

MyModel

**Simulator
Data Load
Procedure**

3Q
Version 1

Purpose: Simulator Data Transformations

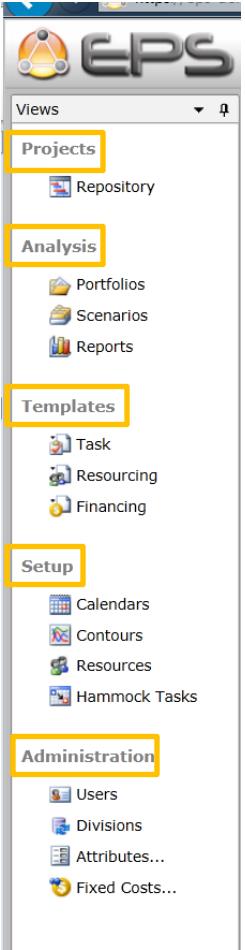
b.hogan@snhu.edu

Table of Contents

1.	Definitions.....	2
2.	Status Mode & Start Dates.....	3
3.	Data Assembly & Import Options: MS Excel Data Loader	5
4.	Data Assembly & Import Options – MS Excel Data Organizer.xls.....	6
5.	Import Data Process.....	9
6.	Import Inspection.....	13
7.	Model Analysis	14
	Build a Scenario.....	15
	Analyze Results	18
	Views	19
	Throughput: Gantt	19
	Throughput: Start / Finish Probability	20
	Throughput: Duration	20
	Resource: Unit Time Series	21
	Financials: Productivity Time Series	22
	Financials: Cost Time Series.....	23
	Financials: Revenue / Cost Totals.....	23
	Project Bubble	24
	Throughput: Time Series.....	24
8.	Data Mapping via Templates.....	25
9.	Attribute Configuration.....	26
10.	Future Project Creation.....	27
11.	Resource Algorithm Updating.....	28
12.	Import Validation.....	29
13.	Cost Contours	32
14.	Cost Contour Mapping (via applying templates) and its Configuration	35

1. Definitions

The following is a high-level overview of the Simulator (EPS) model categories. There is also an excellent online help menu, so hit F1 on any page to open documentation for its contents.

	<p>Project Repository</p> <p>The Project Repository allows you to collect projects for your (s). You can import projects from other sources, or add new projects to the repository manually.</p> <p>This documentation details the importing of data from MS Excel.</p> <p>Analysis</p> <p>The Analysis functions of EPS allow you to build s from the projects in the Project Repository. You can also create a variety of scenarios and analyze your and scenario simulation results by viewing the resulting reports.</p> <p>The following three Analysis options are available.</p> <ul style="list-style-type: none">• s – project collections• Scenarios – contains analysis options• Reports – simulated outcome reports <p>Templates</p> <p>Templates provide an easy way to apply risk factors, resources, and financial contours or characteristics to tasks, resources and financials based upon task names and/or attributes.</p> <p>These features will be used for mapping resources, testing different PTRS values, and updating cost (if applicable).</p> <p>Setup</p> <p>The Setup functions of EPS provide the ability for you to define specific calendars, contours, resources, and hammock tasks. ABC will be using resources and may define contours which are useful for spreading cost and revenue over a user defined time period.</p> <p>Administration</p> <p>The Administration functions of EPS provide the ability to set up users, divisions, custom fields or attributes, and define fixed cost categories.</p> <p>MyModel will have setup Users and model Attributes, but Fixed Cost is not being used at this time.</p> <ul style="list-style-type: none">• ABC will have to decide on user read/write privileges. <p>Divisions will be important so each user can create a separate workspace to perform their desired analysis.</p>
--	--

2. Status Mode & Start Dates

It is critical to understand how project **start dates**, a project's task **start & finish dates**, a project's **status mode**, and a project's "status date" affects how project tasks are based in the simulation engine. Different project task designs are going to require different settings. After reading the following, please setup a dummy project and experiment with each of the status mode settings and analyze outcomes in the output reports.

In general, most pharmaceutical models with task architecture at the milestone level, i.e. PreClinical, Phase I, Phase 2, and Registration would use the "calculate status" status mode.

ABC has a couple of special data load options – detailed in a later section.

All project dates are relative to the status date. Broadly, project task dates are either historical or future.



A Historical task is any task occurring before the status date. A historical task's duration is dependent on its start and finish dates. Calculated tasks occur after the status date and are calculated based on predecessors, duration, resources and other conditions.

There are several things to keep in mind when working with Historical tasks.

1. Financial data is not calculated for historical tasks.
2. EPS will not start recording resource work until the status date. This means you cannot view any work completed by resources assigned to historical tasks.
3. If you are illustrating annual resource requirements, it is recommended that the status date be set to 1/1/[yr].
4. If a data set has incomplete start and finish dates for both historical and future tasks, generally models are built with only a project's current stage, i.e. all other historical stages are deleted. We push clients for current phase start dates, or do whatever is necessary to prepopulate them, or a project will start based on the following rule types:

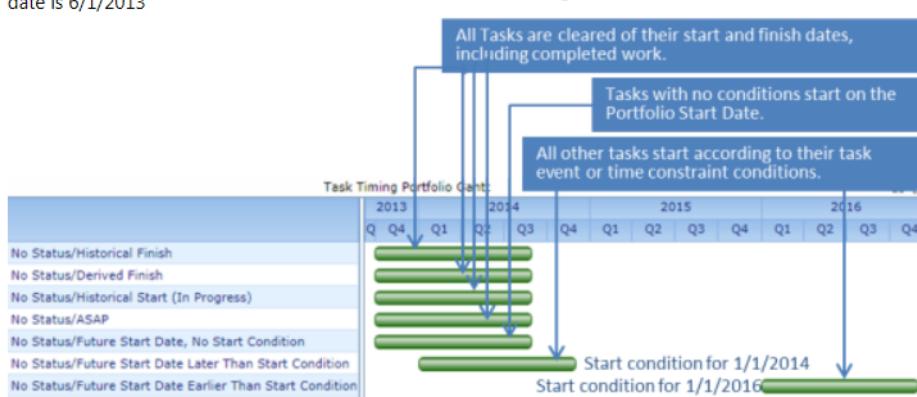
Status Date Type: No Status

Status Mode Options

No Status - The Gantt chart below illustrates how the project/task start dates are calculated with a No Status mode setting and the Portfolio Start date of 10/1/2013. Project start date is 1/1/2011. Portfolio Status date is 6/1/2013

Descriptions

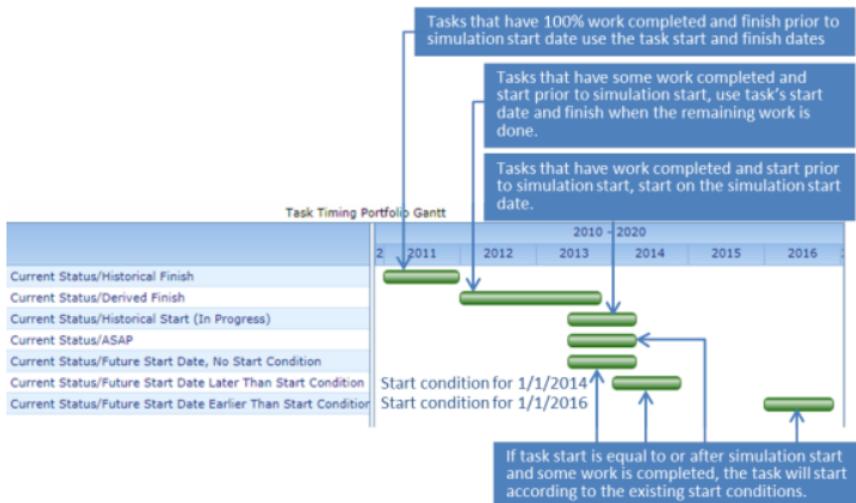
1. All tasks are cleared of their start and finish dates, as well as work completed.
2. Tasks with no conditions start on the "Start Date" (project start date).
3. All other tasks start according to their task event and time constraint conditions > start date.



Status Date Type: Current Status

1. Simulates 'as is', using start/finish dates and work completed from the inputs.
2. Tasks that have 100% work complete and start\finish dates prior to the simulation start date would use the task dates and appear historically finished.
3. Tasks that have partial work complete, and a start date prior to the simulation start date would use the task's start date and finish after the simulation start date once the remaining work was completed. In this case, the task's finish date would never be prior to the simulation start date.
4. Tasks that have 0% work complete and a start date prior to the simulation start date would start on the simulation start date. (The task's start date would be ignored.)
5. If a task has a start date after or equal to the simulation start date (or has no start date), any work completed will be ignored (reset to 0%). The task will start according to its existing start conditions. (No additional time constraint conditions will be created.)

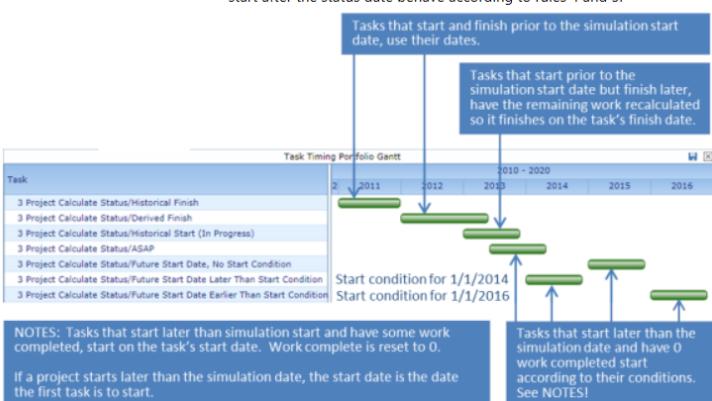
Current Status - The Gantt chart below illustrates how the project/task start dates are calculated with a Current Status mode setting. Project start date is 1/1/2011. Portfolio Status date is 6/1/2013



Status Date Type: Calculate Status

1. Uses start/finish dates that are earlier than simulation start date to calculate and override work completed.
2. Tasks that have start/finish dates prior to the simulation start date, will use those task dates and appear historically completed.
3. Tasks that have a start date prior to the simulation start date, but a finish date later the simulation start date, will start on the task's start date, and have its remaining work recalculated, so that it finishes on the task's finish date.
4. Tasks that have a start date later than the simulation start date, and no work complete, will start according to their conditions. **See #6.**
5. Tasks that have a start date later than the simulation start date, and % complete > 0, will get a can't start until date constraint (single task constraint start condition), so that they start on the task's start date regardless of prior start conditions. Work complete will get reset to 0%.
6. Projects that have a start date later than the status date will get a SNET (Start No Earlier Than) constraint for the project. This is only if the level 1 task starts after the status date. All other tasks that start after the status date behave according to rules 4 and 5.

Calculate Status - The Gantt chart below illustrates how the project/task start dates are calculated with a Calculate Status mode setting. Project start date is 1/1/2011. Portfolio Status date is 6/1/2013



3. Data Assembly & Import Options: MS Excel Data Loader

Organizer Excel Workbook	Excel files – ABC team uses to copy & paste project data from source data. Contains VBA automation that extracts, translates, and loads data into EPS's specific input format. Can have 1 to n copies of this workbook. Project Phase 2 could include automation of data copy & paste.
Loader Excel Workbook	Excel file EPS imports project data from.

We will be using MS Excel VBA to transform data from a ABC source spreadsheet to the EPS MS Excel Import template (below), aka as the “Loader” file. It is important to become familiar with both worksheets. If there are other data fields discovered that the team wants to use in the Loader file, it can be automated.

In general ABC will not have to work directly in this file, but it is the file selected for data importing.

ID	Impl	Task Name	Level	Tracking				Base	Project_Unique	Project_Name	Current_Status	Survival_Term	Current_Phase	Stage_1	Stage_2	Stage_3	
				Start Date	Finish Date	Duration	Days										
1	2242(S1)		1	06/23/2009				2242	Anti II-23 mab	Stage_9	Template_2	11_10_2011					
2	Phase I		2	06/23/2009	1/1/2014	69	70	2242	Anti II-23 mab	Stage_9	Template_2	11_10_2011					
3	Phase II B		2		11/10/2011			2242	Anti II-23 mab	Stage_9	Template_2	11_10_2011					
4	Phase III		2					2242	Anti II-23 mab	Stage_9	Template_2	11_10_2011					
5	Registration		2					2242	Anti II-23 mab	Stage_9	Template_2	11_10_2011					
6	2376(S1)		1	10/31/2006				2376	H4 Antagonist	Stage_9	Template_1	10_31_2012					
7	PreClinical		2	10/31/2006	3/14/2008	100	70	2376	H4 Antagonist	Stage_9	Template_1	10_31_2012					
8	Phase I		2	03/14/2008	2/19/2010	100	71	2376	H4 Antagonist	Stage_9	Template_1	10_31_2012					
9	Phase II A		2	02/19/2010	10/31/2012	100	67	2376	H4 Antagonist	Stage_9	Template_1	10_31_2012					
10	Phase II B		2	10/31/2012				2376	H4 Antagonist	Stage_9	Template_1	10_31_2012					
11	Phase III		2					2376	H4 Antagonist	Stage_9	Template_1	10_31_2012					
12	Registration		2					2376	H4 Antagonist	Stage_9	Template_1	10_31_2012					
13	2109(S1)		1	03/23/2007				2109	TRPV1 Antagonist	Stage_8	Template_1	11_5_2009					
14	PreClinical		2	03/23/2007	8/9/2008	100	70	2109	TRPV1 Antagonist	Stage_8	Template_1	11_5_2009					
15	Phase I		2	08/09/2008	11/5/2009	100	43	2109	TRPV1 Antagonist	Stage_8	Template_1	11_5_2009					
16	Phase II A		2	11/05/2009				2109	TRPV1 Antagonist	Stage_8	Template_1	11_5_2009					
17	Phase II B		2					2109	TRPV1 Antagonist	Stage_8	Template_1	11_5_2009					
18	Phase III		2					2109	TRPV1 Antagonist	Stage_8	Template_1	11_5_2009					
19	Registration		2					2109	TRPV1 Antagonist	Stage_8	Template_1	11_5_2009					
20	2307(S1)		1	08/05/2008				2307	Anti-IL3 MoAb	Stage_8	Template_2	6_20_2013					
21	PreClinical		2	08/05/2008	6/30/2010	100	70	2307	Anti-IL3 MoAb	Stage_8	Template_2	6_20_2013					
22	Phase I		2	06/30/2010	6/20/2013	100	52	2307	Anti-IL3 MoAb	Stage_8	Template_2	6_20_2013					
23	Phase II A		2	06/20/2013				2307	Anti-IL3 MoAb	Stage_8	Template_2	6_20_2013					
24	Phase II B		2					2307	Anti-IL3 MoAb	Stage_8	Template_2	6_20_2013					
25	Phase III		2					2307	Anti-IL3 MoAb	Stage_8	Template_2	6_20_2013					
26	Registration		2					2307	Anti-IL3 MoAb	Stage_8	Template_2	6_20_2013					
27	2185(S1)		1	10/21/2008				2185	HCV-NS5B-NNI	Stage_8	Template_1	10_8_2012					
28	PreClinical		2	10/21/2008	4/22/2010	100	70	2185	HCV-NS5B-NNI	Stage_8	Template_1	10_8_2012					
29	Phase I		2	04/22/2010	10/8/2012	100	43	2185	HCV-NS5B-NNI	Stage_8	Template_1	10_8_2012					
30	Phase II A		2	10/08/2012				2185	HCV-NS5B-NNI	Stage_8	Template_1	10_8_2012					
31	Phase II B		2					2185	HCV-NS5B-NNI	Stage_8	Template_1	10_8_2012					
32	Phase III		2					2185	HCV-NS5B-NNI	Stage_8	Template_1	10_8_2012					

Spreadsheet	Purpose
<i>The columns in the spreadsheet above represent the fields aligning with those EPS. The goal is to populate as many of them as possible so data doesn't have to be manually entered project by project in EPS.</i>	
Task Information	Key fields updated include: projects, a project's task matrix, start & finish dates, survival, cycle times, and attributes. Can also set start conditions, if tasks are other than finish to start relationships, or require conditions to another project task.
Resource Requirements	Each task has a unique ID. Resource requirements are populated for each unique task ID. Each task ID can have 1 to n resources assigned to it. ABC is not initially using this capability.
Resources	Simply the classification of model resource types, capacity, and their costs. ABC is not initially using this capability.
Contours	This spreadsheet is an excellent means in which to import financial data. In the latest EPS release a “countered” Fixed Cost category was created. This results in monthly, quarterly, or annual cost data to be quickly populated into the simulator and applied with Templates\Financing. See Contour section for more details. ABC is not initially using this capability.
Properties	Set the model's calendar options.

4. Data Assembly & Import Options – MS Excel Data Organizer.xls

The “Organizer” workbook contains VBA automation that translates project data into a format for importing into EPS. There are data manipulation options a user needs to master but nothing too complicated. Users copy and paste source data, update stage names, cycle times and survival parameters. Additional automation can be implemented to help with the initial copy and paste of source data but currently it is a manual process.

Spreadsheet	Purpose
Instructions	Detail instructions on how to use the Excel Workbook
Data	Contains copy and pasted client source project data, dates, and desired attributes. Users can define all field names as desired.
Stage ID and Controls	Define the stage names that will be built in the model. Also set between 1 to 4 data load options customized for ABC.
Scenario ID	Define the scenario names to be loaded.
Cycle Time	Define cycle time parameters.
PTRS – Scenario 1 & 2	Define stage survival parameters.
Error Log	Projects that are missing dates, or have date field exceptions, are ignored and recorded on this spreadsheet so they can be corrected by an analyst.

Worksheet: Data

Enter User Defined Stage Names >>>																		
THESE COLUMNS CAN NOT BE MOVED																		
Unique ID	Attribute	Stage	Survival	Attribute	Date	Date	Date	Date	Date	Date	Date	Date	Date	Date	Date	Attribute	Attribute	Attribute
Project_Unique_ID	Project_Name	Current_Stage	Survival_Template	Current_Phase_Start_Date	Stage_1	Stage_2	Stage_3	Stage_4	Stage_5	Stage_6	Stage_7	Stage_8	Stage_9	Stage_10	Stage_11	MTA	Site_Status	External_Status
3351	CCR6 Antagonist	Stage_2	Template_1	6/20/2012	1/23/2012	6/20/2012	9/26/2014									IMM	External	EC
2324	N-Type Ca An	Stage_3	Template_1			6/20/2011										NS	External	EC

- Row 8 defines the data element for each column. MyModel does not recommend changing the current format of the columns, but this is a flexible tool and it could be changed.
- Columns C to G define a project, its current stage, and template. Every project must have a current stage and project template assigned. This can be done with VLOOKUPS in a scrap worksheet.
- Columns H to R are the date columns. There are a number of date rules explained on the “Stage ID and Controls” worksheet. In general, please have the date data formatted as month / day / year.
- Columns S+ are the project attribute columns. Attributes can be added and subtracted as desired.
 - If attributes are added / subtracted, the “exact” name needs to be updated to EPS \ Administration \ Attributes so the values are imported correctly.
 - Attributes with < > ? | # \ / . invalid characters and must be cleaned before importing.
 - All projects are brought in with a “unique” numeric stage ID from 1 to 11. This is useful for mapping additional scenario data when working in EPS.
- Source project data is copied and pasted into these fields.
- Do not leave any “blank” rows between the data sets as the import stops when a blank row is reached.
 - This is useful if testing data and only want to import a few projects at a time.
- Templates 1, 2, 3 and 4 are defined on the Cycle Time and PTRS worksheets. Only enter values = template_1, template_2, template_3 or template_4. Template names are generic and users are responsible for mapping correctly. Ex: Small Molecule = template_1**

Worksheet: Stage ID and Controls

A	B	C	D	E	F	G	H	I	J	K	L
ID	STAGE ORDER	EPS Stage Name	Include in Simulation Build ?	Client Milestone Name	Notes						
1	Stage_1	AD-Hit ID	Yes		Promodel to report if we check for earliest date						
2	Stage_2	H2L	Yes								
3	Stage_3	LO	Yes								
4	Stage_4	LLO	Yes								
5	Stage_5	NME Milestone	Yes								
6	Stage_6	PreClinical	Yes								
7	Stage_7	Phase I	Yes								
8	Stage_8	Phase IIA	Yes								
9	Stage_9	Phase IIB	Yes								
10	Stage_10	Phase III	Yes								
11	Stage_11	Registration	Yes								

This is a very important control. If you want historical dates enter "yes."

Else leave blank and only projects from their current stage forward will be loaded.

If loading all stages. If a stage prior to the current stage does not have a start date it is ignored. The logic is this way because of how prior stages with not dates are handled.

In Pharma useful if blending a Discovery (early stages) and Development (late stages) model.

LOAD HISTORICAL Stages ? Yes Either enter "Yes" or leave

ONLY LOAD BUSINESS DATES No Either enter "Yes" or leave

In Pre-H2L w No Start Date; Median Days from H2L Start Date 183

In Pre-H2L w No Start Date; Enter # random Days 100

In Pre-H2L w No Start Date; Enter # random Days:

Uses RandBetween function to randomly pick # of days between 1 and value entered.

Start date is then calculated based on Today's Date - # of Random Days

Enter "Yes" if want to use dates as cycle time duration. If a task has both a start and finish date then the exact # of days will be loaded for both planned and over-ride cycle time durations.

Any subsequent stages missing dates will be then be applied the cycle time template.

If "No" or blank, only historical stages will have the exact # of days calculated.

HOWEVER, a project in its current stage will have the exact # of days calculated to its next stage if the next stage's date is <= today's date, i.e. whatever day the data is loaded.

- Col C: update the desired stage name.
- Col D: select if the stage will be built for projects in the model. Missing date rules and project stage deletions business rules can still apply.
- Col E: client information on any other internal naming convention

Data Load Options:

1. Load Historical Stages?
 - a. If completed stages, i.e. historical stages with dates, are desired for historical stage throughput reporting then select "yes."
 - b. No: only a project in its current stage, and subsequent stages, will be loaded.
2. Only Load Business Dates?
 - a. Enter "Yes" if want to use dates as a stages cycle time duration. If a task has both a start and finish date then the exact number of days will be loaded for both planned and over-ride cycle time durations.
 - b. Any subsequent stages missing dates are applied to the cycle time template.
 - c. If "No" or blank, only historical stages will have the exact number of days calculated.
 - d. HOWEVER, a project in its current stage will have the exact number of days calculated to its next stage if the next stage's date is <= today's date, i.e. whatever day the data is loaded.
3. In Pre-H2L w No Start Date; Enter Median Days from H2L Start Date
 - a. Some Pre-H2L projects do not have start dates but do have a H2L start date.
 - b. Perform a data analysis on internal data and enter the mean or median number of days based on other project data. The data transformation will input a date based median less H2L start date.
 - c. MyModel appreciates this is not random, but this was requested by ABC.
4. In Pre-H2L with no start date; Enter Number of Random Days
 - a. Some projects have NO start date, but are in the first stage.
 - b. Enter the range of days, from today's date, that a project could have started.
 - c. Range goes from 1 to [entered value]. The date value is chosen at random.
5. Other Date Rules (any projects with ones are noted in "Error Log" worksheet)
 - a. If a project stage has a finish date, but no start date, the stage is deleted.
 - b. Any stage missing both a start & finish date, but prior and after stages have dates, is deleted.
 - c. If a stage's start date is > stage's finished date the stage is deleted.

Worksheet: Scenario ID

A	B	C	E	F
1	Scenario ID	Scenario Long Name	Scenario Short Name	
2	Scenario 1	Baseline	S1	
3				
4				
5	HoganBP: Name of scenario as viewed in both EPS Portfolios & Output Reports.			
6				
7	An attribute called "Scenario ID" is populated with this name, and updated to each projects and its tasks. This is useful if multiple versions of the portfolio are being imported.			
8				
9	Simply change the names before importing.			
10				
11				
12				
13				

- Col B: Define the scenario name assigned as an attribute. This is useful if multiple sets of projects are brought in with different data changes.
 - The “scenario ID” attribute can be used to help parse data into different scenario buckets.
 - EPS \ Analysis \ s \ Add Projects
 - Window opens and can use attributes to quickly filter projects and build desired project collections for scenario analysis.
 - The “scenario short name” is tagged to a project’s name so the user can quickly distinguish multiple versions of the same project in the EPS \ Project Repository.

Worksheet: Cycle Time

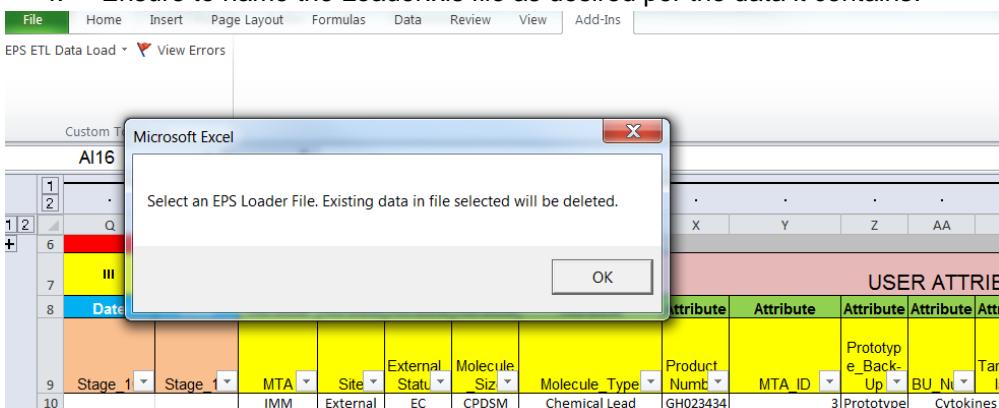
A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	
Cycle Time		TEMPLATE_1: Small				TEMPLATE_2: Large				TEMPLATE_3				TEMPLATE_4				
1	Stage	Min	Avg	St. Dev	Max	Min	Avg	St. Dev	Max	Min	Avg	St. Dev	Max	Min	Avg	St. Dev	Max	CLIENT STAGE NAME
4	AD/Hit ID	14	17	0.5	21	14	17	0.5	18									AD/Hit ID
5	H2L	9	12	0.5	16	9	12	0.5	29									H2L
6	LO	8	11	0.5	15	8	11	0.5	15									LO
7	LLO	9	12	0.5	16	9	12	0.5	13									LLO
8	NME Declaration																	NME Declaration
9	PreClinical	8.5	11.5	0.5	15.5	13.8	16.8	0.5	32									NME
10	Phase I	17.6	20.6	0.5	24.6	21.8	24.8	0.5	34									Phase I
11	Phase IIA	16.2	19.2	0.5	23.2	23	26	0.5	29									Phase IIA
12	Phase IIB	15.5	18.5	0.5	22.5	12.8	15.8	0.5	18									Phase IIB
13	Phase III	36.7	39.7	0.5	43.7	42.5	45.5	0.5	65									Phase III
14	Registration	8.9	11.9	0.5	15.9	8.5	11.5	0.5	17									Registration
15	Notes:																	
16	Data in months																	
17	This data is for populating “override” or variable distribution columns in EPS.																	
18	The average and standard deviation columns will build a Lognormal distribution																	
19	L(mean, standard deviation)																	
20	If stan. Deviation is not known a value of 1 or 2 is sufficient for mock data																	
21																		
22																		
23	Template names are “generic.” Ensure to update each project with its correct template based on desired attribute criteria																	

- Enter cycle time parameters for four templates.
- Average values are updated to “planned” cycle time values.
- Override or variable cycle time, are built with Lognormal distributions, L(mean, standard deviation).
 - Min and max values are used to bound sampled values in the Lognormal.
- Template names are “generic.” There are only four possible templates and users are responsible for applying the correct template to a project.
- Generally only one digit beyond a decimal is needed for modeling purposes.
- All data is in months (unless specific date rules applied then cycle time unit is in Days)

5. Import Data Process

The data loading process is straightforward. The following details and illustrates the step sequence. It is recommended to have spreadsheet open while walking through the steps..

- a) Copy & paste source project data into the “Data” worksheet in the “Data Organizer”
 - b) Update any field names, on row 9, if changed or new.
 - c) Ensure each project has a unique ID.
 - d) Use VLOOKUPS, on a random worksheet, to populate for each project:
 1. Current Stage
 2. Survival Template
 3. Current Phase Date Value
 - e) Perform an Excel search & replace to remove invalid characters: # ? | \ < > @ &
 - f) Ensure all dates are formatted as dates.
 - g) Set if a project type is Discovery or Development in column AH
 - h) Future Projects:
 1. Update number of starts in column AI.
 2. Update time between starts in column AJ.
 - i) Update Scenario ID values.
 - j) Update Cycle Time values.
 - k) Update PTRS values.
 - l) Once satisfied with data integrity, select the Add-Ins Button \ EPS ETL Data Load
 1. Search for the “Loader” file & hit “OK”.
 2. The tool will inform you if there are any issues.
 3. **Inspect the “Error Log” before importing data into EPS.**
 4. Ensure to name the Loader.xls file as desired per the data it contains.



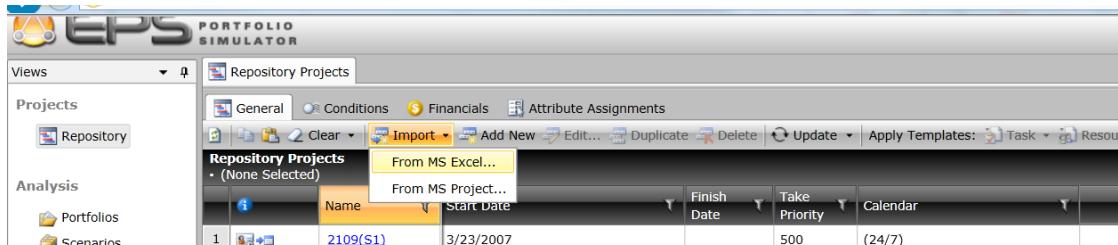
Once the file loading is complete you can either view or close the data in the Loader file.

C14		Registration																										
1	2	A	B	C	D	H	I	R	AH	AI	AJ	AK	AL	AM	AN	AO	AP	AQ	AR	AS	AT	AU						
1	ID	Impl.	Task Name	Level	Tracking			Survival Con		Project Metrics																		
2					Start Date		Finish Date		Base																			
3	1	2242(S1)		1	06/23/2009			2242	Anti IL-23 mab	Stage_9	Template_2	11_10_2011											8_1_2006	6_23_2009				
4	2	Phase I		2	06/23/2009	1/1/2014	69	2242	Anti IL-23 mab	Stage_9	Template_2	11_10_2011											8_1_2006	6_23_2009				
5	3	Phase II B		2	11/10/2011			70	2242	Anti IL-23 mab	Stage_9	Template_2	11_10_2011										8_1_2006	6_23_2009				
6	4	Phase III		2				71	2242	Anti IL-23 mab	Stage_9	Template_2	11_10_2011										8_1_2006	6_23_2009				
7	5	Registration		2				82	2242	Anti IL-23 mab	Stage_9	Template_2	11_10_2011										8_1_2006	6_23_2009				
8	6	2376(S1)		1	10/31/2006			2376	H4 Antagonist	Stage_9	Template_1	10_31_2012											10_31_2006	3_14_2008	2_19_2			
9	7	PreClinical		2	10/31/2006	3/14/2008	100	2376	H4 Antagonist	Stage_9	Template_1	10_31_2012											10_31_2006	3_14_2008	2_19_2			

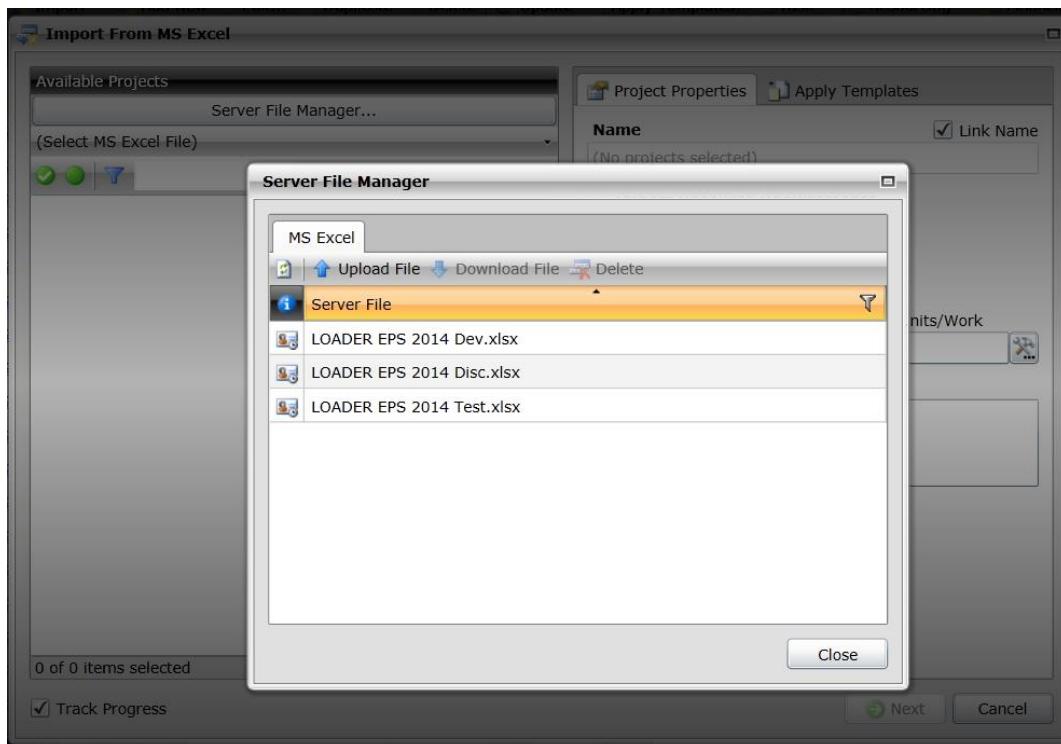
It is recommended to perform a second search & replace in the Loader file for any invalid characters. Generally replacing an invalid character with an underscore “_” is sufficient.

Import Data Process – Cont.

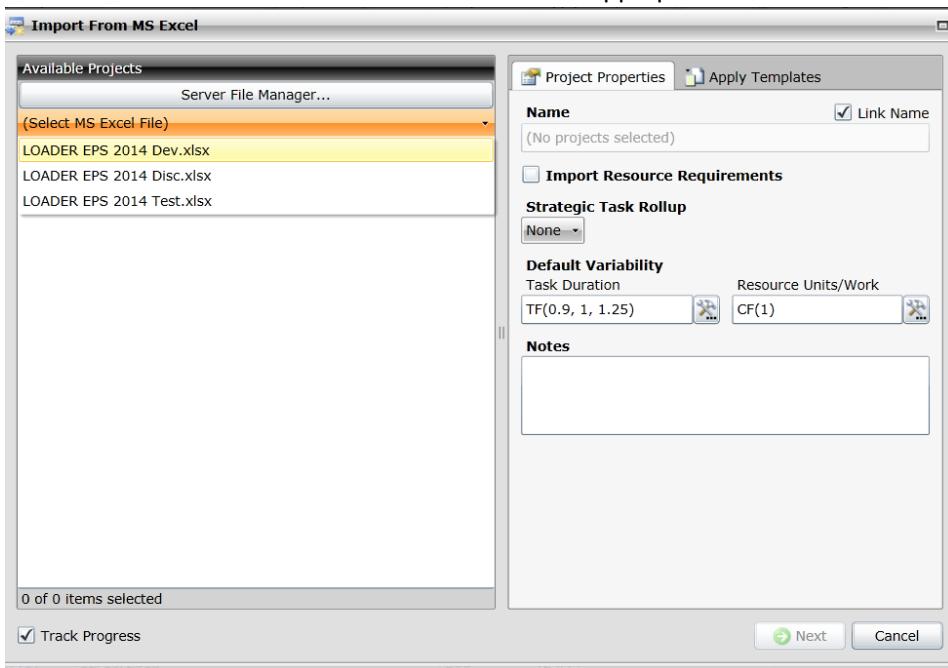
- m) Open EPS.
- n) Select Projects \ Repository \ MS Excel Import.



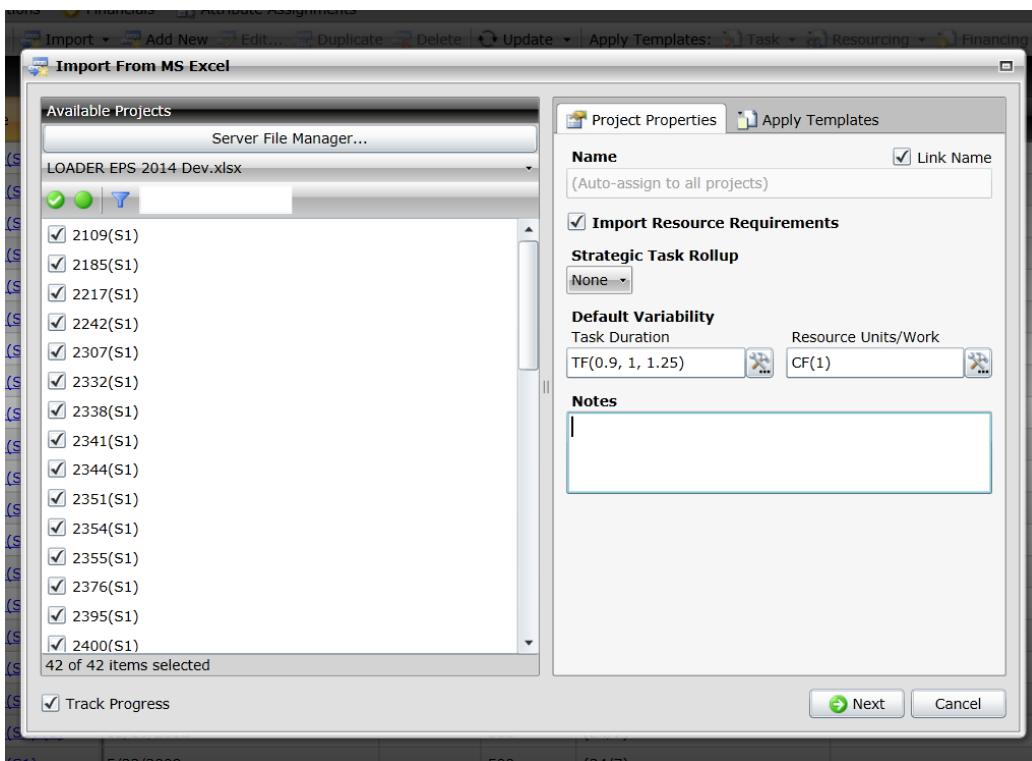
- o) Select the “Server File Manager” once the Import from MS Excel dialogue box is open.
 1. Select the “upload file” menu and search for the Loader.xls file.
 2. If older files appear in this list they can be deleted if not needed.
 3. Select “Close” once the file has been loaded.



- p) Select “Select MS Excel File” and then select the appropriate loader file.



- q) Select the “checkbox” to quickly select all projects.
 r) Check the “import resource requirements” if configured.
 s) The “default variability” would apply task variability in the event any task didn’t have a value.
 t) Select Next.



- u) For the most part all of the attributes will be automatically mapped to the correct attribute name in EPS.
- v) Review the list and ensure none of the attributes are blank.
- w) Project Attributes are at the parent level while Task Attributes are at the stage level.
 - 1. Task attributes are necessary for additional scenario creation data mapping & reporting
- x) After selecting “Ok” the tool will provide any data errors. Generally it would be “invalid characters” not previously scrubbed.
 - 1. MyModel recommends working line by line, as provided in a dialogue box, to find and correct the invalid characters.
 - 2. Bad characters should also be fixed in the source data to limit future rework

Import From MS Excel

Map Attributes

Source Attribute	EPS Project Attribute	EPS Task Attribute
BU_Num		BU_Num
Current_Phase_Start_Date	Current_Phase_Start_Date	
Current_Stage	Current_Stage	
CURRRENT_STATUS		CURRRENT_STATUS
DAS_vs_CS		
Disc_or_Dev	Disc_or_Dev	
DISC_Project_Status		DISC_Project_Status
Indications		Indications
Last_Active_Phase		
Molecule_Size	Molecule_Size	
Molecule_Type	Molecule_Type	
MTA	MTA	
MTA_ID		MTA_ID
Product_Number		Product_Number
Project_Name	Project_Name	
Project_Underline_ID	Project_Underline_ID	

Track Progress

Buttons: Back, OK, Cancel

6. Import Inspection

The following is a view of all loaded projects. Select two or three different projects and ensure that their data values and attributes are all correct. MyModel has performed extensive validation on its data import technology, but it is highly recommended one inspect 2 to 3 projects, at random, to ensure data integrity.

This screenshot shows the EPS Portfolio Simulator interface. The left sidebar contains navigation links for 'Views', 'Projects' (with 'Repository' selected), 'Analysis' (with 'Portfolios', 'Scenarios', and 'Reports'), and 'Templates' (with 'Task' and 'Resourcing'). The main area is titled 'Repository Projects' and displays a table with six rows of project data. The columns are: ID, Name, Start Date, Finish Date, Take Priority, and Calendar. The data is as follows:

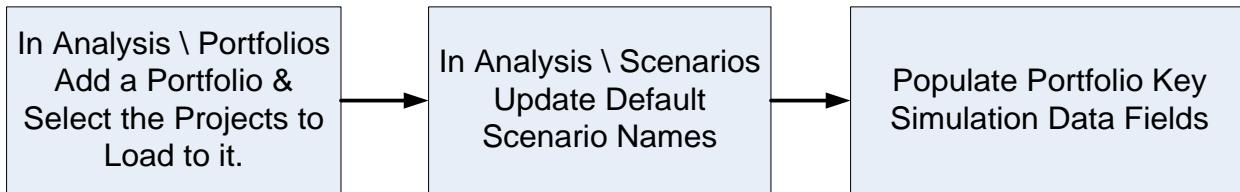
ID	Name	Start Date	Finish Date	Take Priority	Calendar
1	2109(S1)	3/23/2007		500	(24/7)
2	2185(S1)	10/21/2008		500	(24/7)
3	2217(S1)	10/22/2008		500	(24/7)
4	2242(S1)	6/23/2009		500	(24/7)
5	2307(S1)	8/5/2008		500	(24/7)
6	2324(S1)	6/20/2011		500	(24/7)

The following is a detailed project view (click on a project to open this view).

This screenshot shows the EPS Portfolio Simulator interface, similar to the previous one but with a different view. The left sidebar shows 'Views', 'Projects' (with 'Repository' selected), 'Analysis' (with 'Portfolios', 'Scenarios', and 'Reports'), and 'Templates' (with 'Task' and 'Resourcing'). The main area is titled 'Repository Project Tasks' for '2109(S1)' and displays a table with six rows of task data. The columns are: ID, Name, Start Date, Finish Date, Survival %, Plan Duration, Override Duration, and Duration Time Unit. The data is as follows:

ID	Name	Start Date	Finish Date	Survival %	Plan Duration	Override Duration	Duration Time Unit
1	PreClinical	3/23/2007	8/9/2008	100	505	505	Month
2	Phase I	8/9/2008	11/5/2009	100	453	453	Month
3	Phase IIA	11/5/2009		43	19.2	L(19.2, 0.5) [16.2, 23.2]	Month
4	Phase IIB			67	18.5	L(18.5, 0.5) [15.5, 22.5]	Month
5	Phase III			68	39.7	L(39.7, 0.5) [36.7, 43.7]	Month
6	Registration			83	11.9	L(11.9, 0.5) [8.9, 15.9]	Month

7. Model Analysis

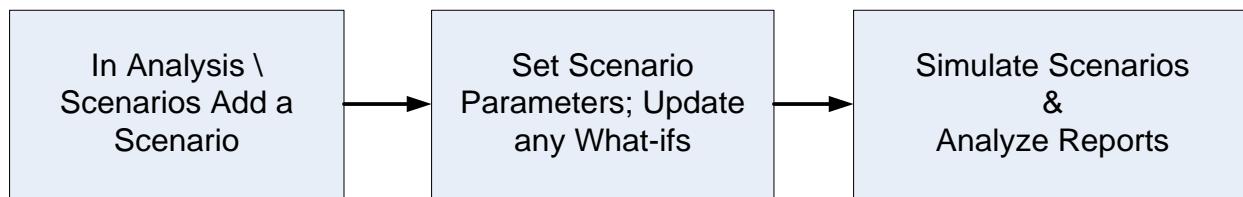


In the Analysis \ s tab, select “Add New” to create a . A can have any collection of projects. Below we see s for “each” project type and data combined. When the “Add New” button is selected, a dialogue box will help expedite project selection via attribute filtering, etc.

	Name	Project Count	Status Date	Run Length	Reporting Interval	Time Series Length	APR
1	Developent	42	1/1/2014	20 yr	Monthly	5 yr	5.5
2	Disc an Dev	194	1/1/2014	30 yr	Monthly	5 yr	5.5
3	Discovery	175	6/23/2014	20 yr	Monthly	5 yr	5.5

FIELD KEY	
A	Status Date – This date is automatically populated from the imported plan based on the earliest project start date. All dates are relative to the Status Date; thus, dates before it are historical and dates after it are future. Generally if you want to see financial and resource data starting in 2014, you would enter 1/1/2014. Therefore, enter the start of the year, or a mid-year, from which an analysis would begin.
B	Run Length – Enter the number of years the simulation will run; generally, 5 to 10 years.
C	Reporting Interval – Data can be viewed Monthly, Quarterly, and Yearly. Each team becomes familiar with what presentation view is most appropriate. Some teams analyze data Monthly, but report on it Yearly.
D	Time Series Length – This is critical for viewing resource and financial data. If you were expecting to see 20 years of data, but only had 5 years of time series data, then no financials or resources would be visualized for years 6 to 20.
E	APR – the rate at which financials change per future simulated year.

Build a Scenario



In the Analysis \ Scenarios tab default scenarios and names for each are automatically created. MyModel strongly recommends updating default names to help one clearly understand what the scenario contains. Shown below are a couple of examples.

- The “Baseline” scenario is the baseline with no changes, i.e. running planned data.
- The “Change Dates” scenario illustrates all project start dates have been pushed out to 1/1/2020.
- The “Exclude Project” scenario will exclude a project in a scenario run.

	Name	Plan	Plan	1	<input checked="" type="checkbox"/>	All Unconstrained	Work-Based	5.5
1	Baseline	Plan	Plan	1	<input checked="" type="checkbox"/>	All Unconstrained	Work-Based	5.5
2	Changed Dates	Plan	Plan	1	<input checked="" type="checkbox"/>	Per Resource	Work-Based	5.5
3	Exclude Mars	Plan	Plan	1	<input checked="" type="checkbox"/>	All Unconstrained	Work-Based	5.5

Changed Date Scenario: Viewing: Scenarios \ What-ifs \ General view:

- Illustrates projects start being forced to start 1/1/2020 – all subsequent stage dates recalculated

	Name	Start Date	Take Priority
1	2109(S1)	1/1/2020	500
2	2354(S1) (1)	1/1/2020	500
3	2400(S1) (1)	1/1/2020	500
4	2965(S1) (1)	1/1/2020	500
5	2964(S1) (1)	1/1/2020	500
6	3705(S1) (1)	12/3/2013	500

Exclude Project Scenario: Viewing: Scenarios \ What-ifs \ General view:

- Illustrates projects being excluded from a scenario analysis
- Used to help address flow & resource loading issues

The screenshot shows a software interface for managing scenarios and what-ifs. On the left, there's a navigation tree with categories like Projects, Analysis, Templates, and Reports. Under Analysis, the Scenarios and What-Ifs options are expanded. The main area is titled "Scenario what-ifs" and shows a hierarchical structure: Portfolio > Project > Develop > 2964(S1) (1). Below this, under "Scenarios", is a table titled "Dev_Base". The first column of the table has a header "Exclude" with a red box drawn around it. The table lists seven rows of project details, each with an "Exclude" checkbox. Row 5 is highlighted with a yellow background.

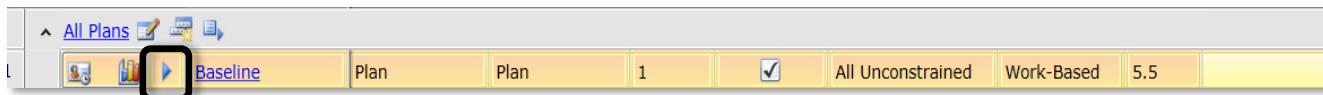
	Exclude	Name	Start Date	Take Priority
1	<input checked="" type="checkbox"/>	2109(S1)	1/1/2020	500
2	<input type="checkbox"/>	2354(S1) (1)	1/1/2020	500
3	<input checked="" type="checkbox"/>	2400(S1) (1)	1/1/2020	500
4	<input checked="" type="checkbox"/>	2965(S1) (1)	1/1/2020	500
5	<input type="checkbox"/>	2964(S1) (1)	1/1/2020	500
6	<input type="checkbox"/>	3705(S1) (1)	12/3/2013	500
7	<input type="checkbox"/>	3241(S1) (1)	11/22/2013	500

Build a Scenario – Cont.

In the Analysis \ Scenarios tab default scenarios and names for each are automatically created. Names are changed by a user to suit the intended analysis work.

FIELD KEY	
A	Task Durations – Plan durations are non-variable and follow a project plan's dates. "Over-rides" are variable distributions.
B	Resource Units / Work – Plan resources that are non-variable will require 'x' number of hours of work or Fixed Units. "Over-rides" are variable distributions.
C	Reps – When running in "override" it is important to run a minimum of 30 replications in order to generate enough variability across all the distributions sampled in a model run. Generally, 100 replications are run when performing results analyses on a model.
D	100% Survival – When this field is checked, all tasks execute and do not fail. Uncheck the field when projects are loaded with survival scores and you want to analyze outcomes including project failures across many simulated futures, i.e. replications.
E	Resource Allocation Mode – "All Unconstrained" results in a simulation providing as many resources as needed when a workload is generated. "Constrained" resources can result in project work being delayed until another project, with captured resources, completes its work requirement. Generally models are run unconstrained.
F	Task Behavior – This field is considered when models are running with constrained resources. It tells the output reports to visualize task start dates either when constraints are satisfied (i.e. "Event Based" results), or with "Work-Based" results that illustrate when resources were actually performing work on a task's start and finish dates.
G	APR – Annual Percentage Rate values adjust a project's revenue growth as simulation years increment beyond the first year that a project's revenue has started accruing.

Select the **blue arrow** button to simulate scenarios!



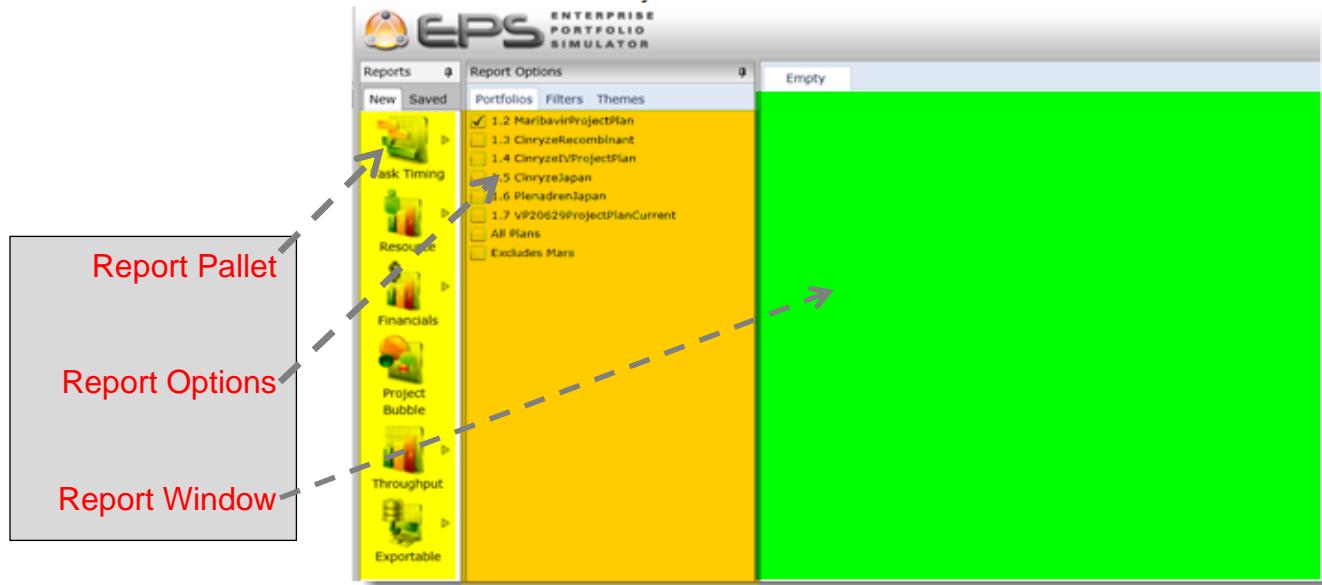
Analyze Results

Reports are viewed in a separate web page. Select Analysis \ Reports to open the report viewer.

On the left hand side of the reporting page are the report pallets. Following the graphic a table details how each report collection will help a client analyze results. In the “Saved” view section are a number of reports MyModel already generated for the team. By going into this tab they can be clicked on.

The next window called “Reporting Options” has three sections:

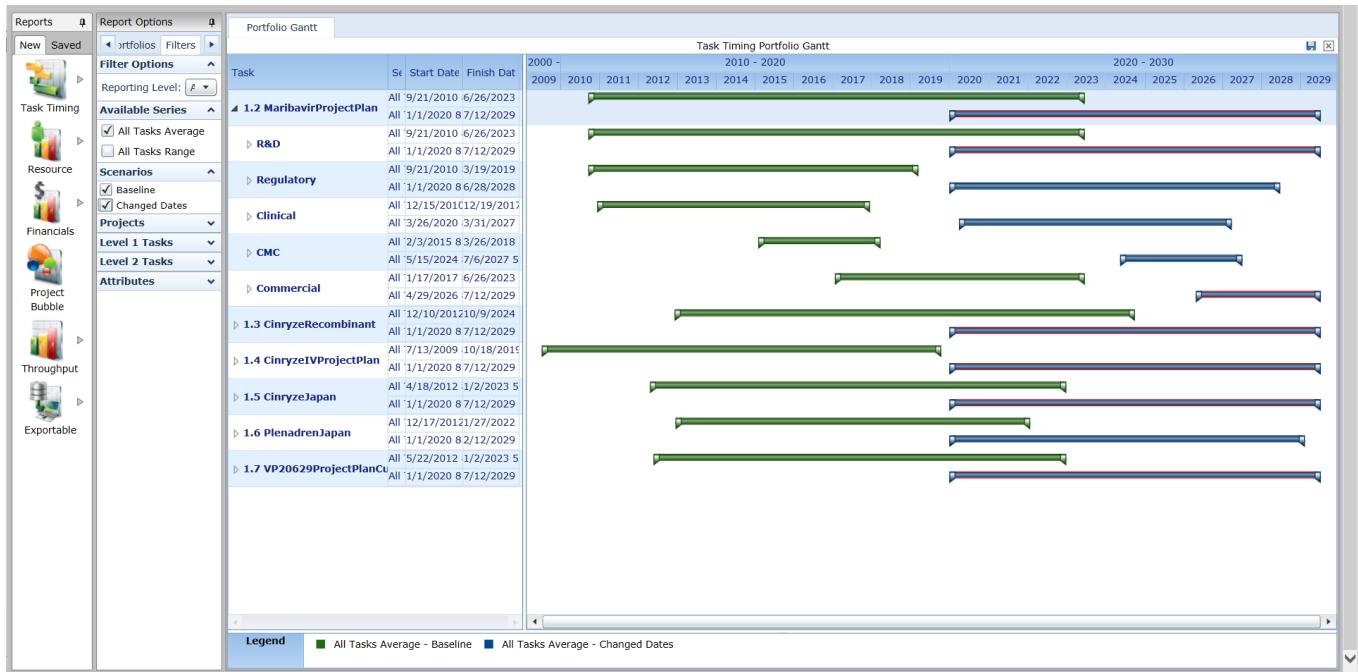
- **s** – users select which s will be available in the “Filters” view
- **Filters** – this window has the report query view where users select / deselect s
- **Themes** – MyModel recommends it is always set to “Summer” as it results in solid color bars & lines



REPORT CATEGORIES	
A	Task Timing – All three reports are used for assessing project Gantt perspectives, tasks' start and finish probability (if survival is used), and duration. The Duration report allows the user to view the total days' or months' activities required to complete the work either at the project or task level.
B	Resource – The “Unit Time Series” report illustrates resources required over time.
C	Financials – All three sub-report types are applicable to the team. The section to follow provides a snapshot of each view and how it can be used.
D	Project Bubble – This report does a nice job comparing cost, revenue, and risk. If projects have PTRS applied, this report is excellent to work with.
E	Throughput – The Time Series and Histogram reports will be found useful as they detail total counts of milestone stages completed.
F	Exportable – This data-driven report supports pivot table analysis. We are not currently using this report.

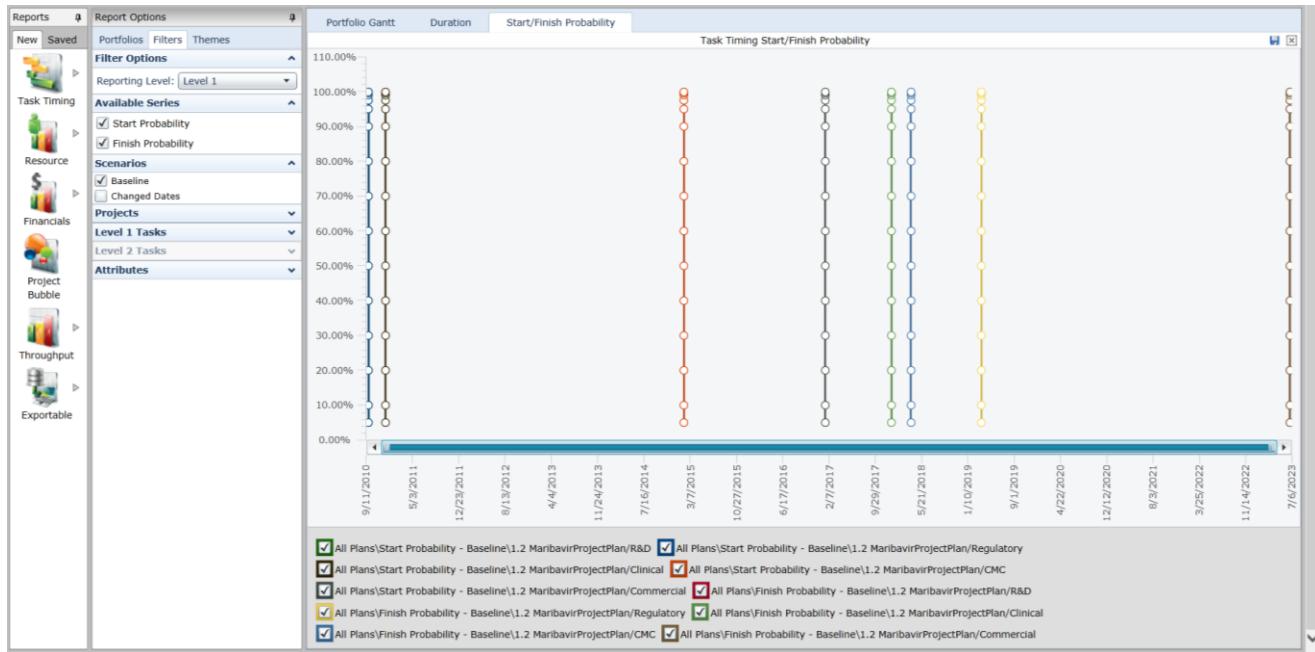
Views

Throughput: Gantt



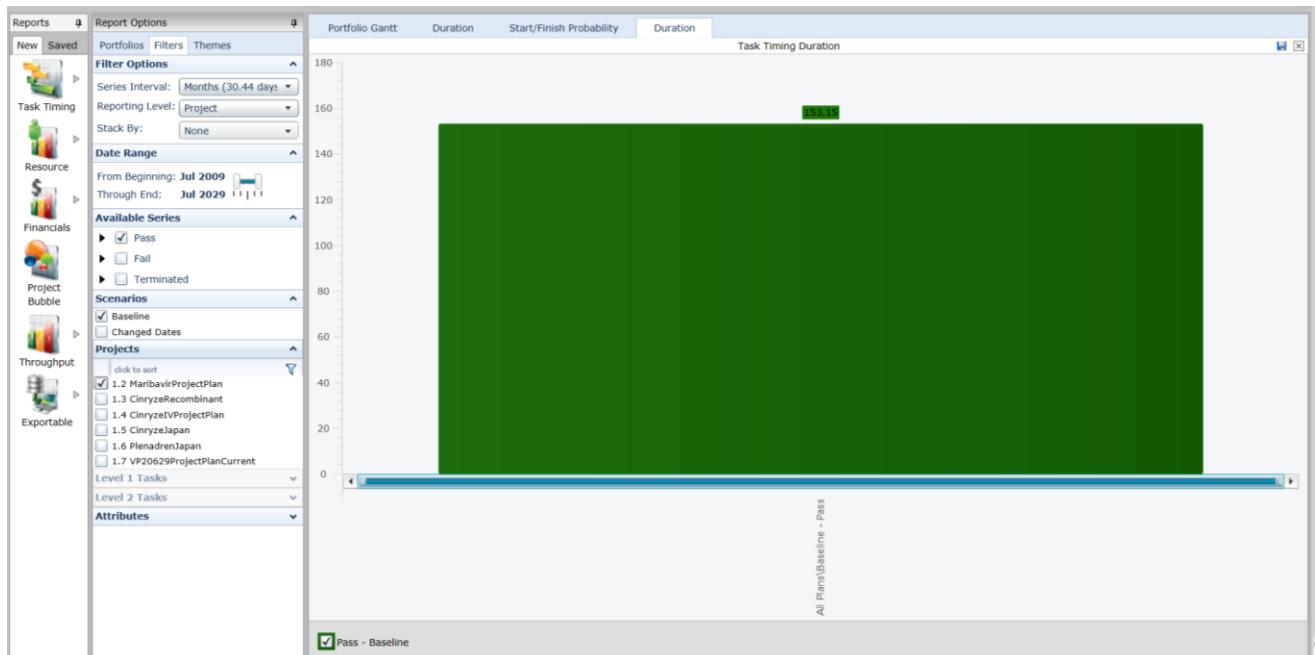
- The Gantt report does an excellent job detailing the project plans start and finish times.
- Above we see the comparison of change dates Scenario to the baseline line plan. For each plan see it shifted to the right when it was asked to start 1/1/2020 in the What-If Scenario window.
- The MyModel team used this report extensively to check dates matched to those in the original project plans.

Throughput: Start / Finish Probability



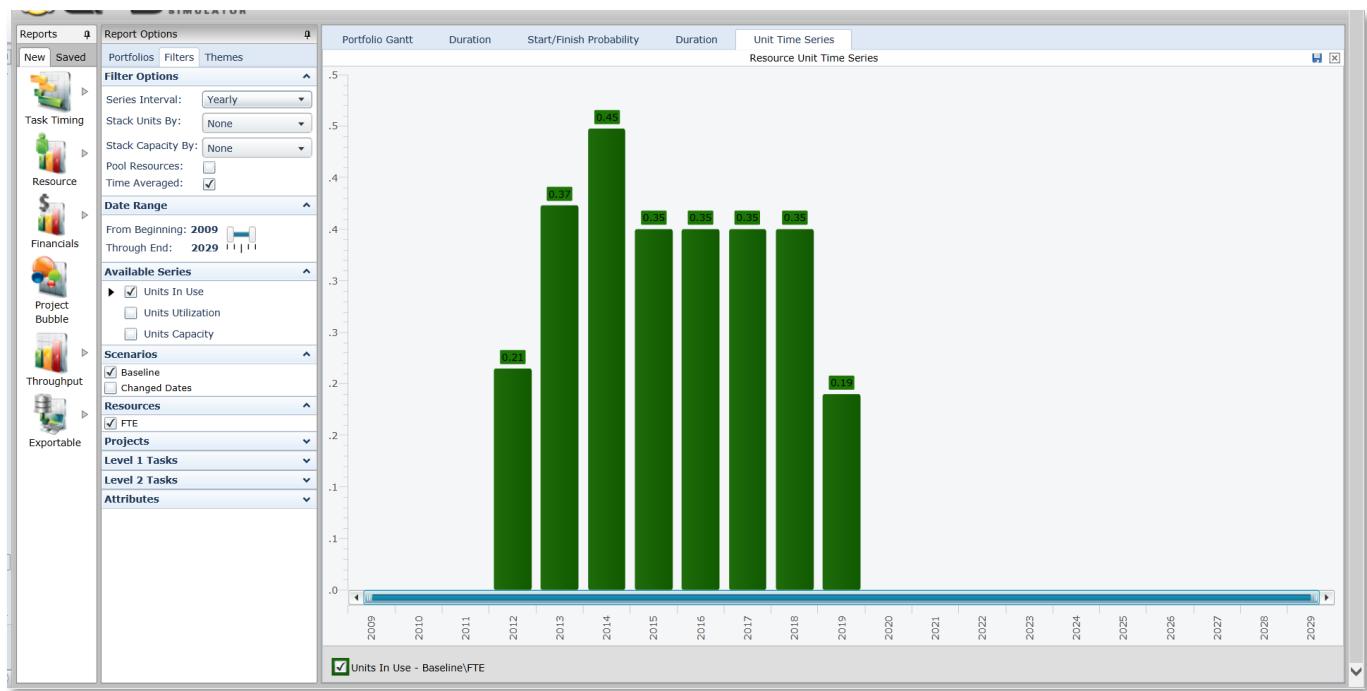
- This illustrates the date spread from project tasks start to projects tasks finish. When a model is run without variability it is not as useful unless tasks have a cycle time distribution for a start date.

Throughput: Duration



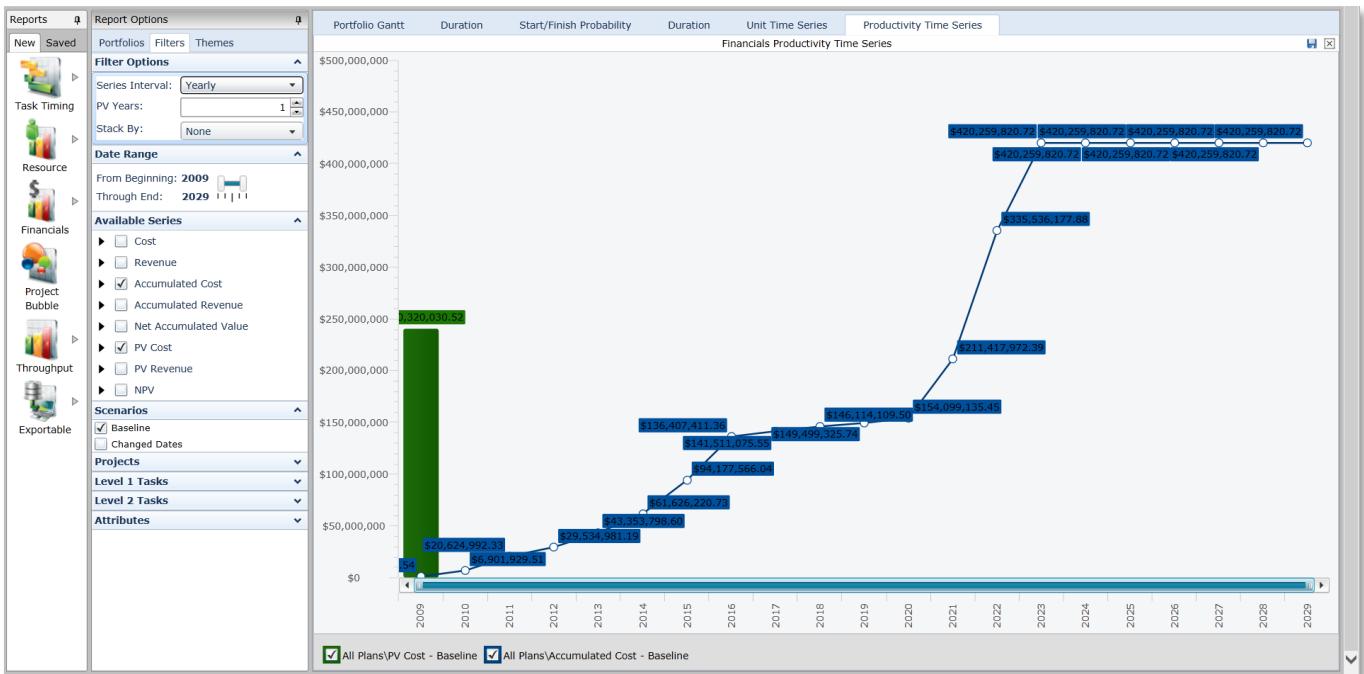
- Duration reports provide a count in terms of days or months the total time a project required to complete.
- When running multiple scenarios this report can be very helpful in visualizing project plan changes and their net effect on total project completion time.

Resource: Unit Time Series



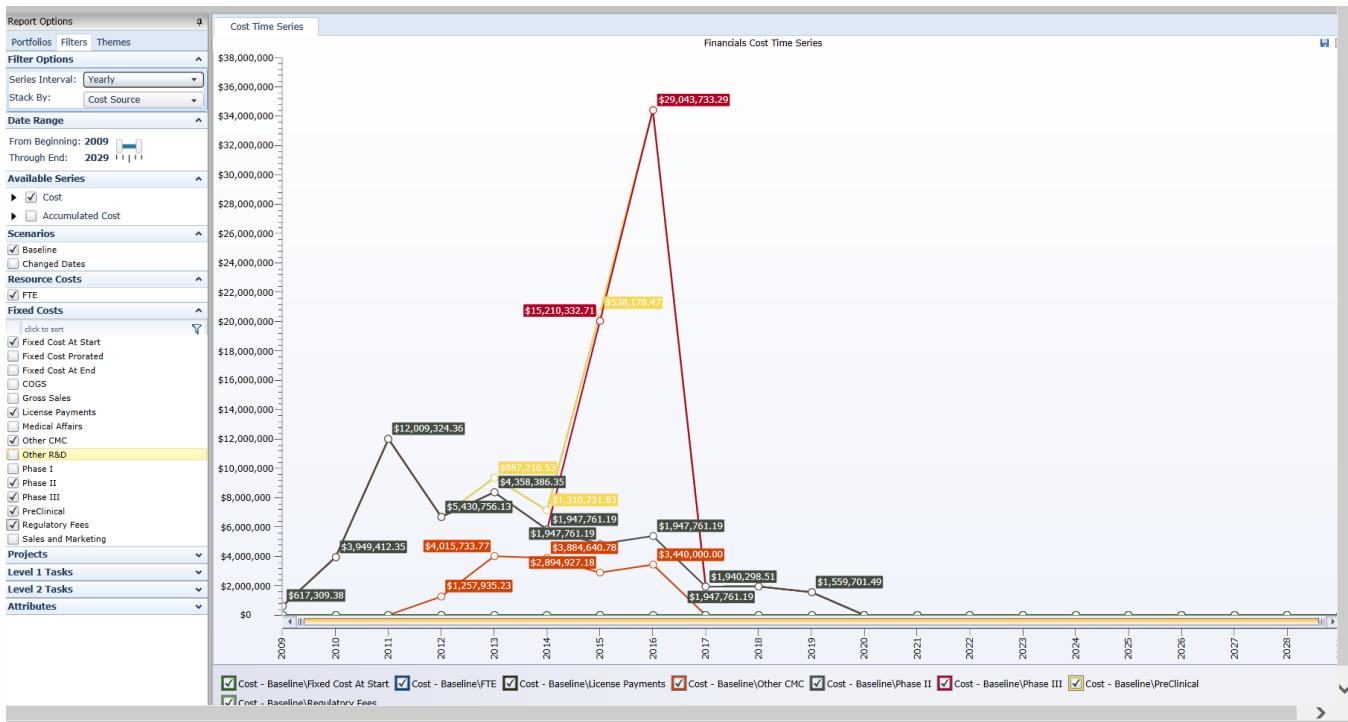
- Resource Units are the total number of people required during a project's execution.
- This report can stack resource requirements across projects, by stage, and the like.
- Resources can also be “pooled” resulting in aggregated resource counts across resource work types.

Financials: Productivity Time Series



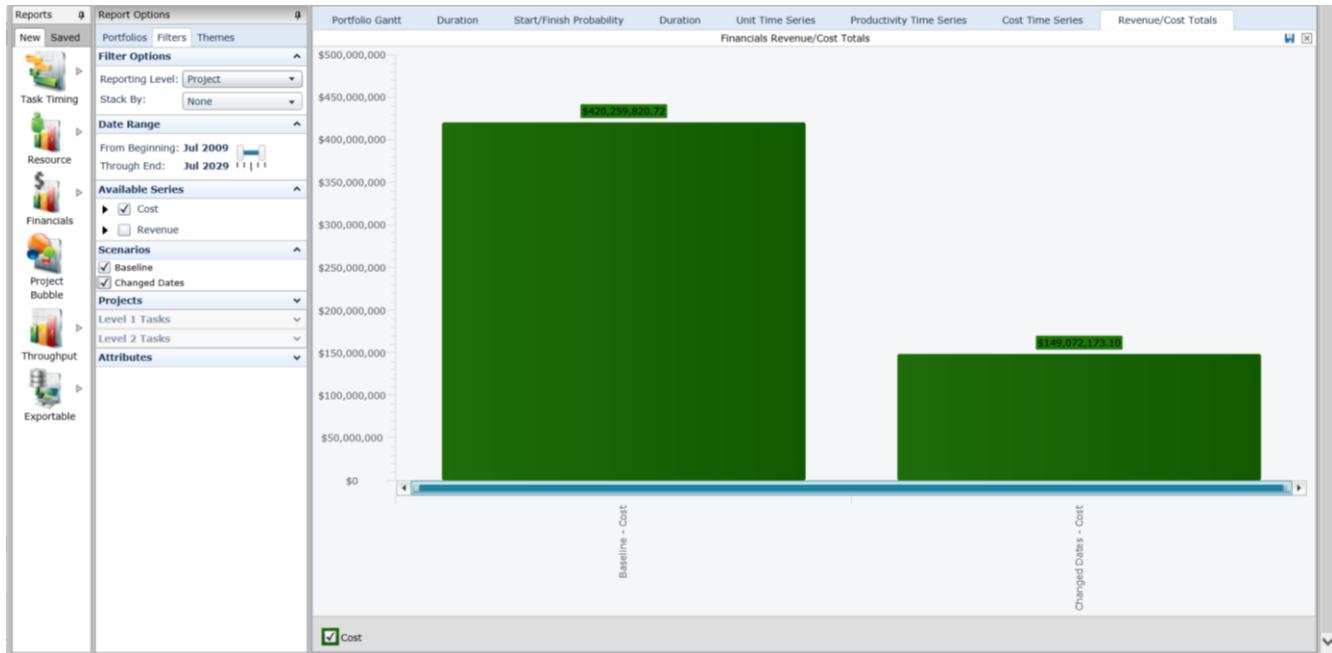
- The productivity report illustrates accumulated revenue, cost, and present value and net present value calculations. Users can select the # of present value years that need to be displayed.
- Users can compare and contrast scenarios, generate per project views, and the like.
- Right click on the graphs to toggle point labels.

Financials: Cost Time Series



- This cost report specifically focuses on cost and accumulated costs, but can drill down into user-defined cost categories if they have been created for the model analysis.
- The graphic above illustrates costs stacked by cost category group.

Financials: Revenue / Cost Totals



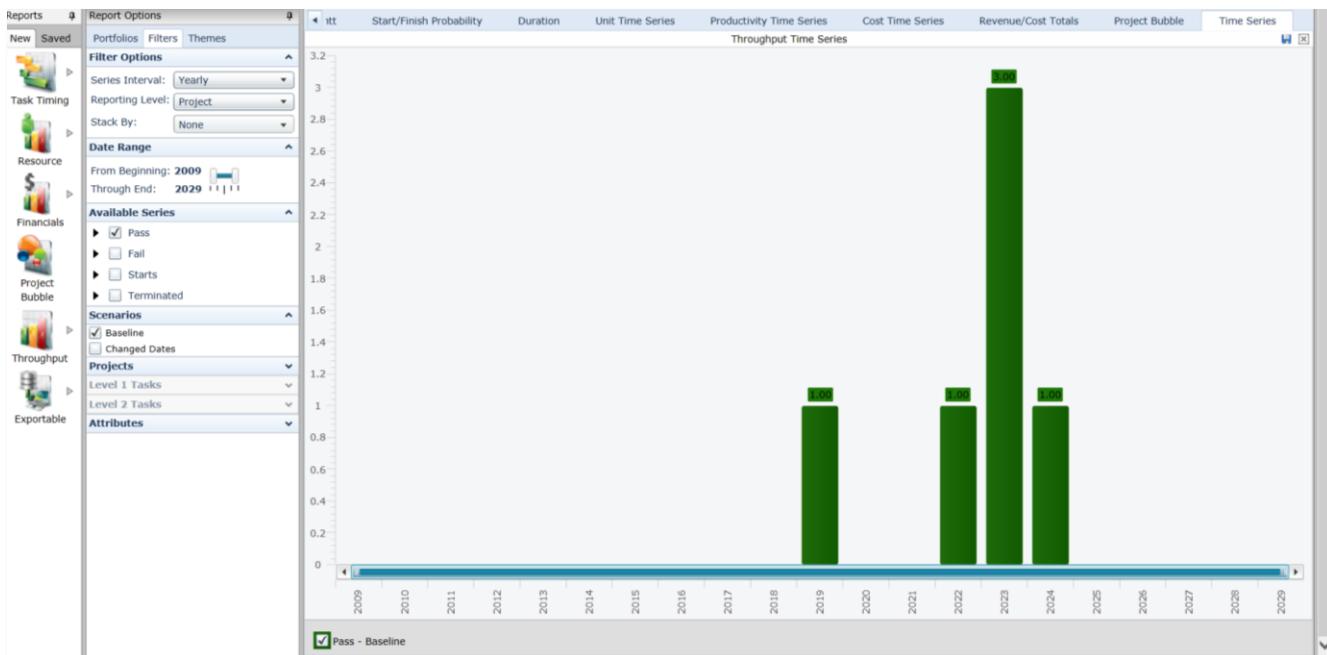
- By cost or revenue, one can illustrate the total costs per , or project, across scenarios.

Project Bubble



- When working with PTRS this report will compare cost time revenue with a bubble position being dependent upon its final simulated PTRS score.
- The above is an example as current projects don't have any PTRS scores so the reports is nonsensical

Throughput: Time Series



- The focus of the throughput reports is to count stage gate totals at key milestones.
- Alternatively they can illustrate total yield in relation to time; analyze data in terms of pass, fails, & starts.

8. Data Mapping via Templates

Templates are a way to quickly change key project data such as survival, cycle time, resource requirements, and cost. This functionality is used to map additional data that was not able to be brought in via the MS Excel Loader workbook.

There is an attribute called "Stage_Number" and all stages have a numeric attribute assigned. Stage_1 has a value of "1" and Stage_1 = Pre-H2L.

The following methodology applies to template mapping for Task, Resourcing, or Financing.

- Select "Add New" and name the data mapping profile.
- Select "Add New" in the "Task Template" Section to insert a blank line.
 - Populate the field values with the data that is to be changed or mapped.
 - Below we see different survival and cycle time values being assigned for stages 1 to 4.
 - Please note a complex set of attributes can be used to parse and select which projects will have data mapped to them.
 - Enter "attribute name" [Boolean] {another other value} for complex formulas

The screenshot shows the EPS PORTFOLIO SIMULATOR interface. On the left, there's a navigation pane with 'Views' (dropdown), 'Projects' (Repository), 'Analysis' (Portfolios, Scenarios, Reports), 'Templates' (Task, Resourcing, Financing), and 'Setup'. The main area has two tables. The top table, 'Task Templates', has columns: Name, Task Attributes, and Stage_Number. It contains one row: 'Data Map Phase Duration' under 'Name', 'Task Attributes' column, and 'Stage_Number' column. The bottom table, 'Task Templates', has columns: Survival %, Override Duration, Task Name Contains, and Stage_Number. It contains three rows: 1 (Survival % 65, Override Duration T(2, 3, 4), Task Name Contains, Stage_Number 1), 2 (Survival % 65, Override Duration T(7, 8, 9), Task Name Contains, Stage_Number 2), and 3 (Survival % 70, Override Duration T(3, 4, 5), Task Name Contains, Stage_Number 3).

Once a template is created, it is mapped in the Project's Repository Window.

Simply select all the projects (upper right box – highlighted) and then in the "apply template" field select which template to apply.

The screenshot shows the 'Repository Projects' window. The left sidebar includes 'Views' (dropdown), 'Projects' (Repository), 'Analysis' (Portfolios, Scenarios, Reports), 'Templates' (Task, Resourcing, Financing), and 'Setup'. The main area shows a table of 'Repository Projects' with columns: Name, Start Date, Finish Date, Take Priority, and Calendar. Rows 1 through 9 are listed. A red box highlights the 'Name' column header. To the right, a 'Apply Templates' dropdown menu is open, showing 'Task', 'Resourcing', and 'Financing'. Under 'Task', 'Data Map Phase Duration' is checked. At the bottom right, there's a status bar saying '1 of 1 items selected' and a 'Apply' button.

9. Attribute Configuration

Select Administration \ Attributes to define Project and Task Attributes. Models come with attributes defined but in the event a new attribute needs to be added and imported with the Loader they must also be created in the Attributes table. Please ensure to use the same name as the Loader's name so it will map seamlessly.

Note: MyModel uses underscores to address issues that can arise with too many spaces being entered

The screenshot shows the SIMULATOR application interface. On the left is a navigation tree with categories like Projects, Analysis, Templates, Setup, and Administration. In the center, a grid titled 'Repository Projects' lists 19 items with columns for Name, Start Date, Finish Date, Take Priority, and Calendar. A modal dialog box titled 'Attribute Settings' is overlaid on the grid. This dialog has tabs for Project, Task, Resource, and a selected 'Text' tab. It lists 10 attributes with checkboxes for 'Enabled' and alternate names:

Enabled	Alternate Name
<input checked="" type="checkbox"/>	Text1 Project_Unde_ID
<input checked="" type="checkbox"/>	Text2 Project_Name
<input checked="" type="checkbox"/>	Text3 Current_Stage
<input checked="" type="checkbox"/>	Text4 Survival_Template
<input checked="" type="checkbox"/>	Text5 Current_Phase_Start_Date
<input checked="" type="checkbox"/>	Text6 Disc_or_Dev
<input checked="" type="checkbox"/>	Text7 Future_Projects_Num_Starts
<input checked="" type="checkbox"/>	Text8 Future_Projects_TBS
<input type="checkbox"/>	Text9 Stage_4
<input type="checkbox"/>	Text10 Stage_5

At the bottom right of the dialog are 'OK' and 'Cancel' buttons.

10. Future Project Creation

The Loader “does not” fully create future projects. It builds them in the Project Repository and then the user updates the “Additional Occurrences” and “Occurrence Frequency” field for the correct values in the \ Projects Window.

Steps:

1. Build the future project profile in the builder setting the correct stage start date & time period
2. Name each project as it is most understandable
3. Update the Future project # of start attributes
4. The following is an example and these project will import and update with all other defined projects
5. Import the projects into EPS

THESE COLUMNS CAN NOT BE MOVED											USER ATTRIBUT		
6	Enter User Defined Stage Names >>>					ADHID	H2L	LO	LLO	N M E	at	Attribute	Attribute
7	Unique ID	Attribute	Stage	Survival	Attribute	Date	Date	Date	Date	St ag e	Future_Prot ojects Num_ Sta tus	Future_Prot ojects TBS	
8	Project_Unique_ID	Project_Nam	Current_Stage	Survival_Template	Current_Phase_Start Date	Stage	Stage_2	Stage_3	Stage_4	Stage	8	3	
9	Future_1	Future_PreH2L	Stage_1	Template_1	1/1/2014	1/1/2014					1	3	
10	Future_2	Future_H2L	Stage_2	Template_1	1/1/2014		1/1/2014				1	3	
11	Future_3	Future_LO	Stage_3	Template_1	1/1/2014			1/1/2014			1	3	
12	Future_4	Future_LLO	Stage_4	Template_1	1/1/2014				1/1/2014		1	3	

6. Update the project's into a desired in the Analysis section
 - a. Update the Additional Occurrences field
 - b. Update the Occurrence Frequency
7. Discussion:
 - a. Below we see the 4 future projects imported.
 - b. We increased from 8 to 24 the additional occurrences for PreH2L because we would like to have 8 arrive every quarter. 3 months divided by 8 is 0.375 months. Thus we will have 8 projects arrive every quarter for 3 quarters. Obviously the quantity could be increased to profile as many future years as desired.
 - c. For the other stages we have 3 projects each arriving 3 months apart, ie 1 per quarter
 - d. *In terms of profiling multiple years some clients prefer to have a future projects for each year with the Additional Occurrences profiles for that given year.*

#	Name	Repository Project	Status Mode	Start Date	Additional Occurrences	Occurrence Frequency
1	Future_PreH2L	Future_1(S1)	Calculate Status	1/1/2014	24	0.375 mon
2	Future_H2L	Future_2(S1)	Calculate Status	1/1/2014	3	3 mon
3	Future_LO	Future_3(S1)	Calculate Status	1/1/2014	3	3 mon
4	Future_LLO	Future_4(S1)	Calculate Status	1/1/2014	3	3 mon

11. Resource Algorithm Updating

Resources are updated via the data mapping capability in the Templates \ Resourcing section in EPS. This is a very powerful and flexible means to update resource requirements quickly across all programs.

In EPS go to Templates \ Resourcing and “Add New” to create a Profile. There can be as many profiles as desired each with distinct requirements that can be applied independently or in “addition to” other profiles.

Steps:

1. Select “Add New” under “Resource Templates”
2. Select “Task Attributes” and an attribute to help map data to a desired project or stage
 - a. Stage_Number or Stage_Name map directly to a project task’s stage
3. Select “Add New” in the profile of a desired resourcing template
 - a. Enter Resource
 - b. Enter Resource Requirements to be mapped to projects

The screenshot shows the EPS application window with the 'Templates' category selected in the left sidebar. In the main area, the 'Resourcing Templates' tab is active. A 'Profile' section is displayed with a table containing one row: 'Name' (Apply Resources) and 'Task Attributes' (Stage_Number). Below this, another 'Resourcing Templates' section shows a table with three rows of resource assignments. The first row is for 'Disc Scientist' with 'Fixed' units of 0.15, 'Plan Units' of T(0.1, 0.15, 0.2), and 'Stage_Number' of 1. The second row is for 'Disc Scientist' with 'Fixed' units of 3.2, 'Plan Units' of U(0.05, 0.01), and 'Stage_Number' of 2. The third row is for 'Disc Scientist' with 'Fixed' units of 0.1, 'Plan Units' of U(0.1, 0.12), and 'Stage_Number' of 3. Two red boxes highlight the 'Add New' button in both the top toolbar and the 'Template Data' section of the second table.

4. In Project's \ Repository
 - a. Once a template is created, it is mapped in the Project's Repository Window.

Simply select all the projects (upper right box – highlighted) and then in the “apply template” field select which template to apply. In this case select a “resourcing” template.

The screenshot shows the EPS application window with the 'Projects' category selected in the left sidebar. In the main area, the 'Repository Projects' tab is active. A table lists several projects, each with a small icon and a name like '2109(S1)', '2185(S1)', etc. A red box highlights the 'Name' column header. To the right of the table, there are several buttons and checkboxes, including 'Task', 'Resourcing', 'Financing', and a checked 'Data Map Phase Duration' checkbox. At the bottom right, a message box says '1 of 1 items selected' and has an 'Apply' button.

12. Import Validation

The following details template data import business rules and their imported data outcomes. Based on the following four projects:

	C	D	E	F	G	H	I	J	K	L	M
6	THESE COLUMNS CAN NOT BE MOVED										
7	Enter User Defined Stage Names >>					AD/Hit ID	H2L	LO	LLO	NME Declaration	NME
8	Unique ID	Attribute	Stage	Survival	Attribute	Date	Date	Date	Date	Date	Date
9	Project_Unique_ID	Project_Name	Current_Stage	Survival_Template	Current_Phase_Start_Date	Stage	Stage_2	Stage_3	Stage_4	Stage	Stage
10	3351	CCR6 Antagonist	Stage_2	Template_1	6/20/2012	1/23/2012	6/20/2012	9/26/2014			
11	2324	N-Type Ca An	Stage_3	Template_1	6/20/2011			6/20/2011			
12	2760	CHIKV Inhibit	Stage_1	Template_1	1/0/1900						
13	2334	GPR120 (Meta)	Stage_3	Template_1	1/0/1900	10/15/2008		9/24/2014	9/7/2015	3/21/2016	3/21/2016
14											

- a) Load historical Stages = yes; Only Load Business Dates = Yes; calculate date if missing stage date.
- 3351: all dates loaded correctly with exact # of days calculated.
 - 2324: only created stages from LO forward, as no dates in prior stages.
 - 2760: model randomly calculated a start date for AD/ Hit ID since no date provided.
 - 2334: all dates loaded correctly and stage 1 and 2 deleted as since stage 2 was skipped

ID	Task Name	Level	Roll-up Chi	Future Occurrences	Tracking			Survival	Passed Cycle Time (Duration)			Failed Cycle Time (Duration)			Cycle Cont	
					# St	TBS	Start Da	Finish Da	Ba	P	Estimate	Min	Distributi	Max	Estim	
1	3351(S1)	1			01/23/2012						149.00	149	149.00	149.00	149.00	
2	AD-Hit ID	2			01/23/2012	6/20/2012	63				828.00	828	828.00	828.00	828	
3	H2L	2			09/26/2014	73					11.00	8.00 L(110.5)	15.00	11.00	8.00 L(110.5)	15.00
4	LO	2			09/26/2014	77					9.00	9.00 L(12,0.5)	16.00	12.00	9.00 L(12,0.5)	16.00
5	LLO	2														
6	NME Milestone	2														
7	PreClinical	2														
8	Phase I	2														
9	Phase IIA	2														
10	Phase IIB	2														
11	Phase III	2														
12	Registration	2														
13	2324(S1)	1			06/20/2011											
14	LO	2			06/20/2011	77					11.00	8.00 L(110.5)	15.00	11.00	8.00 L(110.5)	15.00
15	LLO	2									9.00	9.00 L(12,0.5)	16.00	12.00	9.00 L(12,0.5)	16.00
16	NME Milestone	2														
17	PreClinical	2														
18	Phase I	2														
19	Phase IIA	2														
20	Phase IIB	2														
21	Phase III	2														
22	Registration	2														
23	2760(S1)	1			09/09/2014											
24	AD-Hit ID	2			09/09/2014	63					17.00	14.00 L(17,0.5)	21.00	17.00	14.00 L(17,0.5)	21.00
25	H2L	2									12.00	9.00 L(12,0.5)	16.00	12.00	9.00 L(12,0.5)	16.00
26	LO	2									11.00	8.00 L(110.5)	15.00	11.00	8.00 L(110.5)	15.00
27	LLO	2									12.00	9.00 L(12,0.5)	16.00	12.00	9.00 L(12,0.5)	16.00
28	NME Milestone	2														
29	PreClinical	2														
30	Phase I	2														
31	Phase IIA	2														
32	Phase IIB	2														
33	Phase III	2														
34	Registration	2														
35	2334(S1)	1			09/24/2014											
36	LO	2			09/24/2014	97/2015	77				348.00	348	348.00	348	348.00	
37	LLO	2				09/07/2015	76				196.00	196	196.00	196	196.00	
38	NME Milestone	2				03/21/2016	100				0.00	0.00	0.00	0.00	0.00	
39	PreClinical	2				03/21/2016	65				11.50	8.50 L(115,0.5)	15.50	11.50	8.50 L(115,0.5)	15.50
40	Phase I	2									20.60	17.60 L(20,6,0.5)	24.60	20.60	17.60 L(20,6,0.5)	24.60
41	Phase IIA	2									19.20	16.20 L(19,2,0.5)	23.20	19.20	16.20 L(19,2,0.5)	23.20
42	Phase IIB	2									18.50	15.50 L(18,5,0.5)	22.50	18.50	15.50 L(18,5,0.5)	22.50
43	Phase III	2									39.70	36.70 L(39,7,0.5)	43.70	39.70	36.70 L(39,7,0.5)	43.70
44	Registration	2									11.90	8.90 L(119,0.5)	15.90	11.90	8.90 L(119,0.5)	15.90
45																
46																
47																

C	D	E	F	G	H	I	J	K	L	M	
THESE COLUMNS CAN NOT BE MOVED											
Enter User Defined Stage Names >>>						AD/HIT ID	H2L	LO	LLO	NME Declaration	NME
Unique ID	Attribute	Stage	Survival	Attribute	Date	Date	Date	Date	Date	Date	
Project_Unique_ID	Project_Name	Current_Stag	Survival_Template	Current_Phase_Start_Da	Stage	Stage_2	Stage_3	Stage_4	Stage_5	Stage_6	
3351	CCR6 Antagonist	Stage_2	Template_1	6/20/2012	1/23/2012	6/20/2012	9/26/2014				
2324	N-Type Calcium Channel Blocker	Stage_3	Template_1	6/20/2011			6/20/2011				
2760	CHIKV Inhibitor	Stage_1	Template_1	1/0/1900							
2334	GPR120 (Metabotropic G-Protein Coupled Receptor)	Stage_3	Template_1	1/0/1900	10/15/2008		9/24/2014	9/7/2015	3/21/2016	3/21/2016	

- b) Load historical Stages = no; Only Load Business Dates = Yes; calculate date if missing stage date.
- a) 3351: current stage loaded forward with all dates calculated.
 - b) 2324: only created stages from LO forward as no dates in prior stages.
 - c) 2334: current stage loaded forward with all dates calculated.

Row	Task Name	Level	Roll-up Chi	Future Occurrences	Tracking		Survival	Passed Cycle Time (Duration)			Failed Cycle Time (Duration)			Cycle Ti	
					Start Date	Finish Date		Ba	Estimate	Min	Distributi	Max	Estim	Mir	
1	3351(S1)	1			06/20/2012										
2	H2L	2			06/20/2012	9/26/2014	73		828.00	828.00	828	828.00	828.00	828.00	
3	LO	2			09/26/2014		77	11.00	8.00 L(11.0,5)	15.00	11.00	8.00 L(11.0,5)	15.00		
4	LLO	2					76	12.00	9.00 L(12.0,5)	16.00	12.00	9.00 L(12.0,5)	16.00		
5	NME Milestone	2					100								
6	PreClinical	2					65	11.50	8.50 L(11.5,0.5)	15.50	11.50	8.50 L(11.5,0.5)	15.50		
7	Phase I	2					44	20.60	17.60 L(20.6,0.5)	24.60	20.60	17.60 L(20.6,0.5)	24.60		
8	Phase IIA	2					43	19.20	16.20 L(19.2,0.5)	23.20	19.20	16.20 L(19.2,0.5)	23.20		
9	Phase IIB	2					67	18.50	15.50 L(18.5,0.5)	22.50	18.50	15.50 L(18.5,0.5)	22.50		
10	Phase III	2					68	39.70	36.70 L(39.7,0.5)	43.70	39.70	36.70 L(39.7,0.5)	43.70		
11	Registration	2					83	11.90	8.90 L(11.9,0.5)	15.90	11.90	8.90 L(11.9,0.5)	15.90		
12	2324(S1)	1			06/20/2011										
13	LO	2			06/20/2011		77	11.00	8.00 L(11.0,5)	15.00	11.00	8.00 L(11.0,5)	15.00		
14	LLO	2					76	12.00	9.00 L(12.0,5)	16.00	12.00	9.00 L(12.0,5)	16.00		
15	NME Milestone	2					100								
16	PreClinical	2					65	11.50	8.50 L(11.5,0.5)	15.50	11.50	8.50 L(11.5,0.5)	15.50		
17	Phase I	2					44	20.60	17.60 L(20.6,0.5)	24.60	20.60	17.60 L(20.6,0.5)	24.60		
18	Phase IIA	2					43	19.20	16.20 L(19.2,0.5)	23.20	19.20	16.20 L(19.2,0.5)	23.20		
19	Phase IIB	2					67	18.50	15.50 L(18.5,0.5)	22.50	18.50	15.50 L(18.5,0.5)	22.50		
20	Phase III	2					68	39.70	36.70 L(39.7,0.5)	43.70	39.70	36.70 L(39.7,0.5)	43.70		
21	Registration	2					83	11.90	8.90 L(11.9,0.5)	15.90	11.90	8.90 L(11.9,0.5)	15.90		
22	2334(S1)	1			09/24/2014										
23	LO	2			09/24/2014	9/7/2015	77	348.00	348.00	348.00	348.00	348.00	348.00		
24	LLO	2			09/07/2015	3/21/2016	76	196.00	196.00	196.00	196.00	196.00	196.00		
25	NME Milestone	2			03/21/2016		100	0.00	0.00	0.00	0.00	0.00	0.00		
26	PreClinical	2			03/21/2016		65	11.50	8.50 L(11.5,0.5)	15.50	11.50	8.50 L(11.5,0.5)	15.50		
27	Phase I	2					44	20.60	17.60 L(20.6,0.5)	24.60	20.60	17.60 L(20.6,0.5)	24.60		
28	Phase IIA	2					43	19.20	16.20 L(19.2,0.5)	23.20	19.20	16.20 L(19.2,0.5)	23.20		
29	Phase IIB	2					67	18.50	15.50 L(18.5,0.5)	22.50	18.50	15.50 L(18.5,0.5)	22.50		
30	Phase III	2					68	39.70	36.70 L(39.7,0.5)	43.70	39.70	36.70 L(39.7,0.5)	43.70		
31	Registration	2					83	11.90	8.90 L(11.9,0.5)	15.90	11.90	8.90 L(11.9,0.5)	15.90		

- c) Load historical Stages = no; Only Load Business Dates = no
- d) 3351: current stage loaded and exact number of days calculated as finish date < today's date
 - e) 2334: current stage loaded but exact days not calculated because finish date > today's date

A	B	C	D	E	F	G	H	I	R	S	T	U	V	W	X	Y	Z	AA	AB	AC		
Row	Task Name	Level	Roll-up Chi	Future Occurrences	Start Date	Finish Date	Ba	Estimate	Survival	Passed Cycle Time (Duration)	Failed Cycle Time (Duration)	Cycle Time (Duration)	Contour Na	Contour Na	Contour Na	Contour Na	Contour Na	Contour Na	Contour Na	Contour Na		
1	Phase III	2					68		39.70	36.70 L(39.7,0.5)	43.70	39.70	36.70 L(39.7,0.5)	43.70								
10	Registration	2					83	11.90	8.90 L(11.9,0.5)	15.90	11.90	8.90 L(11.9,0.5)	15.90									
11	LO	2			09/24/2014		77	11.00	8.00 L(11.0,5)	15.00	11.00	8.00 L(11.0,5)	15.00									
12	2334(S1)	1			09/24/2014	9/7/2015	77															
13	LLO	2			09/07/2015	3/21/2016	76	12.00	9.00 L(12.0,5)	16.00	12.00	9.00 L(12.0,5)	16.00									
14	NME Milestone	2			3/21/2016		100															
15	PreClinical	2			03/21/2016		65	11.50	8.50 L(11.5,0.5)	15.50	11.50	8.50 L(11.5,0.5)	15.50									
16	Phase I	2					44	20.60	17.60 L(20.6,0.5)	24.60	20.60	17.60 L(20.6,0.5)	24.60									
17	Phase IIA	2					43	19.20	16.20 L(19.2,0.5)	23.20	19.20	16.20 L(19.2,0.5)	23.20									
18	Phase IIB	2					67	18.50	15.50 L(18.5,0.5)	22.50	18.50	15.50 L(18.5,0.5)	22.50									
19	Phase III	2					68	39.70	36.70 L(39.7,0.5)	43.70	39.70	36.70 L(39.7,0.5)	43.70									
20	Registration	2					83	11.90	8.90 L(11.9,0.5)	15.90	11.90	8.90 L(11.9,0.5)	15.90									
21	LO	2			09/24/2014	9/7/2015	77															
22	LLO	2			09/07/2015	3/21/2016	76															
23	NME Milestone	2			3/21/2016		100															
24	PreClinical	2			03/21/2016		65	11.50	8.50 L(11.5,0.5)	15.50	11.50	8.50 L(11.5,0.5)	15.50									
25	Phase I	2					44	20.60	17.60 L(20.6,0.5)	24.60	20.60	17.60 L(20.6,0.5)	24.60									
26	Phase IIA	2					43	19.20	16.20 L(19.2,0.5)	23.20	19.20	16.20 L(19.2,0.5)	23.20									
27	Phase IIB	2					67	18.50	15.50 L(18.5,0.5)	22.50	18.50	15.50 L(18.5,0.5)	22.50									
28	Phase III	2					68	39.70	36.70 L(39.7,0.5)	43.70	39.70	36.70 L(39.7,0.5)	43.70									
29	Registration	2					83	11.90	8.90 L(11.9,0.5)	15.90	11.90	8.90 L(11.9,0.5)	15.90									
30	LO	2			09/24/2014	9/7/2015	77															
31	LLO	2			09/07/2015	3/21/2016	76															
32	NME Milestone	2			3/21/2016		100															
33	PreClinical	2			03/21/2016		65	11.50	8.50 L(11.5,0.5)	15.50	11.50	8.50 L(11.5,0.5)	15.50									
34	Phase I	2					44	20.60	17.60 L(20.6,0.5)	24.60	20.60	17.60 L(20.6,0.5)	24.60									
35	Phase IIA	2					43	19.20	16.20 L(19.2,0.5)	23.20	19.20	16.20 L(19.2,0.5)	23.20									
36	Phase IIB	2					67	18.50	15.50 L(18.5,0.5)	22.50	18.50	15.50 L(18.5,0.5)	22.50									
37	Phase III	2					68	39.70	36.70 L(39.7,0.5)	43.70	39.70	36.70 L(39.7,0.5)	43.70									
38	Registration	2					83	11.90	8.90 L(11.9,0.5)	15.90	11.90	8.90 L(11.9,0.5)	15.90</									

13. New Division Setup

Divisions can be duplicated copying all attributes, templates, and associated data. In the event a new division has to be setup the following data tables can be copied and pasted to help hook up the associated data loader. Copy the following into Administration \ Attributes.

Attributes – Project:

Project_Unde_ID
Project_Name
Current_Stage
Survival_Template
Current_Phase_Start_Date
Disc_or_Dev
Future_Projects_Num_Starts
Future_Projects_TBS

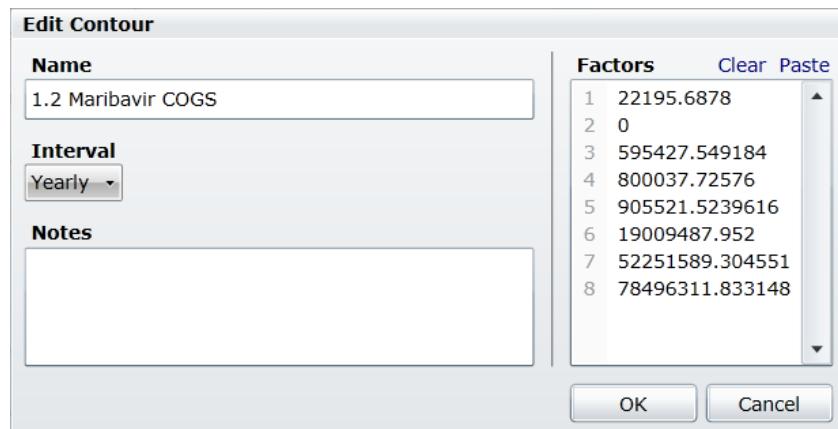
Attributes – Task:

Stage_1
Stage_2
Stage_3
Stage_4
Stage_5
Stage_6
Stage_7
Stage_8
Stage_9
Stage_10
Stage_11
Site
External_Status
Product_Number
MTA_ID
Prototype_Back-Up
BU_Num
Target_Class
Indications
DAS_vs_CS
CURRENT_STATUS
Last_Active_Phase
DISC_Project_Status
Scenario_ID
Stage_Name

14. Cost Contours

ABC could use the following if they want to model project and stage cost – not implemented

Contours are a simple way to apply a series of numbers to a single task in an EPS project. Contours can be applied to revenue, cost, or resources. EPS uses the bin value in the contour table and changes bins based on time advancing in either monthly, quarterly, or annual increments



SPREADSHEET KEY	
A	Contour Name – Combination of project name + [space] + EPS financial category name
B	Time Interval – can be set to monthly, quarterly or yearly
C	Factor Interval # or bin – distinct values applied when simulation clock advances to the next time interval
D	Factor – the financial amount. If years are skipped a bin with a zero value should be included else data will accumulate a year earlier than expected

Additional rules & explanations:

1. One can copy and paste a data column into a contour in EPS using CTRL + V (the right click method does not work). If there was existing data in the contour window when the new data is pasted it will append the other data and not over-ride it.
2. Data values must be in an Excel column. If you try to paste data copied across rows all of it will be applied inside a single bin which is nonsensical.
3. One can never have a negative number in a contour.
4. Changing a work contour's bin value to zero will eliminate tasks when the project is calculated. Tasks with work contours will be ignored in every time period that has a zero for a bin value.
5. Multiple contours can be imported at one time using the EPS Excel Builder. However they must be imported as a dummy project.

Cost Contours – Cont.

Typically clients will organize their financial data annually by cost categories. Some clients are going to have to consolidate cost categories at EPS can only handle a max of 30 Fixed Cost fields.

In the Project Name column we have a Project ID + Project Name + Fixed Cost Name. When multiple projects are being imported, each contour across all projects require a unique name so the financial data can be mapped using the Templates \ Financing data mapping capability.

Project Name	EPS Category	2013	2014	2015	2016	2017
1.2 COGS	COGS	7399	0	198476	266679	
1.2 Gross Sales	Gross Sales					
1.2 License Payments	License Payments					
1.2 Medical Affairs	Medical Affairs					
1.2 Other CMC	Other CMC					
1.2 Other R&D	Other R&D					
1.2 Phase I	Phase I					
1.2 Phase II	Phase II					

Populated table values would be seen here

The consulting team currently doesn't have any data transformation widgets, so the data from a populated table above has to be manually transformed into the following view in the "Contours" spreadsheet of the EPS Excel Builder.xls workbook. Below we see total cost by year interval in the factor column.

A	B	C	D
Contour Name	Time Interval	Interval #	Factor
1.2 COGS	Years	1	7,399
		2	-
		3	198,476
		4	266,679
		5	301,841
		6	6,336,496
		7	17,417,196
		8	26,165,437
1.2 I	Gross Sales	1	1003103.533
		2	1248000
		3	1984758.497
		4	2666792.419
		5	3018405.08
		6	63422578.44
		7	175130518.2
		8	264367831.2

SPREADSHEET KEY	
A	Contour Name – Combination of project name + [space] + EPS financial category name
B	Time Interval – we will always be using years
C	Interval # – we will have a row and sequential value always starting at 1 and ending at the last year interval data point. In this case we have eight years of data thus eight interval #s
D	Factor – the financial amount. If years are skipped a bin with a zero value should be included else data will accumulate a year earlier than expected
E	Project Name – data not imported but is useful to help sort the data to fix any errors

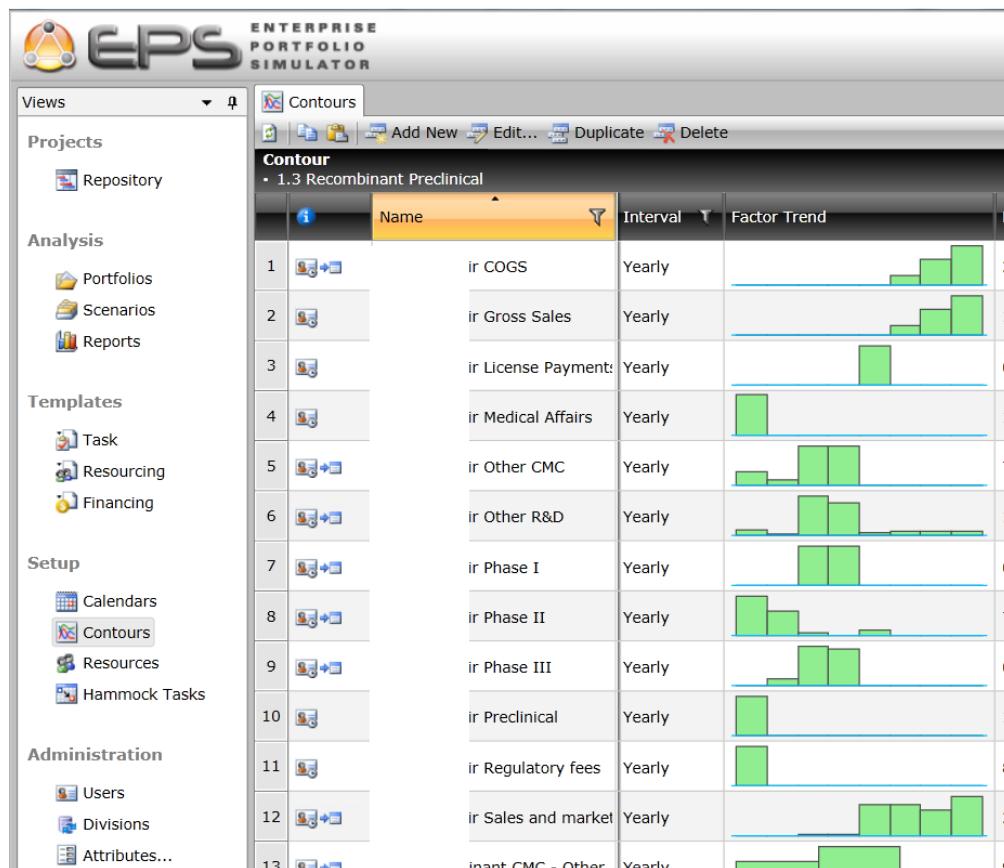
Contours – Cont.

On the “Task Information” worksheet in the EPS Excel Builder the following needs to be added so a dummy project and all the contours will import into whatever Division an analysis is being worked on.

Contours are IMPORTED SEPARATELY in a separate “Loader” workbook.

	A	B	C	D	E	F	G
1	ID	Template	Task Name	Level	Roll-up Children	Future Occurrences	
2						# Starts	TBS
3	1		Contour Project Import	1 N		1 0	
4	2		Task	2 N			

An EPS imported Contour View:



15. Cost Contour Mapping (via applying templates) and its Configuration

The Templates \ Financing organizes the matrix of which cost contour is going to be applied to which project and attribute value. The data is organized by a combination of Fixed Cost category names and 2 attributes: "Finance Attribute" and "Project Name".

In the graphic below we see the Fixed Cost fields, e.g. Medical Affairs, other CMC, other R&D, etc. Essentially decisions are made on what cost category is important for analyzing models. Some teams would group certain cost data together.

Profile		Cost Contours		Apply To		Project Attributes		Task Attributes																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																								
	Name	Cost Contours	Tasks	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100	101	102	103	104	105	106	107	108	109	110	111	112	113	114	115	116	117	118	119	120	121	122	123	124	125	126	127	128	129	130	131	132	133	134	135	136	137	138	139	140	141	142	143	144	145	146	147	148	149	150	151	152	153	154	155	156	157	158	159	160	161	162	163	164	165	166	167	168	169	170	171	172	173	174	175	176	177	178	179	180	181	182	183	184	185	186	187	188	189	190	191	192	193	194	195	196	197	198	199	200	201	202	203	204	205	206	207	208	209	210	211	212	213	214	215	216	217	218	219	220	221	222	223	224	225	226	227	228	229	230	231	232	233	234	235	236	237	238	239	240	241	242	243	244	245	246	247	248	249	250	251	252	253	254	255	256	257	258	259	260	261	262	263	264	265	266	267	268	269	270	271	272	273	274	275	276	277	278	279	280	281	282	283	284	285	286	287	288	289	290	291	292	293	294	295	296	297	298	299	300	301	302	303	304	305	306	307	308	309	310	311	312	313	314	315	316	317	318	319	320	321	322	323	324	325	326	327	328	329	330	331	332	333	334	335	336	337	338	339	340	341	342	343	344	345	346	347	348	349	350	351	352	353	354	355	356	357	358	359	360	361	362	363	364	365	366	367	368	369	370	371	372	373	374	375	376	377	378	379	380	381	382	383	384	385	386	387	388	389	390	391	392	393	394	395	396	397	398	399	400	401	402	403	404	405	406	407	408	409	410	411	412	413	414	415	416	417	418	419	420	421	422	423	424	425	426	427	428	429	430	431	432	433	434	435	436	437	438	439	440	441	442	443	444	445	446	447	448	449	450	451	452	453	454	455	456	457	458	459	460	461	462	463	464	465	466	467	468	469	470	471	472	473	474	475	476	477	478	479	480	481	482	483	484	485	486	487	488	489	490	491	492	493	494	495	496	497	498	499	500	501	502	503	504	505	506	507	508	509	510	511	512	513	514	515	516	517	518	519	520	521	522	523	524	525	526	527	528	529	530	531	532	533	534	535	536	537	538	539	540	541	542	543	544	545	546	547	548	549	550	551	552	553	554	555	556	557	558	559	560	561	562	563	564	565	566	567	568	569	570	571	572	573	574	575	576	577	578	579	580	581	582	583	584	585	586	587	588	589	590	591	592	593	594	595	596	597	598	599	600	601	602	603	604	605	606	607	608	609	610	611	612	613	614	615	616	617	618	619	620	621	622	623	624	625	626	627	628	629	630	631	632	633	634	635	636	637	638	639	640	641	642	643	644	645	646	647	648	649	650	651	652	653	654	655	656	657	658	659	660	661	662	663	664	665	666	667	668	669	670	671	672	673	674	675	676	677	678	679	680	681	682	683	684	685	686	687	688	689	690	691	692	693	694	695	696	697	698	699	700	701	702	703	704	705	706	707	708	709	710	711	712	713	714	715	716	717	718	719	720	721	722	723	724	725	726	727	728	729	730	731	732	733	734	735	736	737	738	739	740	741	742	743	744	745	746	747	748	749	750	751	752	753	754	755	756	757	758	759	760	761	762	763	764	765	766	767	768	769	770	771	772	773	774	775	776	777	778	779	780	781	782	783	784	785	786	787	788	789	790	791	792	793	794	795	796	797	798	799	800	801	802	803	804	805	806	807	808	809	810	811	812	813	814	815	816	817	818	819	820	821	822	823	824	825	826	827	828	829	830	831	832	833	834	835	836	837	838	839	840	841	842	843	844	845	846	847	848	849	850	851	852	853	854	855	856	857	858	859	860	861	862	863	864	865	866	867	868	869	870	871	872	873	874	875	876	877	878	879	880	881	882	883	884	885	886	887	888	889	890	891	892	893	894	895	896	897	898	899	900	901	902	903	904	905	906	907	908	909	910	911	912	913	914	915	916	917	918	919	920	921	922	923	924	925	926	927	928	929	930	931	932	933	934	935	936	937	938	939	940	941	942	943	944	945	946	947	948	949	950	951	952	953	954	955	956	957	958	959	960	961	962	963	964	965	966	967	968	969	970	971	972	973	974	975	976	977	978	979	980	981	982	983	984	985	986	987	988	989	990	991	992	993	994	995	996	997	998	999	1000	1001	1002	1003	1004	1005	1006	1007	1008	1009	1010	1011	1012	1013	1014	1015	1016	1017	1018	1019	1020	1021	1022	1023	1024	1025	1026	1027	1028	1029	1030	1031	1032	1033	1034	1035	1036	1037	1038	1039	1040	1041	1042	1043	1044	1045	1046	1047	1048	1049	1050	1051	1052	1053	1054	1055	1056	1057	1058	1059	1060	1061	1062	1063	1064	1065	1066	1067	1068	1069	1070	1071	1072	1073	1074	1075	1076	1077	1078	1079	1080	1081	1082	1083	1084	1085	1086	1087	1088	1089	1090	1091	1092	1093	1094	1095	1096	1097	1098	1099	1100	1101	1102	1103	1104	1105	1106	1107	1108	1109	1110	1111	1112	1113	1114	1115	1116	1117	1118	1119	1120	1121	1122	1123	1124	1125	1126	1127	1128	1129	1130	1131	1132	1133	1134	1135	1136	1137	1138	1139	1140	1141	1142	1143	1144	1145	1146	1147	1148	1149	1150	1151	1152	1153	1154	1155	1156	1157	1158	1159	1160	1161	1162	1163	1164	1165	1166	1167	1168	1169	1170	1171	1172	1173	1174	1175	1176	1177	1178	1179	1180	1181	1182	1183	1184	1185	1186	1187	1188	1189	1190	1191	1192	1193	1194	1195	1196	1197	1198	1199	1200	1201	1202	1203	1204	1205	1206	1207	1208	1209	1210	1211	1212	1213	1214	1215	1216	1217	1218	1219	1220	1221	1222	1223	1224	1225	1226	1227	1228	1229	1230	1231	1232	1233	1234	1235	1236	1237	1238	1239	1240	1241	1242	1243	1244	1245	1246	1247	1248	1249	1250	1251	1252	1253	1254	1255	1256	1257	1258	1259	1260	1261	1262	1263	1264	1265	1266	1267	1268	1269	1270	1271	1272	1273	1274	1275	1276	1277	1278	1279	1280	1281	1282	1283	1284	1285	1286	1287	1288	1289	1290	1291	1292	1293	1294	1295	1296	1297	1298	1299	1300	1301	1302	1303	1304	1305	1306	1307	1308	1309	1310	1311	1312	1313	1314	1315	1316	1317	1318	1319	1320	1321	1322	1323	1324	1325	1326	1327	1328	1329	1330	1331	1332	1333	1334	1335	1336	1337	1338	1339	1340	1

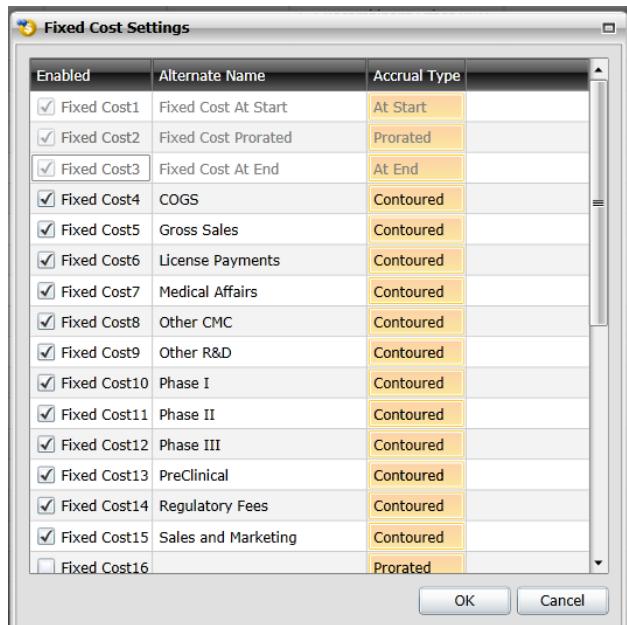
Cost Contour Mapping (via applying templates) and its Configuration – Cont.

In the Projects \ Repository \ Tasks \ Financials tab we see the resulting cost contours applied at a task level. Financial data will be generated based on a project's task when its task start date is reached in the simulator. Every 12 months the simulator will increment the contour's factor and start accruing the next years cost value.

Below (circled in red) are all the the cost fields that the cost contours were mapped to via Templates \ Finance.

	Name	Yearly Revenue	Revenue Contour	Fixed Cost At Start	Fixed Cost Prorated	Fixed Cost At End	COGS	Gross Sales	License Payments	Medical Affairs	Other CMC	Other R&D
1	R&D						1.3 Recombinant Other R&D					1.3 Recombinant Other R&D
2	R&D Activities											
3	Regulatory											
4	IND Filing											
5	EoP2 Meeting											
6	EU (national) scientific advice											
7	BLA Prep											
8	BLA submission											
9	Advisory committee meeting (t)											
10	Approval (standard)											
11	Approval (priority)											
12	Technology Development_CMC						1.3 Recombinant CMC - Other					1.3 Recombinant CMC - Other
13	Phase 1 Drug Product Develop											
14	Nonclinical						1.3 Recombinant Preclinical					
15	Nonclinical Studies											
16	Clinical											
17	Phase 1						1.3 Recombinant Phase 1					
18	Phase 2											
19	Phase 3											
20	Commercial											

Fixed Costs names are defined in the Administration \ Fixed Costs tab. A maximum of 30 fields are available. Please note for each Fixed Cost, the "Accrual Type" is "Contoured." This means the Project's \ Repository \ Tasks \ Financials tab fields will accept a Cost Contour name instead of a numeric value. Other settings specify how costs are accrued during a simulation; at the start of a project task, evenly over a project task, or at a project task's end.



You cannot map two costs to the same attribute. Essentially, each subsequent cost with the same attribute value replaces a prior mapped value. USE UNIQUE NAMES to avoid this issue!