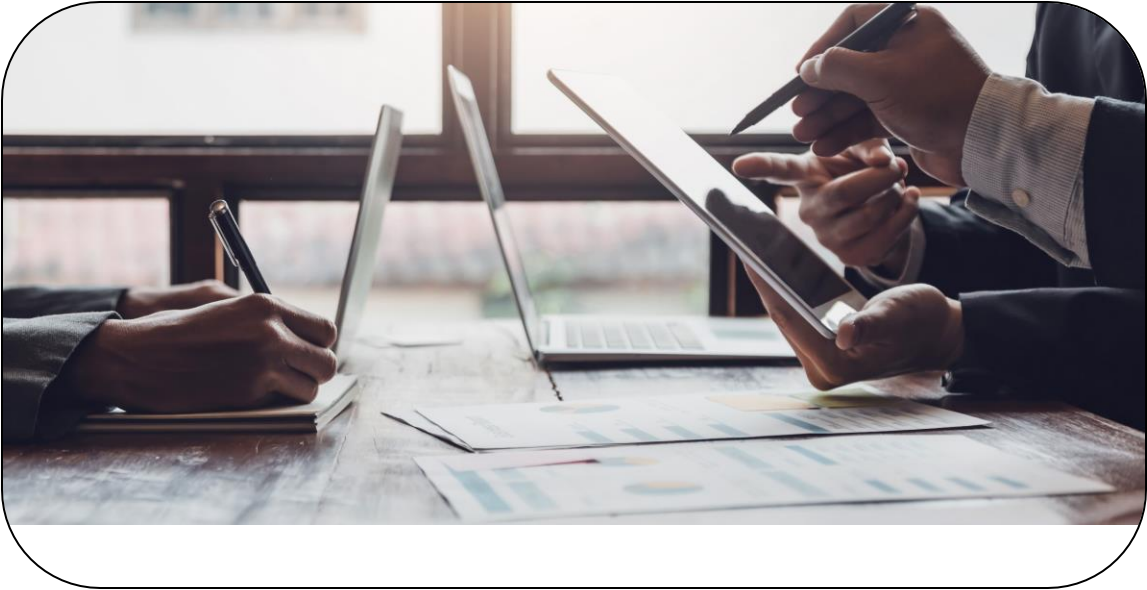


Considerations for First-time EVM Tool Implementations



WITH YOU TODAY



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Agenda for Today

- Why Implement an EVM Tool?
- What Are you Implementing?
 - New Project Setup
 - Existing Projects



Why Implement an EVM Tool?



Why Implement an EVM Tool?

Compliance

- Bidding on a proposal that has EVM contractual clauses (DFARS 252.234-7001, 7002)

Other Reporting Requirements

- 533's
- CSDR

Internal Initiative

- Senior Management - EVM Lite, system robustness improvements

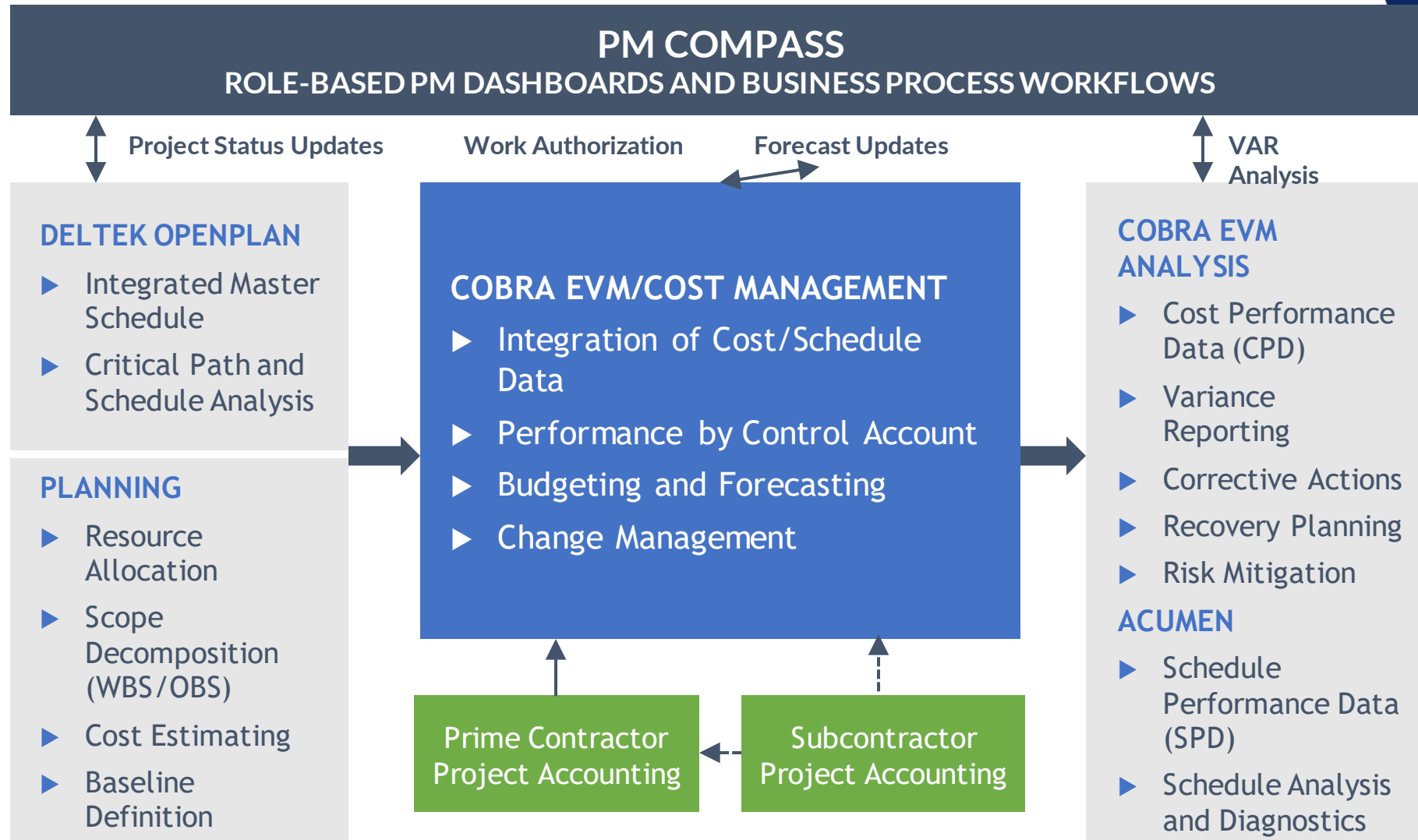
Legacy Tool

- Inefficiency, obsolescence
- home-grown databases, Excel

Integration With Other Tools Within Suite



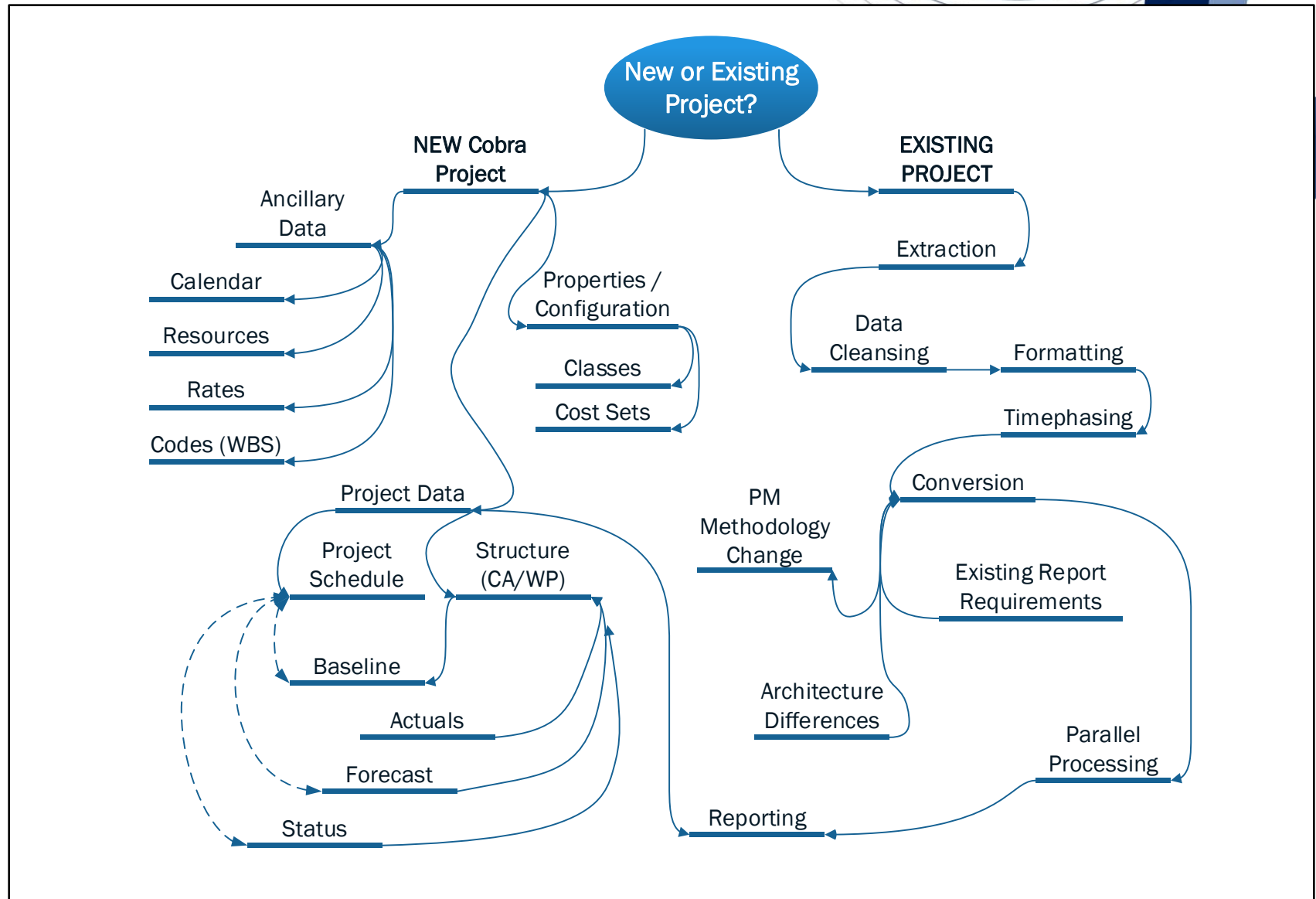
EVM/Project Controls System Architecture



Will You Be Implementing a New or Existing Project?



EVM Tool Implementation Overview



Implementing New Projects



IMPLEMENTATIONS

- New Projects

Considerations

What is the intent of using an EVM Tool?

- Internal initiative
- EVMS compliance
- Customer Reporting

What Existing Data do you have?

- Internal planning, proposal, RFP / SOW, MIL Standards

Organizational Maturity

- Accounting, Scheduling, Forecasting



IMPLEMENTATIONS

- Project Makeup

Ancillary Data

- Calendar
- Resources
- Rates
- Codes (WBS)

Project Data

- Structure
- Actual
- Baseline
- Forecast
- EVM

Properties

- Preferences
- Codes, classes
- Header info

Cobra Explorer Project - Demo Advanced X

Spreadsheet Status Date: 11/30/2015 Time-phase

	WBS	OBS	WP	Resource	Description	Baseline Start	Baseline Finish	Status	Class	Total	11/30/2015	12/31/2015	01/31/2016	02/28/2016
Total					Space Shuttle	06/01/2015	06/30/2018			4,525,876.50	185,684.67	162,757.50	172,829.76	227,711.06
	1.1.1.1	1400			Frame Design	06/01/2015	10/13/2015	Completed		236,410.64				
	1.1.1.1	1400	01		Fuselage	06/01/2015	07/12/2015	Completed		92,735.48				
	1.1.1.1	1400	01	DRAFT	Draftsmen				Actual	6,102.00	0.00			
	1.1.1.1	1400	01	MANAGE	Management				Actual	7,078.32	0.00			
	1.1.1.1	1400	01	SENG	Structural Engineers				Actual	14,060.60	0.00			
	1.1.1.1	1400	01	TECH	Technicians				Actual	7,797.00	0.00			
	1.1.1.1	1400	01	DRAFT	Draftsmen				Budget	5,429.83				
	1.1.1.1	1400	01	MANAGE	Management				Budget	5,248.84				
	1.1.1.1	1400	01	SENG	Structural Engineers				Budget	11,382.83				
	1.1.1.1	1400	01	TECH	Technicians				Budget	6,787.28				
	1.1.1.1	1400	01	DRAFT	Draftsmen				CAMs EAC	0.00				
	1.1.1.1	1400	01	MANAGE	Management				CAMs EAC	0.00				
	1.1.1.1	1400	01	SENG	Structural Engineers				CAMs EAC	0.00				
	1.1.1.1	1400	01	TECH	Technicians				CAMs EAC	0.00				
	1.1.1.1	1400	01	DRAFT	Draftsmen				Earned	5,429.83				
	1.1.1.1	1400	01	MANAGE	Management				Earned	5,248.84				
	1.1.1.1	1400	01	SENG	Structural Engineers				Earned	11,382.83				
	1.1.1.1	1400	01	TECH	Technicians				Earned	6,787.28				

General | Milestones/Steps | Codes | Notes

Status: Completed Description: Fuselage

Dates: Start: 06/01/2015 Finish: 07/12/2015

Actual: 06/01/2015 07/12/2015

Forecast: 06/01/2015 07/12/2015

Early: 06/01/2015 07/12/2015

Late: 06/01/2015 07/12/2015

Pending: 06/01/2015 07/12/2015

Progress Technique: 50-50

Time-phase Detail

Result	Units	TOTAL	06/30/2015	07/31/2015
Percent		100.00	51.16	48.84
HOURS	HOURS	160.00	81.86	78.14
FTE	HEADS	0.43	0.01	0.42
DIRECT	DOLLARS	3,712.00	1,899.15	1,812.85
FRINGE	DOLLARS	129.92	66.47	63.45
OVERHEAD	DOLLARS	576.29	294.84	281.45
G&A	DOLLARS	441.83	226.05	215.78
COM	DOLLARS	388.80	198.92	189.88
Total Currency		5,248.84	2,685.43	2,563.41

Fiscal vs. Calendar Month

What best aligns with your accounting cycle?

IMPLEMENTATIONS

- Calendars

2021

February							May							August							November										
Wk	S	M	T	W	T	F	S	Wk	S	M	T	W	T	F	S	Wk	S	M	T	W	T	F	S	Wk	S	M	T	W	T	F	S
1	31	1	2	3	4	5	6	14	2	3	4	5	6	7	8	27	1	2	3	4	5	6	7	40	31	1	2	3	4	5	6
2	7	8	9	10	11	12	13	15	9	10	11	12	13	14	15	28	8	9	10	11	12	13	14	41	7	8	9	10	11	12	13
3	14	15	16	17	18	19	20	16	16	17	18	19	20	21	22	29	15	16	17	18	19	20	21	42	14	15	16	17	18	19	20
4	21	22	23	24	25	26	27	17	23	24	25	26	27	28	29	30	22	23	24	25	26	27	28	43	21	22	23	24	25	26	27
March							June							September							December										
Wk	S	M	T	W	T	F	S	Wk	S	M	T	W	T	F	S	Wk	S	M	T	W	T	F	S	Wk	S	M	T	W	T	F	S
5	28	1	2	3	4	5	6	18	30	31	1	2	3	4	5	31	29	30	31	1	2	3	4	44	28	29	30	1	2	3	4
6	7	8	9	10	11	12	13	19	6	7	8	9	10	11	12	32	5	6	7	8	9	10	11	45	5	6	7	8	9	10	11
7	14	15	16	17	18	19	20	20	13	14	15	16	17	18	19	33	12	13	14	15	16	17	18	46	12	13	14	15	16	17	18
8	21	22	23	24	25	26	27	21	20	21	22	23	24	25	26	34	19	20	21	22	23	24	25	47	19	20	21	22	23	24	25
April							July							October							January 22										
Wk	S	M	T	W	T	F	S	Wk	S	M	T	W	T	F	S	Wk	S	M	T	W	T	F	S	Wk	S	M	T	W	T	F	S
9	28	29	30	31	1	2	3	22	27	28	29	30	1	2	3	35	26	27	28	29	30	1	2	48	26	27	28	29	30	31	1
10	4	5	6	7	8	9	10	23	4	5	6	7	8	9	10	36	3	4	5	6	7	8	9	49	2	3	4	5	6	7	8
11	11	12	13	14	15	16	17	24	11	12	13	14	15	16	17	37	10	11	12	13	14	15	16	50	9	10	11	12	13	14	15
12	18	19	20	21	22	23	24	25	18	19	20	21	22	23	24	38	17	18	19	20	21	22	23	51	16	17	18	19	20	21	22
13	24	26	27	28	29	30	1	26	25	26	27	28	29	30	31	39	24	25	26	27	28	29	30	52	23	24	25	26	27	28	29



IMPLEMENTATIONS

- Resources

Considerations When Creating Resource Files

Labor Category vs Named Resource

- Labor category levels vs blended
- Using both for different classes
- Matching accounting

How to include subcontractor resources

- Company
- Element of Cost
- Vendor Employee ID (if in timesheet system)

Whether Accruals require additional resources or use existing

Resource	Parent
Systems Engineering	Engineering
Sys Engineer IV	Systems Engineering
Sys Engineer III	Systems Engineering
Sys Engineer II	Systems Engineering

Resource	Parent
Systems Engineer	Engineering
Electrical Engineer	Engineering
Developer	Engineering

Resource	Parent
Actuals	RBS
Ameen, Bob	Engineering
Johnikin, Kelsey	Engineering

Period	Resource	Accrued Amount
9/30/2021	Systems Engineer	\$1,000.00
9/30/2021	Project Control	\$400.00

Period	Resource	Accrued Amount
9/30/2021	Labor Accrual	\$1,400.00



IMPLEMENTATIONS

- Rates

Direct Rates

- Proposed Rates
- Generic rates based on benchmark data
- Blended actual rates

Indirect Rates

Target rates

Actuals

Reconciliation of indirect rates

Escalation

Determining rate and where it is applied

WBS	BOE	Resource	Rate	Hours
1.1.1	12	Cyber Engineer IV	\$175.00	240.0
1.1.1	12	Cyber Engineer III	\$155.00	240.0

Name	Labor Category	Hourly
Employee 1	Sys Engineer IV	65.00
Employee 2	Sys Engineer III	57.00
Employee 3	Sys Engineer II	62.00
Employee 4	Systems Engineer	48.00
Employee 5	Systems Engineer	77.00
Employee 6	Sys Engineer V	95.00
Blended: Systems Engineer:		67.33

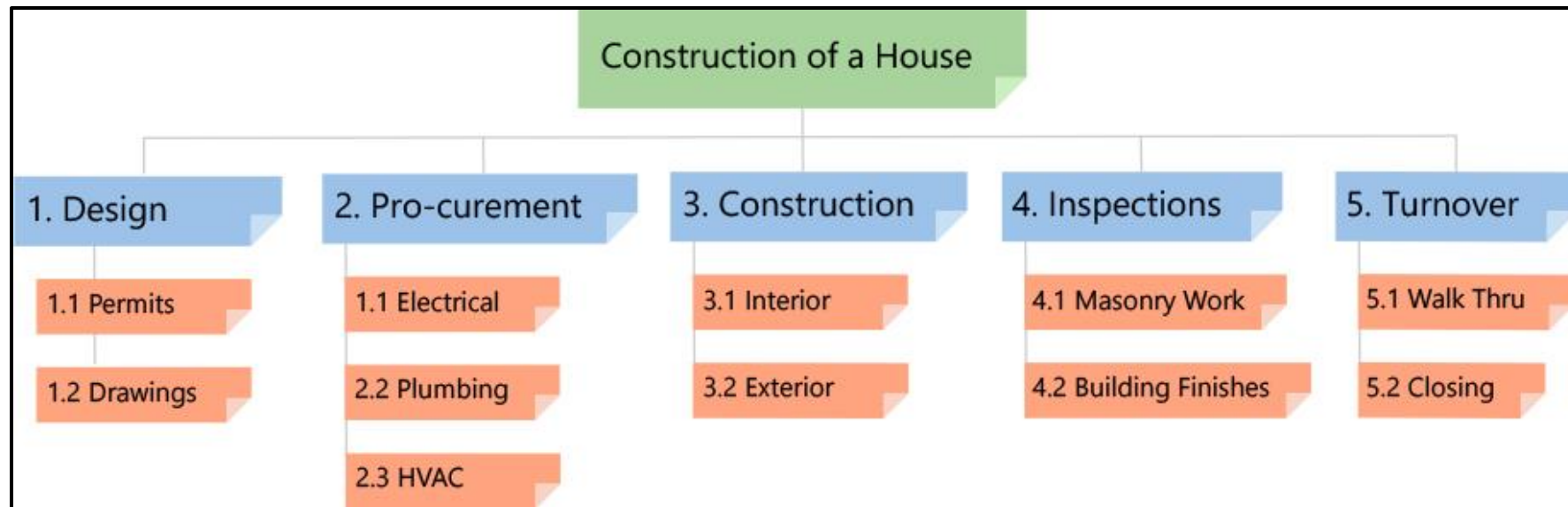
OH	30%	30%	30%	30%	30%	30%	30%	30%	30%	30%	30%	20%
Period	1	2	3	4	5	6	7	8	9	10	11	12
Direct	\$1,000	\$1,000	\$1,000	\$1,000	\$1,000	\$1,000	\$1,000	\$1,000	\$1,000	\$1,000	\$1,000	\$1,000
OH	\$300	\$300	\$300	\$300	\$300	\$300	\$300	\$300	\$300	\$300	\$300	\$200
adjustment												-\$1,100

IMPLEMENTATIONS

- Codes

WBS

- Product oriented
- Includes all work
- Should be decomposed to include sufficient level of detail
- The lowest level doesn't have to be consistent



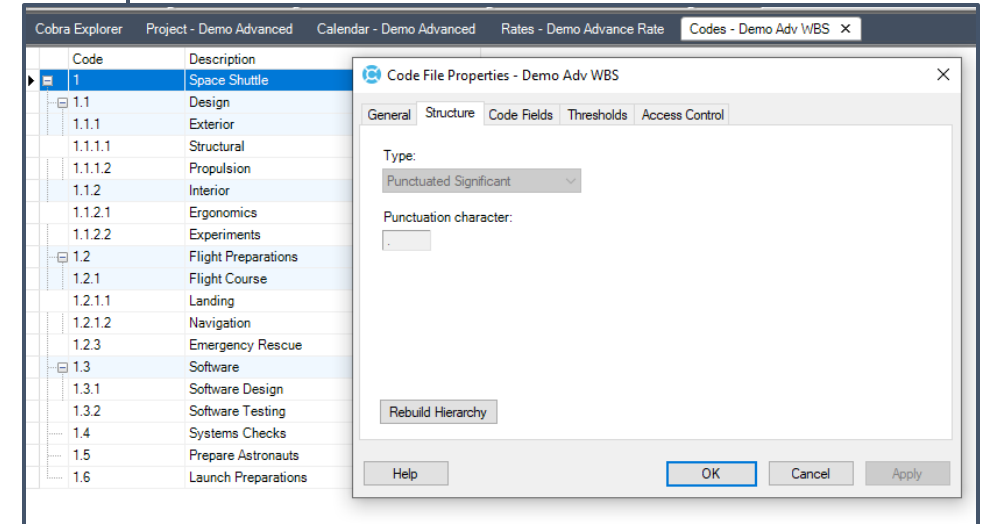
IMPLEMENTATIONS

- Codes

WBS Considerations

- Given a CWBS or Mil Standard to use?
- What is a sufficient level for this project?
- Understanding the scope to define it within the WBS (create a WBS Dictionary)

WBS #	Level 1	Level 2	Level 3	Level 4
1.0	Electronics/Avionics/Generic Systems			
1.1	Prime Mission Product (PMP) 1...n (Specify)			
1.1.1	PMP Integration, Assembly, Test, and Checkout			
1.1.2	PMP Subsystem 1...n (Specify)			
1.1.2.1	Subsystem Integration, Assembly, Test, and Checkout			
1.1.2.2	Subsystem Hardware 1...n (Specify)			
1.1.2.3	Subsystem Software Release 1...n (Specify)			
1.1.3	PMP Software Release 1...n (Specify)			
1.1.3.1	Computer Software Configuration Item (CSCI) 1...n (Specify)			
1.1.3.2	PMP Software Integration, Assembly, Test, and Checkout			
1.2	Platform Integration, Assembly, Test, and Checkout			
1.3	Systems Engineering			
1.3.1	Software Systems Engineering			
1.3.2	Integrated Logistics Support (ILS) Systems Engineering			
1.3.3	Cybersecurity Systems Engineering			
1.3.4	Core Systems Engineering			
1.3.5	Other Systems Engineering 1...n (Specify)			
1.4	Program Management			
1.4.1	Software Program Management			
1.4.2	Integrated Logistics Support (ILS) Program Management			
1.4.3	Cybersecurity Management			
1.4.4	Core Program Management			
1.4.5	Other Program Management 1...n (Specify)			
1.5	System Test and Evaluation			
1.5.1	Developmental Test and Evaluation			
1.5.1.1	Engineering Development Test			
1.5.1.2	System Qualification Test			
1.5.1.3	Cybersecurity Test and Evaluation			
1.5.1.4	Other DT&E Tests 1...n (Specify)			
1.5.2	Operational Test and Evaluation			
1.5.2.1	Cybersecurity Test and Evaluation			
1.5.2.2	Other OT&E Tests 1...n (Specify)			
1.5.3	Live Fire Test and Evaluation			
1.5.4	Mock-ups/System Integration Labs (SILs)			
1.5.5	Test and Evaluation Support			
1.5.6	Test Facilities			
1.6	Training			
1.6.1	Equipment			
1.6.1.1	Operator Instructional Equipment			
1.6.1.2	Maintainer Instructional Equipment			
1.6.2	Services			
1.6.2.1	Operator Instructional Services			
1.6.2.2	Maintainer Instructional Services			
1.6.3	Facilities			
1.6.4	Training Software 1...n (Specify)			
1.7	Data			
1.7.1	Data Deliverables 1...n (Specify)			



IMPLEMENTATIONS

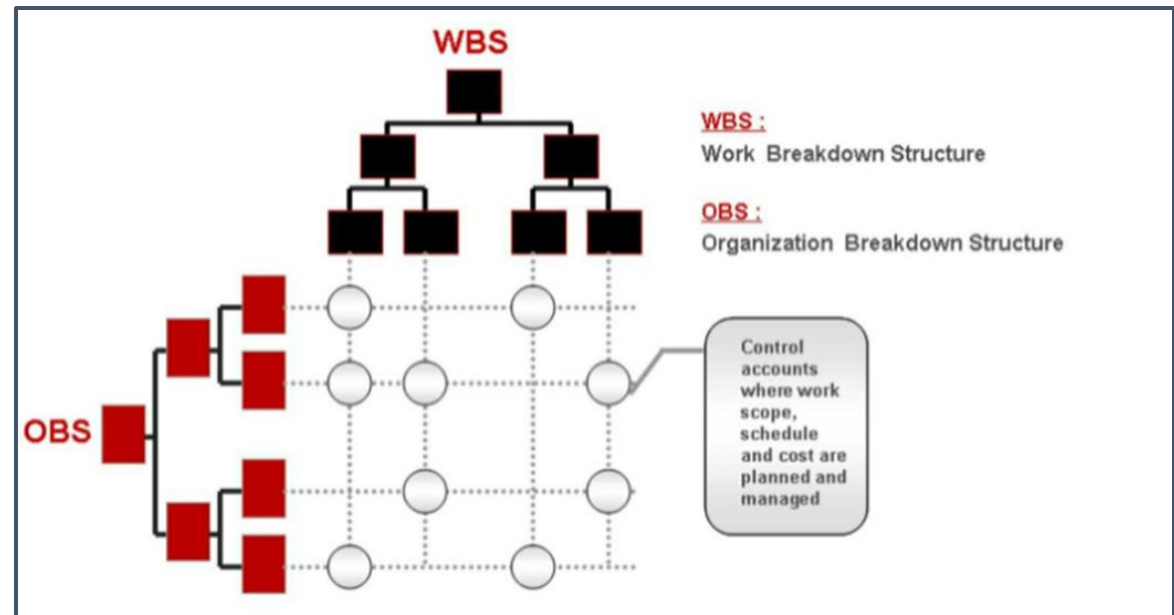
- Project Structure

Control Accounts and Work Packages

- The level where scope, schedule, and cost should be managed
- If established too low, work packages don't provide much added value
- If established too high, there is decrease visibility to work scope
- Often just a level of the WBS

Other Considerations

- Mixing large material purchases with labor
- Overall dollar value assigned to CAMs in the RAM



IMPLEMENTATIONS

- Project Structure

Work Packages

- Subdivision of a Control Account
- Place where work is planned, progress is measured, and earned value calculated
- Is clearly distinguished from other work with its own clearly defined scope
- Has start and finish dates
- Actuals can be recorded at this level (if not at the Control Account)

Other Considerations

- Durations and size
- Mixing LOE with discrete work
- Mixing large material purchases with labor
- Cobra has many Progress Techniques available (EVTs)

The screenshot displays the Cobra Explorer interface for a project named "Project - Demo Advanced". It is divided into two main sections: a "Spreadsheet" view at the top and a detailed "Milestones/Steps" view at the bottom.

Spreadsheet View:

	WBS	OBS	WP	Resource	Description	Progress
Total					Space Shuttle	
	1.1.1.1	1400			Frame Design	
	1.1.1.1	1400	01		Fuselage	50-50
	1.1.1.1	1400	02		Wing Design	Milestones
	1.1.1.1	1400	03		Heat Shield Design	User Defined
	1.2.3	1000			Emergency Rescue	

Milestones/Steps View:

This view provides a detailed look at the "Wing Design" work package. It shows the status as "Completed" and the description as "Wing Design".

Dates:

Date Type	Start	Finish
Baseline	06/01/2015	10/13/2015
Actual	06/01/2015	10/13/2015
Forecast	06/01/2015	10/13/2015
Early	06/01/2015	10/13/2015
Late	06/01/2015	10/13/2015
Pending	06/01/2015	10/13/2015

Progress Technique: Milestones

Summary Table:

Name	Description	Baseline Finish	Actual Finish	Forecast Finish	Status	Weight
PHASE1	Structure Design	06/15/2015	06/15/2015	06/15/2015	Completed	9
PHASE2	Material Design	07/15/2015	07/15/2015	07/15/2015	Completed	21
PHASE3	Wiring Design	10/13/2015	10/13/2015	10/13/2015	Completed	70

IMPLEMENTATIONS

- Scheduling

Developing an IMS

- Start with High level schedule / Major milestones or standard WBS
- Decompose further into manageable activities

Are Levels Defined in the IMS?

- Control Account
- Work Package
- Milestone or Task
- Schedule Visibility Tasks (SVT)

	*CA	*WP	*EVT	*CWBS	Name	% Work Complete	Duration	Predecessors
1					Sample System IMS	99%	2522 d	
2					Program Milestones	0%	2462 d	
94					Government/Customer Furnished (GFE/CFE)	0%	1538 d	
286					Inter-Divisional Dependencies	100%	882 d	
301				1.1.4.01	System	99%	2462 d	
302				1.1.4.01.01	Prime Mission Product	99%	2462 d	
303				1.1.4.01.01.01	Engineering Control System (ECS)	100%	2462 d	
304	44			1.1.4.01.01.01	ECS HW	100%	2462 d	
305	44	14382		1.1.4.01.01.01	Console Design	100%	378 d	
306	44	14382	MWPC	1.1.4.01.01.01	Prepare Preliminary Drawings of console structure	100%	34 d	15
307	44	14382	MWPC	1.1.4.01.01.01	Conduct Console Finite Element Analysis (FEA)	100%	82 d	15,1476
308	44	14382	MWPC	1.1.4.01.01.01	Prepare Final detail drawings of console structure	100%	69 d	1476,15
309	44	14382	MWPC	1.1.4.01.01.01	Produce 3D models of console structure	100%	5 d	1476,15
310	44	14382	MWPC	1.1.4.01.01.01	Command Module Console Framework Build	100%	189 d	1556,15
311	44	45		1.1.4.01.01.01	ECS HW Preliminary Design	100%	2116 d	
312	44	45	MWPC	1.1.4.01.01.01	Perform ECS HW Preliminary Design Engineering	100%	20 d	19,170
313	44	45	MWPC	1.1.4.01.01.01	Conduct ECS HW Preliminary Information Assurance Review of Design	100%	1 d	312
314	44	45	MWPC	1.1.4.01.01.01	Perform Trade Studies and Prepare ECS HW PDR Purchase Technical Specifications	100%	22 d	19
315	44	45	MWPC	1.1.4.01.01.01	Prepare ECS HW PDR Preliminary Drawings/Sketches	100%	100 d	4
316	44	50		1.1.4.01.01.01	ECS HW Detail Design	100%	623 d	
317	44	50	MWPC	1.1.4.01.01.01	Perform ECS HW Detail Design Engineering	100%	262.5 d	164FF,165FF
318	44	50	MWPC	1.1.4.01.01.01	Update ECS HW CDR Craft Systems Drawing	100%	97 d	20
319	44	50	MWPC	1.1.4.01.01.01	RESTART: Update ECS HW CDR Craft Systems Drawing	100%	26 d	13,318,15
320	44	53		1.1.4.01.01.01	ECS HW CDR Block Diagrams	100%	312 d	
321	44	53	MWPC	1.1.4.01.01.01	Prepare ECS HW Block Diagrams - DAUs (F.3)	100%	2 d	103,105
322	44	53	MWPC	1.1.4.01.01.01	Review, Comment, Adjudicate TM&LS Data - Battle Override ICD	100%	2 d	112
323	44	53	MWPC	1.1.4.01.01.01	Prepare ECS HW Block Diagrams - Battle Override Panel	100%	45 d	105,322FF



IMPLEMENTATIONS

- Scheduling

Developing an IMS

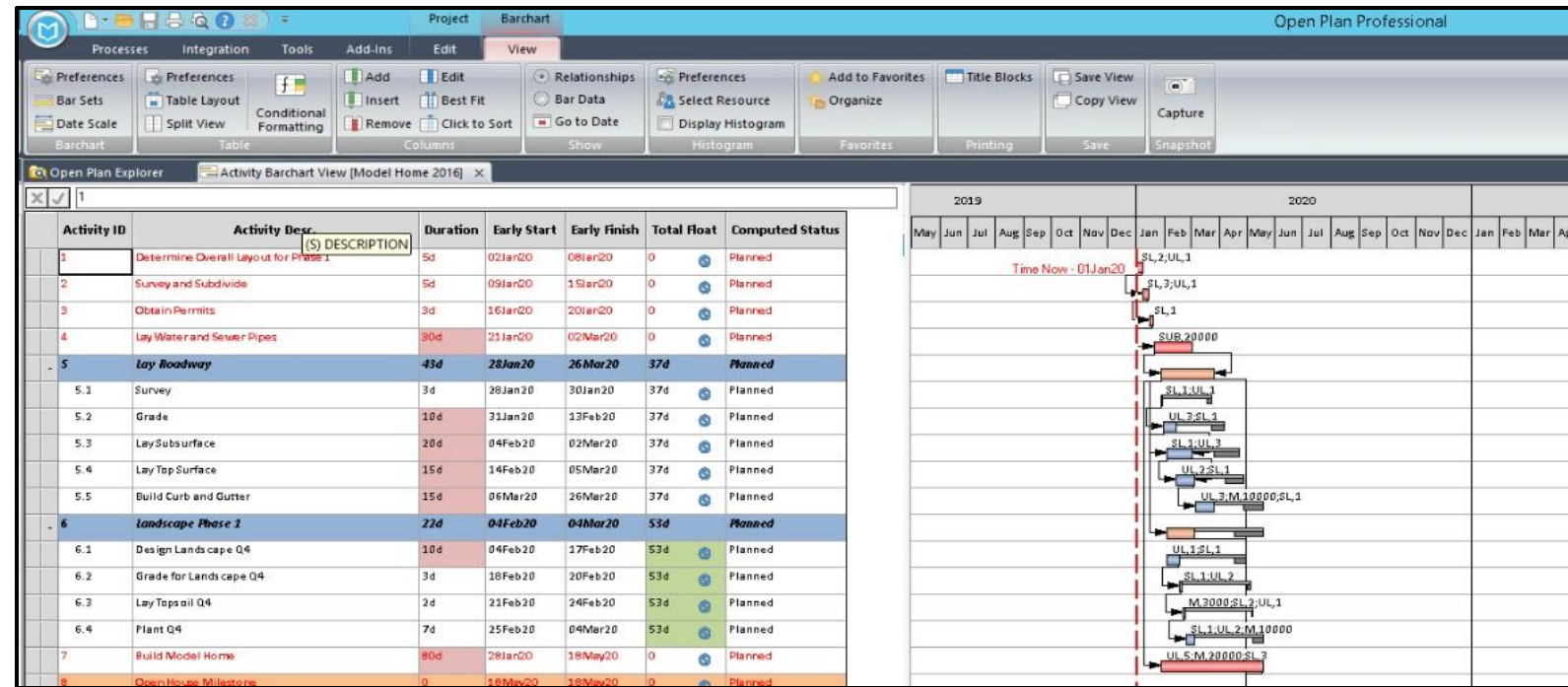
- Is it necessary for my project?
- Leveling resources
- Top-down vs bottoms up planning

Integration with EV Engine

- Fields needed (CA, WP, EVT, Milestone IDs, Milestone Weights)

Updating Status

- Actuals, remaining duration
- Let the network do the math!



IMPLEMENTATIONS

- Cost Classes

What's the Difference?

- Cost Classes – Tool to segregate cost records / resource assignments (Budget, Forecast, Actuals, Earned)
- Reporting Sets – Group related classes together for reporting

Uses for Classes

- Accruals
- Unbillable/Unallowable
- Tracking modifications, Unapproved Budget
- Internal vs External reporting
 - Different rates can be applied to the same inputs (i.e., hours) for T&M vs Internal Cost Buildups

Cost Class	Customer Reporting Cost Set	Internal Reporting Cost Set
Actuals	x	x
Accruals	x	x
Unallowables		x



IMPLEMENTATIONS

- Project Data

Where Is Your Budget Coming From?

- Resource loaded IMS
- Pricing File / BOE from proposal
- Starting from scratch with a target value but no supporting documentation?

Activity Details [SHIP]

General Relationships Resources Codes Advanced Risk User Fields Notes Steps

ID: 1.1.1.3 Status: Planned

Desc.: Develop Mission Systems Duration: 2m

TimePhase >>

Res. Curve	Res. Level	Alternate Res. ID
F	500.00	

SHIP -

- SHIP.LABOR.01 - Painters
- SHIP.LABOR.02 - Shipfitters 1
- SHIP.LABOR.03 - Shipfitters 2
- SHIP.LABOR.04 - Industrial Fitters
- SHIP.LABOR.05 - Welders 2
- SHIP.LABOR.06 - Pipe Fitters
- SHIP.LABOR.07 - Outside Machinist
- SHIP.LABOR.08 - Electricians
- SHIP.LABOR.09 - Sheet Metal
- SHIP.LABOR.10 - Carpenters
- SHIP.LABOR.11 - Insulators
- SHIP.LABOR.12 - Shipfitters 0
- SHIP.LABOR.13 - Riggers
- SHIP.LABOR.15 - Laborers

	WBS	OBS	WP	Resource	Description	Class	Total
Total					Space Shuttle		31,829.50
	1.1.1.2	1420	04		Booster Release Design		
	1.1.1.2	1420	04	DRAFT	Draftsmen	Budget	500.00
	1.1.1.2	1420	04	EENG	Electrical Engineers	Budget	2,052.83
	1.1.1.2	1420	04	MANAGE	Management	Budget	5,000.00

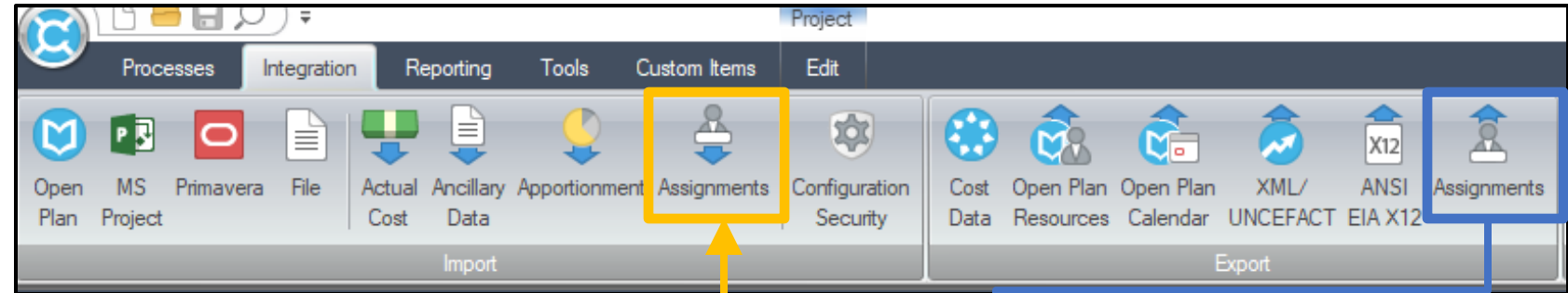
Task Mode	Task Name	Work	Start	Details	1/17	1/24	Feb '16 1/31
13	Experiment Room	7,552 hrs	1/19/2016	Work	96h	120h	120h
	DRAFT	500 hrs	1/19/2016	Work	32h	40h	40h
	EENG	2,052 hrs	1/19/2016	Work	32h	40h	40h
	MANAGE	5,000 hrs	1/19/2016	Work	32h	40h	40h
14	Sleeping Quarters	0 hrs	2/19/2016	Work			
15	Cargo Bay	0 hrs	12/21/2015	Work			
16	Experiment Design	0 hrs	12/21/2015	Work			
17	Crystal Growth	0 hrs	2/19/2016	Work			
18	Construction - Prefab. Build. Matrl	0 hrs	12/21/2015	Work			

IMPLEMENTATIONS

- Project Data

How Will You Update Forecasts and Make Budget Changes?

- Assignment Export/Import functionality (shown)
- Flat File
- Directly within Tool Interface
- via integrated tools or modules within the product suite (i.e. Deltek PM Compass)



	A	B	C	D	E	F	G	H	I	J
1	Project: Demo Advanced: Space Shuttle			Class: Forecast	06/30/2015 07/31/2015 08/31/2015 09/30/2015 10/31/2015					
2	Control Account	Work Package	Resource	Start	Finish					
3	1.1.1.1 / 1400 : Frame Design (Closed)			01-Jun-15	13-Oct-15					
4		01 : Fuselage (Closed)		01-Jun-15	12-Jul-15					
5			DRAFT	HOURS		163.72	156.28			
6			MANAGE	HOURS		81.86	78.14			
7			SENG	HOURS		179.07	170.93			
8			TECH	HOURS		204.65	195.35			
9		02 : Wing Design (Closed)		01-Jun-15	13-Oct-15					
10			DRAFT	HOURS		32.29	30.83	33.76	32.29	30.83
11			MANAGE	HOURS		32.29	30.83	33.76	32.29	30.83
12			SENG	HOURS		92.02	74.34	81.43	77.87	74.34
13			TECH	HOURS		46.49	195.59	141.38	112.32	54.22
14		03 : Heat Shield Design (Closed)		01-Jun-15	13-Jul-15					
15			DRAFT	HOURS		103.79	196.21			
16			MANAGE	HOURS		51.20	28.80			
17			SENG	HOURS		98.40	21.60			
18			TECH	HOURS		191.99	108.01			

IMPLEMENTATIONS

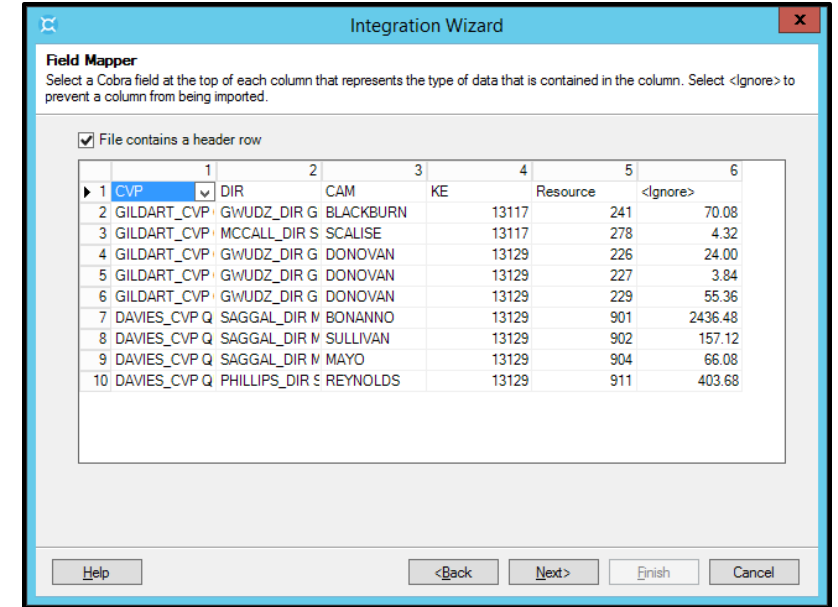
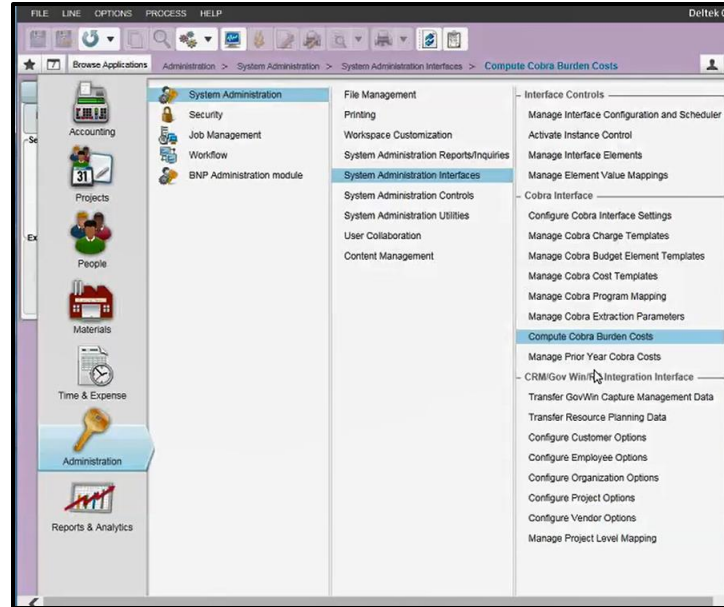
- Project Data

How will you import Actual Costs?

- Flat File (.csv) from Accounting system
- Costpoint to Cobra Connection

Do your Accounting Project IDs match CA or WPs?

	A	B	C	D	E	F
1	WBS	WP	RESOURCE	Cost Date	Hours	Direct
2	1.123.01	1.123.01.01	33532	1/28/2022	140	7774.9
3	1.123.01	1.123.01.01	93469	1/28/2022	152	2352.96
4	1.123.01	1.123.01.01	30757	1/28/2022	60	845.4
5	1.123.01	1.123.01.01	51848	1/28/2022	160	8067.2
6	1.123.01	1.123.01.01	TRVL	1/28/2022		300
7	1.123.01	1.123.01.02	41648	1/28/2022	25	704.5
8	1.123.01	1.123.01.02	69878	1/28/2022	40	1293.8
9	1.123.01	1.123.01.02	93366	1/28/2022	40	1286.2
10	1.123.02	1.123.02.01	96391	1/28/2022	40	2033.2
11	1.123.02	1.123.02.01	50236	1/28/2022	20	542.4
12	1.123.02	1.123.02.01	82768	1/28/2022	38	865.07



IMPLEMENTATIONS

- Status

How will you status your Project?

- Integration with IMS file
- Flat File
- Directly within EV Tool Interface
- Via other tools or modules

What do you need to status Cobra?

- % Complete
- Actual Start / Finish
- Forecast Start / Forecast Finish
- Milestone date updates

LOE activities

- Can be contained within status files, or
- Most EV Tools can automatically status during Calendar advancement

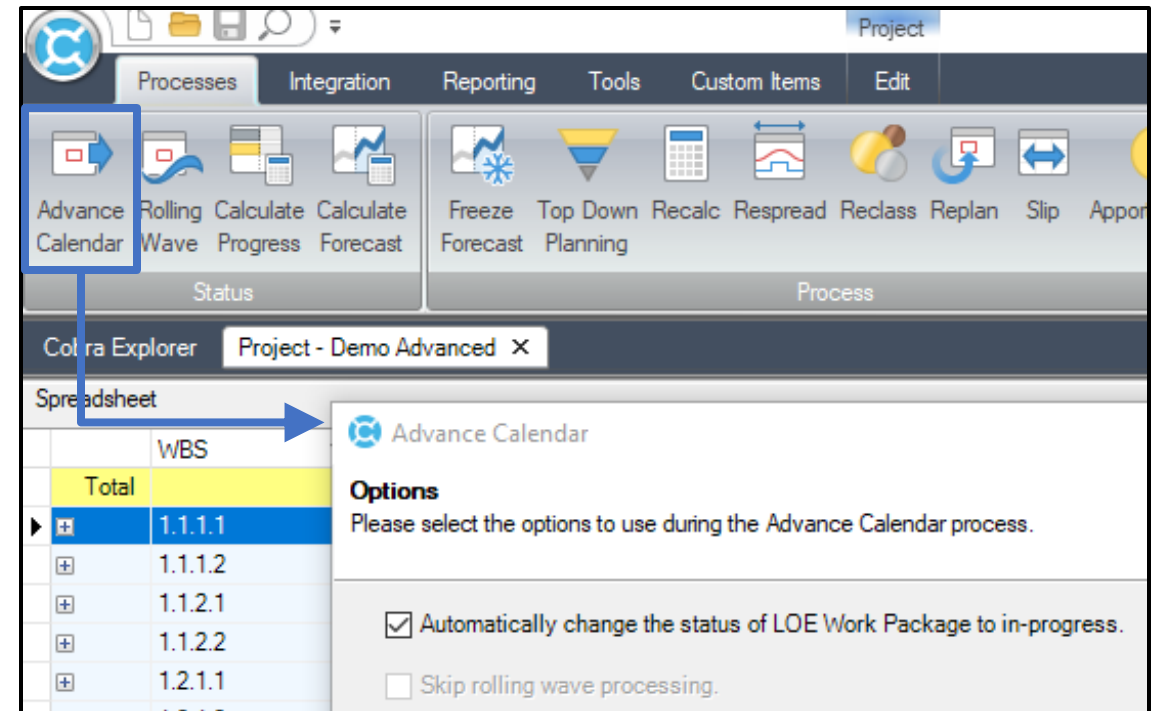


Image Source: EVM Tool



Implementing Existing Projects



IMPLEMENTATIONS

- Existing Projects



Extraction

- ▶ Can you export all project data from existing tool (Budget, Performance, Actuals, Forecast)?
- ▶ Does data exist in spreadsheets?



Formatting

- ▶ All data can be imported into Cobra via Integration wizard
- ▶ Headers on import files will vary depending on Cobra file type
 - Typically need CA/WP and dates at a minimum, resources for time-phased data



Data Cleansing

- ▶ Is your hierarchy well maintained?
 - Do you have both Parent / Child elements that make up Control Accounts?
 - Are all levels present?
 - Are all Work Packages unique to a single CA?

IMPLEMENTATIONS

- Existing Projects

Data Cleansing (cont.)

- Are your resource assignment dates contained within the WP baseline and forecast dates?
- Do you have leading or trailing 0's in your data?
- How were dates exported and formatted from legacy data?
- Do multiple assignments for the same resource exist within the same WP and class?
- Do you have EVT's mapped to appropriate Cobra codes, and do all WPs have them?

Cobra Progress Technique	Cobra Code
Level of Effort	A
Milestone	B
Percent Complete	C
50-50	E
0-100	F
User Defined %	H
Planning Package	K
Calculated Apportioned	M

WBS	Element
1.1	Control Account
1.2	Control Account
1.3	Control Account
1.3.1	Control Account

	A	B	C	D	E	F
1	Source WBS	Excel				
2	1.7	1.7				
3	1.8	1.8				
4	1.9	1.9				
5	1.10	1.1				

Image Source: EVM Tool

WBS	WP	Resource	Baseline Start Date	Baseline Finish Date	From date	To date	Hours	Direct
1.123.01	1.123.01.01	PM	1/3/2022	4/30/2022	1/3/2022	1/28/2022	152	8441.32
1.123.01	1.123.01.01	PM	1/3/2022	4/30/2022	1/29/2022	2/25/2022	152	8441.32
1.123.01	1.123.01.01	PM	1/3/2022	4/30/2022	2/26/2022	3/25/2022	160	8885.6
1.123.01	1.123.01.01	PM	1/3/2022	4/30/2022	3/26/2022	4/29/2022	200	11107
1.123.01	1.123.01.01	PM	1/3/2022	4/30/2022	4/30/2022	5/27/2022	160	8885.6
1.123.01	1.123.01.01	PM	1/3/2022	4/30/2022	5/28/2022	6/24/2022	144	7997.04
1.123.01	1.123.01.01	PM	1/3/2022	4/30/2022	6/25/2022	6/30/2022	32	1777.12



IMPLEMENTATIONS

- Existing Projects

Time-Phasing

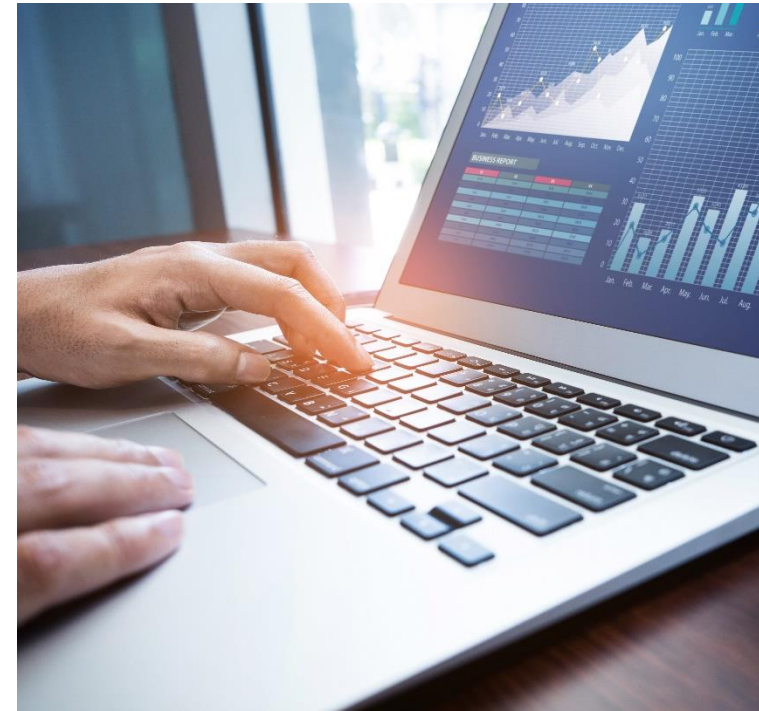
How do you want to load your data into Cobra?

Historical (Budget, Forecast, Actuals)

- Cumulative to date in prior period, latest month in current period
- Load monthly data for current year
- Load all periods

Earned Value

- Cobra does not readily import EV values
- Cobra calculates EV based on Budget resources, which is not always available in legacy tools
- Budget changes in the past can complicate reconciliation of prior EV values



Post-Implementation: Monthly Processing



MONTHLY PROCESSING

- Reporting

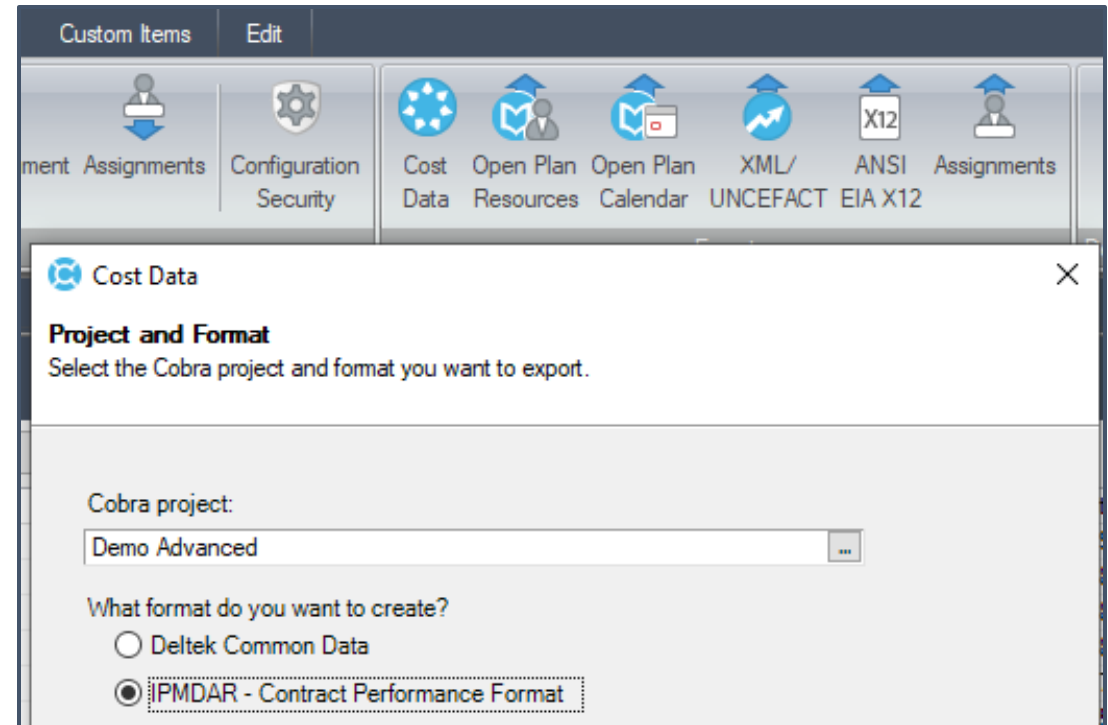
Types Of Reports

Out of the Box

- Legacy IPMR Formats 1- 5
- 533M and 533 Q
- Timephased
- Control Account Plan (CAP)
- Work Authorization Documents (WAD)
- Responsibility Assignment Matrix (RAM)

Exports

- IPMDAR
- Deltek Acumen, wInsight



MONTHLY PROCESSING

- Existing Projects

PARALLEL PROCESSING

Are You Ready to Turn-off Your Legacy System and Begin Operating Solely in Cobra?

- ▶ If not, a few months of operating in both systems is a good idea
- ▶ Perform internal and customer deliverable requirements in legacy system on your normal monthly close schedule, then
- ▶ Replicate in Cobra simultaneously or afterwards and see how well you did
- ▶ Helps with learning the tool and processes needed to operate

Things to Track:

- ▶ BCRs, ancillary data changes (rates, WBS, resources), Actuals, Progress, and Forecast updates, status
- ▶ Client reporting - Formatting changes are often acceptable but prior period reports must reconcile to your first delivery out of Cobra



Get to Know Robert Ameen

Director, BDO Industry Specialty Services - Program Optimization & Project Controls Solutions

Robert Ameen is a Director for the BDO Government Industry Specialty Service (ISS) and the Program Optimization and Project Controls team. He has over 25 years of experience in a variety of engineering and Government contracting environments, specializing in Project Control and Earned Value Management Systems.

Robert has extensive experience with EVMS data architecture, systems implementation, and fully compliant EVMS Reporting. His background in database and tool development, combined with his operational project control experience provides a unique advantage in data integrity and efficiency during implementations and monthly operations. In addition, he has extensive experience developing project baselines and preparing for Integrated Baseline Reviews (IBRs).

Robert holds the Earned Value Professional (EVP) certification from the American Association of Cost Engineers (AACEi), the Project Management Professional (PMP) certification from the Project Management Institute (PMI), and a Graduate Certificate in EVM from the PMI. He holds a B.S. in Mechanical Engineering from Virginia Tech, and an M.B.A. from Old Dominion University.



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Get to Know Kelsey Johnikin

Senior Manager, BDO Industry Specialty Services - Program Optimization & Project Controls Solutions

Kelsey Johnikin is a Manager for BDO's Industry Specialty Services Group in the Program Optimization and Project Controls team. She has over 10 years of experience as a Project Controls Analyst on major Department of Defense projects. In this capacity, she uses the Deltek PPM suite to track, manage, and report against program performance metrics using the Earned Value Management methodology. This involved interfacing with the different program roles and corporate executives to ensure compliant execution against contract requirements while still maximizing margins on the program.

Kelsey's experience includes configuring and processing the EVM Tools and working with program teams to develop a process design that allows for seamless monthly processing. This requires a thorough understanding of how the tools operate but also necessitates the synthesis and manipulation of data from external sources into their EVM tool. Through her years in the industry including experience as a project controls analyst, Kelsey brings an intimate knowledge of the needs of analyst.

Kelsey holds the holds a B.S. in Economics from Jacksonville State University, a Master of International development for Saint Mary's University Minnesota and an M.B.A. from Troy University.



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THANK YOU

