

JD EDWARDS ENTERPRISEONE PRODUCTION AND DISTRIBUTION PLANNING

ORACLE

JD EDWARDS ENTERPRISEONE

KEY FEATURES

- Plan movement of materials and products from procurement, through manufacturing and distribution
- Generate resource unconstrained or constrained production and distribution plans
- Reduce total supply chain costs through single-pass planning across supplier, distribution and manufacturing locations
- Reduce planning cycles and inventories
- Real time messaging and alerts with automatic retraction and context-sensitive drilldowns
- Allow multiple planners to collaborate on the same plan in real time
- Optimize component and finished good substitutions
- Pool safety stock through dynamic networks to reduce risk of stock outs
- Reduce freight costs within network via transportation loading

Do you want to reduce your inventory levels while improving your customer service at the same time? Do you want to reduce your supply chain planning cycle time to improve the responsiveness of your supply chain? JD Edwards EnterpriseOne Production and Distribution Planning optimizes the day-to-day flow of goods from procurement through manufacturing to distribution with real time visibility and event management. Simultaneously planning MPS, DRP and MRP to produce plans that respect constraints optimized around key cost drivers while ensuring that plans remain synchronized and acted upon among all locations within your supply chain network.

The Issue: Feasible and Collaborative Plans for Your Supply Chain

In today's business-to-business environment, a collaborative supply chain is a must. Even simple supply chain networks pose many questions: What products to make and to ship? How much of each? From where would they be sourced? When should shipments be made? The combined answers to those and other planning questions have impact on profitability and customer service.

At the heart of supply chain management is the question: What is the best way to coordinate the acquisition, production, storage, and movement of goods and materials across the supply chain to meet specific demand elements, such as customer orders, sales forecasts, or inventory level targets? The supply chain consists of physical locations through which raw materials and finished products flow and the resources that transport the goods between locations—from original suppliers to production plants, warehouses, and distribution centers, all the way to the final demand source, your customer.

The supply chain plan is a statement of how to coordinate all material supply, production, and distribution. This plan requires more than addressing the basic questions of when and how much product to move from each location in the supply chain; it needs to consider material, storage, and transportation costs as well as constraining factors such as supplier, production, storage, and transport capacities. This complexity of the planning process drastically increases with the number of products and locations involved.

Using the traditional approach of planning materials, production, and distribution separately, systems may create feasible materials, production, and distribution plans. However, plans are no longer adequate if they are merely feasible – they need to be optimized. Plans must bring about the highest possible levels of customer service at the lowest possible cost.

The Solution: Dynamic Agility for All Phases of Your Supply Chain

JD Edwards EnterpriseOne Production and Distribution Planning module provides a time-phased master production schedule and distribution plan based on dynamic sourcing, rather than restricting you to single-plant or warehouse sourcing. You determine appropriate

replenishment activities for material, work in process items, finished goods, and empty or reusable items by optimizing your multi-echelon distribution networks in a single pass.

Planning cycles are significantly reduced with the ability to simultaneously plan distribution, manufacturing and materials. Considering optimized distribution, manufacturing and material costs and constraints at the same time ensures

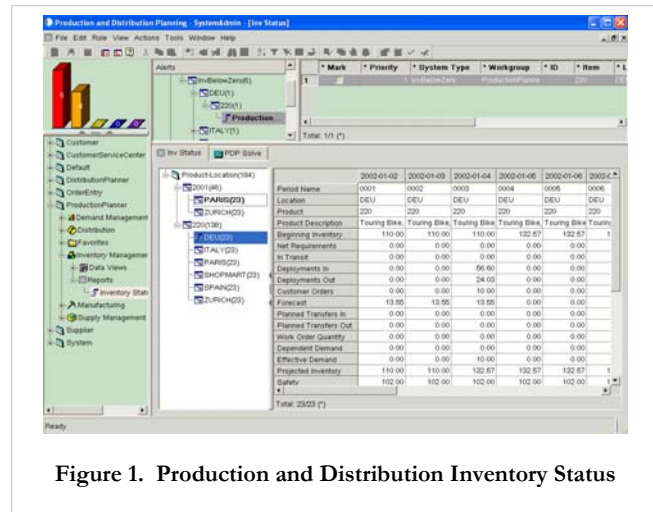


Figure 1. Production and Distribution Inventory Status

that plans across the organization are feasible across the business and delivered at the lowest possible cost. The single pass tactical plan for provides quick turnaround times to all areas of the organization and collapses the planning cycle – often to days from weeks.

JD Edwards EnterpriseOne Production and Distribution Planning understands the various costs, constraints, and lead times involved in product delivery, while simultaneously

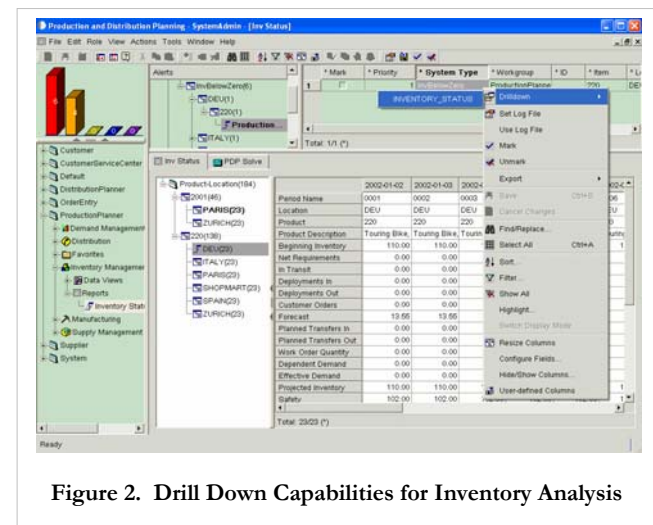


Figure 2. Drill Down Capabilities for Inventory Analysis

exploiting agility in the load-building process.

From the moment you recognize the demand for finished goods, production and distribution planning activities makes your supply chain process — from material procurement to manufacturing to end-product distribution — as smooth as possible. You can generate optimized and feasible procurement, manufacturing, and distribution plans in complete collaboration with your suppliers and customers. Once implemented, your plan is immediately visible to those responsible for its execution, thereby synchronizing the many people, processes, and systems that traditionally operate as disparate functional units.

Real-time Visibility

JD Edwards EnterpriseOne Production and Distribution Planning gives you the freedom to choose the best ideas, the best partners, and the best technology. With real-time messaging and web planning components, you can enable high levels of visibility and communication, and at the same time establish collaborative relationships with suppliers and customers via the

internet. Activities, such as vendor managed inventory (VMI) are fully supported.

For example, if issues are detected concerning material availability, resource utilization, inventory violations, or product delivery, real-time alerts are sent to those who need to know. Depending on the level of trust with each individual business partner, you can determine the appropriate level of information to share to gain maximum value from the business relationship.

Business to Business Efficiency Using Optimized Planning

Since the end-to-end supply chain involves not only the storage and physical distribution of materials but also their acquisition and production, JD Edwards EnterpriseOne Production and Distribution Planning has functional elements performed by traditional manufacturing systems such as Manufacturing Requirements Planning and Master Production Scheduling and combines them with distribution planning to create one integrated supply chain system.

Optimized planning is best achieved by taking an integrated end-to-end view of supply chain activities. Planning materials, production, and distribution in isolation from each other cannot possibly yield optimized plans. To attain truly optimized plans, working with one view of the total enterprise is essential; a view should consider all decision elements together, not parts of the supply chain one at a time. JD Edwards EnterpriseOne Production and Distribution Planning creates an end-to-end view of the supply chain to produce optimized plans.

The Need for Collaboration

Planning is only one factor in successful achievement of tangible benefits. Both supply chain planning and execution involve a high degree of consultation and collaborative work among a number of people, including managers, planners, and operating staff.

JD Edwards EnterpriseOne Production and Distribution Planning addresses crucial needs for collaboration and makes possible the instantaneous sharing of information across the entire supply chain, not only within the core enterprise but also throughout the extended enterprise.

Solver Technologies to Drive the Supply Chain

A *solver* takes in all relevant data and decision parameters, processes them all to produce an optimized plan. JD Edwards EnterpriseOne Production and Distribution Planning determines how to best use manufacturing and distribution resources through two types of solvers:

Linear programming: Linear programming is a mathematical method that determines the best use of multiple constrained resources (e.g. production, storage, transportation facilities) to achieve set goals (e.g. safety stock levels, customer deliveries) at the least possible cost.

Heuristic: A heuristic is a methods of solution based on practical experience, such as rules-of-thumb instead of the mathematic optimal solution. Sometimes, operational realities or policy decisions require adjustments to, or replacement of, the mathematically precise solution.

Alerts of Potential Problems

The moment JD Edwards EnterpriseOne Production and Distribution Planning becomes aware of potential problem, such as stock-out condition, all interested parties and immediately alerted so that remedial action can be taken.

There are significant features in these alerts. The module directs an alert only to specific interested parties whose roles in the enterprise require them to know about an exception and

take corresponding action. It allows various parties to control what alerts they want to see according to the severity of situations. When the cause of an alert has been fixed so that the situation is no longer a contingency, alerts are dynamically retracted in real-time.

Drilldowns

When a planner receives an alert they usually need to look into the circumstances around the alert in order to determine its cause and the corrective measures to take.

For example, a planner can call for an inventory status report with a click of the mouse. The alert subsequently takes the planner to the exact place in the report that shows the cause. It may be shipments of the product arriving at, or going out of, a distribution center on that date. The planner has quick access to whatever information needs to be examined.

Collaboration Enabling

The business of supply chain planning is a collaborative process. It typically involves several planners with specific roles and responsibilities. These responsibilities, however, have intersections of common interest. For example, a planner for one product is interested in transportation facilities that are shared by other products. Decisions that a planner makes affecting the shared resource need to be known to other planners.

JD Edwards EnterpriseOne Production and Distribution Planning enables this information interchange by disseminating new and changed data to all interested and authorized parties throughout the network in real-time. There is never any need for planners to make repetitive inquiries to be kept up-to-date on the latest data.

Incremental Deployment. Get Benefits Quickly.

You can deploy all JD Edwards EnterpriseOne Supply Chain Planning products incrementally, enabling you to start with a smaller planning footprint quickly, while still leveraging the tight integration once all components are operational. Each additional module requires limited incremental effort to implement since all of the components share a common integration foundation (Supply Chain Business Modeler) and work together seamlessly. If your shop floor throughput poses challenges to your business, you can implement Production Scheduling first. Alternatively, you can enable it later as an add-on to your existing implementation of other JD Edwards EnterpriseOne Supply Chain Planning products, leveraging all of your existing setups.

The Complete Supply Chain Management Solution

JD Edwards EnterpriseOne enables you to efficiently manage customer processes, manufacture products, ship orders, collect payments, and more - all from applications that are built with unified information architecture. This provides a single definition of your customers, suppliers, employees, and products – all aspects of your business. Whether you implement one module or the entire suite, JD Edwards EnterpriseOne enables you to share unified information across the enterprise so you can make smarter decisions based on greater business insight.

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