



**PRINCEPS is pleased to invite you to its first technology conference in Paris on April 11<sup>th</sup>-13<sup>th</sup> 2012**, in which it will present and officially launch 3 new products of its scheduling suite:

- **Flowers:** this is our simulation-based scheduling system; **it introduces a new paradigm** which is completely different from all existing systems in this category
- **Compass:** A crude oil blending and sequencing optimisation system which is built with Aimms and Gurobi, and implements some in-house algorithms in addition. This system is unique of its kind in the market
- **Optimix:** a multi-period Product Blend optimisation system also built with Aimms, Gurobi and in house technology

**PRINCEPS has been active in refinery planning and scheduling for more than 10 years and has conducted a large number of projects worldwide.** It has now capitalized its know-how in the above software packages, in which it has implemented the latest IT and optimization technologies.

Regarding the first of these products (flowers), which is the core piece of our suite, Princeps' technology is unique in that it automates a large number of scheduling decisions and incorporates the following features:

- 1- Our approach is based on rigorous mathematical tools, like graph algorithms among other things, and **implements both discrete and continuous time simulation;** yet, it is by several folds faster than the usual discrete time calculations that are commonly used in this area
- 2- It includes triggers, which make it possible to **dynamically modify events during simulation, or, in other words, to make a schedule self-adjust** its events to the simulation results.
- 3- It operates **propagation through the graph of events**, thereby triggering a cascade of consequences of any given decision automatically
- 4- It allows **schedules archiving and "versioning"**, again in a very rigorous way, making it possible to merge different branches from different users, or rolling back schedule changes as needed
- 5- Last but not least, it uses the very latest graphical technologies, making the user interfaces friendly and flexible to the highest extent

Please make sure to disseminate this invitation to all those in your company who are involved in refinery scheduling. We already have confirmation from 3 majors and a number of other companies. This will be a genuinely interesting opportunity for you to see what kind of new scheduling technology is in the market and what the other companies' expectations are in this area