



Project Management at Scale

Two Use Cases:

- 1. Replacing 31,000 Assets Before their End-of-Life Dates.**
- 2. Managing Scheduled and Unscheduled Asset Outages.**

If your goal is to implement standardized, consistent and repeatable processes for delivery of IT services across your enterprise and optimize use of shared resources, do you think of this as a use-case for a Remedy-based process-driven project management, resource management and cost management application?

If your goal is to implement a data-driven, evidence based and measured improvement of operational processes, do you think of this as a use-case for a Remedy-based process-driven project management, resource management and cost management application?

If your goal is to have continuous assessment of value and on-going operational optimization that drives efficiencies, do you think of this as a use-case for a Remedy-based process-driven project management, resource management and cost management application?

I hope so. These goals are really good reasons for implementing our ActionProgram Manager Plus (APM Plus). But there are others use cases for APM Plus.

What about replacing 31,000 assets before they reach their end-of-life date? What about managing scheduled and unscheduled asset outages? Are these use cases you think of for a Remedy-based project management, resource management and cost management application?

APM Plus is a Remedy-based process and life-cycle management system that automates many of the standard project management, resource management and cost management functions including using a critical path method date calculator to automatically generate project timelines. The result is easy-to-use enterprise-wide. And being Remedy-based is really important. Because it is Remedy-based and developed using the Remedy Action Request System, APM Plus easily interfaces with the applications in the Remedy IT Service Management suite including Asset Management and takes advantage of standard Remedy workflow functionality and other standard Remedy capabilities such as automatic notifications. These are over 20 use cases this combination can perform well.

Let me talk about how this combination, APM Plus and Remedy Asset Management, handles both of these use cases. You can think of them as one tool.

Replacing Assets Before They Reach their End-of-Life Dates.

The Problem.

Let's say that you are the Navy and need a better way to replace assets before they reach their end-of-life dates. And let's say it takes 6 months to complete the tasks necessary to replace a certain type of asset. If you have approximately 200 systems on 155 ships, you need to generate 31,000 project plans (200 times 155 = 31,000) and cost plans before each asset reaches its end-of-life date. You also need to



then track the performance because you want to be sure the schedule does not slip, and the replacement is received before the end-of-life date.

Our approach, using APM Plus and Remedy's Asset Management application, works as follows:

The Solution.

Phase 1: Setup.

1. First, after documenting each work process for replacing each type of asset in APM Plus, define each process in APM Plus, building a repository of work processes.
2. Then check the Remedy Asset Management application to make sure all 31,000 assets are in the database. If necessary, use BMC's Discovery application to find the remaining assets. Export the data for these remaining assets into the Remedy Asset Management application. Make sure that each asset record includes the end-of-life date for that asset.
3. While you are doing this, my team will add a button to the Asset record and to the Asset Type record. If you click on that button, a form opens where you enter the following data:
 - Period needed to replace the asset. For example, if it takes 6 months to replace the asset, you might enter 12 months. You want to make sure the budget necessary is available so adding 6 months gives you some flexibility as to when the work needs to be completed.
 - Work process to be used to generate project plan. This will be a drop down list showing all of the work processes in the repository. Select the one to be used for this type of asset.
 - Person responsible for replacing the asset. This is also a drop down list of the people responsible for managing each project plan.
4. My team will also define the necessary workflow.

Phase 2: Automating the process and working the tasks.

5. The result will be the following:
 - Automatically, using Remedy's workflow functionality and notification functionality, 12 months before the end of life date for each asset, a project plan will be generated using the specified work process.
 - The cost of replacing the asset will be calculated. Because it is Remedy-based, bringing the replacement cost of the asset into the project task record is easy.
 - Automatically, the person responsible for managing the acquisition will be notified that he/she has a new project to manage.
 - Automatically, the project record for that plan will be posted onto the responsible person's Overview Console
 - Automatically, all of the project task records will be added to the Asset record's "related items tab" so you can see a history of all of the work performed against that asset. As the tasks are worked and statused, the tasks on the related items tab are updated.



6. When a project plan and the cost plan are generated, the person responsible will check that they have the budget to replace the asset. If necessary, they might change the planned start date of the project to a time when the budget is available. The person responsible might want to plan based on the planned finish date rather than the planned start date. APM Plus can track the budgeted monies available.
7. If the budget is available and the person responsible wants to keep the planned start date, the person responsible will assign tasks to the people assigned to work the tasks. Each task will go into the person's Overview Console so they can see the tasks that are coming. If the person responsible wants to change the planned start date or planned finish date after assigning people to tasks, he/she will change the date and click on Save. This recalculates the schedule and automatically updates the resource assignments.
8. When ready, the responsible person will send the plan to leadership for approval. An approval process was used to generate the approval tasks. These approval tasks will go onto each leader's Overview Console at the appropriate time. As approvals are given, each approval action is automatically logged in the Project Details field on the Project record.
9. If the leadership approves the plan, everyone involved is automatically notified that the plan has been approved. This is logged in the Project Details diary field on the Project record, and in each Task record's Task Details diary field.
10. The responsible person clicks on the Execute Project button, and the project starts. The following things happen automatically:
 - The status of the project changes to In Process.
 - The date/time when the project starts is saved as the actual start date for the project.
 - The last plans, both the schedule plan and the cost plan, are saved as the Baseline plan.
 - The person responsible for the first task is automatically notified that he/she can start working on their task. This notification is logged in the Task Details field on the Tasks record.
11. When he/she is ready to start working on the task, the worker changes the status from Assigned to In Process and clicks on Save. When this is done, 3 things happen.
 - The date/time is saved as the Actual Start date/time for the task.
 - The "work time tab" pops up.
 - The status of the task is updated on the related items tab on the Asset record.
12. As they are working the task, the worker enters his/her time spent using the work-time tab. When they do this, the following happens:
 - These time entries are posted to the Universal Timesheet.
 - The Actual cost of the task is calculated and stored on the task record.
 - The Actual cost is updated on the related items tab on the Asset record. This way, you know the true-cost-of-ownership of the asset, as well as the cost of replacing the asset.



13. When finished working the task, the worker changes the status from In Process to Complete and clicks on Save. The following happens:

- The date/time is saved as the Actual Finish date for the task. The actual duration is calculated.
- Automatically, the status of the successor tasks are changed from Assigned to In Process.
- The people responsible for the successor tasks are notified that they can start work on their tasks.
- The status of the task on the Asset record is updated.

14. The workers on the successor tasks do the same things. When they start working on the task, they change the status from Assigned to In Process. When finished, they change the status from In Process to Complete. While working the task, they enter their time spent using the “work time tab.” They continue doing this until all of the tasks have been finished. When all of the tasks are finished, automatically using workflow, the project record closes and the responsible person and other interested parties are notified that the project has finished. The Asset record has been updated and the new asset is in place.

During the project, other notifications are automatically sent to make sure the project stays on schedule. The day before a task is scheduled to start, the person responsible for the task is notified that the task is scheduled to start tomorrow and the notification is logged in the Task Details diary field. If they do not start work on time, the day after the task was scheduled to start, the person is notified that the task was supposed to start yesterday, and the notification is logged. If they still don't start work on the task, the next day, the person and his/her manager is notified and the notification is logged. This continues until the work is started. The same notifications are automatically send based on the planned finish date of each task. These notifications help keep the project on schedule and on-cost.

Managing Scheduled and Unscheduled Asset Outages.

The Problem.

Managing scheduled and unscheduled asset outages is slightly different from the process defined above. Assets can be maintained on a daily, weekly, semi-monthly, monthly, quarterly, semi-annually or annually. There are tasks to be done before an asset comes off-line and tasks to be done after an asset comes-offline. The asset can come off-line during non-standard hours, such as Sunday afternoon at 2PM.

One of the things that is interesting about this problem is that the date when the asset comes off-line is in the middle of the plan. The dates in the schedule need to be keyed on this middle date. We call this date the “target date” and the task representing the “target date” in the plan is the “target task.” Critical path method (CPM) date calculators deal with a planned start date or a planned finish date but not a middle date. But then we realized that the target date is the planned finish date for the tasks that come before, and the planned start date for the tasks that come afterwards. With that in mind, we made two changes to APM Plus. We re-wrote the CPM date calculator so it could generate a schedule based on the target date, and we added a field to the APM:TemplateTasks form to identify which task is the “target task.” The APM:TemplateTasks form is where tasks in the work process are defined. The APM:TemplateTaskDependencies form is where the dependencies between the tasks are defined.



The Solution.

Here, the steps are very similar to the ones detailed above but there are some differences.

1. Of course, the asset data needs to be checked for completeness.
2. The Project Remedies team will add a button to the asset record and develop the necessary workflow. When clicked, the following fields need to be populated for the asset or asset type:
 - Frequency. This is a drop down list: daily, weekly, semi-monthly, monthly, quarterly, semi-annually or annually.
 - Date/time when the asset comes off line. For example, the 3rd Sunday of the quarter at 2PM.
 - Name of the responsible person.
 - Work process to be used to generate the project plan.
3. The Project Remedies team defined the necessary workflow, which did the following:
 - A week before the first task in the schedule was to be worked, APM Plus would generate a project plan and a cost plan for that asset using the work process specified.
 - That project plan would be added to the person responsible's Overview Console.
 - The person responsible for managing the work would be notified that he/she has a new plan.
 - The person responsible assigns people to tasks and those tasks are added to the worker's Overview Console.
 - All of the tasks would be added to the "related items tab" on the Asset record and updated as the tasks are worked and cost

From here, the system works the same was as described above.

If you understand Remedy, its workflow and notification functionality, it is really very straightforward. All of this is automated so nothing drops through the cracks. More projects finish on-time and on-budget. The whole organization performs more efficiently.

For more information or to schedule a demonstration, please contact Stan Feinstein, President of Project Remedies. Stan's work phone is 310-230-1722 and his email address is stanf@projectremedies.com.