

Technology Overview: Actenum ASM

Overview

Actenum ASM (Asset Scheduling Manager) is the foundation technology that powers our advanced scheduling solutions.

Actenum ASM is an advanced suite of scheduling components and tools. It brings together techniques in constraint reasoning, modern heuristics, and operations research. With a powerful graphical user interface development toolkit, including a flexible and interactive Gantt chart tool, Actenum ASM addresses a wide variety of asset scheduling situations rapidly and effectively.

Advanced Features

Actenum ASM has been designed to deal with real-world scheduling challenges, including:

- ∅ Complexity (in terms of the number of tasks and resources that have to be related in a schedule, in appropriate sequences, according to timing requirements),
- ∅ The need to understand the consequences of scheduling decisions on production goals, through linkage of schedules to user-defined key performance metrics,
- ∅ The need to leverage user knowledge rather than replacing it with a totally automated solution,
- ∅ Unplanned events (for example, disruptions caused by equipment break-down, bad weather, or staff absences or injuries),
- ∅ Planned alterations (to accommodate preventive maintenance, shifting priorities, and changes in demand), and
- ∅ Rapid response: results at the “speed of business”.

Actenum ASM Benefits

Actenum ASM enables you to smooth out daily variances in maintenance and production. Response times are improved when disruptions occur through the rapid scheduling capability, and you gain insight into the quality of your scheduling decisions, since they are linked to your production metrics.

At the heart of each Actenum ASM implementation is a sophisticated business and technical model of your specific production environment, which captures expert user knowledge, and supports operational staff in their daily tasks.

By providing reliable, timely, and actionable scheduling information rapidly, Actenum ASM enables the alignment of resource and asset use with key production goals and metrics. The impact of various scheduling alternatives is always understood. Accelerated scheduling improves response times to operational changes and supply chain variances, yielding predictable operational performance.

Designed for complex environments

Preparing a schedule in a complex operational environment is a difficult and time-consuming process, and is usually done manually. With a large number of possible ways that assets and tasks can be combined, as well as the many timing and sequencing requirements that must be satisfied, the possibility for error is always present, and you often have little insight into how any one schedule alternative will affect key production goals. Actenum ASM employs several proprietary capabilities to deal efficiently and rapidly with situations like this.

Instead of following a traditional approach—such as linear programming—that might result in the manipulation of millions of variables and require several minutes or hours, Actenum ASM manipulates a model of the scheduling situation in a completely different way. As a result, it's able to generate practical and reliable schedules very rapidly. As well, Actenum ASM links schedules to production metrics, so that you can rapidly generate, assess, and score scheduling options, and drive the optimal response.

Actenum ASM requirements

Actenum ASM requires the following operational environment:

- Ø OS: Microsoft Windows 2000 or XP, Macintosh OSX, Linux
- Ø Platform: Java Runtime Environment 1.4
- Ø RAM: minimum 500 MB
- Ø CPU: P4 1GHZ or equivalent
- Ø Database: Any JDBC compliant SQL database.

About Actenum

Actenum is the leading provider of Asset Scheduling Management (ASM) software for the energy and mining industries. Our solutions increase production uptime through rapid, reliable scheduling of production assets.

During daily operations—even in the most complex, disrupted production environments—Actenum solutions enable you to create optimized asset schedules that are directly linked to user-defined key operational metrics. As a result, you can make informed and effective scheduling decisions that support your production goals, reduce deferred production, and improve operating efficiency.

To speak to an Actenum representative, or to schedule a demonstration, please contact us at 604.681.1262 x 224, or info@actenum.com.