

ORACLE SERVICE PARTS PLANNING

KEY FEATURES

- Service Parts Planning Workbench with integrated forecasting and replenishment planning to efficiently support service parts planners
- Unique capabilities to support high volume forecasting and replenishment
- Planner Work Lists tailorable by individual planners to prioritize work
- Key forecasting methods that support the complex range of demand patterns inherent in service parts planning
- Support for part condition to represent returns and refurbishment
- Part Criticality Matrix to reduce maintenance of service levels and forecasting rules
- Part supersession
- Returns forecasts to predict the flow of repairable product back into the supply chain
- Automatically minimize new buys
- Plan for life time buys
- Incremental planning and interactive re-planning
- Auto-release rules to automatically release planning recommendations to service execution
- Integration to Oracle® Spares Management for external repairs and technician inventory
- Integration to Oracle® Depot Repair for internal repairs

Do you need to manage a complex after sales service supply chain with all its unique challenges? Do you need to improve part availability and customer satisfaction? Do you need to reduce investment in service parts inventory? Do you need to streamline service operations to drive cost reduction? Oracle® Service Parts Planning, a key component of Oracle’s comprehensive Service Management Solution, can transform your after sales service and support operations from a cost center to a key profit center and source of strategic advantage.

Transform your service organizations from cost to profit centers

The world’s leading organizations have realized that operational efficiency combined with customer service can drive marketplace success. Service organizations are instrumental in achieving top line growth, profitability, and customer loyalty. Oracle Service Parts Planning, a key component of Oracle’s comprehensive Service Management solution, enables you to effectively manage the challenges of a multi-echelon service supply chain. Using a single Service Planner Workbench, you can simultaneously analyze forecast and replenishment decisions, as well as release plan recommendations for execution. Oracle Service Parts Planning also provides the important statistics and optimization that service planners need to improve forecast accuracy and calculate optimal replenishment and redistribution for all service parts while considering key constraints such as part criticality, part condition, and part supersession. Making informed and optimal decisions enables you to transform your service operations from a cost center to a profit center at reduced IT complexity and cost.

Item	Org	Planner	Buyer	Planning Met...	BOM Item Type	Make/Buy	Processing LT	Repair Yield	Standard Cost
ADVALV_213...	SLC-DC1	JSmith	Smith, Mr. Jo...	MPS planning	Standard	Make	0	8	0

Worksheet Preferences	Service	Days in Past	01/07/2011: P:0	01/10/2011: P:1	02/07/2011: P:2	03/14/2011: P:3	04/11/2011: P:4	05/09/2011: P:5	06/13/2011: P:6
SLC.DC1	ADVALV_2132X3	Net Forecast		1,000.00					
		Independent De...	0.00	0.00	1,000.00	0.00	0.00	0.00	0.00
		Dependent De...	0.00	0.00	0.00	0.00	0.00	0.00	0.00
		Total Demand	0.00	0.00	1,000.00	0.00	0.00	0.00	0.00
		Total Supply	0.00	0.00	1,500.00	0.00	0.00	0.00	0.00
		Projected Availa...	0.00	0.00	500.00	500.00	500.00	500.00	500.00
		Total Defective ...	0.00	0.00	0.00	0.00	0.00	0.00	0.00
		Total Defective ...	0.00	0.00	0.00	0.00	0.00	0.00	0.00
		Safety Stock			257.14	500.00	500.00	500.00	500.00

Add/Edit	Date	Comment	Item	Exception	Count (All)	Count (Action not taken)
	01/07/2011	Need to talk to supplier and see if we can e...	ADVALV_2...	Items below safety stock	2	2
		Add new comment		Items with a shortage	1	1
				Late replenishment for forecast	1	1

Figure 1: Oracle Service Parts Planning – Service Planner Workbench

Simultaneously forecast, replenish, and redistribute your service parts

Oracle Service Parts Planning provides a single Service Planner Workbench to manage forecasting and replenishment decisions and process large numbers of service parts. Multiple planners can work on a single plan and prioritize their work around the most important exceptions, parts, suppliers, and customers. They can analyze replenishment and forecast information; simultaneously view item information like attributes, failure rates, and the supersession chain; and analyze exceptions and enter comments for their decisions. In addition, history of shipments, returns, and field technician usages can be viewed.

Improve service parts planner productivity

Oracle Service Parts Planning provides key capabilities to improve the productivity of service planners. You can define one or more work lists with prioritization so that the most important issues are always presented when entering the workbench to begin the plan analysis. You can also define unlimited item, supply-demand, exception, supplier, and customer queries that automatically show a pre-defined subset of critical information. Query results are retained between analysis sessions to enable you to return to where you left off. Work lists and queries can be private or shared between planners. You can use workflow driven exception messages to notify planners and automatically initiate corrective action. Interactive ‘what-if’ simulation and fast incremental planning enables rapid response to changing conditions – for example, you can simulate changing forecasts or forecast methods, changes to supply and demand, and changes to item attributes such as yield and lead times.

Oracle Service Parts Planning provides out-of-the-box statistics and optimization – designed For Planners, not Programmers™ – to get you started quickly without programming. Combined with extensive defaulting rules, it enables you to make better decisions faster.

More accurately forecast your service parts

Predicting the demand of service parts presents unique challenges. Service parts’ demand patterns differ from new production items – the service parts necessary to support new products need to be identified before any history of usage exists.

Account for intermittent, seasonal, and fast-moving demand patterns

Oracle Service Parts Planning provides support for key forecasting methods specifically targeted to address the challenges of service parts: moving average, exponential smoothing methods like Holt Winters enhanced, regression with seasonal causal, Croston’s, regression with seasonal causal, and multiplicative Monte Carlo regression with seasonal causal. It also provides more than 100 advanced parameters for automatic fine tuning. Oracle Service Parts Planning embeds the powerful, patented, and proven Bayesian analytical forecast engine that blends multiple forecast methods instead of selecting one method, resulting in unprecedented forecast accuracy.

Forecast a large number of parts

Scalability to support a large amount of parts can present a challenge when forecasting service parts. Oracle Service Parts Planning supports event-driven forecasting with the capability to forecast groups of items on different cycles. You can define which parts are more frequently forecasted than others by assigning rules that are based on usage patterns and part criticality.

Leverage composite forecasting

Even with the best methods, many service parts forecasting problems remain difficult to solve. For example, when you release a new product, you need to predict service requirements prior to having any usage data that is required for statistical forecasting methods. Oracle Service Parts Planning provides powerful composite forecasting that enables you to combine forecasts based on actual shipments, field technician usages, and returns from customers. In addition, you can forecast based on existing and projected product population and expected service failure rates. History of multiple revisions across your supersession chain is automatically combined to accurately predict demand for the new revision.

Leverage Oracle Demantra for additional forecasting capabilities (optional)

Oracle Service Parts Planning can operate together with Oracle® Demantra Demand Management to deliver additional forecasting capabilities. For example, you can leverage Oracle Demantra Demand Management to forecast specific customer service agreements and how they impact demand and inventory or you can forecast new parts based on part characteristics and life cycle demand curves of similar parts. When the organization requires a business process that spans demand management across the Sales, Marketing, Operations and Service organizations, you can also leverage Oracle Demantra Demand Management.

Optimize the replenishment of parts across the extended service network

Oracle Service Parts Planning enables you to minimize inventory and purchasing costs while maximizing parts availability and service levels. It considers all of the critical service planning constraints and is completely integrated with the field service execution system.

Minimize inventory and purchasing costs and out of stock impacts

Oracle Service Parts Planning automates key planning decisions to provide a high level of customer service at the lowest overall cost. For example, it automatically plans to repair returned defective parts and consumes inventory of older revisions before planning new buy orders to fulfill the shortfall, minimizing the total cost of meeting service demand. In addition, it automatically replenishes to safety stock levels and can dynamically reallocate and reposition parts from locations that have excess inventory to locations that need inventory before recommending repairs or new replenishment orders.

Consider key service planning constraints

You can model how your service supply chain changes over time. Time-phased sourcing rules that include sources such as ‘repair at’, ‘return to’, ‘make at’, ‘buy from’, and ‘transfer from’ (including circular sourcing) accurately define your service supply chain. You can group sourcing rules into unlimited assignment sets for what-if scenarios – for example, you can use different ship methods with different lead times to automatically choose when to use expedited delivery to meet service requirements. Flexible assignment of sourcing rules minimizes setup maintenance and lowers overall cost.

Oracle Service Parts Planning accurately models all of the key constraints that make planning for service unique. For example, it represents the unique characteristics of service parts like part supersession chains of multiple revisions; part condition to represent both returned defective parts and new or refurbished parts available for demand; and criticality to drive planning decisions. It plans for both internal and external repair sources, considers purchasing, repair, and transportation lead times across your entire service supply chain, and considers

KEY BENEFITS

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- Accurately forecast all of your service parts.
- Optimize the replenishment and redistribution of parts across the extended service network
- Monitor and control your service supply chain
- Design your most profitable service supply chain
- Configure to your business needs
- Incremental deployment – get benefits quickly without the loss of integration

RELATED PRODUCTS:

- Oracle® Demantra Demand Management and Oracle® Demantra Advanced Forecasting and Demand Modeling
- Oracle® Inventory Optimization: global inventory holding strategies, inventory budgets, and profitability of service level agreements
- Oracle® Collaborative Planning: publish spare parts forecast for new buy and external repair to 'new buy' and 'repair' suppliers; manage spare parts at customer locations
- Oracle® Global Order Promising: promise spare parts to customers
- Oracle® Spares Management: management of technician inventory and replenishment
- Oracle® Depot Repair: management of internal repair processes

yield associated with repairing returns and defectives. It also generates supplier capacity over-utilization exceptions for new buy items.

Collaborate with suppliers and customers

You can optionally leverage the capabilities of Oracle Collaborative Planning to enable service parts planners to publish spare parts order forecast for 'new buy' and (external) repair parts to their spare parts suppliers. In addition, you can manage spare part components at customer locations via a standard vendor managed inventory process.

Out-of-the-box integration with service execution

Oracle Service Parts Planning provides you with global parts inventory visibility across all of your service organizations. Out-of-the-box integration with Oracle Spares Management and Oracle Depot Repair enables you to effectively balance your parts inventory – release depot repair orders, reschedules, and transfers for internal repairs, and new buy purchase orders, external repair orders, and transfers for spares management. You can also automatically release planning recommendations that fall within a specified planning time fence.

Design your most profitable service supply chain

Oracle Service Parts Planning's integration with Oracle® Inventory Optimization enables you to design the optimal service supply chain. For example, you can assess the cost of varying service levels and fulfillment lead-times to determine the cost and profitability of your customer service level agreements. You can also determine the optimal stocking strategy, including the effects of postponement and pooling, and required inventory investment to meet your service commitments within your inventory budget.

Oracle 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. For example, you can decide to start with improvements to your service management process because you have a spare parts problem, and then implement advanced demand management and a sales and operations planning process. The Oracle Value Chain Planning architecture leverages the scalability and security of Oracle's RDBMS 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's Value Chain Planning solution enables you to share unified supply chain planning information across the enterprise so you can make smarter decisions faster, with better information.

Contact Us

For more information about Oracle Service Parts Planning, please visit www.oracle.com or call +1.800.ORACLE1 to speak to an Oracle representative.

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