



2010 ACEIT User Workshop

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Using SumIf and Category Features to Create Estimate Summary Sections

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This paper describes a process for developing tailored summary estimating sections using the new SumIf by Cat functionality in ACE for use there and in POST and PowerPoint. The fStarting from a completed a completed Army ACE estimate the paper shows how existing summary sections can be modified to take advantage of the new functionality. An attachment from a previous ACEIT Workshop shows how the summary sections are constructed using DECs, and how the results are then displayed in the POST environment and then into PowerPoint. The attachment finishes with the procedure of adding the tailored summary section information to a different completed ACE estimate and a comparison with other ACE summary procedures.

The final product of the cost estimating process often includes making summaries of the estimate for different stakeholders. Having a summary section makes it easier for the analyst to provide decision makers with the information they need without having to go through the entire estimate to find what they need. In this case the estimate involves a family of vehicles and the decision makers are interested in seeing both total program costs and costs by platform.

The Army Cost Manual contains the Army's Cost Element Structure (CES) and certain cost summary calculations using portions of the CES. This paper will highlight the modification of the Average Procurement Unit Cost (APUC) from using DECs to using SumIf on Category columns.

Advantages of moving the process to a Category column follow:

- 1. Custom summation within the ACE session
- 2. Category report filtering
- 3. POST report filtering
- 4. Allows for much faster calculation than using DECs. DECs are "dynamic equation columns" designed to be calculated and evaluated each time.
- 5. Category entries can be used at the parent or child level. (Using inherits feature of Cat function)
- 6. They are now unlimited and can be safely be used during copy/paste from one session to another (i.e., won't over-write existing data)
- 7. Handles "inheritance" issues with parent and child entries

Using DECS only gives custom summation within the ACE session

Disadvantages of using DECs follow

- 1. POST can't access DEC information
- 2. ACE report generator can't access DEC information
- 3. DECs are methodologies and cannot be used at any -parent level
- 4. DECs are calculated each time the session is, slowly down the results

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The process of changing from DEC-based SumIf to a Category Column-based SumIf method is described below

Step #1: Create a Category Column

	ACEIT User Workshcreen (BY2006\$K) ACEIT - User Woeen (BY2003\$M)									
	WBS/CES Description	Platform_ID (!) Code	Unique ID	Equation / Throughput	Phas ing					
396	* Unit Costs by Platform									
397	APUC - Average Procurement Unit Cost									
398	ICV - Infantry Carrier Vehicle	1 [ICV]		lf(Prod_Q_ICV >0, Sumlf(ProcurementCost_ByVariant, Platform_ID, @MGV_Tot_\$)/Prod_Q_ICV ,0]	, A					
399	MV-T - Medical Vehicle - Treatment	2 [MV-T]		If(Prod_Q_MEV_T > 0, SumIf(ProcurementCost_ByVariant, Platform_ID, (@MGV Tot \$1 / Prod 0 MEV T.0)	, A					

ACE	
2	The following category columns are empty: Category 1. Instead of creating a new column, would you like to rename an existing Category column that is not being used?
	<u>Y</u> es <u>N</u> o
Edit Cate	egory Column
Enter un	rigue Category column title:
Catego	ory 1
Enter or	aluma short title:

Add/Edit New Category dialog (From ACEIT Help)

<u>H</u>elp

The Add/Edit New Category dialog box allows you to add a new or edit an existing <u>Category</u> <u>Column</u> to your session. The dialog is accessed from the <u>Edit menu</u> by selecting Add Category or Edit Column Properties. The dialog contains the following options.

Column Title

Cat 8

0K

Cancel

2

Enter a description of the category column you wish to add. Column titles can be up to 120 characters in length.

Column Short Title

Enter a short title for the column. <u>Short Titles</u> can be viewed by opening the <u>Workscreen Arrange</u> <u>dialog</u> and checking the box entitled "Short Titles". The short title can be up to 15 characters long. They can contain any special characters or spaces, except for double quotation marks (").

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New category column is not automatically entered on the active workscreen. Need to do a workscreen arrange .



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Arrange Workscreen						×	1
<u>G</u> o To: John's Workscree 💌	2	<u>W</u> orkscreen Title:	John's Wo	kscree			
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Category 2] -						
Lategory 4 Category 5	II Г.	Column Arrangemen	t —				
Category 6		Title		Width	Align	_ _	
Category: MGV Platform Identifier	Unhide >>	WBS/CES Description	on	33.9	Left	-	
FADSS		Methodology Descrip	otion Keywo	12.8	Right	<u> </u>	
Filter by a Budget Activity	K Hide	Methodology (*) Note	es	13.9	Right	-	
Filter by a Common Component		LARD_IKE (") NOtes Notos (*) bu John		25.0	Diabl	- III	
Filter by a Gov PM or LSI Filter by a Tier "n" Sub-Contractor		WBS Indent Level		23.0	Center	÷	
Filter by a Tier 1 Sub-Contractor	a	ProcurementCost_Bu	Mariant (D)	25.0	Bight	÷ II	
Filter by an FCS Platform		Approp	· •	4.1	Center	-	
Filter by GOV or LSI Cost Filter by SEPM Sub-Category	. 4	Platform_ID (!) Code		18.8	Right	-	
PME Matrix		Unique ID		22.8	Center	-	
Durbe Musikas	1 1	Equation / Throughp	out	32.4	Right	-	
Filter		Phasing Method		4.3	Center	-	
C Display all columns		Fiscal Year		5.0	Center	-	
O Display what-if case columns		Units		5.0	Center	-	
O Display DECs		Start Date		9.0	Right	-	
Display category columns		Finish Date		9.0	Right	-	
bispidy category columns		Result Format		9.9	Lert	<u> - </u>	
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Short Titles Height: 2					- 1		
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Looks like this when finished						up he	re
(manufacture and the second							
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WBS/CES Desi	cription	Platform ID (!) Code	Cat	egory: N	1GV	
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APIIC Auerage Processor	at Unit Coat						
397 AFOC - Average Frocuremen							_
398 ICV - Infantry Carrier Vehicle			1 (ICV]			

2 [MV-T]

0.0.0.0

Step #2: Use current DEC entries to populate the new category column

MV-T - Medical Vehicle - Treatment

399

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Highlight the column for copy/paste operation to the new category column

	ACEIT User Workshcreen (BY2006\$K) ACEIT - User Woeen (BY2003\$M)							
	WBS/CES Description	Platform_ID (I) Code	Category: MGV					
396	* Unit Costs by Platform	\$						
397	APUC - Average Procurement Unit Cost							
398	ICV - Infantry Carrier Vehicle	1 [ICV]						
399	MV-T - Medical Vehicle - Treatment	2 [MV-T]						

To change numbering scheme of the platforms to a more descriptive category entry use the Replace

	ACEIT User Workshcreen (BY2006\$K) 🖤 ACEIT - User Woeen (BY2003\$M)						
	WBS/CES Description	Platform_ID (I) Code	Cateo MG	gory: 3∨	Unio	que ID	
396	* Unit Costs by Platform						
397	APUC - Average Procurement Unit Cost						
398	ICV - Infantry Carrier Vehicle	1 [ICV]		1 [ICV]			
	MV-T - Medical Vehicle - Treatment	2 [MV-T]	2		Ch <u>o</u> ices	Ctrl+L	
399					Eguation Builder	Ctrl+E	
400	MV-E - Medical Vehicle - Evacuation	3 [MV-E]	3		Calc BASELINE	F9	
401	MCV - Mounted Combat System	4 [MCV]	4	×	Cut	Ctrl+X	
402	NLOS-C - Non Line of Site - Cannon	5 [NLOS-C]	5 (N		- Conv	Ctrl+C	
403	NLOS-C Spl	5.1 [NLOS-C Special Interest]	ecial II		E-F/	Christy	
404	NLOS-M - Non Line of Site - Mortar	6 [NLOS-M]	6 [NI		<u>r</u> asie Deste Teacut	Curry	
405	C2V - Command & Control Vehicle	7 [C2V]			Paste I <u>n</u> sert	Ctri+M	
406	RSV - Reconnaissance & Surveillance Vehicle	8 [RSV]	8	Æ	Toggle <u>B</u> ookmark		
407	FRMV - FCS Recovery & Maintnenance Vehicle	9 [FRMV]	9[\$	Result Forma <u>t</u>	Ctrl+Shift+R	
408				2	Insert Ro <u>w</u>	Ctrl+F6	
409	APUC - Phased				 Delete Row	F6	
410	ICV - Infantry Carrier Vehicle	1 [ICV]					
411	MV-T - Medical Vehicle - Treatment	2 [MV-T]	2		Eind	Ctrl+F	
412	MV-E - Medical Vehicle - Evacuation	3 [MV-E]	3		<u>R</u> eplace	Ctrl+H	
		i				· \\	

The new Find and Replace dialog box appears.

Find and Replace		×	1
Find Replace			
Find what: 1 [ICV]		•	
Replace with: ICV		•	
Direction: Down	Match case	Current column only	
Search: By Rows	Match whole word only		
Replace All	Replace Find Next	Close Help	
			Make sure you click
ACE	×		here!!!
Replaced 197 instances	of '1 [ICV]'.		
OK			

At this point we look at the current formula and realize that we have chosen the wrong DEC for the equation. No problem, first go to Edit / Edit Column Properties. Next, do workscreen arrange and pull-in the ProcurementCost_ByVariant DEC. Then copy/paste that column's entries into the new category column. Then use Find/Replace to make the column entries more understandable

Edit Category Column	×					
Enter unique Category column title:						
Category: Procurement Cost by Variant						
Enter column short title:						
Variant_2\$						
OK Cancel <u>H</u> elp						

AC	EIT User Workshcreen (BY2006\$K) 💙 ACEIT - User	' Woeen (BY2003\$M)				•
	WBS/CES Description	ProcurementCost_ByVariant (!) Codes	Category: Procurement Cost by Variant	Unique ID	Equation / Throughput	Pha ing
396	* Unit Costs by Platform					
397	APUC - Average Procurement Unit Cost					
398	ICV - Infantry Carrier Vehicle		ICV		If(Prod_Q_ICV >0, SumIf(ProcurementCost_ByVariant, Platform_ID, @MGV_Tot_\$)/Prod_Q_ICV.0	A
399	MV-T - Medical Vehicle - Treatment		MV-T		If(Prod_Q_MEV_T ≻ 0 SumIf(ProcurementCost_ByVariant, Platform_ID, ⊚MGV Tot_\$1 / Prod_0_MEV T, 0	A

The syntax of the formula needs to be changed from a Sumlf with a DEC to a Sumlf using a category column. The two DECs highlighted below are no longer needed and will be replaced by the category based syntax. The Category entries are case insensitive in the Cat formula.

			/	Take c	out & use Cat syntax.				
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398	 X < 1/2 (m 2) If(Prod_Q_ICV >0, Sun 	nIf(ProcurementCost_ByVariant	t, Platform_ID, @MGV_To	t_\$)/Prod_Q	_ICV ,0)	-			
V AC	EIT User Workshcreen (BY2006\$K) 💙 ACEIT - User	Woeen (BY2003\$M)				-			
	WBS/CES Description	ProcurementCost_ByVariant (I) Codes	Category: Procurement Cost by Variant	Unique ID	Equation / Throughput	Pha, ing			
396	* Unit Costs by Platform	\$							
397	APUC - Average Procurement Unit Cost	_							
398	ICV - Infantry Carrier Vehicle				lf(Prod_Q_ICV >0, Sumlf(ProcurementCost_ByVaria Platform_ID, @MGV_Tot_\$)/Prod_Q_ICV	ant, A ',0)			
399	MV-T - Medical Vehicle - Treatment				اf(Prod_Q_MEV_T : SumIf(ProcurementCost_ByVariant, Platform_ (@MGV Tot \$1 / Prod O MEV T	• 0, A ID, . 01			

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Categorry Feature Use (From ACEIT Help)

Cat()

Purpose:

This function retrieves information from existing Category columns. This function can be used within the <u>IF</u>, <u>SumIf()</u> or <u>SumIfTot()</u> functions to allow the user to do string comparisons.

Syntax:

Cat ([@var,] "Cat Title" [, Inherit])

@var

This is an optional argument used to reference the ACE row where the category value is stored. The @var syntax identifies an ACE row, where var is the Unique ID of the row to reference. If no row is specified, the function defaults to retrieve the category value from the current row (the row where the function is called).

Cat Title

This argument is the <u>short title</u> of the <u>category</u> column. By default, category columns can be found on the WBS workscreen. You can see a list of category columns by opening the <u>Arrange dialog</u> and clicking the radio button entitled "Display Category Columns". This lists the full title of the column. To view the short title, click on a category column and select <u>Edit ></u> <u>Edit Column Properties</u>. The resulting dialog shows both the full and short title of the column.

Inherit

This optional parameter indicates how to treat inheritance of category codes. If not specified, the default is "0", which means that the cell must explicitly define the code; a value < 0 means that the parent's code will be used (even if the child code is different from the parent); and a value of "1" means that the parent's code will be used if the cell is empty.

Remarks:

- 1. This function is always used within another function as part of an expression (e.g., SUMIF, IF).
- 2. This function can be used to evaluate the result of complex functions.
- 3. Cat Title must be enclosed in quotation marks since it is a text string.

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Example:

SumIf(Cat("Appn"), "RDTEA", @Total\$) - Returns the sum of all rows under "Total\$" that have an appropriation of "RDTEA".

SumIf(Cat("Service"), "Army", @Total\$) - Returns the sum of all rows that have a category code of "Army" in the Service category column.

SumIf(OR(Cat("Service")="AirForce", Cat("Service")="Army"), 1, @Total\$) - Returns the sum of all rows that have a category code of "AirForce" or "Army" in the Service category column.

IF(Cat("Appn") = "3010", 10, 0) - Returns a value of 10 if the value in the Appropriation column is 3010; otherwise it returns 0.

ł	After	deciphering the syntax a	New portion of the				
1	💙 ACE 7.	2 - [ACEIT - User Workshop, MG¥s (25 - 27 Jan 1	0).aceit - John's Workscreen (B	72003\$M)]		formula	_ 8
	🐑 Eile	Edit View Documentation Calc Cases Rep	orts <u>T</u> ools <u>W</u> indow <u>H</u> elp				- 8
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E	398	🝷 🗙 🗸 🏂 🍓 궑 If(Prod_Q_ICV >0, Sun	nIf (Cat ("Variant_2\$"), "ICV", (@MGV_Tot_\$) / Prod_Q_I	CV, 0)		_
		IT User Workshcreen (BY2006\$K) 💙 ACEIT - User	Woeen (BY2003\$M) 👫 ACEI	- User Workiewer (BY2003	\$M)		
ſ		WBS/CES Description	ProcurementCost_ByVariant (!) Codes	Category: Procurement Cost by Variant	Unique ID	Equation / Throughput	Phas ing
	396	* Unit Costs by Platform					
	397	APUC - Average Procurement Unit Cost					
	398	ICV - Infantry Carrier Vehicle				lf(Prod_Q_ICV >0, SumIf (Cat ("Variant_ "ICV", @MGV_Tot_\$) / Prod_Q_I0	2\$"), A (V,0)
1	200	MV-T - Medical Vehicle - Treatment				If(Prod_Q_MEV_T >0, SumIf (Cat ("Variant	2\$"), A

Unfortunately the Category columns and entries do not show up in the formula bar as do other items such IDs, functions, DECs and UDFs.

	💟 ACE 7.2 - [ACEIT - User Workshop, MGYs (25 - 27 Jan 10).aceit - John's Workscreen (BY2003\$M)]													
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l	398 × × ✓ 🛵 📸 🎠 If(Prod_Q_ICV >0, SumIf (Cat ("Variant_2\$"), "ICV", @MGV_tot_\$[)/Prod_Q_ICV ,0)													
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I	398	ICV - Infantry Carrier Vehicle			3	ID MGV_SusTool_2\$		nt_2\$''), ''ICV'',	Α					
I	000					ID MGV_SysSpecificSup_4\$		rod_Q_ICV ,UJ						
I	200	MV-T - Medical Vehicle - Treatment			1	ID MGV_Tot_\$		$Q_MEV_T > 0,$	А					
I	399					ID MGV_Training_4\$		nt, Platform_ID,						
I	400	MV-E - Medical Vehicle - Evacuation			:	ID MGV_TrainingDevices_1\$		Q_MEV_E >0,	Α					
I	401	MCV - Mounted Combat Sustem				ID MGV_TrainingDevices_2\$		Cost BuVariant	Δ					
I	401	NI OC C. New Live of City. Common				ID MGV_Trans_5\$			~					
I	402	INLUS-L - Non Line of Site - Lannon			-	ID MGV_Trng_5\$		_NLUS_U > 0,	A					
I	403	NLOS-C Spl			1	MGV Tronomo 24		$OS_C_Spl > 0,$	A					
I	404	NLOS-M - Non Line of Site - Mortar			:	↓		_NLOS_M > 0,	A					
I	405	C2V - Command & Control Vehicle			:	All Unique ID Function DEC		Cost_ByVariant,	Α					
							<u></u>							

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Attachment

The final product of the cost estimating process often includes making summaries of the estimate for different stakeholders. Having a summary section makes it easier for the analyst to provide decision makers with the information they need without having to go through the entire estimate to find what they need. In this case the estimate involves a family of vehicles and the decision makers are interested in seeing both total program costs and costs by platform. This paper assumes an Army cost estimating environment and stakeholders. However, the methodology could be modified to meet other needs. The information below is from the Stryker program, but any costs shown have been changed for example purposes and should not be used as representative of the Stryker program.

The Army Cost Manual contains the Army's Cost Element Structure (CES) and certain cost summary calculations using portions of the CES. This paper will highlight two calculations, the Program Acquisition Unit Cost (PAUC) and the Average Procurement Unit Cost (APUC). These calculations use selected CES items from the Research, Development, Test & Evaluation (RDTE) and Procurement appropriations. The table below shows the RDTE and Procurement appropriations and their respective ACE parent row variable names.

	Parent Row Variable
	Names in Estimating
Cost Element Structure	Section
1.0 - RDT&E Funded Elements	
1.01 - Development Engineering	Stryker_DevEng_1\$
1.02 - Production Engineering & Planning (PEP)	Stryker_PEP_1\$
1.03 - Development Tooling	Stryker_DevTool_1\$
1.04 - Prototype Manufacturing	Stryker_ProtoMfg_1\$
1.05 - Systems Engineering / Program Management	Stryker_SEPM_1\$
1.06 - System Test and Evaluation	Stryker_STE_1\$
1.07 - Training Devices	Stryker_TrngDevices_1\$
1.08 - Data	Stryker_Data_1\$
1.09 - Support Equipment	Stryker_SupEquip_1\$
1.10 - Development Facilities	Stryker_DevFac_1\$
1.11 - Other RDT&E	Stryker_Other_1\$
2.0 - Procurement Funded Elements	
2.01 - Non-Recurring Production	Stryker_NonRec_2\$
2.02 - Recurring Production	Stryker_RecProd_2\$
2.03 - Engineering Changes	Stryker_ECO_2\$
2.04 - Systems Engineering / Program Management	Stryker_SEPM_2\$
2.05 - System Test & Evaluation	Stryker_STE_2\$
2.06 - Training Devices	Stryker_TrngDevices_2\$
2.07 - Data	Stryker_Data_2\$
2.08 - Support Equipment	Stryker_SupEquip_2\$
2.09 - Operational / Site Activation	Stryker_OperSiteAct_2\$
2.10 - Fielding	Stryker_Fielding_2\$
2.11 - Training Ammunition / Missiles	Stryker_TrngAmmo_2\$
2.12 - War Reserve Ammunition / Missiles	Stryker_WarRes_2\$
2.13 - Modifications	Stryker_Mods_2\$

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2.14 - Other Procurement Stryker Other 2\$
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3.0 - Military Construction Funded Elements	
3.01 - Development Construction	Stryker_DevConst_3\$
3.02 - Production Construction	Stryker_ProdConst_3\$
3.03 - Operational/Site Activation Construction	Stryker_OpSiteConst_3\$
3.04 - Other Military Construction	Stryker_Other_3\$
4.0 - Military Pay Direct Funded Elements	
4.01 - Crew	Stryker_Crew_4\$
4.02 - Maintenance (MTOE)	Stryker_MTOE_Maint_4\$
4.03 - System Specific Support	Stryker_SysSpecificSup_4\$
4.04 - Systems Engineering/Mgt	Stryker_SEPM_4\$
4.05 - Replacement Personnel	Stryker_RepPers_4\$
4.06 - Other Military Pay	Stryker_Other_4\$
5.0 - Operations & Maintenance Funded Elements	
5.01 - Field Maintenance Civilian Labor	Stryker_FMCL_5\$
5.02 - System Specific Base Operations	Stryker_BaseOps_5\$
5.03 - Reparables (Spares)	Stryker_Reparable_5\$
5.04 - Consumables (Replenishment Repair Parts)	Stryker_Consumable_5\$
5.05 - Petroleum, Oil, and Lubricants (POL)	Stryker_POL_5\$
5.06 - End Item Supply and Maintenance	Stryker_EndItem_5\$
5.07 - Transportation	Stryker_Trans_5\$
5.08 - Software	Stryker_Software_5\$
5.09 - System Test and Evaluation (Operational)	Stryker_STE_5\$
5.10 - Systems Engineering/Program Management	Stryker_SEPM_5\$
5.11 - Training	Stryker_Trng_5\$
5.12 - Other O&M	Stryker_Other_5\$

Cost calculations from the Army Cost Manual use the following CESs. While all the calculations are modeled in the presentation ACE session, only the PAUC and APUC are covered in detail.

Development Cost = 1.01 to 1.11 Fly-away = 2.01 to 2.05, 2.104 Fly-away (not used typically) = 1.01 to 1.06, 2.01 to 2.05, 2.104 Weapon System cost = 2.01 to 2.09, 2.103 to 2.106 Program Acquisition Cost = 1.0, 2.01 to 2.10, 3.0 Procurement Cost = 2.01 to 2.10 + 2.14 Ownership Cost = 2.11 - Training Ammo + 2.12 - War Reserve + 2.13 - Modifications + 2.14 - Other) + (4.0 - Military Pay + 5.0 - Operations & Maintenance, both post MS C). Need MS C variable for Start Date DEC.

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ACE Session Set-up

Added Needed Bookmarks. Bookmarks are useful for getting around sessions. If you re-name a row you need to toggle the bookmark icon to make the new title show up in on the bookmark list.

ACE 7.1 - [Bookmark	mmary Demo, Stryker (2 Jan (08).aceit - DEC Codes (BY2008	\$M)]			<u>- 0 ×</u>	
	: C <u>a</u> s es, <u>R</u>eports <u>I</u>ools <u>W</u>	1		_ & ×			
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rring Production 🔹 🍂 🛍 🚠	2.02 - Recurring Preduction	rows, especially	rows, especially in large				
1.01 - Development Engineering 1.04 - Prototype Manufacturing	Notes (*) by_John WBS	sessions.	0	ighput	Phasi Fiscal	Units De	
1.05 - Systems Engineering / Program 1.051 - Government SEPM		L STCV	IF(FYYR=2008.0VH FA	CIL.2005+0VH	F		
1.052 - Contractor SEPM			IF(FYYR=2008,OVH FA	CIL.2005+0VH	F		
1.00 - System rest and Evaluation 1.07 - Training Devices		Bookmarked	IF(FYYR=2008,OVH_FA	CIL.2005+0VH_	F		
*PROCUREMENT FUNDED ELEMENTS		row	CIL.2005+0VH_	F			
2.01 - Non-Recurring Production		100	CIL.2005+0VH_	F			
2.012 - Depot Facilitization			IF(FYYR=2008,OVH_FA	CIL.2005+0VH_	F		
700 ATGW			IF(FYYR=2008,OVH_FA	CIL.2005+0VH_	F		
701 NBCRV		5FCV	IF(FYYR=2008,OVH_FA	CIL.2005+0VH_	F		
702 MGS		5FCV	IF(FYYR=2008,OVH_FA	CIL.2005+0VH_	F		
703 2.02 - Recurring Produ	q	3 CV Stryker_RecProd_2	6				
704 CONTRACTOR		4					
705 HARDWARE		5					
706 ICV HARD	🔨 this line uses spreadsheat	6FCV ICV_CMFG	CV_MFG_SUNK+BLK_I	MP_SUNK/10+I	F		
707 RV HARD	V this line uses spreadsheat	6FCV RV_CMFG	RV_MFG_SUNK+BLK_I	MP_SUNK/10+If	F		
708 MC HARD	V this line uses spreadsheat	6FCV MC_CMFG	MC_MFG_SUNK+N	IORTAR_SUNK	F		
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Determine Summary Cost and Data Needs. I created sections that would sum at the x.x CES level and at the x.xx CES level by total program and by variant as desired. These summaries are either simple pass-throughs of parent level information or they use the SumIf/DEC combination to filter data below the parent level for the summation. Formulas and phasing would appear as shown below.

x.x Level Summary

💙 ACE 7	.1 - [ACEIT - User Conf, Tailored Summary D	emo, Stryker (2 Jan 08).acei	: - DEC Ce	odes	(BY2008\$M)]							
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i DEC Codes 🔹 🔹 🗃 🏭 🍺 - 譚 劉 - 🌌 蠲 @ 🗄 🖏 🖏 🖉 🖓 🖓 🦕 🗺 💱 👘 👬 🛝 🖓 🍇 🏄 🎸 🎽 🕷 🚰 🔩												
28 • f total Stryker Family (x.x level)												
	WBS/CES Description	Notes (*) by_John	WBS Indent	Ap pro	Unique ID	Equation / Throughput	Phasi ng	Fisc 📤 Yea				
28	Total Stryker Family (x.x level)	Don't modify or delet any row in this section without talking to John Bryant	1			[Bookmark Row]	F					
29	Total Stryker	POST header row, also useful in ACE. Can also do a cagtegory filter report on the Filter by Stryker Variant column for each variant for nice report for this section.	1		*Estimate							
30	1.0 - RDT&E Funded Elements		2			Stryker_RDTE_1\$	F					
31	2.0 - Procurement Funded Elements		2			Stryker_Proc_2\$	F					
32	3.0 - Military Construction Funded Elements		2			Stryker_MILCON_3\$	F					
33	4.0 - Miltary Pay Direct Funded Elements		2			Stryker_MPA_4\$	F					
34	5.0 - Operations & Maintenance Funded Elemen		2			Stryker_O&M_5\$	F	-				
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Created by John D. Bryant	
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x.xx Level Summary

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69 • 🏂 📾 🔉 Total Stryker Family (x.xx level)												
	WBS/CES Description	Notes (*) by_John	WBS Indent	Ap pro	Unique ID	Equation / Throughput	Phasi ng	Fisc. Yea				
69	Total Stryker Family (x.xx level)	Don't modify or delet any row in	1			[Bookmark Row]	F					
70	Total Stryker	POST header row, also	1		*Stryker_Start2							
71	1.0 - RDT&E Funded Elements		2									
72	1.01 - Development Engineering		3			Stryker_DevEng_1\$	F					
73	1.02 - Production Engineering & Planning (PEF		3			[Stryker_PEP_1\$]	F					
74	1.03 - Development Tooling		3			[Stryker_DevTool_1\$]	F					
75	1.04 - Prototype Manufacturing		3			Stryker_ProtoMfg_1\$	F					
76	1.05 - Systems Engineering / Program Manag		3			Stryker_SEPM_1\$	F					
77	1.06 - System Test and Evaluation		3			Stryker_STE_1\$	F					
78	1.07 - Training		3			Stryker_Trng_1\$	F					
79	1.08 - Data		3			[Stryker_Data_1\$]	F					
80	1.09 - Support Equipment		3			[Stryker_SupEquip_1\$]	F					
81	1.10 - Development Facilities		3			[Stryker_DevFac_1\$]	F					
82	1.11 - Other RDT&E		3			[Stryker_Other_1\$]	F					
83												
84	2.0 - Procurement Funded Elements		2									
85	2.01 - Non-Recurring Production		3			Stryker_NonRec_2\$	F					
86	2.02 - Recurring Production		3			Stryker_RecProd_2\$	F					
87	2.03 - Engineering Changes		3			Stryker_ECO_2\$	F					
88	2.04 - Systems Engineering / Program Manage		3			Stryker_SEPM_2\$	F					
•	1											
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Parent level Row Examples in the Detailed Estimating Section

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DEC Cod	DEC Codes											
2.0 - Proc	uremei 🔹 🏂 2	.0 - Procurement Funded Ele	ements			Unique ID						
	WBS/CES Description	Notes (*) by_John	WBS Ap Indent pro	Unique ID	Baseline	Equation / Throughput ng						
679	2.0 - Procurement Funde		2 TCV	Stryker_Proc_2\$	14979.492 *							
680	2.01 - Non-Recurring Pr		3TCV	Stryker_NonRec_2\$	\$ 81.494 *	11 Dement						
681	2.011 - Initial Produ		4		\$ 78.097 *	x.xx level Parent						
682	ICV - NON REC		5FCV		\$ 23.711 *	Row Unique ID						
683	RV - NON REC		5TCV		\$ 1.433 *	1						
684	MC - NON REC		5TCV		\$ 12.995 *	[Cost Throughput]						
102			E TOV		© 1 1©1 ★	Coot Throughout] TV						
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x.x Level by all Variants Using Sumlf/DEC combination Sumlf causes ACE to go to row labeled Stryker_RDTE_1\$ and looks in the LifeCycleCost_ByVariant DEC column for a value of 1 and then adds that rows value to the total. This continues through all the children of parent row and stops when it encounters the next same level parent row.

💟 ACE 7.1 - [ACEIT - User Conf, Tailored Summary Demo, Stryker (2 Jan 08).aceit - DEC Codes (BY2008\$M)]													
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CES Level x.x by 👻 🌈 CES Level x.x by Variant													
	WBS/CES Description	Notes (*) by_John	WBS Indent	Approp	Unique ID	Equation / Throughput	Phasi ng	Fiscal Year	Uni				
195	CES Level x.x by Variant	Don't modify or delet any row in	1		*ces_level2								
196	1.0 - RDT&E Funded Elements	POST header row, also	2	2									
197	ICV - Infantry Carrier Vehicle		3	}		Sumlf(LifeCycleCost_ByVariant, 1, @Stryker_RDTE_1\$)	F						
198	RV - Reconnaissance Vehicle	SumIf	3			Sumlf(LifeCycleCost_ByVariant, 2,	F						
199	MCV - Mortar Carrier Vehicle	statement fo	r 3	}		Sumlf(LifeCycleCost_ByVariant, 3,	F						
200	CV - Commander's Vehicle	ICV platfor	n 3	}		Sumlf(LifeCycleCost_ByVariant, 4,	F						
201	FSV - Fire Support Vehicle		н з	}		Sumlf(LifeCycleCost_ByVariant, 5,	F						
202	ESV - Engineer Squad Vehicle		3	}		Sumlf(LifeCycleCost_ByVariant, 6,	F						
203	MEV - Medical Evacuation Vehicle		3	}		Sumlf(LifeCycleCost_ByVariant, 7,	F						
204	ATGM - Anti-Tank Guided Missile V		З	3		Sumlf(LifeCycleCost_ByVariant, 8,	F						
205	NBCRV - NBC Reconnaissance Vel		З	3		Sumlf(LifeCycleCost_ByVariant, 9,	F						
206	MGS - Mobile Gun System		З	3		Sumlf(LifeCycleCost_ByVariant, 10,	F						
207									•				
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1.0 - RDT	&E Fur 🔹 🥠 🏂 Stryker	RD SI	umIf. Summation		\backslash					
	WBS/CES Description	w	ill stop when it	S	Approp	Unique ID	LifeCy	vcleCost_ByVariant (!) Codes	ProgAcqCost_ Cc—	
311	Total Stryker Program	ge	ets to the next			Stryker_Tot_\$				
312	1.0 - RDT&E Funded Elemen	ts ec	ual level parent	1	2	Stryker_RDTE_1\$				
313	1.01 - Development Engine	erir	1	3	8 RDTEA	Stryker_DevEng_1\$				
314	DEVELOPMENT ENGI	NEE IC	ow.	4	RDTEA					
315	ICV				5 RDTEA			1 [ICV]		
316	RV				5 RDTEA			2 [RV]		
317	MC		1 1 1		.1 1			3 [MCV]		
318	CV	For ea	ch calculation and	for	the sel	ected CES the	ere	4 [CV]		
319	FSV	will be	e an entry such as	these	e. Eac	h variant with	a	5 [FSV]		
320	ESV	1.111			C. d.			6 [ESV]		
321	MEV	child i	ow DEC entry if i	ieea	for the	e calculation.		7 [MEV]		
322	ATGM	Use []	xxx 1 to add text for	or cla	arity.	All DEC entri	es	8 [ATGM]		
323	NBC RV	for Su	mIf/DEC based or	loul	ations	follow the ser	mo	9 [NBCRV]		
324	MGS	or Su	mm/DEC-based ca	ncui	auons	ionow the sal	ne	10 [MGS]	T	
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60	🔹 🏂 🎰 🚵 CES Level x.x by M	1GS						
	WBS/CES Description	WBS Indent	Approp	Unique ID	Baseline	Equation / Throughput	Phasing Method	Fisc. Yea
60	CES Level x.x by MGS	1			\$ 0.000 *			
61	Total MGS	1		*Stryker_Start	\$ 6,655.8 *			
62	1.0 - RDT&E Funded Elements	2			\$ 105.6 *	Sumlf(LifeCycleCost_ByVariant, 10, @Stryker_RDTE_1\$)	F	
63	2.0 - Procurement Funded Elements	2			\$ 2,019.7 *	Sumlf(LifeCycleCost_By∀ariant, 10,	F	
64	3.0 - Military Construction Funded Elements	2			\$ 0.0 *	Sumlf(LifeCycleCost_By∀ariant, 10,	F	
65	4.0 - Miltary Pay Direct Funded Elements	2			\$ 3,390.5 *	Sumlf(LifeCycleCost_By∀ariant, 10,	F	
66	5.0 - Operations & Maintenance Funded Element	2			\$ 1,139.9 *	Sumlf(LifeCycleCost_By∀ariant, 10,	F	-
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Procurement and Program Acquisition Cost by Variant Using SumIf/DEC Combination

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		(Shireff Oy)	WBS				Phaei	Eigenl 📤
	WBS/CES Description	Notes (*) by_John	Indent	Approp	Unique ID	Equation / Throughput	ng	Year
256	Costs by Variant		1		Avg_Costs_byFamily			
	Procurement Cost by Variant	(2.01 to 2.10, plus 2.14) /	2		Stryker_Tot_Proc_\$			
257		Total Qty, what most						
		comparison						
	ICV - Infantry Carrier Vehicle		3			Sumlf(ProcurementCost BvVariant.	F	
258	,					1, @Stryker_Tot_\$)		
259	RV - Reconnaissance Vehicle		3			Sumlf(ProcurementCost_ByVariant,	F	
260	MCV - Mortar Carrier Vehicle		3			Sumlf(ProcurementCost_ByVariant,	F	
261	CV - Commander's Vehicle		3			Sumlf(ProcurementCost_ByVariant,	F	
262	FSV - Fire Support Vehicle		3			SumIf(ProcurementCost_ByVariant,	F	
263	ESV - Engineer Squad Vehicle		3			SumIf(ProcurementCost_ByVariant,	F	
264	MEV - Medical Evacuation Vehicle		3			SumIf(ProcurementCost_ByVariant,	F	
265	ATGM - Anti-Tank Guided Missile V		3			SumIf(ProcurementCost_ByVariant,	F	
266	NBCRV - NBC Reconnaissance Ver		3			SumIf(ProcurementCost_ByVariant,	F	
267	MGS - Mobile Gun System		3			SumIf(ProcurementCost_ByVariant,	F	
268		NBCRV is not broken out by						
269	Program Acquisition Cost by Variant	Program acquisition cost	2		yker_Tot_ProgAcq_\$			
270	ICV - Infantry Carrier Vehicle		3			Sumlf(ProgAcqCost_ByVariant, 1, @Stryker_Tot_\$)	F	
271	RV - Reconnaissance Vehicle		3			SumIf(ProgAcqCost_ByVariant, 2,	F	
272	MCV - Mortar Carrier Vehicle		3			Sumlf(ProgAcqCost_ByVariant, 3,	F	
273	CV - Commander's Vehicle		3			Sumlf(ProgAcqCost_ByVariant, 4,	F	
274	FSV - Fire Support Vehicle		3			Sumlf(ProgAcqCost_ByVariant, 5,	F	
275	ESV - Engineer Squad Vehicle		3			Sumlf(ProgAcqCost_ByVariant, 6,	F	
276	MEV - Medical Evacuation Vehicle		3			SumIf(ProgAcqCost_By∀ariant, 7,	F	-
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<u>APUC & PAUC by Total and by Variant Using SumIf/DEC Combination</u> This section uses the A phasing method which uses the sum of all the variables in the equation and produces the overall avg in the baseline column instead of the sum of the averages with the F method.

💟 ACE 7.1 - [ACETT - User Conf, Tailored Summary Demo, Stryker (2 Jan 06).aceit - DEC Codes (BY2006\$M)]								
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Average	Unit Co 🔹 🍌 📠 🍌 Average Unit Cost	s by Variant						
	WBS/CES Description	Notes (*) by_John	WBS Indent	Approp	Unique ID	Equation / Throughput	Phasi ng	Fiscal ^ Year
281	Average Unit Costs by Variant		1		*Avg_Costs			
282	APUC by Family	Average Procurement Unit Cost at the total Stryker Family level.	2			Stryker_Tot_Proc_\$ / TOT_PSCH	A	
283	APUC - Average Procurement Unit Cost	(2.01 to 2.10, plus 2.14) / Total Qty, what most people compute for comparison	2					
284	ICV - Infantry Carrier Vehicle		3			Sumlf(ProcurementCost_ByVariant, 1, @Stryker_Tot_\$) / ICV_PSCH	A	
285	RV - Reconnaissance Vehicle		3			SumIf(ProcurementCost_ByVariant,	A	
286	MCV - Mortar Carrier Vehicle		3			SumIf(ProcurementCost_ByVariant,	A	
287	CV - Commander's Vehicle		3			SumIf(ProcurementCost_ByVariant,	A	
288	FSV - Fire Support Vehicle		3			SumIf(ProcurementCost_ByVariant,	A	
289	ESV - Engineer Squad Vehicle		3			Sumlf(ProcurementCost_ByVariant,	A	
290	MEV - Medical Evacuation Vehicle		3			Sumlf(ProcurementCost_ByVariant,	A	
291	ATGM - Anti-Tank Guided Missile V		3			Sumlf(ProcurementCost_ByVariant,	A	
292	NBCRV - NBC Reconnaissance Veh		3			Sumlf(ProcurementCost_ByVariant,	A	
293	MGS - Mobile Gun System		3			SumIf(ProcurementCost_ByVariant,	A	-
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295	🔹 🏂 🏦 🚵 🛛 PAUC by Family							
	WBS/CES Description	Notes (*) by_John	WBS Indent	Approp	Unique ID	Equation / Throughput	Phasi ng	Fiscal≜ Year—
295	PAUC by Family	Program Acquisition Unit Cost at the total Stryker Family level.	2			Stryker_Tot_ProgAcq_\$ / TOT_PSCH	A	
296	PAUC - Program Acquisition Unit Cost b	Program acquisition cost	2					
297	ICV - Infantry Carrier Vehicle		3			Sumlf(ProgAcqCost_ByVariant, 1, @Stryker_Tot_\$) / ICV_PSCH	A	
298	RV - Reconnaissance Vehicle		3			Sumlf(ProgAcqCost_ByVariant, 2,	A	
299	MCV - Mortar Carrier Vehicle		3			SumIf(ProgAcqCost_ByVariant, 3,	A	
300	CV - Commander's Vehicle		3			SumIf(ProgAcqCost_ByVariant, 4,	A	
301	FSV - Fire Support Vehicle		3			Sumlf(ProgAcqCost_ByVariant, 5,	A	
302	ESV - Engineer Squad Vehicle		3			Sumlf(ProgAcqCost_ByVariant, 6,	A	
303	MEV - Medical Evacuation Vehicle		3			Sumlf(ProgAcqCost_ByVariant, 7,	A	
304	ATGM - Anti-Tank Guided Missile V		3			Sumlf(ProgAcqCost_ByVariant, 8,	A	
305	NBCRV - NBC Reconnaissance Veh	NBCRV is not broken out by	3			Sumlf(ProgAcqCost_ByVariant, 9,	A	
306	MGS - Mobile Gun System		3			Sumlf(ProgAcqCost_ByVariant, 10,	A	-
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							NUM	

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Modifications afterwards. Change DEC variable name. From the **Edit** menu select **Edit Column Properties** to bring up this dialog box

Y ACE	7.1 -	ACEIT - User Conf, Tailored Summa	ary Demo, Stryker, test (15 Jan 08).aceit
Eile	<u>E</u> dit	<u>View D</u> ocumentation <u>C</u> alc C <u>a</u> s	es <u>R</u> eports <u>T</u> ools <u>W</u> indow <u>H</u> elp
i 🗋 🛛	5	Undo Edit Workscreen 'DEC Codes' Ct	rl+Z 🗧 🔤 🕢 🔏 🎾 🖘 🖬 100%
DEC C	Gi	Can't Redo Ct	rl+Y 🛛 🗿 纪 💿 😳 🏷
*Config	¥		rl+X
a cu		Copy Ct	rl+C
	2	Paste Ct	rl+V
		Paste <u>T</u> ext Only	Cus_Num (!) Customer
1		Paste I <u>n</u> sert Ct	rl+M
2		Paste Insert Te <u>x</u> t Only	
3	3-0	Insert Ro <u>w</u> Ctr	+F6
4	■×	Delete Row	F6
6		Clear De	elete
7		Fill	•
8		- Find (1	rl+E
9		Replace Ct	
11		Replace Unique ID Ctrl+Shi	
12		Go To Ctr	+F5
13		Bookmarks	
14			
15	ų	Add DEC	
16	n	Add DEC Ctri+Shi	
17		Delete Column Shirt	
18	đ.	Eait Column Properties Ct	
	.00	Result Forma <u>t</u> Ctrl+Shil	t+R
		Font	

DECs are a form of variable, so it finds all places it was used and replaces the variable as shown below.

Shortened the name and added "2"

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If you decide at a later time that a particular row should no longer be used in a DECbased calculation you simply go to that row and DEC column and delete the entry. Likewise if you need to add another child row to calculation you add the row and make the appropriate entry in the DEC.

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POST Worksheet Set-Up

Locating the File and Case. From the **POST** menu in Excel chose **Reports**, then select the type of report desired. For cost element summary sections I want a **Time Phased Report**.



For summary info on unit costs I choose the What if Report.



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Selecting Sections to Display

🗿 What if Report		× I	
Data Rows Fil	ter Options		
Session(s)			
Selected Cases			
Case			
	lick the	ן	
bi	rowser		
		-	
	*平		
📙 My Reports	<u>0</u> K	<u>Cancel</u> <u>H</u> elp	
Select Session(s)		<u>? ×</u>
Look <u>i</u> n:	🗀 User Confere	ence (14-16 Jan 08) 📃 🕓 🍺 💴 🖬 🔹	
	🚞 Joe G's Stuff		
My Recent	ACEIT - User	Conf, Tailored Summary Demo, Stryker (2 Jan 08).aceit File, v20 (13 Dec 07) RELEN.aceit	
Documents	Stryker - ACP	File, v20, test (13 Dec 07) RELEN.aceit	
		\setminus	
Desktop		\	
		Find your file	
Mu Documents			
ny becamento			
My Computer			
Mu Network	File name:	ACELT - User Conf. Tailored Summary Demo. St	Open
Places	Files of tupe:		Cancel
	Thes of type.		

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闘 What if Report	×
Data Rows Filter Options	
Session(s)	
ACEIT - User Conf, Tailored Summary Demo, 💽 📴 🍫	
Selected Cases	
■ Base + SPIP (OMA) ■ Saseline ■ SWith PHP	
Just want the baseline for now.	
<u>My</u> Reports <u>OK</u> <u>C</u> ancel <u>H</u> elp	

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Results in Excel The result would look something like this, only it would look a lot better in Excel

What if Report for Baseline in ACEIT - User Conf, Tailored Summary Demo, Stryker (15 Jan 08).aceit

Costs in BY2008 \$M Tuesday, 08 January 2008, 10:24 am

Rows Filter	BaseYear 🛛 🔻	Cases
-------------	--------------	-------

What if Results

Costs in BY2008 \$M	
WBS	Baseline
*Configuration Functions	
*Base Year of Calculation	2008
*Units of Calculation	Millions
	US Government Indices for FY 2007
*System Inflation Table for Calculation	11/29/2007
*Time of Calculation	10:24 AM
*Date of Calculation	08 Jan 2008
*Time ACE Session Last Saved	10:13 AM
*Date ACE Session Last Saved	08 Jan 2008
Costs by Variant	\$138335.961
Procurement Cost by Variant	\$68852.180
ICV - Infantry Carrier Vehicle	\$13265.100
RV - Reconnaissance Vehicle	\$3361.718
MCV - Mortar Carrier Vehicle	\$2740.271
CV - Commander's Vehicle	\$6436.618
FSV - Fire Support Vehicle	\$1486.724
ESV - Engineer Squad Vehicle	\$4046.283
MEV - Medical Evacuation Vehicle	\$8205.333
ATGM - Anti-Tank Guided Missile Vehicle	\$1452.194
NBCRV - NBC Reconnaissance Vehicle	\$19157.201
MGS - Mobile Gun System	\$8700.737

<u>Manipulating Data to Get the Desired Slide</u> You can link POST generated worksheets to normal Excel worksheets to get your desired summary calculation comparison as shown below.

Microsoft Excel - POST - User Conf (7 Jan 08).xls							_ 8 ×
Eile Edit View Insert Format Tools POST Data	ApproveIt Window Help Ad	dobe PDF Adob	e PDF			Type a quest	ion for help 🛛 🗕 🗗 🗙
	▲ ■ ■ - ② 國 ク 勢	S 10 - CI	- 0. 1	Σ - A Z [1 10	10% - 👩 📘	
	Channes - Fed Deview			- L + A + I			
	r Changes Ciju Review			-		1	
Arial 10 - B I U abe = =	🔲 📾 🔤 📄 💲 % ,	.00 .00 Ⅲ □		中苦生	* = E	∄ • 🆄 • 🛓 •	÷
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2							
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4							
5			_				
7	EY08 \$M			A 11 41	.l		
8 Platform	APUC	PAUC		All the	donar	entries	
9 ICV - Infantry Carrier Vehicle	\$ 9.07	\$ 9.11		are just	norma	l links to	
10 RV - Reconnaissance Vehicle	='What if Report (2)'!E255	\$ 6.94		- DOCT	1 00000	otod	
11 MCV - Mortar Carrier Vehicle	\$ 8.11	\$ 8.29		aPOSI	gener	aleu	
12 CV - Commander's Vehicle	\$ 20.63	\$ 20.80		worksh	eet		
13 FSV - Fire Support Vehicle	\$ 10.93	\$ 11.38					
14 ESV - Engineer Squad Vehicle	\$ 21.18	\$ 21.46		/			
15 MEV - Medical Evacuation Vehicle	\$ 12.23	\$ 12.32		\sim			
16 ATGM - Anti-Tank Guided Missile Vehicle	\$ 12.74	\$ 13.35		-			
17 NBCRV - NBC Reconnaissance Venicle	\$ 33.96 ¢ 32.24	\$ 04.10 \$ 22.60					
10 MGS - Mobile Gun System	32.34	3 32,80					
20		\sim					
21		·					
22							
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29							
31							
N 🔹 🕨 🛝 What if Report (PAUC, APUC / Time Phased Re	port (2) 🔏 Separator 🦯 What if F	Report 🖌 Time R	•				
🛙 Draw 🔻 📐 AutoShapes 🕶 🔨 🔪 🖂 🖉 🍪 🖓	A 4 0 2 A 🕹 😽 -	🥒 - <u>A</u> - 🔳	≣≓	• 🗊 🖡			
Edit							NUM

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<u>Export to PowerPoint Slide</u> Choose POST, then Data, then Export to PowerPoint/Word. The following wizard dialog box appears.

👰 Update Wizard	×
What file do you want to update?	
File	
🚰 Use Existing File	
ACEIT - User Conf, DEC Paper, ver #1 (4 Jan 08).doc	
Presentation1	
<< <u>B</u> ack <u>N</u> ext >>	<u>Finish <u>C</u>ancel <u>H</u>elp</u>
	•////

If you are on a regular Excel sheet you can only select Print Area for export

1	📴 Update Wizard						×
	POST has analyzed 'Presentation1' and found the following exported items.						
	Description	Туре	Location	Source	Date/Time	Status	
	Print Area Click here. Any formatting chan be updated	Range y value or ges will	Slide 1	PAUC, APUC	1/8/2008 9:12:5	Unknown	
			<< <u>B</u> ack <u>b</u>	Lext.>>> <u>Fi</u> nis	h <u>C</u> ancel	<u>H</u> elp	

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If you are exporting from a POST worksheet you have more choices



<u>Updating</u>. Save any changes to the ACE session. If you don't save any changes since the last save will not show up. Choose **POST**, then **Reports**, then **Update** and the following dialog box appears

🛃 Update Reports		_	
POST - User Conf (7 Jan 08).xls			Y
Sheet Name What if Report (2) Time Phased Report (2) What if Report Time Phased Report	Type What If Report Time Phased Report What If Report Time Phased Report	Date/Time 1/8/2008 8:27:47 AM 1/7/2008 2:59:51 PM 1/7/2008 3:00:38 PM 1/7/2008 2:59:51 PM Select report(s) you want to update	
	<u>0</u> K	<u>C</u> ancel <u>H</u> el	p

If the session/case needs to be re-calculated this dialog box appears.

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<u>**Portability</u>** When you change the filename or path you need to re-link the POST worksheets to the correct location. Choose **POST**, then **Manage**, then **Worksheets**.</u>

2	Worksheets in 'POST - User Conf (15 Jan 08).xls'						
	Sheet Name	Туре	Session	Date/Time			
	📰 What if Report (2)	What If Report	ACEIT - User Con	1/8/2008 9:03:22 AM			
	🐏 PAUC, APUC	Excel Worksheet					
	厕 Time Phased Report (2)	Time Phased Report	ACEIT - User Con	1/8/2008 9:04:58 AM			
	🐏 Separator	Excel Worksheet					
	調 What if Report	What If Report	ACEIT - User Con	1/8/2008 9:09:10 AM			
	🔊 Time Phased Report	Time Phased Report	ACEIT - User Con	1/8/2008 8:59:49 AM			
Click on Edi Session Lini icon.		Click on Edit Session Links icon.					

💪 Edit Links	<u> </u>
Session(s) to Replace	
Name Sheet(s) Date/Til ACEIT - User Conf, Tailored Summ What if Report (2) 1/8/200	me 08 9:01:48 AM
Click on Select Session icon	
Replace With	
<u>Apply</u> <u>R</u> eplace	ancel <u>H</u> elp

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Select Session		<u>?</u> ×
Look jn:	: 🗀 Demo Files 📃 🔇 🤌 📂 🛄 -	
My Recent Documents Desktop My Documents My Computer	ACEIT - User Conf, Tailored Summary Demo, Stryker (15 Jan 08).aceit	
My Network Places	File <u>n</u> ame: ACEIT - User Conf, Tailored Summary Demo, St ▼	pen

💪 Edit Links				- I X
Session(s) to Replace				
Name		Sheet(s)	Date/Time	
ACEIT - User Conf, T-	ailored Summ	What if Report (2)	1/8/2008 9:01:48 AM	
	Click on Replace			
Beplace With				
F:\ACEIT Stuff\User C	onference (14-	16 Jan 08)\Demo Riles\ACE	IT - User Conf, Tailore 📘	- 🖻
		Apply <u>R</u> eplace	<u>C</u> ancel	

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Calculate dialog box shows up.

ł	Calculate		<u>- 0 ×</u>
	Case	Session	Description
	Baseline	ACEIT - User Conf,	The case has not been calculated
			<u>C</u> alculate <u>C</u> ancel

Worksheets in 'POST - User Conf (15 Jan 08).xls'										
Sheet Name	Туре	Session D	at							
🔡 What if Report (2)	What If Report	ACEIT - User Conf, Tailored Summary Dem 1/	/8							
PAUC, APUC	Excel Worksheet									
🜆 Time Phased Report (2)	Time Phased Report	ACEIT - User Conf, Tailored Summary Dem 1/	/8							
Separator	Excel Worksheet									
🗐 What if Report	What If Report	ACEIT - User Conf, Tailored Summary Dem 1/	/8							
🔊 Time Phased Report	Time Phased Report	ACEIT - User Conf, Tailored Summary Dem 1/	/8							
		Can do multiple updates to one file								
•										
🛅 🛅 💰 🍫 🔺]	<u>C</u> lose <u>H</u> elp								

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<u>Using This Summary Section in Other Sessions</u> You can copy and paste the summary section into other session. Upon pasting the rows to the destination ACE session the dialog box below appears. At this point you can accept all the summary section DECs and others if you want.

Orp	ohan D	ECs	×
Г	Assign	Destinations	
	The fo Please <canc< th=""><th>llowing columns do not corres indicate what you wish to do el> to discard all of these colu</th><th>pond to columns in the session. with their contents. (Press umns' contents.)</th></canc<>	llowing columns do not corres indicate what you wish to do el> to discard all of these colu	pond to columns in the session. with their contents. (Press umns' contents.)
		Dec ID	Resolution 📃 📥
	2	DevelopmentCost_ByVarian	<insert></insert>
	3	LifeCycleCost_ByVariant	<insert></insert>
	4	Notes	<insert></insert>
	5	OwnershipCost_ByVariant	<insert></insert>
	6	ProcurementCost_ByFamilyT	<insert></insert>
	- 7 -	ProcurementCost_ByVariant	<insert></insert>
	8	ProgAcqCost_ByFamilyToT	<insert></insert>
	9	ProgAcqCost_ByVariant	<insert></insert>
	10	RollAwayCost_ByVariant	<insert></insert>
	•		
		ОК	Cancel <u>H</u> elp

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At this point you can you copy and paste the parent level CES variable name to the appropriate Unique ID column in your estimating section.

ACE 7	.1 - [ACEIT - User Conf, Tailored Summary D	emo, Stryker (2 Jan 08).aceil	t - DEC C	odes	(BY2008\$M)]			
	Edit view vocumentation care cases	Reports Tools Mindow i	teip		Minute Constant			^
: 🖬 🖾			100%	•	Pricrosofic Salis Serie		0	
DEC Co	des 🔹 💌 🔛 🛅 🍺 👻 🚼	• 🗗 🔏 💿 🗄 🖓 🖓	🦻 🖗	ŽΞ	x3 💱 💱 🕌 🛄	總 🎋 缅 雀 🗲 🕴 🖩 🌾 🚰 🐔		
69	🔹 🛛 🏂 👘 🚠 Total Stryker Fam	ily (x.xx level)						
	WBS/CES Description	Notes (*) by_John	WBS Indent	Ap pro	Unique ID	Equation / Throughput	Phasi ng	Fisc_ Yea
69	Total Stryker Family (x.xx level)	Don't modify or delet any row in	1			[Bookmark Row]	F	
70	Total Stryker	POST header row, also	1		*Stryker_Start2			
71	1.0 - RDT&E Funded Elements		2					
72	1.01 - Development Engineering		3			Stryker_DevEng_1\$	F	
73	1.02 - Production Engineering & Planning (PEP		3			[Stryker_PEP_1\$]	F	
74	1.03 - Development Tooling		3			[Stryker_DevTool_1\$]	F	
75	1.04 - Prototype Manufacturing		3			Stryker_ProtoMfg_1\$	F	
76	1.05 - Systems Engineering / Program Manag		3			Stryker_SEPM_1\$	F	
77	1.06 - System Test and Evaluation		3			Stryker_STE_1\$	F	
78	1.07 - Training		3			Stryker_Trng_1\$	F	
79	1.08 - Data		3			[Stryker_Data_1\$]	F	
80	1.09 - Support Equipment		3			[Stryker_SupEquip_1\$]	F	
81	1.10 - Development Facilities		3			[Stryker_DevFac_1\$]	F	
82	1.11 - Other RDT&E		3			[Stryker_Other_1\$]	F	
83								
84	2.0 - Procurement Funded Elements		2					
85	2.01 - Non-Recurring Production		3			Stryker_NonRec_2\$	F	
86	2.02 - Recurring Production		3			Stryker_RecProd_2\$	F	
87	2.03 - Engineering Changes		3			Stryker_ECO_2\$	F	
88	2.04 - Systems Engineering / Program Manag		3			Stryker_SEPM_2\$	F	
•	n							Þ
Ready							NUM	

If there is already something there you can right click in the cell and select the Replace Unique ID feature. You would probably want to change all of them to your program name instead of Stryker in any case.

Replace Unique ID	×									
ACE will replace all occurrences in the session of the following ID with a replacement that you provide. Stryker_RecProd_2\$										
Please enter its replacement. Search ID List (Your new ID must be unique)										
Stryker_RecProd_2\$										
OK Cancel Help										

Then you would populate the children level rows with the appropriate DEC column entries.

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DEC Summaries vs. Other Summaries

Dynamic Equation Columns DECs totals are available within the ACE session using SumIf Function. SumIf Can be Used on Several DECs in the Same Formula (Multiple-Criteria SumIf). There are no limits on the number of DECs. Since DECs are a form of a variable, name changes cascade throughout the estimate similar to the Replace Unique ID feature.

<u>Category Columns</u> The nice thing about Category Columns is that the allow text strings. However, Report results are not available in ACE and there are a limited number of Category Columns and you can only sort on one criterion per report. Column name changes need to be updated in Reports. As shown below, category column have some issue when copying and pasting to another file.

Row Paste Overwrites Existing Category Columns ACEIT does not appear to handle Categories well in Copy/Paste from another session. ACEIT allows you to change category column titles, but it appears that ACEIT remembers the default column names and when you copy/paste it goes to that column in the destination session regardless of the current column title.

niker-	· A B A ROUND (SHEDRING)			the second second		<u></u>	T STR	NER PROCUREMENT ACP FOR MISTER NECKY PROTAGOR - ARE	Columna (07200	ni=40				
	WBS/CES Description	USMC - PIB Entries	Filter by SEPM Sub-Category	Filter by a RDTE Contractor	Filter by Stryker Variant	Filter by a Budget		WBS/CES Description	WBS/tem Number	Арргор	Expansion Available	FUNDING	1	ARIAN
1	ATGM - Anti-Tank Guided Masile Vehicle	1			ATEM		7	* Time ACE Session Last Saved		-	Countration of Street			
b.	RV - Reconnaissance Vehicle				P/V		.0	* Date ACE Session Last Saved						
5	FSV - File Support Vehicle				FSV		9							
5	ESV - Engineer Squad Vehicle				ESV		10	*Stryker MS II for NBCRV Estimate						
	CV - Conmander's Vehicle				CV		11							
	MEV - Medical Evacuation Vehicle				MOV		12							
	NBCRV - NBC Reconvisionce Vehicle				NBCRV		13	PROCUREMENT FUNDED ELEMENTS		WTCV	X			
÷.,	MDS - Mobile Gun System	1			MSS		14	NON-RECURRING PROD		WTCV	×		BCT	
	ICV - NON REC PRICE	BCT					15	INITIAL PRODUCTION FACILITIES						
2	RV - NON REC PROD	BCT					16	ICY - NON REC PROD	_	WTCV			BCT	ICV.
	HC - NON RECPRIOD	DC1					17	RV - NON REC PROD		WTCV			BÇT	RV
1	CV - NON REC PROD	BCI					18	MC - NON REC PROD	_	WTCV			BCT	MC
	FSV - NON REC PROD	BCT					19	CV - NON REC PROD		WTCV	1		BCT	CV
	ESV - NON REC PROD	BCT					20	FSV - NON REC PROD		WTCV	/		BCT	FSV
	MEV - NON RECPROD	BCT					1.00	EDV . NON DEC DOOD		WTEV			BCT	ESV
	ATEM - NON RECPROD	BCT	13 I							WICV			BCT	MEV
	NEORV - NON REC PROD	B/1	So So	urce f	ile			Source file		WTCV			BCT	ATGM
	HGS - NON REC PROD	801	50	urce i	ne			Source me		WTCV			BCT	NBC
					C 1			a . a 1		WTCV			BCT	MGS
	2.012 - Productori Bare Tupport (PES)		- Ca	tegor	v Colui	mn 🗆		Cafegory Column		WTCV	X			
	ICV - Infantty Carrier Vehicle	5.0	0.		,			earegory coranin						
	MCV - Moriar Carrier Vehicle		0.00	teria a	octod t	^		and antrias						
			i en	ries n	asied i	0	100	and enmes						

<u>Summation Formula</u> Another method is to use a summation formula using a Unique ID for Each Row. However this gets very long, fairly quickly.

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