Understanding and Using a Schedule

What   These guidelines show the advantages and provide examples of using a good schedule in the monthly status process.

Why   Using a good schedule has the following advantages:

- Ability to assess performance
- Earned Value calculation
- Improved future estimating accuracy

1 Elements of a Good Schedule for Statusing

The following elements are included in schedules for monthly status updates:

- Baseline Targets
- Completed percentage
- Total Float
- Start and Finish Dates
- Predecessors

2 Baseline Targets

A good baseline target can use the following:

- A graphical representation of baseline, that is, black bar below current scheduled activity.
- Columns to show start and finish dates of baseline.

Notes:

- Baseline needs to be set to Performance Measurement Baseline (PMB) and not changed except through the change control process.
- For projects that do not have an established PMB, baselines can be set based on targets or frozen schedule goals.
- P6 can have several associated baselines but the true baseline should be represented by the PMB.

3 Example

The example below shows the status of the following:

- Project Completion
- Total Float
- Start, Finish Dates and Predecessors

3.1 Project Completion:

Project completion percentages are depicted using bars and columns indicate activity.
If the activity completion blue line (horizontal) appears on the left of the Data Date (DD) blue line (vertical) as in #2640, we quickly ascertain this activity is behind schedule. Conversely Line #2639 is ahead of schedule because the activity blue line is on the right of the DD blue line. Activity % complete is also shown in columns.

3.2 Total Float

Total float represents the number of days before critical activities are impacted and is only used to understand impacts.
Note: Any delay in schedule will impact schedule performance and Earned Value reporting

3.3 Start, Finish Dates and Predecessors

The below example shows project start and finish dates and their dependency on predecessor schedules.

Using these minimum elements, we can see the following

- #2639 started on time, is ahead of schedule and is projected to finish on time.
- #2640 started on time, but has not completed as planned (was planned as one day duration).
- #2644 should have started one period ago but did not. Duration is expected to happen as planned.
- #2647 is being pushed by predecessor, #2644 not finishing as planned.
- #2649 is suspect of poor status or not meeting planned expectations as it started very early, but appears to be finishing very late.
- #2653 and MS #2654 are being pushed by #2649 finishing late.

  As P6 is a dynamic scheduling tool and FNAL schedules are properly resource loaded and logically tied, analysis of the schedule should be done after every update. This analysis should be done by the scheduler and CAM to ensure proper status has been taken. Using the minimum elements described, will help in this analysis. Proper time allowance for status and analysis should be given at the end of every update cycle. Using these elements as a minimum will help the CAM understand variances and will help in writing a Variance Analysis Report (VAR).

4 Contact Information

Please feel free to contact your Project Controls Specialist for further information regarding how to use and interpret a schedule.

5 Document Revision History

Date	Version	Author	Description
07/28/2014	1.0	Richard Marcum	This is the initial release of this document.