Automated Cost Estimating Integrated Tools

Leveraging ACEIT 7.0 New Features

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Abstract

Leveraging ACEIT 7.0 New Features

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Keeping up to date with the new features of a software release can be a challenge. This session will highlight several of the key features of the latest ACEIT release and provide users insight into how they can be applied in their work environment to enhance performance, increase capability, or simplify an ACE model.

Part 1 of the session will focus on how to import ACEIT 6.1a or earlier ACE files and POST Workbooks into the ACEIT 7.0 environment. It will also cover improvements made to ACE to support navigation within the file and in construction of equations. In addition, the session will demonstrate the changes to the ACE software that support what-if excursions and quick access to BY and TY results.

Part 2 of the session will discuss several new ACE functions and how they can be used to enhance your cost model. It will also show how to use the new RI$K and POST reporting features to enhance the user's ability to analyze the estimate. Lastly, the session will show how users can build "smart" estimate documentation summaries by using the new ACEIT application, POST Document Designer (POST DOC).

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OUTLINE

- **Part 1**
  - Importing 6.1 files into 7.0
  - Easier Navigation and Formatting
  - Point and Click Equation Building
  - What-if drills in 7.0
  - Equations in Learning Fields
- **Part 2**
  - Using new ACE Functions
  - Using new POST RI$K and Delta reports
  - Building “smart” documentation with POST Doc

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Summary of ACEIT 7.0 Focus

- **The new features of ACEIT 7.0 focus on the following areas:**
  - New XML File Structure
  - Improved Usability
  - Time Phased What if Cases
  - Easier WBS Construction
  - Documentation enhancements
  - Variables and equations allowed in more fields
  - New and Improved Example files
  - Improved Risk Specification and New Reports
  - New Plug-ins
  - New Applications – POST Doc Designer and ACEIT Librarian

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Leveraging ACEIT 7.0 New Features – Part 1

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Converting ACE 6.1 Sessions to 7.0

- **ACE 7.0 contains all the functionality of 6.1 plus more!**
- **Converting 6.1 session to 7.0 is automatic!**
  1. Open ACE 6.1 session (.acw) in 7.0 → Automatically converted to 7.0 format and new file created (.aceit)
  2. ACE 6.1 and ACE 7.0 can be open at the same time
  3. Calculate in 6.1 and 7.0 and verify that results match
- **Smaller file size**
- **Menus reorganized**
  - Tools > Session Options → File > Properties
- **ACE 7.0 sessions can be saved back to 6.1 format *(new features won't work, custom reports, formatting and workscreen arrangement won't be saved)***
- **If session is used in POST files, let POST convert the ACE session. Steps covered in Part 2 of this presentation.**

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More robust error checking

- **More robust error checking, some Warnings have been upgraded to Fatal to ensure accurate results are produced and to prevent mistakes**
  - For example:

	WBS/CES Description	Approp	Unique ID	BASELINE	Phasing Method	Equation / Throughput
1	Parent Row			$ 200.000 *		
2	Child 1 - F phased	OMA		$ 150.000 *	F	50
3	Child 2 - Unphased	OMA		$ 50.000 *		50

TY-phased report

	Cost Element	Approp	Total	FY 2006	FY 2007	FY 2008
1	Parent Row		$ 206.157	$ 50.941	$ 52.050	$ 53.165
2	Child 1 - F phased	OMA	$ 156.157	$ 50.941	$ 52.050	$ 53.165
3	Child 2 - Unphased	OMA	$ 50.000			

  - "WARNING PHZ 627 - Item phased but summed with unphased item" **has been elevated to** "FATAL PHZ 892 – Constant and Yearly phasing methods summed together"
- **Remember…Fatal errors must be corrected before a full calculation can complete**

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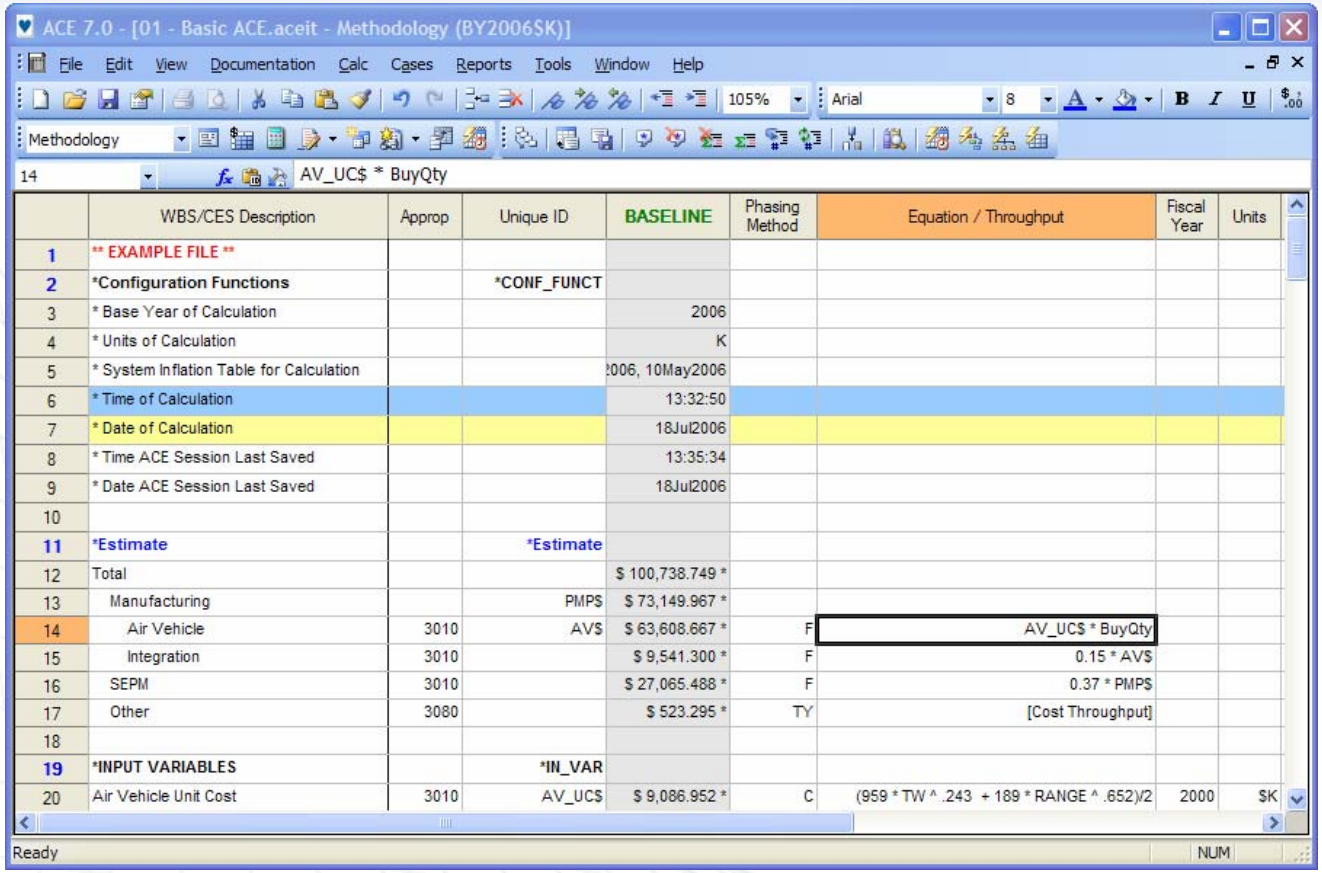
ACEIT 7.0: XP Style Look and Feel



	WBS/CES Description	Approp	Unique ID	BASELINE	Phasing Method	Equation / Throughput	Fiscal Year	Units
1	** EXAMPLE FILE **							
2	*Configuration Functions		*CONF_FUNCT					
3	* Base Year of Calculation			2006				
4	* Units of Calculation			K				
5	* System Inflation Table for Calculation			2006, 10May2006				
6	* Time of Calculation			13:32:50				
7	* Date of Calculation			18Jul2006				
8	* Time ACE Session Last Saved			13:35:34				
9	* Date ACE Session Last Saved			18Jul2006				
10								
11	*Estimate		*Estimate					
12	Total			$ 100,738.749 *				
13	Manufacturing		PMP$	$ 73,149.967 *				
14	Air Vehicle	3010	AV$	$ 63,608.667 *	F	AV_UC$ * BuyQty		
15	Integration	3010		$ 9,541.300 *	F	0.15 * AV$		
16	SEPM	3010		$ 27,065.488 *	F	0.37 * PMP$		
17	Other	3080		$ 523.295 *	TY	[Cost Throughput]		
18								
19	*INPUT VARIABLES		*IN_VAR					
20	Air Vehicle Unit Cost	3010	AV_UC$	$ 9,086.952 *	C	(959 * TW ^ .243 + 189 * RANGE ^ .652)/2	2000	$K

- Selected Config functions added to new sessions
- Row/Col headers highlighted to identify current cell
- Background color on rows/cols/cells
- Copy/paste includes formatting
- Category columns have choice lists
- **Unlimited undo/redo!**
- Bookmarks
- Format Painter
- Zoom
- Comment/Uncomment multi rows

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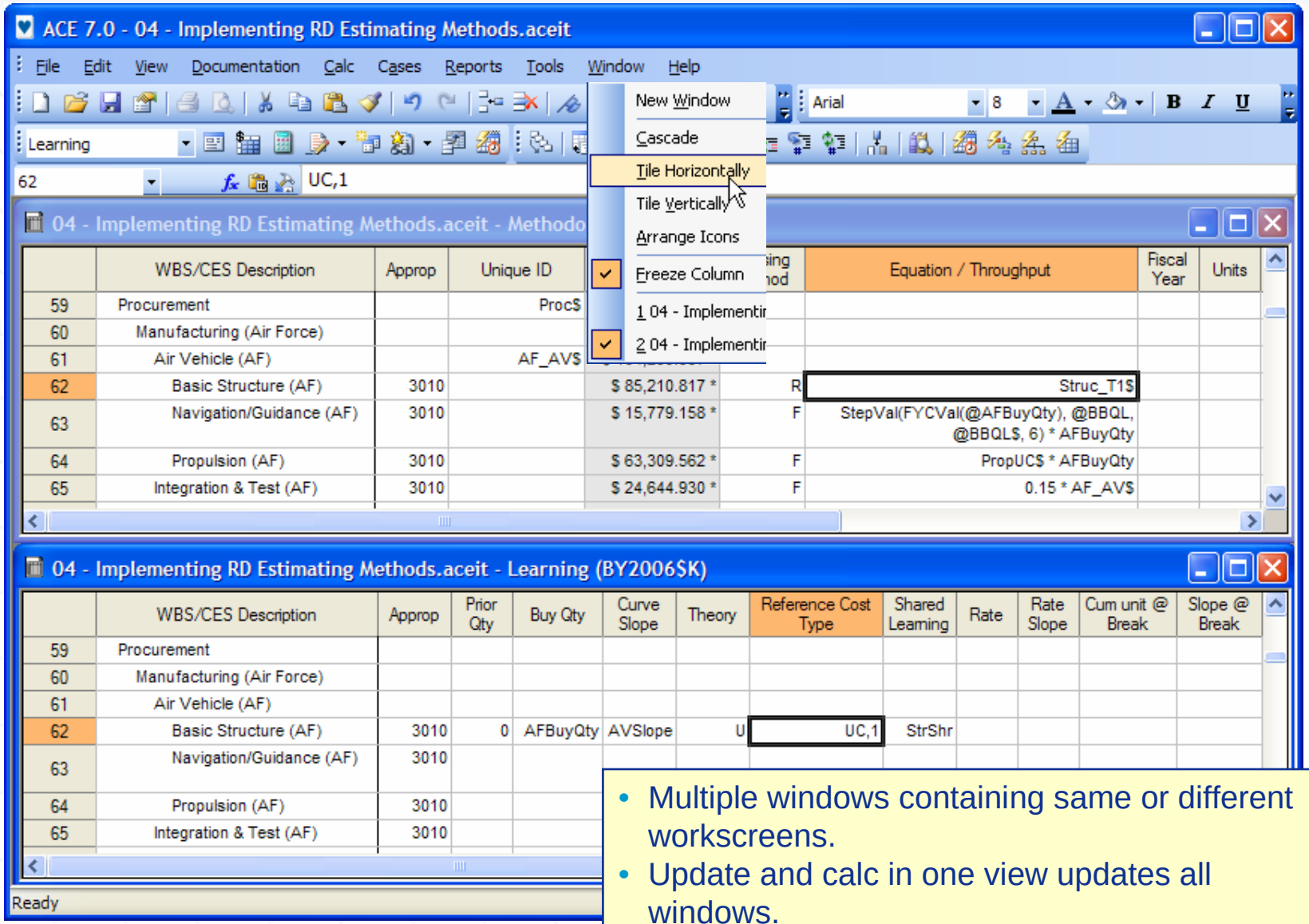
Multi-Workscreen View



- Multiple windows containing same or different workscreens.
- Update and calc in one view updates all windows.

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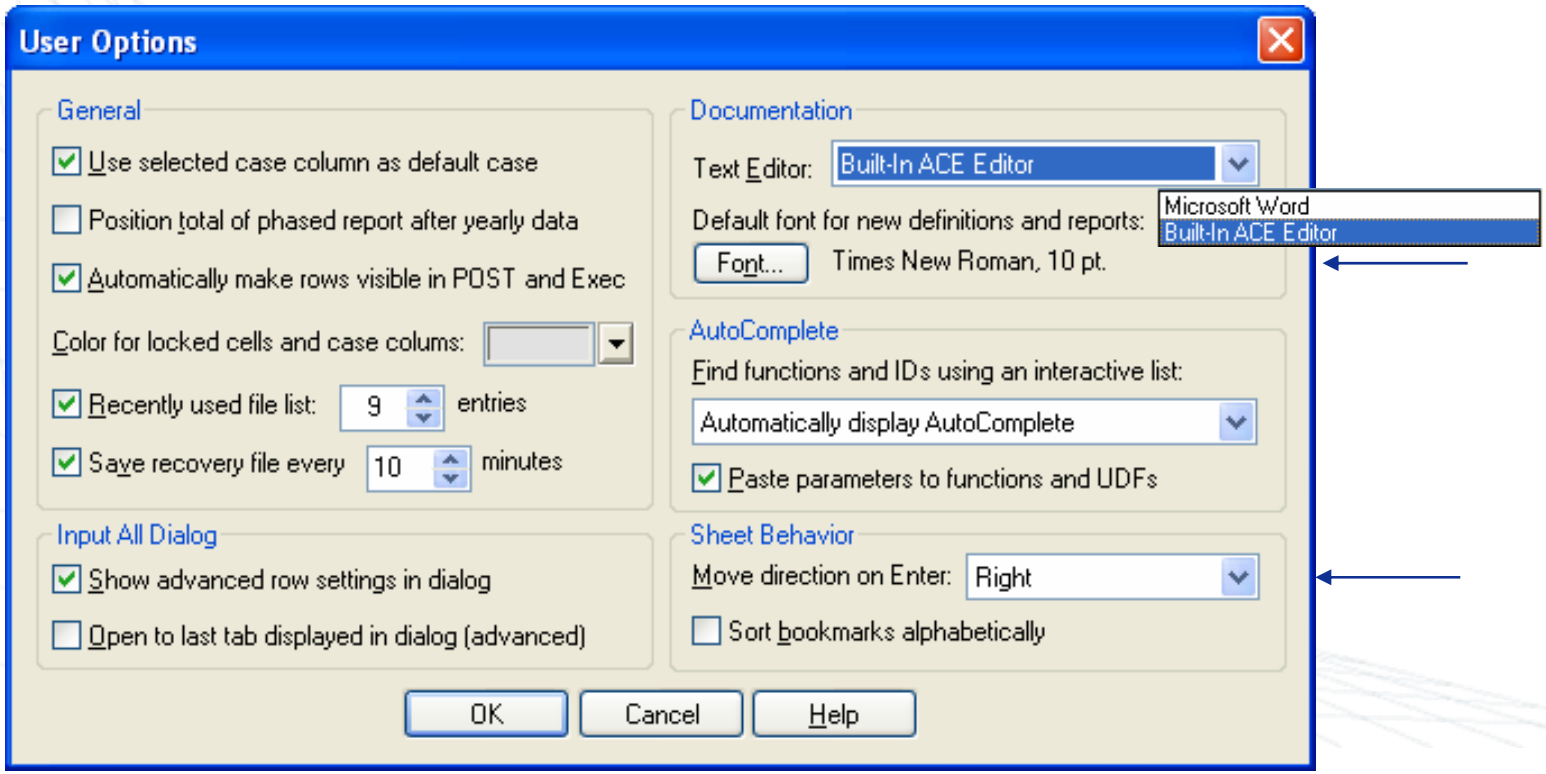
User Options

- New User Options *(Tools>User Options)*
  - Automatically tag rows so they are readily visible in POST
  - **New Autosave feature!**
  - Set default font for new definitions and reports
  - Set the direction for the Enter key to move



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Easier WBS construction and editing

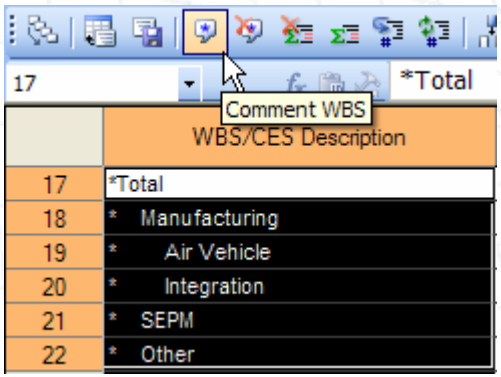
New option: Edit > WBS > **Auto Indent Using Indent Level**

Enter text for the WBS items, enter the level of indenture (e.g., 1, 2, 3, …), and select the option to automatically indent the items

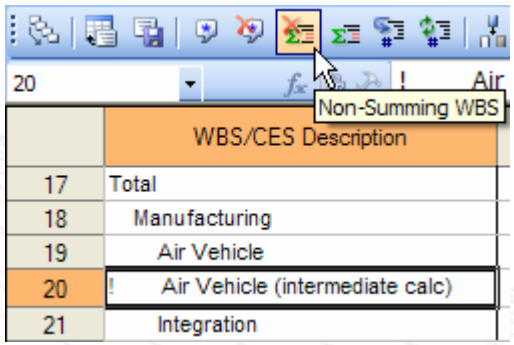
WBS/CES Description	WBS Indent
Total	1
Manufacturing	2
Air Vehicle	3
Integration	3
SEPM	2
Other	2

WBS/CES Description	WBS Indent
Total	1
Manufacturing	2
Air Vehicle	3
Integration	3
SEPM	2
Other	2

Insert/remove comment character "*" on one or more rows



Insert/remove non-summing character "!" on one or more rows



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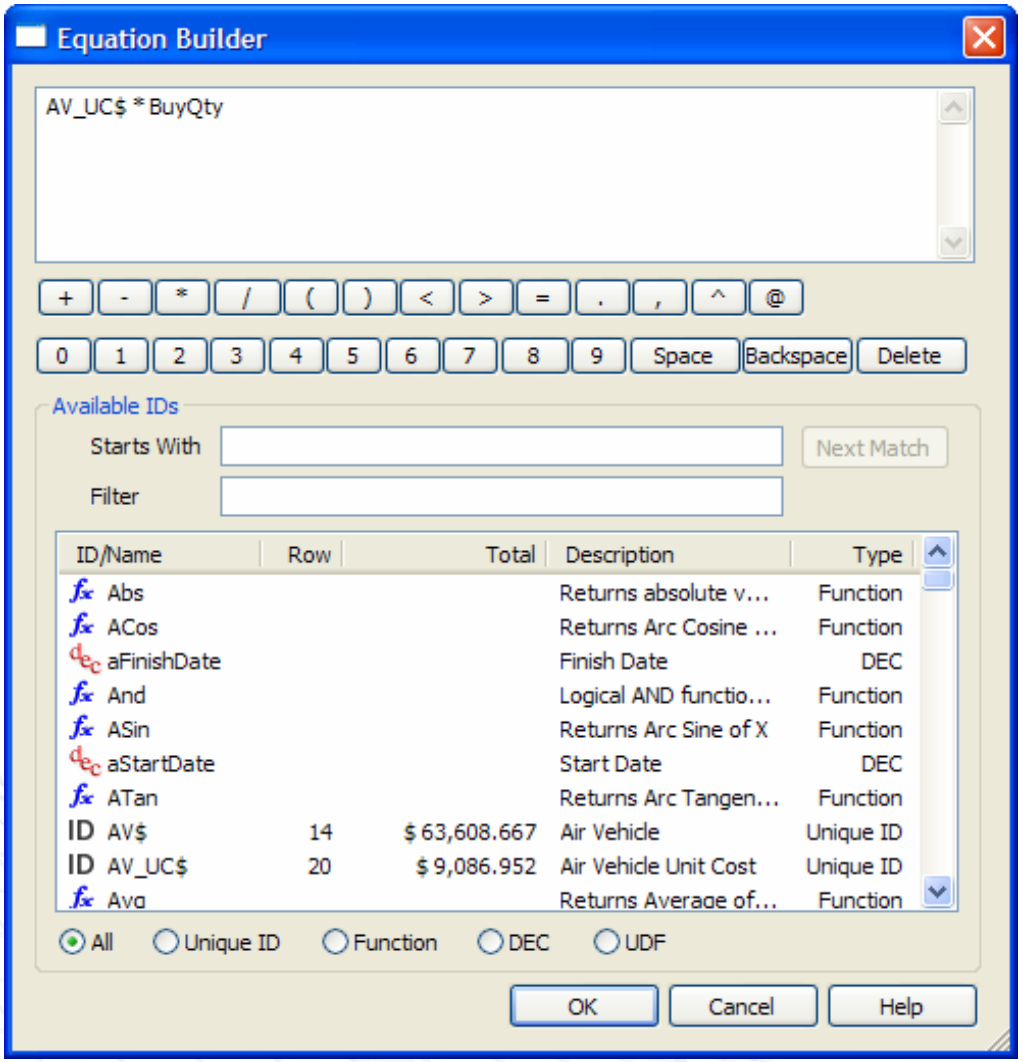
Equation Builder

- **Point and click equation building**
- **Equation builder contains complete listings of:**
  - Unique IDs
  - Functions
  - DECs
  - User-defined Functions (UDFs)
- **List can be filtered to quickly find variables, functions, DECs or UDFs to use in your equation**
- **Includes buttons for numbers and operators**



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What-ifs in 7.0

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What If Drills with Phased Overrides

- **ACE 6.1:**
  - Create an extra row containing new phased values
  - Create a case for each alternative
  - Zero out rows not used in current alternative
  - Consequence of this method is that all cases must have a total override on one of the rows

Yearly Phasing Workscreen

	WBS/CES Description	Unique ID	BASELINE	Phasing Method	FY 2008	FY 2009	FY 2010
234	Army Transportable Ground Station Quantity	ArmyGSQty	6 *				
235	Army Transportable Ground Station Quantity1		3 *	IS		1	2
236	Army Transportable Ground Station Quantity2		3 *	IS	1	2	1

What If Workscreen

WBS/CES Description	Trans Ground Station Alt 1	Trans Ground Station Alt2
Army Transportable Ground Station Quantity	3 *	4 *
Army Transportable Ground Station Quantity1	3 *	0
Army Transportable Ground Station Quantity2	0	4 *

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Input/Results Viewer (IRV) in ACE

INPUTS VIEW

ACE 7.0 - [06d - Conducting What ifs.aceit - Inputs/Results Viewer (BY2006$K)]

File Edit View Mode Calc Cases Reports Tools Window Help

Inputs | Cases by Total

	WBS/CES Description	BASELINE	Lower Propulsion Cost	New 3010 Budget and AF	Ground Station Mods
119	*INPUT VARIABLES				
120	**RDT&E Inputs				
121	Air Vehicle T1	$ 2,034.393 *	$ 1,963.630 *	$ 2,034.393 *	$ 2,034.393 *
122	Basic Structure T1	$ 1,344.325 *	$ 1,344.325 *	$ 1,344.325 *	$ 1,344.325 *
123	Navigation/Guidance	$ 158.055 *	$ 158.055 *	$ 158.055 *	$ 158.055 *
124	Propulsion	$ 532.013 *	450 BY2005 $K	$ 532.013 *	$ 532.013 *
125	Navigation / Guidance Weight (lbs)	25 *	25 *	25 *	25 *
126	Air Vehicle S/W Labor Hours	17500 *	17500 *	17500 *	17500 *
127	Transportable Ground Stations (Army) - T1	$ 201.520 *	$ 201.520 *	$ 201.520 *	$ 201.520 *
128	Ground Station Hardware (Army)	$ 79.028 *	$ 79.028 *	$ 79.028 *	$ 79.028 *
129	Transportable Vehicle (Army)	$ 68.491 *	$ 68.491 *	$ 68.491 *	$ 68.491 *

TOTAL
FY 2003
FY 2004
FY 2005
FY 2006
FY 2007
FY 2008
FY 2009
FY 2010
FY 2011
FY 2012
FY 2013
FY 2014
FY 2015
FY 2016
FY 2017
FY 2018
FY 2019
FY 2020
FY 2021
FY 2022
FY 2023
FY 2024

Ready

Create cases with total overrides and compare cases side-by-side

Create cases with time-phased overrides in ACE.

ACE 7.0 - [06d - Conducting What ifs.aceit - Inputs/Results Viewer (BY2006$K)]

File Edit View Mode Calc Cases Reports Tools Window Help

Inputs | Phased by Case

- BASELINE
- Lower Propulsion Cost Scenario
- New 3010 Budget and AF Buy Quantities
- Ground Station Mods

	WBS/CES Description	Cost Interpretation	FY 2009	FY 2010	FY 2011	FY 2012	FY 2013
179	*Buy Quantities						
180	Total Air Vehicle Buy Quantity		2 *	2 *	12 *	30 *	40 *
181	Air Force Buy Quantities		1 *	1 *	2 *	15 *	25 *
182	Low Rate Initial Production		1	1	2		
183	Full Rate Production				0	15	25
184	Army Buy Quantities		1 *	1 *	10 *	15 *	15 *
185	Low Rate Initial Production		1 *	1 *			
186	Full Rate Production				10 *	15 *	15 *
187	Army Transportable Ground Station Quantity		1 *	2 *			
188							
189	* Initial Spares Calculations						
190	Number of Initial Spares (Army)		1 *	1 *			
191	Number of Initial Spares (AF)		1 *	1 *			
192							

Ready NUM

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Phased Overrides in 7.0

- **ACE 7.0:**
  - Create a new what if case and enter phased overrides

	WBS/CES Description	Unique ID	Phasing Method	FY 2008	FY 2009	FY 2010
234	Army Transportable Ground Station Quantity	ArmyGSQty	IS		1	2

ACE 7.0 - [07 - Detailed LCC Estimate What Ifs 6.aceit - Inputs/Results Viewer (BY2006$K)]

File Edit View Mode Calc Cases Reports Tools Window Help

Inputs | Phased by Case

BASELINE
Trans Ground Station Alt2
Ground Station Higher Unit Cos
Lower Propulsion Cost Scenario
New 3010 Budget and AF Buy C
Ground Station Mods

	WBS/CES Description	Cost Interpretation	FY 2007	FY 2008	FY 2009	FY 2010
234	Army Transportable Ground Station Quantity				1 *	2 *
235						
236	* Initial Spares Calculations					
237	Number of Initial Spares (Army)				1 *	1 *

ACE 7.0 - [07 - Detailed LCC Estimate What Ifs 6.aceit - Inputs/Results Viewer (BY2006$K)]

File Edit View Mode Calc Cases Reports Tools Window Help

Inputs | Phased by Case

BASELINE
Trans Ground Station Alt2
Ground Station Higher Unit Cos
Lower Propulsion Cost Scenario
New 3010 Budget and AF Buy C
Ground Station Mods
Higher Block Buy Cost at Quant

	WBS/CES Description	Cost Interpretation	FY 2007	FY 2008	FY 2009	FY 2010
234	Army Transportable Ground Station Quantity			1	2	1
235						
236	* Initial Spares Calculations					
237	Number of Initial Spares (Army)				1 *	1 *
238	Number of Initial Spares (AF)		1 *	1 *		

NUM

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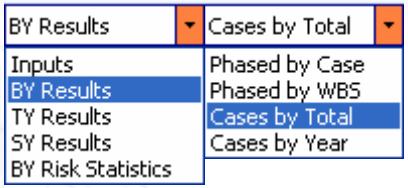
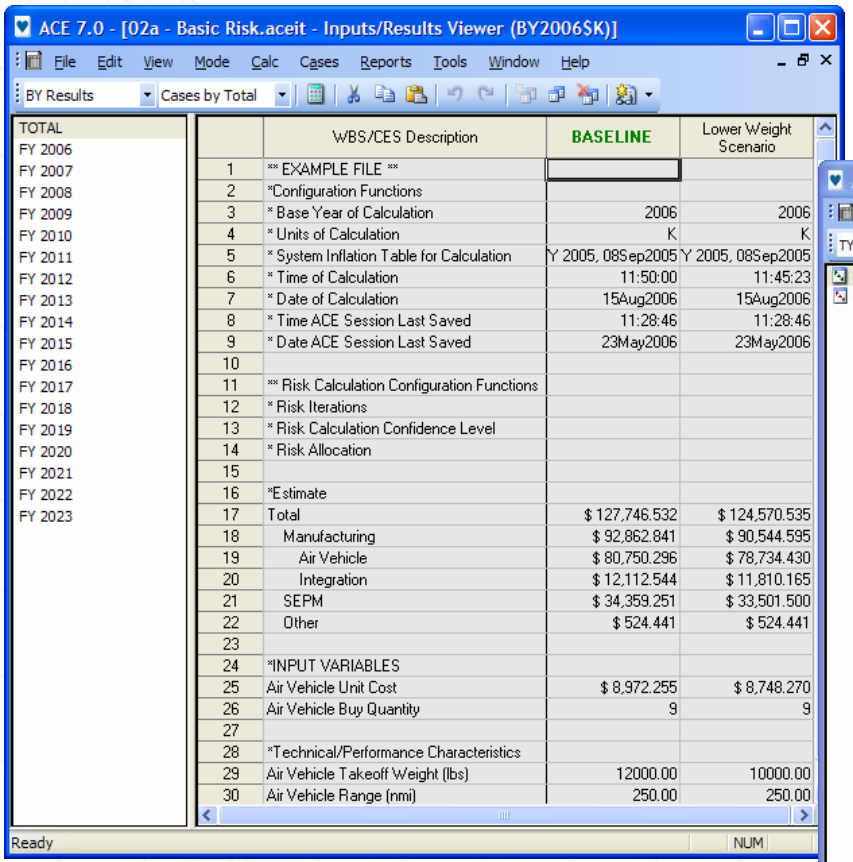
Inputs/Results Viewer in ACE



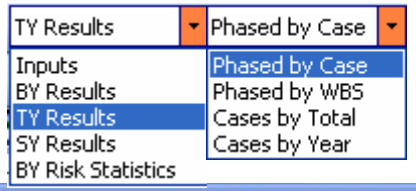
RESULTS VIEW

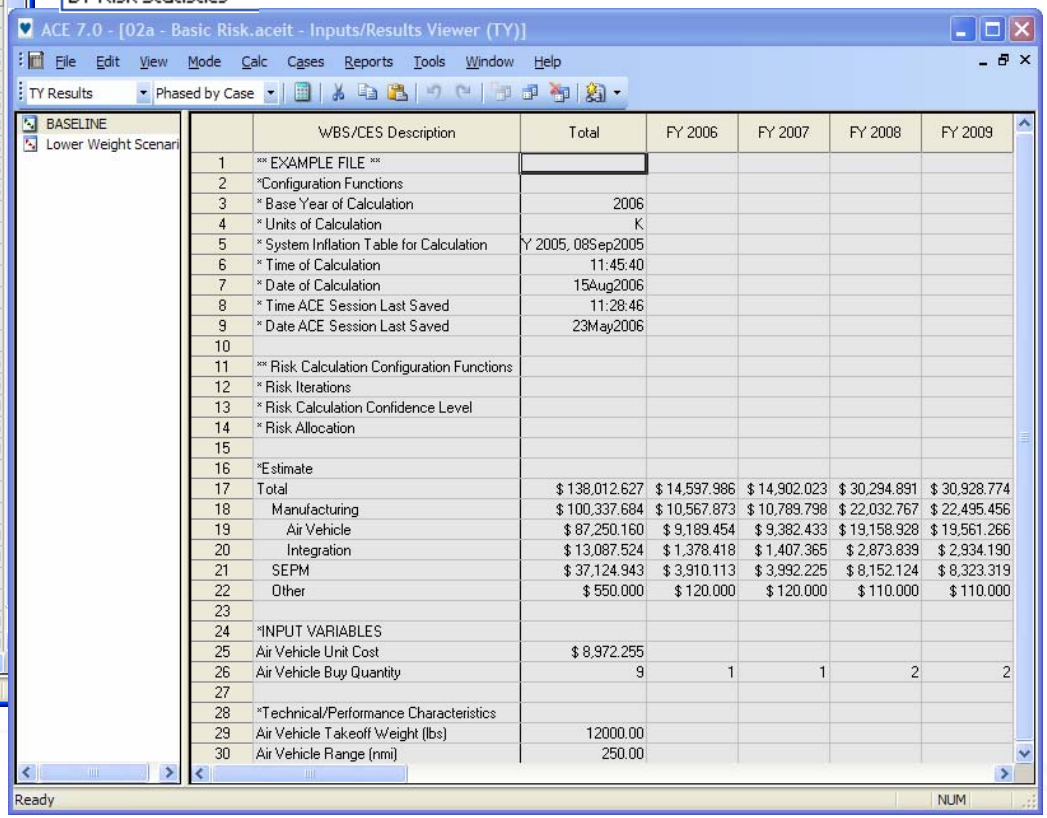
Quick access to BY, TY, SY Results and Risk Statistics

(no need to generate a report for a "quick view")



	WBS/CES Description	BASELINE	Lower Weight Scenario
1	** EXAMPLE FILE **		
2	*Configuration Functions		
3	* Base Year of Calculation	2006	2006
4	* Units of Calculation	K	K
5	* System Inflation Table for Calculation	Y 2005, 08Sep2005	Y 2005, 08Sep2005
6	* Time of Calculation	11:50:00	11:45:23
7	* Date of Calculation	15Aug2006	15Aug2006
8	* Time ACE Session Last Saved	11:28:46	11:28:46
9	* Date ACE Session Last Saved	23May2006	23May2006
10			
11	** Risk Calculation Configuration Functions		
12	* Risk Iterations		
13	* Risk Calculation Confidence Level		
14	* Risk Allocation		
15			
16	*Estimate		
17	Total	$ 127,746.532	$ 124,570.535
18	Manufacturing	$ 92,862.841	$ 90,544.595
19	Air Vehicle	$ 80,750.296	$ 78,734.430
20	Integration	$ 12,112.544	$ 11,810.165
21	SEPM	$ 34,359.251	$ 33,501.500
22	Other	$ 524.441	$ 524.441
23			
24	*INPUT VARIABLES		
25	Air Vehicle Unit Cost	$ 8,972.255	$ 8,748.270
26	Air Vehicle Buy Quantity	9	9
27			
28	*Technical/Performance Characteristics		
29	Air Vehicle Takeoff Weight (lbs)	12000.00	10000.00
30	Air Vehicle Range (nmi)	250.00	250.00





	WBS/CES Description	Total	FY 2006	FY 2007	FY 2008	FY 2009
1	** EXAMPLE FILE **					
2	*Configuration Functions					
3	* Base Year of Calculation	2006				
4	* Units of Calculation	K				
5	* System Inflation Table for Calculation	Y 2005, 08Sep2005				
6	* Time of Calculation	11:45:40				
7	* Date of Calculation	15Aug2006				
8	* Time ACE Session Last Saved	11:28:46				
9	* Date ACE Session Last Saved	23May2006				
10						
11	** Risk Calculation Configuration Functions					
12	* Risk Iterations					
13	* Risk Calculation Confidence Level					
14	* Risk Allocation					
15						
16	*Estimate					
17	Total	$ 138,012.627	$ 14,597.986	$ 14,902.023	$ 30,294.891	$ 30,928.774
18	Manufacturing	$ 100,337.684	$ 10,567.873	$ 10,789.798	$ 22,032.767	$ 22,495.456
19	Air Vehicle	$ 87,250.160	$ 9,189.454	$ 9,382.433	$ 19,158.928	$ 19,561.266
20	Integration	$ 13,087.524	$ 1,378.418	$ 1,407.365	$ 2,873.839	$ 2,934.190
21	SEPM	$ 37,124.943	$ 3,910.113	$ 3,992.225	$ 8,152.124	$ 8,323.319
22	Other	$ 550.000	$ 120.000	$ 120.000	$ 110.000	$ 110.000
23						
24	*INPUT VARIABLES					
25	Air Vehicle Unit Cost	$ 8,972.255				
26	Air Vehicle Buy Quantity	9	1	1	2	2
27						
28	*Technical/Performance Characteristics					
29	Air Vehicle Takeoff Weight (lbs)	12000.00				
30	Air Vehicle Range (nmi)	250.00				

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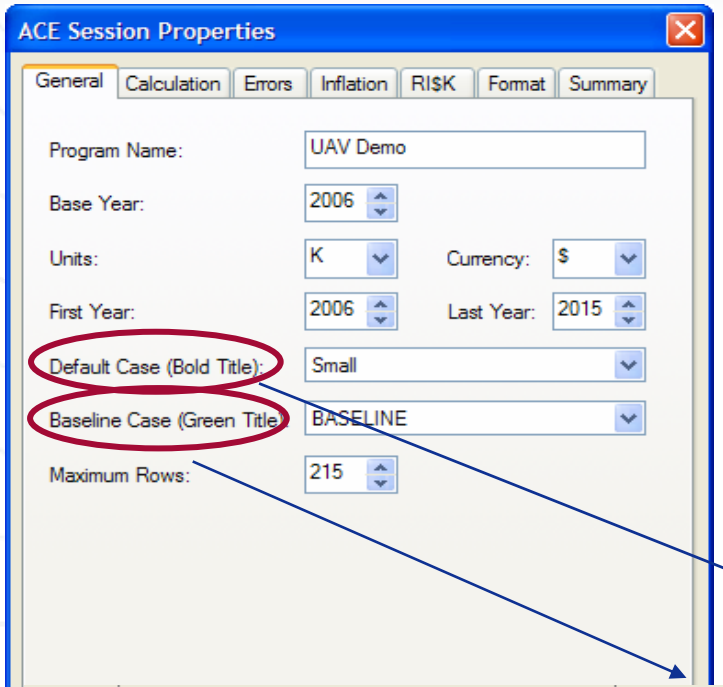
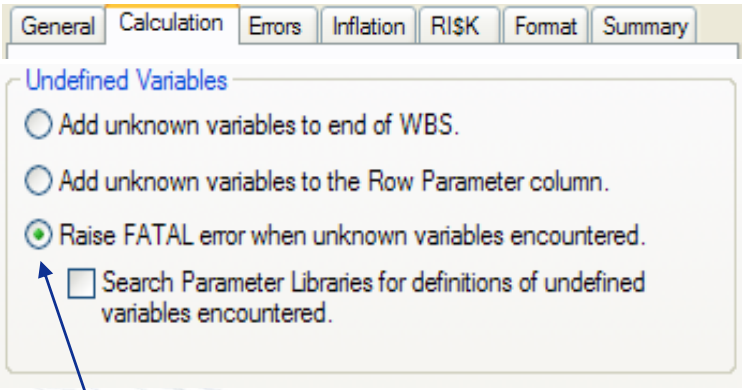
Session Properties



- Now under **File>Properties** *(formerly under Tools>Session Options)*
- Set **Default** case for calculation and reports
- Set Baseline case. Regardless of name, identifies your "baseline" case on workscreens and the viewer

	WBS/CES Description	BASELINE	Very Small	**Small**
1	** EXAMPLE FILE **			
2	***Configuration Functions**			
3	* Base Year of Calculation	2006	2006	2006
4	* Time of Calculation	09:51:08	09:50:18	09:50:18
5	* Date of Calculation	04May2005	23Jan2006	23Jan2006
6	* System Inflation Table for Calculation	005, 08Sep2005	005, 08Sep2005	005, 08Sep2005
7	* Time ACE Session Last Saved	12:14:19	12:14:19	12:14:19
8	* Date ACE Session Last Saved	22Apr2005	23Jan2006	23Jan2006



New default for new sessions

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Enhanced Flexibility

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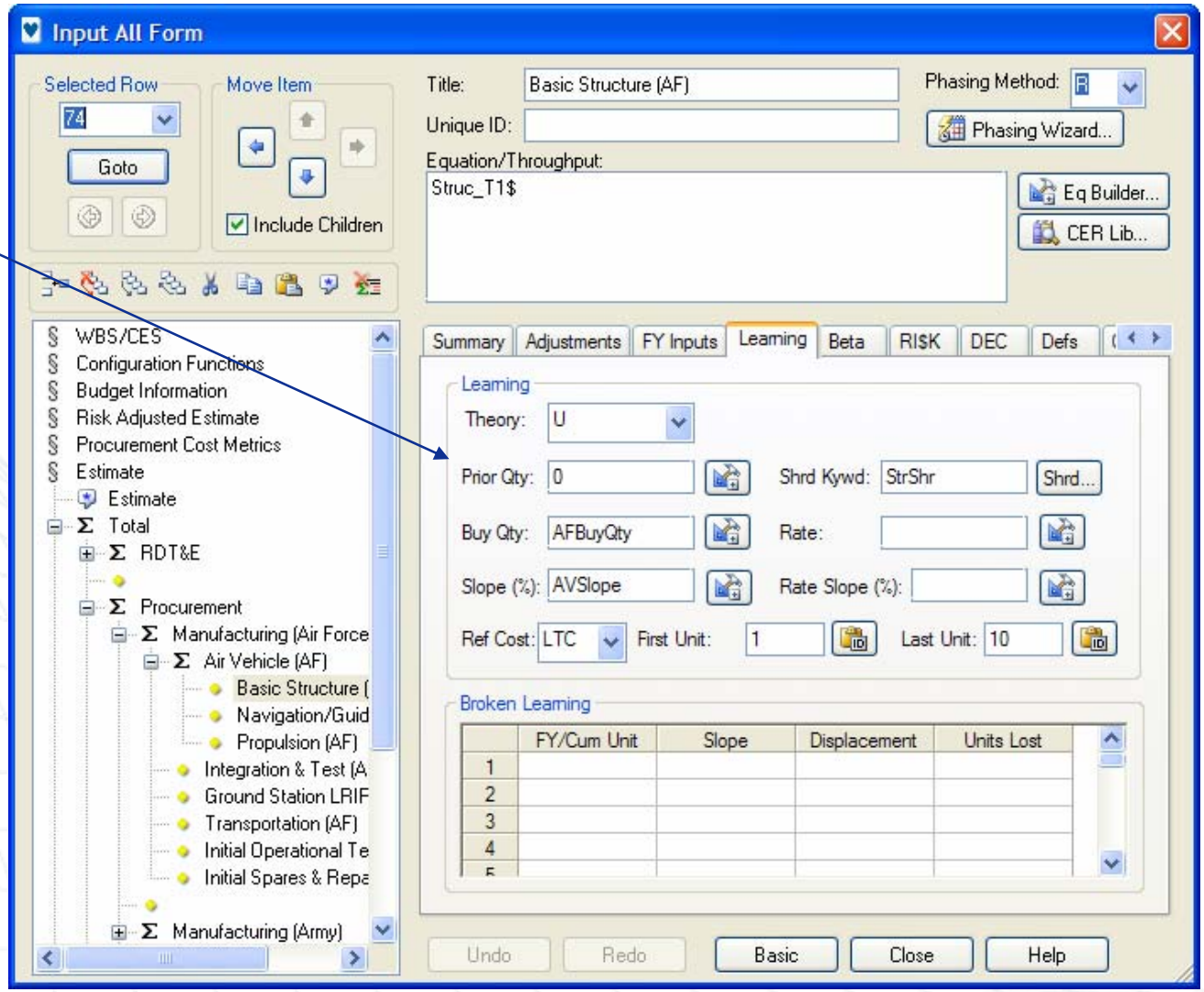
Improved Flexibility

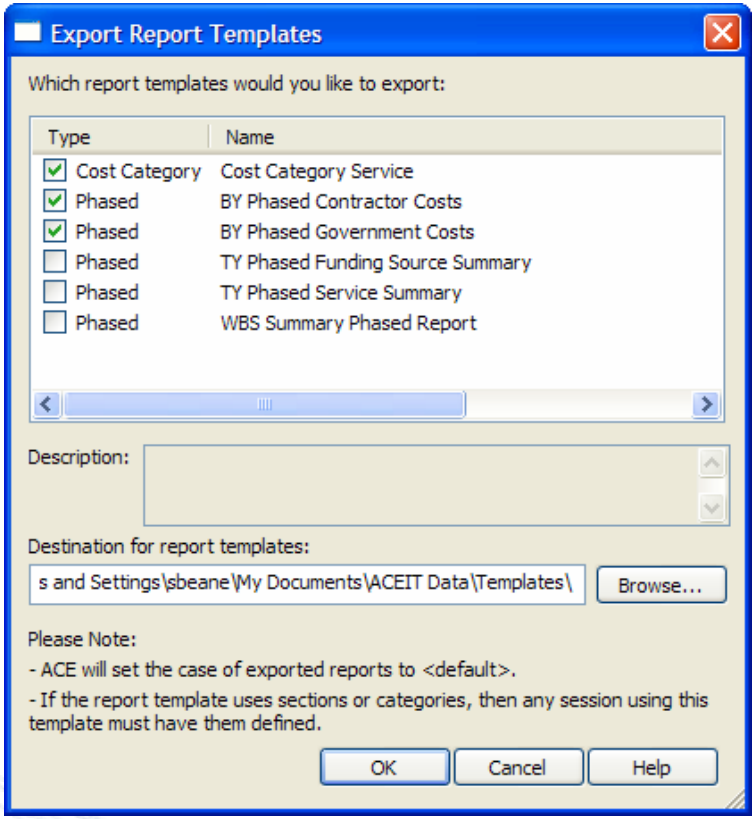
Equations and variables, in addition to numbers are permitted in most **Learning** fields

Variables are allowed, in addition to numbers for most **Risk** fields: Low, High, Low Interpretation, High Interpretation, Adj SE/CV, Group Strength and Sched/Technology Penalty fields.



ACE Documentation and Reporting Features

- **Documentation**
  - New right-click option **Edit Definition** when in the definition keyword columns
  - **Definition Cleanup** feature identifies and removes unused definitions
  - **Export Report Templates** for use in other sessions or to share with other users



Leveraging ACEIT 7.0 New Features – Part 2

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OUTLINE

- **Part 1**
  - Importing 6.1 files into 7.0
  - Easier Navigation and Formatting
  - Point and Click Equation Building
  - What-if drills in 7.0
  - Equations in Learning Fields
- **Part 2**
  - Using new ACE Functions
  - Using new POST RI$K and Delta reports
  - Building “smart” documentation with POST Doc

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New Built-in Functions

- **Date Functions**
  - Three new date functions, **DateDayDiff, DateMonthDiff**, and **DateYearDiff** that return the number of days, months, and years, respectively between two dates.

DateMonthDiff(01OCT2006, 15Jan2008)	15.45 *

- **Operational Functions**
  - **OpCycle**, calculates a cyclical schedule where a phased or constant value is repeated every x years for a specified number of cycles.

Cost Element	Phasing Method	Equation / Throughput	FY 2006	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011	FY 2012
Maint Sched (repeat every other year, with 10% increase)	F	OpCycle(100, 2006, 2, 1.1)	100		110		121		133

- **Lookup Functions**
  - **MatDecVal** function allows the user to access DEC results stored in an ACE matrix. It returns the value at the specified coordinate of the matrix. Usage: **MatDecVal(@Matrix, Index, @DECId)**

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New Built-in Risk Functions

- **RiskMean (@Var [, deltacost])** - returns the mean of given row after a risk distribution has been calculated for the row.
- **RiskMedian (@Var [, deltacost])** - returns the median of given row after a risk distribution has been calculated for the row.

  [*deltacost]* is an optional parameter. It determines whether the mean/median should be returned or the difference between the mean/median and the point estimate. Set to 0.0 to retrieve mean/median and non-0.0 to retrieve delta.
- **RiskStdDev (@Var)** - returns the standard deviation of given row after a risk distribution has been calculated for the row.
- **RiskConf (@Var, value)** - returns the confidence of the value based on the statistics of the given row. The confidence is returned as a factor (probability) between 0.0 and 1.0.

Proc$	$ 241,695.972 (38%) *
RiskConf(@Proc$, 300000)	0.719 *

- **RiskPoint (@Var)** - returns the pre-risk adjusted point estimate for the given row. Used when you want the point estimate value of a specific row to be used in the equation of another row.

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POST in 7.0

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Converting POST to 7.0

- ***Be sure to read the section of the Release Notes titled "Converting POST 6.1 Files (cache and workbooks) to POST 7.0"***

- **IMPORTANT: To preserve your POST cases, convert your POST files PRIOR to making any changes in ACE to the ACE session(s) they are linked to.**

- **The basic process is to open the acw file in POST 7.0 and then use POST>Manage>Worksheets to relink your inputs sheets and reports.**

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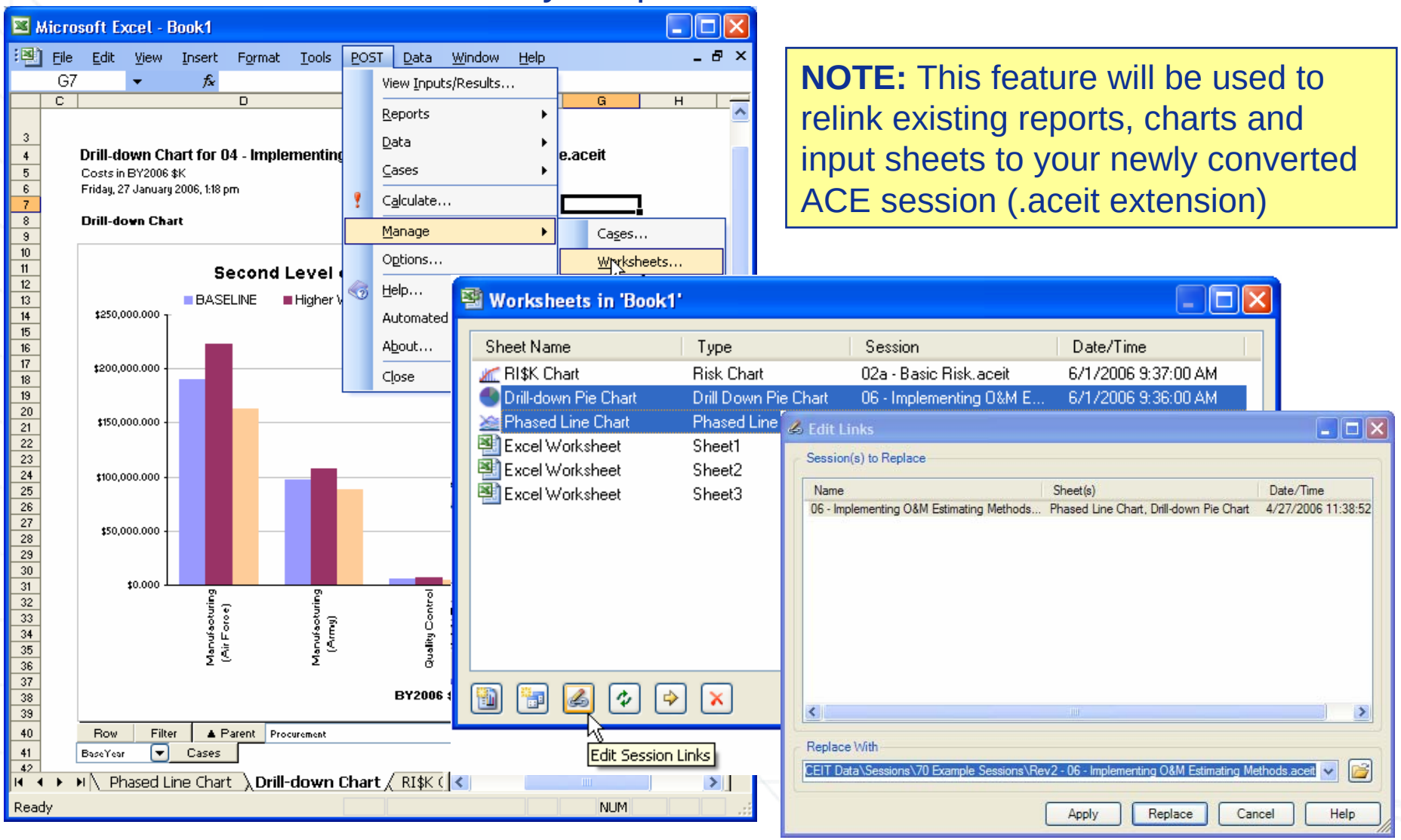
Easier Management of POST Files

- New **Edit Links** feature lets you update ACE session name



NOTE: This feature will be used to relink existing reports, charts and input sheets to your newly converted ACE session (.aceit extension)

POST 7.0 New Reports

- **New Reports**
  - **RI$K Allocation Report** - shows allocated risk results at various confidence levels based on a single risk calculation.
- **New Report Options**
  - **Delta report** now accepts negative and positive thresholds (rather than absolute).
  - **RI$K Chart**
    - Risk S-curves now available in Then Year (TY) and Same Year (SY) dollars.
    - Risk S-Curve may also be based on allocated risk results. This causes the risk chart to match the total numbers on an allocated phased report.
    - Plot multiple cases on the same RI$K S-curve chart.

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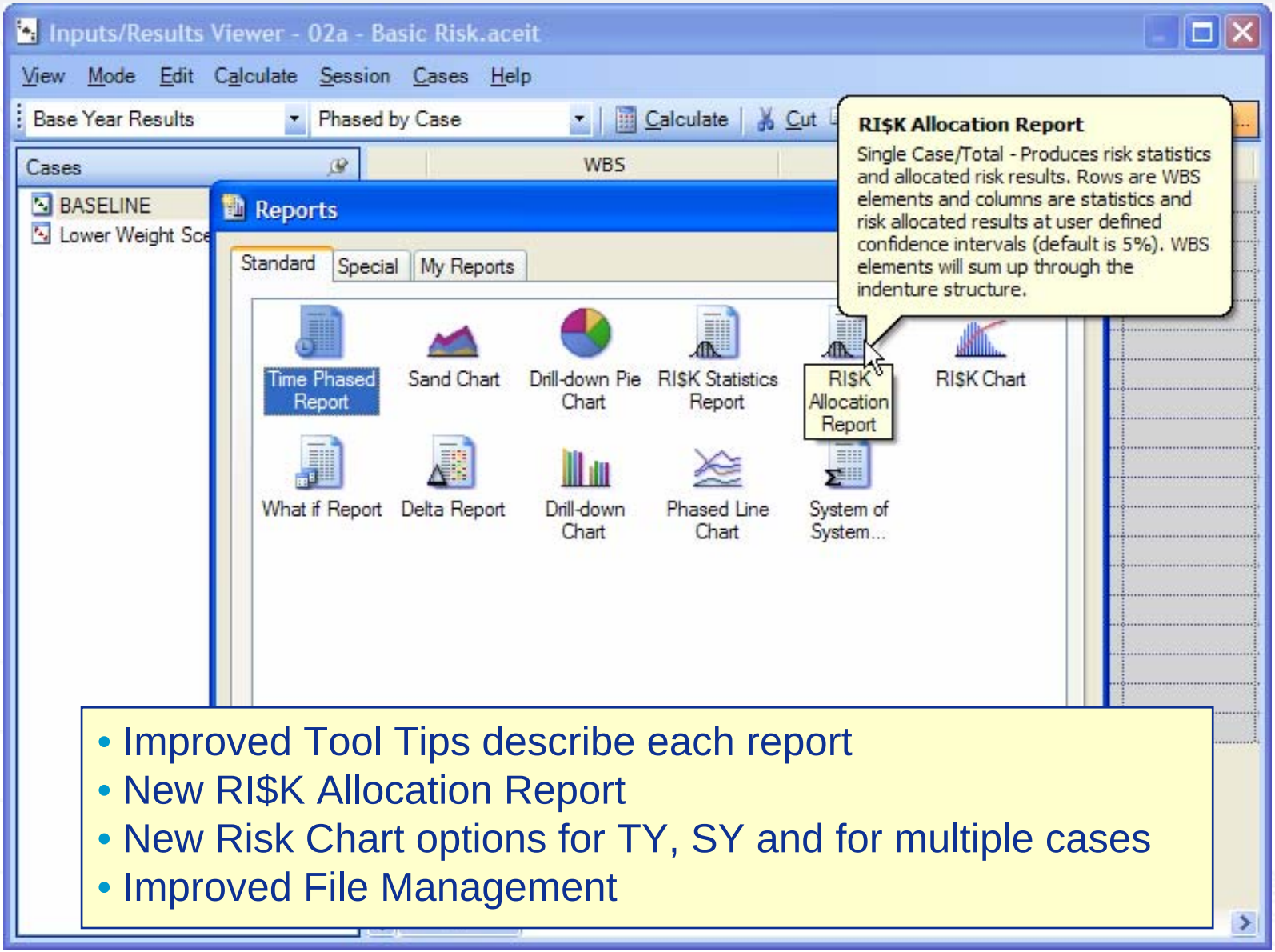
POST



- Improved Tool Tips describe each report
- New RI$K Allocation Report
- New Risk Chart options for TY, SY and for multiple cases
- Improved File Management

Risk Allocation Report

New Risk Allocation Report shows allocated risk results and highlights the WBS level from which the risk was allocated. Results will sum up through the WBS indenture structure.

RI$K Allocation Report for Lower Weight Scenario in 02a - Basic Risk.aceit

Costs in BY2006 $K, 500 iterations

Wednesday, 10 May 2006, 3:23 pm

Rows | BaseYear | Case

Results allocated from 'Level 2 WBS Elements', in 5% intervals

Costs in BY2006 $K	Point Estimate Statistics (BY)					Allocated Results						
WBS	Point Estimate	Confidence	Mean	Std Dev	CV	5%	10%	15%	20%	25%	30%	35%
*Base Year of Calculation	2006											
*Time of Calculation	3:15 PM											
*Date of Calculation	10 May 2006											
*System Inflation Table for Calculation	Use Most Recent USG Table											
*Time ACE Session Last Saved	4:43 PM											
*Date ACE Session Last Saved	26 Apr 2006											
*Risk Iterations	500											
*Risk Calculation Confidence Level												
*Risk Allocation												
Total	$124,570.535	30%	$136,603.309	$21,264.555	0.1557	$100,338.293	$105,299.468	$110,527.552	$113,458.369	$116,868.471	$120,603.003	$123,761.917
Manufacturing	$90,544.595	45%	$92,232.524	$11,838.611	0.1284	$74,829.465	$77,275.321	$80,116.828	$81,538.616	$83,299.079	$85,403.935	$87,021.772
Air Vehicle	$78,734.430	41%	$81,483.466	$10,140.802	0.1245	$67,527.808	$69,542.352	$71,807.005	$72,927.454	$74,306.220	$75,984.430	$77,307.052
Integration	$11,810.165	65%	$10,749.057	$2,456.601	0.2285	$7,301.656	$7,732.969	$8,309.824	$8,611.163	$8,992.859	$9,419.504	$9,714.720
SEPM	$33,501.500	26%	$43,845.293	$13,653.459	0.3114	$25,282.147	$27,733.170	$30,075.362	$31,548.566	$33,167.457	$34,770.181	$36,285.830
Other	$524.441	50%	$525.492	$181.581	0.3455	$226.681	$290.977	$335.361	$371.187	$401.935	$428.888	$454.315
Air Vehicle Unit Cost	$8,748.270	41%	$9,053.718	$1,126.756	0.1245	$7,315.195	$7,659.496	$7,897.444	$8,083.441	$8,233.001	$8,388.306	$8,605.782
Air Vehicle Buy Quantity	9					9	9	9	9	9	9	9
Air Vehicle Takeoff Weight (lbs)	10000.00	25%	10666.71	850.67	0.0797	9450.19	9633.67	9773.79	9896.36	9998.75	10102.60	10207.82
Air Vehicle Range (nmi)	250.00	25%	266.67	21.27	0.0798	236.11	240.83	244.36	247.36	250.04	252.52	255.21

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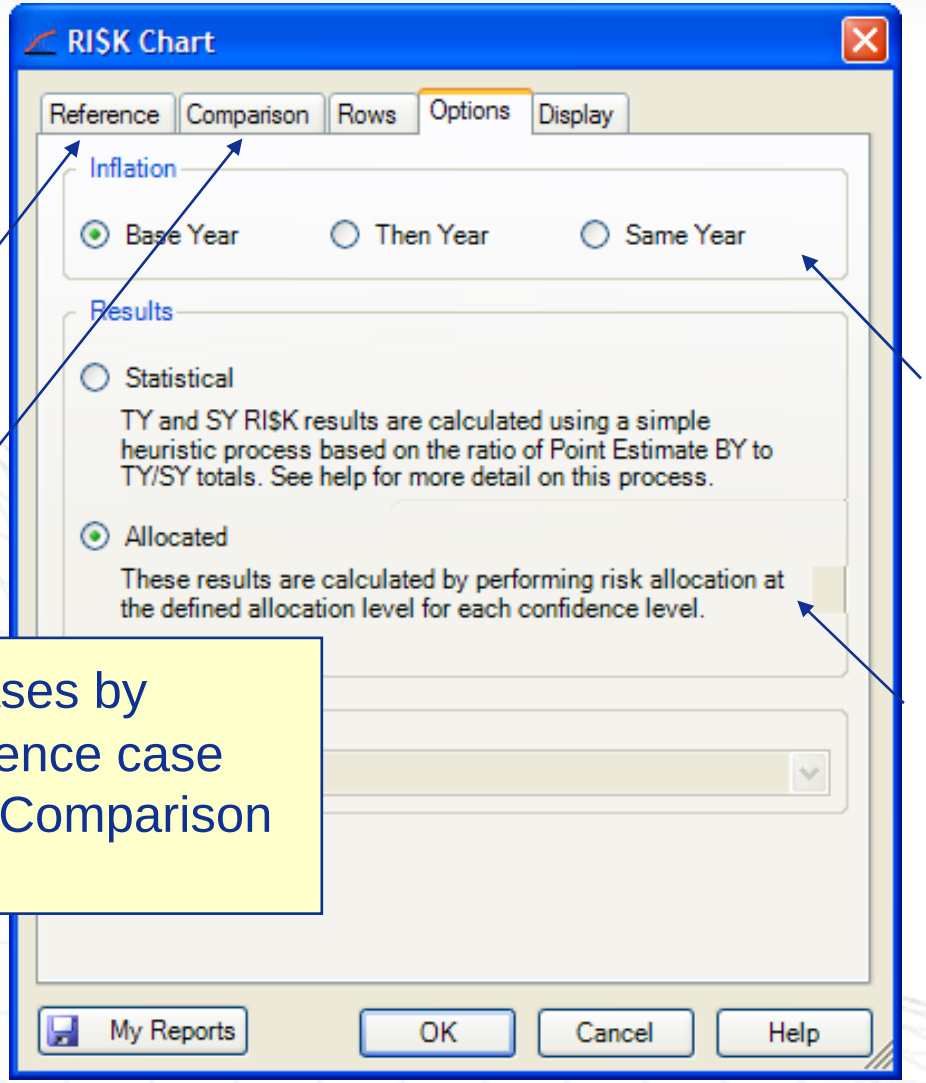
RI$K Chart Options



- Plot multiple cases by selecting a Reference case and one or more Comparison cases

- New Risk Chart options for TY, SY dollars

- New Risk Chart option to use Statistical results or Allocated results

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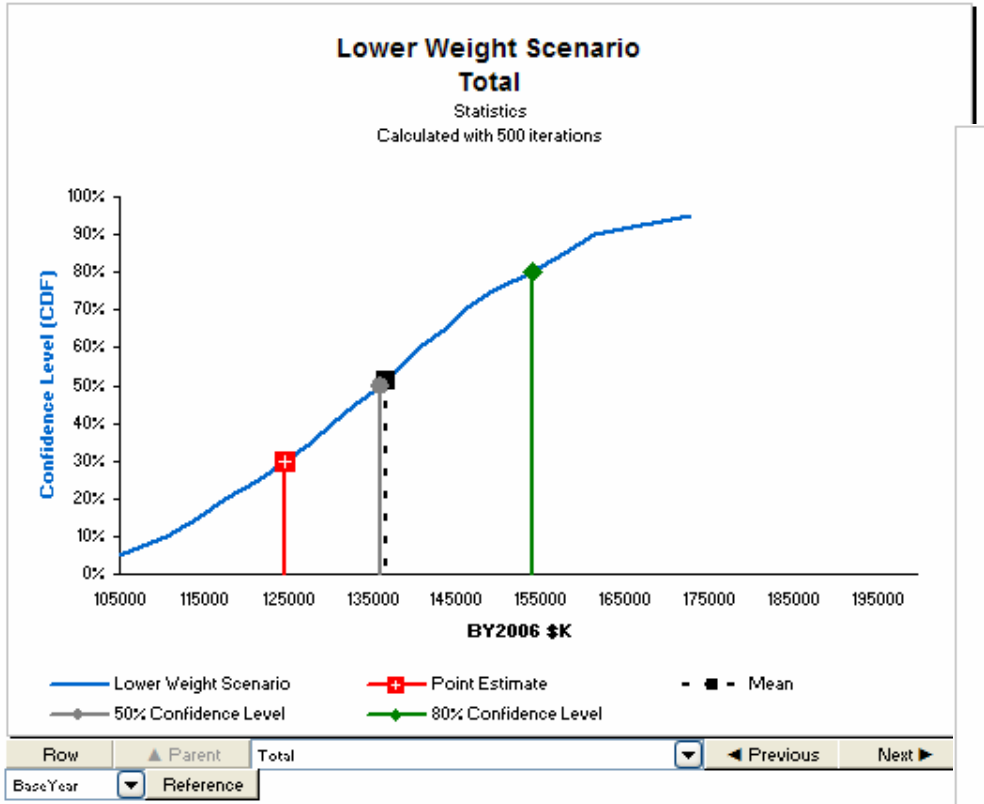
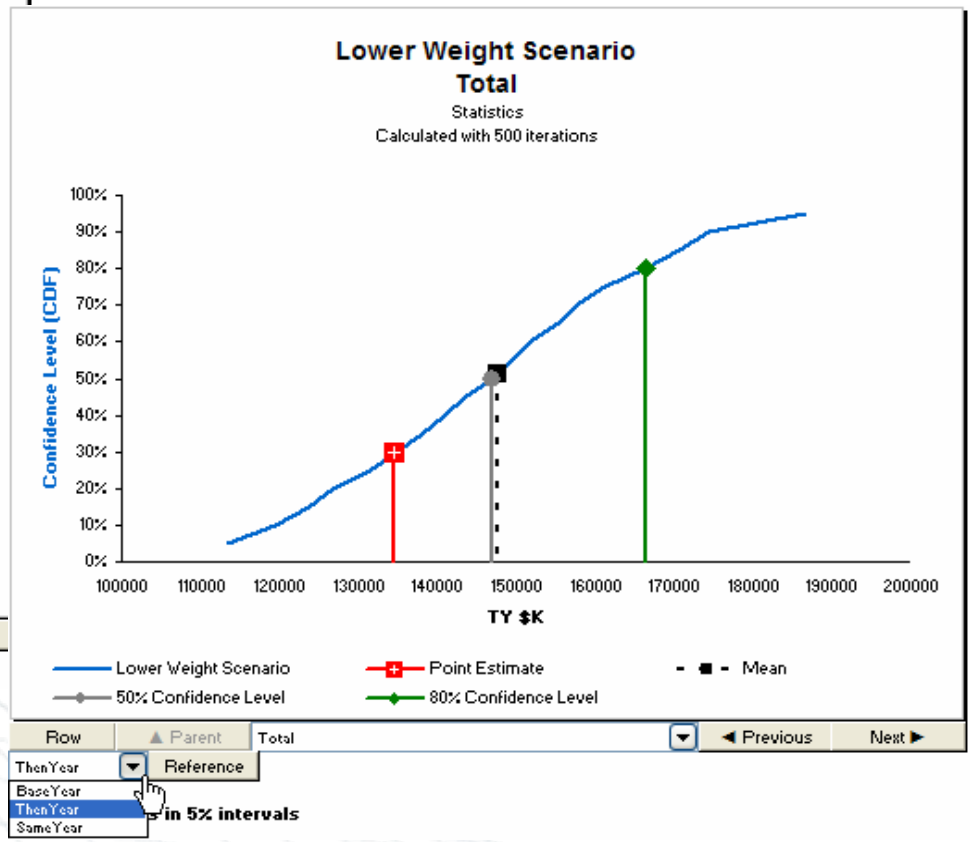
RI$K Charts

RI$K Chart





BY RI$K Chart shows dollars normalized to a particular BY and which include risk

NEW **TY** RI$K Chart shows inflated budget dollars which include risk

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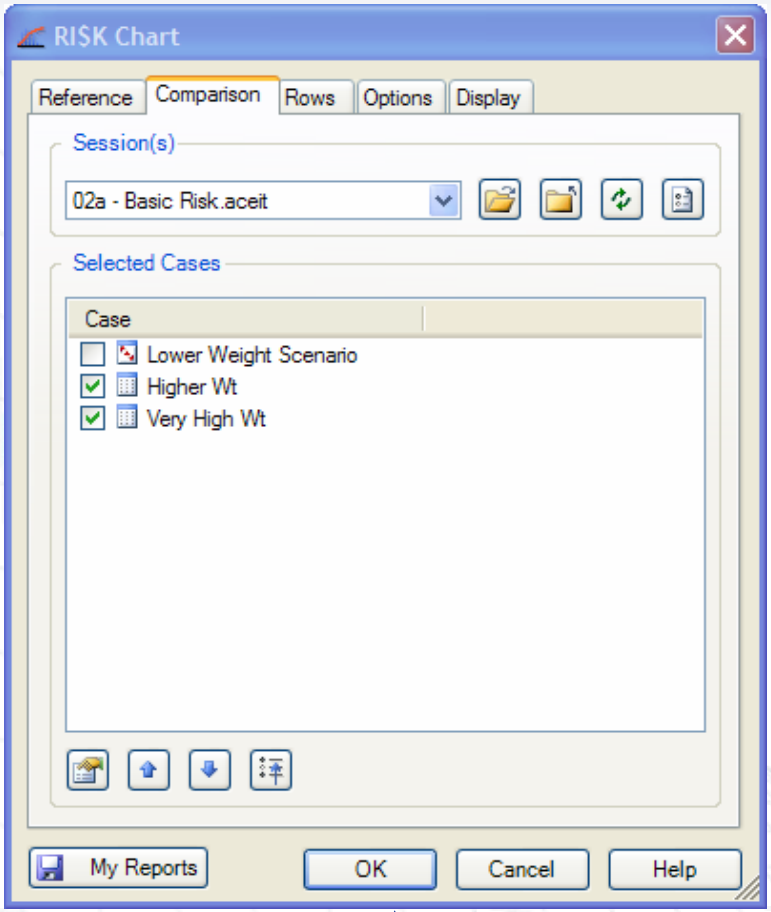
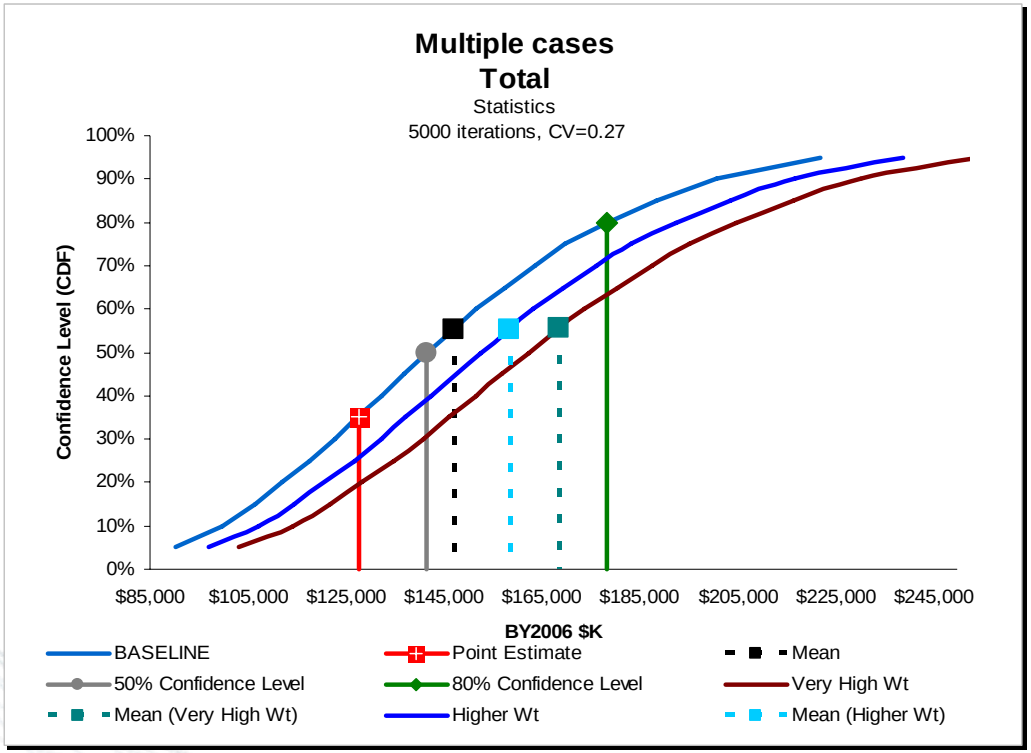
New S-Curve Overlay Charts





Plot multiple cases by selecting a Reference case and one or more Comparison cases

Multiple Cases on one Risk S-curve chart

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POST Document Designer (POST Doc)

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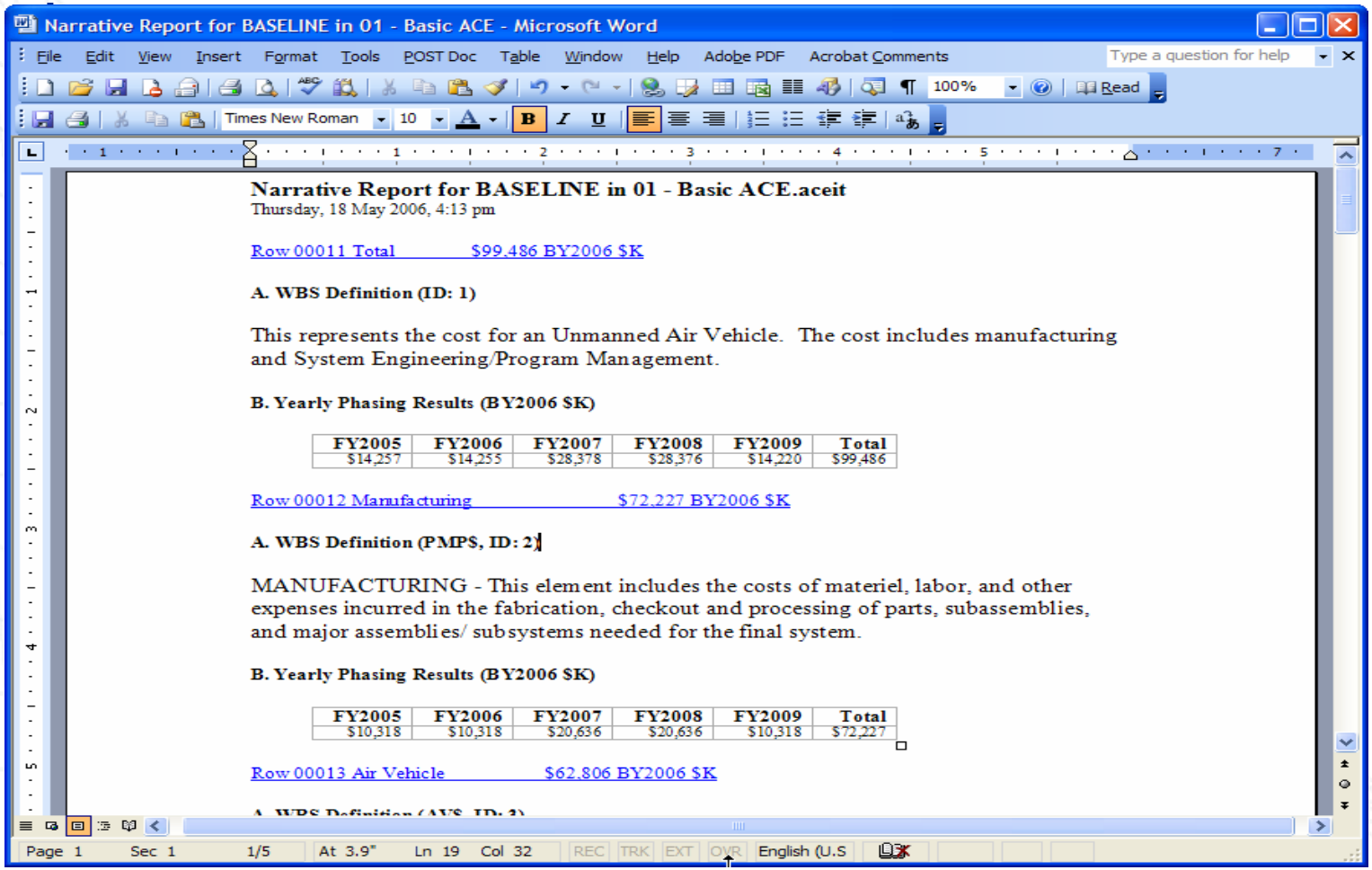
What is POST Documentation Designer?

- **Operates within the Microsoft Word environment**
- **Enables Creation of Smart Documents**
  - Narrative reports can be generated directly ***from*** Word
  - Data (definitions, equations, input parameters, etc.) and results from your ACE session can be directly inserted into a MS-Word document
  - Data/results are directly linked to an ACE session
  - Data/results can be refreshed without affecting formatting of overall document

Smart Narrative

- **Narrative report created directly in Word**
- **Contains links to the ACE session so report can be easily refreshed when estimate changes without affecting format**



Narrative Report for BASELINE in 01 - Basic ACE.aceit
Thursday, 18 May 2006, 4:13 pm

Row 00011 Total $99,486 BY2006 $K

A. WBS Definition (ID: 1)

This represents the cost for an Unmanned Air Vehicle. The cost includes manufacturing and System Engineering/Program Management.

B. Yearly Phasing Results (BY2006 $K)

FY2005	FY2006	FY2007	FY2008	FY2009	Total
$14,257	$14,255	$28,378	$28,376	$14,220	$99,486

Row 00012 Manufacturing $72,227 BY2006 $K

A. WBS Definition (PMPS, ID: 2)

MANUFACTURING - This element includes the costs of materiel, labor, and other expenses incurred in the fabrication, checkout and processing of parts, subassemblies, and major assemblies/ subsystems needed for the final system.

B. Yearly Phasing Results (BY2006 $K)

FY2005	FY2006	FY2007	FY2008	FY2009	Total
$10,318	$10,318	$20,636	$20,636	$10,318	$72,227

Row 00013 Air Vehicle $62,806 BY2006 $K

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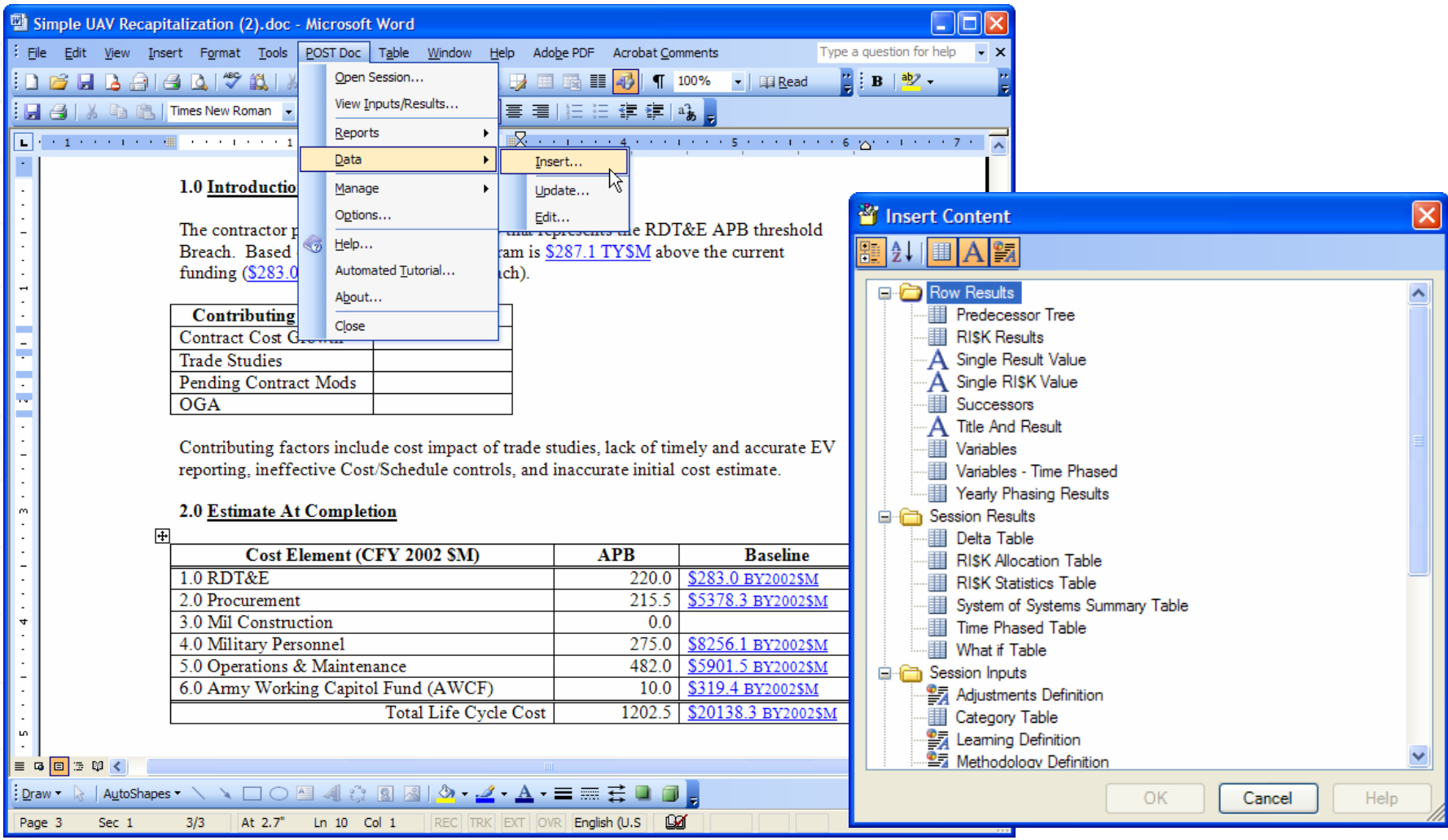
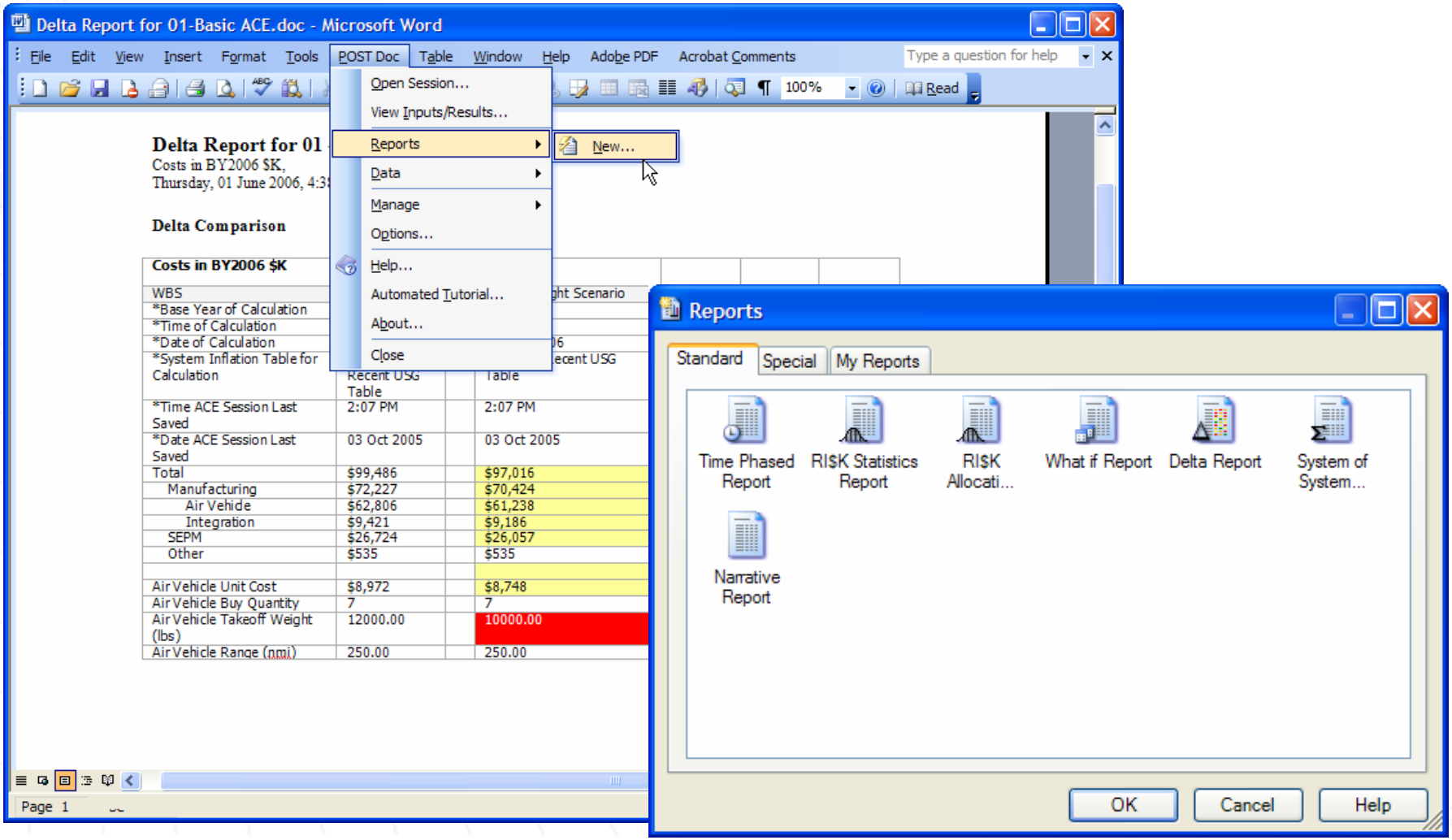
POST Doc Functionality

- Create user-defined customized reports of ACE data
- Embedded content can be refreshed as the estimate changes



POST Doc Reports

Generate updateable POST tabular reports directly in Word



Thank You

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