5 Coordinate and Support

This chapter presents three compound components:

- Project-activity management
- Accounting management
- Document management

5.1 Support / Project-Activity Management



What. Project-activity management spans across all enterprise activities to be planned and executed. Project-activity management is the umbrella, the overall plan and execution, the one that activates smaller plans and executions within other components.

Scope. Project-activity management begins with a project and ends with activities.

Steps. Establish a project. Make project-activity requests. Conduct activities. Use resource and activity pools to find workable combinations.

Links. Request material resources (material-resource management). Request manufacturing processes (manufacturing management). Request facility development (facility management). Request facility use (facility management), request inventory movement (inventory management), and request positions (human-resource management).

Components. The components within project-activity management are (Figure 5-1):

- Project-activity request
- Project activity
- Activity-and-resource pool

Moment-intervals. The pink moment-intervals for project-activity management are (Figure 5-2):

- Project
- Project-activity request
- Project activity

Interactions. The components work together to get things done. An example of inter-component interaction, "calculate cost overrun", is shown in Figure 5-3. A sender asks a pink project-activity request to compare its estimated, planned, and actual cost. It gets its estimated cost. It asks each of its pink planned project-activity objects to compare its planned and actual costs. Each planned project-activity object asks each of its actual project-activity objects to get its costs. Ultimately, the project-activity request returns a comparison of estimated, planned, and actual costs.

Here's another example (Figure 5-4). A sender asks a pink project-activity request to estimate its percentage completion. The request ripples from project-activity request to each of its sub-requests (if any) to each of the corresponding project-request details and finally to component-specific requests. Ultimately, the project-activity request returns the result to the sender.

Expansion. One could expand this compound component by adding planning coordination and planning simulation, plus work-breakdown structures and other planning tools.

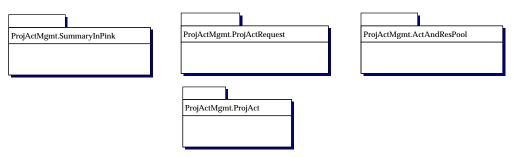


Figure 5-1. Project-activity management components.

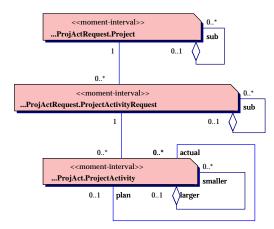


Figure 5-2. Summary in pink.

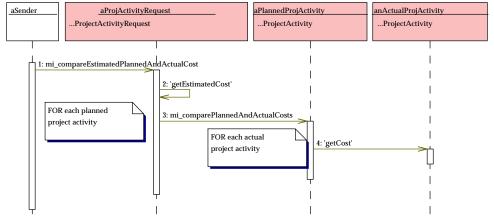


Figure 5-3. Calculate cost overrun.

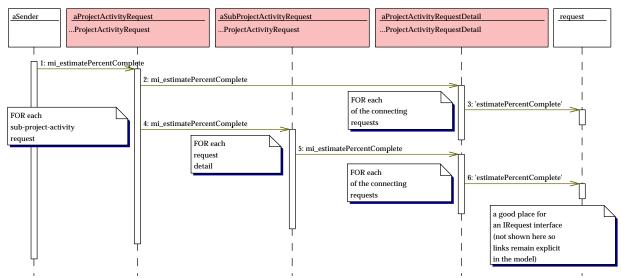


Figure 5.4- Estimate percent complete.

5.1.1 Support / Project-Activity Management / Project-Activity Request



Guided tour. The project-activity request component has two pink moment-intervals, project and project-activity request.

Project. A pink project links to two yellow roles, project manager and project sponsor. It also links to a pink project-activity request.

Project-activity request. A pink project-activity request links to two yellow roles, activity requester and activity planner. It links to a yellow organization role, organization with activity to accomplish. It also links to pink project-activity request detail(s).

Project-activity request detail. A pink project-activity request detail specifies interval and status, along with a link to one or more of the following:

- Materials request
- Production request
- Facility-use request
- Facility-maintenance request
- Movement request
- Position request
- Budget request

Activity-request pool. A green activity-request pool is a collection of project-activity requests. It monitors those requests, selecting the next one; it ask that "next one" to generate a project activity.

Before and after. For project-activity request, the subsequent pink moment-intervals are budget request and project activity. For project-activity request detail, the subsequent pink moment-interval details are project-activity detail, along with materials request (materials management), production request (manufacturing management), facility-development request (facility management), facility-use request (facility management), facility-maintenance request (facility management), movement request (inventory management), and position request (human-resource management).

Methods. Key methods include make project-activity request, activate an activity pool, rate urgency, and generate project activity.

The project-activity request component is shown in Figure 5-5.

Interactions. The "activate an activity-request pool" sequence is shown in Figure 5-6. A sender asks a green activity-request pool to activate itself. The pool starts monitoring the requests in the pool. It selects the next project-activity request, by asking each pink request to rate its urgency (for example, it might get its priority and get its due date). It selects the winning project-activity request and asks it to generate a corresponding project activity. The project-activity request sends a message to the project activity class to create a new project-activity object, then asks that object to make a project activity, giving it the arguments it needs to do so.



Tip. Activate, deactivate, and monitor? Use activate/deactivate and monitor methods to express initial activation followed by some on-going behavior, running asynchronously over some period of time.

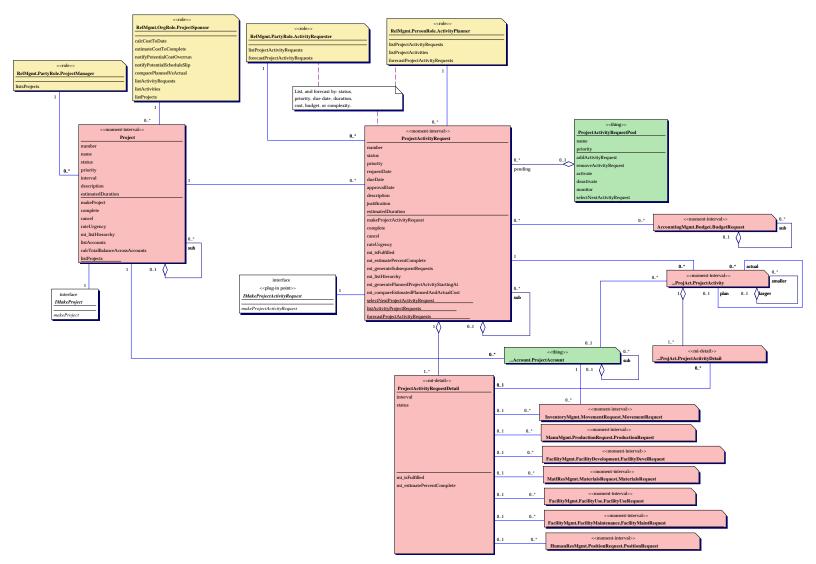


Figure 5-5. Project-activity request component.

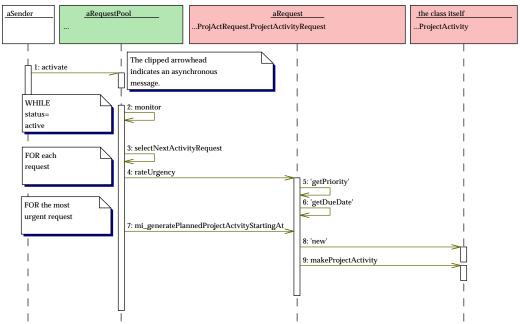


Figure 5-6. Activate an activity-request pool.

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5.2 Support / Accounting Management

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5.3 Support / Document Management

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