

TeamPort Project Model Elements



Locations are where teams are based.



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 apply abilities to work and coordinate.

Teams work on activities through Contracts to indicate a role in the activity. Teams can be grouped in an Organizational Breakdown Structure (**OBS**).



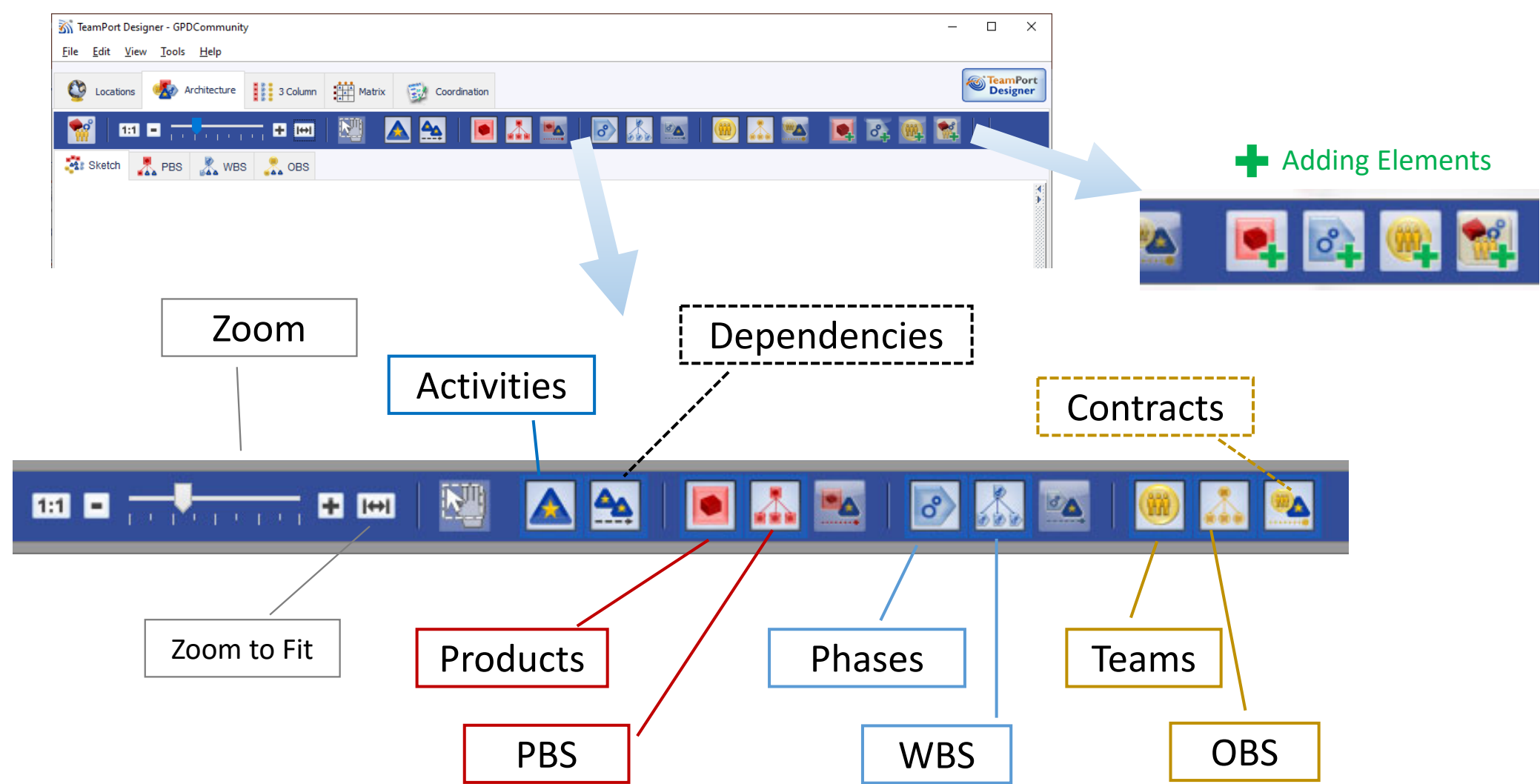
Phases are grouped activities as a flow of progress over time..

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



Activities represent progress toward the completion of Products.

Toolbars: Viewing and Hiding Project Elements and Relationships



Adding a Project Element (Architecture View)

Buttons to add a Product, Phase, or Team are shown in the toolbar. Look for the **green plus** on the icon.

For example:

1. Click once on the Add Team Button
2. Move the mouse to where the team will be placed
3. Click to add the new team

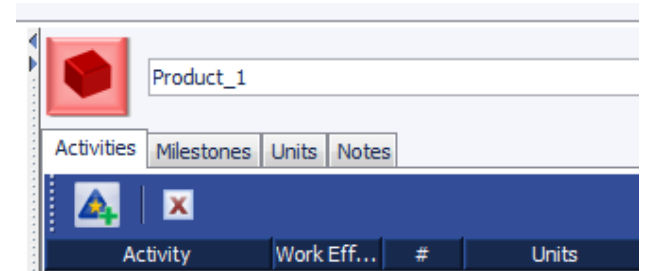


Activities are added within Products. See the activities tab in the Product detail pane.

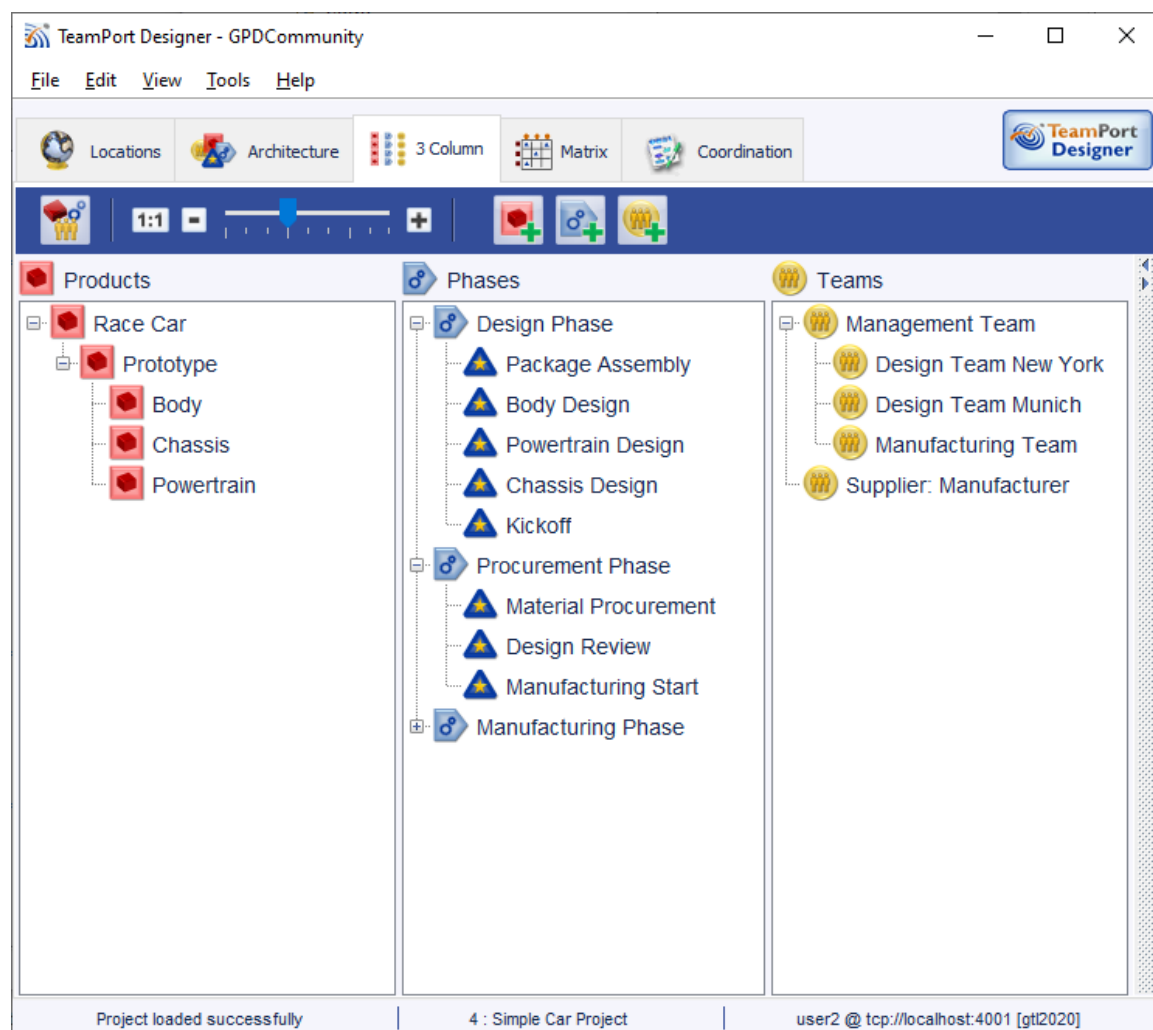
Deleting selected elements: select and hit the delete key (function delete on a Mac). Also available in Edit menu.

Undo (^Z) allows small steps back (layout, breakdown structures, attribute values) during model creation.

Restoring deleted objects is not yet available. To ensure recoverability, save often and load a previous version as needed.



Three Column View



1. The View shows 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

Product by Team

Product \ Team	Management Team	Design Team New York	Design Team Munich	Manufacturing Team	Supplier Manufacturer
Race Car	2		1		
Prototype	1	2		1	
Body			1	1	
Chassis		1			1
Powertrain		1			1

TeamPort Designer - GPDCommunity

File Edit View Tools Help

Locations Architecture 3 Column Matrix Coordination

Product by Phase

Product \ Phase	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
Race Car																
Prototype		1														
Body			1													
Chassis				1												
Powertrain					1											

TeamPort Designer - GPDCommunity

File Edit View Tools Help

Locations Architecture 3 Column Matrix Coordination

Phase by Team

Phase \ Team (Contracts)	Management Team	Design Team New York	Design Team Munich	Manufacturing Team	Supplier Manufacturer
Design Phase					
Procurement Phase					
Material Procurement	D A	P		Q	
Design Review	DQA		P		
Manufacturing Start	PDQ				
Manufacturing Phase					

TeamPort Designer - GPDCommunity

File Edit View Tools Help

Locations Architecture 3 Column Matrix Coordination

Phase by Phase

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

Changing Team Size and Availability

The Team Detail Pane is shown on the right when selecting the yellow circle team icon.

CityCar2015

Industrial Design

Location

Location_1

Profile Activities Notes

Capacity

Member Count

4

Schedule

40 hrs/wk

Cost

Hourly work cost

\$80.00

Apply to all abilities

Abilities

Communicate

Decide

Transfer

Work

View Ability

Team Size

Team Schedule Availability

For customized schedules, unlink the schedule from the location

Team Work Schedule

Industrial Design

Location_1

Linked to Location: Location_1

View in Time Zone: Not Linked Location_1

Work Week Exceptions

40 hrs/wk

Sun Mon Tue Wed Thu Fri Sat

12:00 AM

1:00 AM

2:00 AM

3:00 AM

4:00 AM

5:00 AM

6:00 AM

7:00 AM

8:00 AM

9:00 AM

10:00 AM

11:00 AM

12:00 PM

1:00 PM

2:00 PM

3:00 PM

4:00 PM

5:00 PM

OK Cancel

Schedule Wizard

Set Hours Per Week: (1 - 168) 40

OK Cancel

Schedule wizard for rapid adjustment

Activity - Detailed Attributes

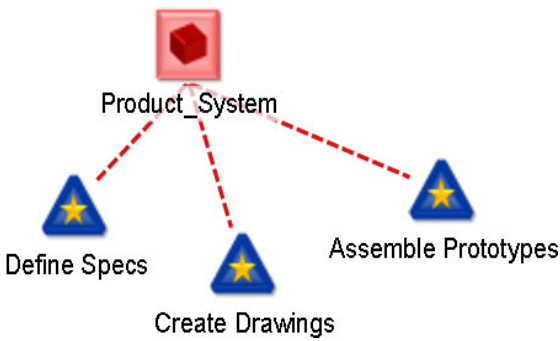
- Scope demanded to deliver part (or all) of a product
 - progress units
 - nominal effort
 - skills required
 - complexity



- Assigned through a pattern of roles called contracts
- Can be grouped in Phases

Nominal effort is the hours required for one person of average ability to complete the activity if they have all the resources required and are not interrupted.

Note that effort is NOT duration. Duration is an emergent output due to many factors.



Roles on this activity can be viewed and edited in the contracts tab.

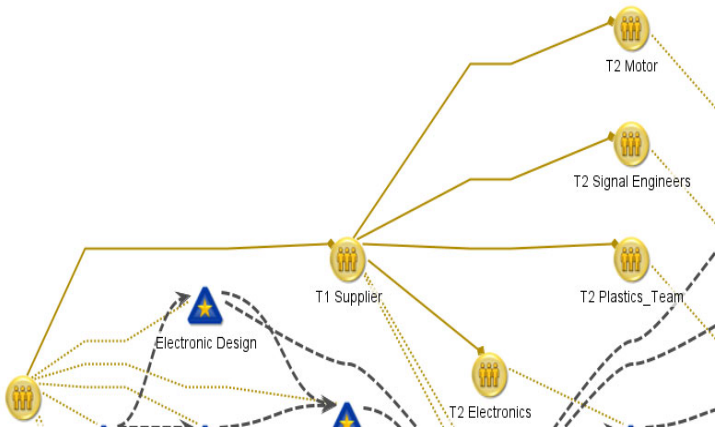


Roles: Teams assigned to Activities as contracts

Role	Responsibility
Primary*	works to complete the activity and coordinates with others.
Decision*	handles exceptions should a quality issue be uncovered.
Quality	reviews work in progress to discover errors.
Assist	works but does not coordinate (lends capacity to the primary).

* 1 team, and only 1 team, required per activity

Phase (Team Contracts)	GAC Design	T1 Supplier	T2 Plastics_Team	T2 Signal Engineers	T2 Electronics	T2 Motor
Design Phase						
Gateway	PDQ	A	A	A	A	A
Plan	PDQ	A				Q
A &Pkg_Design		PDQ				
Motor Design	PDQ					Q
Signal Design	PDQ					
Shell Design	PDQ					
Electronic Design	PDQ	A			A	
Prototype Phase				PDQ		
Signal Proto				PDQ		
Shell Proto						
Electronics Proto					PDQ	
Motor Proto		D				P Q
Assembly Phase						



The Activity detail pane (above left) and the Matrix view (Phase by teams, above right) show the contracts for all roles by teams..

The architecture views show the Primary contract as a dashed yellow line.

Hierarchy (Breakdown Structures) vs. Links (Dependencies & Contracts)



The cross cursor is used to drag elements.

- An element dragged and dropped onto another icon forms a *breakdown structure*.



When moving the cursor near the top of an icon, it changes to a hand.

- **Click and hold using the hand** to draw a link from one icon to another, *creating a contract or dependency*.

Source

Target



Team



Team

Creates **Organizational Breakdown Structure (OBS)**—The Target becomes the parent



Team



Activity

Creates a **Contract**, the relationship between a Team and an Activity that represents work



Product



Product

Creates **Product Breakdown Structure (PBS)**—The Target becomes the parent



Activity or Phase



Phase

Creates **Work Breakdown Structure (WBS)**—The Target becomes the parent

Creates a **Dependency**. The Target becomes the dependent.



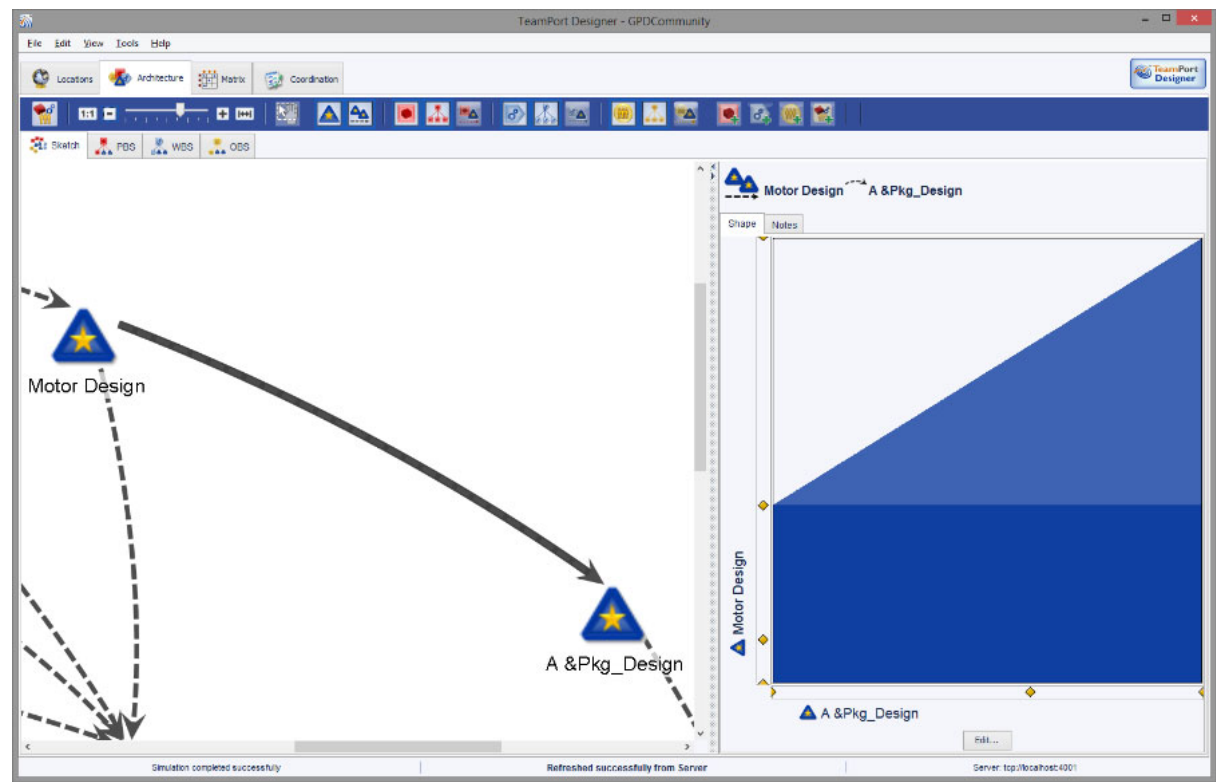
Activity or Phase



Activity

Creates a **Dependency**. The Target becomes the dependent.

Changing Dependence Shape (Concurrency)



A dependency is added by drawing a link from upstream to downstream activities.

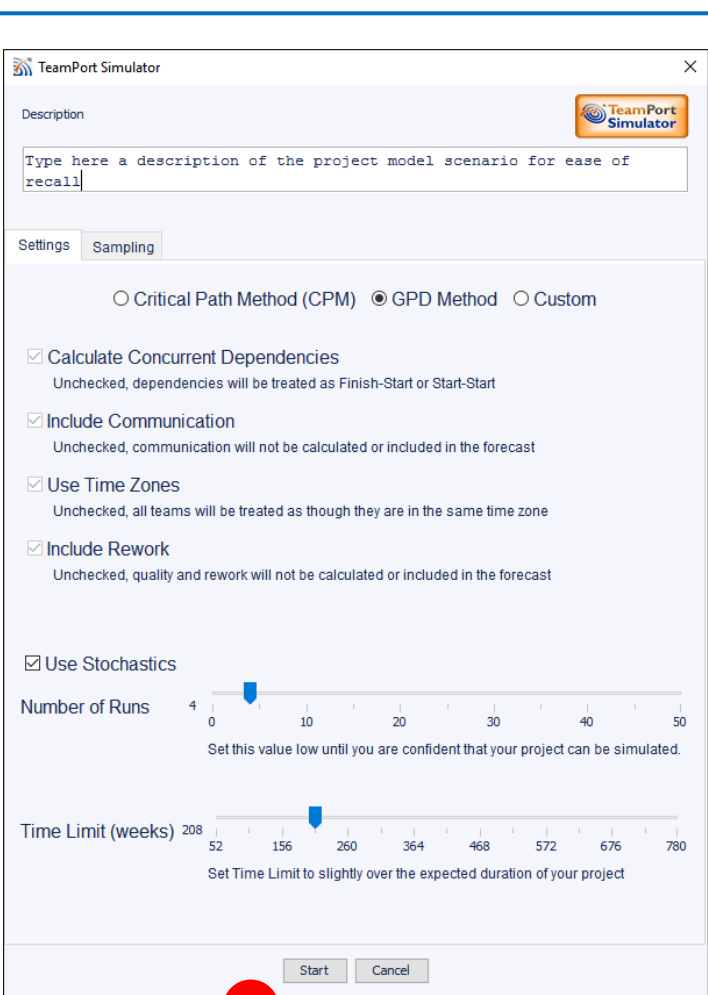


The shaded area, in blue, is the dependence represented as a constraint; an area of needed information from upstream to downstream during concurrent progress.

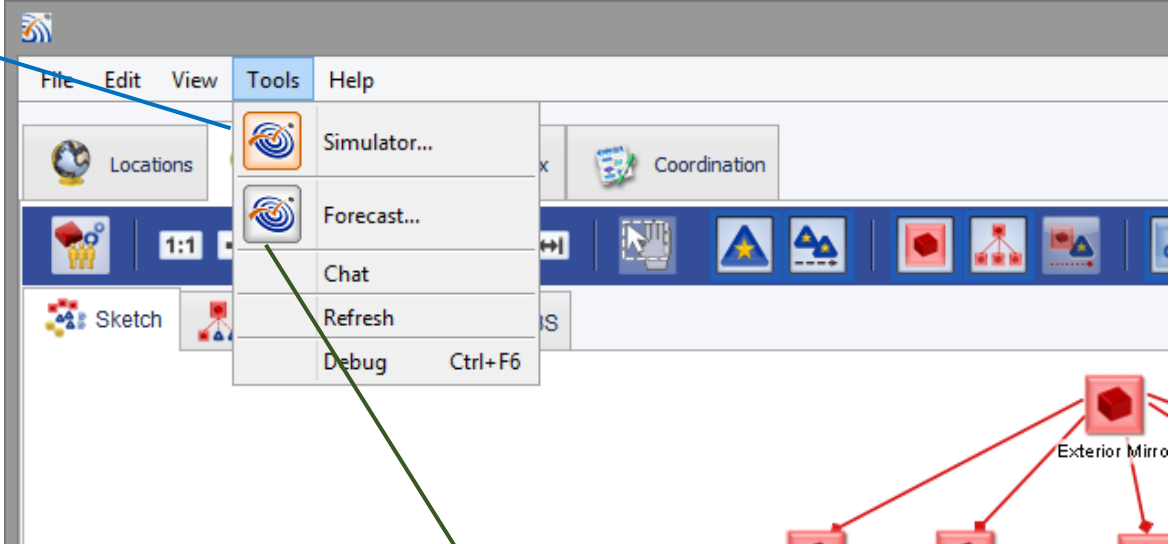
The shape is edited in a popup pane by clicking edit in a dependencies detail pane.

Running Simulations to create Forecasts

Select *Simulator...* in the Tools Menu



2 Adjust settings and click Start

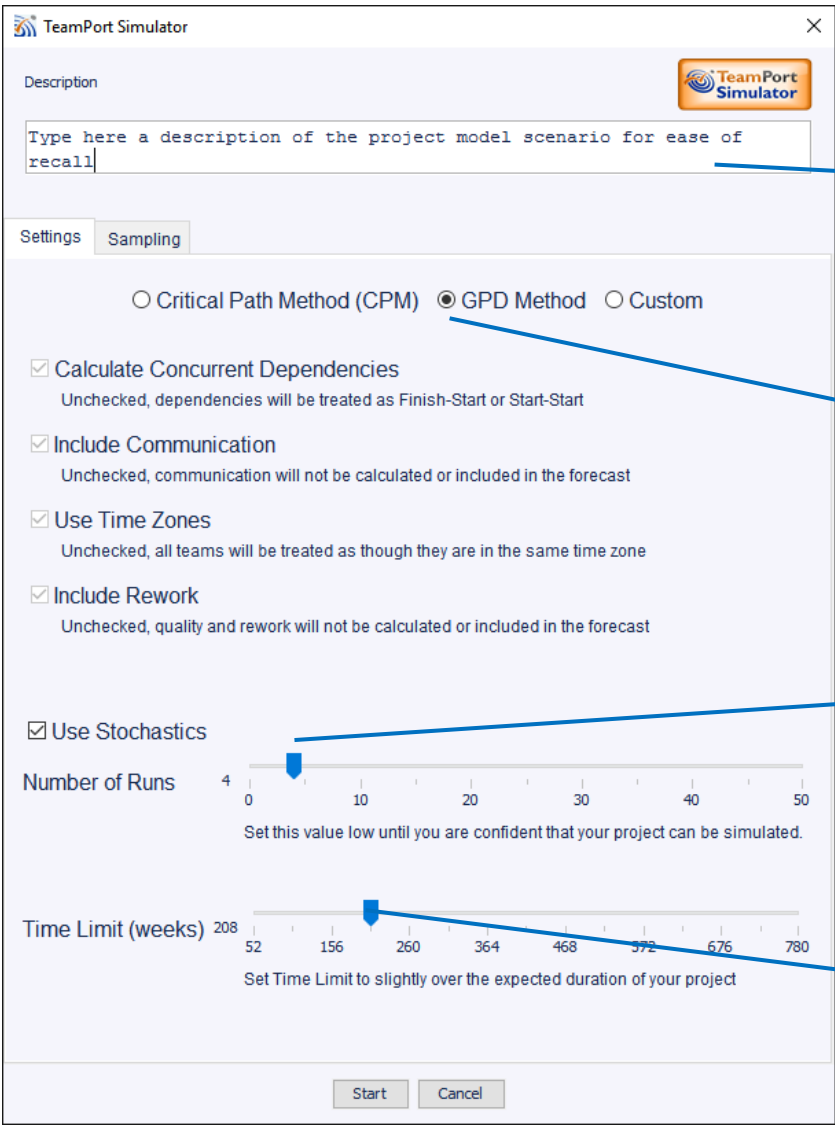


4 Open the Forecast App



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

Simulations Settings



1 Describe recent model changes, so it is easier to later review many forecasts and return to the original model.

2 **GPD Method** for simulations is recommended to capture realistic dynamics. If you change to traditional CPM or custom settings, be aware of the checkboxes below.

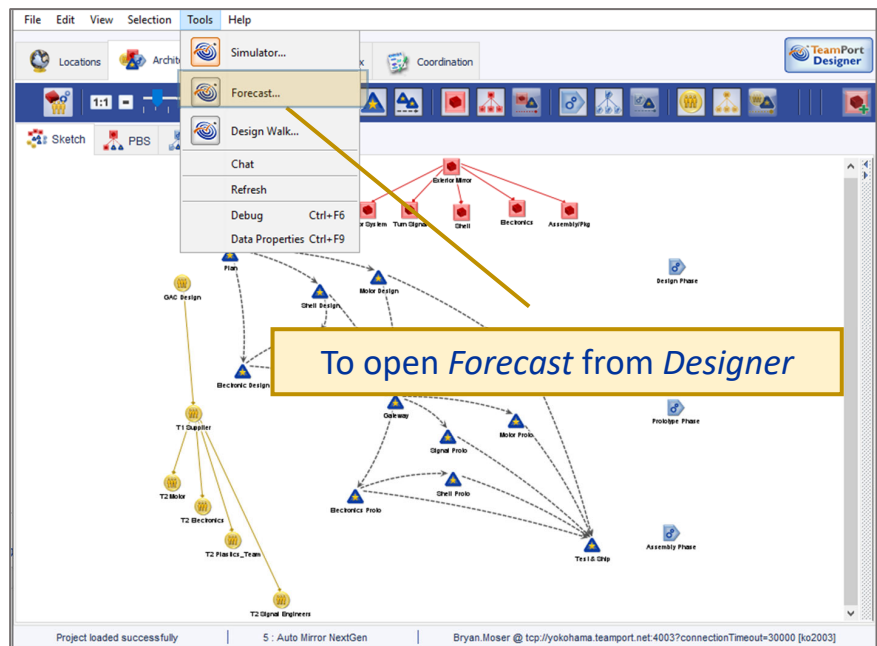
3 **# of runs** is used to indicate a Monte Carlo sim. Early in building a model, set this (3 to 5). After a model is built and explored, major scenarios can be simulated with more detail (20+)

4 **Time Limit** tells the simulator to stop trying to forecast a project if the forecast is going too long. Set higher if a simulation fails due to time limit.

Opening and Selecting a Forecast

TeamPort Forecast visualized forecast of complex projects, dynamic outcomes, and root cause of progress, costs, and risk.

- Forecast is opened from the Designer Tools menu. (Cntrl Shift F)
- Forecast will be blank when first opened. See File -> Open to select amongst completed forecasts.
- Recently loaded forecasts are easily compared by toggling quickly between them.



index

21

comm

conc

tmzn

rewk

runs

30

TeamPort Forecast

The forecast # and simulator settings are shown in the upper right

File -> Open the Forecast chooser (Cntrl O)

Select Forecast

Index	Date	Project Name	Av. Finsh	Av. Cost	Description
5	Apr 4, 2020, 1:18 PM	Auto Mirror NextGen	Mar 26, 2015	\$2,373,601	GPD forecast
4	Apr 4, 2020, 1:17 PM	Auto Mirror NextGen	Feb 4, 2015	\$1,453,859	CPM forecast

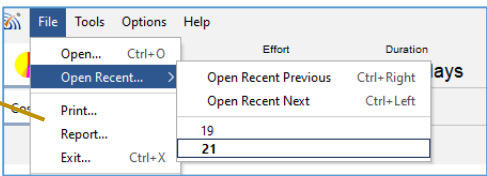
Open

Work

Team	Cost	%
Electronics	\$79,339	5.1%
Motor	\$119,994	7.7%
Signal Engineers	\$62,773	4%
Electronics Team	\$68,050	4.4%
Design	\$508,196	32.6%
Total	\$1,055,955	67.7%
Supplier	\$147,369	9.4%
Electronics	\$73,562	4.7%
Motor	\$540	0%
Signal Engineers	\$494	0%
Electronics Team	\$645	0%
Design	\$130,835	9.7%
Total	\$373,244	23.9%

Select a row and click Open to load a particular forecast

Toggle amongst recently loaded forecasts from File -> Open Recent (Cntrl ← and Cntrl →)



Forecast: examining Simulation result(s)

Overviews of cost and effort are shown in the first tab, for the while project and by team.

The first View tab shows Cost and Effort overviews

Details for the selected cost, effort, or team are shown in the pane on the right.

Various types of effort are shown: **Forecasts include Work, Coordination, and Wait**

File Tools Options Help

Auto Mirror NextGen

Effort 12,300

Cost Overview Cost by Team Effort Overview Effort by Team

Team Effort = 5,078 hrs

T1 Supplier

T1 Supplier 41%

GAC Design 28%

10% T2 Motor

11% T2 Electronics

5% T2 Signal Engineers

5% T2 Plastics Team

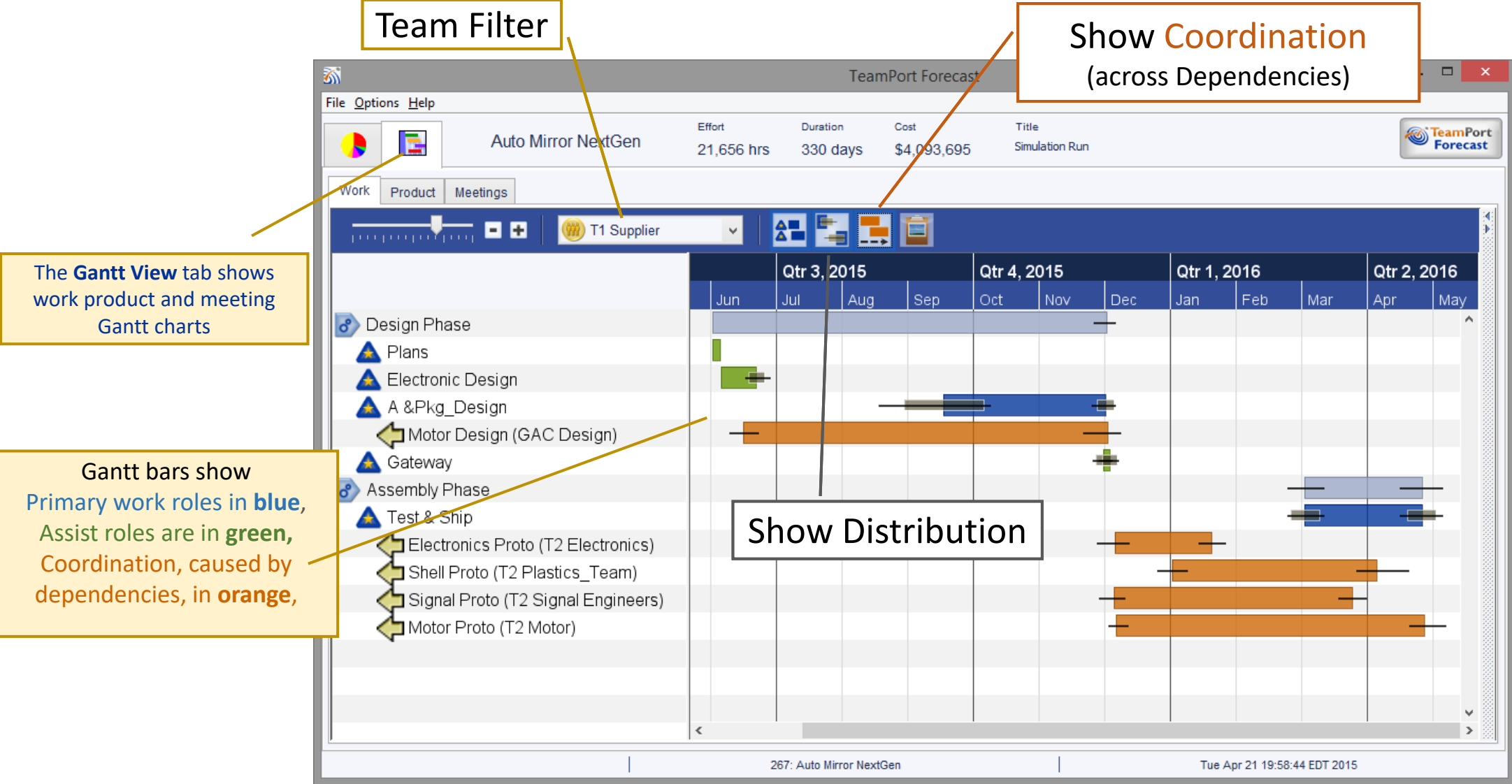
Type	Effort	%
Primary	1,120.4	22.1%
Assist	826.4	16.3%
Quality	109.8	2.2%
Rework	57.3	1.1%
Communication	1,984.5	39.1%
Travel	9.7	0.2%
Meeting	24	0.5%
Decision	78.3	1.5%
Wait	867.6	17.1%

Timeline

Work shown in blue, Coordination in orange, and Wait in gray

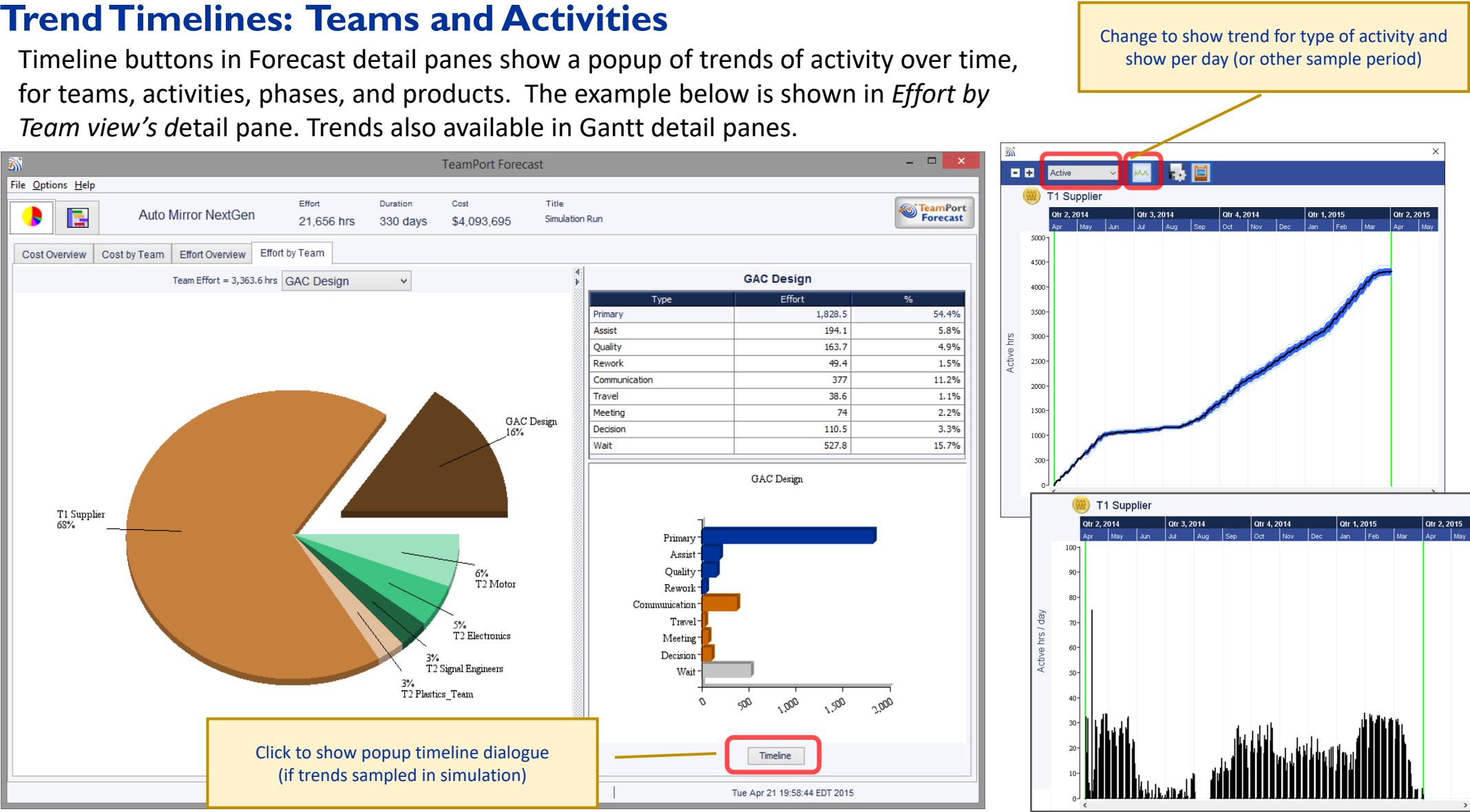
Gantt Charts filter by Team and show Coordination

TeamPort Job Aid V4.6



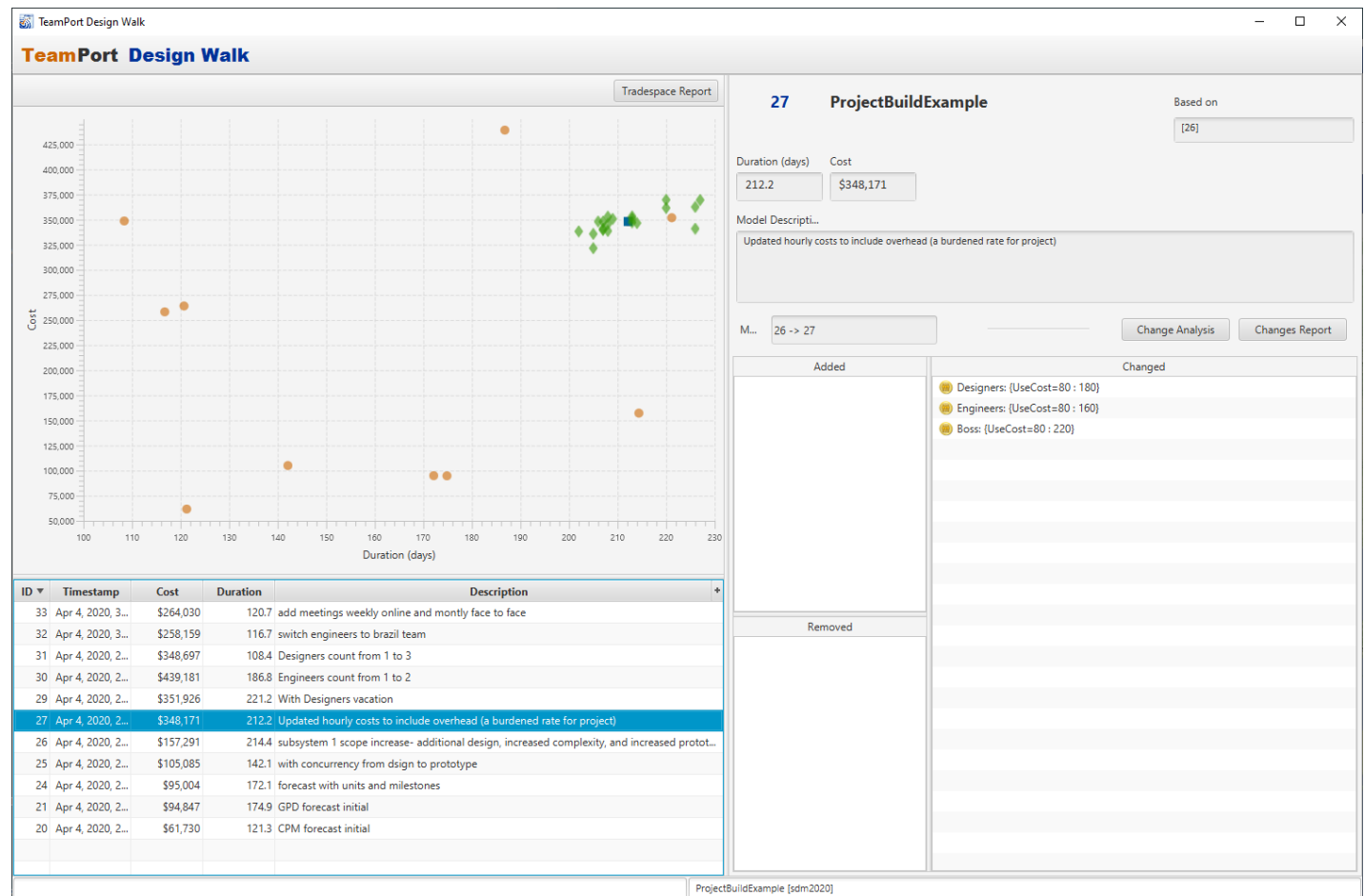
Trend Timelines: Teams and Activities

Timeline buttons in Forecast detail panes show a popup of trends of activity over time, for teams, activities, phases, and products. The example below is shown in *Effort by Team view's* detail pane. Trends also available in Gantt detail panes.



The **Design Walk** application is accessed from **Designer** or Forecast, in the Tools menu. (*Cntl Shift W*)

- *Design Walk* Shows a series of forecasts from simulated project models.
- **Clicking** on a table row will highlight (dark blue) the scenario forecast in the tradespace diagram.
- If a simulation includes multiple runs (Monte Carlo), **double clicking** on a table row will show the variation range for that scenario.
- The **Tradespace Report** button exports this tradespace data to an Excel workbook.



Participating in the Project Design community


- Online resources at <https://teamport.com>, 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)
- Your co-workers, colleagues, and others in the Project Design community
- GPD customer service and technical support via email at support@teamport.com

Teamport Help 4.0

- 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
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- Commentary
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 - How the Simulator Works
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 - Designer User Interface
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 - Viewing and Hiding Elements
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 - Contract Types
 - Dependency Types
 - Printing

Designer: Teamport's Project Model Builder

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

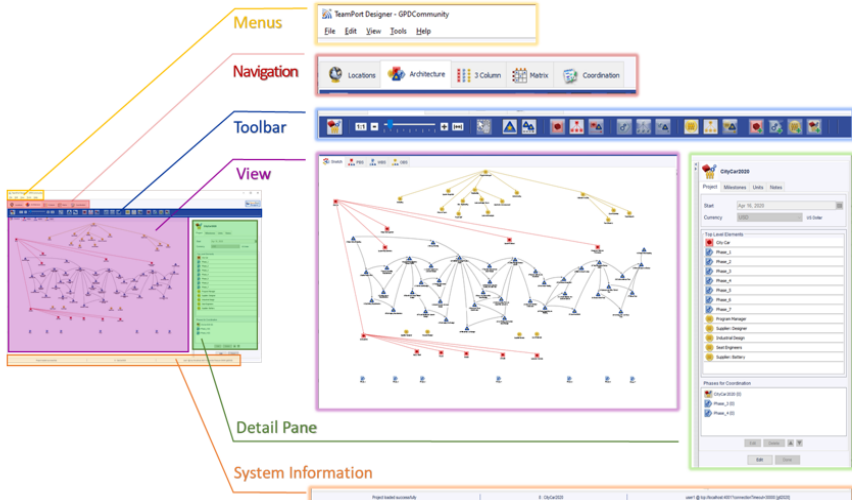


Collaboratively, teams discover the interrelationships among products, tasks, people, locations, coordination, and work schedules that make up a project. Hi-level visualization of dependencies and relationships is a unique strength of TeamPort Designer. The impact is clarity of scope, roles, and effective 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, View specific Toolbars, a View, Detail Panes, and System Information.



The screenshot shows the TeamPort Designer interface with several callouts pointing to specific UI elements:

- Menu:** Points to the top menu bar with options like File, Edit, View, Tools, Help.
- Navigation:** Points to the navigation pane on the left with icons for Locations, Architecture, Culture, Matrix, and Coordination.
- Toolbar:** Points to the toolbar below the navigation pane with various icons for project management.
- View:** Points to the main workspace area displaying a complex network diagram of project elements and their relationships.
- Detail Pane:** Points to the right-hand pane showing a list of project elements and their details.
- System Information:** Points to the bottom status bar showing project information.