ORACLE DATA SHEET

Oracle Value Chain Planning
Advanced Supply Chain Planning

ORACLE 12 VALUE CHAIN PLANNING

Do you need to reduce your supply chain planning cycle times? Should you use alternate materials or resources to meet demand? Should you reallocate inventory in your distribution channel? What is the impact of a sudden reduction of supplier capacity on your customer demand? Oracle® Advanced Supply Chain Planning provides database centric holistic planning and optimization that rapidly and significantly improves supply chain performance by analyzing all aspects of a supply chain and developing optimal plans across the virtual supply chain.

KEY FEATURES

- Holistic supply and distribution planning
- Mix unconstrained, constrained, and optimized plans
- Centralized and decentralized planning
- Simultaneous material and capacity planning
- Variable time bucketing and constraints
- Model the realities of your supply chain: customer and supplier facilities; alternate components, resources, processes, suppliers, facilities, and ship methods; end item and component substitution, warehouse capacity, shelf life
- Enforce capacity, enforce demand due dates
- Configurable exception queries and priorities
- Integrated with Oracle E-Business Suite and JD Edwards EnterpriseOne via Value Chain Planning Integration Base Pack (select releases and features apply)

KEY BENEFITS

- Reduce planning cycle time
- Evolve from MRP to modern planning
- Make better decisions faster

Overview

With today's rapidly changing business conditions, you need a planning tool that surpasses the traditional latency of disconnected planning processes or Excel planning spreadsheets. Increased global competition, mass customization, higher levels of customer service, and less money to invest in information technology require you to move away from the "hold excess and expedite everything" paradigm. Your need to make better decisions faster, 24 hours a day, by leveraging a planning model that connects your entire supply chain network in a single planning run. Oracle Advanced Supply Chain Planning makes you more responsive by enabling you to perform simultaneous material and capacity planning across multiple facilities and time horizons in a single planning run, while at the same time accounting for the latest consensus forecast, sales orders, production status, purchase orders, and inventory policy recommendations. You can choose to immediately start with more advanced constrained and optimized planning constructs, leveraging the out-of-the-box optimization, or decide to get to that point gradually by starting with unconstrained planning.

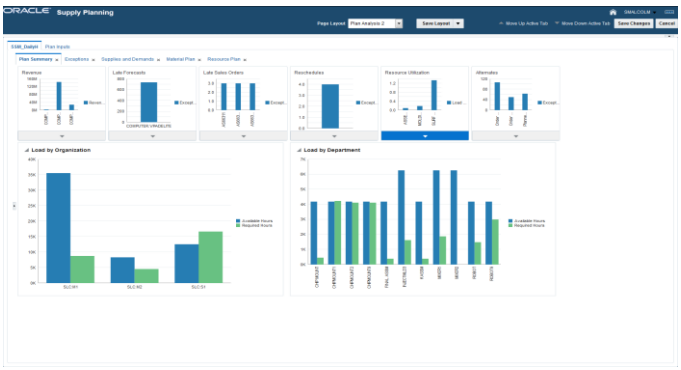

Figure 1: Advanced Supply Chain Planning – Configurable Plan Summary

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Reduce planning cycle time by running fewer plans

Oracle Advanced Supply Chain Planning enables you to run holistic plans that span long term aggregate planning to short term detailed schedules, multiple manufacturing processes (lot based, process, discrete, configure-to-order, and project based), and all organizations across a virtual supply chain. As a single solution for distribution, supply chain, and manufacturing planning, it is based on one supply chain model, one planning engine, and one setup. Its flexible configuration, however, enables you to define different models that can co-exist (hub-and-spoke planning; single plan) and evolve as your organization grows without requiring reimplementation. Extensive defaulting logic paired with a productivity enhancing user interface and strong exception management enables planners to quickly make their decisions.

Comprehensive distribution planning

Oracle Advanced Supply Chain Planning offers comprehensive support for companies that focus more on solving distribution and replenishment problems. Distribution planners can leverage a comprehensive Distribution Planner Workbench that presents global visibility of material positions, automates allocations and redistribution between regional and central distribution centers, with the ability to manually override, consolidates individual shipments into optimal truckloads. The Workbench highlights exceptions, and releases planning recommendations for execution, while taking into account kitting, end item substitution, date effective sourcing, distribution and allocation rules, global forecasting (dynamic order fulfillment), alternates (components, suppliers, facilities, and ship methods), warehouse capacity, shelf life, and supplier capacity constraints.

Comprehensive support for vertical industries

Oracle Advanced Supply Chain Planning considers key requirements for a broad range of industries. For example, for Process the tool supports complex network routings, contiguous operations, resource charges, process effectivity, minimum transfer quantities, fixed and integer ingredient scaling, alternate ingredients, resources, processes, suppliers, facilities, and ship methods, alternate recipes and formulas, co-products and by-products, end item substitution, shelf life, sequence dependent setups/changeovers, warehouse capacity, and batch production support (OPM integration). For High Technology, including Semiconductor, the planning tool supports alternate components, resources, processes, suppliers, facilities , and ship methods, end item substitution, sequence dependent setups/changeovers, critical items/resources and aggregate resources, lot-based jobs support (OSFM Integration), operation yield, simultaneous product family and item level planning, complex network routings, co-products and by-products, binning, multi-level configure-to-order models, and planned inventory points. For project-based and Aerospace and Defense companies, the tool supports key capabilities such as project group netting, hard and soft pegging, borrow-payback, project demand and supply views, contract pegging, cross-project allocations, project excess netting, and project specific exception messages, as well as the integration with Oracle Primavera.

Increase productivity and reduce decision making latency

Having sophisticated technology to help manage distribution and replenishment is not sufficient in and of itself. Tools need to be intuitive, easy to use, and easy to deploy to provide real business value and reduce planner's workload.

Robust exception management and root-cause analysis

Oracle Advanced Supply Chain Planning enables a management by exception paradigm. Exceptions can be displayed at any level of aggregation. You can quickly view all the exceptions for an entire plan, or decide to just focus on the exceptions for all critical items assigned to you, or directly deal with the issues for one specific item. You can also navigate from an exception to related exceptions. You can, for example, directly relate a problem like a shortage to the orders that may be impacted by that shortage. Similarly, comprehensive late demand diagnosis helps you analyze the root-cause of late demand.

Supply chain pegging

Full pegging enables you to quickly see all the way from end demand to the lowest level component or resource requirements. You can easily peg up and peg down from demand to supply and vice versa, as well as jump back and forth between previous states of the pegging information, or reduce the pegging information to view end demands or exceptions only.

Reduce planner workload through automation

Oracle Advanced Supply Chain Planning makes extensive use of workflow to enable process automation and automated corrective action. This enables you to significantly reduce the non-value added costs of manual activity. For example, workflow notifications will be sent when the planning engine detects late orders, over-utilized or under-utilized resources, and order reschedules.

Personalization

Planners can leverage extensive personalization to tailor their workspace to their needs. They can configure which screen to launch when starting their work, which queries to execute, share personal queries for items, supply, demand, resources, and exceptions with other planners, and organize plan summary, supply, demand, vertical and horizontal plan views, and Gantt charts to their needs. In addition, they can also decide to auto-create Excel output files to tailor their analysis to their own needs.

Simulation and planner collaboration

Multiple planners can also perform online simulations. Warnings are displayed to other planners if one planner is running the on-line planner for simulation purposes. For simulation purposes, planners can create multiple simulation scenarios where each scenario can vary key item attributes such as lead time, service levels, costs, and so on. Oracle Advanced Supply Chain Planning also enables the simultaneous use of one plan by multiple planners. An audit trail tracks all of the changes made to the plan. Each planner can see any changes made by other planners that may have affected what they are working on. The audit trail also enables planners to undo changes when they realize a change made during simulation has not improved the plan.

Detailed scheduling

Oracle Advanced Supply Chain Planning can optionally provide scheduling results down to the minute, which could be required for the initial few days of your planning horizon. Some examples of the detailed scheduling features include: sequence dependent setups (minimization of changeovers), scheduling of batch resources (such as furnaces or cleaning tanks where multiple products proceed through an operation of a fixed duration and capacity is represented in volume or weight); minimum transfer quantity, which models situations where subsequent operations start after a portion of the operation is complete instead of the complete operation which can reduce cycle time; and, the scheduling of simultaneous resources such as when tooling, machinery, and labor all need to be available simultaneously.

When companies prefer running fast day-level plans for material and capacity without inline scheduling constraints, yet still want to perform detailed plant level scheduling, they can leverage the integration with Oracle® Production Scheduling. Oracle Production Scheduling provides the most detailed plant scheduling level and can plan for actual as well as planned production. After scheduling is done, release the planned orders back to Advanced Supply Chain Planning as firm planned orders, or release directly to execution.

Designed For Planners, Not Programmers™ – Out-of-the-box optimization

Oracle Advanced Supply Chain Planning was designed For Planners Not Programmers™, presenting sophisticated optimization logic in business terminology that planners understand, such as choosing alternate resources, alternate suppliers, alternate facilities, use of substitute components, alternate ship methods, and different material and resource constraints over time.

Drive to operational excellence

Oracle Advanced Supply Chain Planning, in combination with other Oracle Advanced Planning products, can enable many best business practices such as collaborative planning, sales and operations planning, and continuous improvement.

Sales and operations planning

Oracle Advanced Supply Planning improves your sales and operations planning process by enabling you to collaborate with your internal organizations and external trading partners on a common set of demand data. Oracle Advanced Supply Chain Planning provides the operations planning portion of the Sales and Operations Planning process – It provides the rough cut capacity planning to help you determine the most profitable use of your resources.

Tactical supply chain planning

When deployed with Oracle Advanced Supply Chain Planning, you can use Oracle Advanced Supply Chain Planning's plan results as a starting point for intra-day simulations. Rapid Planning provides to fine tune what planned orders can and cannot be overridden in the simulation so preserve key decisions already made in the batch tactical plan. When done with the simulations, the results can be published back to Advanced Supply Chain Planning which will enforce the decisions made in its next run.

Collaborative planning

Oracle Advanced Supply Chain Planning enables you to pull your trading partners into the planning process. For example, the output of your plan can be published to your suppliers via Oracle Collaborative Planning directly from the Planner Workbench. The commitments from your suppliers come back as supplier capacity that is considered as a constraint in determining what you can produce to meet your demand based on your supplier capabilities. In addition, planners can simultaneously view plan related supply chain collaboration exceptions.

Continuous improvement

Oracle Advanced Supply Chain Planning calculates a variety of key performance indicators that highlight the effectiveness and efficiency of the supply planning process. In combination with extensive reports and workflow-enabled exception alerts, these enable users to discover areas for focus as well as to track the benefits of continuous improvement programs. Planners can personalize their Plan Summary to analyze and view these performance indicators. They can also leverage the integration with Oracle® Advanced Planning Command Center as a starting point for their analysis and quickly drill down from aggregate to details, and take corrective actions.

Enable key executives to analyze tactical planning information

Oracle Advanced Supply Chain Planning is fully integrated with Oracle Advanced Planning Command Center to provide key supply chain decisions makers the capability to analyze output from your supply plans, together with data from other Value Chain Planning products. You can compare key corporate performance metrics for your business strategies and alternatives as represented in your strategic and tactical plans. Oracle Advanced Planning Command Center also complements the analysis that planners and supply chain analysts can perform via an integrated Supply Chain Analyst dashboard that enables comparison between plan versions, archiving of plans at summary level, as well as contextual drill downs directly into the Planner Workbench.

Craw, walk, run – Adjust your model without reimplementation

Oracle Advanced Supply Chain Planning can be implemented using an incremental deployment approach. Planning organizations that are comfortable with straightforward unconstrained material and capacity planning can start with unconstrained planning, which still provides many benefits, as the planners get to use a more productive tool that provides a foundation for moving to more advanced planning processes. You can also decide to gradually move from single facility based planning to multi facility supply chain planning, without the need to reconfigure your system, as another step towards improvement of your planning decisions by taking the flow of materials between organizations into account holistically. Constraint based planning is typically the next step. This requires more accurate data but in return provides better quality plans. From constrained planning you can easily evolve to optimized planning. In both cases there is no need to retrain planners or to reconfigure the system. Oracle Advanced Supply Chain Planning even enables you to run different models at the same time. The coexistence of models enables you to compare the current unconstrained planning decisions to the ‘future’ constraint based planning decisions during a transition period, or to enable more sophisticated planning organizations in your company to move forward more aggressively than others.

RELATED PRODUCTS

- Oracle® Demand Management: use demand scenarios as input to supply chain planning
- Oracle® Advanced Planning Command Center for business scenario planning and aggregate level analysis, and Sales and Operations Planning analysis
- Oracle® Strategic Network Optimization: use network design optimization to create time-phased sourcing rules as inputs
- Oracle® Inventory Optimization: use time-phased safety stocks as input to supply chain planning
- Oracle® Global Order Promising: use constrained plans for capable to promise; reflect updates of promised orders directly in the plan
- Oracle® Production Scheduling: feed planned orders into production scheduling for more refined shop floor scheduling
- Oracle® Collaborative Planning: publish order forecast to suppliers; receive supply commits from suppliers; view collaboration exceptions in Planner Workbench
- Oracle® Demantra Real-Time Sales and Operations Planning: Provide constrained forecast and rough-cut capacity
- Oracle® Rapid Planning: react quickly to supply chain events with rapid what-if simulation
- Oracle® In-Memory Performance Driven Planning to enable improved end to end planning performance

Extreme performance for the demand-driven value chain

Planning your complex value chain has always been challenging, and the degree of difficulty keeps increasing. Trends in business and economic conditions as well as emerging technology have added to the complexity. The pressure increases to plan for more complex value chains, more frequently, to a greater level of detail, and to make more informed decisions. Oracle in-memory processing, based on the Value Chain Planning's In-Memory Performance Driven Planning and the Oracle Database In-Memory Option, provides un-paralleled performance and scalability to enable the next generation of interactive planning, simulation, and analysis to dramatically improve the performance of existing planning processes and enable new processes that were not previously feasible. This provides a unique value proposition in terms of reduced planning cycle time and data latency; increased application availability and transaction scalability; increased user satisfaction via improved response time; improved decision making with improved planning analytics; and, lower total cost of ownership and faster time to value.

VALUE CHAIN PLANNING — A COMPLETE SOLUTION

Oracle's Value Chain Planning solution enables companies to efficiently design, plan, and service their value chains from factory to shelf. Its componentized architecture enables you to start with any product and expand to other areas at any point in time. The Oracle Value Chain Planning architecture leverages the scalability and security of Oracle's Database and Fusion Middleware technology and can be deployed as a single instance with Oracle E-Business Suite, or integrated with other systems. Whether you implement one module or the entire product solution, Oracle Value Chain Planning enables you to share unified supply chain planning information across the enterprise so you can make informed decisions faster.

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