

*Getting Started*  
A Quick Overview of Project Design  
with the TeamPort Platform

Version 4.1

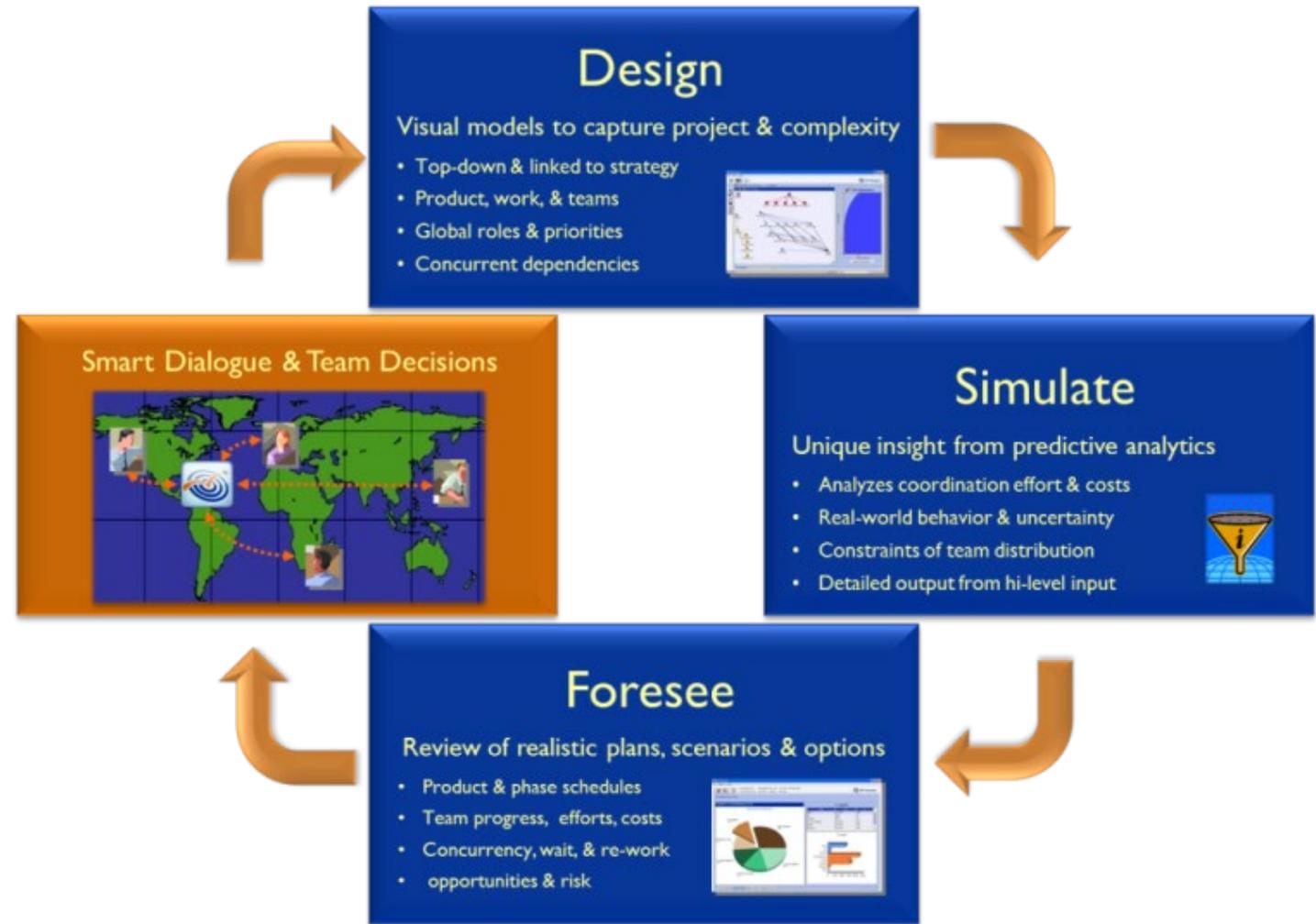
[www.teamport.com](http://www.teamport.com)



# Project Design is an Iterative, Social Process

*Project Design* is the capability to model, explore, and optimize complex projects and programs -- for teams to design their projects - - before committing to action.

**Project Designers build digital-twin models of complex projects** to design the project before execution and to rapidly adjust as things change.





# Principles of Project Design

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Based on 20 years of research and field experience, our methods and tools for model-based project management are guided by Principles of Project Design.

1. Encourage collaboration by cross-functional teams  
A forum for sharing ... and listening to ... multiple perspectives
2. Focus on capturing the most critical project information  
The interactions of teams, flow of activities, and the products they create
3. Avoid the false precision of detail  
“Forest for the Trees” view -- maintained as total project architecture
4. Rapidly, iteratively simulate projects to yield key insights  
Trade-offs and convergence on a realistic and optimal baseline plan

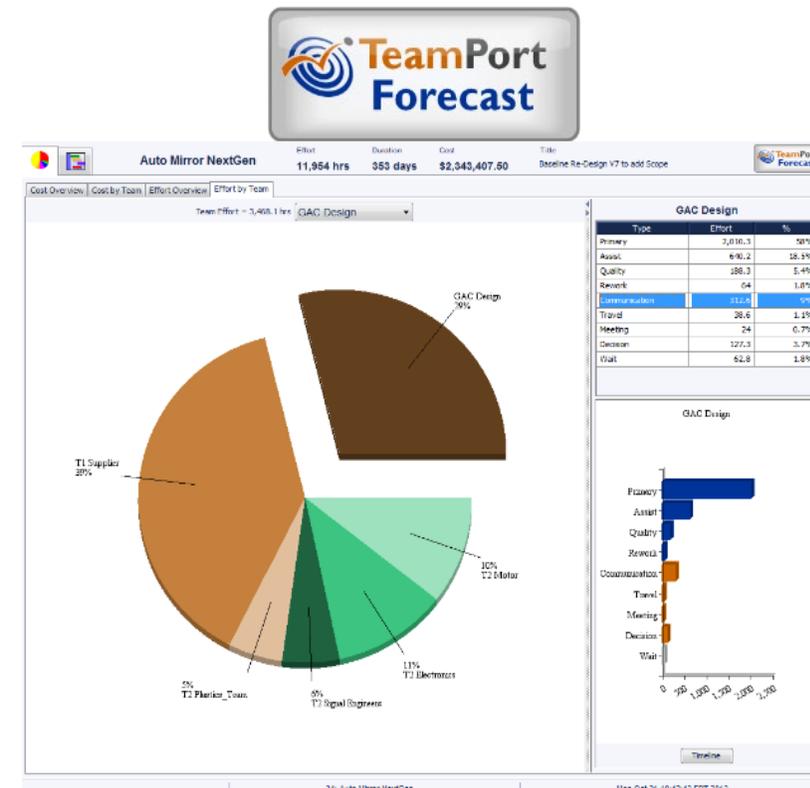
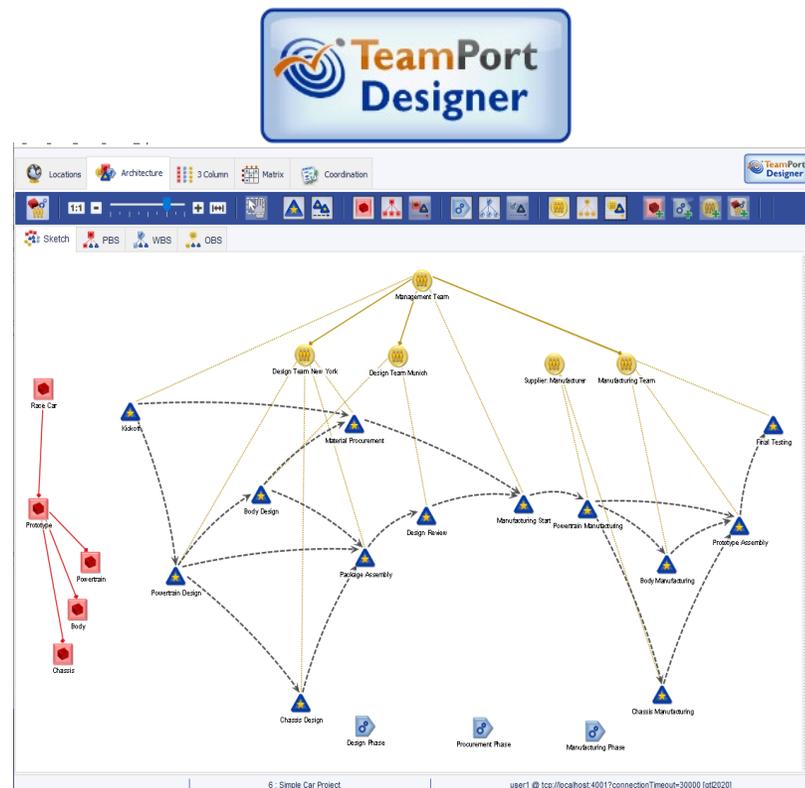




# TeamPort is a platform for Model-based Project Management

## Software for rapid modeling of dynamic projects and portfolios

- Program strategy dialogue
- Collaborative visual design
- Forward-looking forecasts and analytics



# A Quick Overview: TeamPort Designer



Version 4.1

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# TeamPort Project Model Elements

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- **Locations** are **where work takes place**. The time and distance between Locations influences the coordination of work.



- **Products** are the **meaningful result of completed work**. A Product includes Activities that represent scope and progress to realize the Product.

Products can be grouped as a Product Breakdown Structure (**PBS**).



- **Teams** are **people who make effort to work and coordinate by applying abilities**.

Teams can be grouped as an Organizational Breakdown Structure (**OBS**).



- **Phases** are **grouped activities that represent flow of progress over time**. These stages of progress may stretch across multiple products yet viewed together for governance.

Phases can be grouped as a Work Breakdown Structure (**WBS**).



- **Activities** represent scope and **progress toward the completion of Products**.

**Activities connect these three breakdown structures.** Teams work on activities during phases to generate products.

# TeamPort Designer: Overall Layout

Menus



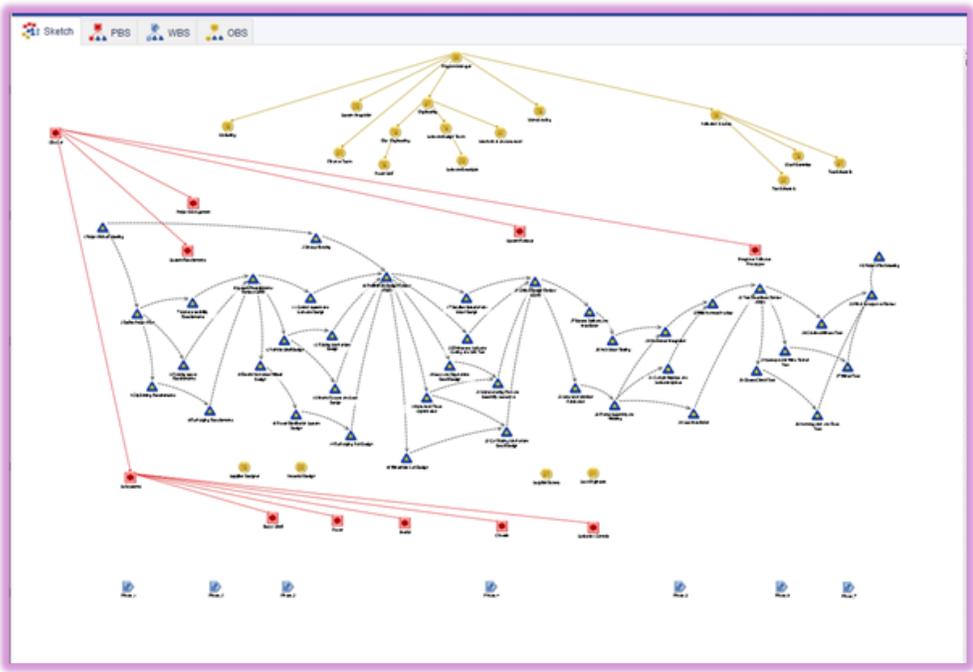
Navigation



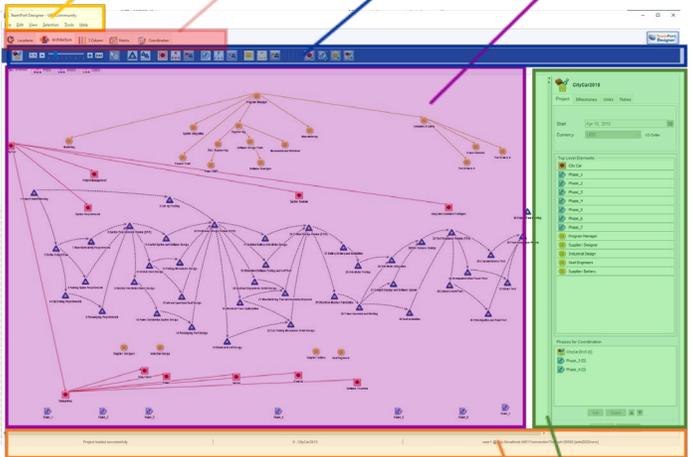
Toolbar



View



Detail Pane



System Information



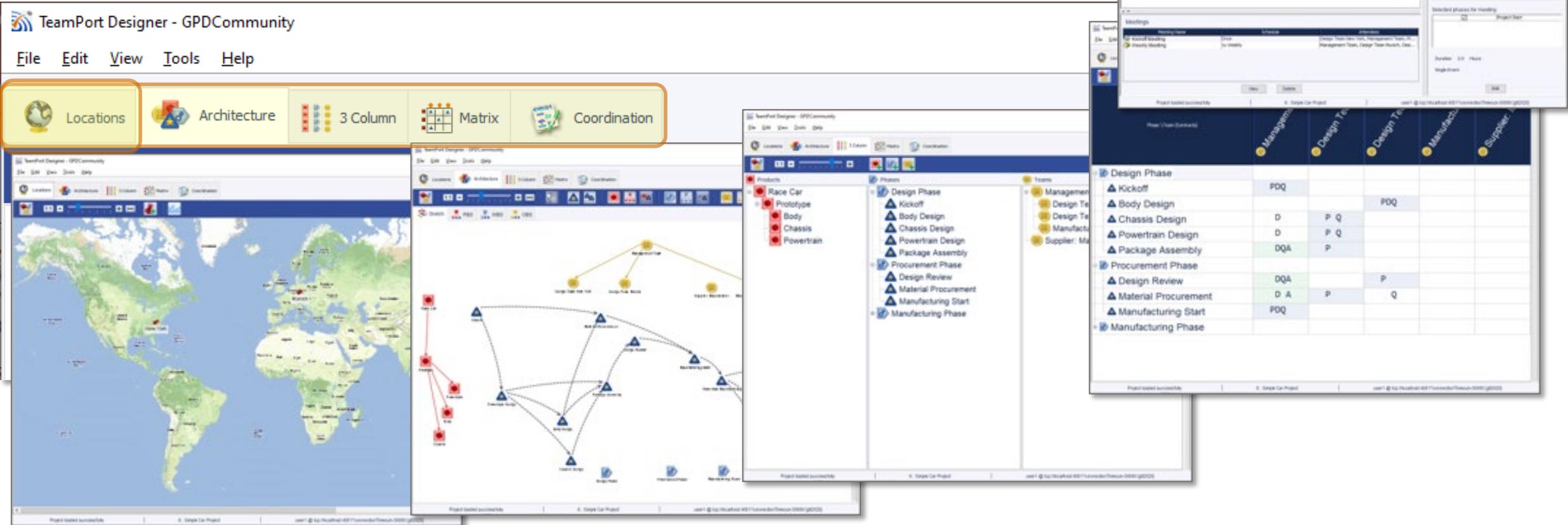
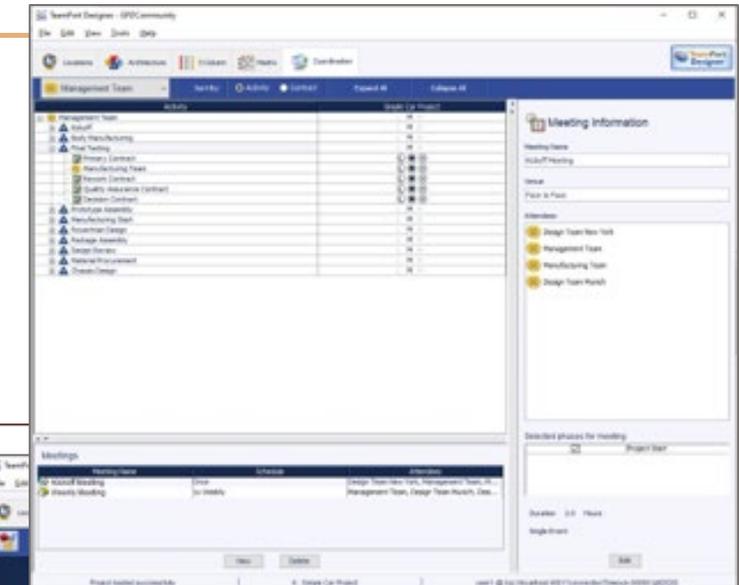
**CityCar2020**  
Project Milestones Units Notes  
Start: Apr 16, 2020  
Currency: USD US Dollar  
Top Level Elements:  
City Car  
Phase\_1  
Phase\_2  
Phase\_3  
Phase\_4  
Phase\_5  
Phase\_6  
Phase\_7  
Program Manager  
Supplier: Designer  
Industrial Design  
Seat Engineers  
Supplier: Battery  
Phases for Coordination:  
CityCar2020 (0)  
Phase\_3 (0)  
Phase\_4 (0)



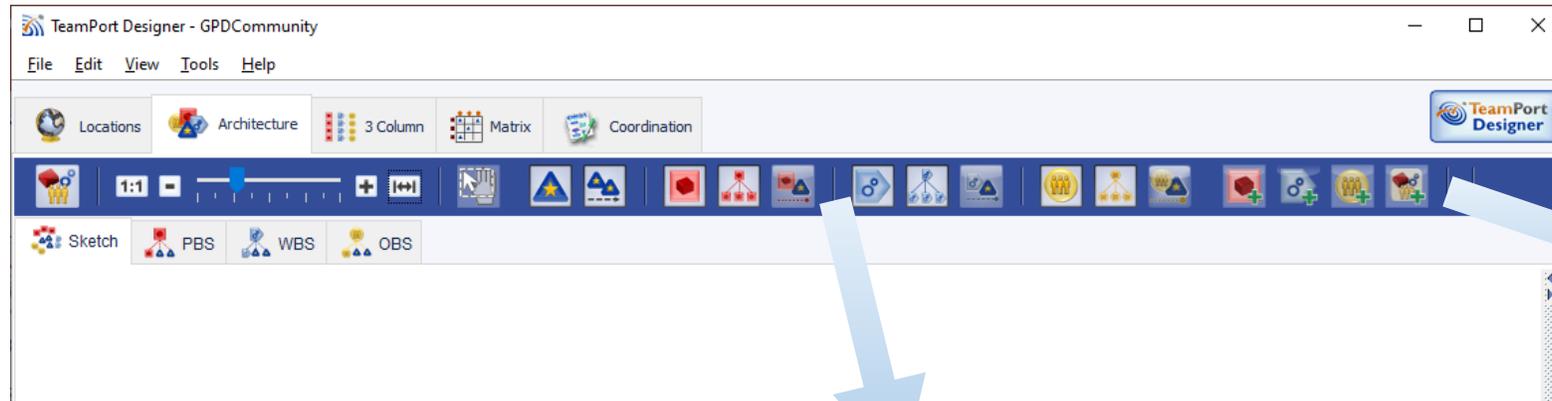


# Designer: Five Views

- Each view shows a project model (as it emerges) from different perspectives.
- Some – but not all – aspects of a model can be seen and edited from each view.



# Toolbars: Viewing and Hiding Project Elements and Relationships



+ Adding Elements



Zoom

Dependencies

Activities

Contracts

Zoom to Fit

Products

Phases

Teams

PBS

WBS

OBS

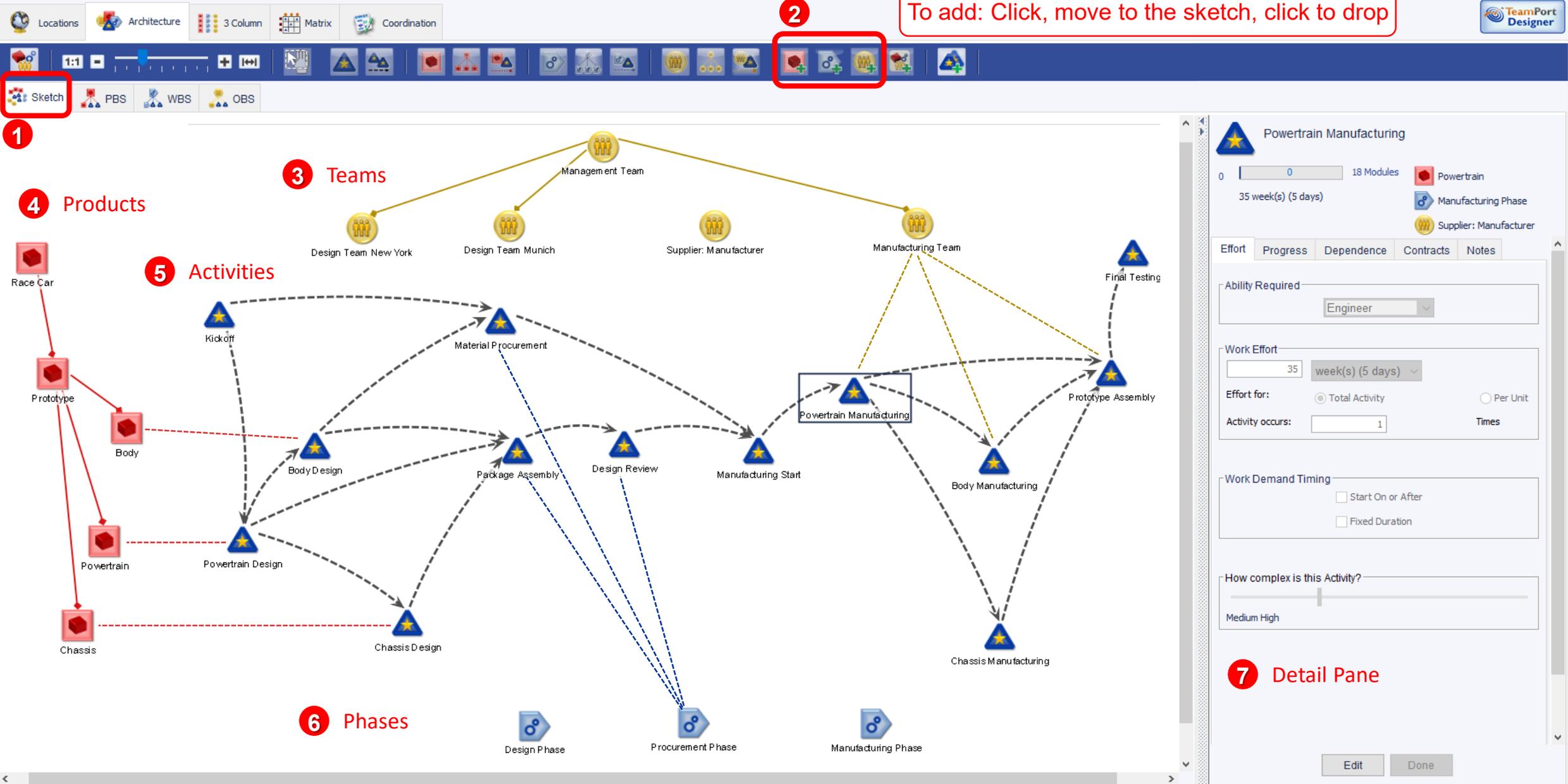




# Designer: Sketching the project architecture



To add: Click, move to the sketch, click to drop



1

4 Products

5 Activities

3 Teams

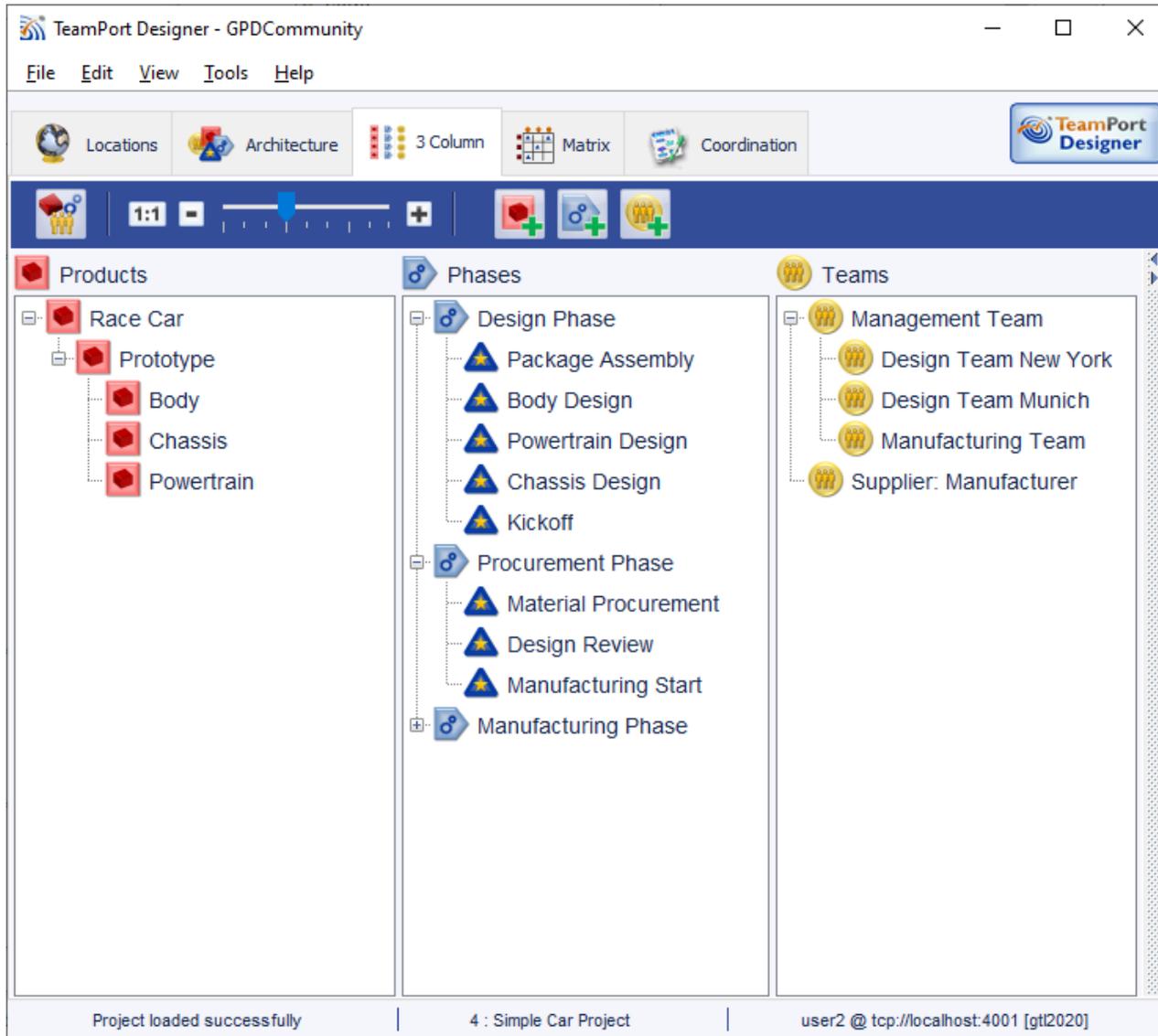
6 Phases

7 Detail Pane

2



# Three Column View



1. The View shows the three breakdown structures, with activities shown within the phase-based WBS
2. The list order of the project elements, and hierarchy, can be changed by dragging and dropping
3. New products, phases ,and teams can be added (see **green plus signs** in the toolbar).
4. The detail pane for a selected project element can be revealed on the right, just as in other views.



# Matrix Views



TeamPort Designer - GPDCommunity

File Edit View Tools Help

Locations Architecture 3 Column Matrix Coordination

1:1

Product by Team

Product \ Team

Management Team				
Race Car			2	
Prototype			1	
Body				
Chassis				
Powertrain				

Project loaded successfully | 4 : Simple Car

TeamPort Designer - GPDCommunity

File Edit View Tools Help

Locations Architecture 3 Column Matrix Coordination

1:1

Product by Phase

Product \ Phase

Management Team				
Race Car				
Prototype			1	
Body				1
Chassis				
Powertrain				1

Project loaded successfully | 6 : Simple Car Project

TeamPort Designer - GPDCommunity

File Edit View Tools Help

Locations Architecture 3 Column Matrix Coordination

1:1

Phase by Team

Phase \ Team (Contracts)

Management Team				
Design Phase				
Procurement Phase				
Material Procurement		D A	P	Q
Design Review		DQA		P
Manufacturing Start		PDQ		
Manufacturing Phase				

Project loaded successfully | 4 : Simple Car Project | user2 @ tcp://localhost:4001 [gtl2020]

TeamPort Designer - GPDCommunity

File Edit View Tools Help

Locations Architecture 3 Column Matrix Coordination

1:1

Phase by Phase

Phase \ Phase (DSM)

	Design Phase	Package Assembly	Body Design	Powertrain Design	Chassis Design	Kickoff	Procurement Phase	Material Procurement	Design Review	Manufacturing Start	Manufacturing Phase	Prototype Assembly	Chassis Manufacturing	Powertrain Manufacturing	Body Manufacturing	Final Testing	
Design Phase	X																
Package Assembly		X							FS								
Body Design		FF	X						Com...								
Powertrain Design		FS	Com...	X	Com...												
Chassis Design		FS			X												
Kickoff				FS		X		FS									
Procurement Phase							X										
Material Procurement								X		FF							
Design Review									X	FS							
Manufacturing Start										X					FS		
Manufacturing Phase											X						
Prototype Assembly												X					FS
Chassis Manufacturing												FS	X				
Powertrain Manufacturing												FS	Com...	X	Com...		
Body Manufacturing												FS			X		
Final Testing																X	

Project loaded successfully | 4 : Simple Car Project | user2 @ tcp://localhost:4001 [gtl2020]

# A Quick Overview: TeamPort Forecast



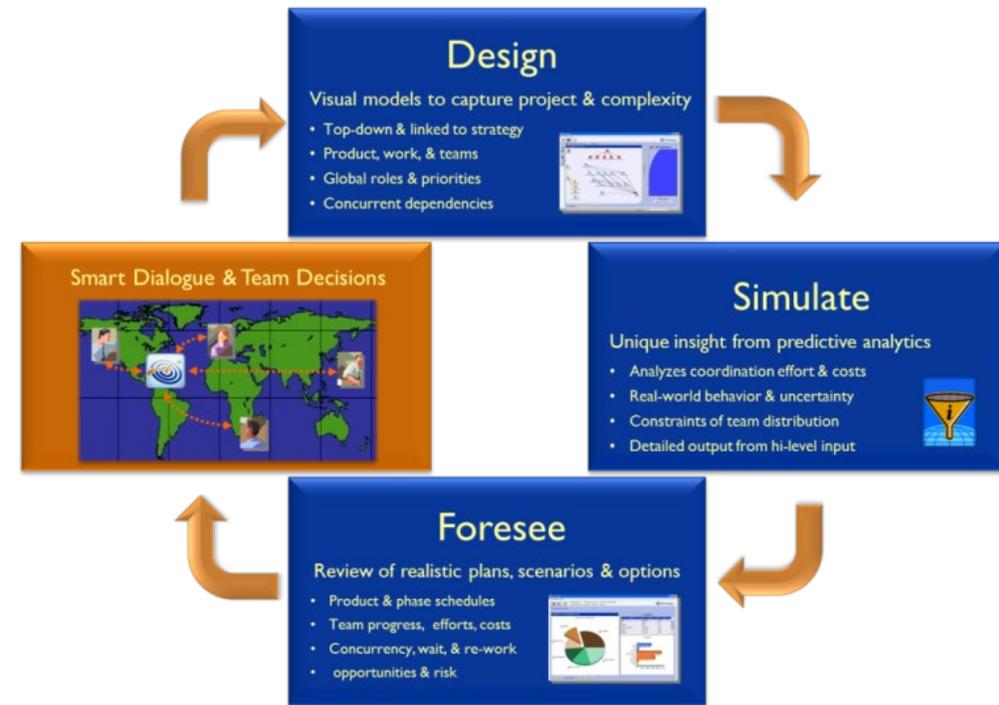
Version 4.1

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# Performance is Emergent

- At GPD, we've leveraged systems thinking and methods to better expose the underlying drivers of performance of projects. The total project system – it's elements, relationships and dynamics – combine in often surprising ways.
- More detail, without considering the effects of mixing team behaviors with project architecture, will not improve our ability to foresee. In fact, too much detail can obscure our view.
- The big idea from project design with TeamPort is that a project's cost, schedule and scope are not inputs, but outputs!

Cost, Schedule, and Scope at Quality are *emergent*.





# Running Simulations to create Forecasts

Select *Simulator...* in the Tools Menu

TeamPort Simulator

Description

Type here a description of the project model scenario for ease of recall

Settings Sampling

Critical Path Method (CPM)  GPD Method  Custom

Calculate Concurrent Dependencies  
Unchecked, dependencies will be treated as Finish-Start or Start-Start

Include Communication  
Unchecked, communication will not be calculated or included in the forecast

Use Time Zones  
Unchecked, all teams will be treated as though they are in the same time zone

Include Rework  
Unchecked, quality and rework will not be calculated or included in the forecast

Use Stochastics

Number of Runs 4  
Set this value low until you are confident that your project can be simulated.

Time Limit (weeks) 208  
Set Time Limit to slightly over the expected duration of your project

Start Cancel

2

Adjust settings and click Start

File Edit View Tools Help

Locations

Simulator...

Forecast...

Chat

Refresh

Debug Ctrl+F6

Coordination

Sketch

Exterior Mirror

4

Open the Forecast App

T2 Motor

Simulation completed successfully

3

A simulation takes seconds to a minute.  
If successful, a message is shown in lower left of Designer.

# Forecast: examining Simulation result(s)



## Forecasts include Work, Coordination, and Wait

TeamPort Forecast

File Options Help

Auto Mirror NextGen    Effort: 21,656 hrs    Duration: 330 days    Cost: \$4,093,695    Title: Simulation Run

Cost Overview    Cost by Team    Effort Overview    Effort by Team

Team Effort = 3,363.6 hrs    GAC Design

**GAC Design**

Type	Effort	%
Primary	1,828.5	54.4%
Assist	194.1	5.8%
Quality	163.7	4.9%
Rework	49.4	1.5%
Communication	377	11.2%
Travel	38.6	1.1%
Meeting	74	2.2%
Decision	110.5	3.3%
Wait	527.8	15.7%

**GAC Design**

**GAC Design**

Timeline

267: Auto Mirror NextGen    Tue Apr 21 19:58:44 EDT 2015

Active

T1 Supplier

Qtr 2, 2014			Qtr 3, 2014			Qtr 4, 2014			Qtr 1, 2015			Qtr 2, 2015	
Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May

T1 Supplier

Qtr 2, 2014			Qtr 3, 2014			Qtr 4, 2014			Qtr 1, 2015			Qtr 2, 2015	
Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May



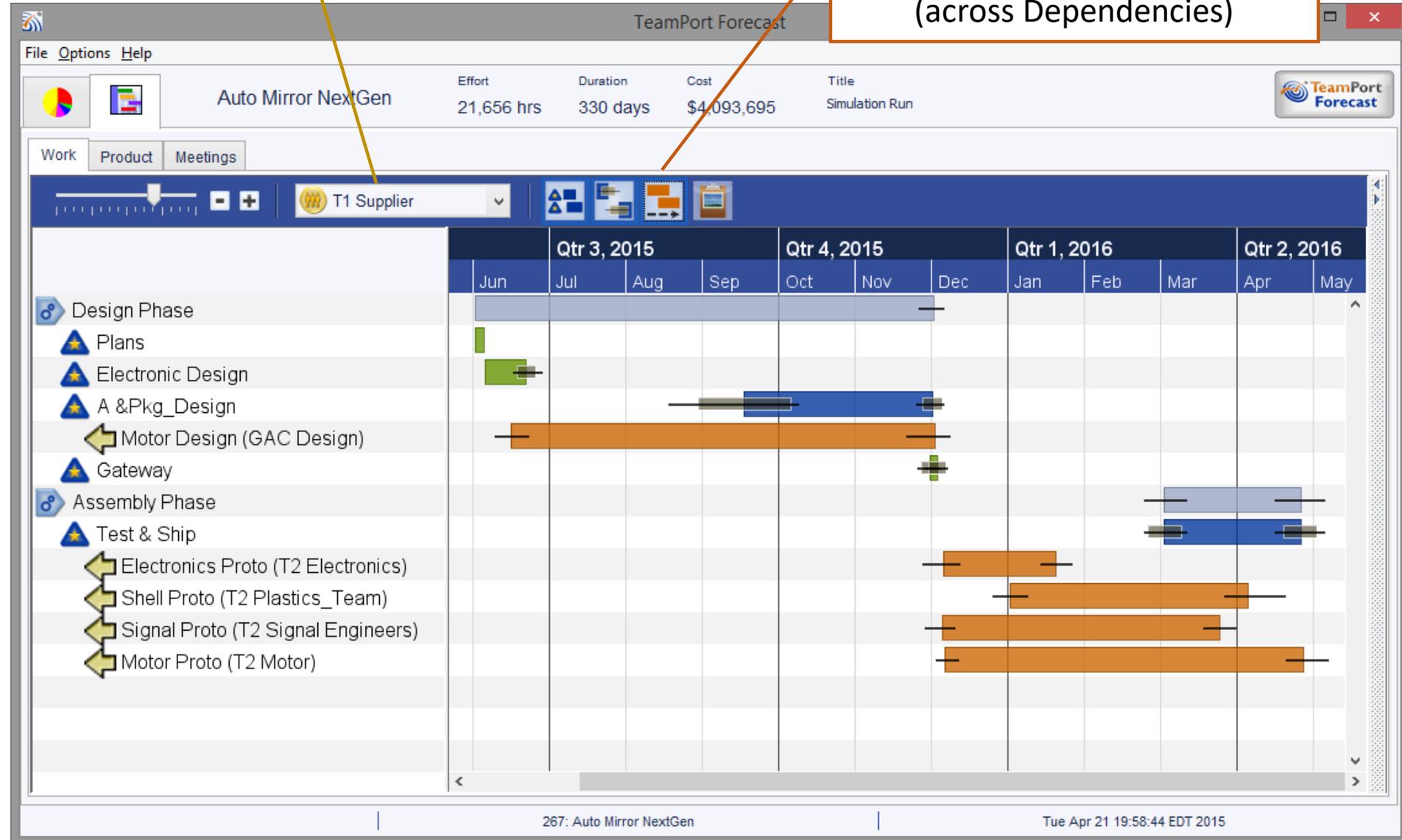
# Gantt Charts

Team Filter

Show Coordination  
(across Dependencies)

Schedule, shown here as a Gantt Chart, are outputs, rather than inputs, of planning.

Beyond traditional Gantt charts, these charts reveal uncertainty ranges of forecasts and the real effort and duration required for coordination.



# A Quick Overview: TeamPort Design Walk



Version 4.1

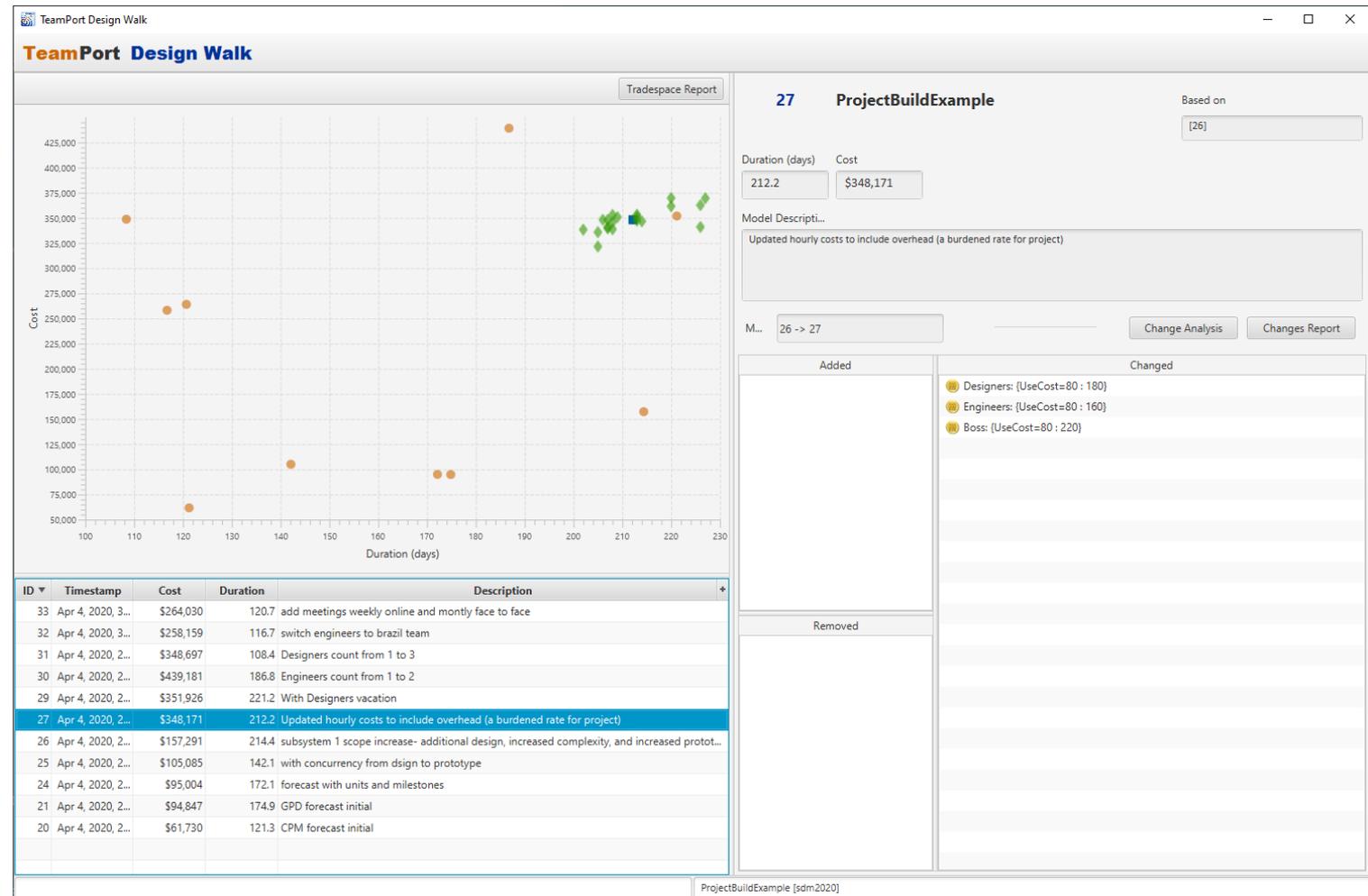
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# TeamPort Design Walk



- The **Design Walk** application is accessed from **Designer** or **Forecast**, in the Tools menu.
- It shows a path during project design sessions: a series of simulated models and forecasts over time.
- **Clicking** on a table row will highlight (dark blue) the scenario forecast in the tradespace diagram on the left.
- If a simulation includes multiple runs (Monte Carlo), **double clicking** on a table row will show the variation range in forecasts for that scenario.





## TeamPort as Platform

- This video has shared a quick overview of three TeamPort applications that used by Project Designers, sponsors, and teams.
- TeamPort has been architected to support a growing family of tools and services to support project model-building, sharing, analytics, and ongoing teamwork performance.





# Participating in the Project Design community

- Online resources at <https://teamport.com/members>, including user guides, videos, courses, case studies, and sample models
- the Help menu in Designer
- Professional development courses including Basic, Advanced, and Professional certification ([www.teamport.com/courses](http://www.teamport.com/courses))
- Your co-workers, colleagues, and others in the Project Design community
- GPD customer service and technical support via email at [support@teamport.com](mailto:support@teamport.com)

The screenshot shows the Teamport Help 4.0 application. On the left is a table of contents with the following sections:

- Getting Started
- TeamPort Overview
- Designer**
  - Designer Views
  - Designer Detail Panes
  - Controls: Alphabetical List
  - Controls: by Menu
- Forecast
  - Overview Charts
  - Gantt Charts
- Controls
  - Forecast Detail Panes
- Design Walk
  - DesignWalk
  - DesignWalk Tradespace Report
- Report and Sync
  - Report to Spreadsheet
  - Sync to and from Spreadsheet
  - Export to MS Project
  - DesignWalk Tradespace Report
- Commentary
  - What Is Project Design?
  - Adding Project Elements
  - Creating Relationships
  - How to Generate a Forecast
  - How the Simulator Works
- Reference Information
  - Designer User Interface
  - Designer Views
  - Viewing and Hiding Elements
  - Definitions
  - Contract Types
  - Dependency Types
  - Printing

The main content area displays a help article titled "Designer: Teamport's Project Model Builder". The article includes the TeamPort Designer logo and the following text:

**TeamPort Designer is visual modeling software to rapidly capture the essence of complex projects.**

Collaboratively, teams discover the interrelationships among products, tasks, people, locations, coordination, and work schedules that make up a project. Hi-level visualization of dependencies and relationships is a unique strength of TeamPort Designer. The impact is clarity of scope, roles, and effective utilization of teams and critical resources. Improve communication among teams and coordinate processes to save time, money, and effort.

So that project leaders can focus on their own expertise in the teams, product, and work at hand, we've eliminated the need for them to be software experts. Project managers and team leaders access multiple project views, enabling global, collaborative project design. TeamPort Designer's user-supportive environment dramatically improves the productivity of project managers and teams.

Project models are rapidly created and improved for more accurate plans that are easily maintained.

The Designer User Interface is composed of six parts: Menu, Navigation (to select Views), View specific Toolbars, a View, Detail Panes, and System Information.

The screenshot also shows a diagram of the Designer User Interface with labels pointing to various components:

- Menus:** Points to the File, Edit, View, Tools, Help menu.
- Navigation:** Points to the Locations, Architecture, Column, Matrix, Coordination tabs.
- Toolbar:** Points to the toolbar with various icons.
- View:** Points to the main workspace displaying a network diagram.
- Detail Pane:** Points to the right-hand pane showing a list of elements.
- System Information:** Points to the bottom status bar.

At the bottom of the screenshot, it states: "All parts of the UI are covered in depth in other Help articles except the System Info section."

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Concluded