

Oracle Fusion Cloud Supply Planning Production Scheduling

Making the best use of your production resources is critically important to optimize your manufacturing operations. Every minute spent producing the wrong products not only increases costs and waste; it also keeps you from delivering what your customers actually need. Oracle Fusion Cloud Supply Planning's *Production Scheduling* features put you in control of your operations, with minute-by-minute planning and execution of manufacturing tasks. Dynamic visualizations and flexible rescheduling capabilities help you produce the right products at the right time.

Improve factory throughput

Production Scheduling maximizes factory throughput for the same capital investment. You can easily determine the most feasible schedule to execute on the shop floor to meet delivery expectations of your customers and, make changes on the fly when needed. Best of all, it works as part of a suite of Oracle Cloud Supply Chain Management applications, providing unparalleled ease of implementation, built-in integration, automatic updates, and lower total cost of ownership compared to on premise solutions.

Enable a proactive shop floor

Traditional scheduling systems can't respond quickly to manufacturing shop floor events or changing customer order priorities during the day. They must first extract the information necessary for scheduling, such as item attributes, work order details, and resource status from underlying MES/ERP systems and then process it for finite scheduling. By the time they're able to release jobs back for execution, scheduling has been delayed, and valuable production cycles may have been missed.

By contrast, Oracle's Production Scheduling capabilities always capture the "live" snapshot of latest manufacturing information for production scheduling from Oracle Cloud Manufacturing, including the current resource availability and work orders. Its real-time integration allows you to generate schedules quickly and release them for execution on demand. Schedules are dynamic and can be fine-tuned manually, factoring in outages and breakdowns as they occur. Production scheduling enables a proactive shop



Key business benefits

- Maximize production throughput
- Optimize resource utilization
- Reduce manufacturing related costs
- Improve personnel productivity
- Reduce expedites and production waste
- Improve delivery performance

floor through on-demand scheduling and execution at the speed of your business in the cloud.

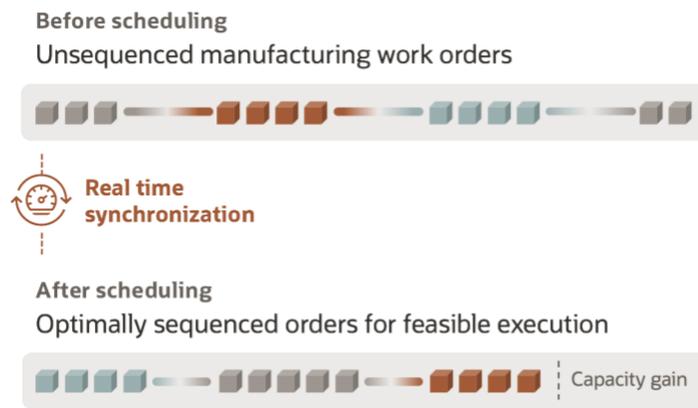


Figure 1. Enable a proactive shop floor

Maximize resource utilization

One key to profitable manufacturing is maximizing the utilization of your critical resources. If your production schedules aren't feasible, shop floor personnel would spend time expediting around shortages and resolving resource constraints. This inevitably results in inconsistent lead times, unpredictable factory throughput and excess work-in-process inventory.

Production Scheduling can improve both your shop floor productivity and delivery performance by creating finite schedules that simultaneously respect material, resource capacity and time constraints, such as shifts and holidays.

Use attribute-based changeover constraints

Attributes for scheduling relevant to your industry are flexibly supported. You can also define attribute-based changeover rules. Oracle Cloud Supply Planning's production scheduling can automatically sequence production considering what quantity of products should be run together to decrease overall changeover time without jeopardizing demand or carrying excessive work in process inventory.

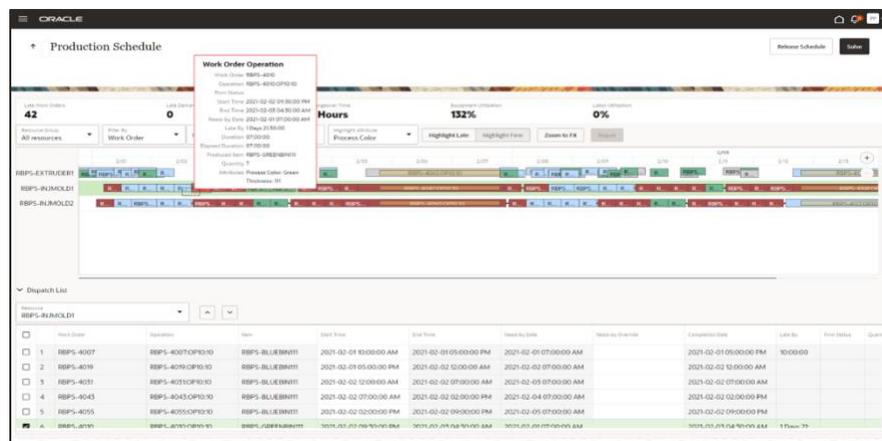


Figure 2. Attribute based changeovers ensure that resource capacity is utilized optimally

Key features

- Simultaneously apply material, capacity and calendar constraints on machines, crews, and tools
- Minimize changeover time considering industry attributes
- Consider user-defined attribute sequences
- Manage production visually with interactive Gantt chart views
- Schedule mixed-mode manufacturing
- Manage maintenance work orders
- Monitor late orders, changeover time and utilization in real time
- Simulate impact of machine breakdowns and unplanned downtime

Get complete shop floor visibility

Production scheduling with Oracle Cloud Supply Planning provides embedded metrics such as late demands, late work orders, total changeover time, equipment utilization and labor utilization to evaluate performance at a glance.

You can visualize the health of the schedule through a resource Gantt chart, along with upstream and downstream operations to quickly identify resource bottlenecks or excess capacity. Within the Gantt, you can conveniently pivot on attributes, products, late orders, and other criteria to understand production issues, such as the amount of time lost to expensive changeovers. At a glance, you can see which work orders are late and why, which attribute sequences are good and which ones are less desirable, and how heavily resources are being used across the schedule horizon. You can also identify alternate resources that can offload production to ease bottlenecks.

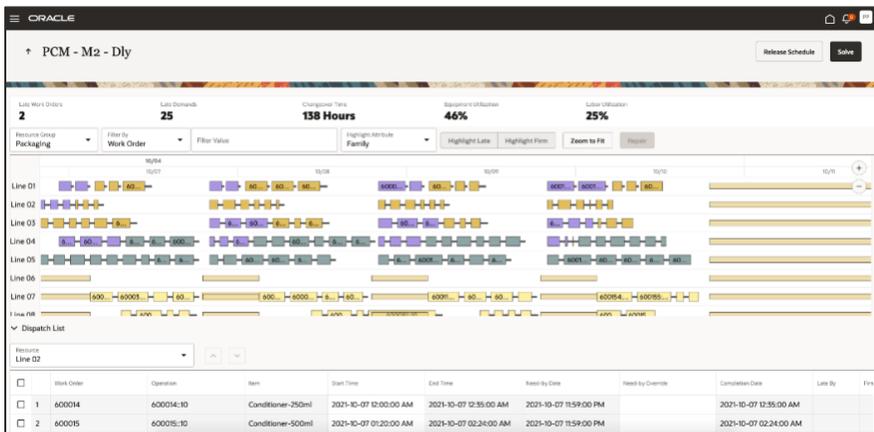


Figure 3. Fine-tune and adjust the production schedule inline to simulate for the best executable schedule based on current constraints and customer requirements

Interactive drag-and-drop rescheduling and fast inline schedule simulation help you quickly devise solutions and improve customer service by focusing on high priority late work orders.

The Dispatch List is the same representation of the schedule but listed in a table form. This provides another convenient way to re-sequence work order operations and fine tune the schedule as needed. After refining the schedule, you can approve it for release to the production floor for execution.

Use REST services to set up schedules

Interface Production Scheduling to existing data sources such as spreadsheets, databases, or flat files with REST services. You may use REST services to create, modify and get schedules quickly, or delete scheduling setup information such as on changeover rules, attributes, user defined attribute sequences, KPIs and status of resources.

REST services-based integration lets you spend more time on business problems by automating the often monotonous, repetitive tasks involved in getting master scheduling information from source systems.

Related products

- **Oracle Fusion Cloud Demand Management** predicts and models future shipments, orders, and other demand signals.
- **Oracle Fusion Cloud Sales and Operations Planning** aligns business plans and operations across the sales, marketing, finance, and supply chain organizations.
- **Oracle Fusion Cloud Supply Chain Execution** defines and executes production, shipping, receiving, transfers, and other execution activities across the global supply chain.

Empower Supply Planning processes with Production Scheduling

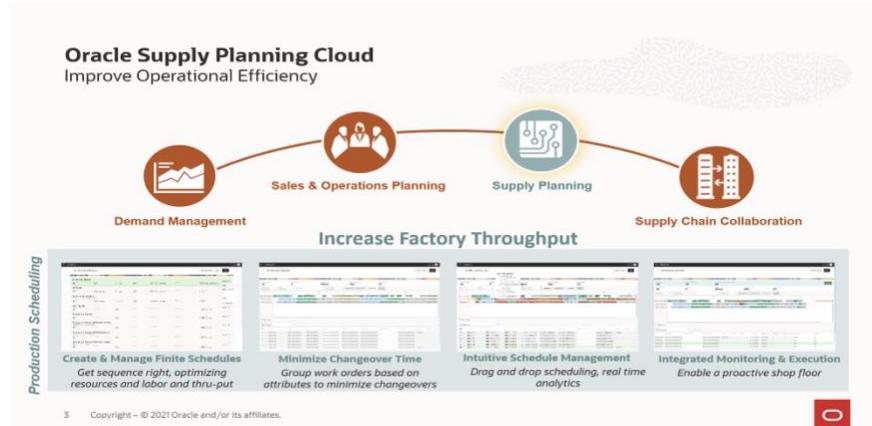


Figure 4. Schedule your factory with the Production Scheduling Service

Production Scheduling is a capability of Oracle Cloud Supply Planning. Combined with Oracle Cloud Manufacturing, these solutions provide integrated, closed-loop tactical manufacturing planning, scheduling, and execution.

To learn more about Production Scheduling and the other capabilities of Oracle Fusion Cloud Supply Planning, visit oracle.com/scm/supply-chain-planning/supply-planning.

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