Using Schedule Analyzer Forensic
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Schedule Analyzer Forensic (SA Forensic) is such a large collection of specialty software tools that users often do not know how to apply them all. This paper is a short explanation of the typical uses of SA Forensic software by the claims specialist.

The beginning of any claim involves the receipt of a large number of P3 schedules on one or more disks. SA Forensic **Find P3 Schedules** will quickly find and catalogue all such schedules. It will create a spreadsheet containing a complete summary of all aspects of each schedule found including resources, costs, and constraints.

Before proceeding further with the analysis, a claims specialist first has to document actual date variances from the update schedules and the As-Built schedule.   It will do no good to make determinations if the dates used do not match those in the As-Built schedule. SA Forensic **Conformer** will look at an entire series of schedule updates and create a new set of P3 schedules all using the same dates as found in the As-Built schedule. A complete log of all discrepancies found is also created.

Actual dates are not the only thing that change over the course of a project. Relationships are also modified, possibly changing the critical path and invalidating baseline expectations. SA Forensic **Relationship Lister** charts the entire history of every relationship over the entire course of the project in a spreadsheet displaying when the relationship was added or when it was removed. It tracks the relationship driving and critical status in each update and notes when lags were changed.

The first step in a claim is to determine what the As-Built schedule says was critical. This may not end up being the final work, but it certainly should be the first word. SA Forensic **As-Built Critical Path** will stepwise 'walk' the data date backwards in your As-Built schedule revealing what activities were on the critical or longest path throughout the project. The estimating algorithm uses an assumed linear work progression for in-progress activities, but this can be sharply refined using a work profile as described later in this paper.

A more in-depth look at the actual float experienced by every activity in the entire course of the project can be revealed using SA Forensic **As-Built Float Calculator**. A spreadsheet is created showing the total float and longest path setting for every activity for every day of the project. This is an excellent tool for creating an impressive graphic for further analysis or presentation. Work profiles can be used here as well to sharpen the accuracy of activity status.

In order to demonstrate project delays using a Time Impact Analysis (TIA,) you are going to need a schedule update with a status date immediately prior to the delay event. When appropriate schedule updates are not available, SA Forensic **Schedule Rebuilder** can fairly re-create the appropriate P3 schedule with any data date using your As-Built schedule. Work Profiles or just later manual adjustments using outside information can fine-tune the status of on-going activities.

Another, innovative technique to try in order to create the basis of a 'But-For' Schedule is to create an unstatused schedule based upon the As-Built schedule durations and logic. In order to do this, you will need to do more than just remove the actual dates for the As-Built Schedule. You will need to change the original durations to match the actual durations <u>and</u> you will need to change the planned relationships to match the actual relationships.   Luckily, SA Forensic **As-Planned/As-Built** Maker does this quickly and accurately. The result is a new P3 schedule showing the actual critical path and ready for your removal of delays to reveal what could have happened.

It is critical that you validate and adjust each schedule to match the events noted in contemporaneous documents such as Inspector's Logs and the dailies. SA Forensic **Profile Maker** makes this a snap with a one-click automated process that draws from the information available in your As-Built schedule. Included is a complete set of data editing, validation, and management functions for creating a daily work profile data set. In addition to compiling and reporting on your findings, the work profiles can optionally be used to enhance the accuracy of the other SA Forensic software modules listed above.

Another use of the work profile data base is to automatically create 1-day duration activity schedules. SA Forensic **Work Schedule** will read your work profiles created using Work Profiler and convert the original As-Built or As-Planned schedule into an 'x-ray image' showing linked 1-day activities. In place of a 15-day activity, you might get seven 1-day activities linked finish-to-start showing when the work was actually performed. Perfect for display purposes or better for Collapse Analysis. Run this program against your As-Planned Schedule, or better yet – the schedule produced using As-Planned/ As-Built Maker for spectacular results.

So there you have it, SA Forensic software can take you from the beginning to the triumphant end of your claim in record time. It prepares, analyses, and displays results in ways that were nearly impossible before. SA Forensic will not make you into a claims analyst, but it will certainly help a claims analyst to achieve new heights in accuracy and completeness in less time than ever though possible.

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