

Getting Started

A Quick Overview of Project Design with the TeamPort Platform

Version 4.5

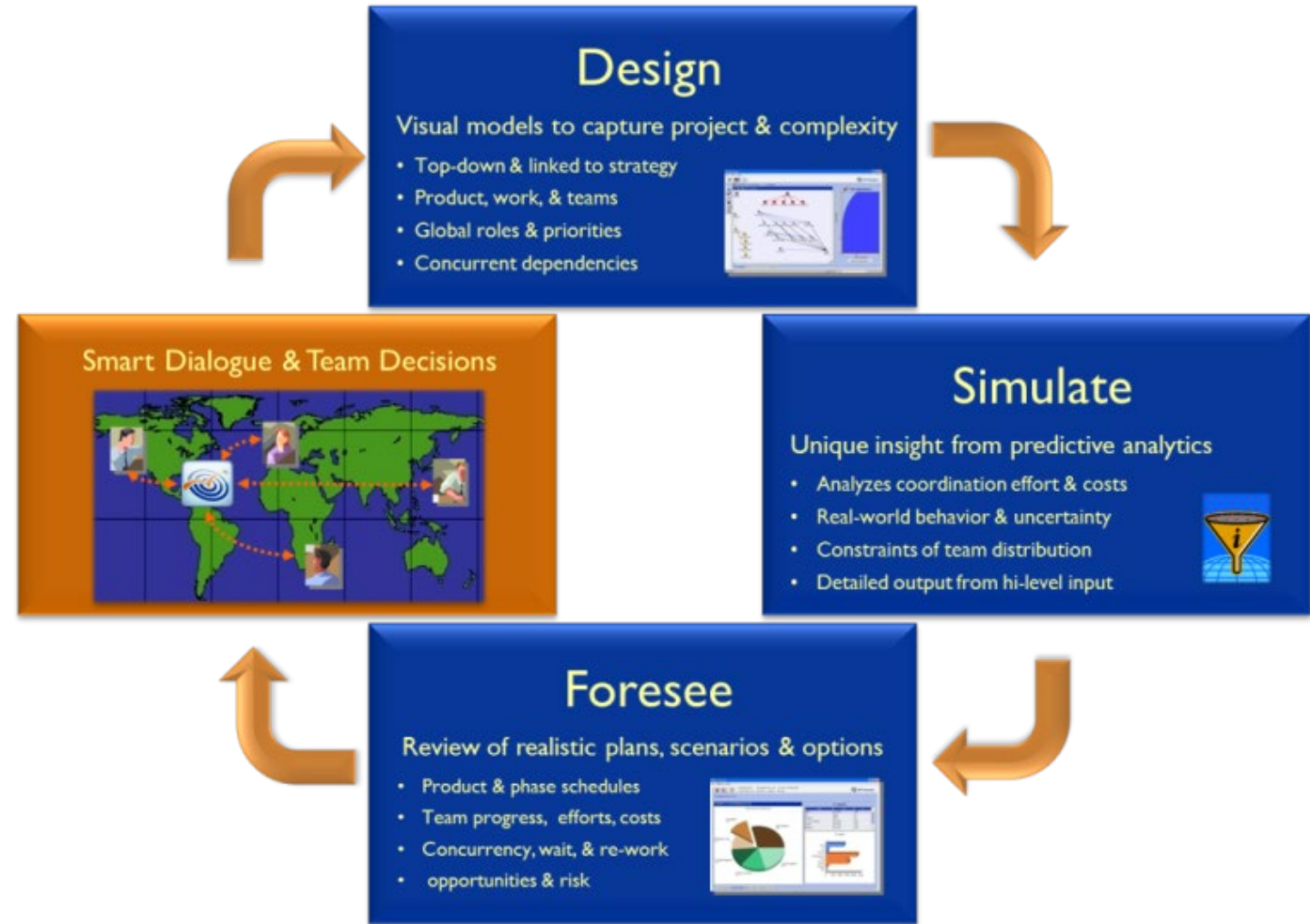
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Project Design is an Iterative, Social Process

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

Based on 20 years of research and field experience, our methods and tools for model-based project management are guided by these principles:

- 1. Encourage** engagement and 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. Simulate** rapidly and iteratively to yield key insights
Simulation forecasts the likely performance -- cost, schedule, and scope – as emergent *outputs*.
- 5. Generate** many feasible designs of the project – many plans
A tradespace of project designs shows trade-offs, teams converge on a realistic and optimal baseline plan

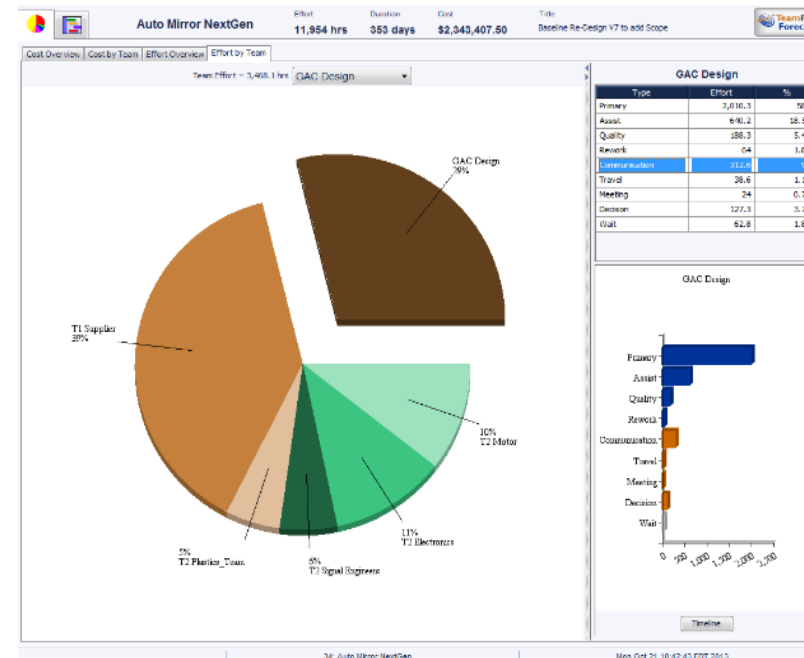
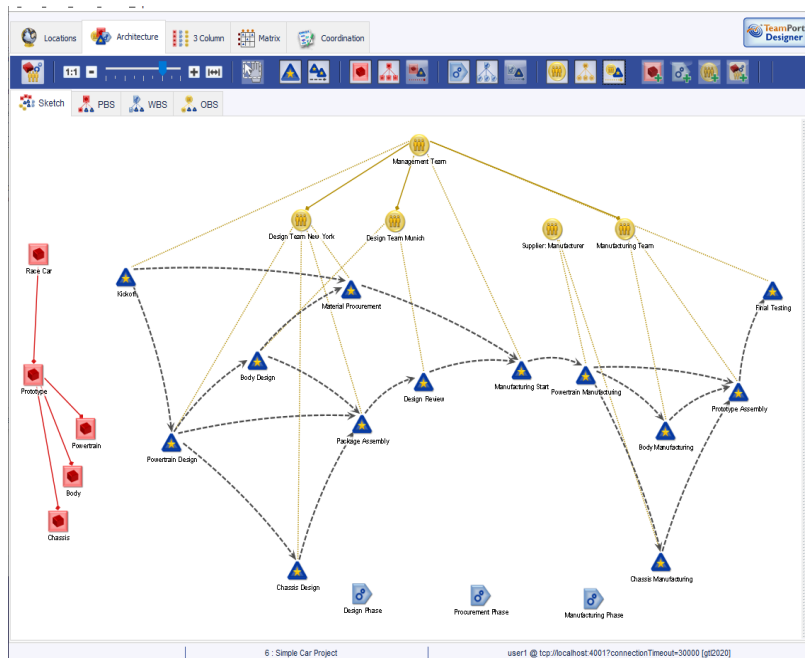




TeamPort is a platform for Model-based Project Management

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 4.5

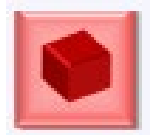
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TeamPort Project Model Elements



- **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

TeamPort Designer - GPDCCommunity

File Edit View Selection Tools Help

Locations Architecture 3 Column Matrix Coordination

1:1

Sketch PBS WBS OBS

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)

Edit Delete

Edit Done

Project loaded successfully | 8 : CityCar2020 | user1 @ tcp://localhost:4001?connectionTimeout=30000 [gl2020]

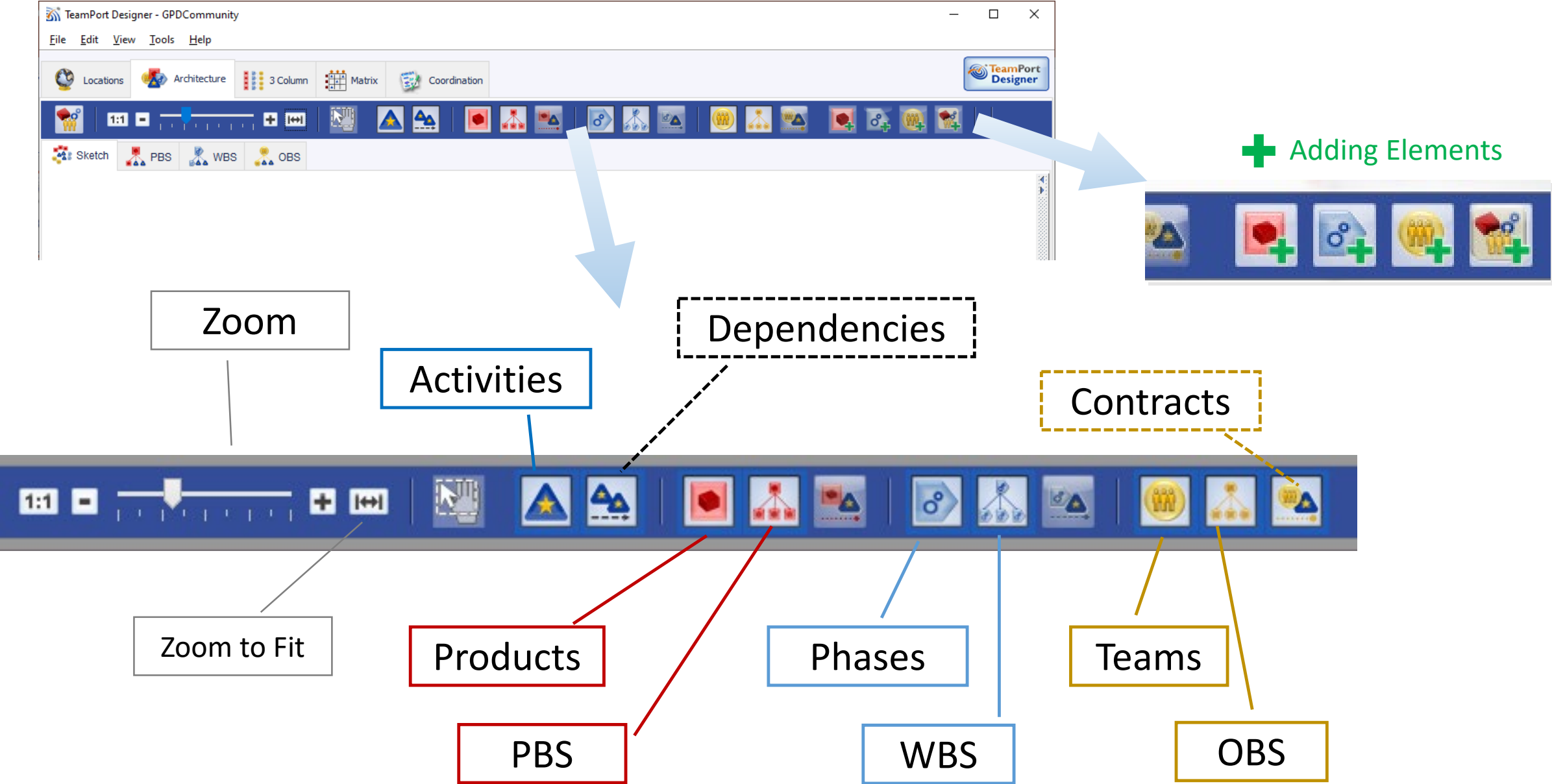




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- The screenshot shows the SharePoint Designer 2010 interface. The top ribbon includes tabs for 'File', 'Site', 'Share', 'Tools', and 'Help'. Below the ribbon, there are icons for 'Locations', 'Archives', 'Provision', 'Reports', and 'Connections'. The main content area is titled 'Management Team' and shows a list of team members. The right sidebar displays the 'Meeting Information' section, which includes a 'Meeting Name' field, a 'Meeting' dropdown, a 'Date' field, and a 'Project & Place' field. The bottom status bar indicates the project is loaded successfully.

The screenshot displays a project management application with a Gantt chart and a task list. The Gantt chart at the top shows a timeline from 0 to 100% with tasks like 'Design Phase', 'Procurement Phase', and 'Manufacturing Phase'. Below it, a task list shows details for 'Design Phase' tasks, including 'Kickoff', 'Body Design', 'Chassis Design', 'Powertrain Design', and 'Package Assembly', with columns for status (e.g., PDQ, D, P, Q, DQA, D A) and completion percentage.

Toolbars: Viewing and Hiding Project Elements and Relationships





Designer: Sketching the project architecture

1 Sketch

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

3 Teams

4 Products

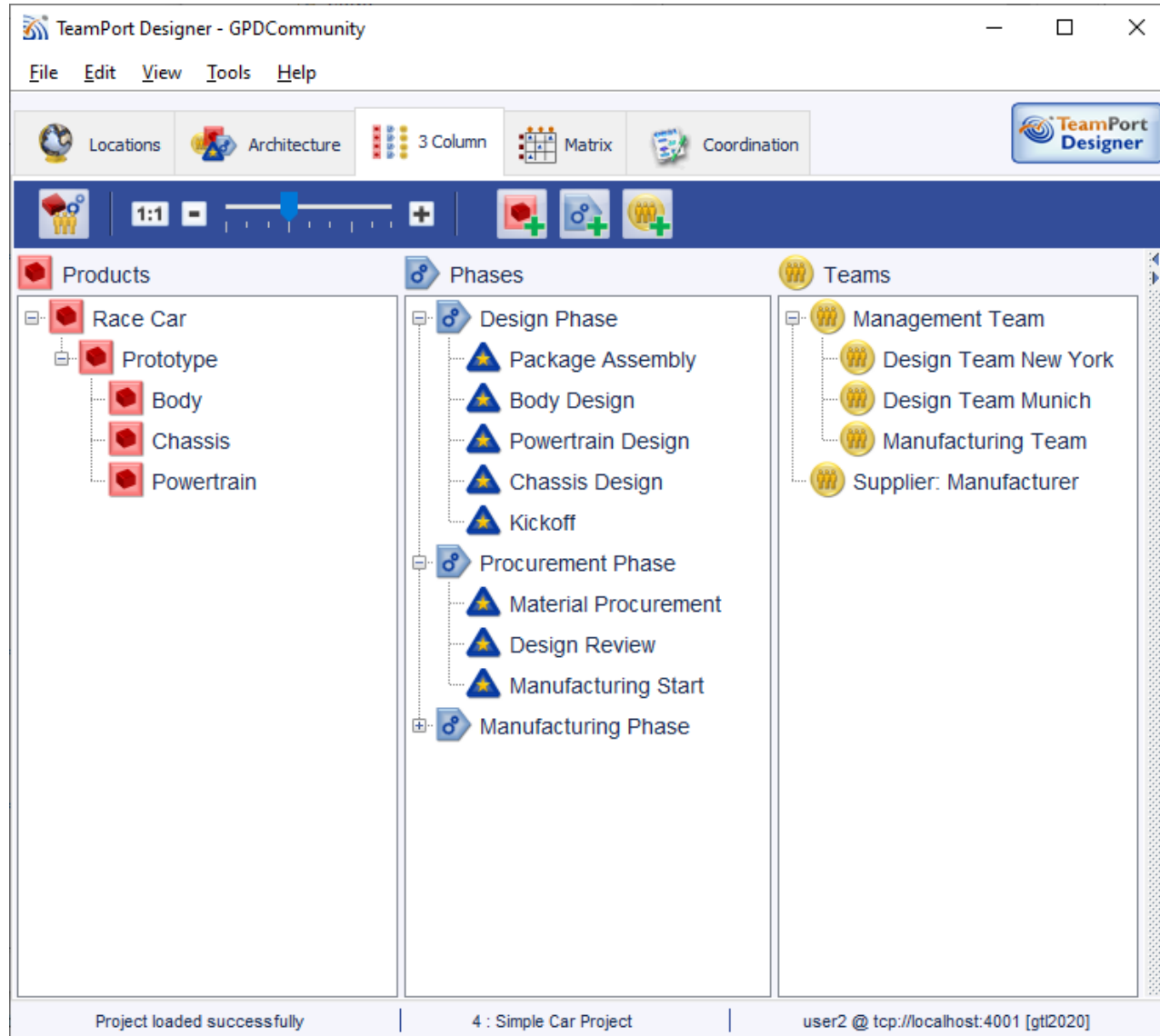
5 Activities

6 Phases

7 Detail Pane



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



Product by Team



Product by Phase



Phase by Team



Phase by Phase

TeamPort Designer - GPDCCommunity

File Edit View Tools Help

Locations Architecture 3 Column Matrix Coordination

1:1

Product by Team Product by Phase Phase by Team

Product \ Team

| Product | Team |
|------------|------|
| Race Car | 2 |
| Prototype | 1 |
| Body | |
| Chassis | |
| Powertrain | |

Project loaded successfully | 4 : Simple Car

TeamPort Designer - GPDCCommunity

File Edit View Tools Help

Locations Architecture 3 Column Matrix Coordination

1:1

Product by Team Product by Phase Phase by Team

Product \ Phase

| Product | Phase |
|------------|-------|
| Race Car | |
| Prototype | 1 |
| Body | |
| Chassis | |
| Powertrain | |

Project loaded successfully | 6 : Simple Car Project

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File Edit View Tools Help

Locations Architecture 3 Column Matrix Coordination

1:1

Product by Team Product by Phase Phase by Team

Phase \ Team (Contracts)

| Phase | Team |
|----------------------|------|
| Design Phase | |
| Procurement Phase | |
| Material Procurement | D A |
| Design Review | DQA |
| Manufacturing Start | PDQ |

Project loaded successfully | 4 : Simple Car Project

TeamPort Designer - GPDCCommunity

File Edit View Tools Help

Locations Architecture 3 Column Matrix Coordination

1:1

Product by Team Product by Phase Phase by Team Phase by Phase

Phase \ Phase (DSM)

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

Project loaded successfully | 4 : Simple Car Project

user2 @ tcp://localhost:4001 [gtt2020]

A Quick Overview: TeamPort Forecast



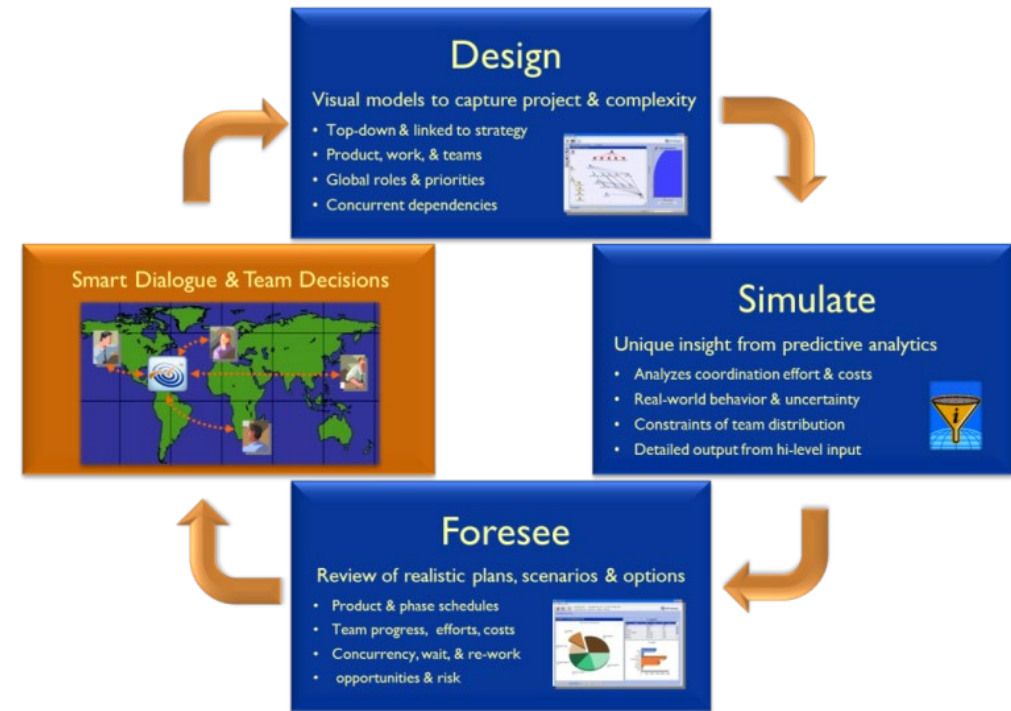
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Performance is Emergent

- 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!

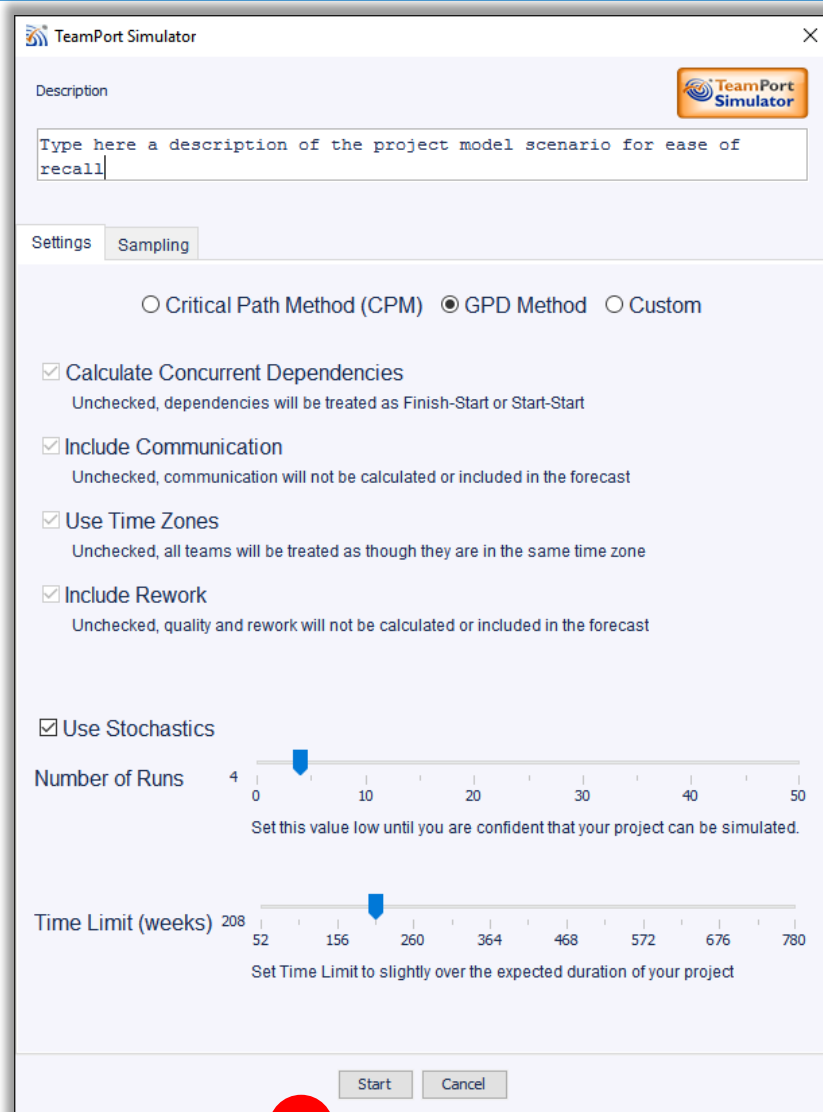
Cost, Schedule, and Scope at Quality are *emergent*.



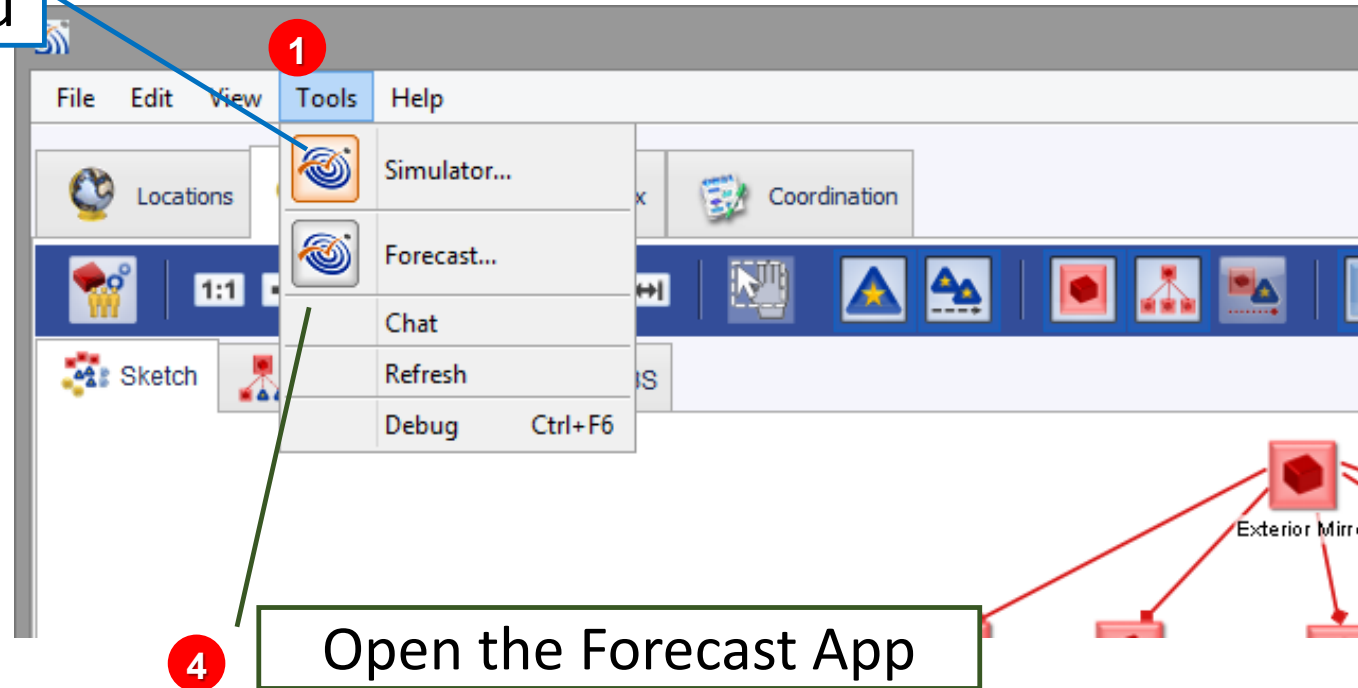


Running Simulations to create Forecasts

Select *Simulator...* in the Tools Menu



Adjust settings and click Start

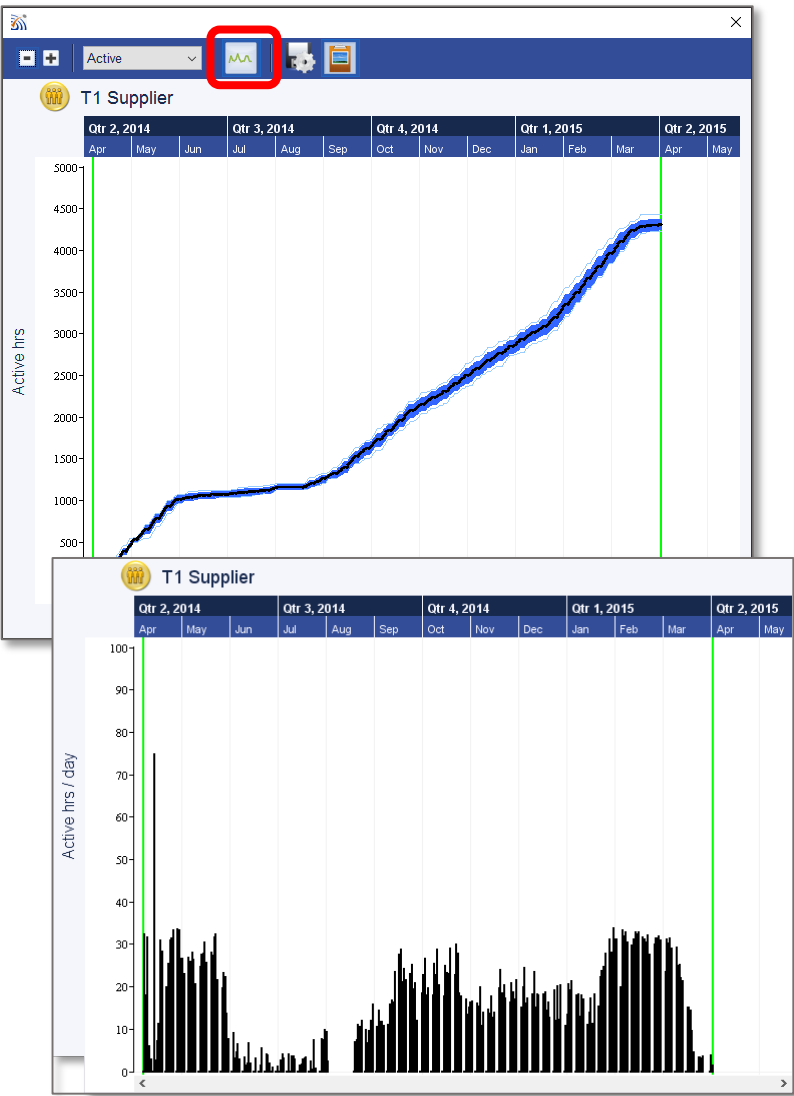
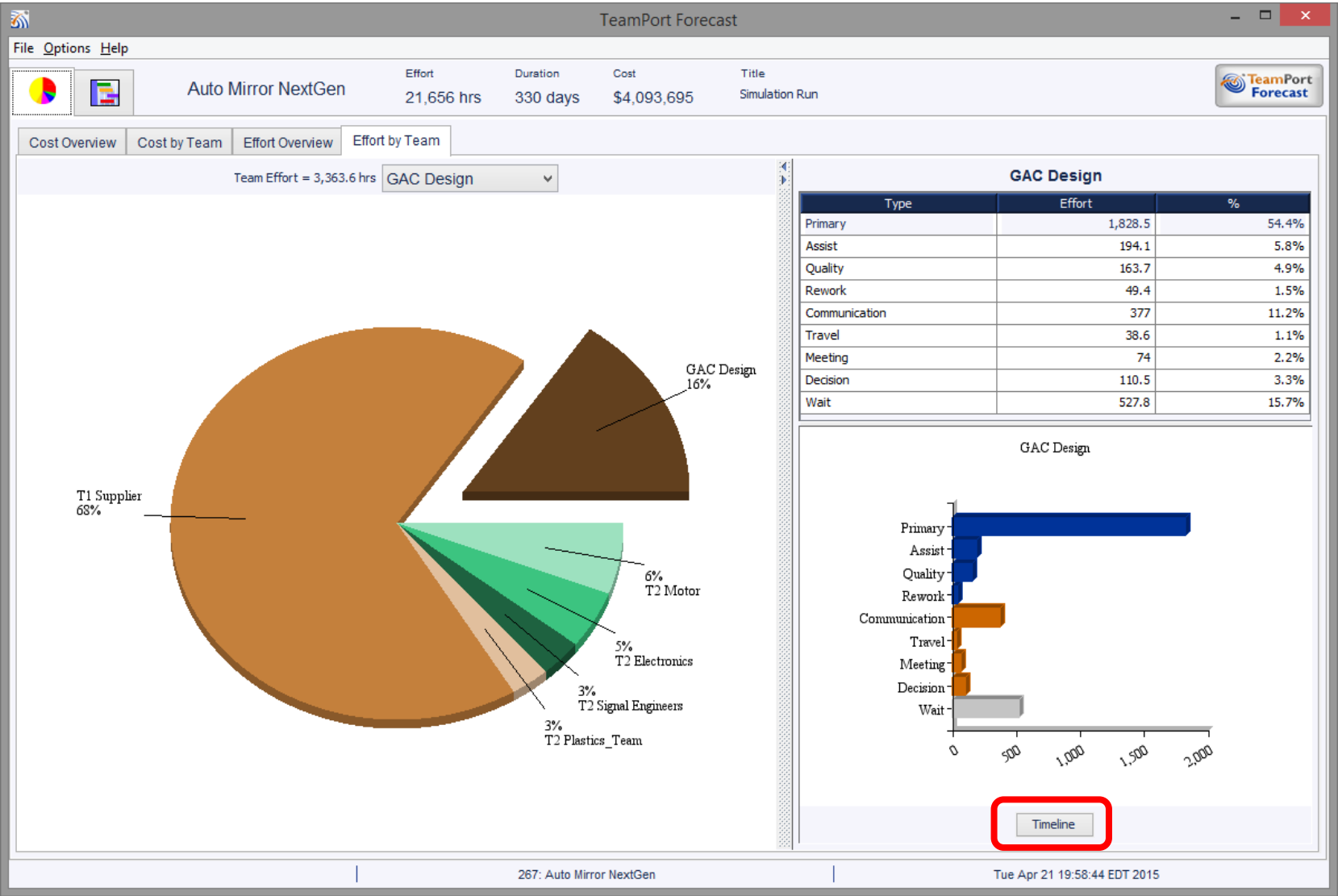


3 A simulation takes seconds to a minute.
If successful, a message is shown in lower left of Designer.

Forecast: examining Simulation result(s)



Forecasts include **Work**, **Coordination**, and **Wait**



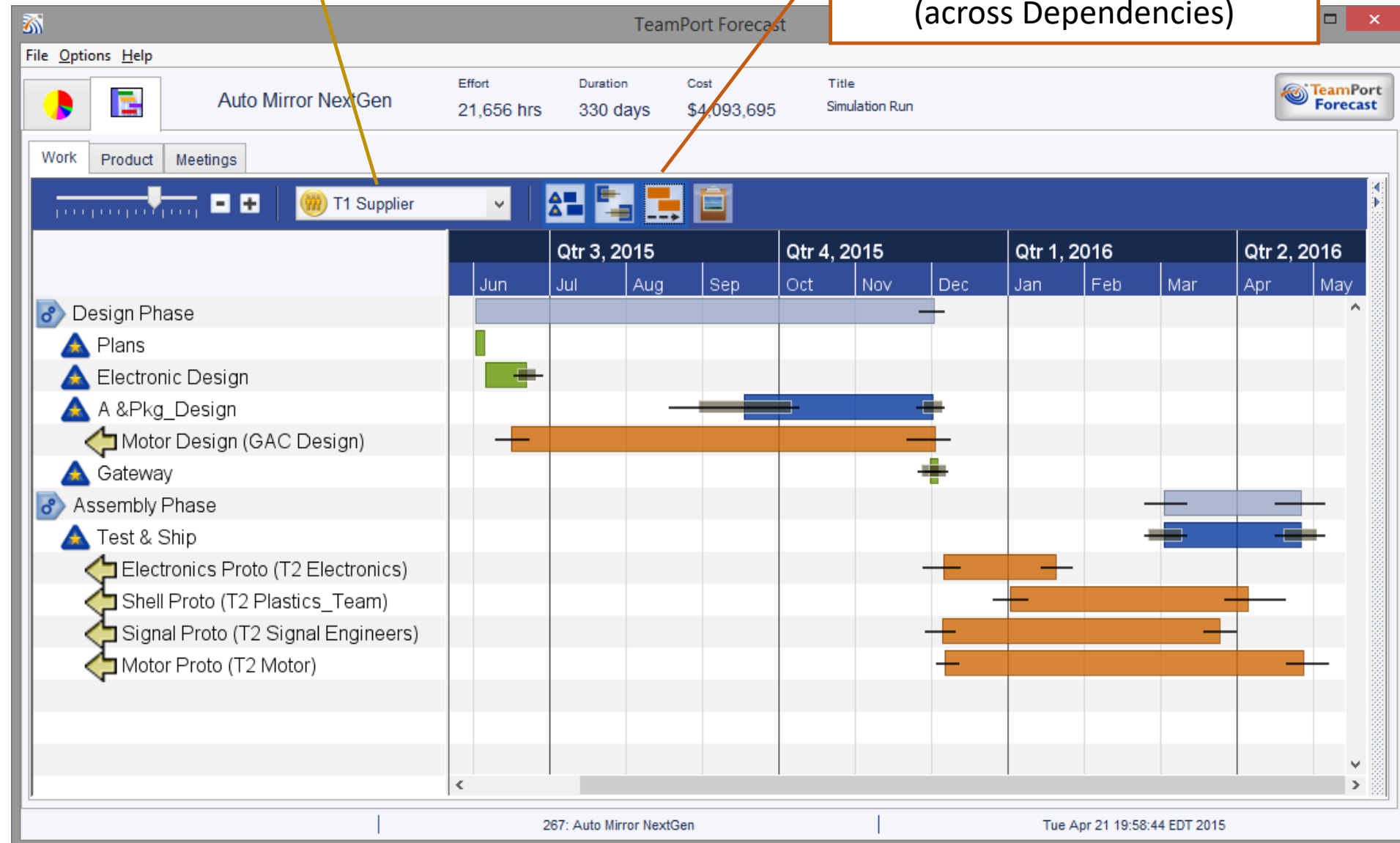
Gantt Charts

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



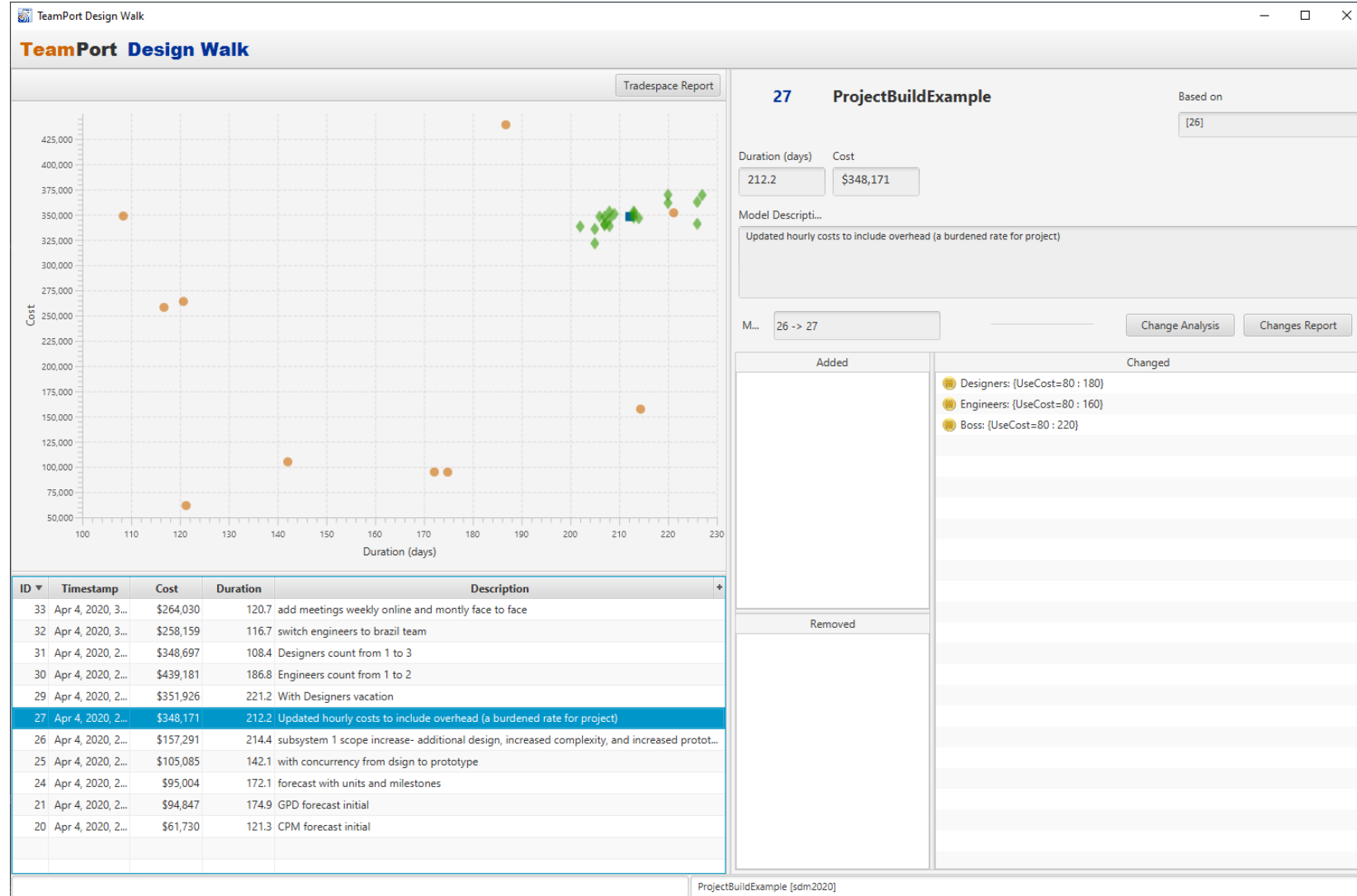
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The **Design Walk** application is accessed from **Designer** or **Forecast**, in the Tools menu.

- *Design Walk* Shows a series of forecasts from simulated project models 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.
- The **Tradespace Report** button exports this tradespace data to an Excel workbook.





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)
- Your co-workers, colleagues, and others in the Project Design community
- GPD customer service and technical support via email at support@teamport.com

The screenshot shows the 'Teamport Help 4.0' window. The left pane lists the 'Designer' section, which includes: Getting Started, TeamPort Overview, Designer (with sub-items: Designer Views, Designer Detail Panes, Controls: Alphabetical List, Controls: by Menu), Forecast (with sub-items: Overview Charts, Gantt Charts, Controls, Forecast Detail Panes), Design Walk (with sub-items: DesignWalk, DesignWalk Tradespace Report), Report and Sync (with sub-items: Report to Spreadsheet, Sync to and from Spreadsheet, Export to MS Project, DesignWalk Tradespace Report), Commentary (with sub-items: What Is Project Design?, Adding Project Elements, Creating Relationships, How to Generate a Forecast, How the Simulator Works), and Reference Information (with sub-items: Designer User Interface, Designer Views, Viewing and Hiding Elements, Definitions, Contract Types, Dependency Types, Printing).

The main pane displays the 'Designer: Teamport's Project Model Builder' section. It features the TeamPort Designer logo and text describing the software as visual modeling software to rapidly capture the essence of complex projects. It highlights collaborative discovery of interrelationships among products, tasks, people, locations, coordination, and work schedules. It also mentions that project models are rapidly created and improved for more accurate plans that are easily maintained.

Below the text, a diagram illustrates the Designer User Interface (UI) components, which are composed of six parts: Menu, Navigation, View specific Toolbars, a View, Detail Panes, and System Information. The diagram shows a screenshot of the Designer UI with labels pointing to these components: Menu (File, Edit, View, Tools, Help), Navigation (Locations, Architecture, 3 Column, Matrix, Coordination), Toolbar (various icons), View (a large network diagram), Detail Pane (a list of elements), and System Information (a status bar at the bottom).

All parts of the UI are covered in depth in other Help articles except the System Info section.

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Concluded