

A Tutorial on Argus Portfolio Analysis

Background

Since most developers, investors and other parties actively involved in real estate have multiple properties, portfolio analysis is one of the key elements of real estate finance. This is especially true where a lender may be looking to the borrower for recourse debt, or where the portfolio assemblage has some benefits whereby the whole becomes more than the sum of the parts. Periodically, investors will look at alternative scenarios in assembling and holding real estate portfolios. The objective of this Primer is to walk through some of the nuances of Argus as a portfolio analysis tool.

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Preliminary Step

File Organization

Create individual Property Files and put in a Target Directory. If you are doing multiple portfolios, you may want to create a separate directory on the server for each team to use, if desired. Make sure that you have stabilized the Argus runs for each property before the portfolio analysis. You should also formulate a preliminary opinion regarding the merits of each property and the proceeds they may generate. In effect, you are conducting a hold-sell on the properties that will be complemented by your analysis of how they fit together and help achieve your client's goals and objectives. It is possible a property that looks like a sales candidate on its own, complements the other assets in terms of NOI growth, rent rolls, TIs and other economics.

To begin explore your individual properties. Note that any mistakes in the individual properties will carry over to the Portfolio. Thus, you should look at your individual Property runs to make sure the "make sense." This can be achieved by applying some basic checks such as:

- Cash Flow. Look at your Cash Flows; are they reasonable?
- Gross Revenue/SF. Since you have the SF of the building and the calculated Gross Revenue, divide it by the total rentable SF; is it in the "ballpark" given your averages rent?
- NOI/Value. Look at the NOI and divide it by your Cap Rate; is the value in line with your expectations?
- Resale. Look at the resale summary. Does the Resale Amount relate to your assumed Value? What is the IRR compared to your Cap Rate? Does it make sense?
- Detailed PV. Look at the details. Do the annual Cash Flows seem reasonable? Test against your Cap Rate. Does the resale value align with your exit Cap Rate?
- Depreciation. Look at your depreciation schedule. Divide Building Value by useful life; is the number right? Note that your treatment of Land may be an issue, since land is not depreciable. Make sure you didn't put the Land Value into the Property Purchase; Argus subtracts that amount from the Cash Flow each year. Rather, put it in the Depreciation & Taxes sheet under Yield.

Depreciation Schedule

Name	Simple/Detail	Method	Useful Life	Amount - Basis
Property	Simple	Straight Line	31	3,600,000
Capital Expenditures	Simple	None		
Land Costs	Simple	None		
Hard Costs	Simple	None		
Soft Costs	Simple	None		
Debt Interest	Simple	None		
Leasing Commissions	Simple	None		
Tenant Improvements	Simple	None		

Property Level Changes

If you made changes at the property level, they will be reflected in the Portfolio next time you open it and run Reports. However, you should Run Property Level reports within the individual properties to make sure they are recalculated. At the individual property level, look at this Report in the Detailed PV. This is the same report at the Portfolio Level.

Analysis Period	For the Year Ending	Annual Cash Flow	P.V. of Cash Flow @ 10.00%
Year 1	Feb-2009	\$1,878,794	\$1,707,995
Year 2	Feb-2010	2,591,516	2,141,748
Year 3	Feb-2011	2,432,467	1,827,549
Year 4	Feb-2012	1,529,800	1,044,874
Year 5	Feb-2013	2,790,248	1,732,524
Year 6	Feb-2014	1,875,791	1,058,835
Year 7	Feb-2015	2,984,994	1,531,774
Year 8	Feb-2016	2,984,241	1,392,171
Year 9	Feb-2017	2,059,385	873,380
Year 10	Feb-2018	3,264,266	1,258,516
Total Cash Flow		24,391,502	14,569,366
Property Resale		44,057,711	20,407,245
Total Property Present Value			\$34,976,611
Rounded to Thousands			\$34,977,000
Per SqFt			279.77
Percentage Value Distribution			
Assured Income			13.17%
Prospective Income			28.48%
Prospective Property Resale			58.35%
			100.00%

Check these numbers; do they make sense?

Again, do the numbers make sense? Are they reasonable? Does the Resale approximately equal the NOI capped by your Exit Cap Rate?

Case Study

Property Overview

This is a case study using two properties. Note that we use two properties --Eastlake Plaza and Global Logistics-- which are named the same as the 2008 case, but have different inputs and assumptions.

Property 1: Eastlake Plaza

Property Information		
Property Name	Eastlake Plaza	
Property Type	Office & Retail	
Property Size	50,000	
Average Occupancy	90.04%	
Analysis Start	March 2008	
End Date	February 2018	
General Inflation	3.00%	
General Vacancy Rate	0.00%	
Credit & Collection Loss	0.00%	
Revenues and Expenses		
	\$/SqFt	Amount
Miscellaneous Revenues	-	-
Reimbursable Expenses	-	-
Non-Reimbursable Expenses	-	-
Capital Expenditures	-	-
Rent Roll & Market Leasing		
	#	Amount
Tenants	3	\$851,574
Market Leasing Assumptions	1	
Top 5 Tenants by Total Rent		
	Suite	Rent
Office 1	300	\$557,500
Retail 1	301	\$295,313
Retail 2	302	\$6,306

Property 2: Global Logistics

Property Information			Present Value & Yield			
Property Name	Global Logistics		Unleveraged Discount Rate	10.00%		
Property Type	Office/Industrial		Unleveraged Present Value	\$17,484,098		
Property Size	80,000		Leveraged Discount Rate	10.00%		
Average Occupancy	100.00%		Leveraged Present Value	-		
Analysis Start	March 2008		Cap Rate	6.50%		
End Date	February 2018		Calculated Resale	\$23,384,616		
General Inflation	0.00%		Purchase Price	-		
General Vacancy Rate	0.00%		Unleveraged IRR	-		
Credit & Collection Loss	0.00%		Direct Cap Value	-		
Revenues and Expenses			Cap Rate Matrix - Unleveraged			
	\$/SqFt	Amount	Cap Rates	PV @0.00%	PV @0.00%	PV @0.00%
Miscellaneous Revenues	-	-				
Reimbursable Expenses	-	-				
Non-Reimbursable Expenses	-	-				
Capital Expenditures	-	-				
Rent Roll & Market Leasing			Summary Cash Flow (Year 1)			
	#	Amount		\$/SqFt	\$ Amount	
Tenants	2	\$1,550,000	Potential Gross Revenue	\$19.38	\$1,550,000	
Market Leasing Assumptions	1		Effective Gross Revenue	19.38	1,550,000	
			Net Operating Income	19.38	1,550,000	
Top 5 Tenants by Total Rent			Cash Flow Before Debt	\$19.38	\$1,550,000	
	Suite	Rent				
Office 1 Global	400	\$950,000				
Office 2 Global	402	\$600,000				

Create Portfolio

New File from Scratch. Navigate to Directory where you have individual files.

Name and Indicate Portfolio;

The screenshot shows a 'Property Description' form with the following fields and values:

Additional Data	Comments	Input Preferences	Output Preferences
Property Description	Timing	Area Measures	Property Inflation
Property Name:	JRD REF 2008 Port 4V1		
Address:			
Address2:			
City:	Seattl		
State:	WA	Zip:	98195
Country:			
Portfolio:	JRD Port 4 V1		
Property Type:	Portfolio		

Assuming you are in the directory with your Property Files, you will see a listing of available ones.

The screenshot shows two panels: 'Property Information' and 'Portfolio Selection'.

Property Information

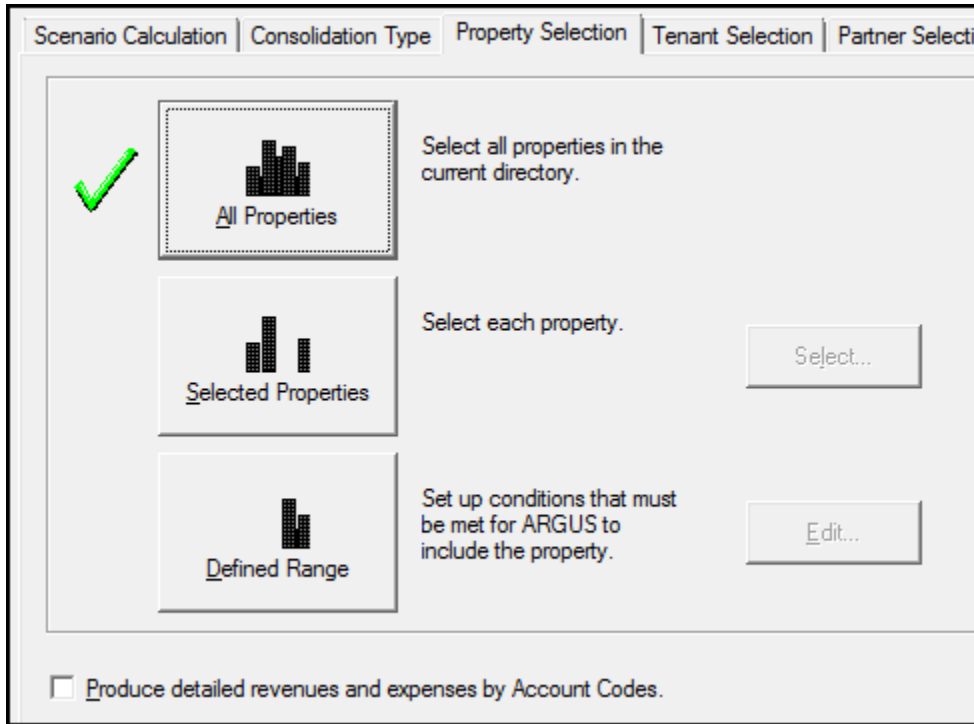
Property Name	JRD REF 2008 Port 4V1
Property Type	Portfolio
Property Size	1
Average Occupancy	-
Analysis Start	March 2008
Reporting Start	March 2008
End Date	February 2018
Portfolio Expenses	Pending

Portfolio Selection

Scenario Calculation	No Change
Consolidation Type	Property Cash Flows
Property Selection	All Properties
Selected Properties	<ul style="list-style-type: none">•Eastlake Plaza1•Global Logistics1

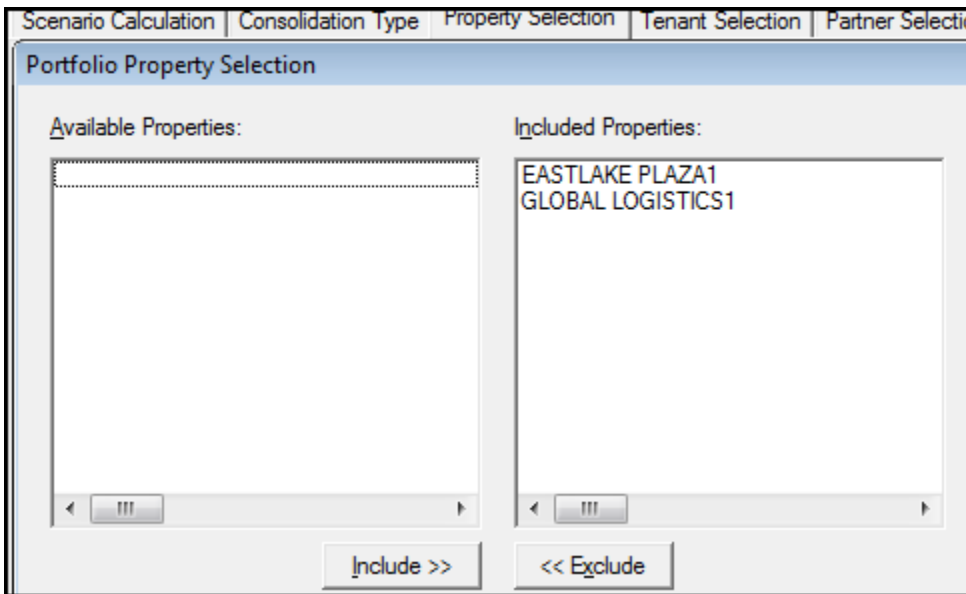
Tutorial on Argus Portfolio-Level Analysis

Under Portfolio Selection, you can pick what you want included from your directory.



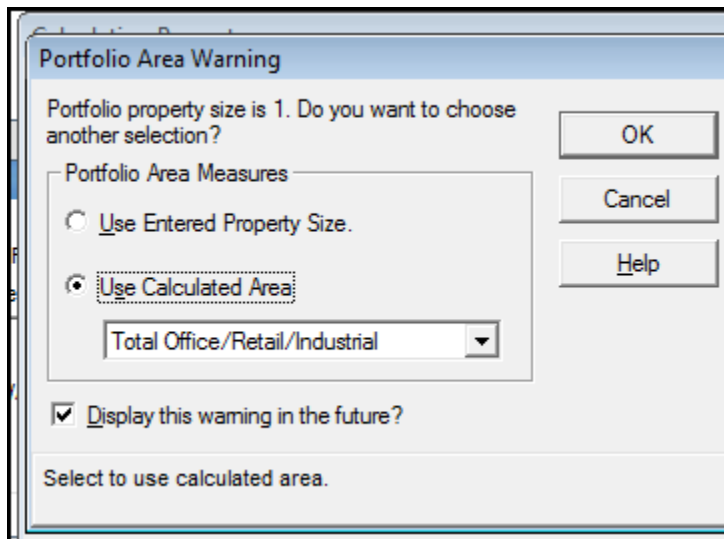
Select the middle option from the top default; Selected Properties. This is where you will add and subtract properties.

In this case, I selected both properties (there could have been variations in the number and/or scenarios).



Specify Property/Portfolio Size

To consolidate, run Reports and Calculate composite size via Argus



Review Portfolio DCF and Schedules

Now, you can Run Reports and View Property Level (which is Portfolio Level)

Schedule Of Prospective Cash Flow In Inflated Dollars for the Fiscal Year Beginning 3/1/2008				
For the Years Ending	Year 1 Feb-2009	Year 2 Feb-2010	Year 3 Feb-2011	Year 4 Feb-2012
Gross Revenue				
Potential Rental Revenue	\$2,487,824	\$2,585,324	\$2,593,688	\$2,635,443
Absorption & Turnover Vacancy			(166,704)	
Base Rent Abatements	(86,250)		(37)	(133,333)
Scheduled Base Rental Revenue	2,401,574	2,585,324	2,426,947	2,502,110
Retail Sales Percent Revenue	7,545	6,192	5,804	6,209
Total Gross Revenue	2,409,119	2,591,516	2,432,751	2,508,319
Effective Gross Revenue	2,409,119	2,591,516	2,432,751	2,508,319
Net Operating Income	2,409,119	2,591,516	2,432,751	2,508,319
Leasing & Capital Costs				
Tenant Improvements	225,000		153	568,000
Leasing Commissions	305,325		131	401,200
Total Leasing & Capital Costs	530,325		284	969,200
Cash Flow Before Debt Service & Taxes	\$1,878,794	\$2,591,516	\$2,432,467	\$1,539,119

Tutorial on Argus Portfolio-Level Analysis

Verify Correct Property Inputs

To check, look at individual Projects and explore the various DCF components. Make sure all assumptions are reasonable as they will be masked at the portfolio level when aggregated.

Eastlake Plaza

Schedule Of Prospective Cash Flow In Inflated Dollars for the Fiscal Year Beginning 3/1/2008				
For the Years Ending	Year 1 Feb-2009	Year 2 Feb-2010	Year 3 Feb-2011	Year 4 Feb-2012
Potential Gross Revenue				
Base Rental Revenue	\$937,824	\$1,035,324	\$1,035,354	\$1,035,443
Absorption & Turnover Vacancy			(37)	
Base Rent Abatements	(86,250)		(37)	
Scheduled Base Rental Revenue	851,574	1,035,324	1,035,280	1,035,443
Retail Sales Percent Revenue	7,545	6,192	5,804	6,209
Total Potential Gross Revenue	859,119	1,041,516	1,041,084	1,041,652
Effective Gross Revenue	859,119	1,041,516	1,041,084	1,041,652
Net Operating Income	859,119	1,041,516	1,041,084	1,041,652
Leasing & Capital Costs				
Tenant Improvements	225,000		153	
Leasing Commissions	305,325		131	
Total Leasing & Capital Costs	530,325		284	
Cash Flow Before Debt Service & Taxes	\$328,794	\$1,041,516	\$1,040,800	\$1,041,652

Global Office

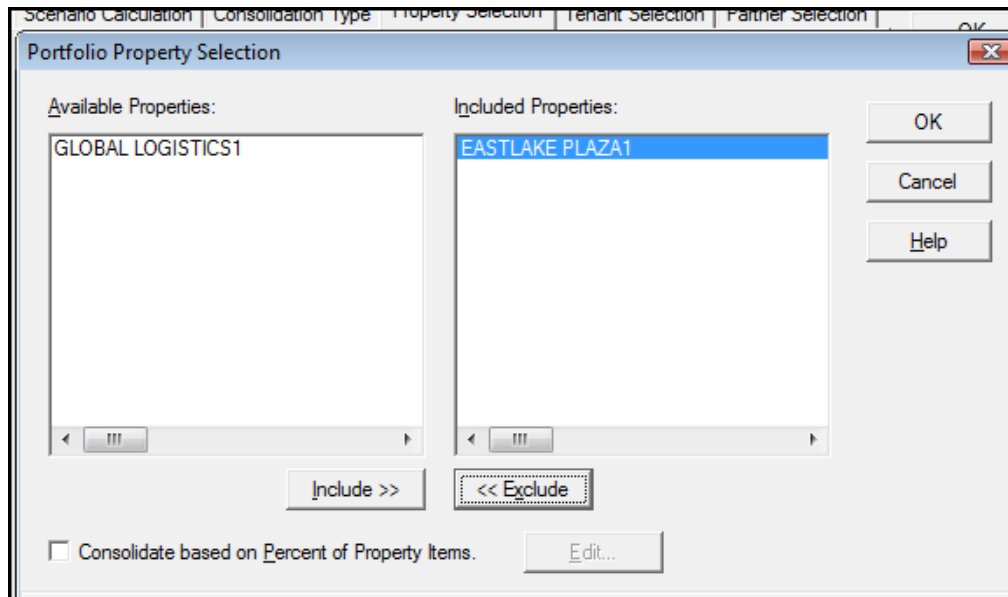
Schedule Of Prospective Cash Flow In Inflated Dollars for the Fiscal Year Beginning 3/1/2008				
For the Years Ending	Year 1 Feb-2009	Year 2 Feb-2010	Year 3 Feb-2011	Year 4 Feb-2012
Potential Gross Revenue				
Base Rental Revenue	\$1,550,000	\$1,550,000	\$1,558,334	\$1,600,000
Absorption & Turnover Vacancy			(166,667)	
Base Rent Abatements				(133,333)
Scheduled Base Rental Revenue	1,550,000	1,550,000	1,391,667	1,466,667
Total Potential Gross Revenue	1,550,000	1,550,000	1,391,667	1,466,667
Effective Gross Revenue	1,550,000	1,550,000	1,391,667	1,466,667
Net Operating Income	1,550,000	1,550,000	1,391,667	1,466,667
Leasing & Capital Costs				
Tenant Improvements				568,000
Leasing Commissions				401,200
Total Leasing & Capital Costs				969,200
Cash Flow Before Debt Service & Taxes	\$1,550,000	\$1,550,000	\$1,391,667	\$497,467

Tutorial on Argus Portfolio-Level Analysis

Portfolio Composition: Buy/Sell Impacts

If it works, you should have the consolidated = sum of Eastlake and Global. Now, you can work with selling or disposing of the assets by modifying what's in the portfolio.

Go Back to Portfolio, and Go to Select



Notice, I Excluded Global Logistics. So, the “Portfolio” should be the Eastlake numbers alone:

Schedule Of Prospective Cash Flow In Inflated Dollars for the Fiscal Year Beginning 3/1/2008				
For the Years Ending	Year 1 Feb-2009	Year 2 Feb-2010	Year 3 Feb-2011	Year 4 Feb-2012
Gross Revenue				
Potential Rental Revenue	\$937,824	\$1,035,324	\$1,035,354	\$1,035,443
Absorption & Turnover Vacancy			(37)	
Base Rent Abatements	(86,250)		(37)	
Scheduled Base Rental Revenue	851,574	1,035,324	1,035,280	1,035,443
Retail Sales Percent Revenue	7,545	6,192	5,804	6,209
Total Gross Revenue	859,119	1,041,516	1,041,084	1,041,652
Effective Gross Revenue	859,119	1,041,516	1,041,084	1,041,652
Net Operating Income	859,119	1,041,516	1,041,084	1,041,652
Leasing & Capital Costs				
Tenant Improvements	225,000		153	
Leasing Commissions	305,325		131	
Total Leasing & Capital Costs	530,325		284	
Cash Flow Before Debt Service & Taxes	\$328,794	\$1,041,516	\$1,040,800	\$1,041,652

Exporting/Consolidating in Excel

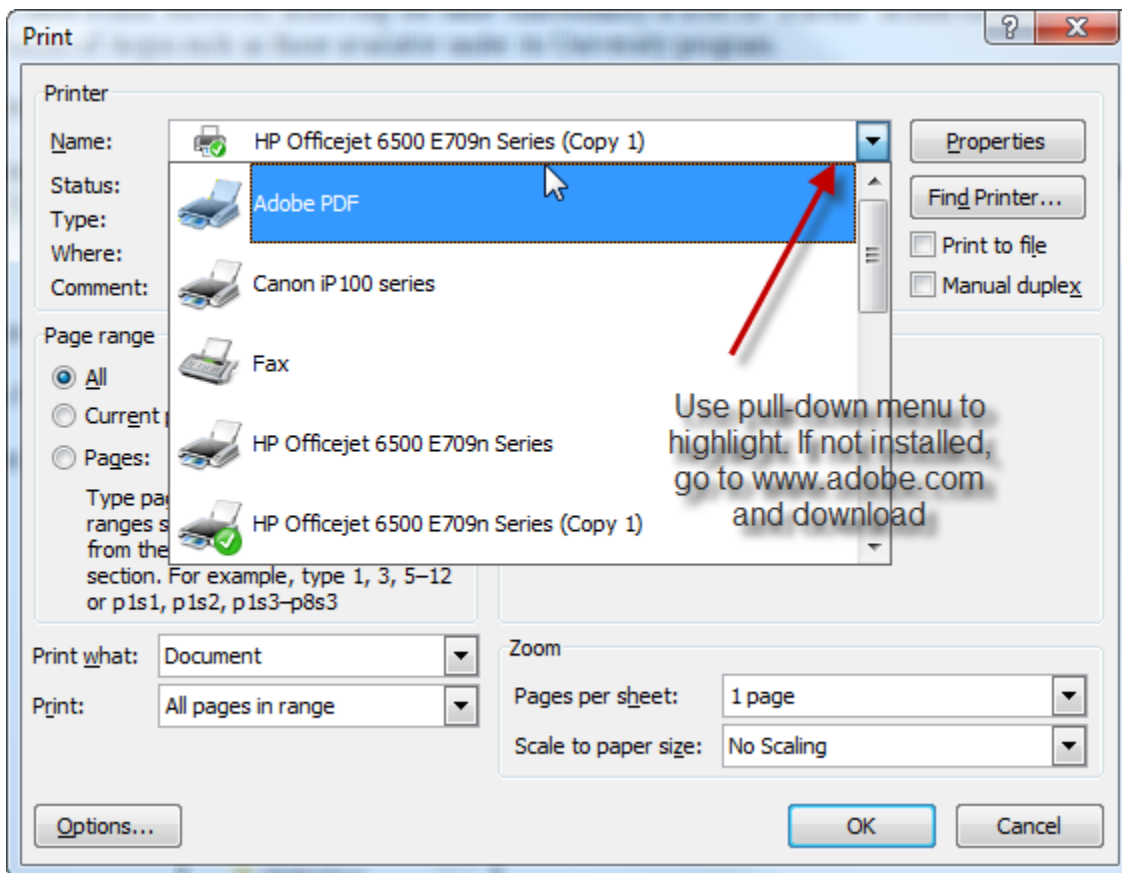
Overview

You can do a lot of portfolio modeling in Argus and generate reports and other support materials. However, at some point you may want to pull into Excel which is a more portable format for sharing the results, combining with other data, etc. In the commercially licensed version of Argus, you can EXPORT any table a data. However, achieving the same functionality is a bit of “Eureka” in non-commercial versions of Argus such as those available under its University program.

Alternatives for Non-Commercial Licensees (Argus University Program)

There are two basic options depending on your hardware settings, software and output needs. The first is to Print to PDF. You do this by making sure you have an Adobe PDF print driver installed. The following is a brief overview of how to get Argus into Adobe; a more complete step-by-step for Excel follows.

Adobe Print Option



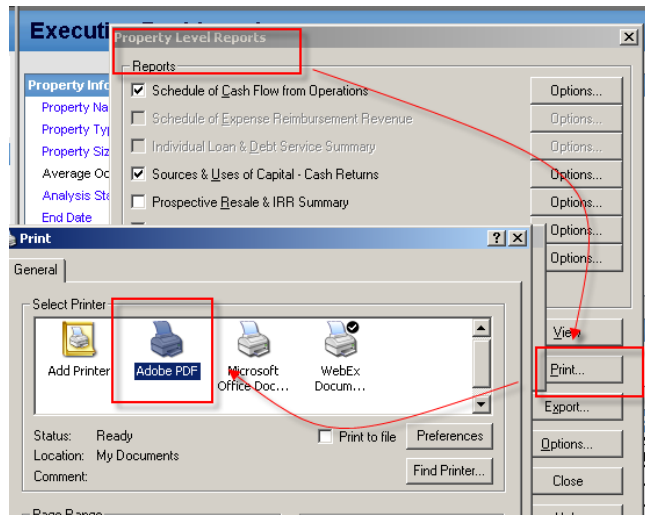
Printing to PDF and Getting Data into Excel

Printing to PDF

Go back to Property File and Print to Adobe:

Navigate to your Directory with the files.

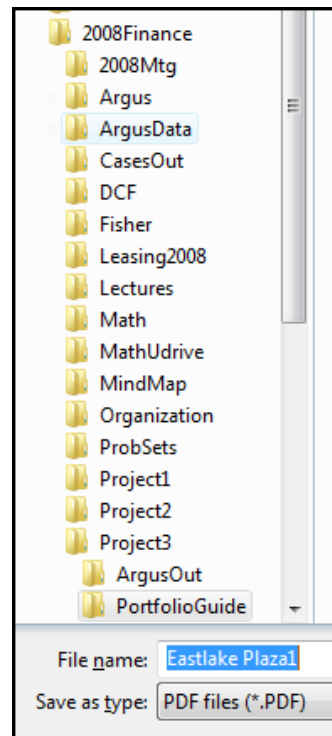
Tell it to Print to Adobe



Excel Option

Now, let's get in Excel. Make sure you have Excel open and can toggle between Argus and Excel. Go back to Eastlake and Print to Adobe:

Navigate to your Directory with the files.



Tutorial on Argus Portfolio-Level Analysis

I get this 3 page output
(this is part of Page 1)

For the Years Ending	Year 1 Feb-2009	Year 2 Feb-2010	Year 3 Feb-2011	Year 4 Feb-2012	Year 5 Feb-2013
Potential Gross Revenue					
Base Rental Revenue	\$937,824	\$1,035,324	\$1,035,354	\$1,035,443	\$1,035,443
Absorption & Turnover Vacancy			(37)		
Base Rent Abatements	(86,250)		(37)		
Scheduled Base Rental Revenue	851,574	1,035,324	1,035,280	1,035,443	1,035,443
Retail Sales Percent Revenue	7,545	6,192	5,804	6,209	6,442
Total Potential Gross Revenue	859,119	1,041,516	1,041,084	1,041,652	1,041,885
Effective Gross Revenue	859,119	1,041,516	1,041,084	1,041,652	1,041,885
Net Operating Income	859,119	1,041,516	1,041,084	1,041,652	1,041,885
Leasing & Capital Costs					
Tenant Improvements	225,000		153		
Leasing Commissions	305,325		131		
Total Leasing & Capital Costs	530,325		284		
Cash Flow Before Debt Service & Taxes	\$328,794	\$1,041,516	\$1,040,800	\$1,041,652	\$1,041,885

Pull into Excel

If your package does not have export enabled, you can cut and paste to Excel using the mouse to highlight and then copy via CTRL-C. Now, toggle to Excel which should be open (ALT-tab) and then paste via CTRL-V.

For the Years Ending	Year 1 Feb-2009	Year 2 Feb-2010	Year 3 Feb-2011	Year 4 Feb-2012	Year 5 Feb-2013	Year 6 Feb-2014
Potential Gross Revenue						
Base Rental Revenue	\$937,824	\$1,035,324	\$1,035,354	\$1,035,443	\$1,035,443	\$1,105,591
Absorption & Turnover Vacancy			(37)			(102,438)
Base Rent Abatements	(86,250)		(37)			(102,438)
Scheduled Base Rental Revenue	851,574	1,035,324	1,035,280	1,035,443	1,035,443	900,715
Retail Sales Percent Revenue	7,545	6,192	5,804	6,209	6,442	6,683
Total Potential Gross Revenue	859,119	1,041,516	1,041,084	1,041,652	1,041,885	998,398
Effective Gross Revenue	859,119	1,041,516	1,041,084	1,041,652	1,041,885	998,398
Net Operating Income	859,119	1,041,516	1,041,084	1,041,652	1,041,885	998,398
Leasing & Capital Costs						
Tenant Improvements	225,000					339
Leasing Commissions	305,325					631
Total Leasing & Capital Costs	530,325					970
Cash Flow Before Debt Service & Taxes	\$328,794	\$1,041,516	\$1,040,800	\$1,041,652	\$1,041,885	428

Highlight the area of interest. Right Click and Open Table as Spreadsheet

Tutorial on Argus Portfolio-Level Analysis

Caveats

This approach will create some alignment issues due to spaces (parentheses), commas and other “variables.” However, you can open several lines, one at a time and get them in clean.

	Year 1 Feb-2009	Year 2 Feb-2010	Year 3 Feb-2011	Year 4 Feb-2012
Potential Gross Revenue				
Base Rental Revenue	\$937,824	\$1,035,324	\$1,035,354	\$1,035,443
Absorption & Turnover Vacancy			(37)	
Base Rent Abatements	(86,250)		(37)	
Scheduled Base Rental Revenue	851,574	1,035,324	1,035,280	1,035,443
Retail Sales Percent Revenue	7,545	6,192	5,804	6,209
Total Potential Gross Revenue	859,119	1,041,516	1,041,084	1,041,652
Effective Gross Revenue	859,119	1,041,516	1,041,084	1,041,652
Net Operating Income	859,119	1,041,516	1,041,084	1,041,652
Leasing & Capital Costs			153	
Tenant Improvements	225,000		131	
Leasing Commissions	305,325			
Total Leasing & Capital Costs	530,325		284	
Cash Flow Before Debt Service & Taxes	\$328,794	\$1,041,516	\$1,040,800	\$1,041,652

	A	B	C	D	E	F
1 Cash Flow Before Debt S		\$328,794	\$1,041,516	\$1,040,800	\$1,041,652	\$1,041,885
2						
3 Net Operating Income		859,119	1,041,516	1,041,084	1,041,652	1,041,885

The choice in how you pull the data out is up to you. Extract, copy to Word, Key in by hand, etc.

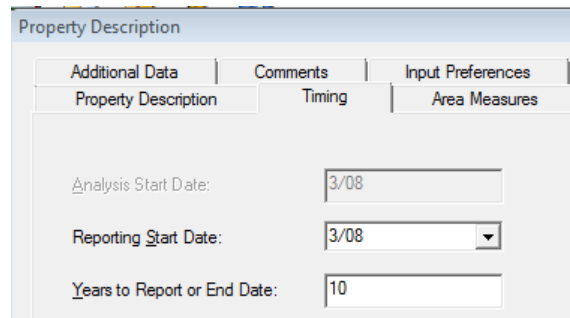
Once you get the data in a manageable form, show your consolidated cash flows, values and other key variables that you use in making your decision.

Portfolio Analysis in Argus

Portfolio Hints

Timing

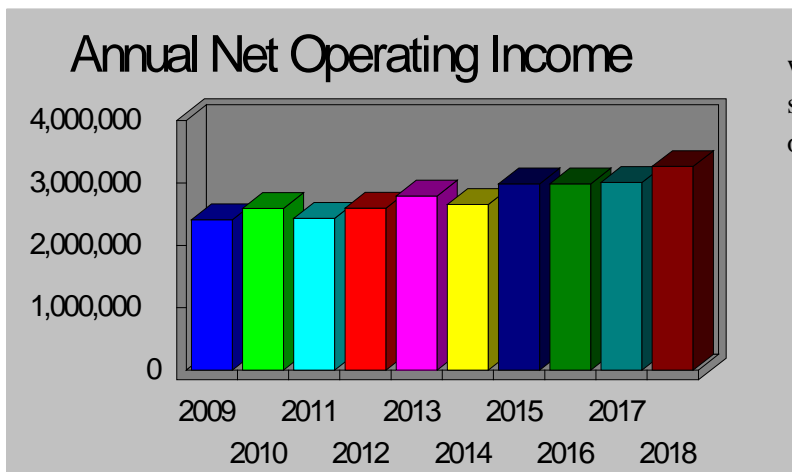
For the individual properties, the timing will be different, depending on the assumptions fed into the Property Description, Timing inputs. Now, in the Portfolio file, the Timing will dominate the Property Inputs. As such, if a property life is shorter than the portfolio, it will be automatically sold and the income and other values adjusted accordingly. Thus, rather than being in or out, you can phase the sale of properties.



Property Description	
Additional Data	Comments
Property Description	Timing
Analysis Start Date:	3/08
Reporting Start Date:	3/08
Years to Report or End Date:	10

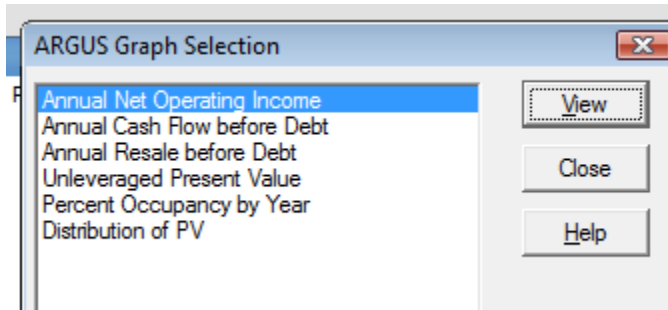
Graphics

There are a number of graphs that you can generate in Argus at the portfolio level. The good news is they didn't disable the Clipboard function, so you can enter that option and it will automatically put the image in the clipboard and you can Paste it into Word.



While this can be helpful, you might want to plot the individual properties to show how they each contribute to the overall portfolio.

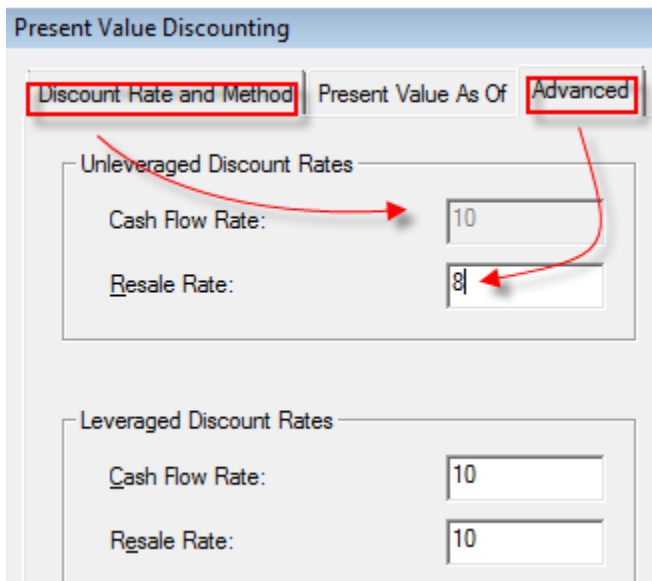
These are the built-in graph options.



As an alternative, you might want to show the individual properties and then aggregate them. To that end, open each file, run the Property Reports, Highlight the data of interest,

Portfolio Value

Under the Yield Menu, you can indicate the PV discount rates. Note that any inputs at the Portfolio Level will override discount rates at the property level. That is, Argus will discount the Portfolio Aggregate cash flows or other line items you specify.



To feed in different Cap rates for cash flow and Exit, use the options to the left. Note that you enter the cash flow Cap/Discount rate first, and then the Resale or Exit under the Advanced tab.

If you have component portfolios with different timing, you must enter present value rate overrides in the portfolio.

Portfolio Scenarios

If you want to look at how various portfolios hold up under different situations, you can run some Portfolio Scenarios. To do so, enter **New** on the Portfolio Scenarios screen. You can change three types of inputs at the Portfolio level: property, market and inflation. Under Portfolio, Scenario, select **New**:

Tutorial on Argus Portfolio-Level Analysis

The screenshot shows the 'Portfolio Scenario' dialog box. It has a title bar 'Portfolio Scenario' and a close button. Below the title bar, there is a 'Scenario:' text box and a 'Print Title' checkbox. Underneath is an 'Apply To:' dropdown menu currently set to 'All'. The main area is divided into three tabs: 'Property', 'Market', and 'Inflation'. Under the 'Property' tab, there are three rows of controls: 'Cap Rate:', 'Vacancy Loss:', and 'Credit Loss:'. Each row has a dropdown menu followed by a 'Percent adjust' dropdown menu.

Cap Rate/Vacancy/Credit Loss/Year

You can enter different Cap Rates and other variables per year. To use the Cap Rate at the Portfolio level, the individual property Resale Prices must be based on Cap Rates.

The screenshot shows two overlapping dialog boxes. The top one is the 'Portfolio Scenario' dialog box, which is partially obscured by the 'Cap Rate' dialog box below it. A red arrow points from the 'Cap Rate' dialog box to the 'Cap Rate' dropdown menu in the 'Portfolio Scenario' dialog box. Red text is overlaid on the 'Portfolio Scenario' dialog box, reading: "To enter pattern, click on Detail under the Pull Down menu. Now you can input Cap Rates for each year." The 'Cap Rate' dialog box has a title bar 'Cap Rate' and a table with columns for years from Dec-2008 to Dec-2016. The first column is labeled 'For the Year Ending' and the first row is labeled 'Adjustments:'. There are 'OK' and 'Cancel' buttons at the bottom of the 'Cap Rate' dialog box.

To enter pattern, click on Detail under the Pull Down menu. Now you can input Cap Rates for each year.

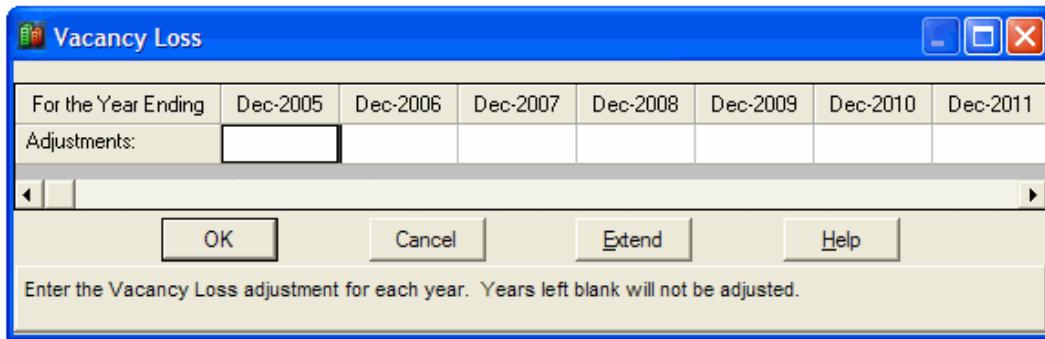
For the Year Ending	Dec-2008	Dec-2009	Dec-2010	Dec-2011	Dec-2012	Dec-2013	Dec-2014	Dec-2015	Dec-2016
Adjustments:									

Detailed Vacancy Loss

The Portfolio level Vacancy Loss will only work on Properties with a Vacancy Loss indicated. Thus, you should be careful to check to make sure you are getting the interactions you are seeking.

Portfolio Scenarios: Detailed Vacancy Loss

The detailed Vacancy Loss window allows you to enter values that vary over time.



For the Year Ending	Dec-2005	Dec-2006	Dec-2007	Dec-2008	Dec-2009	Dec-2010	Dec-2011
Adjustments:							

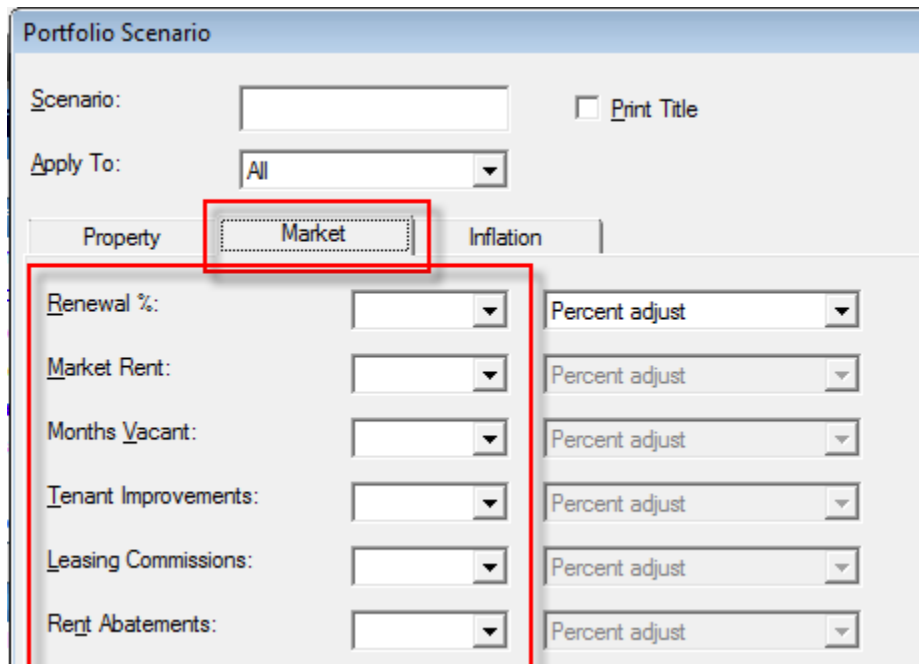
OK Cancel Extend Help

Enter the Vacancy Loss adjustment for each year. Years left blank will not be adjusted.

Enter the adjustments in the fields corresponding with the years in which they occur.

Market Leasing

While you are in the Portfolio Scenario New, you can click on the Market Assumption Tab to get these options. Any changes here will override the Market Leasing Assumptions on the individual Properties.



Portfolio Scenario

Scenario: Print Title

Apply To:

Property **Market** Inflation

Renewal %: Percent adjust

Market Rent: Percent adjust

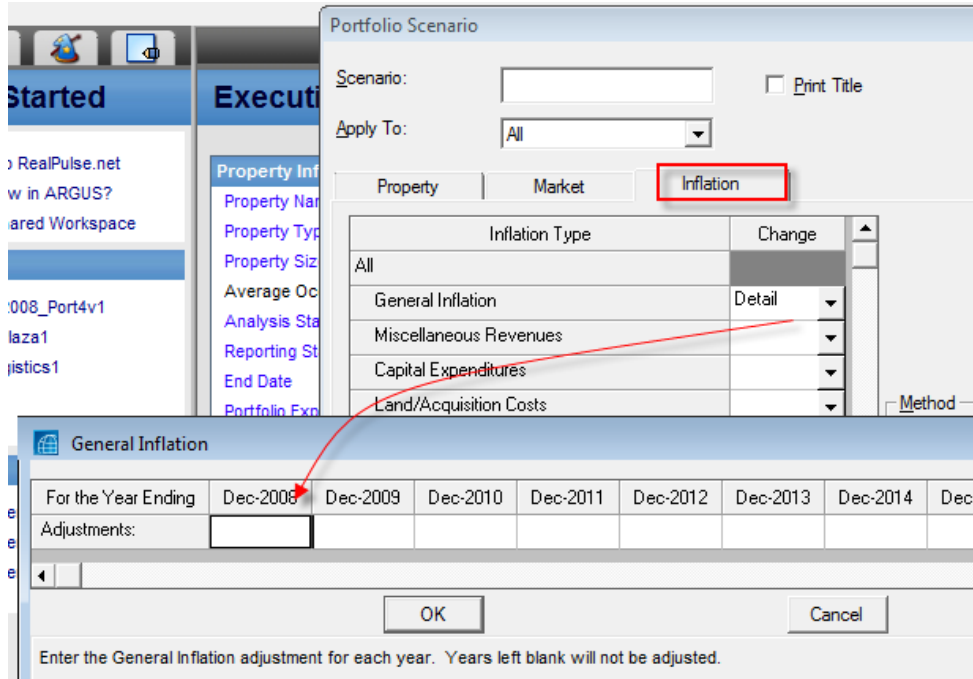
Months Vacant: Percent adjust

Tenant Improvements: Percent adjust

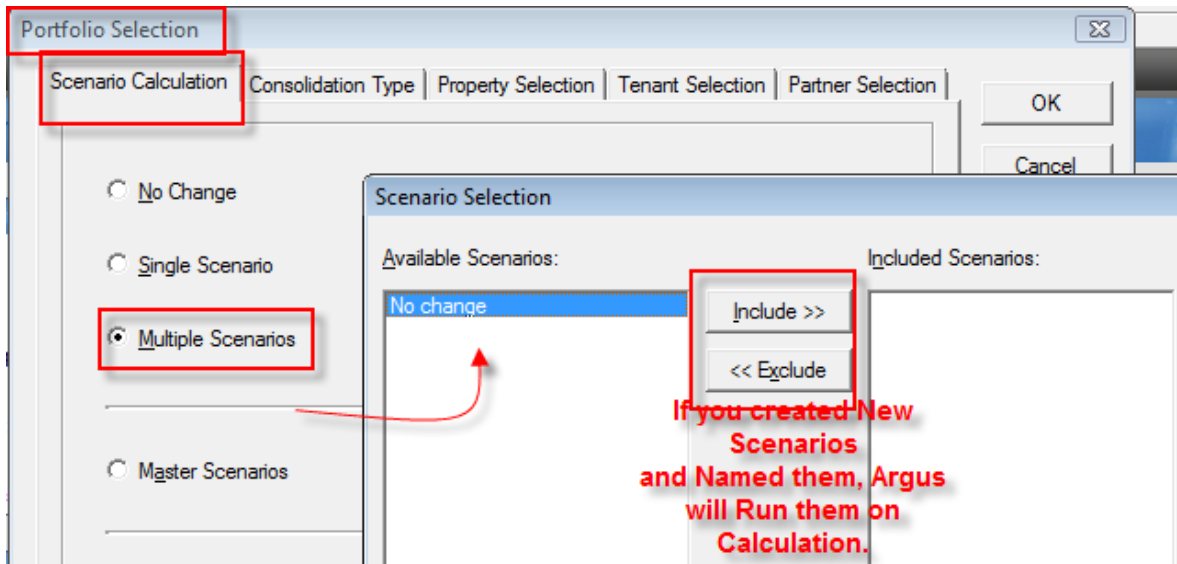
Leasing Commissions: Percent adjust

Rent Abatements: Percent adjust

Inflation

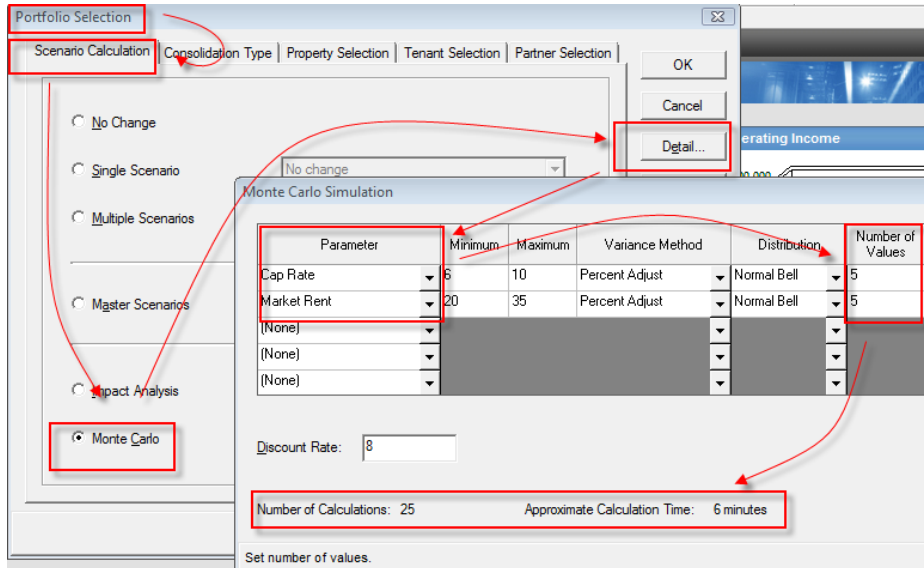


Multiple Scenarios



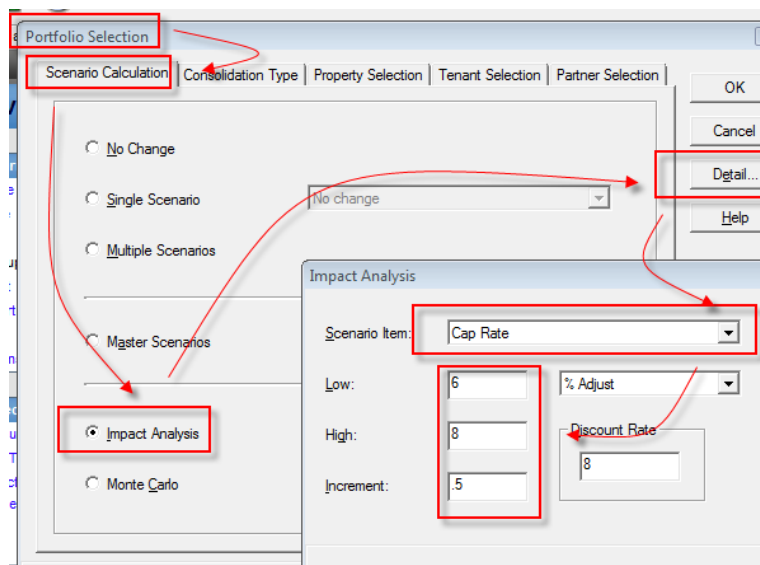
Monte Carlo Simulations

Another option that you might want to “Play” with is the Monte Carlo. In effect, you enter min/max for various items and Argus will input them at the Portfolio Level, overriding individual assumptions.



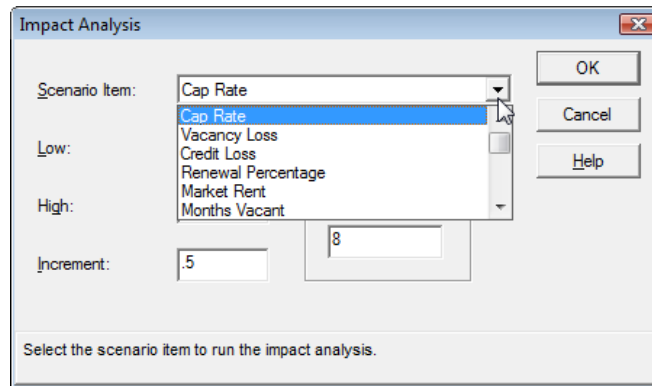
Impact Analysis

This is a powerful feature that can allow you to look at the “Impact” of changes in the following variables. Assuming you enter them in the Scenario Calculation portion of Portfolio Selection, you can isolate the Impact of individual Properties on those variables. To set this up, you must indicate some Scenarios.

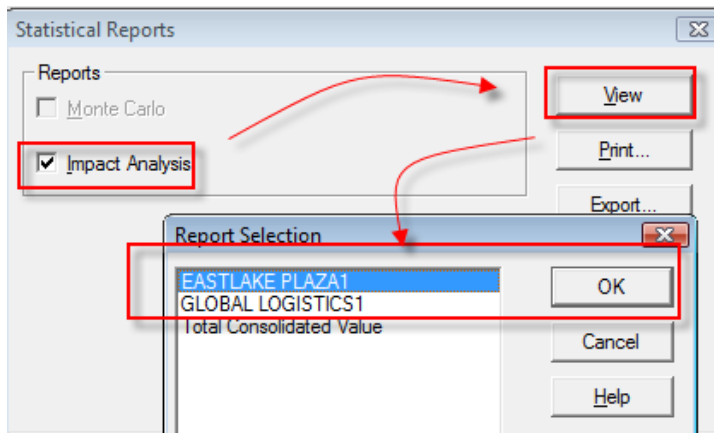


Tutorial on Argus Portfolio-Level Analysis

These are the Variables you can set up for Impact analysis.



Now, when you answer OK, it will automatically run your “scenario.” This may take several minutes, depending on the number of Steps between the High Low. When it’s finished, it gives you the option of looking at the Impact of the Cap Rate changes.



Impact of Cap Rate
on Eastlake

For The Rates	Unleveraged FV	Leveraged FV
6.00%	\$12,467,592	\$12,467,592
6.50%	\$12,437,979	\$12,437,979
7.00%	\$12,408,643	\$12,408,643
7.50%	\$12,379,579	\$12,379,579
8.00%	\$12,350,785	\$12,350,785
Mean	12,408,916	12,408,916
Standard Deviation	46,172	46,172
Minimum	12,350,785	12,350,785
Maximum	12,467,592	12,467,592

Impact of Cap on Global Logistics

For The Rates	Unleveraged FV	Leveraged FV
6.00%	\$22,778,638	\$22,778,638
6.50%	\$22,717,866	\$22,717,866
7.00%	\$22,657,662	\$22,657,662
7.50%	\$22,598,017	\$22,598,017
8.00%	\$22,538,926	\$22,538,926
Mean	22,658,222	22,658,222
Standard Deviation	94,755	94,755
Minimum	22,538,926	22,538,926
Maximum	22,778,638	22,778,638

On Portfolio

For The Rates	Unleveraged FV	Leveraged FV	Unleveraged IRR
6.00%	\$35,246,230	\$35,246,230	8.00%
6.50%	\$35,155,845	\$35,155,845	8.00%
7.00%	\$35,066,305	\$35,066,305	8.00%
7.50%	\$34,977,596	\$34,977,596	8.00%
8.00%	\$34,889,711	\$34,889,711	8.00%
Mean	35,067,137	35,067,137	8.00%
Standard Deviation	140,927	140,927	
Minimum	34,889,711	34,889,711	8.00%
Maximum	35,246,230	35,246,230	8.00%

Note. These changes don't seem to reflect the swings in Cap Rates; I'll have to check this out but wanted to give you the option.

Property Level Inputs

As noted in earlier "tutorials," at the portfolio level, Argus can work with Property Level inputs, or can override those inputs. However, to work with Property Level inputs, you must make sure you have activated or enabled them in the Property files. This is particularly true with respect to current valuation. For example, at the Portfolio Level, you can indicate a Current Value or Portfolio Value that is the sum of the Component Properties:

Tutorial on Argus Portfolio-Level Analysis

The screenshot shows the 'Portfolio Purchase Price' dialog box with the 'Sum of Component Prices' option selected. The 'Purchase Price' field in the background table is highlighted with a red box and contains the value \$32,761,819. The dialog box also includes 'OK', 'Cancel', 'Detail...', and 'Help' buttons.

Present Value & Yield	
Unleveraged Discount Rate	10.00%
Unleveraged Present Value	\$36,318,493
Leveraged Discount Rate	10.00%
Leveraged Present Value	-
Purchase Price	\$32,761,819
Unleveraged IRR	10.00%

In this example, I had two properties with a component value of \$32.76 million.

Option 1. Purchase Price Override

In some cases, you may be looking at the portfolio assemblage value and want to add a premium on top of the mere aggregation of the individual properties. To that end, you can enter a current value override in terms of dollars by selecting the second option above.

The screenshot shows the 'Portfolio Purchase Price' dialog box with the 'Purchase Price Override' option selected. The 'Purchase Price' field in the background table is highlighted with a red box and contains the value \$0. Red arrows point from the dialog box options to the table below. A red text box says 'Enter \$\$ or pulldown menu for detail. Then enter individual values.'

Present Value & Yield	
Unleveraged Discount Rate	10.00%
Unleveraged Present Value	\$36,318,493
Leveraged Discount Rate	10.00%
Leveraged Present Value	-
Purchase Price	\$0
Unleveraged IRR	-

Summary Cash Flow (Year 1)		\$/SqFt	\$ Amount
Total Gross Revenue	\$19.85	\$2,580,063	
Vacancy & Adjustments	(0.66)	(86,250)	
Effective Gross Revenue	19.18	2,493,813	
Net Operating Income	19.18	2,493,813	
Leasing & Capital Costs	(4.08)	(530,325)	
Cash Flow Before Debt	\$15.10	\$1,963,488	

Name	Acct Code	Amount	Units	Area	Frequency	% Fixed	Inflation	Adjust IRR	Notes
1									

Option 2. Total Component Current Value

To activate this option, you must make sure you turned on Direct Cap Current Value for IRR in the individual properties. Go back and look at these inputs under Purchase Price.

The screenshot shows the Argus software interface. At the top, the 'Present Value & Yield' window displays various financial metrics: Unleveraged Discount Rate (10.00%), Unleveraged Present Value (\$20,405,444), Leveraged Discount Rate (10.00%), Leveraged Present Value, Cap Rate (6.50%), Calculated Resale, Purchase Price (highlighted with a red box), Unleveraged IRR, and Direct Cap Value (\$18,212,500). To the right, the 'Net Operating Income' window shows a bar chart from 2009 to 2019. Below these, the 'Property Purchase Price & Current Value' dialog box is open, with 'Direct Cap Value as of Reporting Start' selected (highlighted with a red box). The 'Direct Capitalization' dialog box is also open, with 'Cap Rate' set to 8 (highlighted with a red box) and 'Commission as a Percent of Value' set to 6.

Now Recalculate the Property Reports for this asset and repeat for other asset(s).

Now, go back to Portfolio and Run Property Level Reports (under reports). Once Run, you will get the Portfolio IRR:

The screenshot displays the 'Property Information' window for 'JRD REF 2008 Port 4V1' and the 'Property Level Reports' dialog. The 'Property Information' window shows details like Property Type (Portfolio), Property Size (130,000), and Analysis Start (March 2008). The 'Property Level Reports' dialog has several reports checked, including 'Schedule of Cash Flow from Operations', 'Sources & Uses of Capital - Cash Returns', 'Prospective Resale & IRR Summary', and 'Prospective Present Value Summary'. In the background, the 'Present Value & Yield' window shows a 'Purchase Price' of \$30,167,465 (highlighted with a red box) and an IRR of 11.19%. A red arrow points from the 'Purchase Price' in the 'Present Value & Yield' window to the 'Property Level Reports' dialog.

In this case, the NOI capped values were different than the Current Value price. Again, you could have inflated the individual property values from acquisition and selected the first option which would have added up the values, inflated.