Oracle Supply Planning Cloud

Supply planners typically spend half their time crafting plans that satisfy the most customers, maximize the use of resources and leverage the best sources for materials and components. They then spend the other half improvising solutions when things change. Oracle Supply Planning Cloud offers simpler, faster and better tools to bridge the gap between strategic optimization and tactical firefighting. Its global, iterative plans detect issues, reprioritize competing demands, and intelligently reschedule and reroute global supply in near real time when needed. By rapidly simulating supply scenarios, and collaborating online to prevent future disruptions, planners can do more with less.

**PLAN GLOBAL SUPPLY**

Today’s supply chains are complex, with multiple tiers of internal and external nodes. You must plan for a global network of in-house production and distribution facilities, contract manufacturers, drop ship suppliers and outside services providers. In addition, you may need to manage discrete, process and configure-to-order manufacturing processes.

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**Key Business Benefits**

- Increase on-time order fulfillment.
- Respond faster to demand changes
- Reduce inventory and obsolescence costs
- Effectively plan complex configure-to-order, drop shipped and contract manufactured supply
- Reduce the impact of manufacturing and supply disruptions

**Key Features**

- Plan your global supply chain across multiple tiers
- Calculate statistical safety stock requirements
- Generate supply plans that include outsourced manufacturing and upstream suppliers
- Plan process and discrete manufacturing
- Dynamically prioritize and reschedule demands based upon business requirements
- Automatically evaluate and address material and capacity constraints
- Analyze exceptions, determine root causes and make intelligent action recommendations
- Model what-if changes to capacity, demand, supply and items
- Compare the effectiveness of alternative plans
- Release the best plan for execution, and cancel or reschedule them as needed

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Oracle Supply Planning Cloud accounts for lead times, shipping/receiving calendars, material and capacity constraints across your extended supply chain, so you know when you can realistically meet demand. With its comprehensive network and sourcing model, you can trade off internal vs. external production capacity, configure drop ship relationships, consolidate supply at your own facilities, or identify when a second-tier supplier’s limited capacity could put demand at risk. You can choose to

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Figure 1. Quickly respond to changes in supply and demand across global networks

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manage your network with a few global rules, or tailor your planning for each high-value component at a critical facility.

**Generate Detailed, Executable Plans**
Supply plans must accurately reflect material constraints to be executable. For example, effectivity dates on components, lot expiration dates and inventory reservations can impact supply availability, so Oracle Supply Planning Cloud includes them in its calculations. It also accounts for any existing reservations on purchase orders, manufacturing work orders or transfer orders. Finally, to ensure consistency with production processes, Oracle Supply Planning Cloud uses manufacturing routings to determine material and resource requirements.

When your plans need to account for complex configure-to-order supply requirements, Oracle Supply Planning Cloud can consume configured product orders from model-level demand forecasts. It can also determine component and resource requirements based upon historical demand, calculate option-dependent lead times, and detect potential model-level supplier capacity overloads.

Supply plans don’t only fulfill order demands; they also replenish buffer stock. Oracle Supply Planning Cloud manages statistical safety stock at a specified service level based on the amount of forecast error. Alternatively, you can use a days-of-cover policy, or set safety stock quantities manually when you need to.

**Automatically Evaluate and Select Alternatives to Reduce Delays**
You may have alternate suppliers, substitute components and other supply options you can leverage to meet customer obligations when a disruption occurs. Oracle Supply Planning Cloud automatically evaluates all available options to overcome supply constraints, so you can meet demand on time. Planning addresses material and resource constraints simultaneously to recommend alternative resources, alternate routings and bills-of-material, secondary material sources and suppliers as needed.

**Plan Supply in Heterogeneous Manufacturing Environments**
Oracle Supply Planning Cloud allows you to plan in a variety of manufacturing environments. You can plan in a discrete manufacturing environment regardless of whether it is make-to-stock or configure-to-order. You can plan in environments where you could fulfill orders using contract manufacturing, including outside processing of an operation and drop shipment of orders from suppliers directly to customers. You can also plan for process manufacturing, where any operation may produce multiple products, co-products or by-products. Oracle Supply Planning Cloud scales the ingredient requirements to match the quantity of the batch being manufactured, in addition to calculating the by-product output. Finally, you can plan for manufacturing plants that combine elements of discrete and process manufacturing.

**CONTINUOUSLY MONITOR SUPPLY CHAIN PERFORMANCE**
Oracle Supply Planning Cloud launches with a global picture of your supply chain’s performance. You can monitor plan performance to targets on revenue, margins, order fulfilment, turns, and more.

**Gain Instant Access to Aggregate and Detailed information to Monitor Performance**
The visual Plan Summary table provides one-click access to demands at risk, inventory and capacity plans in context, so you don’t have to search and filter reams of data to begin working.
Oracle Supply Planning Cloud empowers you with contextual guided navigation to further analyze and update data across multiple dimensions.

You can easily change the screen layout and analytics to suit your role, planning objectives. You can tailor supplier, organization, resource, geography and product hierarchies to match your business segments. You can also add your own custom measures to capture unique data sources, perform proprietary calculations or build alternate plans. This broad configurability helps you support your team’s existing planning processes, and easily evolve to new planning practices over time.

Understand Cross Supply Chain Linkages

Pre-seeded worksheets offer familiar spreadsheet-like views, as well as specialized tools to rapidly review resource utilization, pegging of materials and master data. This allows you to focus on planning issues you care about, such as late orders, and, material and resources shortages. For example, the Build Plan shows material and resource requirements for an assembly over time in aggregated time buckets.

Related Products

- **Oracle Demand Management Cloud** predicts and models future shipments, orders and other demand signals.
- **Oracle Sales & Operations Cloud** aligns business plans and operations across the sales, marketing, finance and supply chain organizations.
- **Oracle Supply Chain Collaboration Cloud** shares order forecasts with suppliers and collaborates on their supply commitments.
- **Oracle Order Management Cloud** centralizes and standardizes your order fulfillment across multiple sales channels.
- **Oracle Supply Chain Execution Cloud** defines and executes production, shipping, receiving, transfers and other execution activities across the global supply chain.
- **Oracle Procurement Cloud** integrates sourcing, contracts and purchasing of goods and services.
You can analyze the end to end supply chain relationships spanning primary items, components or co-and by-product items, suppliers and resources. You can also easily focus on the specific orders driving demand, identify material and capacity shortages and push demand out or position available supply options to alleviate the shortages.

**Diagnose Planning Issues**

You can easily comprehend why the plan did what it did, because it shows how need by dates, earliest/latest start dates, consumption start dates, material available dates and other factors cause resource overloads and demand lateness. An easy-to-use Gantt chart allows you to visualize the plan at an item level or resource level, and make adjustments that work best for you without violating supply-side constraints.

Oracle Supply Chain Planning Cloud detects resource overloads, material shortages, order changes and other critical events so you can plan around them. You can decide which exceptions you want to apply to a particular plan, create your own exceptions, and adjust exception thresholds. You can also leverage intelligent tools such as Demand at Risk analysis to prioritize and resolve multiple exceptions in a single action.

![Gantt Chart](image)

**Figure 4.** Use the Gantt Chart to view, diagnose and resolve orders and resource requirements over time

**RESPOND TO CHANGING BUSINESS CONDITIONS**

When supply or demand changes, you need to be able to update your plans, consider alternative scenarios and work with internal organizations, contract manufacturers and suppliers to rebalance the supply chain. When supply constraints are insurmountable, you need to be able to reprioritize your order backlog so orders most important to you are fulfilled first.

**Prioritize and Reschedule Your Order Backlog**

Supply planners usually work to satisfy a given set of demands by resolving supply constraints. But what if demands in the backlog could be prioritized and rescheduled based upon your latest plans and supply conditions? The backlog management features of Supply Planning Cloud leverage flexible business rules to reorder pending sales orders and transfers, and simulate rescheduling alternatives. You can then accept, adjust and release scheduled date changes to reduce delivery delays, increase sales and achieve your margin targets, while relaxing critical supply constraints.
The most important orders should be accorded priority when supplies are limited. Backlog Management ranks competing demands based upon your criteria such as requested date, order creation date, item category and customer in addition to other attributes that affect your business. You can use these intelligent recommendations to maximize the value of orders that you can ship within a fiscal period, or simply to improve customer service. New dates, sources and transmit modes for affected orders can be released to Order Management Cloud or to export files that you can load into an on-premise order management system.

**Simulate Multiple Plan Scenarios**

With Oracle Supply Planning Cloud, you can also run multiple supply simulations using different assumptions. Plan simulations can evaluate the effect of an ECO or the potential supply disruption of a big new order. You can adjust sourcing, move supply and demand to different dates, update item attributes, bills of material, routings and resource attributes, and revise resource availability or supplier capacity to see the impact on your plan.

You can compare your plan simulations both at aggregate level (to see which generates more revenue, triggers fewer exceptions or improves other metrics) and at detailed level (to see how the due dates on specific orders changed). You can also save simulation changes that you want to apply across multiple plans or planning runs. Waterfall analysis compares current and previous results to drive continuous improvement.

In some situations, you may not want to re-run the entire plan, but just check on the impact of any changes you’ve made. Oracle Supply Planning Cloud allows you to recalculate a subset of the plan output in near real time to preview how user initiated changes affect supply and demand quantities and dates, planned orders, resources, supplier capacities and components.

**Collaborate Internally and Externally to Refine Your Plan**

Planning collaboratively yields better results, so Oracle Supply Planning Cloud links your plans with Oracle Social Cloud conversations. You can discuss delays with manufacturing, a proposed purchase order quantity with the buyer, or a safety stock policy change on an item with other planners. The system links your dialog and any notes with the plan to document the reasons behind your decisions.

Collaboration with external suppliers and contract manufacturers is just as important. Oracle Supply Planning Cloud can share your plan with trading partners through Oracle Supply Chain Collaboration Cloud. Supplier commitments are available for analysis, so you can decide whether you need to identify another supply source.

**Review and Release Orders for Execution**

To put your plans into action, you need to send your supply order recommendations to execution systems. Oracle Supply Planning Cloud can release planned orders to procurement, inventory and manufacturing automatically, or you can control the process manually. For example, you can review the percentage of a planned order for manufacturing that has all their components available, and release only the quantity that’s ready-to-build. Planned supply orders may support multiple demands, or, peg to an individual demand back-to-back. A Pegging Analysis screen helps you see these details and prioritize supplies; for example, those that fulfill sales orders rather than forecasted demand.

Integration of the order release process to Oracle Cloud SCM applications is built-in and an out-of-box integration package to Oracle eBusiness suite is available. If you are creating plans for other on-premise ERP systems, you can also export the planned orders and changes as a file that can then be imported into your Supply Chain Execution systems.
EXTEND YOUR PLANNING PROCESS AS YOU SEE FIT

Most Cloud ERP solutions only offer simplistic “one-size-fits-all” planning capabilities. Oracle Supply Planning Cloud changes the game, with comprehensive planning tools that are not only easy to use, but can evolve with your business. It is tightly integrated with Oracle Demand Management Cloud, so you can forecast demand and plan supply in a single user interface. It’s also pre-integrated with other Oracle SCM Cloud services, so you can spend less time implementing.

Oracle Supply Planning Cloud can plan supply for facilities that are still running on on-premise ERP and other SCM solutions. This allows you to slowly migrate your SCM processes to the cloud. You can start with planning, using available file-based and REST integration API to integrate your existing applications, and lift the rest of your applications to the cloud later on.

Oracle Supply Planning Cloud allows you to extend the solution for your unique business requirements. You can configure your own data analysis using custom time series data and configurable charts, graphs and tables. A series of REST Application Programming Interfaces (API) allows you to build two-way integration with custom extensions that may be required.

Take advantage of Oracle Supply Planning Cloud’s world-class simulation, collaboration, ease of use and ease of deployment to take your planning to the next level. It’s simpler, faster and better: Cloud without compromise.

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Integrated Cloud Applications & Platform Services

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