1. Set up the information on your company in 'My Company Information'
2. Select your 'Report Preferences'

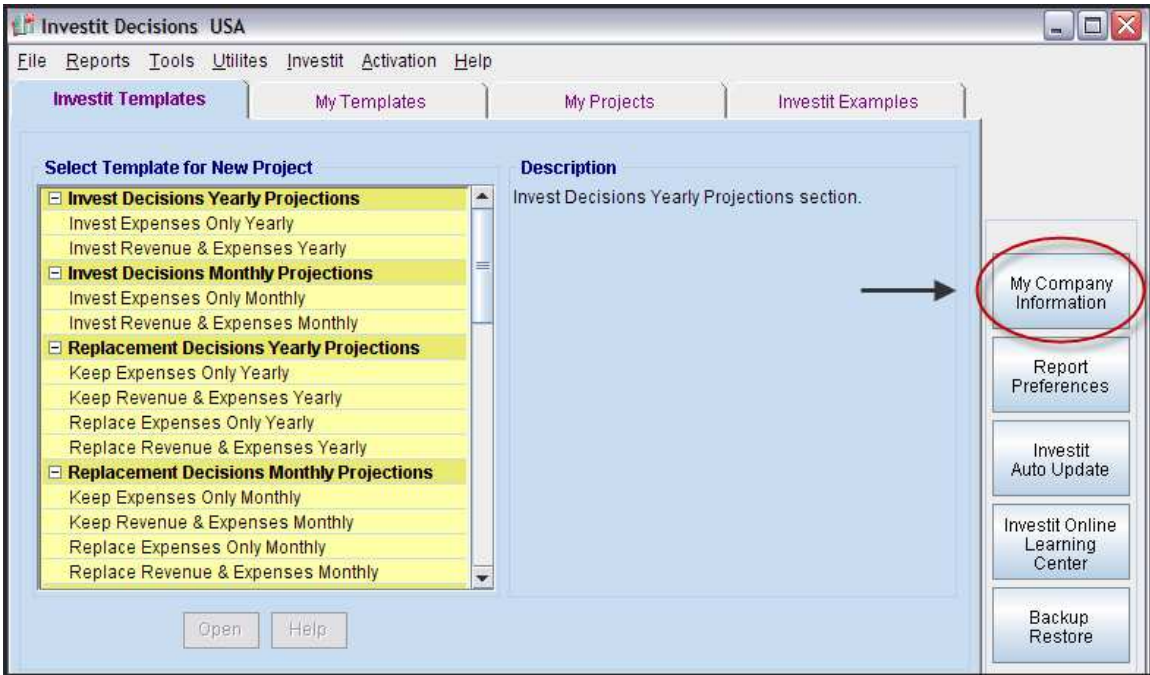
## Steps

1. Enter your company and personal information
2. Select your "Report Preferences"

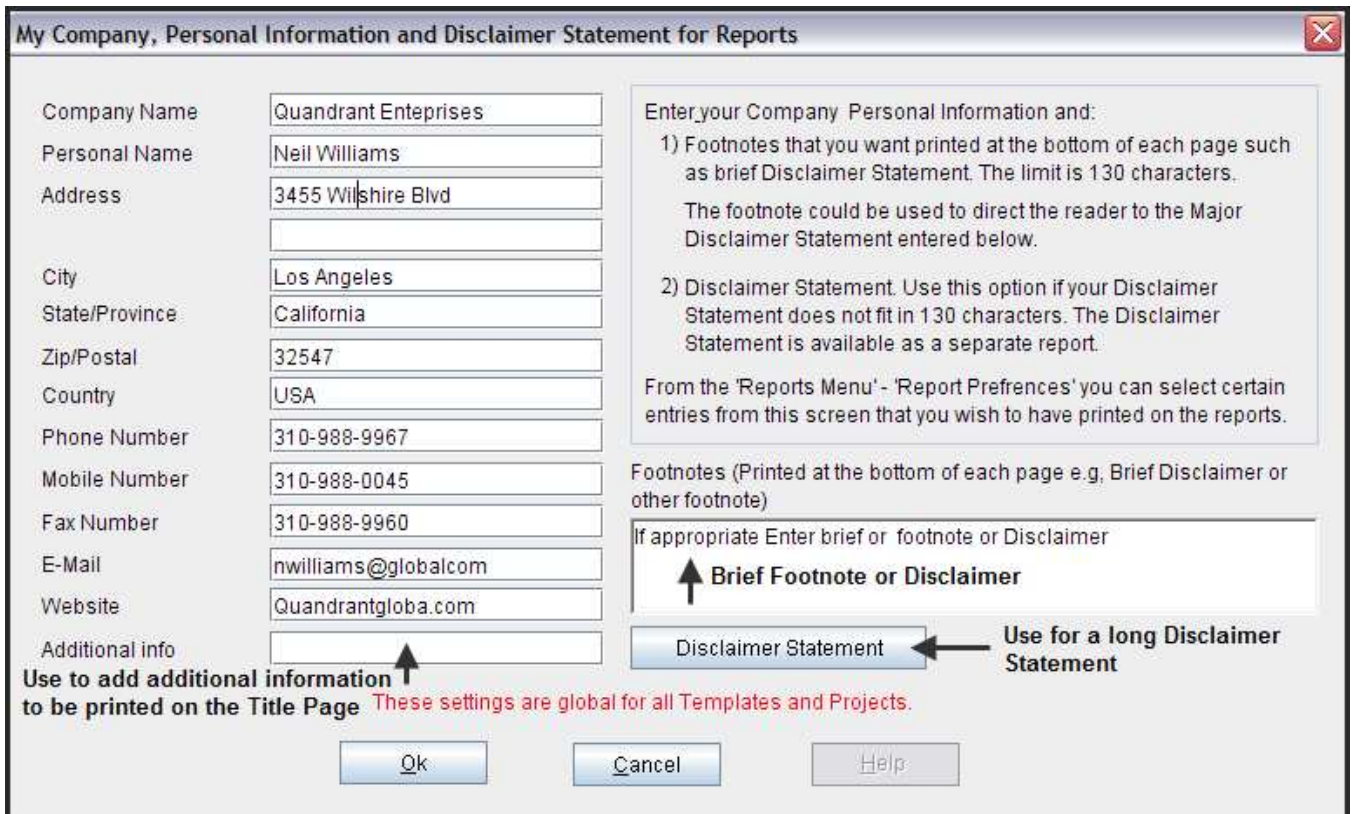




1. Open Investit Decisions
2. Click on 'My Company Information' button on the Investit Decisions panel



3. Enter your company, personal information and a Footnote or Disclaimer Statement if appropriate

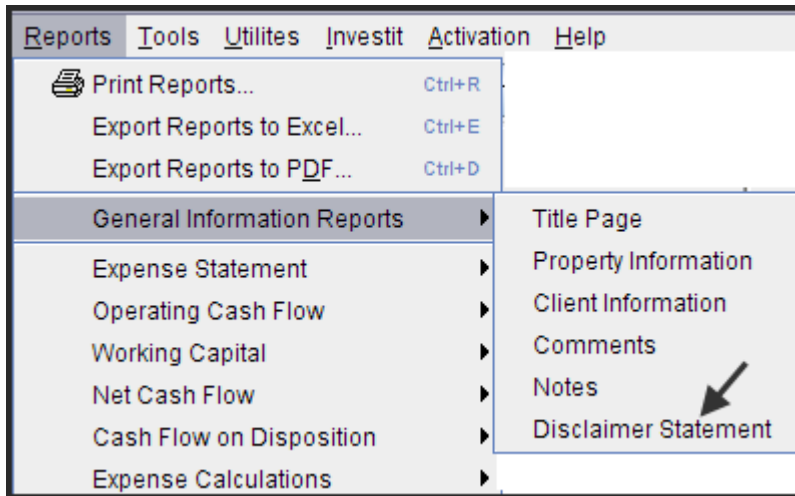




## Setting up a Disclaimer Statement or Footnote

There are two Disclaimer Statement options;

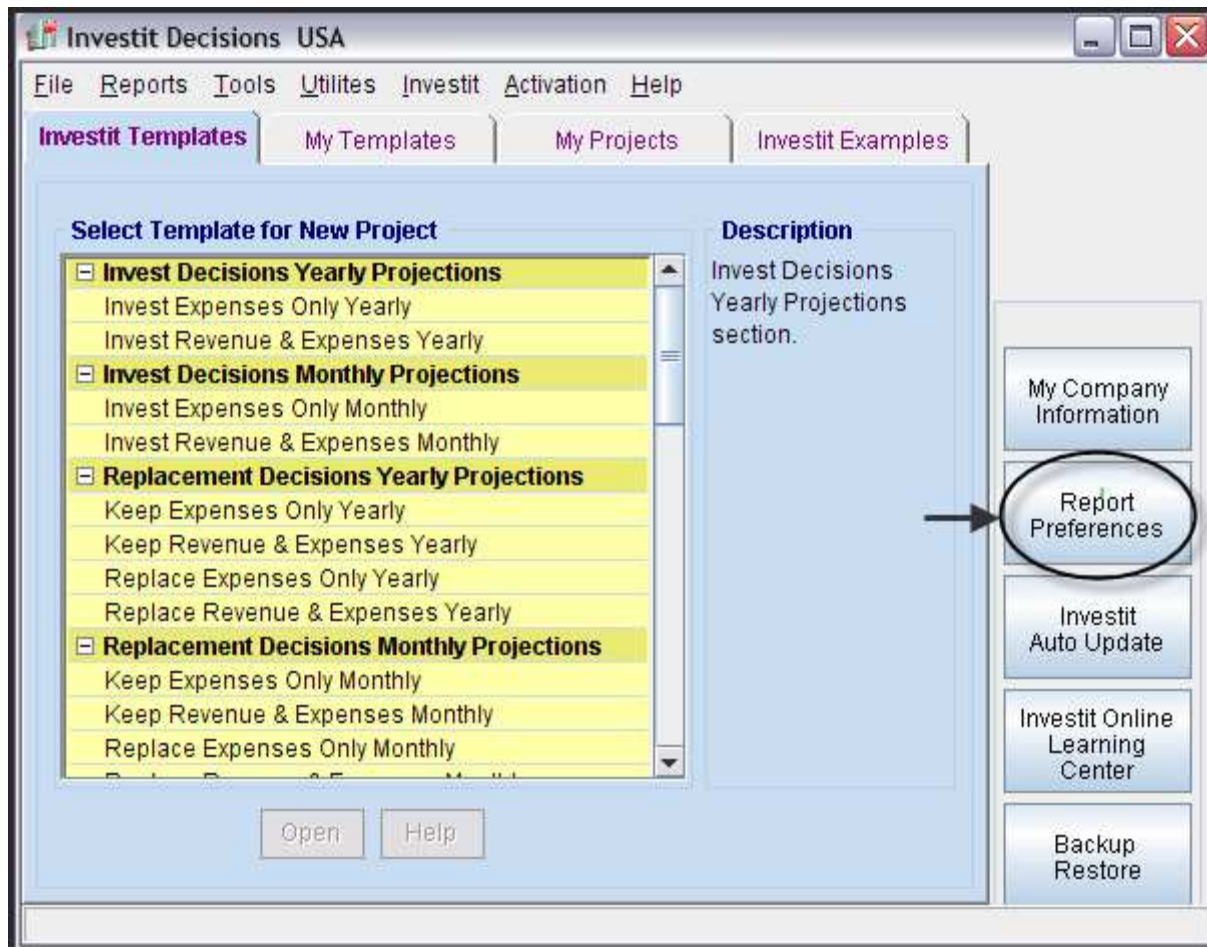
- 1. Brief Disclaimer Statement or footnote** that is printed at the bottom of each page. Enter this type of Disclaimer Statement in the My Company Information dialog screen. The footnote Disclaimer Statement is limited to 130 characters. See example below
- 2. Expanded Disclaimer Statement** that is printed as a separate report from the Report Menu. Use this if your Disclaimer Statement is longer than 130 characters. Click on the Disclaimer Statement button and enter your Disclaimer Statement in the Disclaimer Statement dialog screen. The Disclaimer Statement can then be printed from the **Report Menu**



A common approach with Disclaimer Statements is to use the brief Footnote Disclaimer Statement to direct the reader to the expanded Disclaimer Statement, which is separately attached to the presentation package.

## Selecting Report Preferences

Use Report Preferences to select what information you require to be printed on the reports and your preferred font. Report Preferences can be accessed from the Investit Panel or from the Report Menu after selecting and opening a Template.



Report Preferences allow you to select the company and personal information to be printed on:

- The Title Page
- All Reports

and allows you to select your preferred Font.

As an example, you may elect to print your company's name, telephone number but not the address.

1. Click on 'Report Preferences' on the Investit Decisions
2. Select the appropriate folder tab and check the information you wish to include in the 'Title Page' and 'All Reports'
3. Select the desired Fonts on the Fonts tab

Report preferences selection dialog

**Entry and Report Preferences**

**Title Page** | All Reports | Fonts

Show Today's Date

**Show Property Information**

- Project Name
- Project Description
- Address

**Show My Company Information**

- Company Name
- Personal Name
- Address
- Phone Number
- Mobile Number
- Fax Number
- E-Mail
- Web Site
- Additional Information

Show Footnotes (e.g., Brief Disclaimer or other footnotes)

To change the 'Footnotes' go to 'Edit' menu and select 'My Company Information'

**Annotations:**

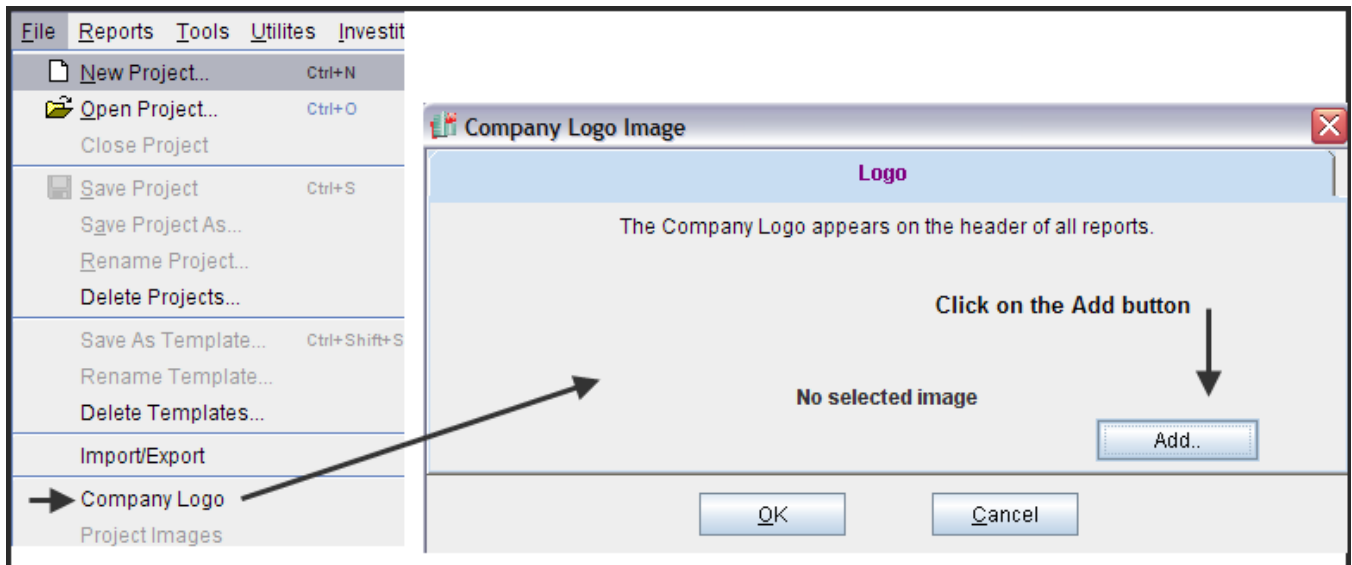
- ↑ Select preferred font (points to Fonts tab)
- ↑ Select what you want to show on the Reports (points to Additional Information in All Reports tab)
- ← Select what you want to show on the Title Page (points to Fax Number)

## Importing a logo

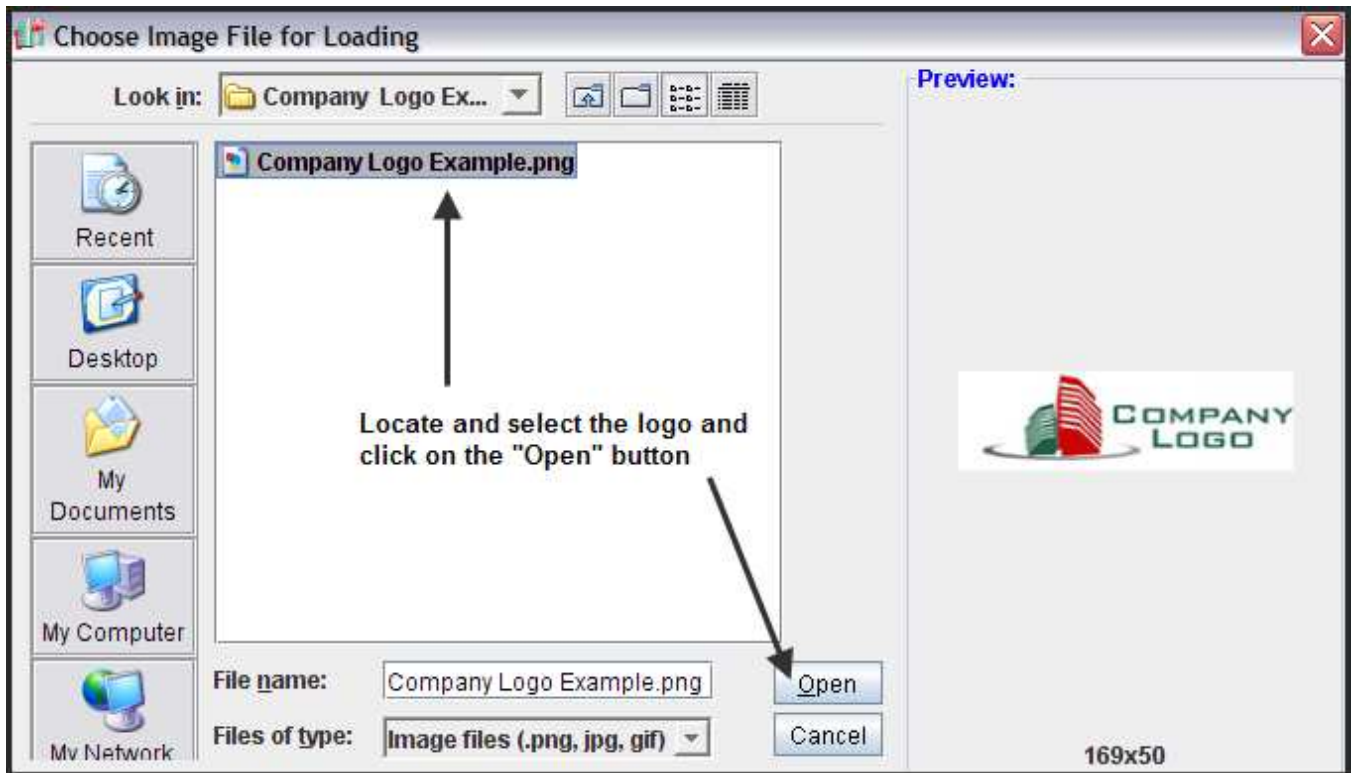
Following are the steps for importing your company logo. Acceptable file formats are;

.png .jpg .gif

1. Select "Company Logo" on the File Menu then click on the "Add" button



2. Locate and select the logo and click on the "Open" button

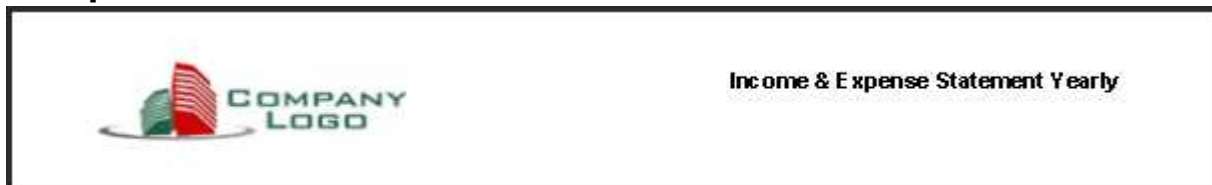


3. Click on the "Ok" button



The company logo is now displayed on all reports

### Example



## STARTING A PROJECT, SAVING, VIEWING REPORTS & EXPORTING TO EXCEL & PDF

The steps involved in carrying out an analysis are;

1. Open Investit Decisions
2. Select and open the appropriate template
3. Enter the data in the Folders
4. Save the Project
5. View or Print the reports
6. Reports can be exported to Excel or PDF

Open Investit Decisions and select and open the appropriate template on the Investit Template **list**

Partial list of Investit Decision's templates

Investit Templates	
<b>Select Template for New Project</b>	
<input type="checkbox"/>	<b>Invest Decisions Yearly Projections</b>
	Invest Expenses Only Yearly
	Invest Revenue & Expenses Yearly
<input type="checkbox"/>	<b>Invest Decisions Monthly Projections</b>
	Invest Expenses Only Monthly
	Invest Revenue & Expenses Monthly
<input type="checkbox"/>	<b>Replacement Decisions Yearly Projections</b>
	Keep Expenses Only Yearly
	Keep Revenue & Expenses Yearly
	Replace Expenses Only Yearly
	Replace Revenue & Expenses Yearly
<input type="checkbox"/>	<b>Replacement Decisions Monthly Projections</b>
	Keep Expenses Only Monthly
	Keep Revenue & Expenses Monthly
	Replace Expenses Only Monthly
	Replace Revenue & Expenses Monthly
<input type="checkbox"/>	<b>Outsourcing Decisions Yearly Projections</b>

1. Enter the data in the Folders

The analysis is carried out by selecting a folder and entering the data in the folder.

An example of the information entered in the Investor Folder

The screenshot shows the 'Investit Decisions USA - Untitled Project' application window. The menu bar includes File, Edit, Reports, Tools, Utilites, Investit, Activation, and Help. Below the menu bar is a toolbar with icons for file operations and buttons for 'My Company Info.', 'Client Info.', and 'Notes'. A tabbed interface is visible with tabs for 'Project Info.', 'Investor' (selected), 'Investment', 'Working Capital', 'Expenses', 'Revenue', 'Financing', and 'Salvage Value'. A large double-headed arrow spans the width of the main area with the text 'Enter data into the Folders' centered above it. The 'Investor' tab is active and contains the following data entry fields:

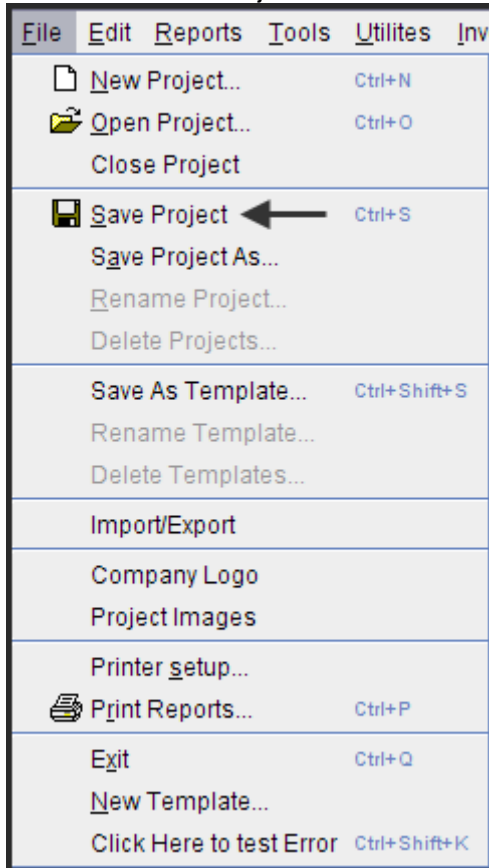
- Turn off Tax Calculations
- Tax Rate**
  - Investor's Marginal Tax Rate: 35.00%
  - Capital Gain Tax Rate: 35.00%
  - Recaptured Depreciation Tax Rate: 35.00%
- Discount Rate or Desired Return on Investment**
  - Before Tax: 0.00%
  - After Tax: 0.00%
- Short Term Rates**
  - Before Tax**
    - Financing Rate: 0.000%
    - Reinvestment Rate: 0.000%
  - After Tax**
    - Financing Rate: 0.000%
    - Reinvestment Rate: 0.000%
- Display Yearly Income Tax Adjustment Grid
- Comments

2. Save the Project

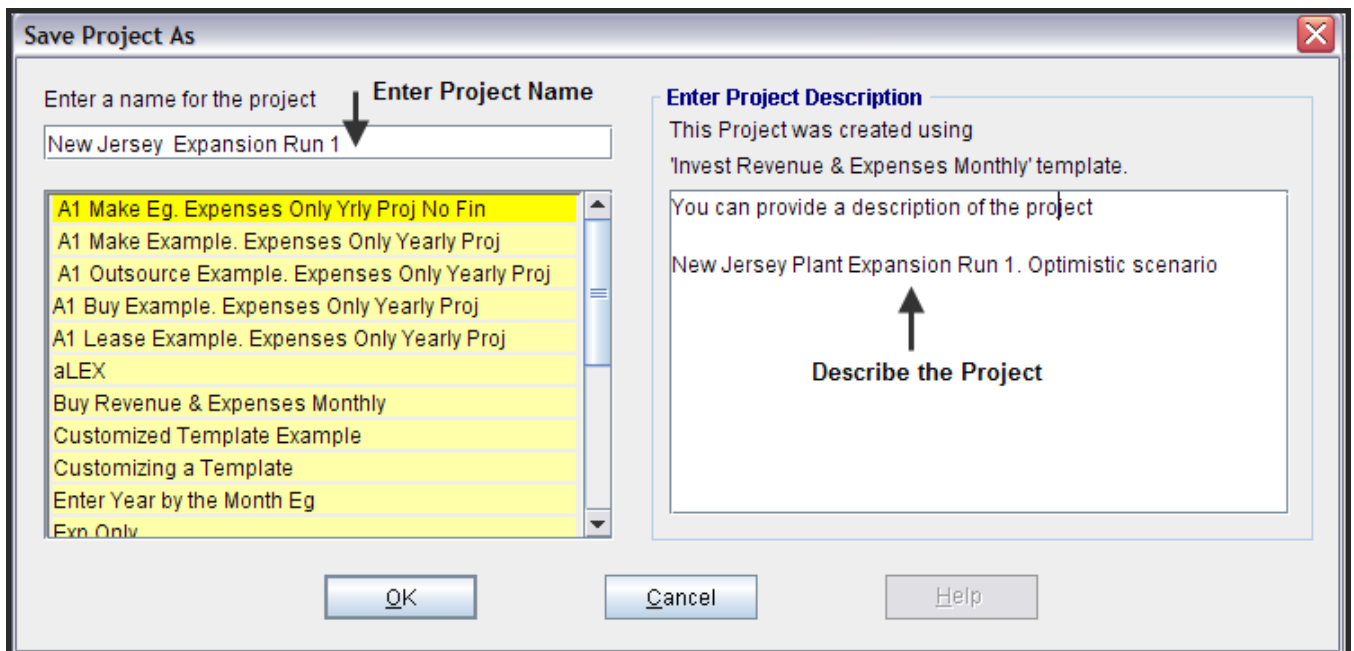
Once you start a project and start entering data, use “Save” to give the project a name and save the project

**Saving a Project**

1. Select “Save Project” from the File Menu



2. Give the project a name and save. You can also enter a description of the project





**Using “Save As” to create scenarios**

You may wish to run different scenarios for the project. As an example;

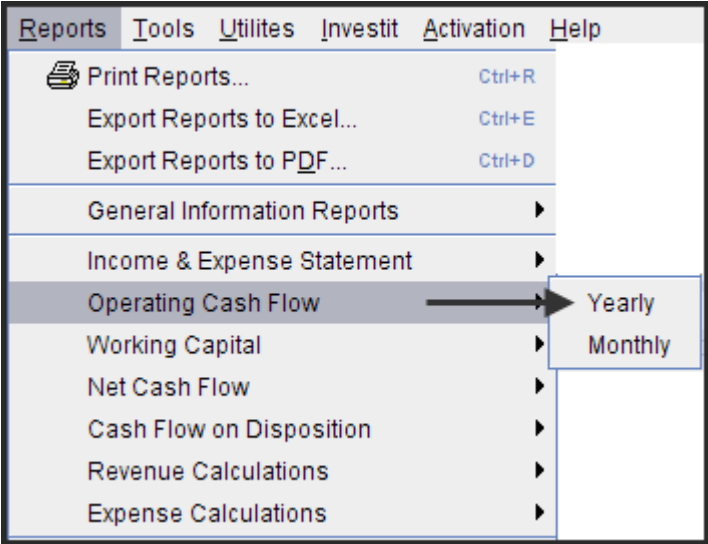
- Optimistic Forecast. Run 1.
- Medium Forecast. Run 2
- Pessimistic Forecast Run 3

1. Use “Save As” to create a duplicate project with a new project name
2. Make the desired changes
3. Save using “Save As”

**Viewing Reports**

Once the data is entered you can view a Report or Graph from the Reports Menu and then print or export to Excel or to PDF.

Following is an example of the “Operating Cash Flow Yearly” report. The report was selected from the report menu.

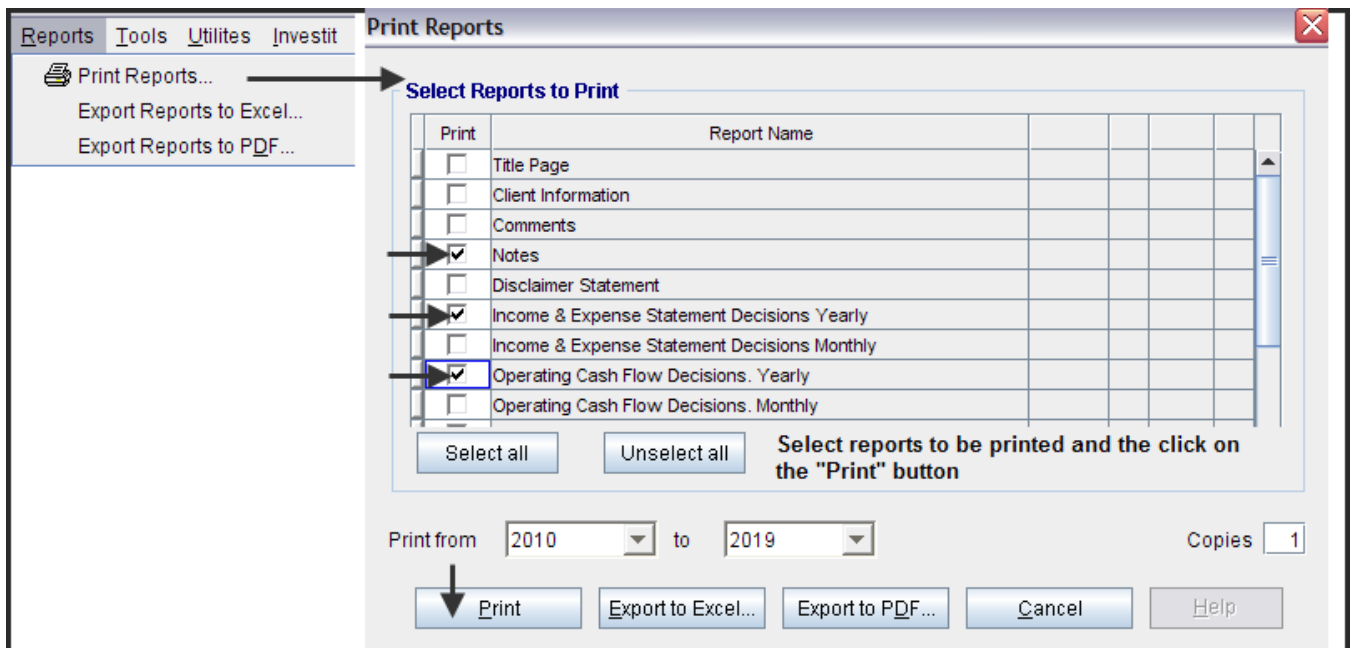


### Example. Operating Cash Flow Report Yearly

<b>Operating Cash Flow Yearly</b>						
New Jersey \$11M Expansion						
Increased production for Product's A & B						
Starting March	<b>2010</b>	<b>2011</b>	<b>2012</b>	<b>2013</b>	<b>2014</b>	<b>2015</b>
<b>CASH FLOW BEFORE TAX</b>						
Revenue	6,300,000	8,482,320	9,168,576	10,049,448	10,917,540	11,895,804
Expenses	5,496,000	6,857,232	7,322,539	7,913,881	8,499,767	9,154,046
Net Income	<b>804,000</b>	<b>1,625,088</b>	<b>1,846,037</b>	<b>2,135,567</b>	<b>2,417,773</b>	<b>2,741,758</b>
Less: Principle Payments	344,242	369,127	395,811	424,424	455,106	488,006
Interest payments	199,095	174,209	147,525	118,912	88,230	55,331
Working Capital Additions	200,000	-	-	-	-	-
<b>CASH FLOW BEFORE TAX</b>	<b>60,664</b>	<b>1,081,752</b>	<b>1,302,700</b>	<b>1,592,230</b>	<b>1,874,437</b>	<b>2,198,421</b>
Less: Income Tax at 35.00%	(338,283)	(435,049)	(78,990)	224,780	471,733	596,643
<b>CASH FLOW AFTER TAX</b>	<b>398,947</b>	<b>1,516,801</b>	<b>1,381,691</b>	<b>1,367,451</b>	<b>1,402,704</b>	<b>1,601,779</b>
<b>INCOME TAX CALCULATIONS</b>						
Net Income	804,000	1,625,088	1,846,037	2,135,567	2,417,773	2,741,758
Less: Interest Payments	199,095	174,209	147,525	118,912	88,230	55,331
Depreciation & Amortization	1,571,429	2,693,877	1,924,198	1,374,427	981,734	981,734
<b>Taxable Income</b>	<b>(966,524)</b>	<b>(1,242,998)</b>	<b>(225,686)</b>	<b>642,228</b>	<b>1,347,809</b>	<b>1,704,693</b>
<b>Income Tax at 35.00%</b>	<b>(338,283)</b>	<b>(435,049)</b>	<b>(78,990)</b>	<b>224,780</b>	<b>471,733</b>	<b>596,643</b>

### Printing Reports

A group of reports can be selected and printed from the Reports menu as follows;

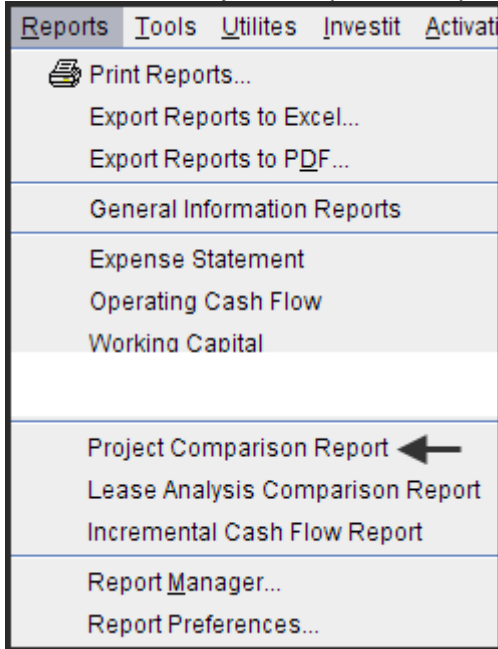


## Project Comparison Report

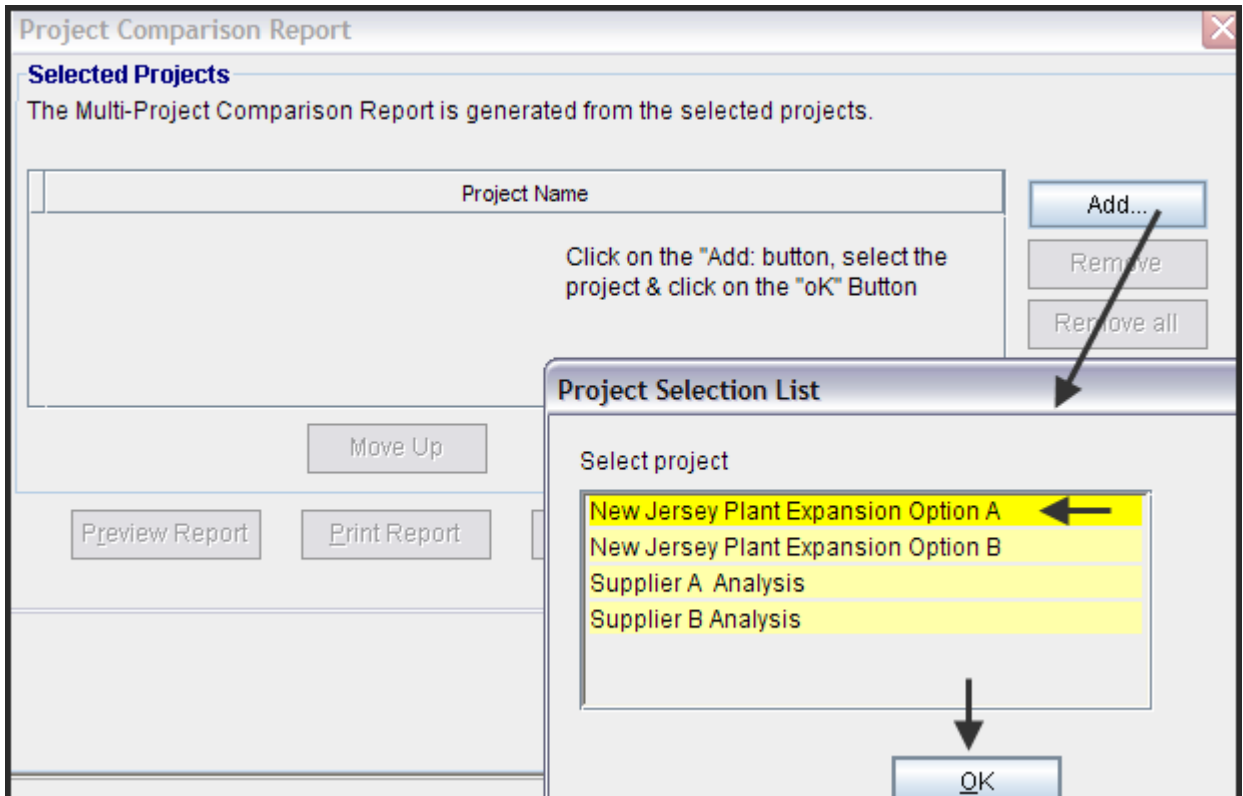
Up to four projects can be compared side by side.

Steps involved in selecting the projects for the Project Comparison Report.

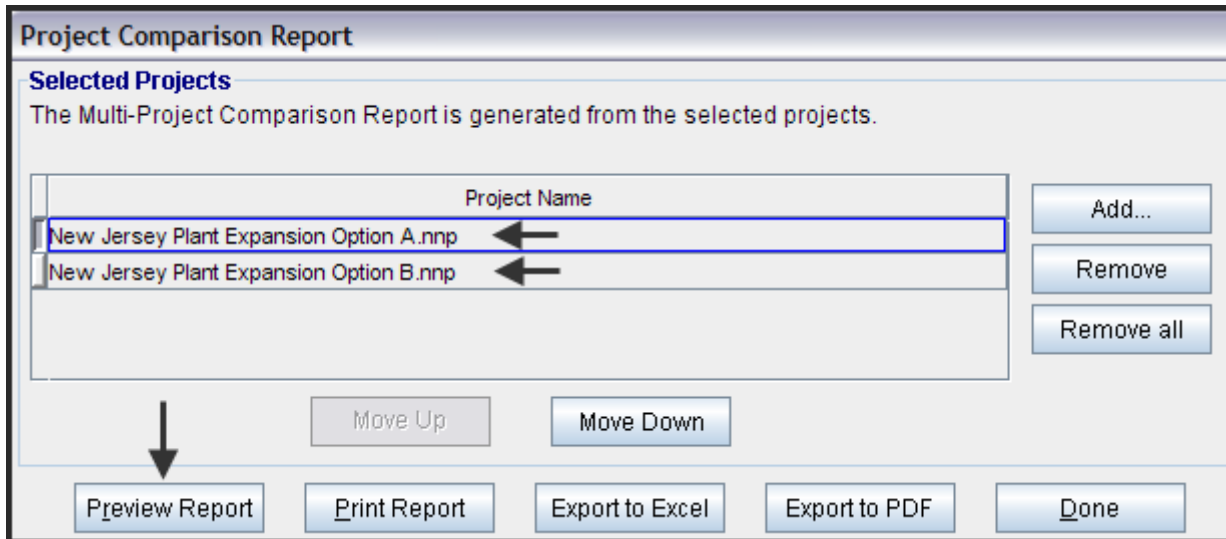
1. Select the Project Comparison Report on the Report menu



2. On the Project Comparison Report dialog click on the "Add" button to display the Report Selection List. Select the Project and click 'Ok' Repeat the process to add another project.



3. The diagram below shows selected projects to be displayed in the “Project Comparison Report”



## Sample Project Comparison Report

<b>Project Comparison Report (Before Tax)</b>			
Net Cash Flow( Before Tax)			
		New Jersey Plant Expansion Option B	New Jersey Plant Expansion Option A
Year	0	(12,260,000)	(8,200,000)
	1	140,524	60,664
	2	1,313,054	1,081,752
	3	1,594,339	1,302,700
	4	1,950,658	1,592,230
	5	2,302,442	1,874,437
	6	2,702,670	2,198,421
	7	3,177,436	2,575,515
	8	4,241,409	3,547,184
	9	4,794,616	3,988,114
	10	6,294,120	5,155,488
	<b>Total</b>	<b>16,251,268</b>	<b>15,176,505</b>
Financial Return Before Tax			
Internal Rate of Return ( IRR)		➔ 13.20%	➔ 16.84%
MIRR		9.58%	11.83%
Short term financing rate		7.000%	7.000%
Short term reinvestment rate		2.500%	2.500%
Net Present Value (NPV)		➔ \$ 868,317 at 12.00%	➔ \$ 2,528,815 at 12.00%
Annual Equivalency		\$ 153,678 at 12.00%	\$ 447,560 at 12.00%
Benefit to Cost Ratio		1.03 at 12.00%	1.19 at 12.00%
Payback Period (Years)		1.03	1.19
Discounted Pay Back Period (Years)		9.57 at 12.00%	8.40 at 12.00%

### Interpretation and Decision

The organizations minimum acceptable return (IRR) is 12.00% before tax.

On initial inspection it appears that both options A & B exceed the desired return (IRR) of 12.00% and they should proceed with Option B and invest the \$12,260,000. This conclusion is incorrect.

They should choose the option that;

1. Provides the highest Net Present Value
2. The highest Benefit to Cost Ratio

Which is Option A the \$8,200,000 investment.

This can be clearly seen using Incremental Cash Flow Report

## Incremental Cash Flow Report

The Incremental Cash Report allows one project to be subtracted from another to generate the incremental cash flow. Up to 4 projects can be added and subtracted.

As an example, an organization is considering expanding their New Jersey Plant and has two options. Option A is to invest \$8,200,000 and increase the sales of Products A & B. Option B is to invest \$12,260,000 and increase the sales of products A & B plus add a new product Z.

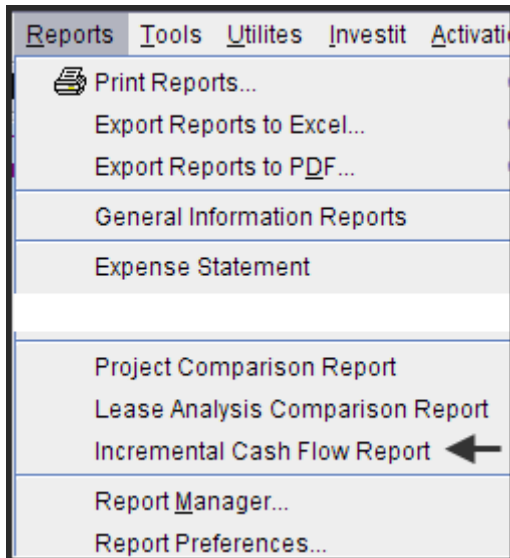
This is called a “Mutually Exclusive Investment” The organization can invest \$8,200,000 for option A or \$12,260,000 for Option B but cannot invest in both Option A and B.

The question is “What is the return on the additional \$4,060,000 required for Option B and is the return (IRR) acceptable? This is called “Incremental Cash Flow Analysis”.

**TIP.** Always select the largest investment first for the Incremental Cash Flow Report. In this example select Option B for \$12,260,000 first, and then subtract Option A the \$8,200,000 investment as follow..

Steps

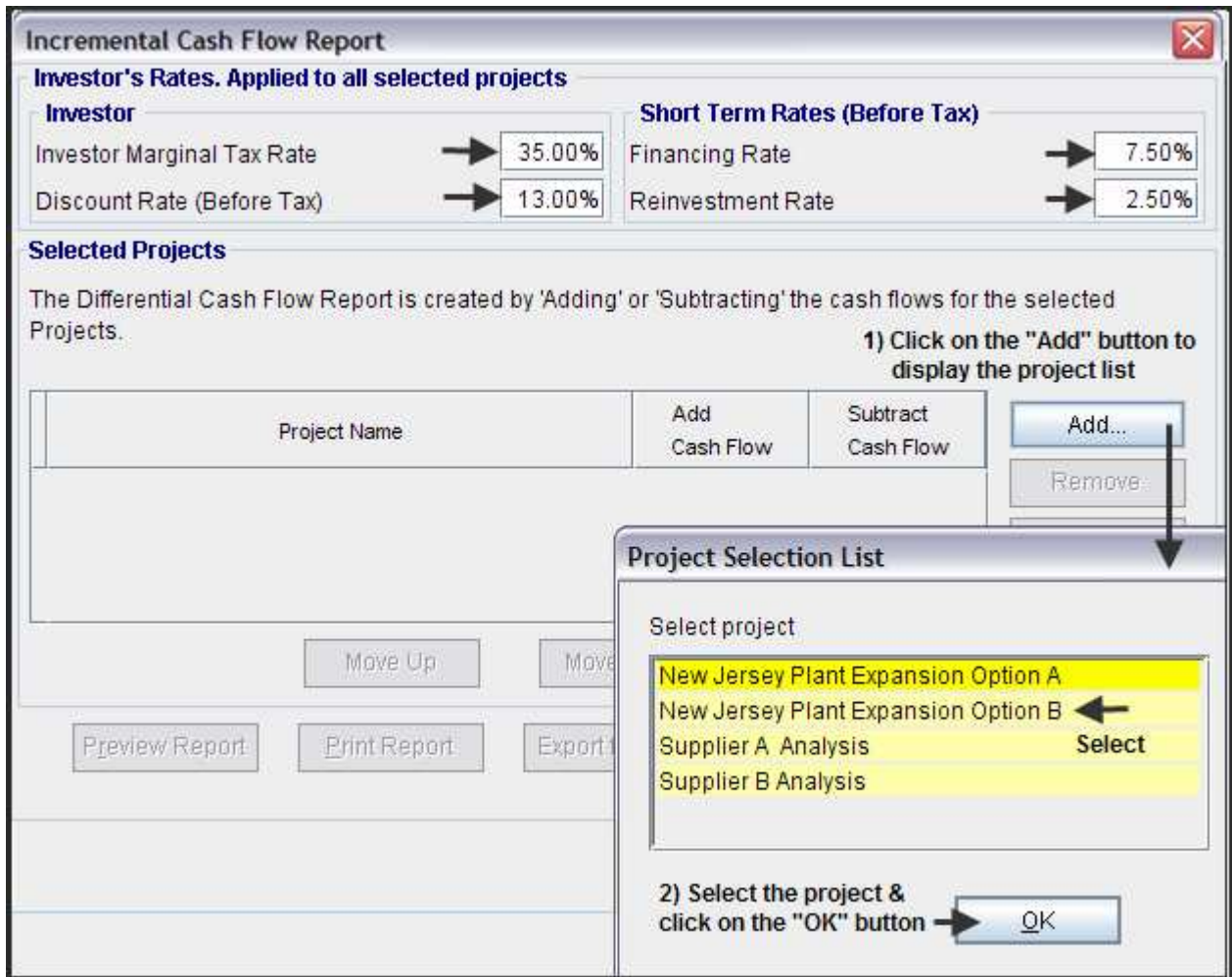
Select the Incremental Cash Flow on the Report menu



Enter;

Investor's Marginal Tax Rate  
Discount Rate  
Short Term Rates

On the "Incremental Cash Flow Report" dialog click on the "Add" button to display the Report Selection List. Select the Project and click 'OK'. Repeat the process to add another project. The Option B project was selected first because its investment of \$12,260,000 is larger than the \$8,200,000 investment for Option A.



The selected projects for the Incremental Cash Flow Report are:

**Investor's Rates. Applied to all selected projects**

Investor		Short Term Rates (Before Tax)	
Investor Marginal Tax Rate	35.00%	Financing Rate	8.00%
Discount Rate (Before Tax)	13.00%	Reinvestment Rate	2.50%

**Selected Projects**

The Incremental Cash Flow Report is created by 'Adding' or 'Subtracting' the cash flows for the selected Projects.

Project Name	Add Cash Flow	Subtract Cash Flow
New Jersey Plant Expansion Option B.nnp	<input checked="" type="radio"/>	<input type="radio"/>
New Jersey Plant Expansion Option A.nnp	<input type="radio"/>	<input checked="" type="radio"/>

**The Net Cash Flow for Option A will be subtracted from the Net Cash Flow for Option B**

Buttons: Add..., Remove, Remove all, Move Up, Move Down

Buttons: Preview Report, Print Report, Export to Excel, Export to PDF, Done

Click on the "Preview Report" button to display the "Incremental Cash Flow Report"



<b>Incremental Cash Flow Report (Before Tax)</b>			
<b>The Net Cash Flow for Option A is subtracted from the Net Cash Flow for Option B to give the "Incremental Cash Flow"</b>			
Net Cash Flow (Before Tax)			
↓			
	Plus	Minus	Incremental
	New Jersey Plant Expansion Option B	New Jersey Plant Expansion Option A	Net Cash Flow (Before Tax)
Year 0	(12,260,000)	(8,200,000)	(4,060,000)
1	140,524	60,664	79,860
2	1,313,054	1,081,752	231,303
3	1,594,339	1,302,700	291,639
4	1,950,658	1,592,230	358,427
5	2,302,442	1,874,437	428,006
6	2,702,670	2,198,421	504,248
7	3,177,436	2,575,515	601,921
8	4,241,409	3,547,194	694,225
9	4,794,616	3,988,114	806,502
10	6,294,120	5,155,488	1,138,632
Total	16,251,268	15,176,505	1,074,763
<b>Before Tax Financial Return</b>			
Internal Rate of Return (IRR)	→ 13.20%	→ 16.84%	→ 3.42%
Net Present Value (NPV) at 13.00%	\$ 138,099	\$ 1,928,935	(\$ 1,790,836)
Modified Internal Rate of Return (MIRR)	9.58%	11.83%	3.13%
Short term financing rate	8.00%	8.00%	8.00%
Short term reinvestment rate	2.50%	2.50%	2.50%
Annual Equivalency at 13.00%	\$ 25,460	\$ 355,483	(\$ 330,032)
Benefit to Cost Ratio at 13.00%	0.98	1.13	N/A
Payback Period	6.71 years	6.03 years	9.06 years
Discounted Pay Back Period at 13.00%	9.93 years	8.69 years	N/A

**Interpretation and conclusion**

If the organization's minimum acceptable rate of return (IRR) is 13.00%, both Option A and Option B seem to be acceptable because they both provide a return (IRR) higher than 13.00%.

However, the return (IRR) on the incremental investment of \$4,060,000 for Option B is 3.42% which is far below the minimum acceptable value of 13.00%. In this case Option B should be rejected and Option A accepted.

The other approach is to select the project with the highest Net Present Value (NPV) which is Option A

Both the 'Incremental Cash Flow' approach or choosing the option with the highest Net Present Value (NPV) will result in the same choice when dealing with mutually exclusive investments.

## Exporting Projects to Excel or PDF

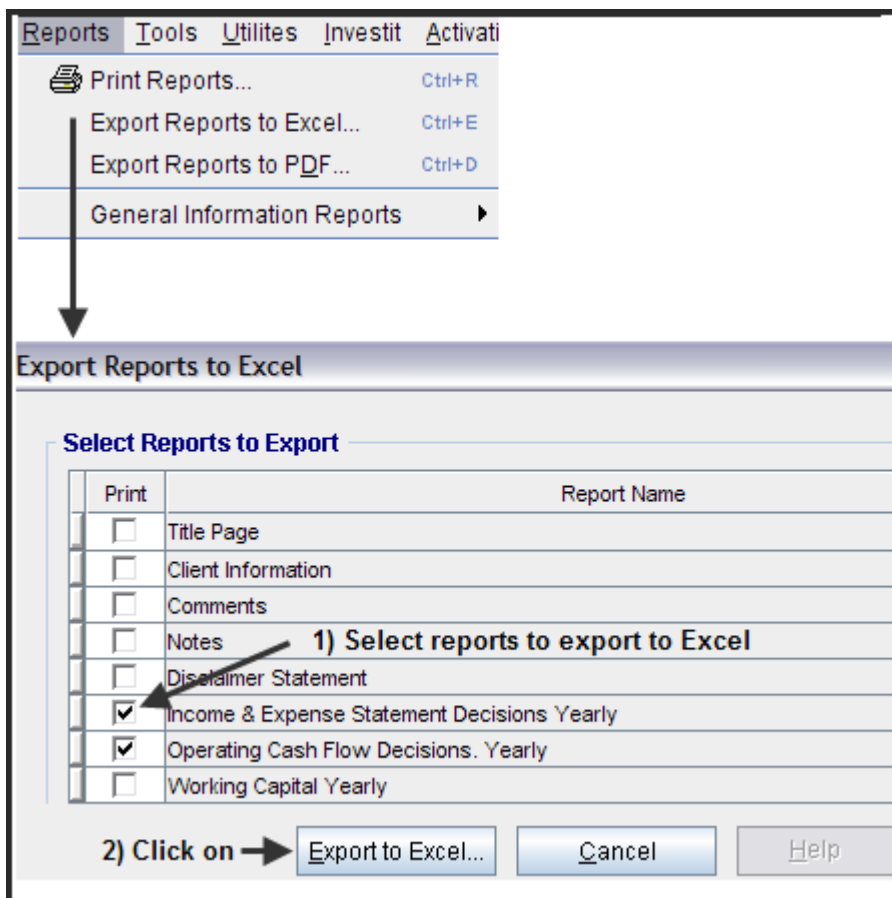
Exporting Reports to MS Excel allows customization of the reports or the application of additional calculations.

**Note:** Exported Reports contain the results not the formulas.

The Excel or PDF report files can be sent as e-mail attachments for others to view and print out the reports.

The selected reports can be quickly exported to Excel or PDF as follows;

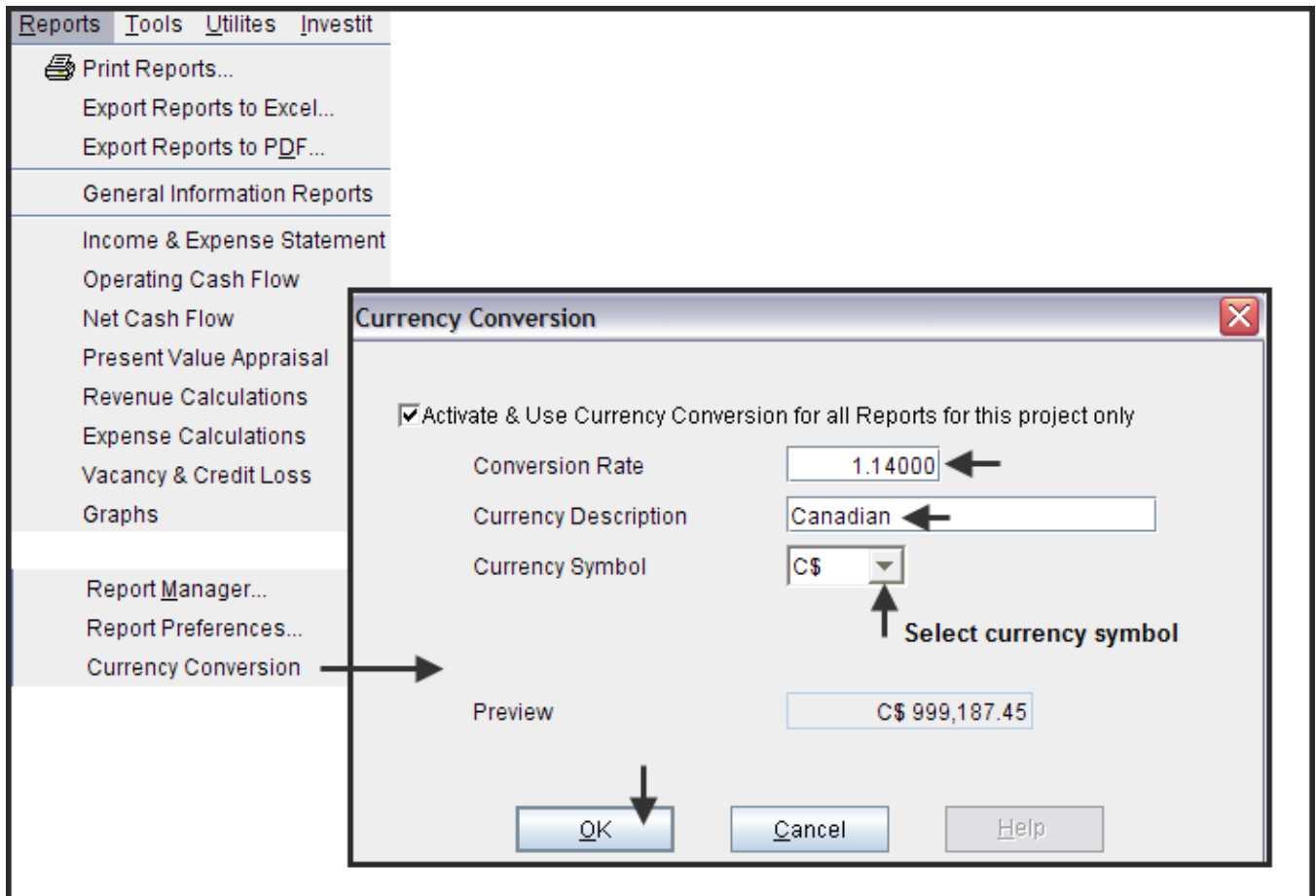
1. Select on the Reports menu either "Export Reports to Excel" or "Export Reports to PDF" then select the reports to be exported and click on the Export button and follow the instructions.
2. Name and save the file on the desktop or select a folder using the Window's browser
3. You can now e-mail the Excel or PDF file.



## Currency Conversion

Enables reports to be converted to another currency.

1. Select "Currency Conversion" from the Report Menu and complete the currency conversion screen
2. Enter;
  - The Conversion Rate
  - Currency Description
  - Select the currency symbol



Example report showing the conversion from USD to Canadian dollars

The example report displays the following data:

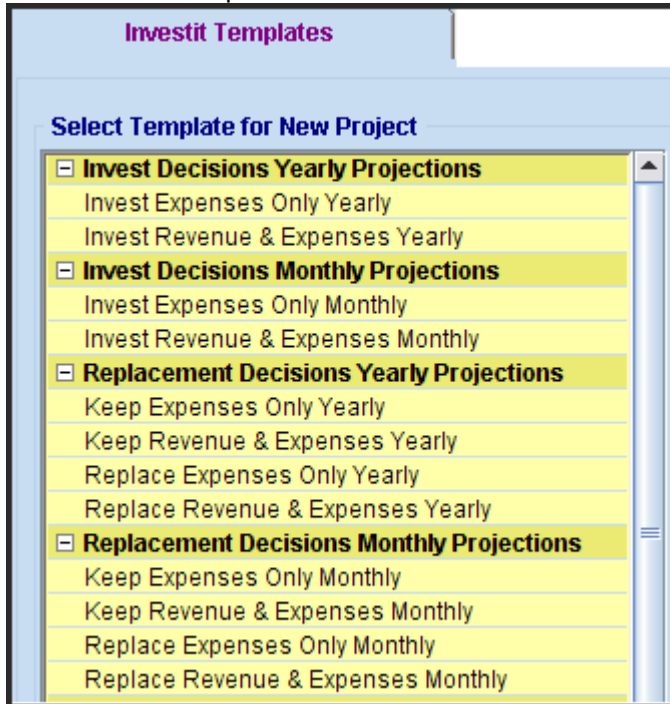
Currency: C\$  
Conversion Rate 1.13

Year	Investment	Borrow	Financing Paid Back	Operating Cash Flow (Before Tax)
Year 1 Jan-Year 1 Dec	C\$ (3,084,900)	C\$ 1,921,000	-	C\$ 39,427
Year 2 Jan-Year 2 Dec	-	-	-	75,534
Year 3 Jan-Year 3 Dec	-	-	-	80,942

## Selecting a template

The first step in starting a project is to select the appropriate template for your analysis.

Partial List of Templates



## Criteria for selecting a template

In choosing a template, there are three considerations that affect the template choice;

1. What type of decision are you making? E.g. Replacement Decisions (Keep or Replace)
2. Do you want to project revenues and expense monthly or yearly?
3. Does the analysis involve "Revenue & Expenses" or only "Expenses"

## Types of Investit Decisions

Investit Decisions offers the following analysis;

1. Investment Analysis
2. Replacement Decisions. Keep or Replace?
3. Outsourcing Decisions. Make or Buy?
4. Buy or Lease?

## **Yearly versus Monthly Templates**

There are two ways to project revenues and expenses

1. Yearly
2. Monthly

Yearly Templates: Revenues and Expenses are projected yearly

Monthly Templates: Revenues and Expenses are projected monthly

Yearly templates are faster to use than monthly templates.

Select a monthly template if;

1. Revenue and expenses change during the year
2. Detailed monthly cash flows are required
3. Sales or expenses are seasonal and depend on the time of the year and require monthly entries and projections

## **Expenses Only versus Revenue and Expense Templates**

The third consideration in choosing a template is whether there is a need to enter revenues (or cost savings) as well as expenses

Revenues are generally not relevant for the following types of analysis. Generally choose a template with "Expenses Only" for;

Replacement Decisions. Keep or Replace?  
Outsourcing Decisions. Make or Buy?  
Buy or Lease

Investments can be classified as "Service Projects" or "Revenue Projects"

### **Service Projects:**

Revenue is not dependant on the choice of the investment.

Example: An organization's revenue is not affected if they decide to lease instead of buy a photocopier.

### **Revenue Projects:**

Projects where the revenues generated depend on the investment choice.

Example: Investing in new plant and equipment to produce and market a new product line which generates increased revenue.

Occasionally there is a need to choose a templates with “Revenue and Expenses” if there a revenue or cost savings involved for following templates;

Replacement Decisions. Keep or Replace?  
Outsourcing Decisions. Make or Buy?  
Buy or Lease

#### Examples

1. An organization is evaluating whether to make a component or outsource. If they outsource they can sublease the excess space in their building which will generate additional revenues. In this case, they would select the “Outsource Revenue and Expenses” template instead of the “Outsource Expenses Only” template
2. An organization is exploring ways to reduce their energy cost and is considering replacing all the internal and external lights with more efficient, longer lasting lights. They would use a Replacement template with Revenue and Expenses because of the energy cost savings generated by the more efficient and longer lasting light bulbs. The cost savings are treated as revenue.

## Invest (Investment Analysis) templates

1. If the investment incurs operating costs but does not affect revenues, choose an “Expenses Only” template

Example.

An organization needs to install equipment to reduce carbon emissions and is evaluating several different equipment suppliers. The decision involves investment, installation and operating expenses.

The decision does not affect the organizations revenues. They would use an “Invest Expenses Only template” because there are no revenue or cost savings involved.

2. If the investment generate revenues or cost savings, choose a “Revenue & Expenses” template

Example.

An organization is considering increasing revenues by investing in new plant and equipment to develop a new product line.

In this case they would use the “Invest Revenue & Expenses” yearly or monthly template.

## ENTERING A PROJECT

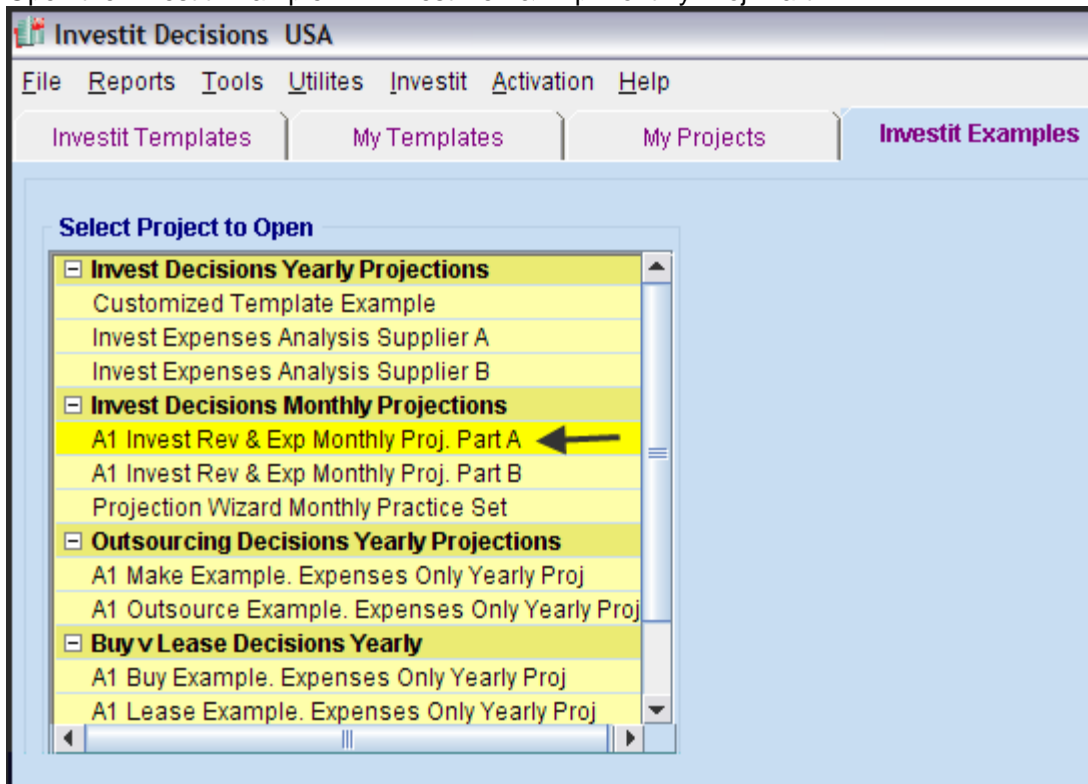
### Introduction

This section illustrates the basic steps involved in entering a project using the Invest Decisions Monthly Template and the example Investit Example “A1 Invest Rev & Exp Monthly Proj. Part A”

The step by step instructions for entering this example is available from the Investit Online Learning Centre. Select “Investment Analysis Monthly”



Open the Investit Example “A1 Invest Rev & Exp Monthly Proj. Part A



The process is to select each Folder and enter the data working from left to right.





## PROJECT INFO. FOLDER

Enter the Project Name and Description

You can change the "Analysis Time Period" the "Starting Date" and "Date Format" which is explained below.

Project Info.	Investor	Investment	Working Capital	Expenses	Revenue	Financing	Salvage Value
<b>Report Headers</b>							
Project Name	New Jersey \$11M Expansion						
Project Description	Increased production for Product's A & B						
<b>Analysis Time Period</b>							
10	Years	Change Analysis Time Period					
<b>Entry Information</b>							
Enter Revenue and Expenses	Monthly	Change Entry Information					
Starting Date	March 2010						

## Changing the Analysis Time Period

You can increase or decrease the Analysis Time Period

**TIP.** If you are considering analyzing an investment over different time periods, create the analysis with the longest time period first because it is far easier to reduce the time period than increase the time period.

Example.

An organization is analyzing an investment opportunity and wants to carry out a 7 year and 10 year analysis

They would create the 10 year analysis first, and then change the Analysis Time Period from 10 years to 7 years and save using "Save As"

If the 7 year analysis is created first, all the revenues and expenses will have to be projected from Year 7 to Year 10. This involves additional work compared to changing the time period from 10 to 7 years.

Changing the Analysis Time Period

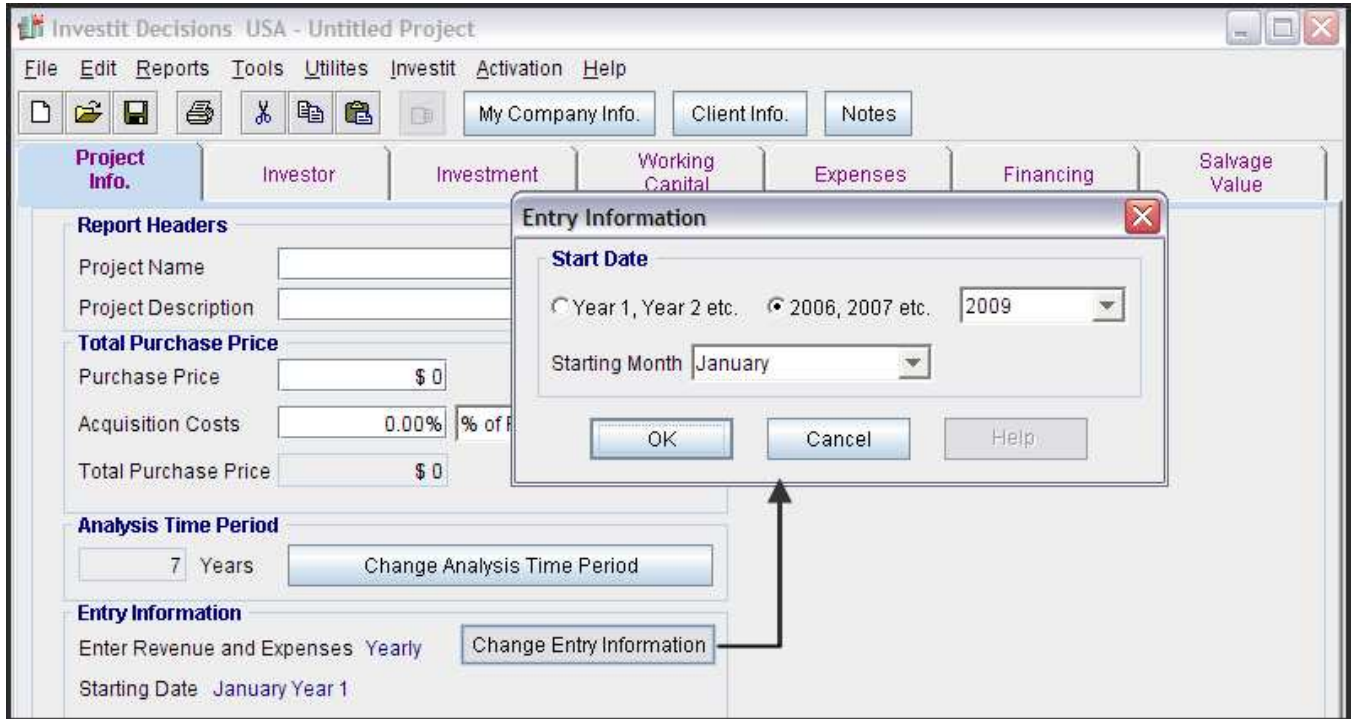


## Changing the Starting Date and Date Format

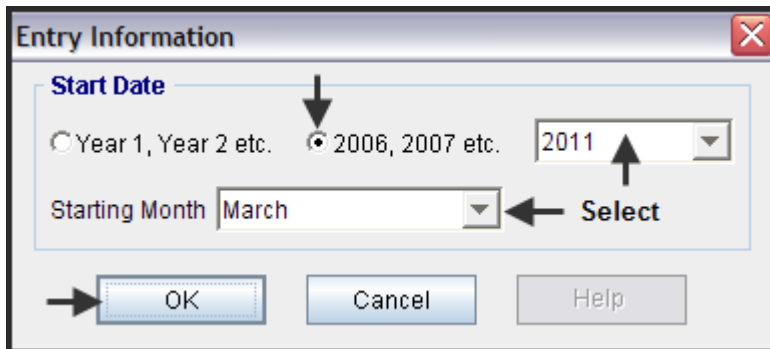
There are two formats for the Starting Date;

1. Year 1 Jan, Year 1 July etc.
2. 2006 Jan, 2006 July etc.

To set the Date format go to the Project Info Folder and click on the "Change Entry Information" Button to display the Date format options



Set the preferred Starting Date and preferred format. As an example;



The "Starting Date" and "Date Format" being used is displayed in the Project Info folder

<b>Entry Information</b>	
Enter Revenue and Expenses <b>Monthly</b>	<input type="button" value="Change Entry Information"/>
Starting Date <b>March 2011</b> ←	

**Notes:**

The Starting Date and Date format appears on the financial reports. As an example;

	→ Starting March	2011	2012	2013
<b>CASH FLOW BEFORE TAX</b>				
Revenue		6,300,000	8,482,320	9,168,576
Expenses		5,496,000	6,857,232	7,322,539
Net Income		<b>804,000</b>	<b>1,625,088</b>	<b>1,846,037</b>

You can change the Starting Date and Date Format at any time and all the reports will adjust to the new Starting Date and Date Format. In the example below the Date Format has been changed from "2011" to the "Year 1" format

	→ Year 1	Year 2	Year 3
<b>CASH FLOW BEFORE TAX</b>			
Revenue	6,300,000	8,482,320	9,168,576
Expenses	5,496,000	6,857,232	7,322,539
Net Income	<b>804,000</b>	<b>1,625,088</b>	<b>1,846,037</b>

## INVESTOR FOLDER

### Entries

Enter the following information;

1. Investor's Marginal Tax Rate, Capital Gain Tax Rate and the Recaptured Depreciation Tax Rate. Normally the three tax rates are the same, but this is not always the case
2. The Investor's Discount Rate or Desired Return on Investment which is used to calculate the Net Present Value, Discounted Payback Period etc.
3. The short term rates for calculating the Modified Internal Rate of Return (MIRR)

Short Term Financing Rate. . If there is a negative cash flow, what would be the short term interest rate to borrow the funds?

Short Term Reinvestment Rate

If there is a positive cash flow what would the short term interest rate be if the funds are invested in a short term bank account?

Investit Decisions USA - A1 Invest Rev & Exp Monthly Proj. Part A

File Edit Reports Tools Utilities Investit Activation Help

My Company Info. Client Info. Notes

Project Info. **Investor** Investment Working Capital Expenses Revenue Financing Salvage Value

Removes the Tax entries for all screens and reports

Turn off Tax Calculations

**Tax Rate**

Investor's Marginal Tax Rate  ←

Capital Gain Tax Rate  ←

Recaptured Depreciation Tax Rate  ←

**Discount Rate or Desired Return on Investment**

Before Tax  ←

After Tax  ←

**Short Term Rates**

**Before Tax**

Financing Rate →

Reinvestment Rate →

**After Tax**

Financing Rate →

Reinvestment Rate →

Display Yearly Income Tax Adjustment Grid ← Allows manual adjustments to the yearly income taxes paid

Comments

### Turn Off Tax Feature

This feature allows you to remove all the tax inputs from the screens and reports

Project Info. **Investor** Investment Working Capital Expenses Revenue Financing Salvage Value

Turn off Tax Calculations

**Discount Rate or Desired Return on Investment**

Before Tax

**Short Term Rates**

**Before Tax**

Financing Rate

Reinvestment Rate

Removes tax calculations from all screens and reports

## Tax Adjustment Grid

Allows manual adjustments to the yearly income taxes paid.

To display the Tax Adjustment Grid click on  Display Yearly Income Tax Adjustment Grid

A positive number increase the income taxes paid for the year

A negative number decreases the income taxes paid for the year

Income Tax Adjustment							
Description	2010 Mar	2011 Mar	2012 Mar	2013 Mar	2014 Mar	2015 Mar	2016 Mar
Income Tax Adjustment	\$ 45,000	\$ 35,000	\$ 0	-\$ 76,000	\$ 0	\$ 0	\$ 0

Increases the tax paid in the year ↑      ↓ Decreases the tax paid in the year

↓

Display Yearly Income Tax Adjustment Grid

## INVESTMENT FOLDER

### Introduction and Example

The Investment folder is used to enter the initial and future capital investments and set up the depreciation claims.

Steps

1. Enter the Description
2. Enter Amount
3. Enter Date. Year & Month
4. Select the Depreciation Method
5. Enter the Recovery Period
6. Additional investments can be added by clicking on the "Add" button which adds another row..

The screenshot shows the 'Investment' tab in the 'Investments' section of the software. The interface includes a menu bar, a toolbar, and a main data entry area. The data entry area contains a table with columns: Description, Amount, Year, Month, Depreciation Method, and Recovery Period [yrs].

Annotations and steps shown in the screenshot:

- 1) Enter description:** Points to the 'Plant Expansion' row.
- 2) Enter the capital investment:** Points to the '\$ 4,000,000' amount in the 'Major Upgrade in Year 5' row.
- 3) Select Year and Month:** Points to the '2014' and 'Mar' dropdowns in the 'Major Upgrade in Year 5' row.
- 4) Select Depreciation Method:** Points to the 'Land (No Deprec.)' dropdown in the 'Major Upgrade in Year 5' row.
- 5) Enter Recovery Period:** Points to the '7.0' value in the 'Recovery Period [yrs]' column for the 'Major Upgrade in Year 5' row.
- 6) Use these buttons to add, insert, delete or move a row:** Points to the 'Add', 'Insert', 'Delete', and 'Move' buttons at the bottom of the table.

The 'Investment [Year 1 Total]' is shown as '\$ 11,000,000'.

Completed Investment Folder example.

The screenshot shows the 'Investment' tab in the 'Investments' section of the software. The data entry area contains a table with columns: Description, Amount, Year, Month, Depreciation Method, and Recovery Period [yrs].

Description	Amount	Year	Month	Depreciation Method	Recovery Period [yrs]
Plant Expansion	\$ 11,000,000	2010	Mar	Personal Prop. 200% DB	7.0
Major Upgrade in Year 5	\$ 4,000,000	2014	Mar	Personal Prop. 150% DB	5.0



## Inflate Button

Allows you to calculate and enter a future value.

Example. It is anticipated a major component will have to be replaced in five years. The cost today \$3,000,000 what is the cost at 5.00% compounding per year for five years? The Depreciation method is Personal Prop. St Line. 200% DB with a 7 year recovery period.

Steps

1. Add row and enter the description "Replacement of Major Component"
2. Enter the Amount \$3,000,000 and set date to Year 2014
3. Select Depreciation Method "Personal Prop. 200% Recovery Period"
4. Enter the Recovery Period of 7 years
5. Click on the "Inflate" Button
6. Complete the Inflate Dialog and click on 'OK'

The screenshot shows the 'Investments' section of a software application. A table lists two investment entries: 'Plant Expansion' and 'Replacement of major component'. The 'Replacement of major component' row is highlighted in blue. An 'Inflate' dialog box is open, showing the calculation of the future value for the selected row. The dialog box contains the following fields:

- Amount: \$ 3,000,000
- Annual Compounding Rate: 5.000%
- Time Period: 5 Years, 0 Months
- Future Value: \$ 3,828,845

Arrows indicate the flow of data: from the 'Inflate' button to the dialog, from the dialog's 'Future Value' field to the 'Amount' cell of the 'Replacement of major component' row, and from the dialog's 'Annual Compounding Rate' field to the 'Annual Compounding Rate' cell of the same row.

The completed entries.

The "Inflate" feature calculated the Future Value for \$3,000,000 compounding at 5.00% for 5 years which is \$3,828,845.

The screenshot shows the 'Investments' section of the software application after the 'Inflate' dialog has been completed. The 'Replacement of major component' row is now highlighted in yellow and shows the updated future value of \$3,828,845. The 'Inflate' button is still visible above the table.



## Depreciation Recovery Periods

Following are the IRS MACRS Property Classifications and Recovery Periods

MACRS refers to the “Modified Accelerated Cost Recovery System”

<b>Applicable Property</b>	<b>Depreciation Method</b>	<b>Recovery Period</b>
Short-lived assets	Personal Property 200% DB	3 years
Computers, automobiles, light trucks	Personal Property 200% DB	5 years
Most manufacturing equipment, except long life equipment	Personal Property 200% DB	7 years Long life 10 years
Sewage treatment plants , telephone distribution plants	Personal Property 150% DB	15 years
Sewer pipes and certain other very long lived equipment	Personal Property 150% DB	20 years
Residential Rental Properties	Residential Prop. St Line	27.5 years
Commercial Real Estate	Commercial Prop. St Line	39 years

## Half Year & Mid Month Conventions

**Personal Property** 200% and 150% DB methods use the “Half Year” convention which assumes that all assets are placed in service in the middle of the year. This means that only 50% of the allowable depreciation is claimed for the first year. The remaining half year is taken in the year following the recovery period. If the asset is sold before being fully depreciated the half year convention is applied in the year that the asset is sold.

**Mid month convention for real estate.** The straight Line Depreciation method is used and the mid month convention applied. As an example, if the property was purchased in March, the depreciation claimed is 9.5 months for year 1. If the property is sold, then the depreciation claimed in that year must take into account the number of months the property was owned during the year of disposal.

The “Mid Year” and “Mid Months” conventions are automatically applied by Investit Decisions when calculating the depreciation schedules.

## Declining Balance Depreciation Method

The depreciation of plant and equipment, called personal property, used the 200% or 150% Declining Balance methods. Initially the depreciation is calculated using the Declining Balance Method and then switches to Straight Line.

The following Depreciation Schedule shows the application of the Mid Year Convention and the switch from Declining Balance to Straight Line Depreciation.

<b>Equipment &amp; Machinery</b>				
Starting Date:	Year 1 January			
Depreciation Method:	Personal Property, 200% Declining			
Recovery Period:	7.0 Year(s)			
First Year Convention: Half-Year	50.0%	←		
Last Year Convention:	50.0%	←		
Amount	\$ 1,000,000			
<b>Declining Balance Deprec.</b>				
Period	Cost Basis	Adjusted Cost Basis	Depreciation	Unamortized Balance
Yr. 1 Jan-Yr. 1 Dec	\$ 1,000,000	\$ 1,000,000	\$ ***142,857	\$ 857,143
Yr. 2 Jan-Yr. 2 Dec		857,143	244,898	612,245
Yr. 3 Jan-Yr. 3 Dec		612,245	174,927	437,318
Yr. 4 Jan-Yr. 4 Dec		437,318	124,948	312,370
Yr. 5 Jan-Yr. 5 Dec		312,370	89,249	223,121
Yr. 6 Jan-Yr. 6 Dec		223,121	89,248	133,873
Yr. 7 Jan-Yr. 7 Dec		133,873	89,249	44,624
Yr. 8 Jan-Yr. 8 Dec		44,624	***44,624	-
Total	\$ 1,000,000		\$ 1,000,000	
<b>***Mid Year Convention applied Year 1 &amp; 8</b>				<b>St Line Deprec</b>

Note: The Recovery Period is 7 years but the depreciation occurred over 8 years because of the "Mid Year" convention.

## WORKING CAPITAL FOLDER

### Introduction

Working Capital is investment or money tied up in inventory, work in progress, accounts receivables etc.

### Repayment of Working Capital

The balance in the Working Capital Account at the end of the Analysis Period is automatically paid down in the last month of the Analysis Period.

Example.

Working Capital addition: 2010 March is \$200,000

Reduction in Working Capital: 2010 May is \$35,000

Balance in the Working Capital account is \$200,000 – 35,000 = \$165,000

If no more additions or deductions are made to the Working Capital, the \$165,000 balance will be automatically paid back in the last month of the Analysis Period

Project Info.	Investor	Investment	Working Capital	Expenses	Revenue	Financing	Salvage Value
<b>Working Capital</b>							
Description	Entry Choice		2010 Mar...	2010 Apr...	2010 May...	2010 Jun...	2
Working Capital	Add or Subtract (-) Working Capital		\$ 200,000	\$ 0	-\$ 35,000	\$ 0	
			Addition to Working Capital ↑		Reduction to Working Capital is entered using a minus ↑		

The repayment in the last month of the “Analysis Period” of the \$165,000 balance in the Working Capital Account can be seen in the Net Cash Report.

Example

Net Cash Flow (Before Tax)							July 23, 2009	
New Jersey \$11M Expansion							Investit Decisions	
Increased production for Product's A & B							A1 Invest Rev & Exp Monthly Proj. Part A	
Year	Investment	Working Capital		Financing		Operating Cash Flow (Before Tax)	Sale Proceeds (Before Tax)	Net Cash Flow (Before Tax)
		Additions	Reductions	Borrow	Paid Back			
2010 Mar-2011 Feb	\$ (11,000,000)	\$ →(200,000)	\$ → 35,000	\$ 3,000,000	-	\$ 95,664	-	\$ (8,069,336)
2011 Mar-2012 Feb	-	-	-	-	-	1,081,752	-	1,081,752
2012 Mar-2013 Feb	-	-	-	-	-	1,302,700	-	1,302,700
2013 Mar-2014 Feb	-	-	-	-	-	1,592,230	-	1,592,230
2014 Mar-2015 Feb	(4,000,000)	-	-	-	-	1,874,437	-	(2,125,563)
2015 Mar-2016 Feb	-	-	-	-	-	2,198,421	-	2,198,421
2016 Mar-2017 Feb	-	-	-	-	-	2,575,515	-	2,575,515
2017 Mar-2018 Feb	-	-	-	-	-	3,547,184	-	3,547,184
2018 Mar-2019 Feb	-	-	-	-	-	3,988,114	-	3,988,114
2019 Mar-2020 Feb	-	-	-	-	-	4,650,488	270,000	5,085,488
		Outstanding balance in the Working Capital Account is paid back → 165,000		-	-	-	Total	\$ 11,176,505

### Tax Implications

Working Capital does not affect the tax calculations but does affect cash flows and financial returns such as the Internal Rate of Return (IRR) and the Net Present Values (NPV).

## EXPENSES & REVENUE FOLDERS

### Introduction

This section provides a brief introduction on how to enter and project revenues and expenses using the **Projection Wizard**. For this brief introduction we will use;

1. The Expenses Folder. The Revenue Folder entries and projections work in a similar fashion.
2. A “Yearly” Template because the entries and projections are simpler than a “Monthly” template
3. Template “Invest Revenue & Expenses Yearly”

For a comprehensive guide on how to use **Projection Wizard** go to the Investit Online Learning Center and print out the Investit Decision Guide “Using Projection Wizard”

Expense Folder is used to enter and project expenses

Project Info.	Investor	Investment	Working Capital	Expenses	Revenue	Financing	Salvage Value
<b>Expenses</b>							
Description	Entry Choice	Qty	Category	Year 1 Jan...	Year 2 Jan...	Year	
Labor	\$ per Yr	—	Common	\$ 0	\$ 0		
Materials	\$ per Yr	—	Common	\$ 0	\$ 0		
Repairs & Maintenance	\$ per Yr	—	Common	\$ 0	\$ 0		
Utilities	\$ per Yr	—	Common	\$ 0	\$ 0		
Insurance	\$ per Yr	—	Common	\$ 0	\$ 0		
Incremental Overhead	\$ per Yr	—	Common	\$ 0	\$ 0		

There are two types of entries;

1. Entries that can be projected using “Projection Wizard”  
Example: Labor Year 1 \$230,000 per Year increasing at 3.00% compounded
2. Single entries which can be made directly in the grid.  
Example; Materials Year 1 \$0 Year 2 \$91,000 Year 3 \$106,000 Year 4 \$10500 which can be entered directly in the grid

The example below shows these entries in the Expenses Folder.

Example of a projection for the Labor costs made using Projection Wizard and Single Entries for the Material Costs

Project Info.		Investor	Investment	Working Capital	Expenses	Revenue	Financing	
<b>Expenses</b>								
Description	Entry Choice	Qty	Category	Year 1 Jan...	Year 2 Jan...	Year 3 Jan...	Year 4 Jan...	Year 5 Jan...
Labor	\$ per Yr	—	Common	\$ 230,000	\$ 236,900	\$ 244,007	\$ 251,327	\$ 258,867
Materials	\$ per Yr	—	Common	\$ 0	\$ 91,000	\$ 106,000	\$ 107,000	\$ 0
Repairs & Maintenance	\$ per Yr	—	Common	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0
Utilities	\$ per Yr	—	Common	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0
Insurance	\$ per Yr	—	Common	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0
Incremental Overhead	\$ per Yr	—	Common	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0

Entered & projected using Projection Wizard

Single entries made directly in the grid

**Projection Description**

Labor

Entry Choice: \$ per Year

Year 1 \$230,000 per Year

Compounding at 3.00% per year for next 9 years

Add Insert Delete

Projection Wizard Projection Description

Describes the projection

## Projection Wizard

Projection Wizard is used to quickly enter and project expenses and revenue

The entry and projection options available in Projection Wizard allow you to quickly enter any kind of projection, no matter how complex.

### VERY IMPORTANT NOTE

The key to using Investit Decisions is learning to use Projection Wizard. It is the heart and soul of Investit Decisions.

Following is a quick demonstration of Projection Wizard. To learn more about the extensive Projection Wizard features print out the "Projection Wizard Instruction Manual" on the Investit Online Learning center and then enter the practice examples.

**INSTRUCTION MANUALS**

- ✦ Investit Decisions
- ✦ Projection Wizard ←
- ✦ Finance Folder: Creating Mortgages & Loans

The quickest way to see how Projection Wizard works is to enter or follow this example;

Template: Invest Revenue & Expenses Yearly

Analysis Period: 10 years

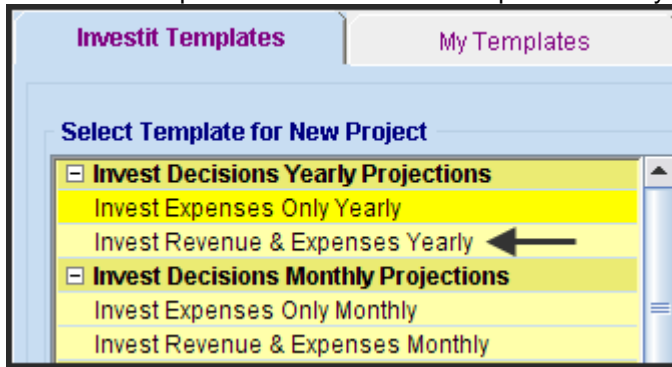
Folder: Expenses

Description: Labor

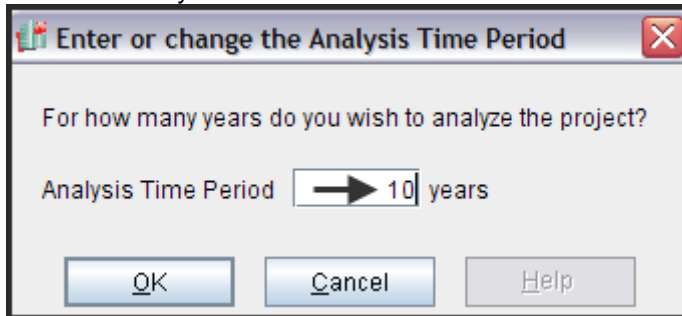
Entry Choice: \$ per Yr

Projection: \$230,000 per Yr then increasing at 3.00% per year compounding until the end of the 10 year Analysis Period

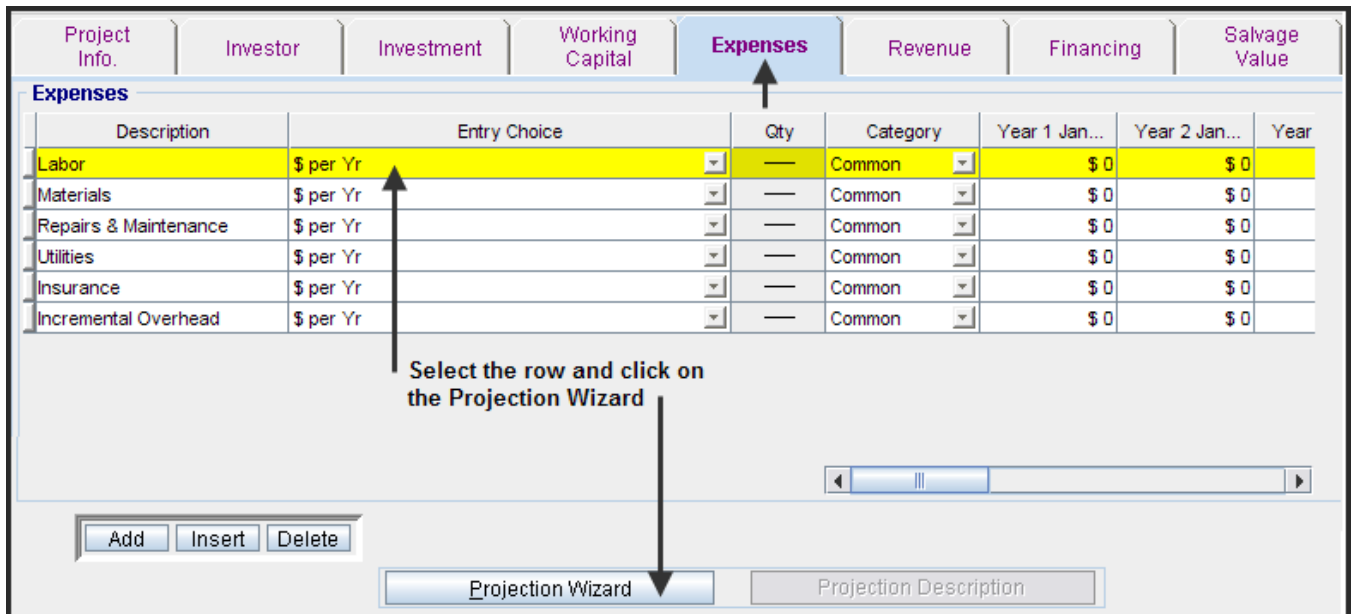
Select the template Invest Revenue & Expenses Yearly



Enter the Analysis Period



Select the "Expenses Folder" and select the "Labor" row. Click on the Projection Wizard button which takes you to the Projection Wizard.



Following are the entries in Projection Wizard.

Note: You can view a description of the projection by clicking on the "Projection Description" button

The screenshot displays the 'Projection Wizard' window. It is divided into two main sections: 'Entry Information' and 'Projection'.

**Entry Information:**  
 Description: Labor  
 Entry Choice: \$ per Yr

**Projection:**

Entry	Project Entry Using...	Increase	Starting Year	Time Period		Cont. Proj.
				To End	Yrs	
\$ 230,000	Annual Compounding	3.00%	Year 1	<input checked="" type="checkbox"/>	10	

Annotations in the image include:  
 - An arrow pointing to the 'Entry Choice & Description' field.  
 - An arrow pointing to the 'Annual Compounding' dropdown menu with the text: 'Different methods for projecting the entries. Select "Annual Compounding"'.  
 - An arrow pointing to the '3.00%' increase field.  
 - An arrow pointing to the 'To End' checkbox with the text: 'Projects to the end of the Analysis Period'.  
 - A button labeled 'Projection Description' with an arrow pointing to a separate window titled 'Projection Description'.

**Projection Description Window:**  
 Labor  
 Entry Choice: \$ per Year  
 Year 1 \$230,000 per Year  
 Compounding at 3.00% per year for next 9 years

**LEARNING PROJECTION WIZARD IS THE KEY TO USING THE FULL POWER OF INVESTIT DECISIONS**

To learn the full capabilities and features of Projection Wizard, print out the "Projection Wizard Instruction Manual" available on the Investit Online Learning Center and then follow and enter the practice examples.



## Using the Expenses & Revenue Folders

Complete the “Revenue & Expense Folders” using the following steps;

1. Select the row or add a new row and enter the description
2. Select the Entry Choices (see explanation below)
3. Certain Entry Choices require the Quantity to be entered
4. If appropriate, select the Category (See explanation below)
5. Use Projection Wizard to make the entry and projections

Project Info.	Investor	Investment	Working Capital	Expenses	Revenue	Financing	Salvage Value
<b>Expenses</b>							
Description	Entry Choice	Qty	Category	Year 1 Jan...	Year 2 Jan...	Year 3 Jan...	
Labor	Amount	—	Common	\$ 0	\$ 0	\$ 0	
Materials	\$ per Yr	—	Common	\$ 0	\$ 0	\$ 0	
	\$ per Yr	—	Common	\$ 0	\$ 0	\$ 0	

**Add row and enter Description** →

↑ **Explained below**

Use to Add, Insert & Delete rows

Use Projection Wizard for entries and projections

Select method for entering the data. Called "Entry Choices"

- \$ per Yr
- \$ per Mo
- \$ per Wk
- \$ per Day
- \$ per Unit and Quantity
- \$ per Hour and Quantity
- Amount
- % of Revenue(s)
- % of Expense(s)
- Edit list...

## Entry Choices

Entry Choices allow you to choose the “Unit of Measure” to be used.

As an example, \$ per Yr, \$ per Mo, \$ per Ton, \$ per Patient etc

You can also create you own Entry Choices. Some examples;

- \$ per Pump (Pump manufacturer)
- \$ per Bed per Day, \$ per Patient (Hospital)
- \$ per Applicant (Government agency)

The ability to create you own “Entry Choices” allows you to adapt a template to your own needs and then save as “My Template”

Investit Templates come pre-loaded with common Entry Choices

Expenses	
Description	Entry Choice
Labor	\$ per Mo
Materials	\$ per Mo
Repairs & Maintenance	\$ per Yr
Utilities	\$ per Wk
Marketing & Sales Fixed Co...	\$ per Day
Sales Commissions	Amount
	\$ per Unit and Quantity
	\$ per Hour and Quantity
	% of Revenue(s)
	% of Expense(s)
	Edit list... ← Use to add your own Entry Choices

### Special Entry Choices. \$ per Unit & Quantity & % of Revenue(s) or Expenses

Following is an explanation of three Entry Choices which have unique characteristics;

1. \$ per Unit & Quantity
2. % of Revenues(s)
3. % of Expenses(s)

#### \$ per Unit & Quantity Entry Choice

This Entry Choice is used when the “Price or Cost per Unit” and the “Quantity” changes over time

In the example below the “Price per Unit” and “Quantity” sold change over time

Revenue							
Description	Entry Choice	Qty	Category	Year 1 Mar...	Year 1 Apr...	Year 1 May...	Year 1 Jun...
Sales Revenue Product A	\$ per Unit Product A and Quantity	—	Common	\$ 3,000	\$ 3,000	\$ 3,400	\$ 3,400
	Quantity	—		300	300	340	340

Price changing over time  →  
 Quantity changing over time  →

## % of Revenues(s) & % of Expenses Entry Choices

The Entry Choice “% of Revenue(s)” allows you to make an revenue a “% of selected revenues” or a “% of selected expenses”

The Entry Choice % of Expense(s) allows you to make an expense a “% of selected revenues” or a “% of selected expenses”

Example:

The Sales Commission Expense is 7.00% of Sales

Select the Entry Choice “% of Revenue” and then select the revenues to which the sales commissions apply.

Expenses		Entry Choice	Qty	Category	Year 1 Mar...	Year
Labor	\$ per Mo					
Materials	\$ per Mo					
Repairs & Maintenance	\$ per Mo					
Utilities	\$ per Mo					
Marketing & Sales Fixed Co...	\$ per Mo					
<b>Sales Commissions</b>	<b>% of Revenue(s)</b>					

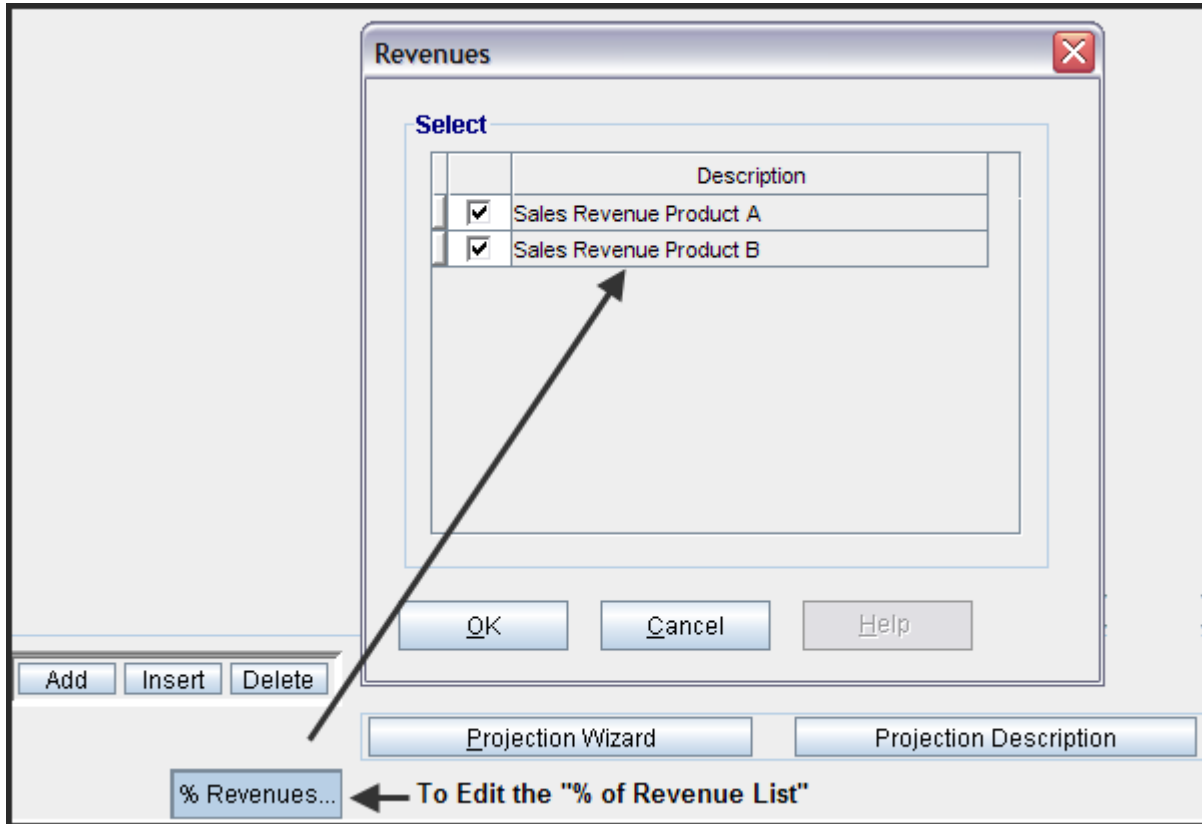
  

Revenues	
<input checked="" type="checkbox"/>	Sales Revenue Product A
<input checked="" type="checkbox"/>	Sales Revenue Product B

The Sales Commission is 7.00% of the sales revenue for Product A & B

Expenses		Entry Choice	Qty	Category	Year 1 Mar...	Year 1 Apr...	Year 1 May...	Year 1 Jun...
<b>Sales Commissions</b>	<b>% of Revenue(s)</b>	→	—	Common	→ 7.00%	7.00%	7.00%	7.00%
Materials	\$ per Mo		—	Common	\$ 15,000.00	\$ 15,000.00	\$ 15,000.00	\$ 15,000.00

Editing the "% of Revenue(s)" list. (Same applies for editing the "% of Expenses List")



## Creating your own Entry Choices

New "Entry Choices" are set up separately for the Revenue and for the Expenses folders.

Example No. 1: Add the Entry Choice "\$ per Sq. Meter per Mo" to the Expenses folder.

1. On the Entry Choice List select "Edit List" to display the "Add Entry Choice" dialog

The screenshot shows the 'Expenses' folder selected in the software interface. The 'Entry Choice List' dialog box is open, displaying a list of entry choices. The 'Add...' button is highlighted, and an arrow points from it to the selected entry choice, '\$ per Mo'. The text 'Click on "Add" to add an Entry' is displayed next to the arrow.

Description	Entry Choice	Qty	Category	Year 1 Mar...	Year 1 Apr...
Labor	Edit list...	—	Common	\$ 60,000	\$ 60,000
Materials	\$ per Mo	—	Common	\$ 15,000.00	\$ 15,000.00
Repairs & Maintenance	\$ per Yr	—	Common	\$ 20,000.00	\$ 20,000.00
Utilities	\$ per Wk	—	Common	\$ 3,000.00	\$ 3,000.00
Marketing & Sales Fixed Co...	\$ per Day	—	Common	\$ 60,000.00	\$ 60,000.00
Sales Commissions	Amount				
	\$ per Unit and Quantity				
	\$ per Hour and Quantity				
	% of Revenue(s)				
	% of Expense(s)				
	Edit list...				

**Entry Choice List**

- \$ per Mo
- \$ per Yr
- \$ per Wk
- \$ per Day
- Amount
- \$ per Unit and Quantity
- \$ per Hour and Quantity
- % of Revenue(s)
- % of Expense(s)

Buttons: Add..., Edit..., Delete, Move Down, Move Up, Programmed EC, OK, Cancel, Help

- On the "Entry Choice List" click in the Add button to display the "Add Entry Choice" dialog and set up the Entry Choice "\$ per Sq. Meter per Mo" and click on the "OK" button.

Example No. 2

A manufacturer of water pumps want to add an Entry Choice "\$ per Pump & Quantity" in order to enter the labor, material and overhead costs as "\$ per Pump"

Go to the Expense Folder and display the Entry Choice List and select "Edit List" and the click on the "Add" button.

Description	Entry Choice	Qty	Category	Year 1 Mar...	Year 1 Apr...
Labor	Edit list...	---	Common	\$ 60,000	\$ 60,000
Materials	\$ per Mo	---	Common	\$ 15,000.00	\$ 15,000.00
Repairs & Maintenance	\$ per Yr	---	Common	\$ 20,000.00	\$ 20,000.00
Utilities	\$ per Wk	---	Common	\$ 3,000.00	\$ 3,000.00
Marketing & Sales Fixed Co...	\$ per Day	---	Common	\$ 60,000.00	\$ 60,000.00
Sales Commissions	Amount				
	\$ per Unit and Quantity				
	\$ per Hour and Quantity				
	% of Revenue(s)				
	% of Expense(s)				
	Edit list...				

Create the Entry Choice "\$ per Pump & Quantity" and click "Ok"

The new Entry Choice "\$ per Pump & Quantity" have now been added to the Entry Choice List

### Rearranging the Entry Choice List & the Default Entry Choice

You can Add and Delete Entry Choices and rearrange the ordering of the list using the "Move Up" and "Move Down" buttons.

#### Important Notes:

1. The Entry Choice at the top of the list is the Default Entry Choice.
2. If you add a row in a grid, the new row will show the Default Entry Choice which is the first Entry Choice in the Entry Choice List
3. Entry Choices that come with the template cannot be edited or deleted

The new Entry Choice "\$ per Pump & Quantity" has moved to the top of the list and becomes the Default Entry Choice.

- \$ per Pump and Quantity
  - \$ per Yr
  - \$ per Mo
  - \$ per Wk
  - \$ per Day
  - \$ per Unit and Quantity
  - \$ per Hour and Quantity
  - Amount
  - % of Revenue(s)
  - % of Expense(s)
  - Edit list...
- ↑  
**Moved to top of list**

When a row is added the Entry Choice at the top of the list is displayed. In this case "\$ per Pump & Quantity"

Description	Entry Choice	Qty	Category	Year 1 Jan...	Year 2 Jan...	Year 3 Jan...
Labor	Amount	—	Common	\$ 0	\$ 0	\$ 0
Materials	\$ per Yr	—	Common	\$ 0	\$ 0	\$ 0
	\$ per Pump and Quantity	—	Common	\$ 0	\$ 0	\$ 0
	Quantity	—		0	0	0

↑  
New row added using the default Entry Choice "\$ per Pump & Quantity"



## Revenue & Expense Categories

Categories can be used to group revenues and to group expenses.

We will add the following three Expense Categories

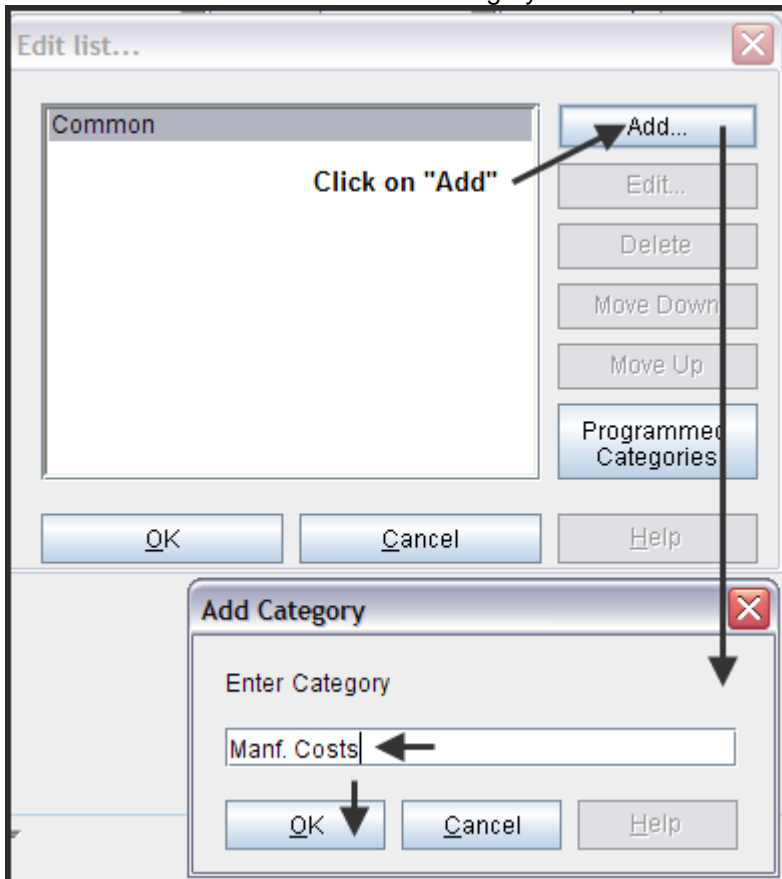
1. Manf. Costs
2. Assembly
3. Overhead

Go to the Expense Folder and display the Category List and select "Edit List

Project Info.		Investor	Investment	Working Capital	Expenses
<b>Expenses</b>					
Description	Entry Choice	Qty	Category	Year 1 Jan...	
Labor	\$ per Yr	—	Common	\$ 0	
Materials	\$ per Yr	—	Common	\$ 0	
Repairs & Maintenance	\$ per Yr	—	Common	\$ 0	
Utilities	\$ per Yr	—	Common	\$ 0	
Insurance	\$ per Yr	—	Common	\$ 0	
Incremental Overhead	\$ per Yr	—	Common	\$ 0	

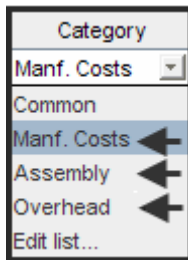
Common  
Edit list... ←

Click on the "Add" button to add the category "Manf. Costs" and click on the 'OK' button.



Repeat the process to add the “Assembly” and “Overhead” categories

The three new Categories have now been added to the Category List



The following example shows the expenses broken down by “Category”

<b>Expense Statement Yearly</b>					
Pump Casing Make Analysis					
Casing for the Excel Pumps					
	Year 1	Year 2	Year 3	Year 4	Year 5
<b>EXPENSES</b>					
<b>Manf.</b> ← <b>Category</b>					
Labor	1,920,000	1,977,600	2,036,928	2,138,772	2,245,716
Materials	300,000	330,750	364,817	394,521	426,641
Repairs & Maintenance	240,000	247,200	254,616	262,260	270,120
Utilities	84,000	87,360	90,852	94,488	98,268
<b>Total</b>	<b>2,544,000</b>	<b>2,642,910</b>	<b>2,747,213</b>	<b>2,890,041</b>	<b>3,040,745</b>
<b>Overhead</b> ← <b>Category</b>					
Insurance	100,000	103,000	106,090	109,273	112,551
Incremental Overhead	480,000	494,400	509,232	524,508	540,240
Building Lease	150,000	150,000	150,000	175,000	175,000
Insurance	100,000	103,000	106,090	109,273	112,551
<b>Total</b>	<b>830,000</b>	<b>850,400</b>	<b>871,412</b>	<b>918,054</b>	<b>940,342</b>
<b>Total Expenses</b>	<b>3,374,000</b>	<b>3,493,310</b>	<b>3,618,625</b>	<b>3,808,095</b>	<b>3,981,087</b>

## **FINANCE FOLDER**

### **Preface**

The Finance Folder allows you to enter the financing for capital investments in equipment, real estate etc., if appropriate.

In capital budgeting, financial and engineering economic analysis it is common to ignore financing as this is an organizational decision. The organization rarely borrows to fund an individual investment in equipment and other assets. Instead, money is raised through retained earnings, the issuance of shares, bonds, debentures and bank loans etc. If this is the case the Finance Folder is not used.

The organization may decide to lease rather than buy the equipment. The Investit Decision's templates "Lease" and "Buy" can be used to decide whether to lease or buy the equipment.

Only use the Finance Folder if there is loan being borrowed against the specific investment or the investment involves the acquisition of real estate funded by a mortgage registered on the property.

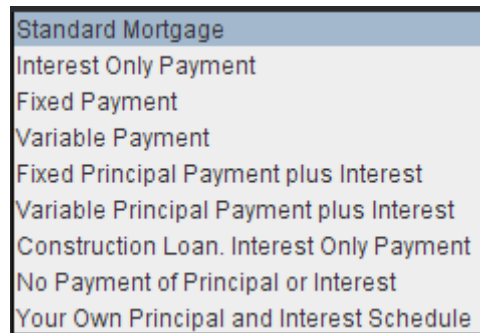
Also used to enter finance such as equipment loans, mortgages etc that apply to the specific project being analyzed.

In most cases investments are funded internally by the organization from money raised from retained earnings, issuance of shares and bonds etc. If this case the Financing folder is not used.

### **Features**

The Financing Folder is used to create mortgages and loans and offers the following features which allows you to enter any kind of mortgage or loan and explore creative financing options

1. The financing can start and finish at any time
2. The number of mortgage or loans is unlimited
3. Choose Fixed" or "Variable" interest rates
4. A full range of mortgage types are available



5. Additional Payments & Borrowing can be made at any time
6. Payment Frequency can be changed

Mortgage Settings	
Payment Frequency	Monthly
Additional Payments/Bo	Monthly
Payment Rounded	Semi-annually
Compounding Frequency	Quarterly
	Semi-monthly

7. Compounding Frequency can be changed

Compounding Frequency	Monthly
	Monthly
	Annually
	Semi-annually
	Quarterly

To learn more about the financing folder and how to set up different types of loans go to the Investit Online Learning Center and print out the Instruction Manual "Finance Folder. Creating Mortgages & Loans"



**Example**

Following are the entries for a standard mortgage or loan.

**Mortgage Details**

Start Date: 2010 March

Type: Standard Mortgage (Fully amortized loan with constant monthly principle and interest payment)

Amount: \$3,000,000

Description: Financing

**Mortgage Settings**

Payment Frequency: Monthly

No additional payments or borrowing

Payments: Rounded to Nearest Cent

Compounding Frequency: Monthly

**Term and Amortization Details**

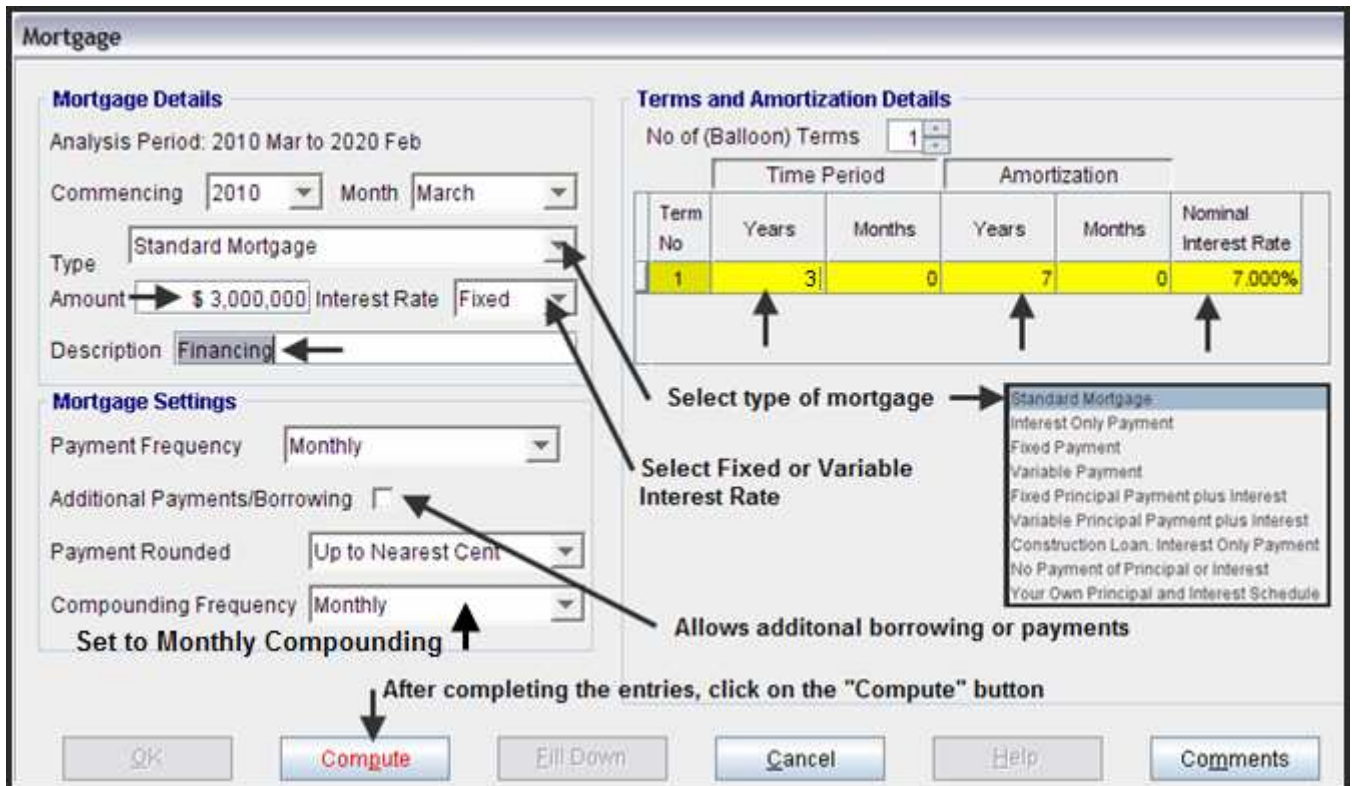
No. of Terms: 1

Time Period: 7 years (Mortgage is paid off with a balloon payment at the end of 3 years)

Amortization Period: 7

Interest Rate: 7.000%

After making the entries click on the "Compute" button and then the "Ok" button to complete the mortgage



## SALVAGE VALUE FOLDER

### Introduction

Used to enter the salvage or terminal value of the asset(s) plus associated disposition costs such as selling expenses, legal fees, clean up costs etc.

### Steps

1. Enter disposition costs such as selling expenses, legal fees, clean up costs etc
2. Enter the salvage value of the asset. Note: The salvage value could be negative.

### Income Tax Adjustment

Allows manual adjustment to the income taxes paid on disposition of the asset

A positive entry reduces the taxes paid on disposition

A negative entry increases the taxes paid on sale

Example:

Entry: \$150,000 will reduce the taxes paid on disposition by \$150,000

Entry: -\$56,000 will increase the taxes paid on disposition by \$56,000

The results can be viewed on the "Cash Flow on Disposition" report

Project Info.	Investor	Investment	Working Capital	Expenses	Revenue	Financing	Salvage Value
<b>Disposition Costs</b>							
Description		Entry Choice		Expense			
Selling Expenses		% of Salvage Value		10.00%			
Enter Disposition Costs							
Add		Insert		Delete		Move	
<b>Salvage Value</b>							
Description		Capital Investment		Salvage Value			
Plant Expansion		\$ 11,000,000		\$ 300,000			
Original investment				Enter Salvage Value			
Note: The Salvage Value can be negative							
Income Tax Adjustment				\$ 0			
Allows manual adjustments to the taxes paid on disposition							

## REPLACEMENT DECISIONS (KEEP or REPLACE) UNIQUE FEATURES

### Introduction

A common Investit Decision is the replacement decision. Should the organization keep repairing an asset or replace the aging asset with a new asset. The “Keep” and “Replace” templates have some unique inputs that are explained in this section.

The screenshot shows the 'Investit Templates' interface. At the top, there are four tabs: 'Investit Templates', 'My Templates', 'My Projects', and 'Investit Examples'. Below the tabs, there is a section titled 'Select Template for New Project' which contains a list of templates. The templates are grouped into four main categories, each with a minus sign icon to its left:

- Invest Decisions Yearly Projections**
  - Invest Expenses Only Yearly
  - Invest Revenue & Expenses Yearly
- Invest Decisions Monthly Projections**
  - Invest Expenses Only Monthly
  - Invest Revenue & Expenses Monthly
- Replacement Decisions Yearly Projections**
  - Keep Expenses Only Yearly
  - Keep Revenue & Expenses Yearly
  - Replace Expenses Only Yearly
  - Replace Revenue & Expenses Yearly
- Replacement Decisions Monthly Projections**
  - Keep Expenses Only Monthly
  - Keep Revenue & Expenses Monthly
  - Replace Expenses Only Monthly
  - Replace Revenue & Expenses Monthly
- Outsourcing Decisions Yearly Projections**
  - Make Expenses Only Yearly
  - Make Revenue & Expenses Yearly
  - Outsource Expenses Only Yearly

To the right of the list is a 'Description' section. The description for the selected template, 'Replacement Decisions Monthly Projections', is: 'Invest Decisions Yearly Projections section.' Below the description, there is a text box containing the text: 'Replacement Decisions Keep Templates Replacement Templates'. An arrow points from this text box to the 'Replacement Decisions Monthly Projections' template in the list.

### Keep or Replace Decision. Examples

A city needs to decide whether they should keep repairing an old wooden bridge or replace it with a new wooden, steel or concrete bridge?

A hospital has an x-ray machine that keeps breaking down. Should they invest in a new x-ray machine?

A company purchased equipment to manufacture circuit boards five year ago. New, more automated equipment which is more reliable is now available for \$5,000,000 installed. Investing in the new equipment will result in less down time, fewer rejected circuit boards and will provide increased production capacity and sales revenue. Should they invest \$5,000,000 in the new equipment?

## Keep Template. Investment Folder

There are two types of investments in “Keep” analysis which are entered in the Investment folder. New & Existing Investments. Existing or historical investments are also referred to as “Preexisting Investments”

Investments							Select "New" or "Existing" investment	
Description	Amount	Year	Month	Depreciation Method	Recovery Period [yrs]	Investment New	Exists	
Existing Equipment	\$ 0	Year 1	Jan	Personal Prop. 200% DB	0.0	<input type="radio"/>	<input checked="" type="radio"/>	
New Equipment	\$ 0	Year 1	Jan	Personal Prop. 200% DB	7.0	<input checked="" type="radio"/>	<input type="radio"/>	

### Preexisting Investments

Preexisting investments are historical investments that were made prior to the Analysis Start date.

The preexisting investment is not relevant to the analysis and does not appear in the cash flows or financial calculations because it is a sunk cost and therefore not relevant to the decision.

However, the remaining depreciation claims related to the preexisting investment and the salvage value of the asset at the end of the Analysis Period is relevant to the “Keep” analysis.

As an example, the equipment that is being considered for replacement was bought four years ago for \$4,000,000. The depreciation method was Personal Property 200% DB with a 7 year recovery period. This means that there are 3 years of depreciation left to claim. This is the Recovery Period of 7 years less the previous four years.

**Note:** Personal Property uses the mid year convention which means that for a recovery period of 7 years the depreciation is claimed over 8 years and therefore the remaining years left to claim depreciation is 4 years when the mid year convention is applied.

The \$4,000,000 historical investment made four years ago is not relevant to the “Keep” decision.

What is relevant is;

- The remaining depreciation claims for 4 years including the application of the Mid year convention in the fourth year
- The “Salvage Value” of the equipment at the end of the Analysis Period

The original investment of \$4,000,000 four years ago does not appear in the cash flow reports because it is a “sunk” or historical cost and not relevant to the Keep Decision.

### New investments

Investment made at the start or during the Analysis Period which appear in the cash flow reports. As an example, \$350,000 is spent on a major overhaul of the existing equipment in Jan Year 3. The depreciation method is “Personal Prop. 200% DB 7 year Recovery Period”



## Entering Preexisting and New Investments. Example

The entries in the Investment Folder entries will be explained using an example

Example

Template: Keep Expense Only Yearly  
Analysis Period: 10 years

### Preexisting Investment:

Investment. \$4,000,000 purchased 4 years ago.  
Time: Four years before the Analysis Start Date.  
Depreciation Method: Personal Property 200% DB with a 7 year recovery period  
Remaining Recovery Period: 3 years  
Salvage Value at the end of the Analysis Period: \$350,000

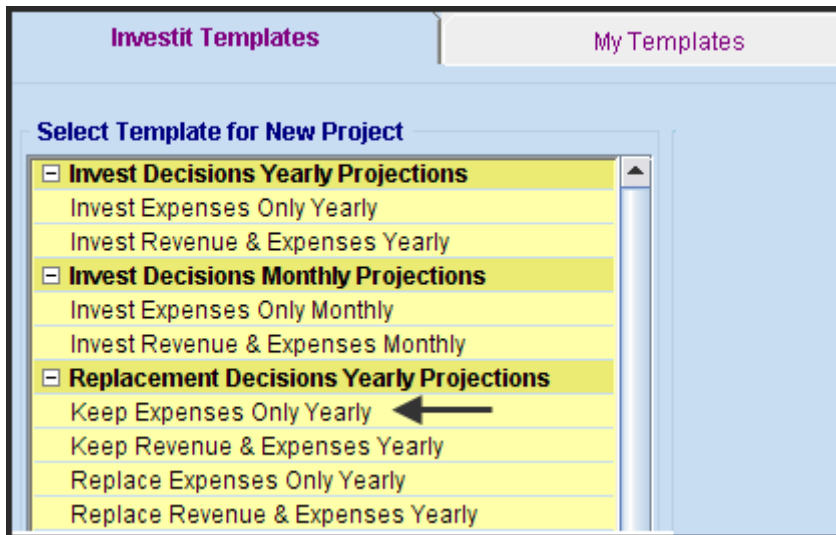
### New investment

It is anticipated that an additional investment to overhaul the equipment will have to be made Year 3 Jan.

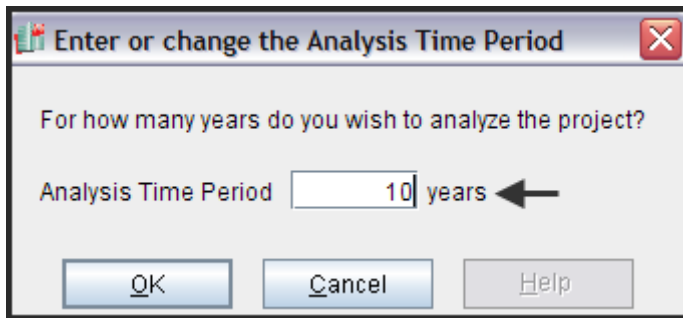
Investment. \$350,000  
Time: Jan Year 3  
Depreciation Method: Personal Property 200% DB with a 7 year recovery period  
Salvage Value at the end of the Analysis Period: \$180,000

Steps

1. Select the "Keep Expenses Only Template"



**2.** Enter the 10 year analysis Period



**3.** The Preexisting Investment is entered by;

1. Select the row." Existing Equipment"
2. Select the depreciation Method



3. Click on "Investment Exists" in the last column
4. Click on "Edit Existing Depreciation" Button
5. Complete the "Preexisting Investment" screen and click on the compute button.

The steps for entering a Preexisting Investment are shown in the diagram below.

## Entering the Preexisting Investment

Project Info. | Investor | **Investment** | Working Capital | Expenses | Financing

**Investments**

Inflate

Description	Amount	Year	Month	Depreciation Method	Recovery Period [yrs]	Investment New	Exists
Existing Equipment	\$ 0	Year 1	Jan	Personal Prop. 200% DB	0.0	<input type="radio"/>	<input checked="" type="radio"/>
New Equipment	\$ 0	Year 1	Jan	Personal Prop. 200% DB	7.0	<input checked="" type="radio"/>	<input type="radio"/>

1) Select Row

2) Select Depreciation Method

3) Select Existing Investment

**Preexisting Investment**

Description: Existing Equipment

Depreciation Method: Personal Prop. 200% DB

Value of the Asset when Acquired: \$ 4,000,000

Original Recovery Period: 7.0

How Long Ago? Year: 4 Month: 0

Applied the Half-Year rule

Undepreciated Balance (Book Value): \$ 1,093,294

Remaining Recovery Period: 3.00

Book Value at start of Analysis Period

Buttons: OK, Compute, Cancel, Help

4) Click to display Preexisting Investment Screen

Investment [Year 1 Total] \$ 0

Edit Existing Depreciation

Add | Insert | Delete | Move

The completed entries for the "Preexisting Investment"

**Investments**

Inflate

**The Undepreciated Balance or Book Value on the Analysis Start Date**

Description	Amount	Year	Month	Depreciation Method	Recovery Period [yrs]	Investment New	Exists
Existing Equipment	\$ 1,093,294	Year 1	Jan	Personal Prop. 200% DB	3.0	<input type="radio"/>	<input checked="" type="radio"/>
New Equipment	\$ 0	Year 1	Jan	Personal Prop. 200% DB	1.0	<input checked="" type="radio"/>	<input type="radio"/>

## Entering the New Investment

### New investment

Investment: \$350,000

Time: Jan Year 3

Depreciation Method: Personal Property 200% DB with a 7 year Recovery Period

Entering the "New" investment is the same processes for all templates. The steps are;

**Investments**

Inflate

Description	Amount	Year	Month	Depreciation Method	Recovery Period [yrs]	Investment New	Exists
Existing Equipment	\$ 1,093,294	Year 1	Jan	Personal Prop. 200% DB	3.0	<input type="radio"/>	<input checked="" type="radio"/>
New Equipment	\$ 350,000	Year 3	Jan	Personal Prop. 200% DB	7.0	<input checked="" type="radio"/>	<input type="radio"/>

1) Select the row    2) Enter the Investment    3) Set the Date    4) Select    5) Enter    6) Select

## Keep Template. Finance Folder

There are two types of mortgages or financing in “Keep” analysis which are selected in the Financing Folder.

### Preexisting Financing

Financing that was arranged to purchase the asset which is being considered for replacement.

As an example, the equipment that is being considered for replacement was financed 4 years ago with a bank loan for \$400,000 amortized over 10 years at 7.00% interest.

The Outstanding Balance on the Analysis Start date is \$272,411  
Remaining Amortization Period: 6 years

What is relevant to the Keep Decision are the principal and interest payments occurring during the Analysis Period, not the original \$400,000 loan.

The information needed to set up the “Existing Mortgage” is;

- The outstanding balance of the existing mortgage or loan on the Analysis Start Date: \$272,411
- Remaining Amortization Period: 6 Years
- Time Period: Which is equal to the Analysis Period unless there is a balloon payment

Preexisting Mortgage entries. Example

**Mortgage** Select. Indicates that the mortgage or loan was made before the Analysis Start Date

**Mortgage Details**

New Mortgage  Mortgage already exists

Analysis Period: Year 1 Jan to Year 10 Dec

Commencing Year 1 Month January

Type Standard Mortgage

Amount \$ 272,411 Interest Rate Fixed

Description Original Equipment Loan

**Mortgage Settings**

Payment Frequency Monthly

Additional Payments/Borrowing

Payment Rounded Up to Nearest Cent

Compounding Frequency Monthly

**Terms and Amortization Details**

No of (Balloon) Terms 1

Term No	Time Period		Amortization		Nominal Interest Rate
	Years	Months	Years	Months	
1	6	0	6	0	7.000%

Remaining Amortization

Outstanding Balance on the Analysis Start

OK Compute Fill Down Cancel Help Comments

## New Financing

Refers to the financing of the replacement asset.

Select the "New Mortgage" option and enter the mortgage or loan information. For more details see the Finance Folder section.

The screenshot shows a software window titled "Mortgage" with a close button in the top right corner. The window is divided into two main sections: "Mortgage Details" and "Terms and Amortization Details".

**Mortgage Details**

**Select**

New Mortgage     Mortgage already exists

Analysis Period: Year 1 Jan to Year 10 Dec

Commencing Year 1 ← Month January ←

Type Standard Mortgage

Amount → \$ 0 Interest Rate Fixed

Description ←

**Terms and Amortization Details**

No of (Balloon) Terms 1

Term No	Time Period		Amortization		Nominal Interest Rate
	Years	Months	Years	Months	
1	0	0	0	0	0.000%

Arrows point to the input fields for "Year 1", "January", "Standard Mortgage", "\$ 0", "Fixed", and "0" in the table, indicating they are the current focus of the user's input.

## Replace Template

In "Replacement Decisions" we need to enter the before and after tax Salvage Value of the equipment being replaced plus repayment of any financing or loans associated with the assets or equipment being replaced.

The "Salvage Value" is the revenue generated from the sale of the equipment less removal costs.

**Note.** The Salvage Value can be negative if the revenue generated by the sale of the equipment being replaced is less than removal costs.

Example:

A company is considering replacing an old steam generator with a more energy efficient model.

The new model will cost \$7,000,000 installed.

Depreciation is Personal Prop. 200% DB Recovery Period: 7 years

Salvage Value of the existing equipment is \$800,000 before tax and \$680,000 after tax.

Original financing.

The purchase of the equipment being replaced was financed by a bank loan of \$1,200,000. The current outstanding balance is \$550,000 which must be paid off if the steam generated is sold.

The entries in the Replace Expenses Only Yearly template Investment Folder are;

Project Info.	Investor	Investment	Working Capital	Expenses	Financing	Salvage Value
<b>Salvage Value of Equipment being replaced</b>						
Salvage Value (Before Tax)	\$ 800,000	Salvage Value (After Tax)	\$ 680,000	Financing Repaid	\$ 550,000	
<b>Investments</b>						
Inflate						
Description	Amount	Year	Month	Depreciation Method	Recovery Period [yrs]	
New Equipment	\$ 7,000,000	Year 1	Jan	Personal Prop. 200% DB	7.0	

## **CUSTOMIZING TEMPLATES**

### **Introduction**

You can quickly customize a template to your own requirements and save as “My Template”

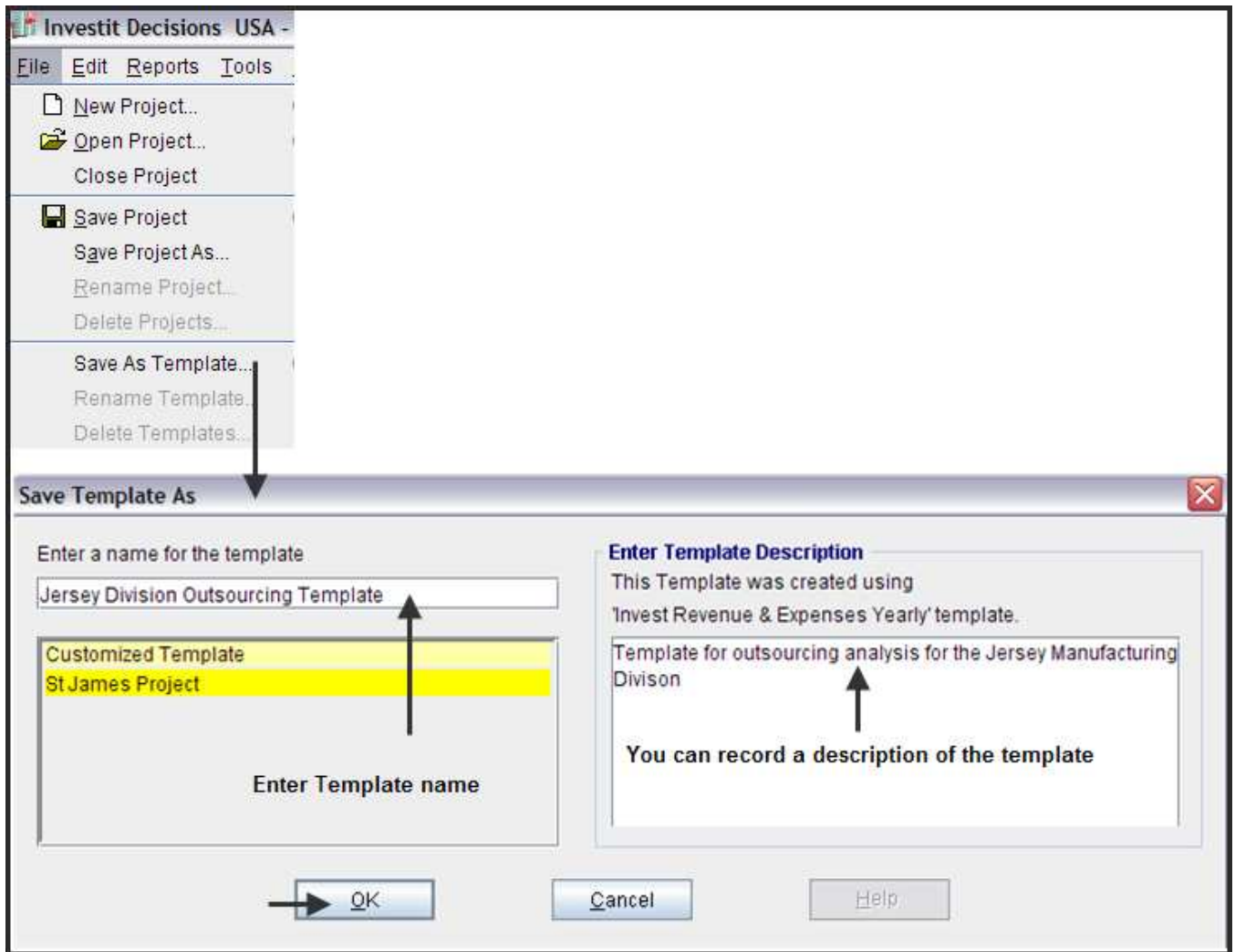
The following components can be customized;

1. Investment, Revenue, Expenses & Salvage Folder grids by;
  - Adding, moving, inserting & deleting rows
  - Changing Descriptions
  - Selecting Entry Choices
2. Adding new Entry Choices
3. Adding Revenue & Categories

### **Creating and saving a new template**

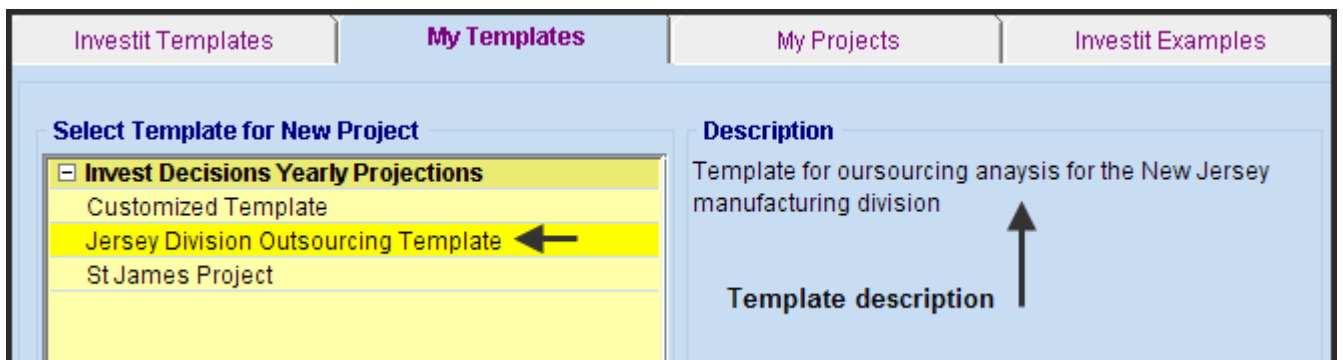
1. Open the appropriate Investit template
2. Modify the Folders to your requirements, such as;
  - Add new rows & descriptions in the Investment, Revenue & Expenses Folders
  - Create new Entry Choices in the Revenue and Expense folders
  - Create new Categories in the Revenue and Expense folders
3. Go to the Report Menu and select “Save As Template”





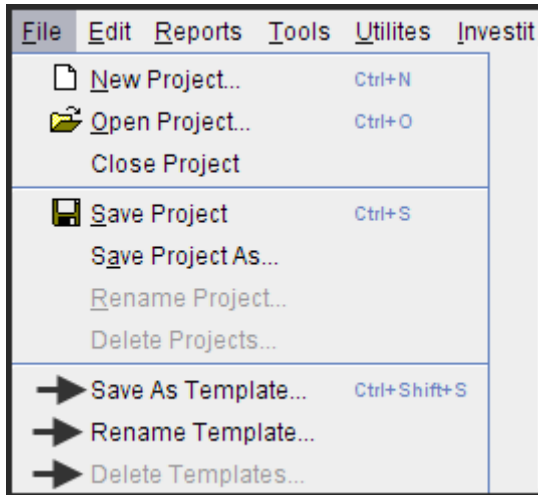
## My Templates

Your customized templates are located in the “My Templates” folder on the Investit Panel



## Renaming & Deleting My Templates

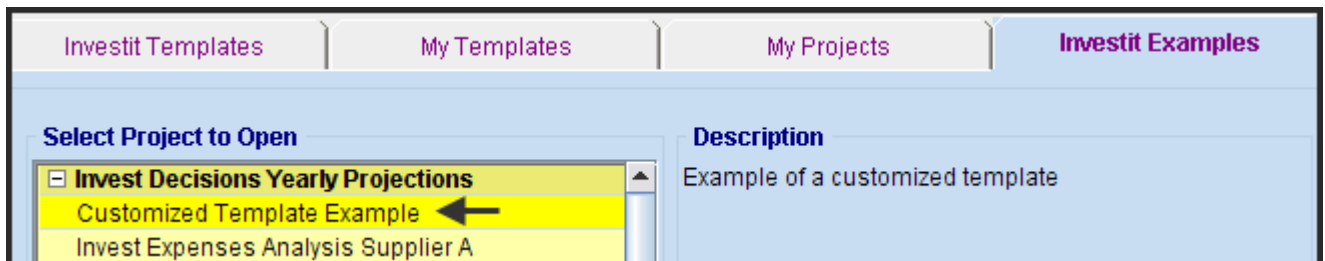
File Menu allows you to “Delete” and “Rename Templates”



## Customized Template Example

Open the 'Investit Examples' folder and select "Customizing a Template Example".

The step by step instructions for this example is available on the Online Learning Center.

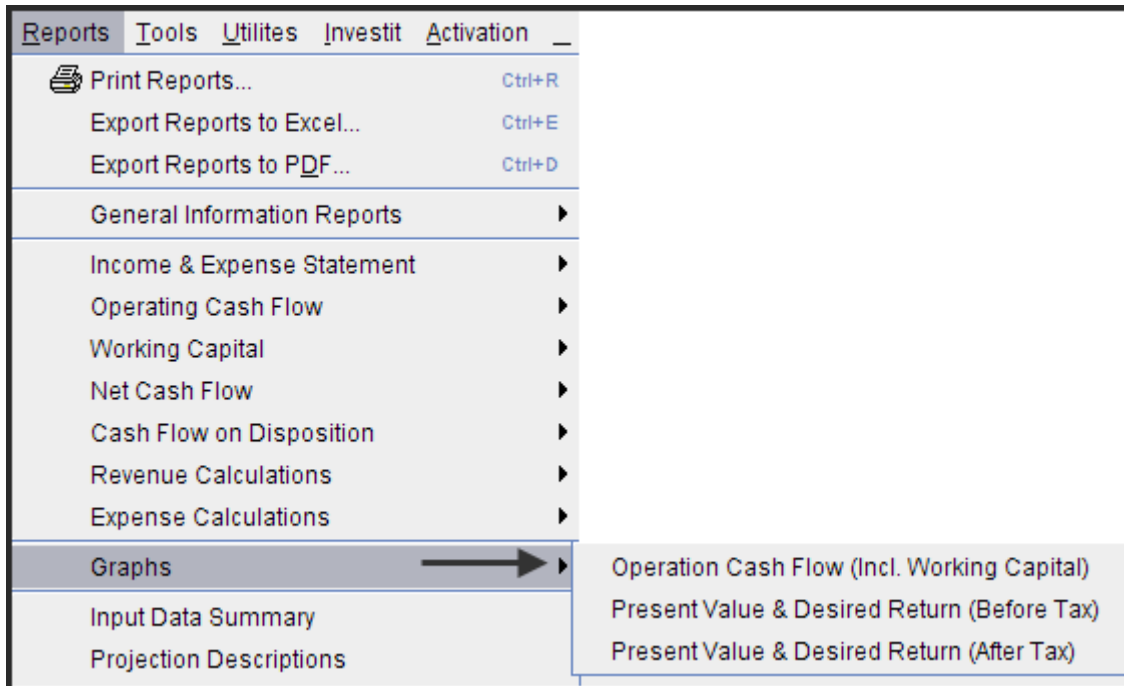


## GRAPHS

There are a number of graphs that displays the financial results visually

To view these graph open up an Investit Example.

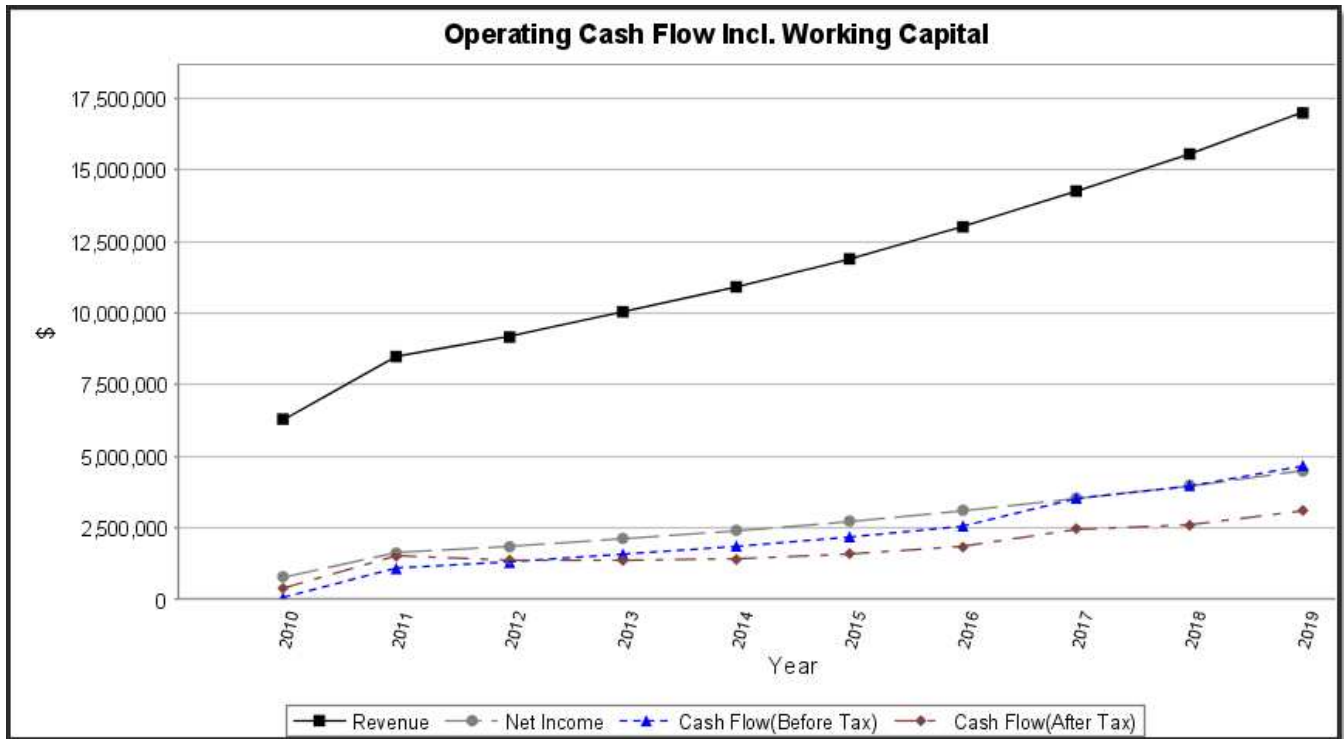
1. From the Report Menu select the Graph to view



### Operating Cash Flow

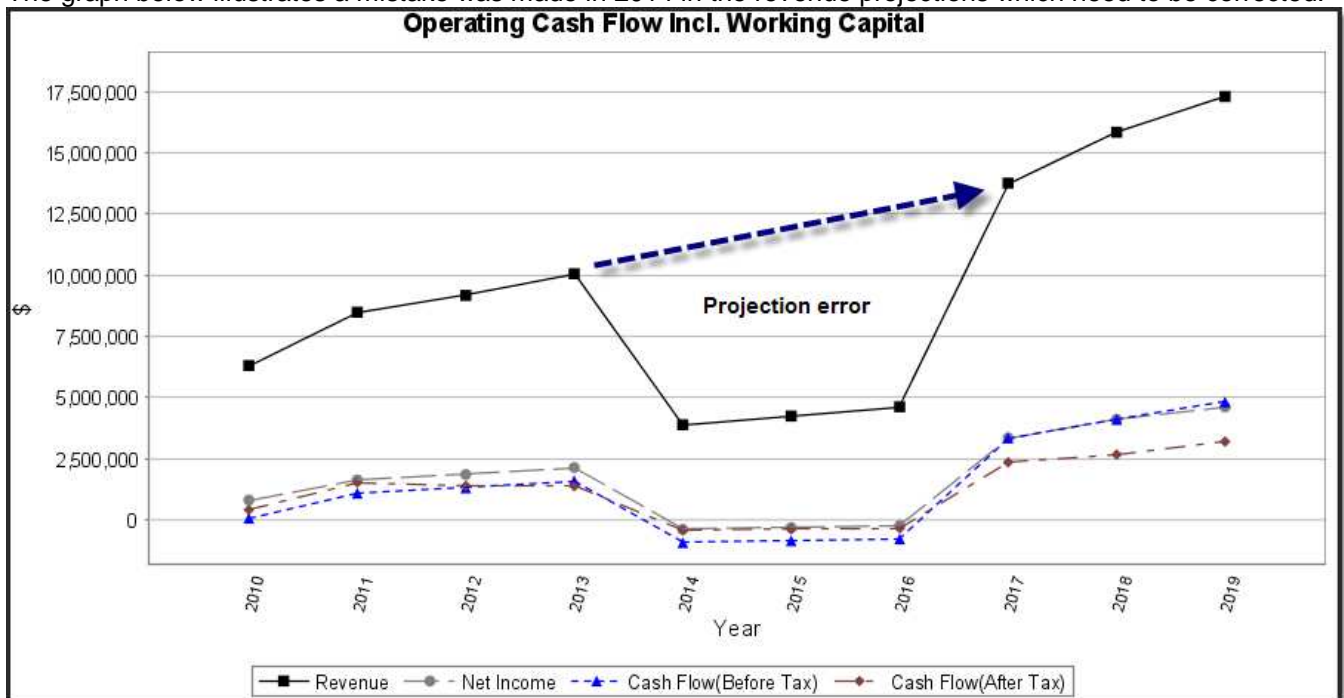
This graph shows how the Operating Cash Flow changes over time. It is very useful graph for spotting errors in your entries and projections.

**TIP:** After entering a Project view the Operating Cash Flow graph to see if the entries and projections appear to be correct.



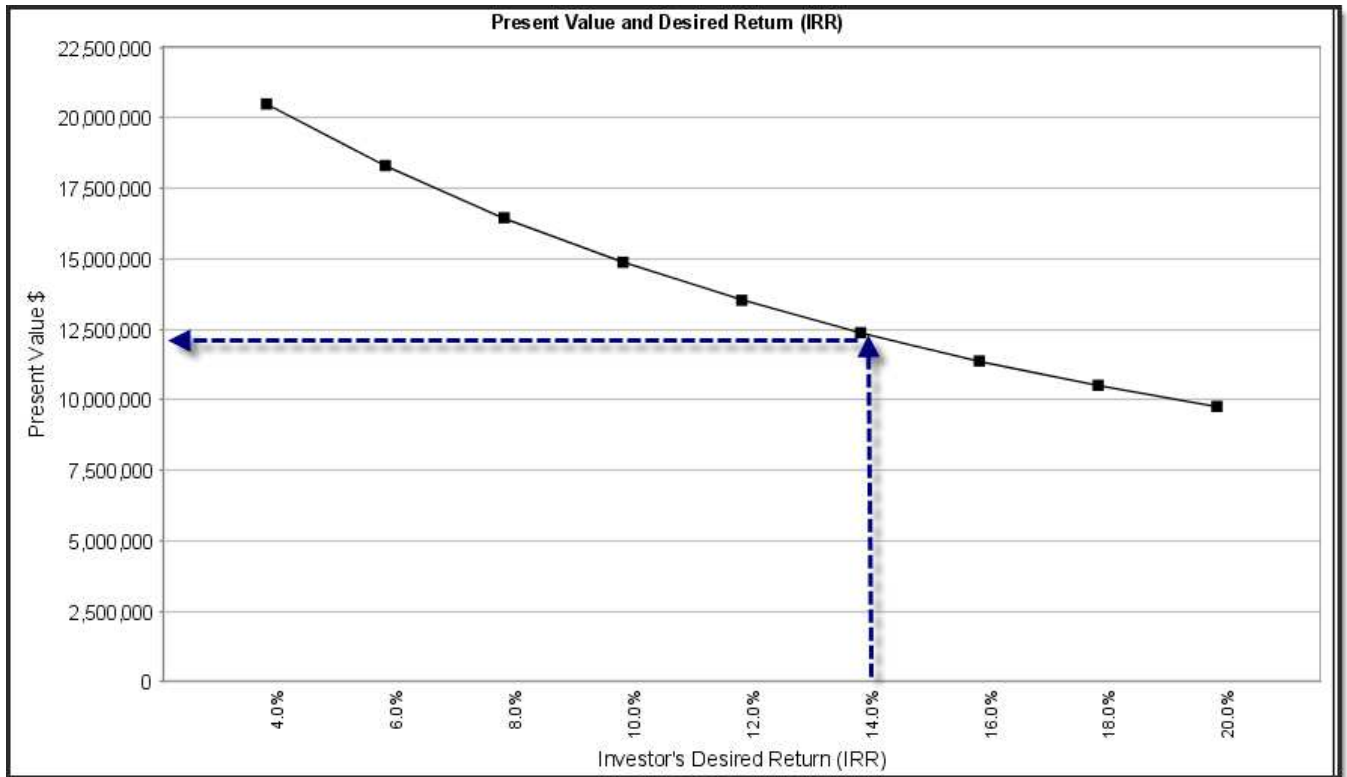
### Example showing an entry and projection error

The graph below illustrates a mistake was made in 2014 in the revenue projections which need to be corrected.



Graph: Present Value vs. Investors Desired Return or Discount Rate

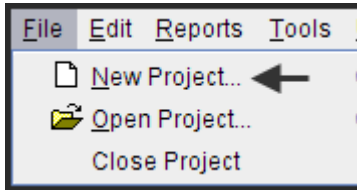
This graph allows you to determine the investment that will provide the desired Internal Rate of Return (IRR).



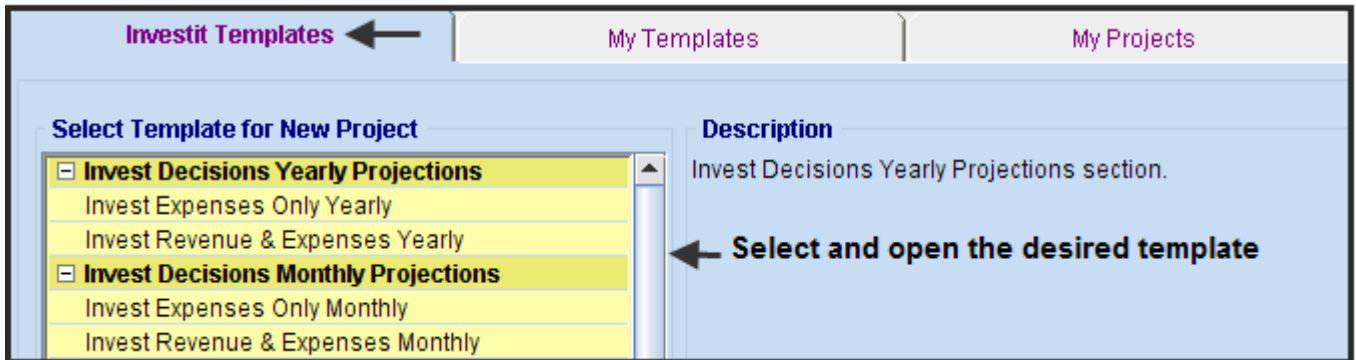
## FILE MENU

This section reviews the File Menu operations

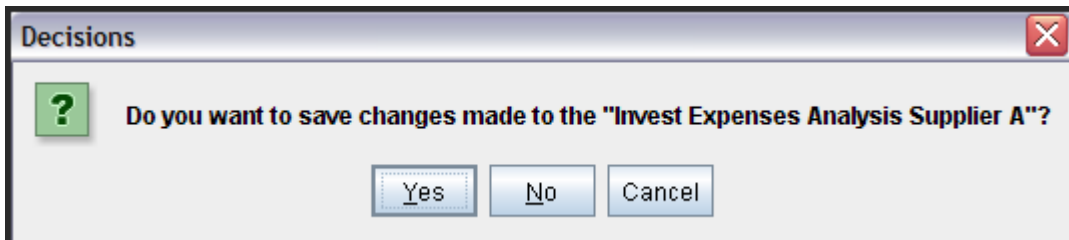
### New Project



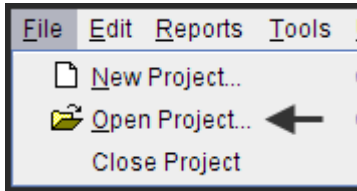
Selecting "New Project" displays the Template List. To open a "New Project" select the appropriate Template.



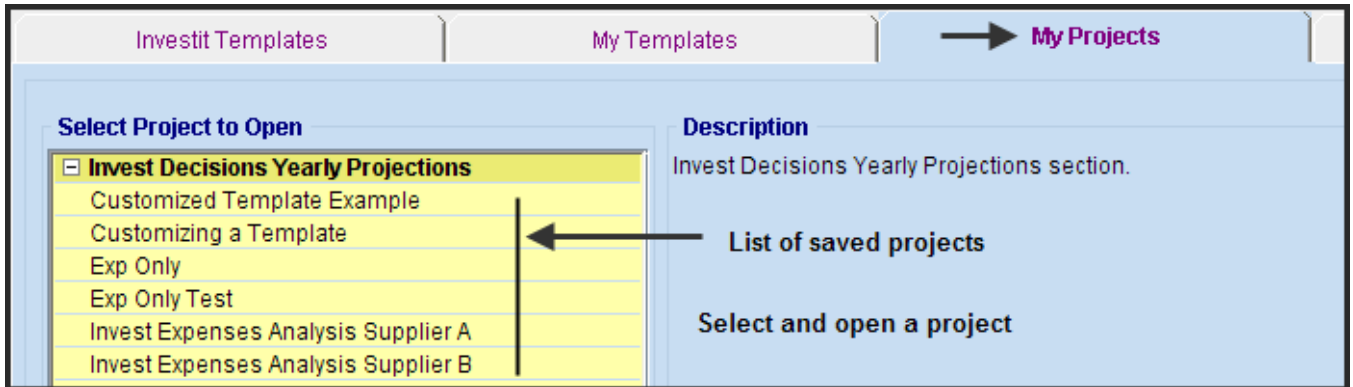
If you have a project open you will be asked if you want to save the Project.



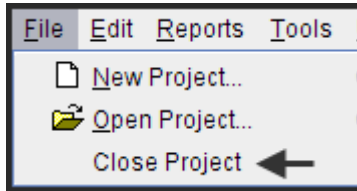
## Open Project



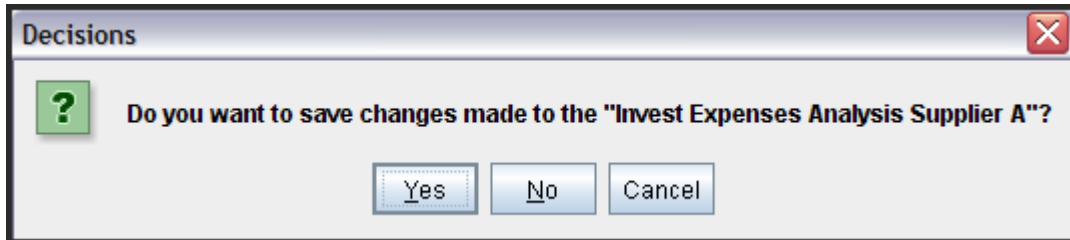
Displays the Saved Project list. Select and open the desired project.



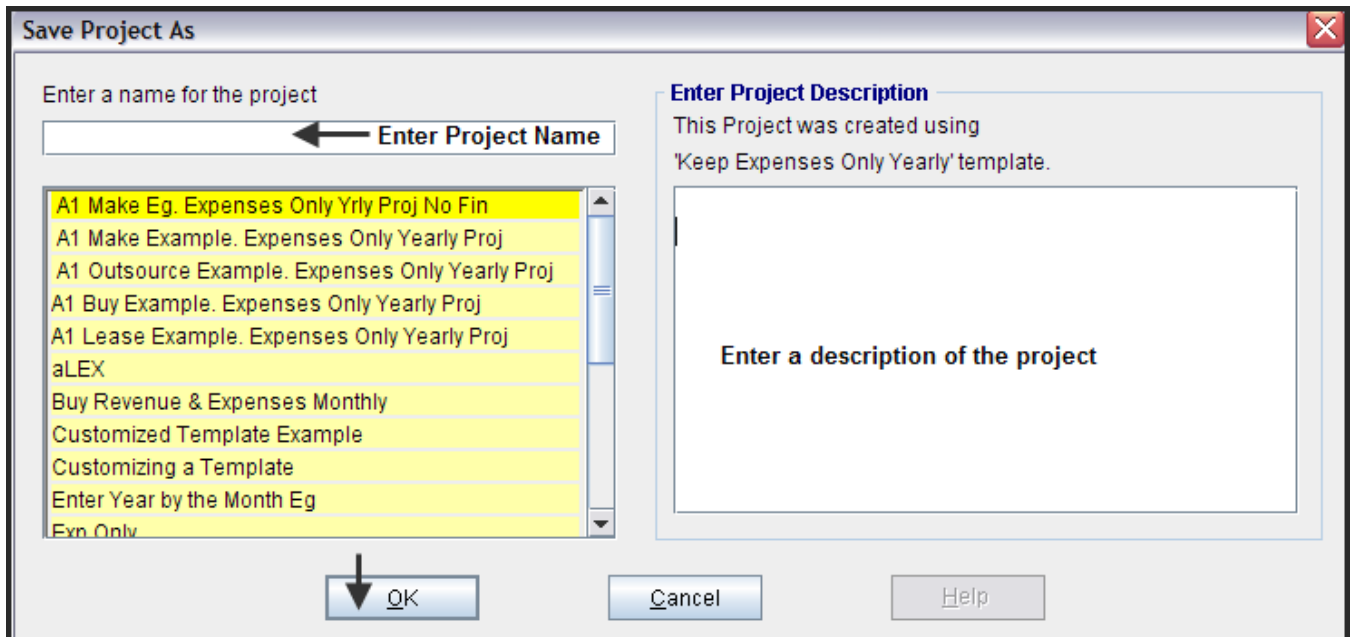
## Close Project



Closing the project returns you to the Investit Panel. You will be asked if you want to save the Project.



If the project is new and hasn't been saved, you will be asked to give the project a name. You can also enter a description of the project.

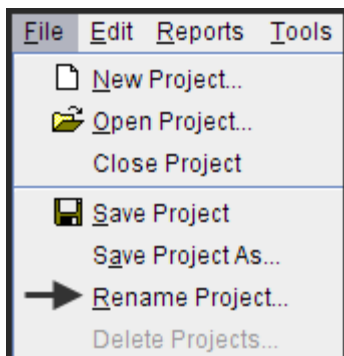




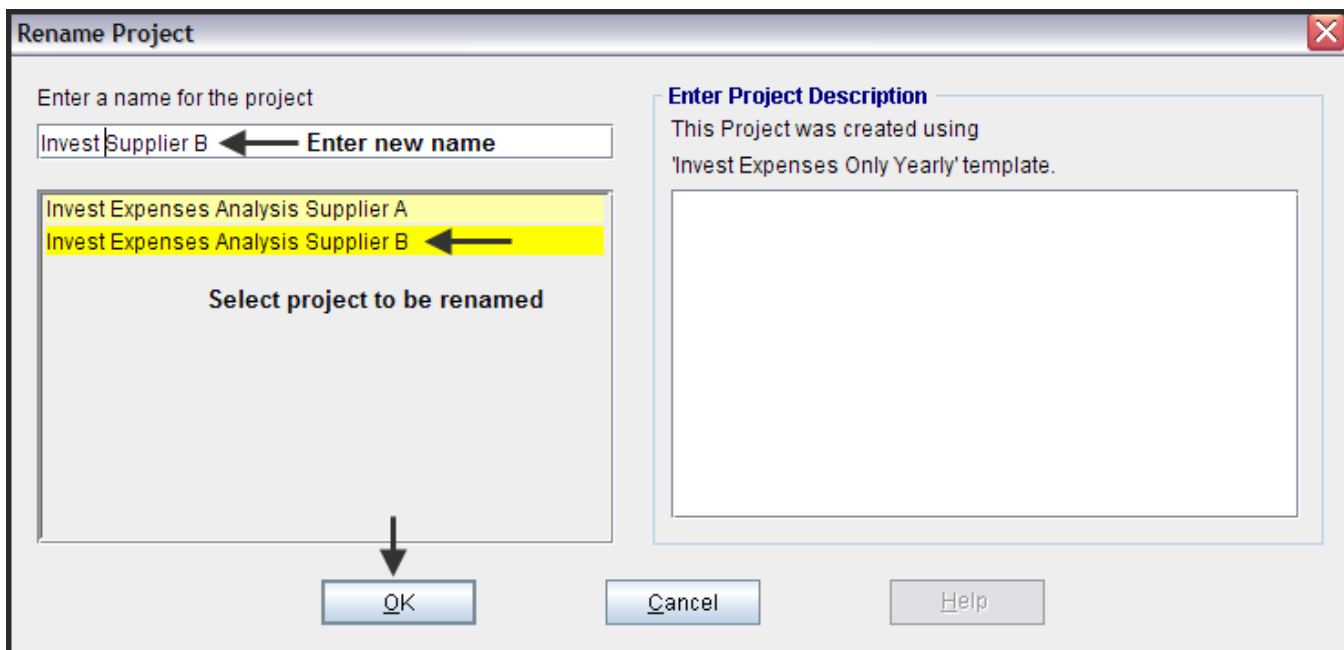
## Rename Project

To rename a project you need to have a project opened.

Select "Rename Project" on the File menu

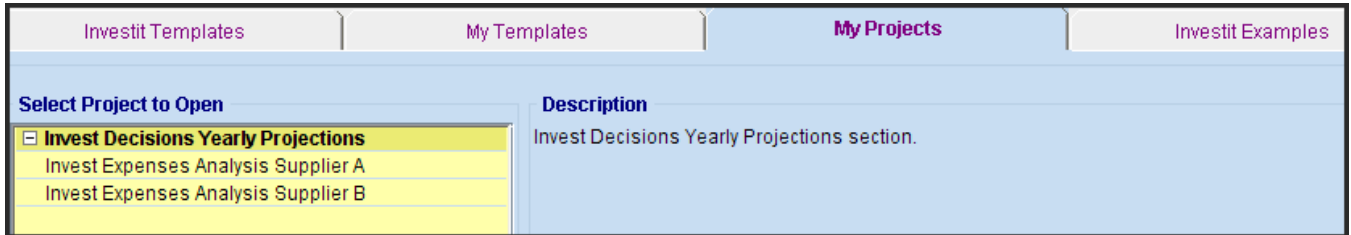


Select the project and change the name.

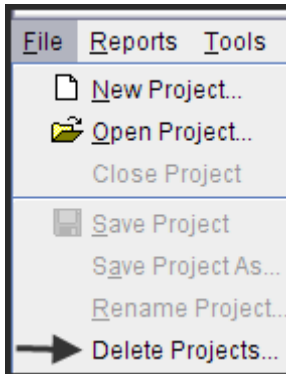


## Delete Projects

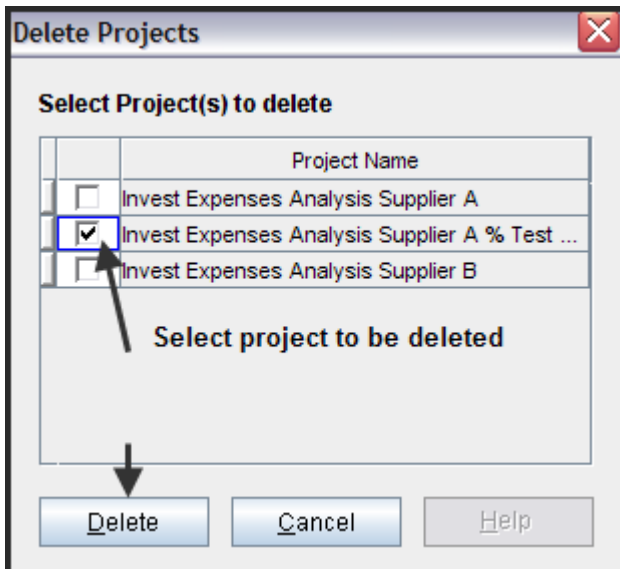
To delete a Project you need to be on the Investit Panel



1. Go to File menu and select "Delete Projects"



2. Select projects to be deleted and click on the "Delete" button

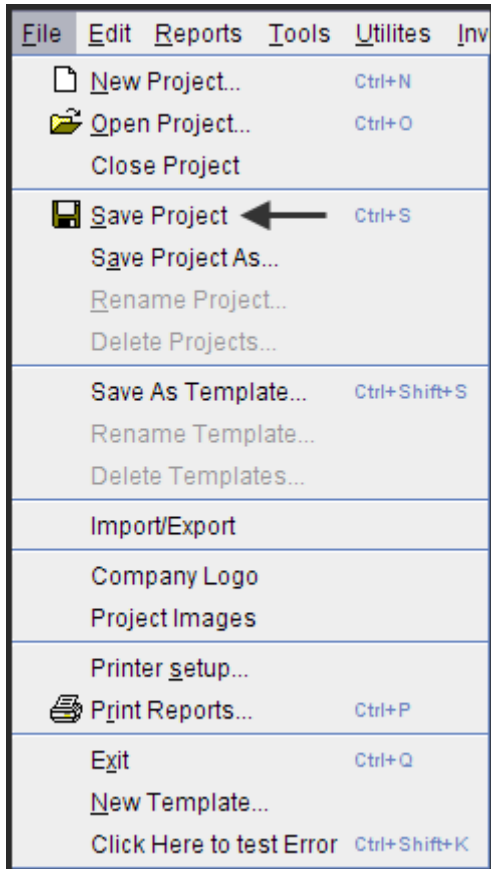


## Save Project & Save Project As

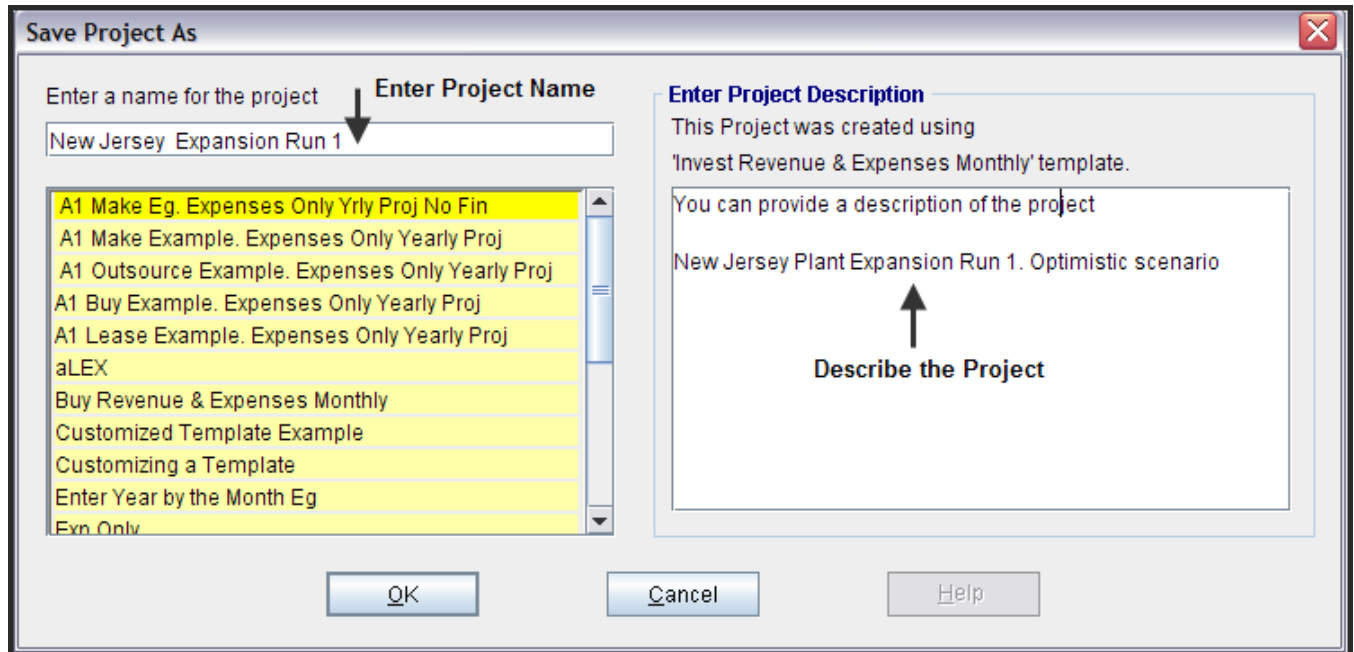
Once you start a project you use “Save” to give the project a name and save the project

Steps

Select “Save” from the File menu



Give the project name and save. You can also enter a description of the project



### Using “Save As”

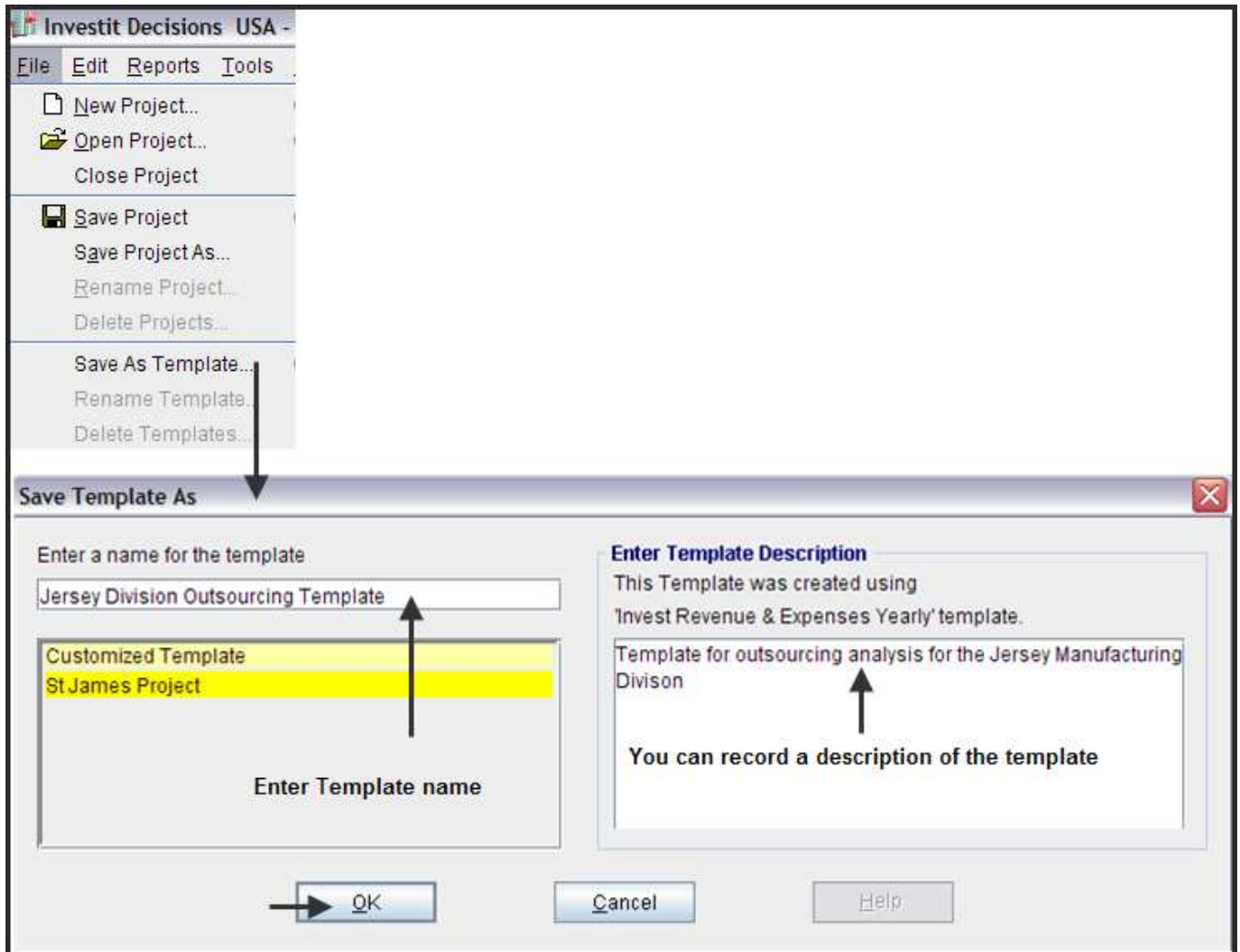
You may wish to run different scenarios for the project. As an example;

- Optimistic Forecast. Run 1.
  - Medium Forecast. Run 2
  - Pessimistic Forecast Run 3
1. Use “Save As” to create a duplicate project but with a new project name
  2. Make the desired name changes
  3. Save using “Save”

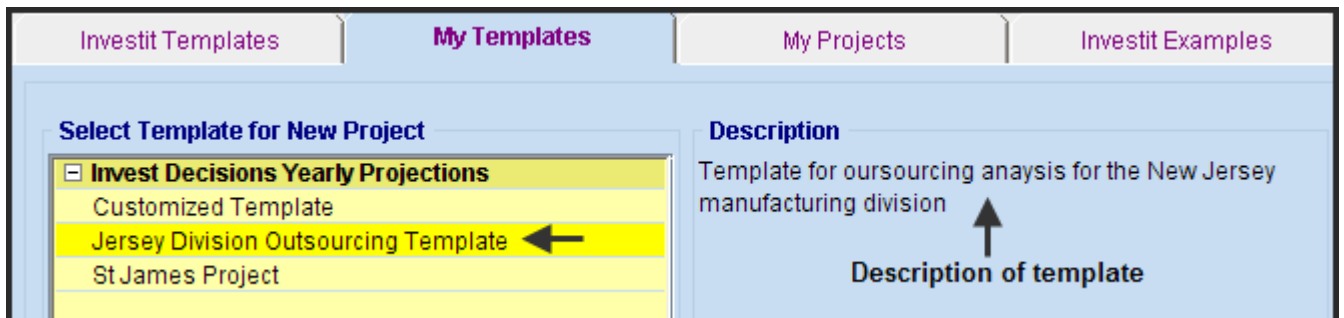
## Save as Template

To save a template that you have modified to suit your own needs.

Select "Save as Template" on the File menu, name and describe the template and save as follows;



On the Investit Panel "My Templates" folder we have added a Template called "Jersey Division Outsourcing Template"

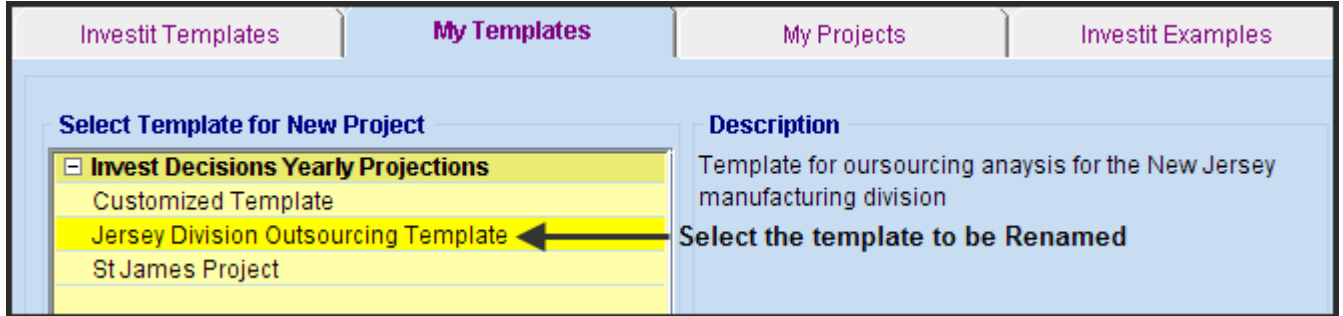


## Rename Template

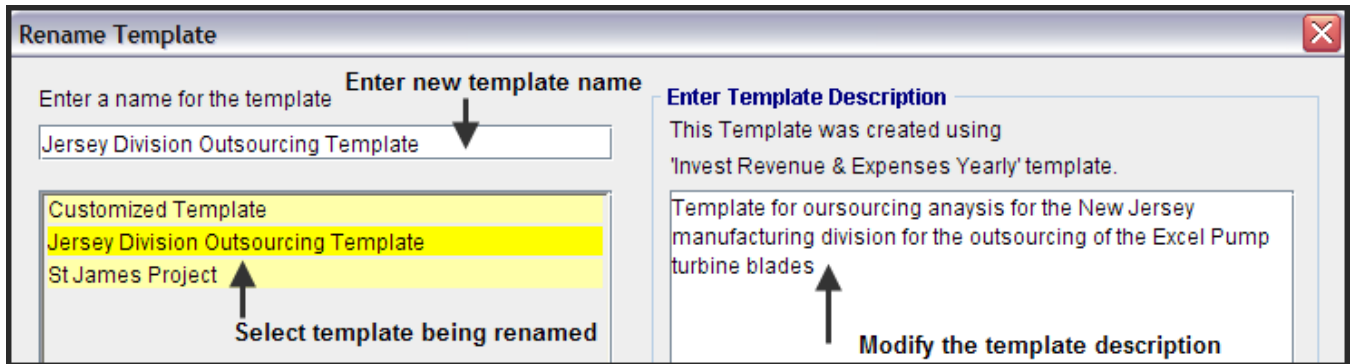
To rename a “My Templates”

1. Select and open the template to be renamed

Note: You need to have “My Templates” open in order to rename a template



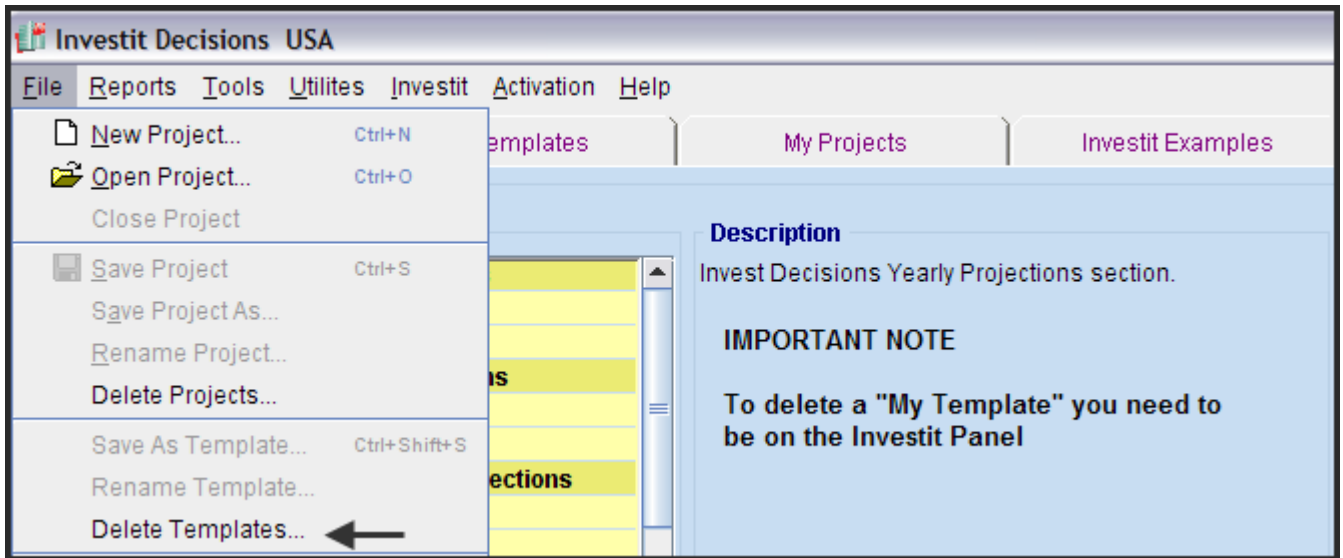
2. Select template to renamed, enter the new template name, modify the template description and click “Ok”



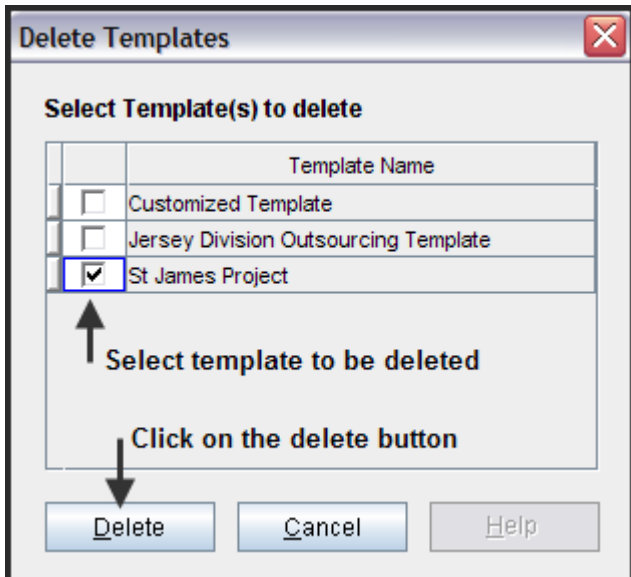
## Delete Templates

To delete a Template that you have saved under “My Templates” you need to be on the Investit Panel.

1. Open the Investit Panel, select “Delete Templates” on the Report menu



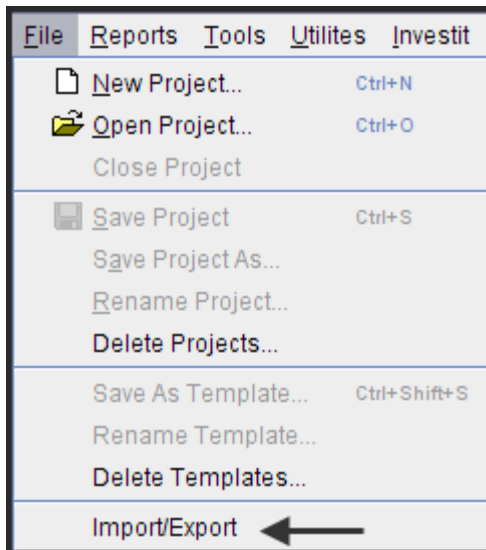
2. Select the template to be deleted and click on the Delete button



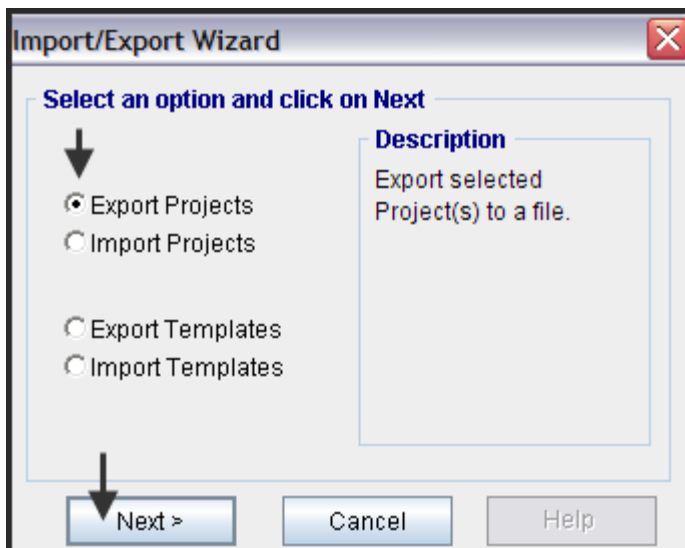
## Import/Export

Allows you to transfer “Projects” and “Templates” between computers that have Investit Decisions installed.

1. Go to the File menu select Import/Export



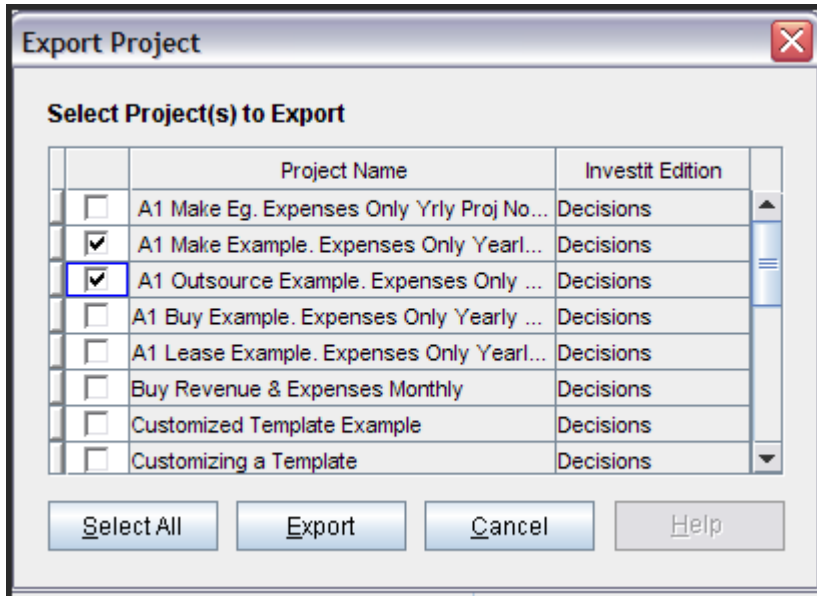
2. Select Import/Export to display the Import/Export Wizard



3. Select the activity and click on the “Next” button. For this example we will use the “Export” option.



4. Select the Projects to be Exported and click on the “Export” button



5. Using the Windows Browser name the “File” and save to the desktop or select a “Folder” using the Browser.
6. You can now e-mail the projects you have Exported.

Follow the same procedure to transfer “My Templates “

### Duplicate Project or Template Names

If you attempt to import a Project or Template that has the same name as one saved on your computer the Duplicate warning message will be displayed offering you several options.

Replace the Project or Template saved on your computer with the imported project

Import the duplicate but modify the Name by adding (1) to the end of the imported project or Template name.

As an example if the Project name is “New Jersey Expansion” the imported Project becomes “New Jersey(1)”

**Note:** The imported file may contain several duplicate Project or Templates. You can apply your selected option to all the duplicate Projects or Templates by clicking on the check box

Apply this option to all duplicates in this imported file

## Import Duplicate(s) Options



The Project name "Demo Office Building" already exists on this computer.

Choose one of the following options.

### Options

- Replace existing Project with the imported Project
- Automatically modify the name of the Imported Project by adding a number e.g. "Demo Office Building(2)" and then import.
- Do not import duplicate Project

Apply this option to all duplicates in this imported file

Ok

Abort

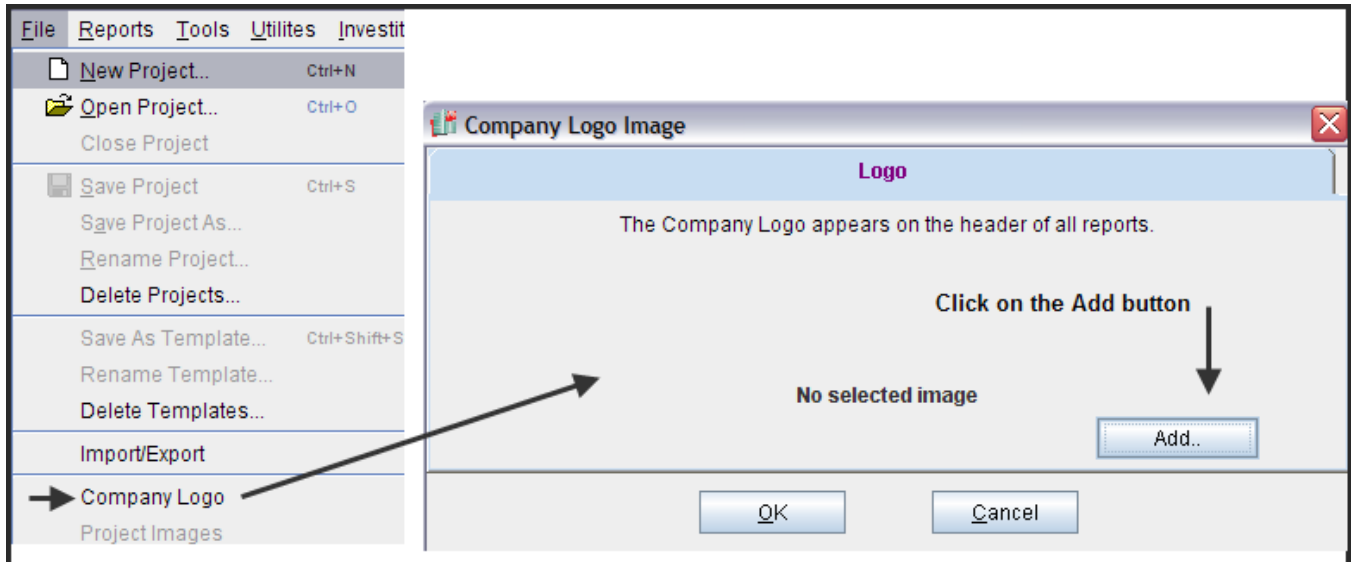
Help

## Importing a Company Logo

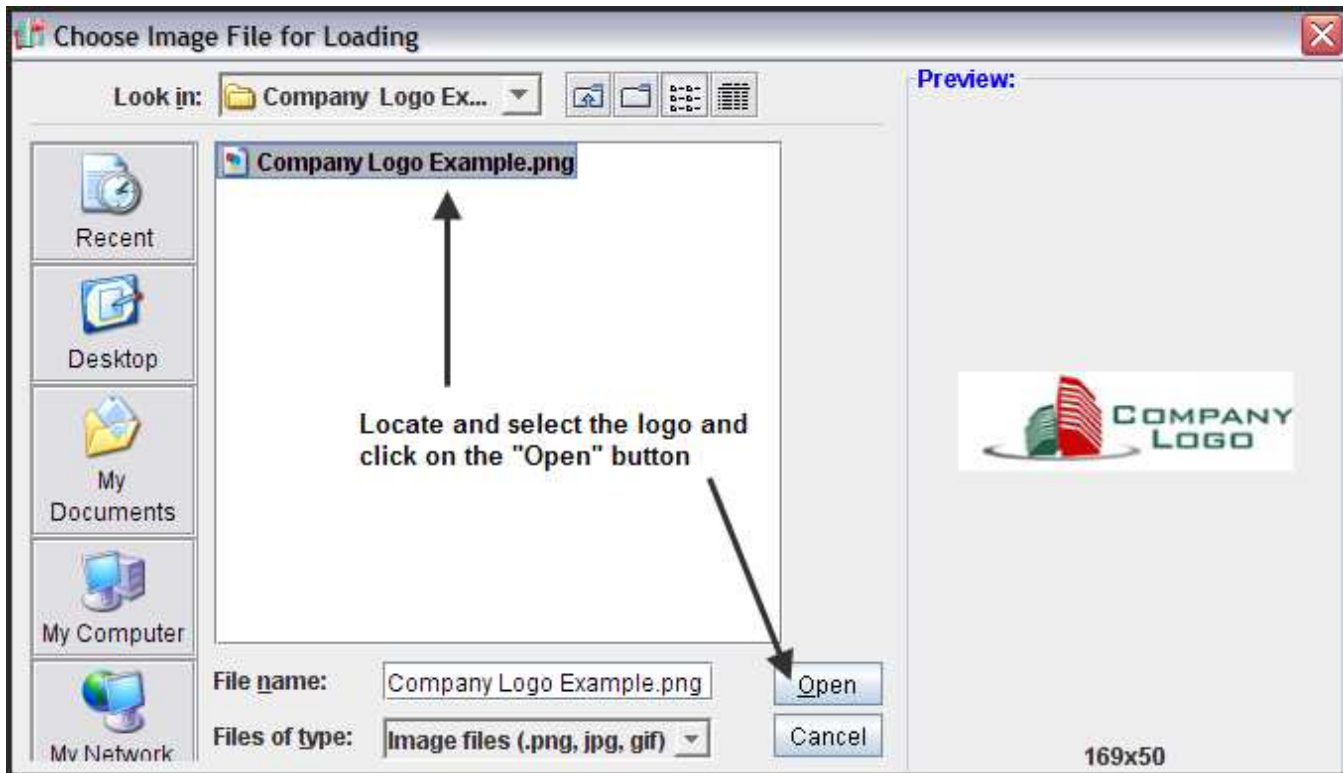
Following are the steps for importing your company logo. Acceptable file formats are;

.png .jpg .gif

1. Select "Company Logo" on the File Menu then click on the "Add" button



2. Locate and select the logo and click on the "Open" button



3. Click on the "Ok" button



The company logo is now displayed on all reports



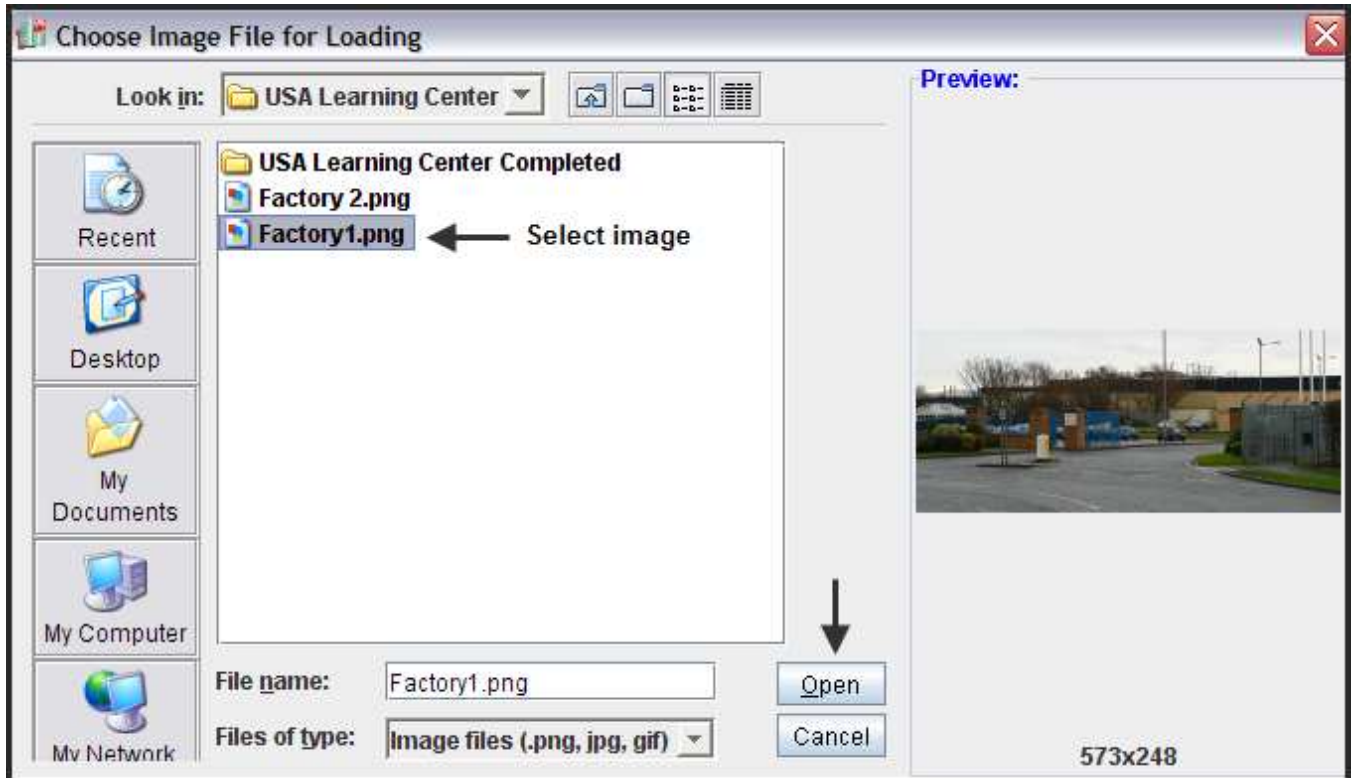
## Project Images

You can import a photograph and display it on the Title Page

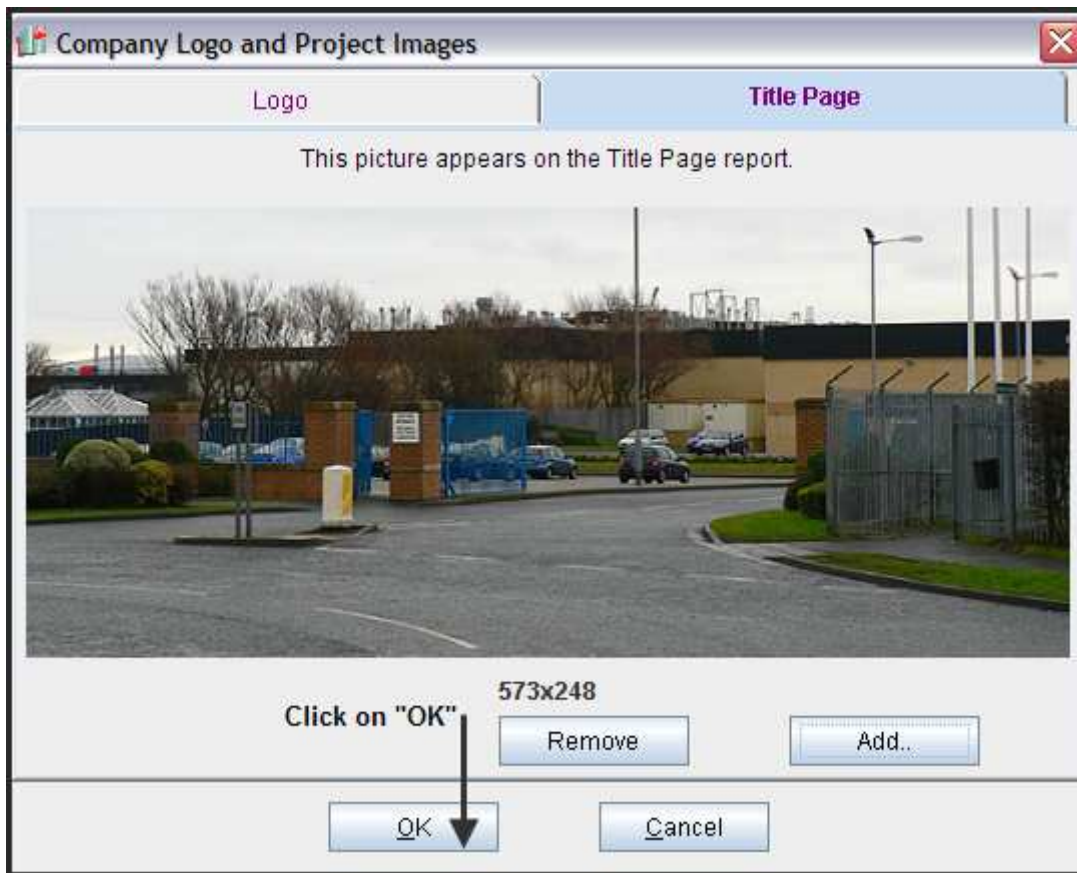
1. Open the Project that you wish to add the image to the Title Page and select Project Images from the File menu. Click on the Add button to add the image



2. Locate, select and open the image



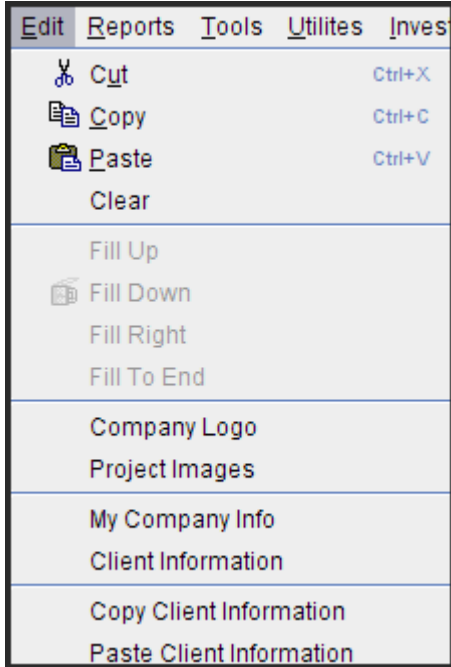
3. Locate, select and open the image. The image will now print on the Title Page



## EDIT MENU

Used to access and edit;

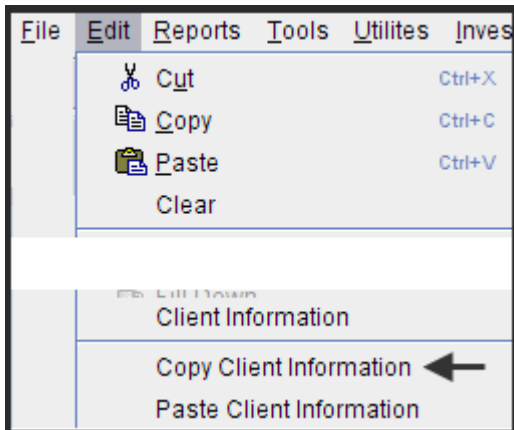
1. Company Logo and Images
2. Copy and paste Client information from one project to another



## Copy & Paste Client Information

You can copy or transfer the Client Information Folders from one project to another. This saves re-entering the Client information.

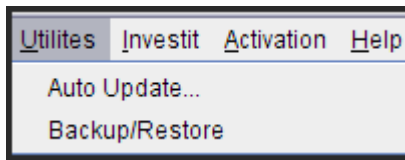
1. Open the Project which has the Client information you wish to Copy
2. On the Edit Menu select "Copy Client Information"



Open a New Project or an existing Project that you wish to transfer the Client information to. Complete the transfer by selecting "Paste Client" information from the "Edit" list

## UTILITIES

Use to back up and restore your projects and templates



### Auto Update

Use Auto Update to check if you have the latest update

### Backup/Restore

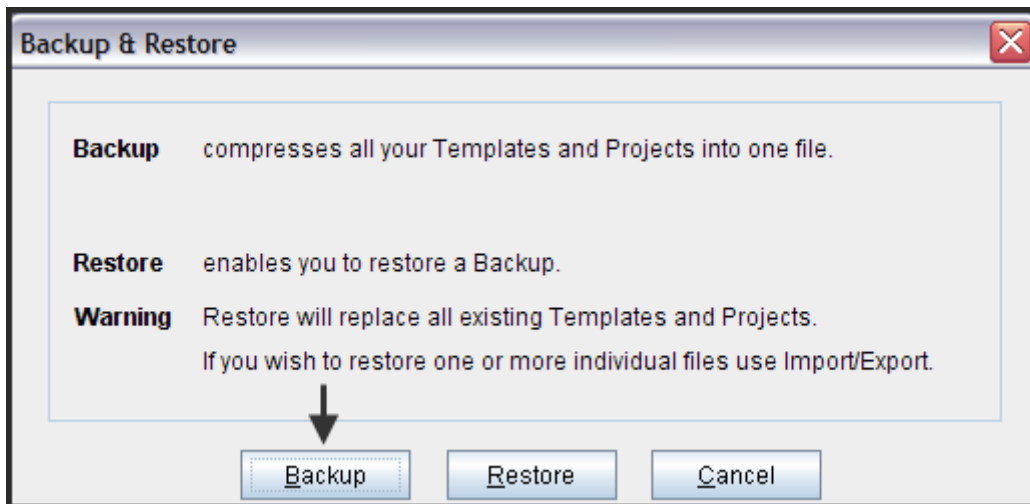
Backup is used to make a copy of the whole data file containing all user projects and templates to a storage device such as CD, zip drive or other external storage device. Restore is used to replace an existing data file containing all user projects and templates with the one that was generated with the Backup routine.

**Process:** Backup the whole data file containing all user projects by selecting Backup from the Utilities Menu or by using the Backup/Restore button on the Navigation Panel. Then restore all user projects and templates from the backup data file to another or the same computer installed with Investit Pro by selecting Restore from the Utilities Menu or by using the Backup/Restore button on the Navigation Panel.

NB: All existing files on the destination drive will be overwritten.

### Backup

1. Click on Backup button

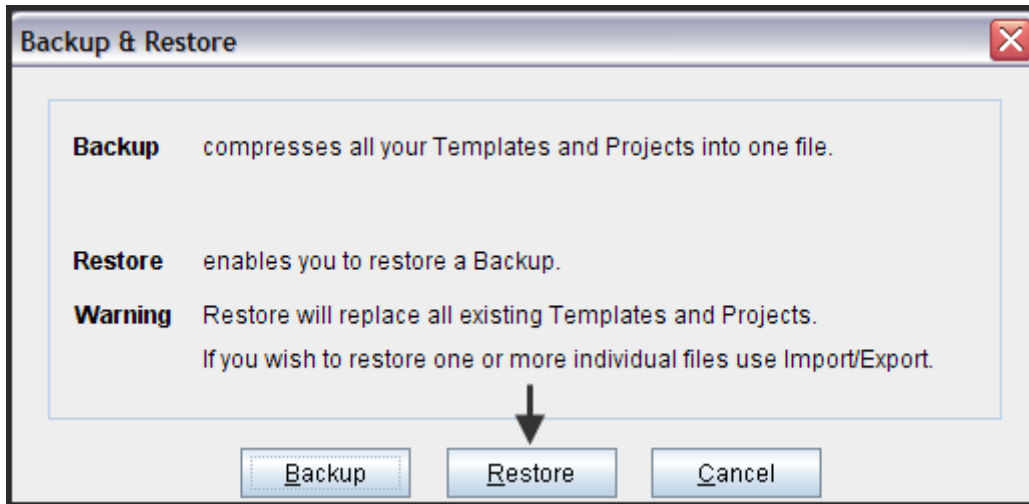


2. Click the button for action to be performed. i.e. Backup.
3. In the Save dialog box insert destination drive or location e.g. desktop or CD Rom drive.
4. Name the file and Click Save to complete the process
5. A confirmation of a successful backup should then be received.



## Restore

1. Click Utilities Menu / Backup/Restore or the Backup/Restore button on the Navigation Panel



2. Click the button for action to be performed i.e. Restore
3. In the Open dialog box locate the file containing the previously backup file.
4. Click Open to complete the process.
5. A confirmation of a successful restore should then be received.

## DEFINITIONS & FORMULAS

### Benefit to Cost Ratio (Before Tax)

Also called the "Profitability Index"

$$\begin{aligned} &= \frac{\text{Benefits}}{\text{Costs}} \\ &= \frac{\text{PV of the Net Income}}{\text{PV}(\text{Investments} + \text{Working Capital Additions} - \text{Salvage Value})} \end{aligned}$$

Where;

PV is the Present Value based on the Discount Rate entered in the Investment Folder  
Net Income = Revenue – Expenses  
Financing is excluded from the calculation