

# Factory Planning

*A real time, multiple constraint-based planning system directly connected to the glovia.com database*

**As you face an increasing number of complex product configurations and a rising wave of customer demands and service requirements, how can you manage inventory, cut costs, and improve on-time delivery to keep everyone satisfied?**

glovia.com Factory Planning is a memory-resident planning tool that simultaneously considers the constraints of capacity, inventory, tooling, and skills to generate an optimized production plan. Factory Planning supports advanced optimization algorithms that reduce set-up times and improve the flow of complex processes.

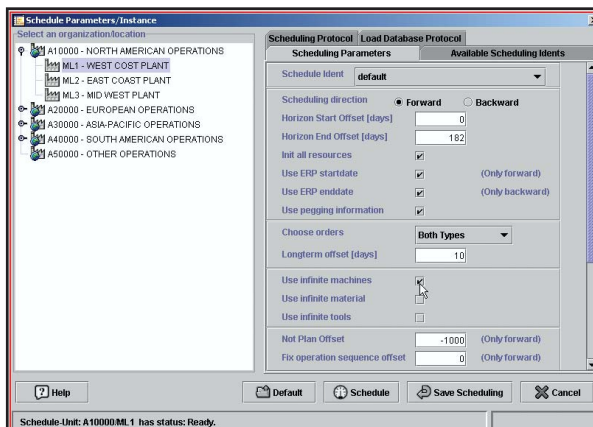
Factory Planning is a flexible solution designed to meet all planning needs. In a live environment, the application can re-optimize the production plan in response to machine breakdowns or unexpected inventory shortages. In a simulation environment, Factory Planning allows you to run and compare multiple plans to find the best solution that balances inventory requirements with actual planned operations. The solution allows you to conduct multiple "what if" scenarios, based on master production scheduling forecasts, to identify and deal with potential production bottlenecks and capacity constraints before they affect production.

Factory Planning delivers many bottom-line business benefits including:

- Higher machine and resource utilizations
- Less overtime and idle time
- Eliminated bottlenecks and repair/maintenance impact
- Reduced inventory levels
- Reduced cycle times
- Improved on-time delivery and customer service

## Real-Time Planning

While nearly all other solutions require batch updates to and from their data models in order to function, Factory Planning has true, real-time production planning. Factory Planning's memory-resident data model is a seamless extension of glovia.com's real-time database, so planning is always based on a single, up-to-the-minute data set.



As events happen throughout your company — orders entered, work orders completed, inventory received — they are reflected in the glovia.com database and the planning data model. This synchronization ensures that the data used to plan reflects your actual factory status, not an outdated snapshot.

## Accurate Capable-to-Promise

In a business climate of fierce competition and ever-increasing customer expectations, accurate Capable-to-Promise commitments are a decisive competitive advantage. Factory Planning enables you to provide your customers with instant, accurate order promise dates — even through the Internet. Simply enter an item number and quantity and Factory Planning determines the earliest possible delivery date by considering the availability of required inventory, production capacity, tooling, and existing commitments.

## Support for both Closed and Open Loop Environments

In fast-paced manufacturing, where shop floor events take place too quickly, production planning usually happens independent of execution systems. In other environments, to realize cost savings, you must synchronize production planning and purchasing with execution. Factory Planning supports both closed and open loop planning environments simultaneously. The application can be tightly coupled with execution systems to provide real-time planning feedback to shop floor events. Revisions may be returned to other glovia.com material planning solutions so that supply orders may be adjusted to suit the constrained plan. This way, inventory levels can be reduced to a minimum and cash flow improved.

## Multi-Plant Dependencies

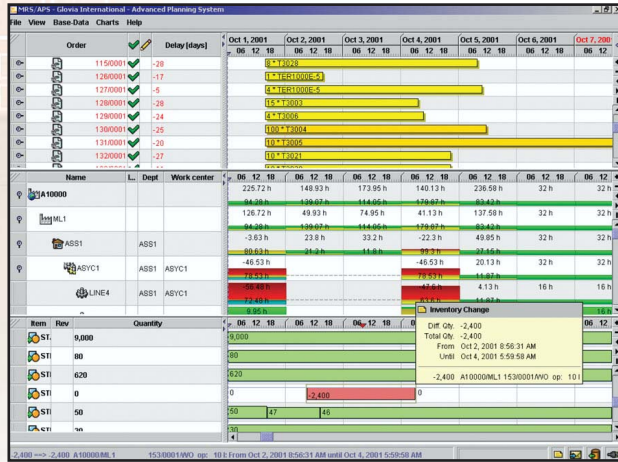
In a multi-plant environment, some factories are dependent on others for supplies. glovia.com allows for the definition of cross-plant supplies, including lead times and delivery methods. These critical dependencies are visible through Factory Planning, which can instantly re-plan production at a dependent plant based on the changing output of a supplying plant.

## Information Visibility

Factory Planning improves plant management and decision making by increasing information visibility. Plant managers can access critical information, such as available capacity for a given time period and loads on individual machines, to identify problem areas quickly and make informed decisions. Managers can run “what if” scenarios to determine the impact of any potential changes or events.

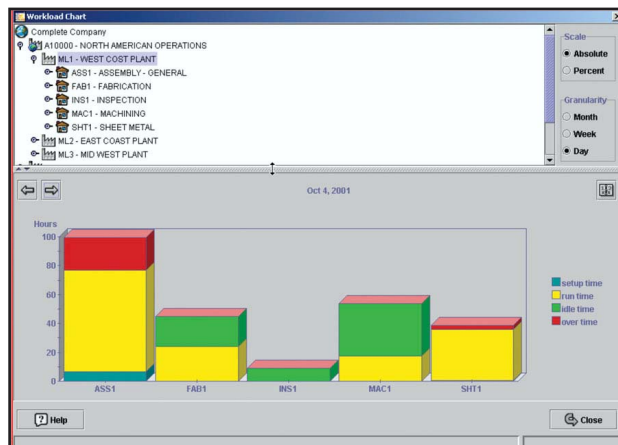
## Execute the Plan

Planning does not end with the creation of an optimized production plan; there must be communication to the shop floor for execution. For this reason, Factory Planning has been designed to sit at the heart of manufacturing execution systems.



Factory Planning enables the seamless execution of the production plan by having shop floor terminals interrogate the application for the correct and current work queue at each work center. The operators simply select the correct item from the list, which “starts” the operation. You can also call up data, drawings, work instructions and additional information from the remote terminal.

In combination with glovia.com Shop Floor Data Collection, details recorded at this terminal, such as completed work orders, are instantly fed to Factory Planning to ensure the plan is on track. Shop floor information is fed to other glovia.com modules for costing and other operational purposes.



## Worldwide Headquarters

Glovia International, Inc.  
1940 E. Mariposa Ave.  
El Segundo, CA 90245-3457 U.S.A.

Toll Free: (800) 223-3799  
Phone: (310) 563-7000  
Fax: (310) 563-7300

For further information and regional locations please visit:

[www.glovia.com](http://www.glovia.com)

© Glovia International, Inc. 2003  
GLOVIA, the Glovia logo, and Interstage  
are registered trademarks of Fujitsu, Ltd.

