

Oracle Demand Planning

Student Guide

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Preface

Profile

Before You Begin This Course

Before you begin this course, you should have the following qualifications:

- Thorough knowledge of forecasting theory and practice
- Working experience with navigating Oracle applications

Prerequisites

- Overview to Advanced Planning and Scheduling Suite of Products
14513GC10

How This Course Is Organized

Oracle Demand Planning is an instructor-led course featuring lecture and hands-on exercises. Online demonstrations and written practice sessions reinforce the concepts and skills introduced.

Related Publications

Oracle Publications

Title	Part Number
<i>Oracle Demand Planning User's Guide</i>	<i>A77223-01</i>
<i>Oracle Advanced Supply Chain Planning and Oracle Global ATP Server User's Guide</i>	<i>A81011-01</i>

Additional Publications

- System release bulletins
- Installation and user's guides
- *read.me* files
- *Oracle Magazine*

Typographic Conventions

Typographic Conventions in Text

Convention	Element	Example
Bold italic	Glossary term (if there is a glossary)	The <i>algorithm</i> inserts the new key.
Caps and lowercase	Buttons, check boxes, triggers, windows	Click the Executable button. Select the Can't Delete Card check box. Assign a When-Validate-Item trigger to the ORD block. Open the Master Schedule window.
Courier new, case sensitive (default is lowercase)	Code output, directory names, filenames, passwords, pathnames, URLs, user input, usernames	Code output: <code>debug.set ('I', 300);</code> Directory: <code>bin (DOS), \$FMHOME (UNIX)</code> Filename: Locate the <code>init.ora</code> file. Password: User <code>tiger</code> as your password. Pathname: Open <code>c:\my_docs\projects</code> URL: Go to <code>http://www.oracle.com</code> User input: Enter <code>300</code> Username: Log on as <code>scott</code>
Initial cap	Graphics labels (unless the term is a proper noun)	Customer address (<i>but</i> Oracle Payables)
Italic	Emphasized words and phrases, titles of books and courses, variables	Do <i>not</i> save changes to the database. For further information, see <i>Oracle7 Server SQL Language Reference Manual</i> . Enter <code>user_id@us.oracle.com</code> , where <i>user_id</i> is the name of the user.
Quotation marks	Interface elements with long names that have only initial caps; lesson and chapter titles in cross-references	Select "Include a reusable module component" and click Finish. This subject is covered in Unit II, Lesson 3, "Working with Objects."
Uppercase	SQL column names, commands, functions, schemas, table names	Use the <code>SELECT</code> command to view information stored in the <code>LAST_NAME</code> column of the <code>EMP</code> table.

Convention	Element	Example
Arrow	Menu paths	Select File—> Save.

Brackets	Key names	Press [Enter].
Commas	Key sequences	Press and release keys one at a time: [Alternate], [F], [D]
Plus signs	Key combinations	Press and hold these keys simultaneously: [Ctrl]+[Alt]+[Del]

Typographic Conventions in Code

Convention	Element	Example
Caps and lowercase	Oracle Forms triggers	When-Validate-Item
Lowercase	Column names, table names	SELECT last_name FROM s_emp;
	Passwords	DROP USER scott IDENTIFIED BY tiger;
	PL/SQL objects	OG_ACTIVATE_LAYER (OG_GET_LAYER ('prod_pie_layer'))
Lowercase italic	Syntax variables	CREATE ROLE <i>role</i>
Uppercase	SQL commands and functions	SELECT userid FROM emp;

Typographic Conventions in Navigation Paths

This course uses simplified navigation paths, such as the following example, to direct you through Oracle Applications.

(N) Invoice > Entry > Invoice Batches Summary (M) Query > Find (B) Approve

This simplified path translates to the following:

1. (N) From the Navigator window, select Invoice > Entry > Invoice Batches Summary.
2. (M) From the menu, select Query > Find.
3. (B) Click the Approve button.

Notations :

(N) = Navigator

(M) = Menu

(T) = Tab

(I) = Icon

(H) = Hyperlink

(B) = Button

Typographical Conventions in Help System Paths

This course uses a “navigation path” convention to represent actions you perform to find pertinent information in the Oracle Applications Help System.

The following help navigation path, for example—

(Help) General Ledger > Journals > Enter Journals

—represents the following sequence of actions:

1. In the navigation frame of the help system window, expand the General Ledger entry.
2. Under the General Ledger entry, expand Journals.
3. Under Journals, select Enter Journals.
4. Review the Enter Journals topic that appears in the document frame of the help system window.

Getting Help

Oracle Applications provides you with a complete online help facility.

Whenever you need assistance, simply choose an item from the Help menu to pinpoint the type of information you want.

To display help for a current window:

1. Choose Window Help from the Help menu, click the Help button on the toolbar, or hold down the Control key and type 'h'.

A web browser window appears, containing search and navigation frames on the left, and a frame that displays help documents on the right.

The document frame provides information on the window containing the cursor. The navigation frame displays the top-level topics for your responsibility, arranged in a tree control.

2. If the document frame contains a list of topics associated with the window, click on a topic of interest to display more detailed information.

3. You can navigate to other topics of interest in the help system, or choose Close from your web browser's File menu to close help.

Searching for Help

You can perform a search to find the Oracle Applications help information you want. Simply enter your query in the text field located in the top-left frame of the browser window when viewing help, then click the adjacent Find button.

A list of titles, ranked by relevance and linked to the documents in question, is returned from your search in the right-hand document frame. Click on whichever title seems to best answer your needs to display the complete document in this frame. If the document doesn't fully answer your questions, use your browser's Back button to return to the list of titles and try another.

Overview to Oracle Demand Planning

Chapter 1

Oracle Demand Planning

Overview

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Oracle Demand Planning Modular Courses

Oracle Demand Planning Modular Courses

- Overview of Oracle Demand Planning (ODP)
- Administering Oracle Demand Planning
- Generating Forecasts
- Analyzing and Managing Forecasts

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Oracle Demand Planning Agenda

This training module provides an overview of the Oracle Demand Planning (ODP) product. Subsequent Oracle Demand Planning training modules are:

- Administering Oracle Demand Planning
- Generating Forecasts
- Analyzing and Managing Forecasts

Objectives

Objectives

After completing this module, you should be able to explain features and benefits of Oracle Demand Planning.

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What is Demand Planning?

What is Demand Planning?

- **Planning for future demand scenarios**
 - Estimate future demand based on market conditions
 - Collaborative planning process involving internal and external participants
- **A crucial function for improving operational plans**
 - Optimal resource allocation
 - Reduced inventory levels
 - Improved customer satisfaction
- **Exception-based forecast tracking and notifications**



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What Is Demand Planning?

Oracle Demand Planning is an integrated module within the Oracle Advanced Planning and Scheduling (OAPS) application suite. Oracle Demand Planning assists in the process of creating forecasts. These forecasts are projections of demand, primarily for finished goods.

Demand planning involves more than forecasting. It is a collaborative process involving internal and external participants. Information from several sources is collected and organized in order to estimate future demand based on market conditions. This is a crucial function for improving operational plans. Successful demand planning results in optimal resource allocation, reduced inventory levels and improved customer satisfaction. ODP provides exception-based forecast tracking and notifications.

Contrasting Demand Planning with Supply Planning



Supply Plans

Manufacturing planning and scheduling applications, such as Oracle ASCP, create supply plans. These systems suggest a set of time-phased purchase orders and work orders as needed to replenish the items that are consumed or demanded throughout a supply chain. This supply plan is driven by a projection of demand, which may be in the form of sales order backlog, demand forecasts, or a combination of actual sales and demand forecasts.

Demand Plans

Oracle Demand Planning provides an accurate, time-phased projection of demand for use in calculating supply plans. Although the ASCP plan is driven by the demand plan, demand is not the only consideration in making the supply plan. Inventory investment, carrying costs and customer service levels, and effective use of labor and production resources are other important considerations in making the final supply plan.


Inventory Plans

Oracle Risk Optimization is a module within the Oracle Advanced Planning and Scheduling suite that automates the tradeoff decisions between service level stock out risks and the risks of investing and carrying safety stock inventory. Risk Optimization (RO) provides a time-phased inventory plan. RO information is also input to Oracle ASCP so that the resulting supply plan balances with the demand plan and at the same time maintains dynamic safety stock inventory as needed to meet customer service level policy objectives.

Advanced Planning and Scheduling (APS) Suite

Advanced Planning and Scheduling (APS) Suite

- **Advanced Supply Chain Planning**
 - **Constraint Based Planning and Optimization**
 - **Risk Optimization**
- **Demand Planning**
- **Global Available-to-Promise Server**
- **Manufacturing Scheduling**
- **(Future) Transportation Planning**
- **(Future) Supply Chain Exchange**



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APS Suite

Oracle Demand Planning can be purchased and operated separately from the other components of the Advanced Planning and Scheduling suite. Synergistic benefits and ease of implementation motivate installing ODP as part of the APS suite.

Advanced Supply Chain Planning can be purchased separately. An optional enhancement to the base ASCP module is Constraint Based Planning and Optimization. Risk Optimization requires ASCP with the Constraint Based Planning and Optimization option implemented.

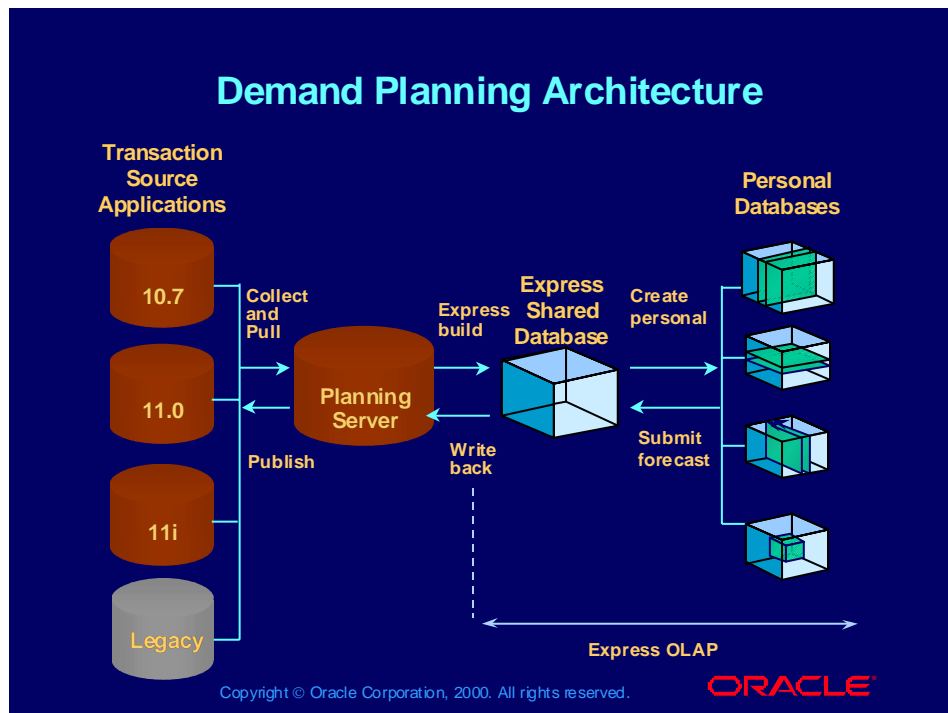
Global Available-to-Promise Server requires ASCP.

All of the above are backward compatible to the Oracle 10.7 character based release.

Manufacturing Scheduling is tightly integrated with Oracle WIP Release 11i, and can be purchased separately from the other APS components. It requires Oracle WIP Release 11i and is not compatible with earlier releases.

In the near future ODP will integrate with the Oracle Supply Chain Exchange. Other current development efforts include transportation planning and warehouse management.

Demand Planning Architecture



Demand Planning Installed with Oracle Applications

Information can be collected from multiple Oracle Applications source instances, for example, Release 10.7, Release 11.0, and Release 11i using the collection programs that come with Oracle Demand Planning. For Oracle Process Manufacturing, there is complete integration with Release 11i. For Releases 10.7 and 11.0, integration solutions are available from Oracle Consulting.

Oracle source instance data is collected to staging tables and then moved to destination tables in the Demand Planning Server. From there, Express data is extracted and moved to the Oracle Express master database.

Express data is submitted to each planner's personal Express database depending upon data assignments made by the Demand Planning Administrator.

After each planner makes changes and submits their forecasts back to the Express Master database, the Demand Planning Manager reviews the changes, finalizes the master demand plan, and submits it to the Demand Planning Server. From there, it is written back to the Oracle source instances.

Why is Demand Planning Difficult?

Why is Demand Planning Difficult?

- Short product life cycles
- Evolving market conditions
- Global markets
- Multiple sales channels
- Multiple sources of information
- Demand distortions



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Challenges for Demand Management

Planning for demand is a difficult challenge. Short product life cycles limit the availability of historical data to use as a basis for projections. Market conditions are constantly changing. Global market demands are filled through multiple competing sales channels. Multiple sources can result in overlapping information, where the same demand is measured at different levels of aggregation. Finally, many factors can cause demand to change from its normal course.

Demand Distortions

Demand Distortions

- State of the economy
- Promotions
- Competitors' responses to promotions
- Product introduction and cannibalization
- Lot-size discounts
- Fiscal budget cycle
- Allocations
- Panic and perceptions
- Hedging, commodity futures



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Influencing Demand

The state of the economy can have a general influence demand for a broad category of products, such as durable goods.

Promotions are intended to change the timing or magnitude of demand.

Competitors can be expected to respond to promotions. For example, when one airline changes fares for a route, other airlines serving that same route are likely to respond with similar pricing.

Cannibalization is a term used to describe the situation where a new product introduction results in reduced demand for similar existing products.

Lot size discounts provide incentive for customers to place larger orders, less frequently than they ordinarily would.

Much of demand seasonality can be traced to fiscal budget cycles. Near the end of a fiscal year, budget gamesmanship requires managers to spend their entire budget or suffer a budget reduction in the next year.

Items in short supply tend to be hoarded in regions of low demand rather than being redistributed. This makes shortages across the system worse. Local sales forecasts are artificially inflated in the hope of gaining a greater allocation. Allocation processes can mask the real level of demand.

Perceptions of impending shortages can be self-fulfilling. For example, fear that the municipal water supply would be disrupted by Y2K problems caused the demand for bottled water to increase just prior to New Years Day 2000. This in turn caused some store inventories to be depleted.

Hedging and futures trading buffer price uncertainty.

Why is Demand Planning Important? Demand Planning Benefits

Why is Demand Planning Important?
Demand Planning Benefits

- **Improve forecast accuracy**
 - **Manage demand distortions**
 - **Plan collaboratively**
- **Improve operational plans**
 - **Inventory reduction**
 - **Higher fill rates**
 - **Higher revenue**

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Demand Planning Benefits

Oracle Demand Planning improves forecast accuracy by providing the capability to effectively manage demand distortions and plan collaboratively.

Oracle Demand Planning provides functionality to improve operational plans, as well as improve a company's ability to manage profitability and customer expectations.

Improving Operational Plans



Planning Versus Reacting

Forecasts always contain some error variance, but the only alternative to forecasting is not forecasting. In other words, the choice is between making sales and operations plans that are based on forecasts that contain some errors, or reacting to the current instant market conditions with a series of short-range decisions.

The figure indicates that it is usually not desirable to let the market directly drive production operations. Reaction to dynamic markets requires rapid changes in usage of operations resources, such as labor, materials, capital equipment and distribution facilities. This chaotic approach is costly, difficult to implement, and often loses sight of strategic goals.

Forecasting is essential to the planning process. Better forecasts tend to improve planning processes. Making use of all available information sources tends to result in better forecasts, provided the information is organized into a usable format.

Oracle Demand Planning enables manufacturers to coordinate information from a broad range of sources to systematically create better forecasts. ODP also improves the operations planning process by providing the information necessary to make product-mix decisions in a manner that is consistent with the strategic goals of the company.

Basing Demand Forecasts on Sales History

Basing Demand Forecasts on Sales History

- **Statistical extrapolation of history provides an objective baseline**
- **Issues:**
 - Sales history usually underestimates the actual level of demand.
 - The effect of unique future events are not reflected in sales history data.
 - Products with short life cycles do not provide enough historical sales data to identify trends and patterns.
- **Booking History**



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Issues Associated With Using Sales History Data

Actual sales are sometimes a poor measure of the true level of demand. Sales can be limited to something less than demand when problems in the supply chain prevent getting the right product to the right place at the right time. Demand forecasts based on historical periods when supply chain problems were causing lost sales tend to underestimate future demand. Safety stock will be consumed.

Marketing promotions and special events can have a profound influence on sales. Sales history alone might not provide enough information for estimating the sales boost from an innovative promotion. When the promotion is underestimated, safety stock will be consumed.

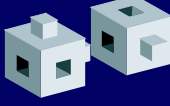
One effect of the trend toward very short product life cycles is that there is little or no sales history data available for most products. For example, seventy percent of sales for one large high-tech manufacturer result from products that have existed for less than two years.

Booking History

Booking history provides more accurate information regarding the actual time that demand occurs than does sales history. Oracle Demand Planning includes booking history as an optional source of demand history information.

Key Features

Key Features



- Internet collaboration
- View and work with data that is relevant to individual responsibilities
- Integrate demand forecasts into Advanced Supply Chain Planning
- Unlimited forecast scenarios
- Multidimensional analysis
- Multiple statistical methods
- Automatic selection of best-fit model
- Exception reporting and feedback

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ODP Key Features

Oracle Demand Planning supports Internet collaboration, incorporating information from sales, marketing, operations, and customers.

Each demand planner can view and work with data that is relevant to their responsibility.

ODP also provides the tools and techniques for building a forecast of demand, which in turn will be used to drive the supply chain planning process.

The online analytical process supports ad hoc creation of an unlimited number of scenarios that can be analyzed within the system.

It also supports multi-dimensional analysis for ad hoc reporting and graph generation.

You can select from several pre-seeded statistical forecasting methods.


You can direct the system to make an automatic selection of the statistical model based on best fit to a range of recent actual demand history data.

Other key features include performance measures, alert notification, and predefined exception reports.

100% Internet-Based Solution

100% Internet-Based Solution

- Web browser access
- Low cost to deploy
- Global visibility

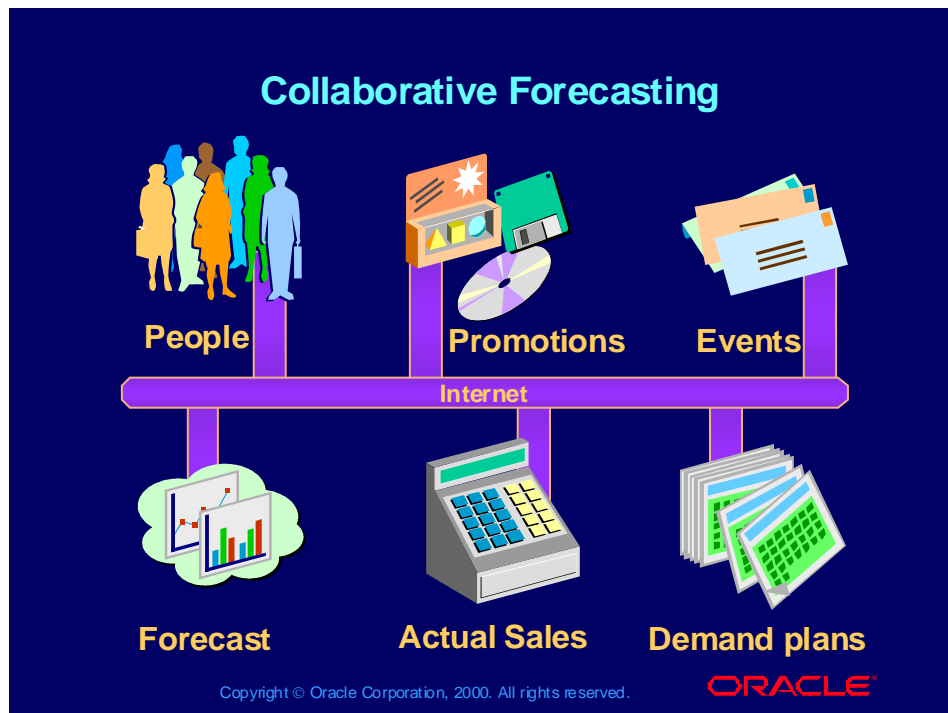


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Internet-Based Solution

Oracle Demand Planning is an easy-to-use Internet-based solution for creating forecasts and developing collaborative demand plans. Only a Web browser is required to access the application, which enables low-cost deployment of powerful demand planning tools to all internal and external participants in the demand planning process.

Collaborative Forecasting



Events and Promotions

Sales are dramatically influenced by promotions, competitive reactions, customer plans, and unique future events, the effects of which are not recorded in sales history data. Forecasts that account for knowledge about unique future events will usually be more accurate than statistical forecasts that rely only on sales history data.

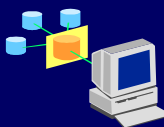
Collaborative Forecasting

Oracle Demand Planning provides a robust Internet-based framework for developing collaborative demand plans and forecasts.

You can collect the data you need from multiple disparate sources and provide secure access to portions of the demand plan. You can also manage multiple scenarios to develop a collaborative consensus demand plan. The integration between Oracle Advanced Supply Chain Planning and Oracle Demand Planning also allows you to manage the balance between production capabilities and market needs.

Information Visibility

- Deploy information using the World-Wide Web
- Information visibility across the supply chain
- Internal and external collaboration with secured access to detailed plans
- Workflow gets the right information to the right place quickly



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Collaboration Reduces Uncertainty

Instead of forecasting your customers' future demand and maintaining safety stock and extra capacity because you will guess wrong, why not just ask your customers? One reason is that adversarial price negotiations require that supplier-customer relationships be kept at arms length. Sharing information in an adversarial environment results in disadvantages at the negotiation table.

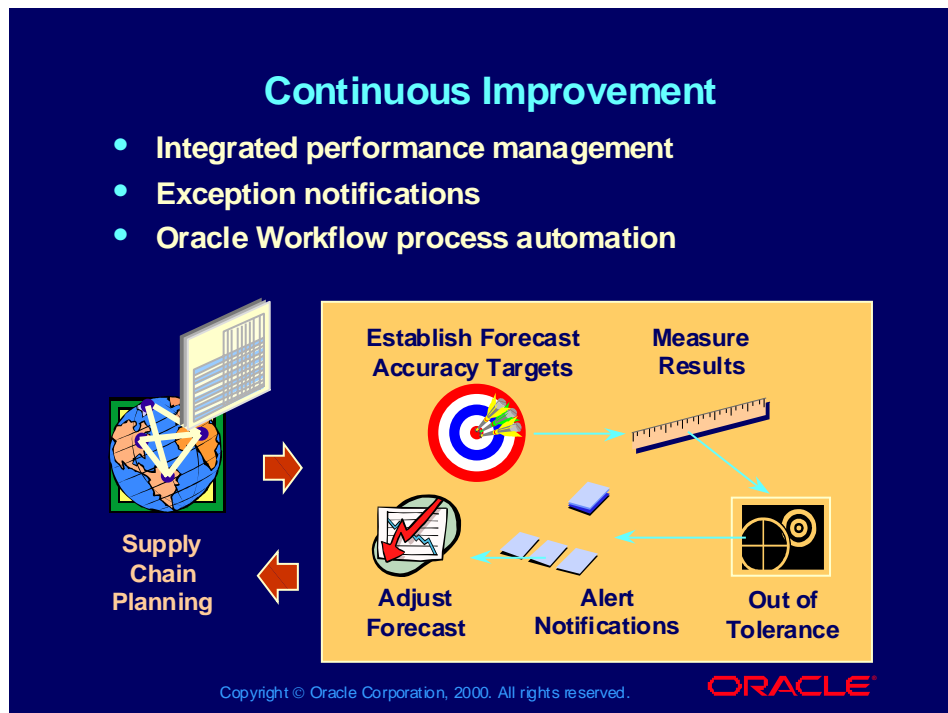
Collaboration is practical in environments where all can gain by sharing information, and where the incentive to maintain trust over the long term is greater than the incentive to use information for temporary unilateral advantage. When collaborative arrangements are carefully established throughout a supply chain, many competitive advantages accrue to the group. Supply chains built upon arms-length adversarial relationships cannot survive in international free markets for very long after collaborative supply chains enter. No longer will competition be company against company. Instead, competition will be supply chain against supply chain.

Sharing Information with Alliance Partners

Virtual enterprises organize alliance partner core competencies into a supply chain to meet customer requirements. The emergence of virtual enterprises requires complete end-to-end visibility across the supply chain from the suppliers' suppliers to the customers' customers. In addition, the need to coordinate production activities across a global supply chain necessitates increased collaboration between every supply chain participant.

Oracle Demand Planning extends the collaborative features of Oracle Applications. It is built on Oracle's Internet computing architecture, which enables all of the applications to be deployed over the Internet or your corporate intranet. ODP is also completely integrated with Oracle's Self-Service Web Applications.

Continuous Improvement



Integrated Performance Management

- Set targets for continuous improvement.
- View, measure and feedback results.
- Compare performance to targets.
- Manage by exception.
- An alert is sent when performance measures miss the targets.
- Process automation using Oracle Workflow manages the demand planning processes.

Alert Notifications

Oracle Demand Planning provides the mechanism to create alerts based on forecast targets. When the target is missed, a notification is automatically triggered for corrective action.


Workflow


Oracle Demand Planning provides the control mechanisms to manage the collaborative nature of forecasting. These mechanisms include notifications, data collection, and execution of forecasting, exception reports and performance analysis based on an event or calendar. The customer can configure the schedule on which these tasks are performed, as well as the sequencing of the tasks.

Planning Server Information

Planning Server Information

- **Historical sales**
- **Marketing plans**
- **Sales plans**



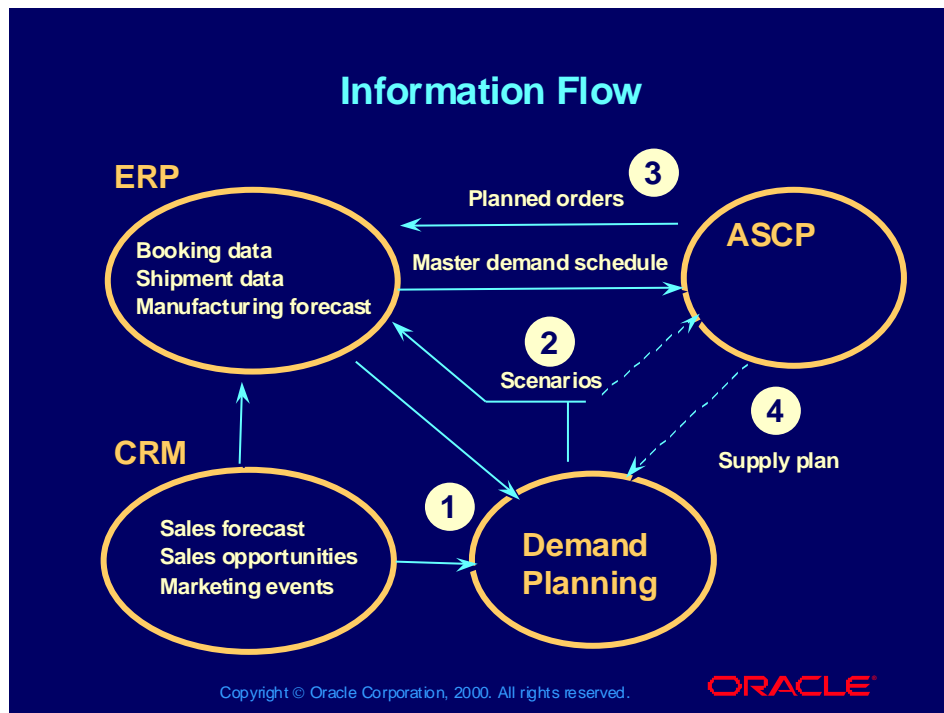
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Information Is Central

Oracle Demand Planning is based on a central repository of information called a planning server. The planning server provides a single source of data integrated in such a way that it can answer a broad range of business questions. Oracle Demand Planning uses much of this information to support the forecasting process. The key areas of information are:

- **Historical sales:** This forms the statistical base for generating demand forecasts. History is particularly useful where trends and seasonal factors repeat from year to year. Sales data can be captured in several ways, most commonly as shipments, orders, or actual sales. Numerous statistical methods have been developed to project historical trends and patterns into the future.
- **Marketing plans:** Marketing influences demand through pricing, advertising, promotions, packaging, education, and new product introductions. Marketing programs use these tools to raise the level of demand or to change the timing of demand. When the impact of previous marketing plans can be estimated, this information, combined with marketing plans for the future, can be used to improve the accuracy of demand forecasts.
- **Sales plans:** Through their direct relationships with customers, salespersons often have a good sense of what orders will be forthcoming. This information can be a valuable indicator of future demand; however, it directly applies only to existing customers. When patterns observed by the sales force differ from patterns included in the marketing plan, it is often useful to find the cause.

Information Flow



Information Flow

1. Information is collected, moved to staging tables, then to tables in the destination Demand Planning Server, and then moved to the Oracle Express database. Once a forecast has been generated in Express, it is submitted back to the Demand Planning server.
2. The forecast can be published back to the source instance for release 10.7 and 11.0 customer bases. Scenarios are somewhat analogous to forecast sets used in earlier releases. However forecasts sets are specific to one inventory organization while scenarios can cross organizations. Therefore one scenario, when published back to the source instances, can link to several forecast sets in different organizations.
3. ASCP planned orders drive purchasing and WIP operations in the source transaction system.
4. The ASCP plan is limited by operation resource constraints, in contrast to the demand plan which does not directly consider constraints. By comparing the demand plan to the ASCP plan, ODP can estimate the amount of lost sales due to production constraints.

General Features

General Features

- Activity log
- Annotated forecast changes
- Multiple allocation rules
- Create new forecast
- New product introductions
- Event and promotion management
- Ad hoc and predefined reports



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ODP Features: General

- Activity log: Oracle Demand Planning maintains an activity log that captures system changes made to the forecast worksheet.
- Annotate changes: Oracle Demand Planning provides the ability to annotate changes to individual cells in the forecast worksheet so that the demand planner can explain changes or store reminders.
- Multiple allocation rules: The demand planner has the option to spread down the forecast using allocation weights based on the history or on the forecast.
- Create new forecast: A step-by-step interactive guide walks the demand planner through the process of creating a new forecast.
- New product introductions and event and promotion management support: Oracle Demand Planning supports new product introduction activity as well as events and promotions that impact demand plans for product families and item categories. The new product product forecast can be based on another product forecast or the history of an existing product or products. Demand planners can enter coefficients that represent a percentage change to be applied to the statistical forecast for managing events, promotions, phase-ins and phase-outs.
- Ad hoc and predefined reports: A set of eighteen predefined reports is shipped with Oracle Demand Planning. You can create and save ad-hoc reports as well.

Statistical and Analytical Features

Statistical and Analytical Features

- Multiple forecasting techniques
- Selection of best-fit model
- Multidimensional analysis
- Performance tracking



The illustration shows a person sitting at a desk with a computer monitor and keyboard. To the right of the desk are three small cubes in red, yellow, and blue. Below the desk is a cloud containing two overlapping charts: a line graph and a bar chart.

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ODP Features: Statistical and Analytical

Oracle Demand Planning includes a broad range of statistical forecasting techniques, as well as automatic outlier detection and filtering capabilities.

Statistical forecasts provide the baseline information for Demand Planning. They are used as the initial estimate of demand. Oracle Demand Planning selects the best-fit model for each series of forecasts to use based upon historical demand and trends and a knowledge base of exception rules.

After statistical forecasts are generated, demand planners review and adjust the baseline forecasts to account for factors that are not exhibited in the historical data: for example, knowledge about a promotion scheduled three months into the future.



You can use several forecast dimensions, such as product family, geographic region, and time, and define your own dimensions. Then you can use the system to analyze the information along various dimensions. For example, you can compare how different product families sell in a specific region during a season of the year.

The system can be used to benchmark performance. The online analytical processing (OLAP) engine contained in the system supports a broad range of metrics to compare actuals to plan, as well as to study further the trends within actuals.

Statistical Forecasting Methods

Statistical Forecasting Methods

- **Exponential smoothing**
 - Single
 - Double
 - Holt-Winters
- **Regression**
 - Linear
 - 5 types of non linear



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Statistical Forecasting Methods

Oracle Demand Planning includes several time-series forecasting methods. Time-series forecasts identify trends and patterns existing in demand history data and then base demand projections on the assumption that historical trends and patterns will repeat in the future.

Major advantages of using time-series methods include:

- They are well suited in situations where a large number of products need to be forecasted.
- They work well for products having fairly stable historical demand data.
- They are useful to smooth out short-term random fluctuations in demand data.
- They are useful for short-term and mid-term forecasting.


Disadvantages include:


- They can be slow to recognize a shift in the trend and general level of demand.
- They sometimes require a significant amount of demand history upon which to base projections.
- They cannot account for factors that affect demand but have not occurred in the past.
- They are ineffective for long-term forecasts.

Selection of Best-Fit Model

Selection of Best-Fit Model

- Geneva forecast engine
- Rapidly determines which forecasting models are likely to produce the best statistical forecasts
- Best-fit selection from nine models
- Outlier detection and filtering
- Seasonality and erratic demand filtering



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Automatic Best-Fit Model

There are many ways to forecast future demand based on the past. It is sometimes difficult to decide which forecasting technique to use. Oracle Demand Planning uses the Geneva automated time-series forecasting algorithm (ATSF) to select the best technique. The forecast technique resulting in the lowest root mean squared error becomes the recommended approach, until an alert causes the techniques to be reevaluated.

The forecast techniques used are:

- Linear regression
- Five types of nonlinear regression
- Single exponential smoothing
- Double exponential smoothing
- Holt-Winters exponential smoothing

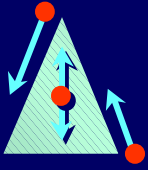
Data filters are used to identify and repair the following demand data situations that would otherwise distort the forecast results:

- Large outliers
- Sparse history
- Incomplete seasonal cycles

Scenarios, Reconciliation, and Consolidation Features

Scenarios, Reconciliation, and Consolidation Features

- Top-down, middle-out, and bottom-up allocation strategies
- Forecast adjustments
- Multiple units of measure
- Convert units to currency and vice versa
- Consolidation of individual forecasts
- Multiple forecasting scenarios



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ODP Features: Reconciliation, Consolidation, and Scenarios

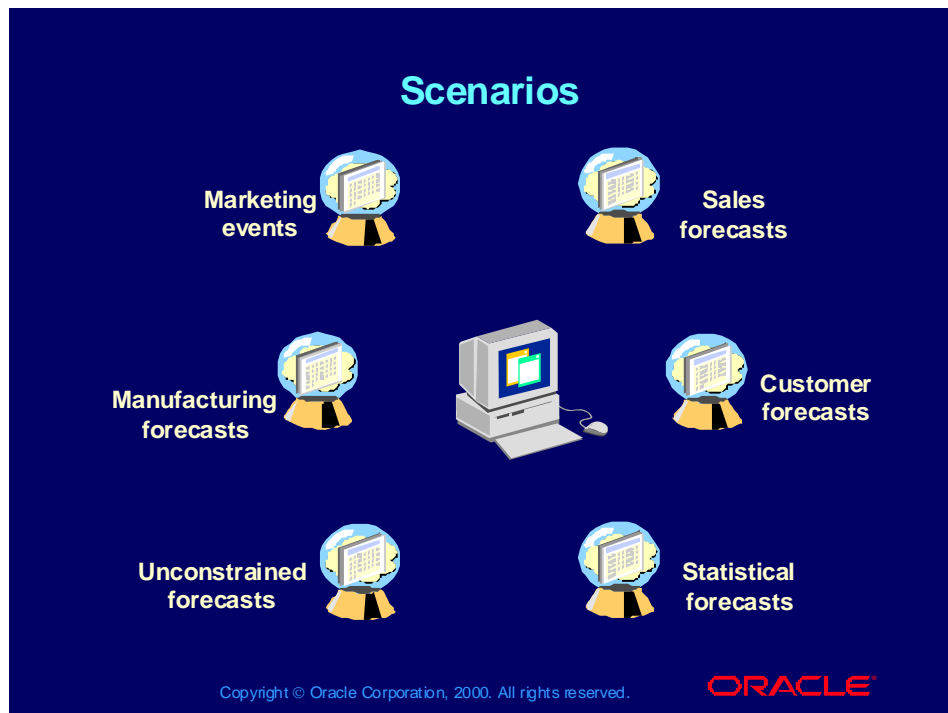
Forecast aggregation can be performed at any level of detail. Bottom-up data is forecast at the lowest level and rolled up to the most aggregate level. Top-down data is forecast at the most aggregate level and then allocated downward to the lowest level of detail. Finally, middle-out data is forecast at an intermediate level and spread down to the lowest level of detail and then rolled up to the most aggregate level. Adjustments made in the hierarchy are first allocated down and then rolled up. Values can be protected so that they are not affected by adjustments originating elsewhere in the hierarchy. These values are protected throughout the lower-level hierarchies. Adjustments can also be entered as percentages.

Oracle Demand Planning supports multiple units of measure. It has the capability to equalize lower-level units of measure at the upper levels. For example, bottles at the item level can be converted to cases at the product family level. Forecasts can be converted from units to currency and vice versa. Forecasts can be entered in units or in monetary values.

Oracle Demand Planning captures demand from all sources, consolidating demand so that it can be summarized by item, product line, region, time, organization, and a variety of other dimensions.

Oracle Demand Planning supports ad-hoc creation of an unlimited number of scenarios, which in turn can be analyzed within the system. The analysis provided across scenarios can be along any dimension and at any level. Scenarios can also be compared in terms of volume or value.

Scenarios



Scenarios

Users can experiment with different approaches to forecasting, known as scenarios. Scenarios can be created, tested, and discarded as needed. The system is delivered with a set of predefined scenarios:

- Sales Forecast
- Sales Opportunities
- Marketing Events
- Manufacturing Forecast
- Statistical Forecast

The demand planner can define new scenarios beyond the standard set.



Scenarios are key to improving the forecasts. By comparing scenarios, questions such as the following can be answered:

- How do our forecasts vary from month to month?
- How accurate is the sales forecast?
- Do managers improve forecast accuracy when they override statistical forecasts?
- What amount of lost sales are the result of supply constraints?

Demand Analysis

Demand Analysis

- Unconstrained demand forecasts
- Constrained supply plans
- Resource cost versus lost sales



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Strategic Questions

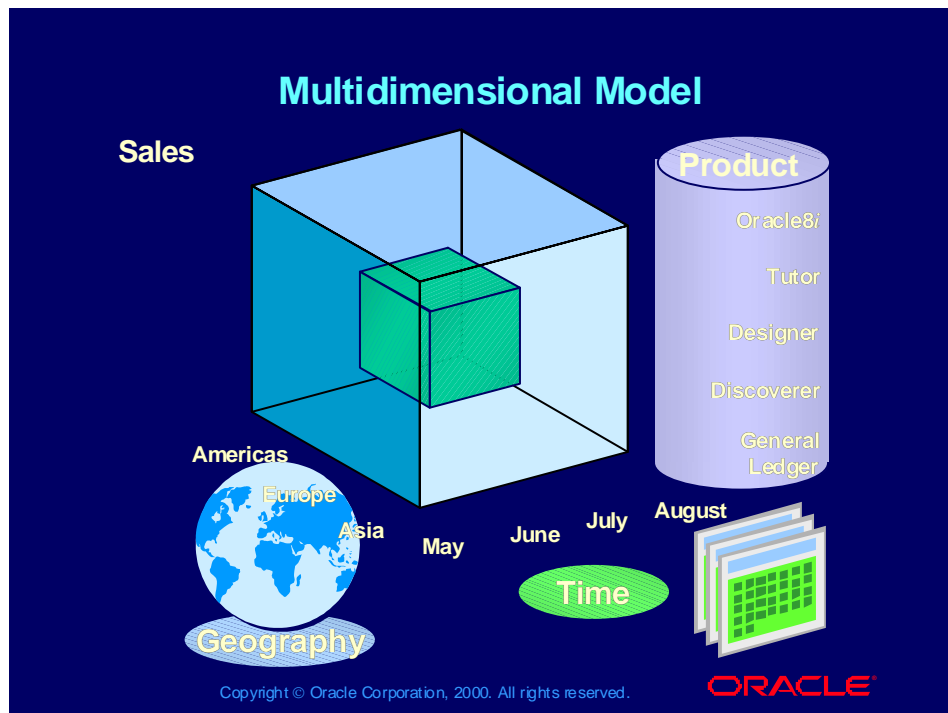
Demand planners generate unconstrained forecasts to estimate market demand as it would occur without the influence of supply constraints and distribution system limitations. Constrained supply plans, by comparison, represent what the producer is capable of delivering. They take into consideration the limitations of capacity, materials, labor, distribution, and other factors.

By having the ability to compare unconstrained demand and constrained supply, producers can look into strategic questions such as:

- Are we producing a product mix that best supports our corporate objectives?
- Would corporate objectives be met if we could supply the unconstrained demand?
- What investment in resources to relieve supply constraints would be justified by the projection of demand?
- Are there regional pockets of unfulfilled demand?
- Is unfulfilled demand the result of production or distribution problems across regions?
- Is the impact of promotions stronger in one region than another?
- Is additional demand pointing to market trends that broadly influence our future?

Finding answers to questions such as these involves analysis. The Oracle Express database provides technology to analyze historical information and to apply that knowledge to demand projections.

Multidimensional Model



Online Analytical Processing (OLAP)

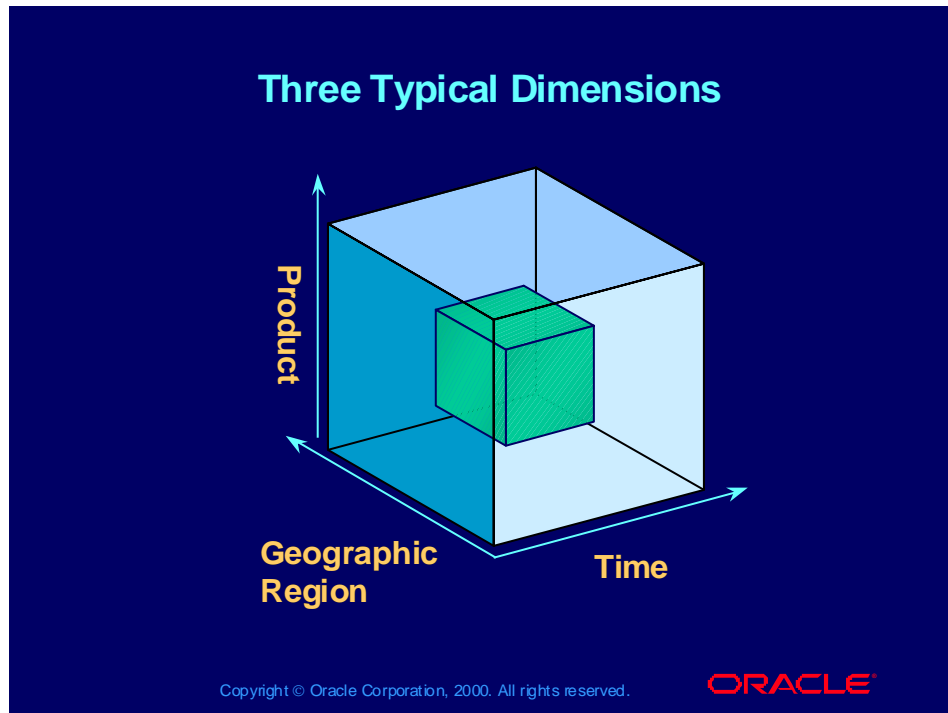
Oracle Demand Planning is based on a multiple-dimensional server and architecture. It enables you to define your own sets of dimensions and your own sets of aggregation. You can define multiple sets of aggregation along all dimensions.

The multidimensional architecture enables analysis along all dimensions without reorganizing the data. It presents the data to you in a way that significant sales trends can be found, whether those trends are in relation to time, product, geographic market, or other dimensions. This enables you to answer questions such as:

- Which products have experienced the most growth?
- What regions are experiencing growth?
- Are some products selling better in some markets than in others?
- Which markets are the most profitable?

Sales management can review and adjust forecasts in monetary amounts, while production management can plan from the same forecasts in units.

Three Typical Dimensions



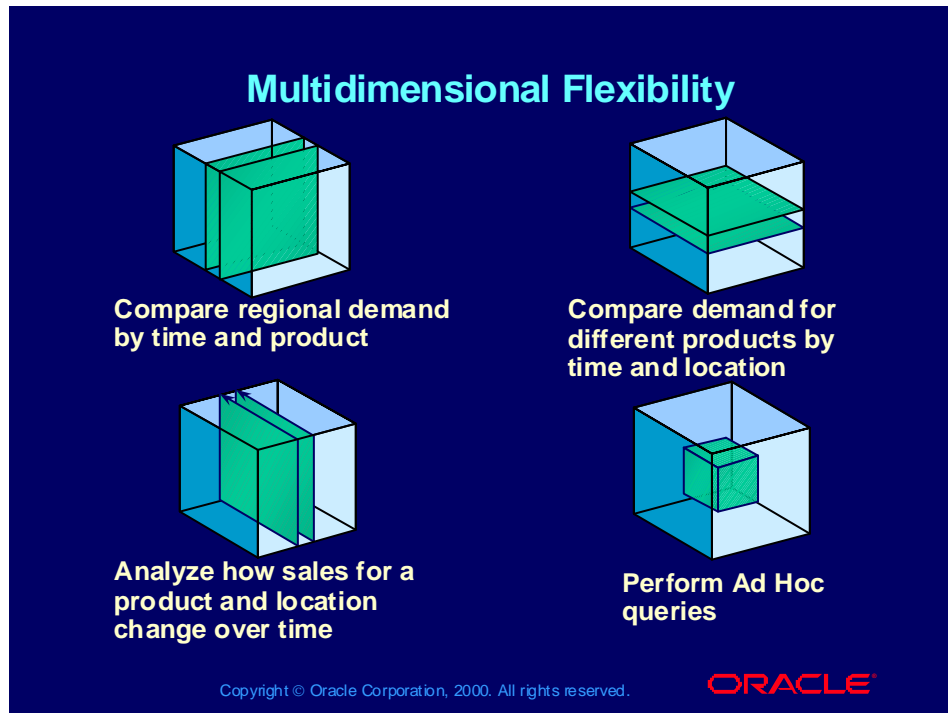
Dimensions

Dimensions define the way data is segmented for the generation, modification, and viewing of demand plans. Oracle Demand Planning contains six predefined demand planning dimensions: Sales Channel, Geography, Ship from Location, Product, Sales Representative, and Time. You can set up two additional user-defined dimensions for a total of eight dimensions.

In the ODP system, each demand plan is given a name and description. Each named demand plan can be run in two, three, or four dimensions. Time and Product are mandatory dimensions in all demand plans. That leaves up to two more dimensions that you can choose for each named demand plan. You list the two, three, or four dimensions that you choose to use in a named demand plan in the Demand Plans window in a column labeled User Dimensions. These are not necessarily the same as user-defined dimensions mentioned in the preceding paragraph. User Dimensions specify which of the eight dimensions the user wants to view in this named demand plan. Again, Time and Product must be included on the User Dimensions list.

One approach would be to select Time, Product, and up to two more choices from the six remaining demand planning dimensions. Another approach would be to collapse several demand planning dimensions into a single User Dimension. For example, Sales Channel, Geography, and Sales Representative could be collapsed into the User Dimension Geography. To continue this example, User Dimensions would be Time, Product, and Geography (which represents the Sales Channel, Geography, and Sales Representative dimensions). Using this approach, the demand planner can toggle among the collapsed demand planning dimensions Sales Channel, Geography, and Sales Representative, but will not be able to view them simultaneously.

Multidimensional Flexibility



Multidimensional Analysis

Oracle Demand Planning gives you flexibility to summarize, rotate, and drill down into any dimension for analysis. This enables the analyst to spend more time making business decisions and less time writing queries.

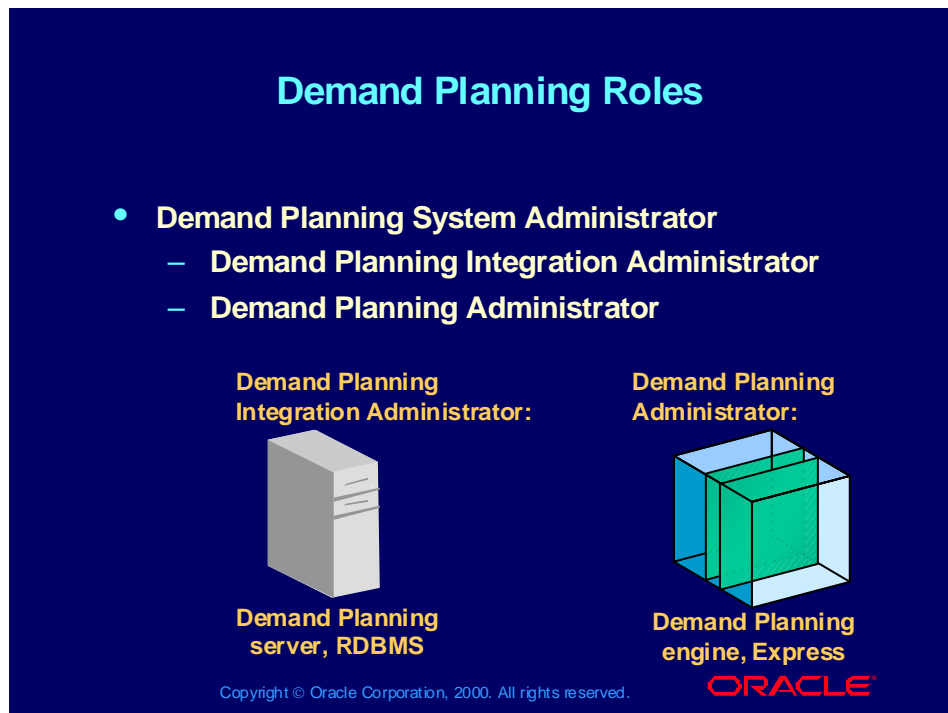
Demand Planning Roles

- Demand Planning Integration Administrator
- Demand Planning Administrator
- Demand Planner
- Demand Planning Manager

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Demand Planning Roles



Demand Planning Roles

For the Demand Planning System Administrator sign-on responsibility two selections are possible: Integration and Planning. This was done to accommodate situations where one person manages both RDBMS and Express. Depending on how you structure your workforce, you could have both a Demand Planning Integration Administrator and a Demand Planning Administrator.

- System administrator: Responsible for RDBMS and Express administration.
- Demand planning integration administrator: Applying a deep understanding of the business process, determines the overall default settings for the demand planning system.
- Demand planning administrator: Responsible for assigning data (and resolving conflicts) to individual demand planners, specifying the baseline forecast methods and forecast allocation rules, selecting and setting defaults for the predefined reports, and invoking forecast consolidation after all data from personal databases has been sent to the shared database. The administrator also:
 - Creates and assigns data slices
 - Generates baseline forecasts
 - Defines default settings for pre-defined reports

Demand Planning Roles

Demand Planning Roles

- **Demand Planner**
 - Analyzing and forecasting demand
 - Submitting scenarios
- **Demand Planning Manager**
 - Review and adjust forecasts
 - Submit final scenarios

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Demand Planning Roles

- **Demand planner:** Responsible for analyzing and forecasting demand in an assigned data segment, and for submitting a demand forecast corresponding to each scenario for his or her segment of the data. The demand planner is assigned a segment of the shared data by the demand planning administrator. Allocation rules, default settings for predefined reports, and baseline forecasts for each scenario are already completed before the demand planner looks at the data. The demand planner can generate forecast variants and new custom measures and aggregates, and can rotate, drill down, or aggregate the data.
- **Demand planning manager:** Responsible for the final forecast numbers for each scenario submitted to the planning server. Once the individual demand planners submit forecasts for each scenario from their personal databases to the shared database, the demand planning administrator invokes the consolidation process to obtain a consolidated forecast. The demand planning manager reviews the consolidated forecast for each scenario and decides whether to accept or reject it. The demand planning manager could modify the forecasts or ask the demand planning administrator to reassign them to the demand planners.

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Summary

Summary

In this lesson, you should have learned how to:

- **Explain features and benefits of Oracle Demand Planning (ODP)**
- **Describe demand planning roles and processes**

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Summary

Oracle Demand Planning assists in the process of creating forecasts. It uses an Internet-based framework to capture demand from all sources, resulting in more accurate forecasts, reduced safety stock requirements, and better planning.

In addition to having all of the features required to create accurate forecasts, Oracle Demand Planning has the following key differentiators:

- Pure Internet-based solution
- Full backward compatibility
- Single-source data integration
- Powerful multidimensional analysis capability
- Proven Geneva ATSF engine
- Support for multiple units of measure
- Multiple scenario comparison

Review Question

Regarding statistical demand forecasts based on sales history data —

- 1. A strength is their ability to account for the effects of future events, promotions and customer plans.**
- 2. They are useful for providing an objective baseline.**
- 3. They become more useful when products have shorter life cycles.**
- 4. They tend to overestimate the actual level of demand.**

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Review Question

Regarding statistical demand forecasts based on sales history data —

1. A strength is their ability to account for the effects of future events, promotions and customer plans.
- 2. They are useful for providing an objective baseline.**
3. They become more useful when products have shorter life cycles.
4. They tend to overestimate the actual level of demand.

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Review Question

Review Question

A large customer uses the internet to communicate a forecast of their demand for your products to your demand planning system. This collaborative customer is acting in the role of:

- 1. Demand plan manager**
- 2. Demand planner**
- 3. Demand planning administrator**
- 4. Demand planning integration administrator**
- 5. System administrator**

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Review Question Solution

A large customer uses the internet to communicate a forecast of their demand for your products to your demand planning system. This collaborative customer is acting in the role of:

1. Demand plan manager
- 2. Demand planner**
3. Demand planning administrator
4. Demand planning integration administrator
5. System administrator

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Administering Oracle Demand Planning

Chapter 2

Introduction

Administering Oracle Demand Planning

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Objectives

After this lesson, you should be able to:

- **Set up Oracle Demand Planning in Oracle Applications**
- **Implement a demand plan in Oracle Demand Planning**
- **Administer a demand plan in Oracle Demand Planning**
- **Perform ongoing administrative tasks for Oracle Demand Planning**

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Agenda

Agenda

- **Introduction to Oracle Demand Planning**
- Reviewing Oracle Demand Planning
- Completing Initial Setup
- Performing Ongoing Administrative Activities

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Objectives

After this lesson, you should be able to:

- **Understand Oracle Demand Planning architecture and data flows**
- **Describe key features of Oracle Demand Planning**
- **List one or more Planning Cycle Activities**
- **Explain the difference between the two types of Express databases used in Oracle Demand Planning**
- **List the four Demand Planning Roles**

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Introduction to Oracle Demand Planning

Oracle Demand Planning enables organizations to:

- **Produce unconstrained forecasts**
- **Capture planning information from multiple sources**
- **Consolidate demand**
- **Summarize demand by item, product line, region, time, and organization**

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Introduction to Oracle Demand Planning

Oracle Demand Planning may be installed

- **As a stand-alone system that can be integrated with Oracle Workflow**
- **As an integrated module within the Oracle Advanced Planning and Scheduling (APS) suite**

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Introduction to Oracle Demand Planning

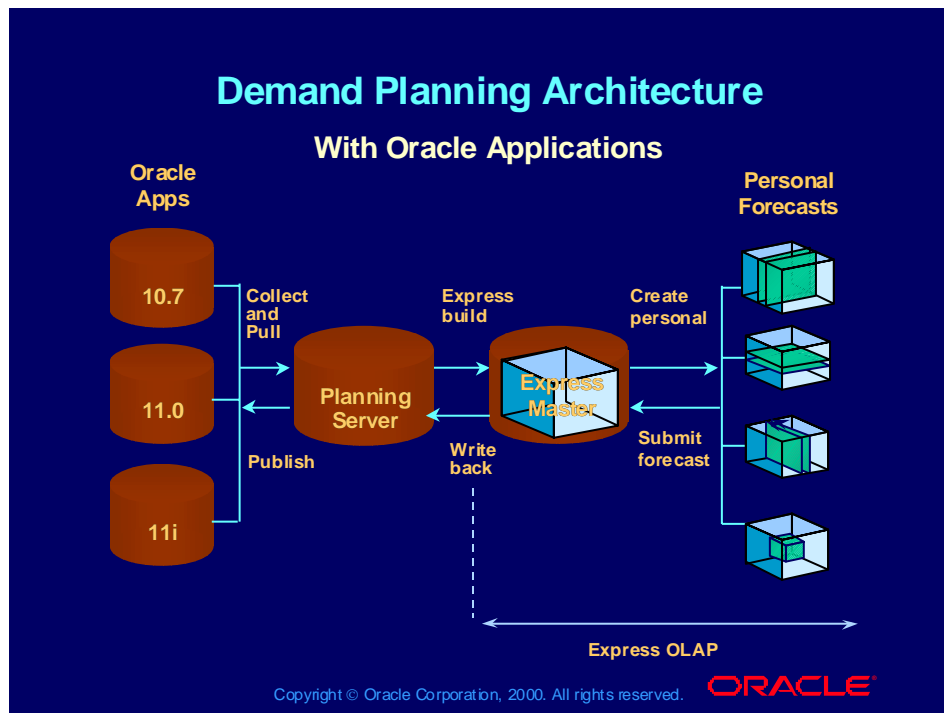
As part of the Advanced Planning and Scheduling suite, Oracle Demand Planning:

- **Drives supply chain planning**
- **Integrates with Oracle Workflow**

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Demand Planning Architecture



Demand Planning Installed with Oracle Applications

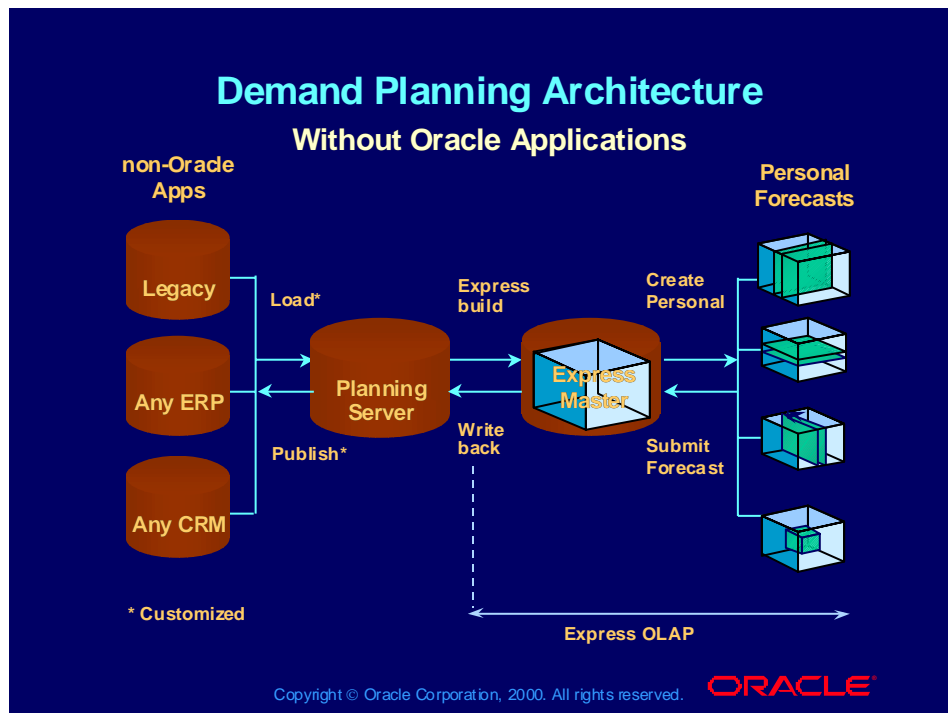
Information can be collected from multiple Oracle Applications source instances, for example, Release 10.7, Release 11.0, and Release 11*i* using the collection programs that come with Oracle Demand Planning. For Oracle Process Manufacturing, there is complete integration with Release 11*i*. For Releases 10.7 and 11.0, integration solutions are available from Oracle Consulting.

Oracle source instance data is collected to staging tables and then moved to destination tables in the the Demand Planning Server. From there, Express data is extracted and moved to the Oracle Express master database.

Express data is submitted to each planner's personal Express database depending upon data assignments made by the Demand Planning Administrator.

After each planner makes changes and submits their forecasts back to the Express Master database, the Demand Planning Manager reviews the changes, finalizes the master demand plan, and submits it to the Demand Planning Server. From there, it is written back to the Oracle source instances.

Demand Planning Architecture



Demand Planning Installed with Other Systems

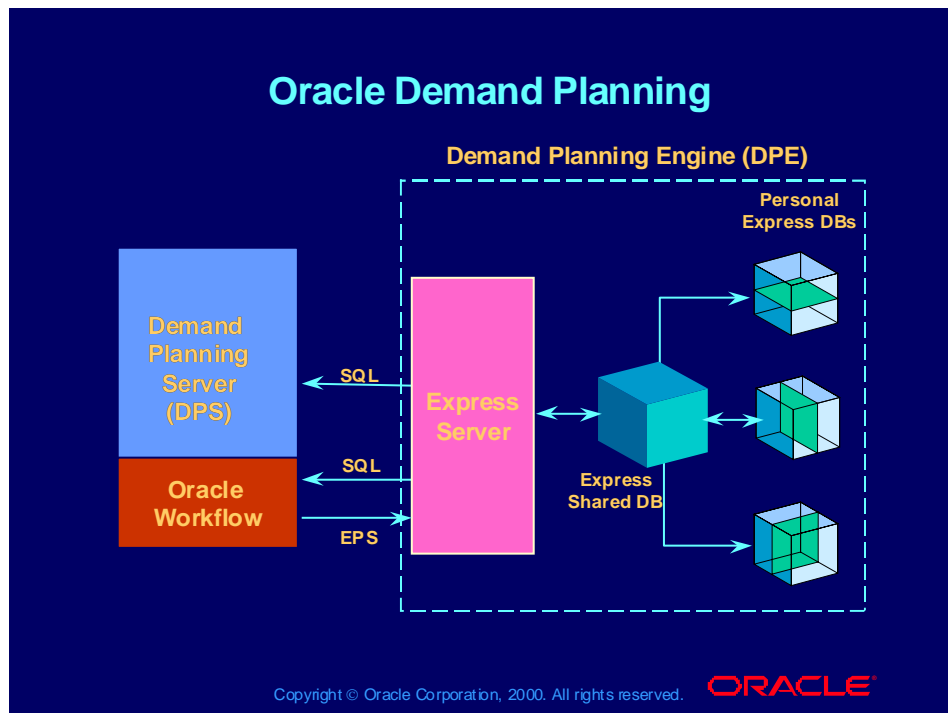
Information can also be collected from multiple source instances of non-Oracle applications using custom collection programs. Such collection programs can be created as SQL*Loader scripts or as copies of the collection programs available with Oracle Demand Planning, Release 11i.

In the same manner as collecting data from Oracle source instances, data is collected to staging tables and then moved to destination tables in the the Demand Planning Server. From there, Express data is extracted and moved to the Oracle Express master database.

Express data is submitted to each planner's personal Express database depending upon data assignments made by the Demand Planning Administrator.

After each planner makes changes and submits their forecasts back to the Express Master database, the Demand Planning Manager reviews the changes, finalizes the master demand plan, and submits it to the Demand Planning Server. From there, it is written back to the source instances.

Oracle Demand Planning



Express Multidimensionality

The multidimensional nature of Express variables allows different users to select and work with different views of the data, depending on their needs. Users are assigned the view of the data they require to do their jobs.

Product Manager View: A product manager might want to view the data for a particular product across all markets.

Regional Manager View: At the same time, a regional manager might be interested in units sold for all products and time periods across the territories for which he or she is responsible.

Financial Manager View: A financial manager or analyst may want to perform a period-to-period comparison across all products and regions.

Ad Hoc View: Any manager or analyst may want to create a subset of the sales data in some unanticipated way to answer a question about the business.

Agenda

Agenda

- Introduction to Oracle Demand Planning
- **Reviewing Oracle Demand Planning**
- Completing Initial Setup
- Performing Ongoing Administrative Activities

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Reviewing Oracle Demand Planning

- **Key Features**
- Demand Planning Data Flow
- Planning Cycle Activities
- Express Databases
- Demand Planning Roles

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Key Features

Key Features

- Internet-based collaboration between users in many locations and departments
- Geneva Forecasting™ engine from Roadmap Technologies that provides:
 - Multiple forecasting methods
 - Efficient estimation and outlier detection algorithms
 - Automatic and manual forecasting modes

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Reference:

Oracle Demand Planning User's Guide, Chapter 1, Overview

Key Features

- **User interface with support for:**
 - **Multiple data views**
 - **Rotation**
 - **Drill down**
 - **Aggregation**

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Key Features

Key Features

- **Oracle Express, an Internet-based analytic database that provides:**
 - **Data manipulation and analytic capabilities at multiple levels within multiple hierarchies**
 - **Custom measures and custom aggregate definitions**

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Reference:

- *Oracle Demand Planning User's Guide*, Chapter 1, Overview

Key Features

Key Features

- Forecast reconciliation at multiple levels
- Consolidation of forecasts by individual planners

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Reference:

- *Oracle Demand Planning User's Guide*, Chapter 1, Overview

Key Features

Key Features

- Extensive reporting capabilities, including:
 - Graphing
 - System-generated reports
 - Capability to create reports on the fly
 - Management of currency or measure conversions

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Reference:

- *Oracle Demand Planning User's Guide*, Chapter 1, Overview

Key Features

Key Features

- **Feedback to planners via:**
 - **Performance monitoring**
 - **Exception reporting**
 - **Comparative reports**
 - **User-defined alert mechanisms**

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Reference:

- *Oracle Demand Planning User's Guide*, Chapter 1, Overview

Key Features

- **Knowledge base composed of:**
 - **Planners' comments**
 - **Audit trails**
 - **Support for reason codes for modifications**
- **Capabilities to model demand planning events**
 - **Promotions**
 - **Cannibalizations**
 - **Product introductions**
 - **Product phase-outs**

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Review Question

Which of the following is not a key feature of Oracle Demand Planning?

- 1. Oracle Express, an Internet-based analytic database**
- 2. Capabilities to model demand planning events**
- 3. Consolidation of forecasts by individual planners**
- 4. Forecast reconciliation at multiple levels**
- 5. Direct access to the Business Intelligence System**

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Review Question Solution

Which of the following is not a key feature of Oracle Demand Planning?

1. Oracle Express, an Internet-based analytic database
2. Capabilities to model demand planning events
3. Consolidation of forecasts by individual planners
4. Forecast reconciliation at multiple levels
5. **Direct access to the Business Intelligence System**

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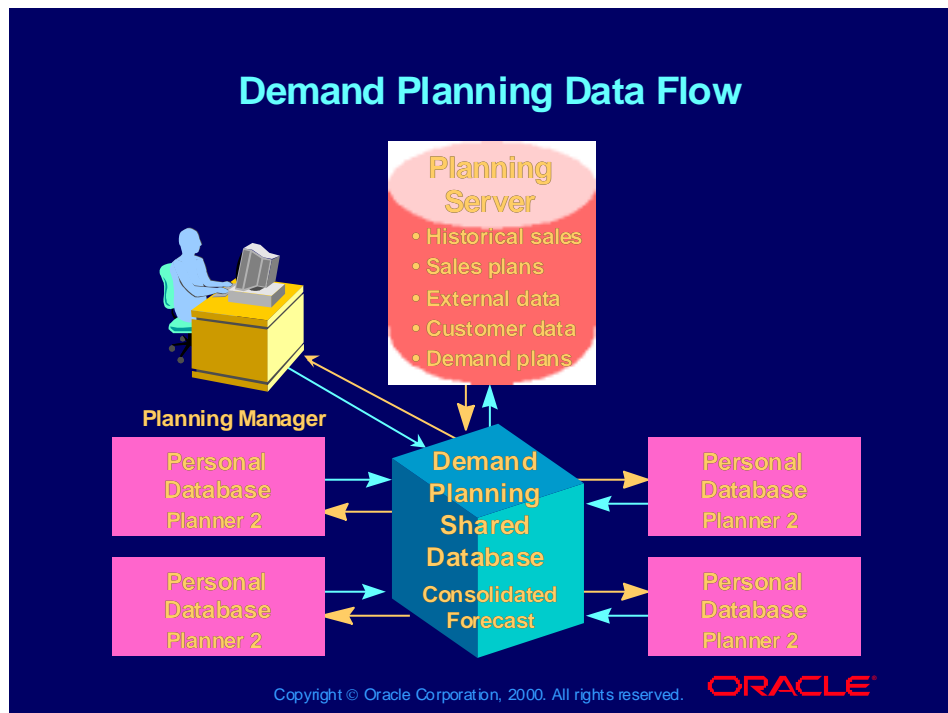
Reviewing Demand Planning

- Key Features
- Demand Planning Data Flow
- Planning Cycle Activities
- Express Databases
- Demand Planning Roles

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Demand Planning Data Flow



Demand Planning Data Flow

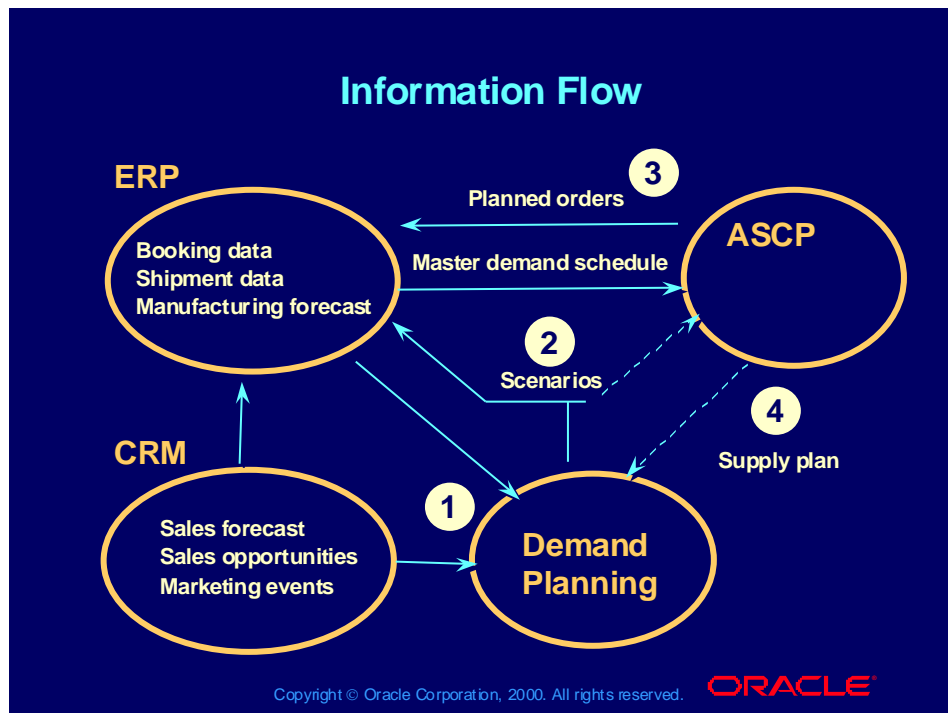
As the planning cycle starts, data moves from the Planning Server to the shared Express database. Moved data includes:

- Historical sales
- Sales plans
- External data
- Customer data
- Demand plans

Based upon predefined assignments, data is next distributed to each planner's personal Express data base. Planners review the baseline forecasts and make adjustments as necessary.

As the planning cycle concludes, data is moved from the planners' personal databases back to the shared database. The planning manager reviews the initial consolidation of forecasts and adjusts planners' final forecast values in the shared database. The final, consolidated forecast is then moved back into the Planning Server.

Information Flow



Information Flow

1. Information is collected, moved to staging tables, then to tables in the destination Demand Planning Server, and then moved to the Oracle Express database. Once a forecast has been generated in Express, it is submitted back to the Demand Planning server.
2. The forecast can be published back to the source instance for release 10.7 and 11.0 customer bases. Scenarios are somewhat analogous to forecast sets used in earlier releases. However, forecasts sets are specific to one inventory organization while scenarios can cross organizations. Therefore, one scenario, when published back to the source instances, can link to several forecast sets in different organizations.
3. ASCP planned orders drive purchasing and WIP operations in the source transaction system.
4. The ASCP plan is limited by operation resource constraints, in contrast to the demand plan which does not directly consider constraints. By comparing the demand plan to the ASCP plan, ODP can estimate the amount of lost sales due to production constraints.

Reviewing Demand Planning

- Key Features
- Demand Planning Data Flow
- **Planning Cycle Activities**
- Express Databases
- Demand Planning Roles

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Planning Cycle Activities

The Demand Planning Cycle includes these activities:

- 1. Downloading data from the Planning Server**
- 2. Generating and distributing baseline forecasts**
- 3. Adjusting forecasts**
- 4. Submitting forecasts**
- 5. Reviewing forecasts**
- 6. Uploading data to the Planning Server**
- 7. Getting feedback**

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Step 1: Downloading Data from the Demand Planning Server

Step 1: Downloading Data from the Demand Planning Server

The Demand Planning Server is the source of

- Forecast data from Sales, Manufacturing, Supply Chain, or a third party, aggregated at any level
- Historical data at the lowest aggregate level
- Data from external sources, such as customer data

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Reference:

- *Oracle Demand Planning User's Guide*, Chapter 1, Overview

Step 2: Generating Baseline Forecasts

Step 2: Generating Baseline Forecasts

- A baseline forecast is system-generated for each scenario associated with a Demand Plan.
- The system administrator defines rules for:
 - Forecasting level
 - Forecasting calendar
 - Allocation rule
 - Forecasting method
- Baseline forecasts are distributed to individual planners based upon data assignments.

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References:

- *Oracle Demand Planning User's Guide*, Chapter 4, Using Worksheets for Forecasting
- *Oracle Demand Planning User's Guide*, Appendix A, Forecast Options
- *Oracle Demand Planning User's Guide*, Glossary

Step 2: Generating Baseline Forecasts

Step 2: Generating Baseline Forecasts

- Responsibility is determined by predefined data assignments for example:
 - Planner 1 is responsible for forecasting demand for Brands 1 and 2 in City A, City B, and City C.
 - Planner 2 is responsible for forecasting demand for Brands 1 and 2 in City D, City E, and City F.
 - Data assignment conflicts can be resolved with administrative tools.

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Step 3: Adjusting Forecasts (continued)

Step 3: Adjusting Forecasts (continued)

Planners use worksheets to review and adjust baseline forecasts by:

- Modifying the data
- Selecting different data values
- Changing the forecasting parameters
- Copying and pasting data

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References:

- *Oracle Demand Planning User's Guide*, Chapter 4, Using Worksheets for Forecasting

Step 3: Adjusting Forecasts

Step 3: Adjusting Forecasts

Predefined or ad-hoc reports can be used to:

- Graph and report data
- Perform “what-if” analyses

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References:

- *Oracle Demand Planning User's Guide*, Chapter 1, Overview

Step 4: Submitting Forecasts

Step 4: Submitting Forecasts

- When a forecast is ready, the planner submits the final values to the shared Express Demand Planning database.
- When a demand plan contains multiple scenarios, a forecast for each scenario is submitted.

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Reference:

- *Oracle Demand Planning User's Guide*, Chapter 4, Using Worksheets for Forecasting

Step 5: Reviewing Forecasts

Step 5: Reviewing Forecasts

Planning managers review data submitted to the shared database and make further adjustments.

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Reference:

- *Oracle Demand Planning User's Guide*, Chapter 4, Using Worksheets for Forecasting

Step 6: Uploading Data to the Planning Server

Step 6: Uploading Data to the Planning Server

Final forecast values for all scenarios are uploaded to the Planning Server.

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Step 7: Getting Feedback

Step 7: Getting Feedback

Users can:

- **Generate parameter-based exception reports**
- **Check forecast accuracy by running reports**
- **Set up alerts to notify them of specific events**
- **Compare actual results to forecasts**
- **Compare various forecasts scenarios**
- **Refer to reports, graphs and worksheets saved in their personal databases**

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Review Question

In what ways can planners get feedback during the demand planning process?

- 1. Refer to reports, graphs and worksheets saved in their personal Express databases.**
- 2. Check forecast accuracy by running reports.**
- 3. Set up alerts to notify them of specific events.**
- 4. Compare actual results to forecasts.**
- 5. Call customers to get their estimates.**

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Review Question Solution

In what ways can planners get feedback during the demand planning process?

1. Refer to reports, graphs and worksheets saved in their personal Express databases.
2. Check forecast accuracy by running reports.
3. Set up alerts to notify them of specific events.
4. Compare actual results to forecasts.
5. Call customers to get their estimates.

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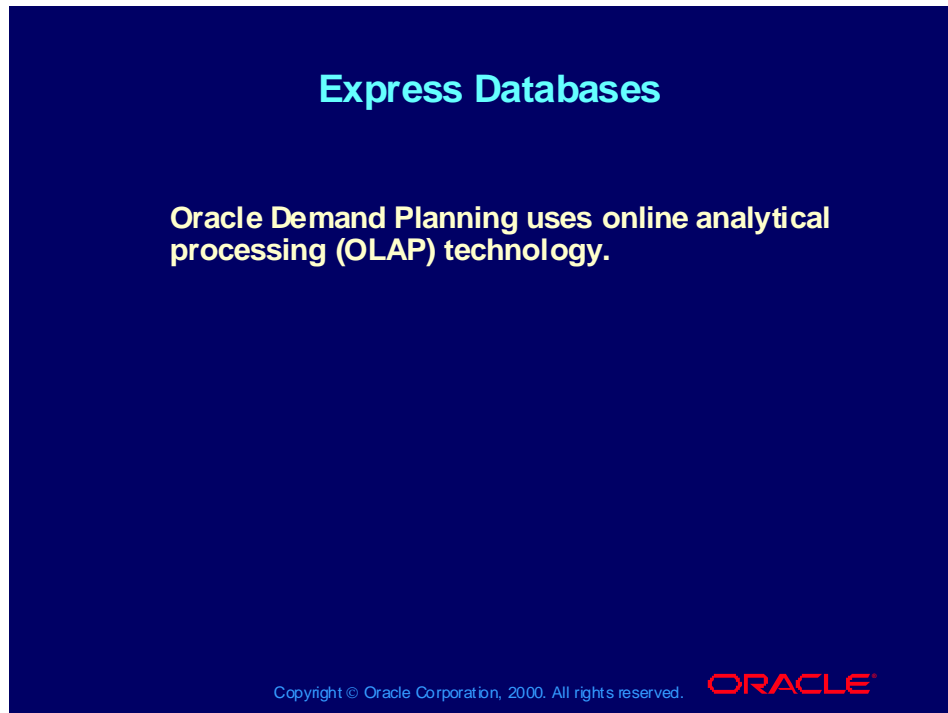
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Reviewing Demand Planning

- Key Features
- Demand Planning Data Flow
- Planning Cycle Activities
- **Express Databases**
- Demand Planning Roles

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Reference:

- *Oracle Demand Planning User's Guide*, Chapter 1, Overview

Express Databases: Shared

The shared Express database:

- **Receives downloads from the Demand Planning Server at the beginning of a planning cycle**
- **Uploads demand data to the Demand Planning Server at the end of a planning cycle**

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Reference:

- *Oracle Demand Planning User's Guide*, Chapter 1, Overview

Express Databases: Personal

A personal Express database is used by each planner to:

- Do forecasting and analysis
- Submit final forecasts to the shared database

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Reference:

- *Oracle Demand Planning User's Guide*, Chapter 1, Overview

Review Question

What data is not moved from the Planning Server to the shared Express database?

- 1. Planned Orders**
- 2. Sales plans**
- 3. Demand plans**
- 4. Historical sales**
- 5. Customer data**

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Review Question Solution

What data is not moved from the Planning Server to the shared Express database?

- 1. Planned Orders**
2. Sales plans
3. Demand plans
4. Historical sales
5. Customer data

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Reviewing Demand Planning

- Key Features
- Demand Planning Data Flow
- Planning Cycle Activities
- Express Databases
- Demand Planning Roles

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Demand Planning Roles

Four roles are supported by Oracle Demand Planning:

- Demand Planning System Administrator
- Demand Planning Integration Administrator
- Demand Planning Manager
- Demand Planner

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Demand Planning Integration Administrator

- **Maintains forms in Oracle Applications that:**
 - **Associate Demand Planning responsibilities with specific demand plans and users**
 - **Store information about each demand plan and its associated scenarios and its location**
 - **Govern data collection and publishing**

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Reference:

- *Oracle Demand Planning User's Guide*, Chapter 1, Overview

Demand Planning Integration Administrator

- Is an individual responsible for a demand plan
- Works with the System Administrator to set up demand plans, Express databases, and data collection programs
- Sets parameters for the Demand Planning page
- Specifies location of Express databases
- Enables predefined reports

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Reference:

- *Oracle Demand Planning User's Guide*, Chapter 1, Overview

Demand Planning Administrator

- **Provides parameters for each baseline forecast**
- **Manages and tracks planning activities, including:**
 - **Downloading data from the Planning server**
 - **Generating baseline forecasts**
 - **Distributing data to planners**
 - **Collecting data from planners**
 - **Uploading final demand plans to the Planning server**
- **Sets data assignments for planners**

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Demand Planning Manager

- Works directly in the shared database with an unrestricted view of all data
- Completes initial review of consolidated forecasts
- Receives and may adjust planners' final forecast values
- Defines alerts for exception conditions

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Reference:

- *Oracle Demand Planning User's Guide*, Chapter 1, Overview

Demand Planner

- Works in his or her personal Express database to:
 - Review baseline forecasts
 - Adjust forecast values
- Is responsible for analyzing and forecasting demand in an assigned data segment
- Submits a forecast for each scenario to the shared database
- Defines alerts for exception conditions

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Reference:

- *Oracle Demand Planning User's Guide*, Chapter 1, Overview

Review Question

Which Demand Planning role completes these tasks?

- Downloading data from the Planning Server
- Distributing data to planners
- Collecting data from planners
- Defining alerts for exception conditions

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Review Question Solution

Which Demand Planning role completes these tasks?

- Downloads data from the Planning Server
- Distributes data to planners
- Collects data from planners
- Defines alerts for exception conditions

Answer: Demand Planning Integration Administrator

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Review Question

Which of these tasks is a Planner responsible for?

- **Analyzing and forecasting demand in an assigned data segment**
- **Completing initial review of consolidated forecasts**
- **Setting up users and responsibilities in Oracle Applications**
- **Setting parameters for the Demand Planning page**

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Review Question Solution

Which of these tasks is a Planner responsible for?

- Analyzing and forecasting demand in an assigned data segment
- Completing initial review of consolidated forecasts
- Setting up users and responsibilities in Oracle Applications
- Setting parameters for the Demand Planning page

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Summary

In this lesson, you should have learned about:

- **Oracle Demand Planning key features**
- **Demand Planning data flow**
- **Planning cycle activities**
- **Personal and shared Express databases in Demand Planning**
- **Demand Planning roles and responsibilities**

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Completing Initial Setup

Administering Oracle Demand Planning

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Objectives

After completing this lesson, you should know how to:

- **Set up instances and profile options**
- **Set up Demand Planning in Oracle Applications**
- **Set up Demand Planning users**
- **Complete Express database setup**
- **Review Applications Utilities Lookups**
- **Review Demand Planning validation messages**

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Agenda

Agenda

- Introduction to Oracle Demand Planning
- Reviewing Oracle Demand Planning
- **Completing Initial Setup**
- Performing Ongoing Administrative Activities

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Completing Initial Setup

- **Setting up instances and profile options**
- **Setting up Demand Planning in Oracle Applications**
- **Defining a Demand Plan**
- **Completing Express Database setup**
- **Reviewing Application Utilities lookups**
- **Reviewing Demand Planning validation messages**

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Setting Up Instances and Profile Options

Setting Up Instances and Profile Options

- Log in to Oracle Applications.
- Set up instances in the **Application Instances** screen.
- Set up profiles in the **Profile Options** screen.

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Reference:

- *Oracle Applications User's Guide*
- *Oracle ASCP and Global ATP Implementation Manual*, Chapter 7, Implementing Oracle Demand Planning

Completing Initial Setup

- Setting up instances, requests, and profiles
- **Setting up Demand Planning in Oracle Applications**
- Defining a Demand Plan
- Completing Express Database setup
- Reviewing Application Utilities lookups
- Reviewing Demand Planning validation messages

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Setting Up Demand Planning in Oracle Applications

Setting Up Demand Planning in Oracle Applications

There are four steps to this process:

1. Defining Demand Planning dimensions
2. Defining Demand Planning hierarchies
3. Defining Demand Planning levels
4. Defining Demand Planning hierarchy levels

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Reference:

- *Oracle Demand Planning User's Guide*, Appendix B, Setting Up Demand Planning in Oracle Applications

Completing Initial Setup

- Setting up instances, requests, and profiles
- Setting up Demand Planning in Oracle Applications
- **Defining a Demand Plan**
- Completing Express Database setup
- Reviewing Application Utilities lookups
- Reviewing Demand Planning validation messages

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Defining a Demand Plan

Defining a Demand Plan

There are five steps to this process:

1. Defining Demand Plans
2. Defining Demand Plan Hierarchies
3. Defining Demand Plan Scenarios
4. Defining Demand Plan Parameters
5. Defining Express Setup

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Online Help Reference:

Oracle Manufacturing Applications > Oracle Demand Planning > Setting Up a Demand Plan

Considerations for Defining A Demand Plan

Considerations for Defining A Demand Plan

- Different units of measure
- A total of eight dimensions can be defined:
 - There are six predefined dimensions
 - Two additional dimensions may user-defined
 - Four dimensions can be viewed in the Demand Planning engine at one time
 - You must specify how to “collapse” added dimensions into the Demand Planning User Dimension
- Calendar type

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Reference:

- *Oracle Demand Planning User's Guide*, Appendix B, Setting Up Demand Planning in Oracle Applications
- *Oracle ASCP and Oracle Global ATP Server Implementation Guide*, Chapter 7, Implementing Oracle Demand Planning

Step 1: Defining A Demand Plan

Step 1: Defining A Demand Plan

- **A Demand Plan definition includes:**
 - A name for the plan
 - A uniform unit of measure
 - An average discount
 - A calendar and calendar type (if applicable)
 - Category sets
- **Demand Plans are associated with Dimensions and User Dimensions.**

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Online Help Reference:

Oracle Manufacturing Applications > Oracle Demand Planning > Setting Up a Demand Plan > Define Demand Plans

Demonstration

Demonstration

This demonstration shows you how to:

- Access the **Demand Plans** window.
- Complete all of the fields in the form.
- Return to the **Navigation List**.

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Reference:

- *Oracle Demand Planning User's Guide*, Appendix B, Setting Up Demand Planning in Oracle Applications

Step 2: Defining Demand Plan Hierarchies

Step 2: Defining Demand Plan Hierarchies

- **User Dimensions are associated with Demand Plan Hierarchies.**
- **One or more Demand Plan Hierarchies may be associated with a Demand Plan.**

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Reference:

- *Oracle Demand Planning User's Guide*, Appendix B, Setting Up Demand Planning in Oracle Applications

Demonstration

Demonstration

This demonstration shows you how to:

- Access the **Demand Plan Hierarchies** window.
- Complete all of the fields in the form.
- Return to the **Navigation List**.

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Online Help Reference:

Oracle Manufacturing Applications > Oracle Demand Planning > Setting Up a Demand Plan > Define Demand Plan Hierarchies

Step 3: Defining Demand Plan Scenarios

Step 3: Defining Demand Plan Scenarios

- Scenarios represent forecasts from multiple sources such as marketing, sales, or customers.
- A Demand Plan can have multiple scenarios.
- Booking History and Requested date are the recommended demand and period data for statistical forecast scenarios because they represent true customer demand.
- Output levels should reflect a level of detail at which a forecast should be published back to the Demand Planning Server.

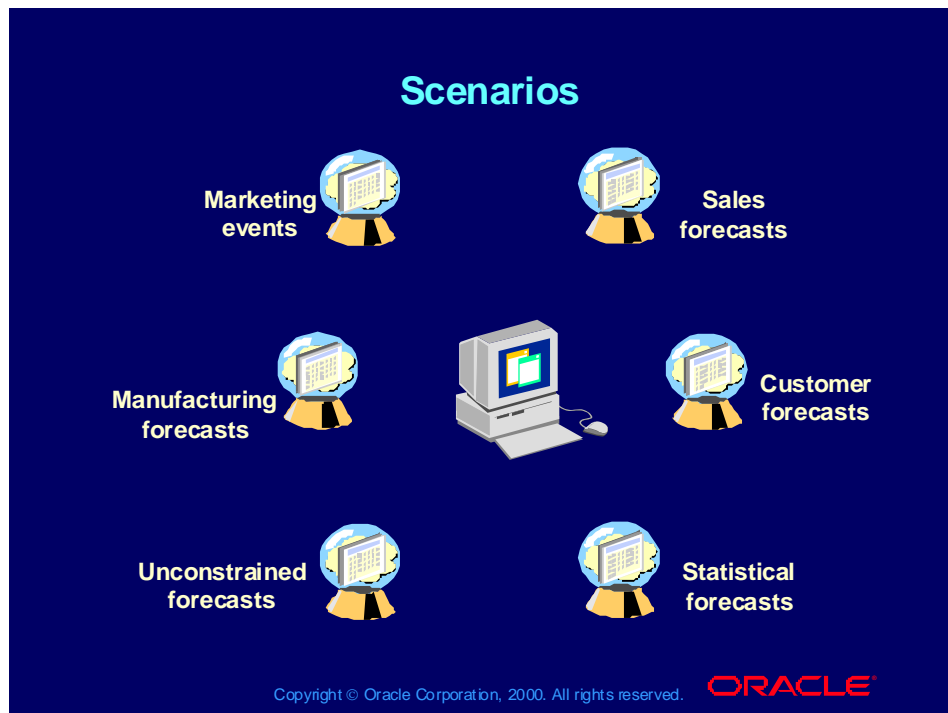
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Online Help Reference:

Oracle Manufacturing Applications > Oracle Demand Planning > Setting Up a Demand Plan > Define Demand Plan Scenarios

Scenarios



Scenarios

Users can experiment with different approaches to forecasting, known as scenarios. Scenarios can be created, tested, and discarded as needed. The system is delivered with a set of predefined scenarios:

- Sales Forecast
- Sales Opportunities
- Marketing Events
- Manufacturing Forecast
- Statistical Forecast

The demand planner can define new scenarios beyond the standard set.

Scenarios are key to improving the forecasts. By comparing scenarios, questions such as the following can be answered:

- How do our forecasts vary from month to month?
- How accurate is the sales forecast?
- Do managers improve forecast accuracy when they override statistical forecasts?
- What amount of lost sales are the result of supply constraints?

Demonstration

This demonstration shows you how to:

- Access the **Demand Plan Scenarios** window.
- Complete all of the fields in the form.
- Specify **Output Levels**.
- Associate **Events** with scenarios.
- Associate **Introduction Plans** with scenarios.
- Return to the **Navigation List**.

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Reference:

- *Oracle Demand Planning User's Guide*, Appendix B, Setting Up Demand Planning in Oracle Applications

Step 4: Defining Demand Plan Parameters

Step 4: Defining Demand Plan Parameters

- Input and output parameters are used to select the data to be loaded into the Express database for creating and analyzing forecasts.
- Input parameters determine the data imported into Express.
- Multiple input parameters can be specified and used in different scenarios.
- Output parameters determine the demand plan scenarios published to the Planning Server.

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Reference:

- *Oracle Demand Planning User's Guide*, Appendix B, Setting Up Demand Planning in Oracle Applications

Online Help Reference:

Oracle Manufacturing Applications > Oracle Demand Planning > Setting Up a Demand Plan > Define Demand Plan Parameters

Demonstration

This demonstration shows you how to:

- Access the **Demand Plan Parameters** window.
- Select the **Input Parameters** tab and complete the fields in that view.
- Select the **Output Parameters** tab and complete the fields in that view.
- Return to the **Navigation List**.

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Reference:

- *Oracle Demand Planning User's Guide*, Appendix B, Setting Up Demand Planning in Oracle Applications

Step 5: Defining Express Setup

Step 5: Defining Express Setup

- Data is downloaded from the Planning Server to the Express Server.
- After Planners and Planning Managers have made adjustments, data is uploaded from the Express Server back to the Planning Server.

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Reference:

- *Oracle Demand Planning User's Guide*, Appendix B, Setting Up Demand Planning in Oracle Applications

Demonstration

Demonstration

This demonstration shows you how to:

- Access the **Express** setup window.
- Complete the fields in the form.
- Return to the **Navigation List**.

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Reference:

- *Oracle Express Server Installation and Configuration Guide for Sun SPARC Solaris*
- *Oracle Express Server Installation and Configuration Guide for NT*

Completing Initial Setup

- Setting up instances, requests, and profiles
- Defining a Demand Plan
- Setting Up Demand Planning in Oracle Applications
- **Completing Express Database setup**
- Reviewing Application Utilities lookups
- Reviewing Demand Planning validation messages

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Completing Express Database Setup

There are three parts to this process:

- Executing Collect Data programs
- Executing Pull Data programs
- Executing Publish Forecast Data to the source instance

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Executing Collect Data Programs

Executing Collect Data Programs

- Data collection programs move data from the source instance to staging tables.
- In the staging tables, data integrity is checked before it is loaded into the destination tables.

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Reference:

- *Oracle Demand Planning User's Guide*, Appendix B, Setting Up Demand Planning in Oracle Applications

Data Collect Process

To execute the Data Collect programs:

- Access the **Collect Utility** window.
- Collect data for individual items.
- Collect data for all data items except **Level Values** and **Time Values**.
- Adjust default values for **Language, Schedule, and Options**.
- Specify various parameters to limit the amount of data selected.
- Submit the information.

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Reference:

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Executing Pull Data Programs

- Pull data programs move data from the staging tables into the destination tables.

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Data Pull Process

To execute the Data Pull programs:

- Access the **Pull Utility** window.
- Pull data for individual items.
- Pull data for all data items except **Level Values** and **Time Values**.
- Adjust default values for **Language, Schedule, and Options**.
- Submit the information.

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Reference:

- *Oracle Demand Planning User's Guide*, Appendix B, Setting Up Demand Planning in Oracle Applications

Executing Publishing Forecast Data to Source Instance

Executing Publishing Forecast Data to Source Instance

To publish Forecast data to Source Instance:

1. In the Navigator, choose **Publish Forecast**.
2. Complete the fields in the **Publish Forecast Parameters** window using the table in Appendix B of the *Oracle Demand Planning User's Guide*.
3. Click **Publish Forecast**.

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Reference:

- *Oracle Demand Planning User's Guide*, Appendix B, Setting Up Demand Planning in Oracle Applications

Completing Initial Setup

- Setting up instances, requests, and profiles
- Defining a Demand Plan
- Setting up Demand Planning in Oracle Applications
- Completing Express Database Setup
- **Reviewing Application Utilities lookups**
- Reviewing Demand Planning validation messages

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Reviewing User Dimension Lookups

Reviewing User Dimension Lookups

To review User Dimension Lookups:

1. In the Navigator, choose **Setup > User Dimensions**.
2. View the fields in the **MSD_USER_DIMENSIONS Lookups** window as shown in Appendix B of the *Oracle Demand Planning User's Guide*.

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Reference:

- *Oracle Demand Planning User's Guide*, Appendix B, Setting Up Demand Planning in Oracle Applications

Viewing Data Elements Lookups

To view Data Elements Lookups:

1. In the Navigator, choose **Setup > Data Elements**.
2. View the fields in the **MSD_DATA_ELEMENT Lookups** window as shown in Appendix B of the *Oracle Demand Planning User's Guide*.

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Reference:

- *Oracle Demand Planning User's Guide*, Appendix B, Setting Up Demand Planning in Oracle Applications

Completing Initial Setup

- Setting up instances, requests, and profiles
- Defining a Demand Plan
- Setting up Demand Planning in Oracle Applications
- Completing Express Database Setup
- Reviewing Application Utilities lookups
- **Reviewing Demand Planning validation messages**

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Reviewing Demand Planning Validation Messages

- Demand Planning Validation Messages inform you when there is an error in a Demand Planning entry or a conflict between two entries.
- The seven Demand Planning message names and definitions are contained in a table in Appendix B of the *Oracle Demand Planning User's Guide*.

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Completing Initial Setup

- Setting up instances, requests, and profiles
- Setting up Demand Planning in Oracle Applications
- Setting up Demand Planning users
- Setting up Demand Plans on the Planning Server
- Setting up Application Utilities lookups
- Reviewing Demand Planning validation messages

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Summary

In this lesson, you should have learned how to:

- **Set up instances and profile options**
- **Set up Demand Planning in Oracle Applications**
- **Set up shared and personal Express databases**
- **Review Application Utilities lookups**
- **Review Demand Planning validation messages**

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Performing Ongoing Administrative Activities

Oracle Demand Planning Release 11*i*

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Agenda

Agenda

- Introduction
- Reviewing Oracle Demand Planning
- Completing Initial Setup
- **Performing Ongoing Administrative Activities**

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Objectives

After completing this lesson, you should be able to do the following:

- **Describe Demand Planning Administrator functions**
- **Modify database information**
- **Set up and modify the Demand Planning page**
- **Set up and enable predefined reports**
- **Set data assignments for Planners**
- **Set Scenario Properties**
- **Define Comment Reason Codes**

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Logging in to Demand Planning

1. In your Web browser, enter the URL for Oracle Applications.
2. In the **Oracle Applications** login window, enter your name and password and choose **Connect**.
3. Choose **Demand Planning Administrator** from the list of responsibilities.
4. Choose a plan from the list.
5. Scroll to the bottom of the page and choose **Start Demand Planning**.

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Demand Planning Administrator Page

The Demand Planning Administrator page is:

- The user interface for the Demand Planning Administrator
- Divided into two frames
 - The Navigation list in the left frame displays options
 - The Workspace in the right frame displays the window that is related to the selected option

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Enabling Local Install of Java Classes

To enable (or disable) local install of Java classes:

1. Choose **User Page Setup** in the Navigation list.
2. Locate the checkboxes for **Local Install** in the **User Page Setup** window.
3. Use checkboxes to select the browser types for which you want to enable (or disable) local install.
4. Choose **Apply** to save the new settings.

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Performing Ongoing Administrative Activities

- **Managing predefined reports**
- Making planner data assignments
- Setting up scenario properties
- Defining and editing comment reason codes
- Reviewing the batch log
- Completing forecasting activities

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Managing Predefined Reports: Demand Planning Administrator

Managing Predefined Reports: Demand Planning Administrator

As Demand Planning Administrator you can:

- **Select the predefined reports to make available to your users, either:**
 - All predefined reports
 - Selected predefined reports
- **Specify the dimensions for which the reports can be generated**
- **Determine certain default report parameters**

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Reference:

- *Oracle Demand Planning User's Guide*, Chapter 2, Administering Demand Planning

Managing Predefined Reports: Dimension Selection Options

Managing Predefined Reports: Dimension Selection Options

- Single or multiple dimensions can be selected for each report

For example, you:

- Select the Growth report.
- Choose the Geography and Product dimensions.
- Users will see a Growth folder with both Product Growth and Geography growth documents.

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Reference:

- *Oracle Demand Planning User's Guide*, Chapter 2, Administering Demand Planning

Managing Predefined Reports: Dimension Selection Restrictions

Managing Predefined Reports: Dimension Selection Restrictions

Restrictions for multiple dimensions apply to:

- **Mix Comparison Report:** Only the Product dimension is available
- **Sales Trend and Cumulative Sales Trend Reports:** Analysis Dimension must be one of Time
- Time cannot be an Analysis Dimension for any other report
- Dimensions selected for reports must have a hierarchy defined

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Reference:

- *Oracle Demand Planning User's Guide*, Chapter 2, Administering Demand Planning

Managing Predefined Reports: Default Settings

Managing Predefined Reports: Default Settings

Default settings for predefined reports are:

- Time Levels
- Comparison Measures
- Review Document Dimension

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Reference:

- *Oracle Demand Planning User's Guide*, Chapter 2, Administering Demand Planning

Performing Ongoing Administrative Activities

- Managing predefined reports
- **Making planner data assignments**
- Setting up scenario properties
- Defining and editing comment reason codes
- Reviewing the batch log
- Completing forecasting activities

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Making Planner Data Assignments

Making Planner Data Assignments

Tasks associated with Planner Data Assignments include:

- Setting system defaults for assignment levels
- Entering planner data assignments
- Editing planner data assignments
- Deleting planner data assignments
- Viewing unassigned data

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Reference:

- *Oracle Demand Planning User's Guide*, Chapter 2, Administering Demand Planning

Making Planner Data Assignments: Setting System Defaults

Making Planner Data Assignments: Setting System Defaults

To set system defaults:

1. In the Navigation list, choose **Demand Planner Assignments**.
2. Scroll to the bottom of the page and choose **Settings**
3. Change the level for one or more of the dimensions in the **System Settings** dialog box.
4. Choose **OK** to save your settings.

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Making Planner Data Assignments: Entering, Editing and Deleting

Making Planner Data Assignments: Entering, Editing and Deleting

You can:

- **Enter planner data assignments**
- **Edit planner data assignments**
- **Delete planner data assignments**

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Making Planner Data Assignments: Viewing Unassigned Data

Making Planner Data Assignments: Viewing Unassigned Data

While making data assignments, you can see data items that have not been assigned to any user. To view unassigned data assignments:

1. In the Navigation List, choose **Demand Planner Assignments**.
2. Scroll to the bottom and choose **Unassigned**.
3. The **Unassigned Data** dialog box is displayed.

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Reference:

- *Oracle Demand Planning User's Guide*, Chapter 2, Administering Demand Planning

Performing Ongoing Administrative Activities

- Managing predefined reports
- Making planner data assignments
- **Setting up scenario properties**
- Defining and editing comment reason codes
- Reviewing the batch log
- Completing forecasting activities

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Setting Up Scenario Properties

Setting Up Scenario Properties

- Forecasts can be generated that can differ in:
 - Scope
 - Certainty
 - Expectation
- You can specify these properties for a scenario:
 - Forecast method
 - Forecast levels
 - Allocation Rule

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Reference:

- Oracle Demand Planning User's Guide, Chapter 2, Administering Demand Planning

Performing Ongoing Administrative Activities

- Managing predefined reports
- Setting planner data assignments
- Setting up scenario properties
- **Defining and editing comment reason codes**
- Reviewing the batch log
- Completing forecasting activities

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Defining and Editing Comment Reason Codes

- **Comments are used by planners to annotate forecasts**
- **A comment consists of:**
 - **A Reason Code**
 - **Optional free text**

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Demonstration

This demonstration shows you how to:

- Access the **Comment Reason Codes** window.
- Add a new entry.
- Save your changes.

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Performing Ongoing Administrative Activities

- Managing predefined reports
- Making planner data assignments
- Setting up scenario properties
- Defining and editing comment reason codes
- **Reviewing the batch log**
- Completing forecasting activities

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Reviewing the Batch Log

Reviewing the Batch Log

Batch logs are generated when you initiate any of these Demand Planning tasks:

- Download data from the Planning Server
- Forecast data and distribute to Planners
- Collect forecast data from Planners
- Upload final forecast to the Planning Server

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Reference:

- *Oracle Demand Planning User's Guide*, Chapter 2, Administering Demand Planning

Reviewing the Batch Log

Reviewing the Batch Log

To view the Batch Log:

1. In the Navigation list, choose **Batch Log**.
2. Review the information displayed for the most recent activity.

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Reference:

- *Oracle Demand Planning User's Guide*, Chapter 2, Administering Demand Planning

Performing Ongoing Administrative Activities

- Managing predefined reports
- Making planner data assignments
- Setting up scenario properties
- Defining and editing comment reason codes
- Reviewing the batch log
- **Completing forecasting activities**

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Completing Forecasting Activities

As the Demand Planning Administrator, it is also your responsibility to:

- View the status of forecasting activities
- Run a forecasting activity
- Rerun a forecasting activity

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Reference:

- *Oracle Demand Planning User's Guide*, Chapter 2, Administering Demand Planning

Viewing Forecast Activities

Viewing Forecast Activities

To view the status of forecast activities:

- In the Navigation list, choose the ***demand_plan_name*** Demand Plan option to display activities for this demand plan.

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Reference:

- *Oracle Demand Planning User's Guide*, Chapter 2, Administering Demand Planning

Running A Forecast Activity

Running A Forecast Activity

To run a forecast activity:

1. In the **Navigation** list, choose the demand plan name.
2. In the **Stage** column, select an activity.
3. Choose **Apply**.

The activity is submitted to Workflow. When it is complete, the **Status** column displays **COMPLETE**.

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Reference:

- *Oracle Demand Planning User's Guide*, Chapter 2, Administering Demand Planning

Rerunning A Forecast Activity

Rerunning A Forecast Activity

To rerun a forecast activity:

1. In the **Stage** column, select an activity.
2. Choose **Apply**.

The activity is submitted to Workflow. When it is complete, the **Status** column displays **COMPLETE**.

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Reference:

- *Oracle Demand Planning User's Guide*, Chapter 2, Administering Demand Planning

Performing Ongoing Administrative Activities

- Managing predefined reports
- Making planner data assignments
- Setting up scenario properties
- Defining and editing comment reason codes
- Reviewing the batch log
- Completing forecasting activities

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Summary

In this lesson, you should have learned about:

- **Administrator functions and the Demand Planning Administrator page**
- **Predefined Reports, including selection options and restrictions, and default settings**
- **Planner data assignments**

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Summary (cont'd)

- Scenario properties
- Comment reason codes
- Workflow settings
- The batch log
- Forecasting activities

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Generating Forecasts

Chapter 3

Review of Oracle Demand Planning Structure, Roles, and Process Steps

Review of Oracle Demand Planning Structure, Roles, and Process Steps

Generating Forecasts

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Objectives

After this lesson, you should be able to:

- **Use common demand planning vocabulary to describe the demand planning structure, roles, and processes**
- **List the topics covered in this and in other ODP course components**

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Agenda

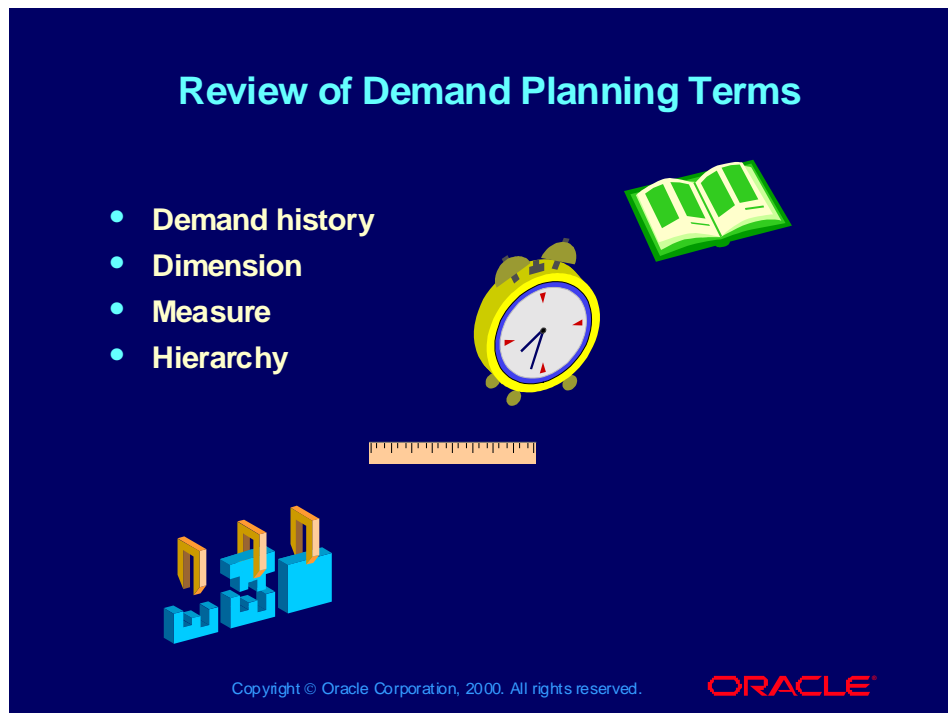
Agenda

- Define demand planning vocabulary terms
- Review the architecture
- Define the scope of the Generating Forecasts course module
- Review the cycle of forecasting activities
- Review the demand planning roles

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Review of Demand Planning Terms



Demand Planning Vocabulary

Demand history: Recorded data showing booking or shipping transactions during a previous time period. This data includes transaction quantity by product and by time period, and typically includes related information, such as customer, geographic region, and sales channel to enable multi-dimensional analysis. Statistical forecasts base projections of future demand upon trends and patterns that exist in demand history data.

Dimension: An axis along which measures are stored. Examples of dimensions are time, product, geographic region, and sales channel. Users can define their own dimensions. Dimension definitions state the hierarchy level structure within each dimension.

Measure: A quantity of interest to the user, such as sales units or sales amount. For example, the measure; sales amount, can be stored along the dimensions of product, time, and geographic region. This permits analysis of sales revenue, by product, by time period, by geographic region, or any combination of these dimensions. The user can define new measures.


Hierarchy: An ordered set of levels used for aggregating data. For example, the time dimension could be accumulated into weekly, monthly, or quarterly levels of aggregation. Each dimension can have several hierarchies. For example, the time dimension could have a manufacturing calendar hierarchy and a fiscal calendar hierarchy. The manufacturing calendar hierarchy could be used for allocation while the fiscal calendar hierarchy is used for reporting.

Level: A degree of aggregation within a hierarchy. For example, within the time dimension, a Gregorian calendar hierarchy can be aggregated into days, months, quarters, and years.

Review of Demand Planning Terms

Review of Demand Planning Terms

- Demand plan
- Scenario specifies
 - Forecast method
 - Forecast aggregation level
 - Allocation rule



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Demand Planning Vocabulary (continued)

Demand Plan: Demand plans can be named and saved. Demand plan definitions specify the name, calendar type, and a list of up to four dimensions used in that plan. Another part of the demand plan definition is the output parameters, which lists the names of the scenarios that are to be published back to the planning server from the Express shared database.

Scenario: Different forecast situations are represented by named forecast scenarios. Forecasts could be obtained from different sources, such as sales force, management, and customers. Forecasts from these sources could differ in scope, certainty, expectation (optimistic versus pessimistic), aggregation level, time horizon, and so on. For example, if a demand plan lists two scenarios named Optimistic and Pessimistic in the output parameters, then demand planners are required to prepare and submit two versions of their forecasts, optimistic and pessimistic.

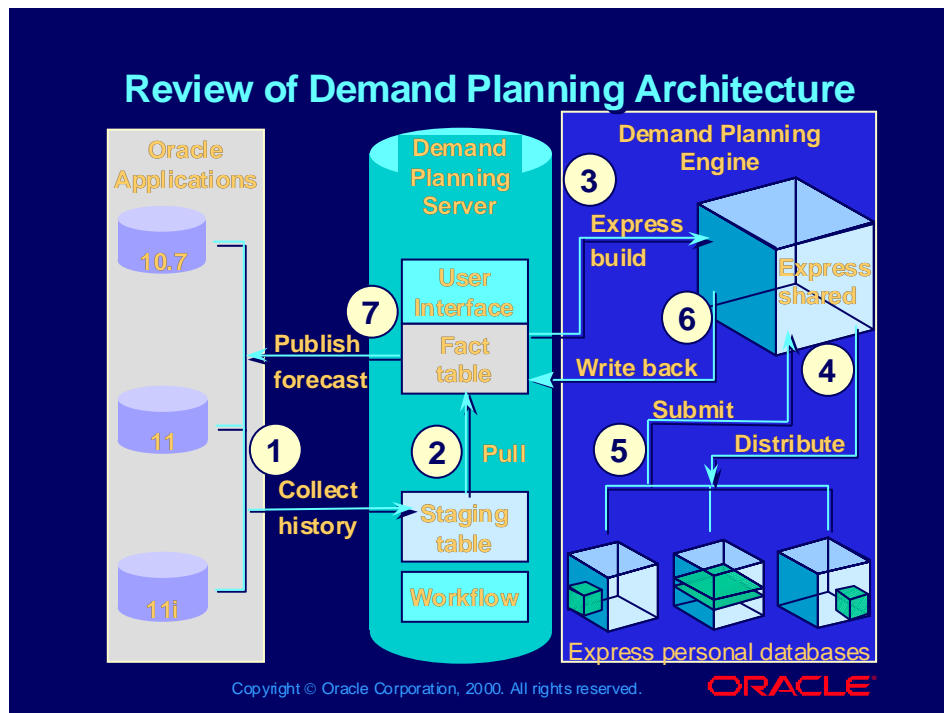
Scenario properties determine

- The statistical method used to generate the baseline forecast
- The hierarchy level at which the baseline forecasts will be calculated for each dimension
- The algorithm that will be used to be used to distribute data to lower levels than the level of the hearty specified in the previous bullet.

Online Help Reference:

Oracle Manufacturing Applications > Oracle Demand Planning > Glossary

Review of Demand Planning Architecture

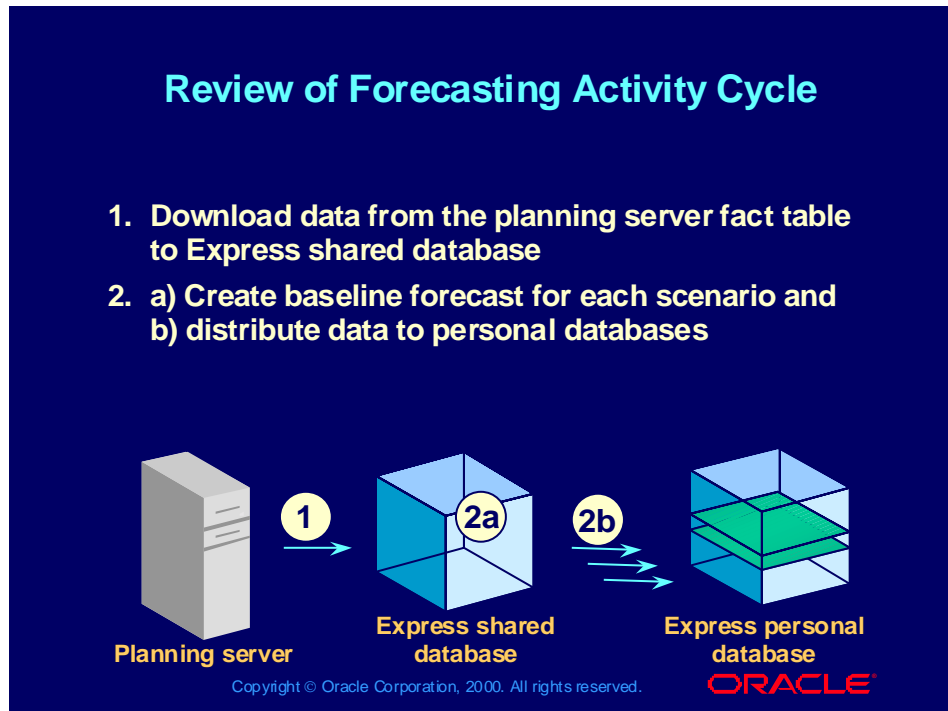


Information Flow

Information can be collected from multiple source instances (10.7, 11.0, or 11i) using out-of-the-box collection programs for discrete and flow manufacturing. There is out-of-the-box 11i integration for OPM, with 10.7 and 11.0 OPM being consulting solutions. Information collected from ERP applications includes histories of booking data and shipment data. Information collected from CRM applications includes sales forecast, sales opportunities, and marketing promotional events.

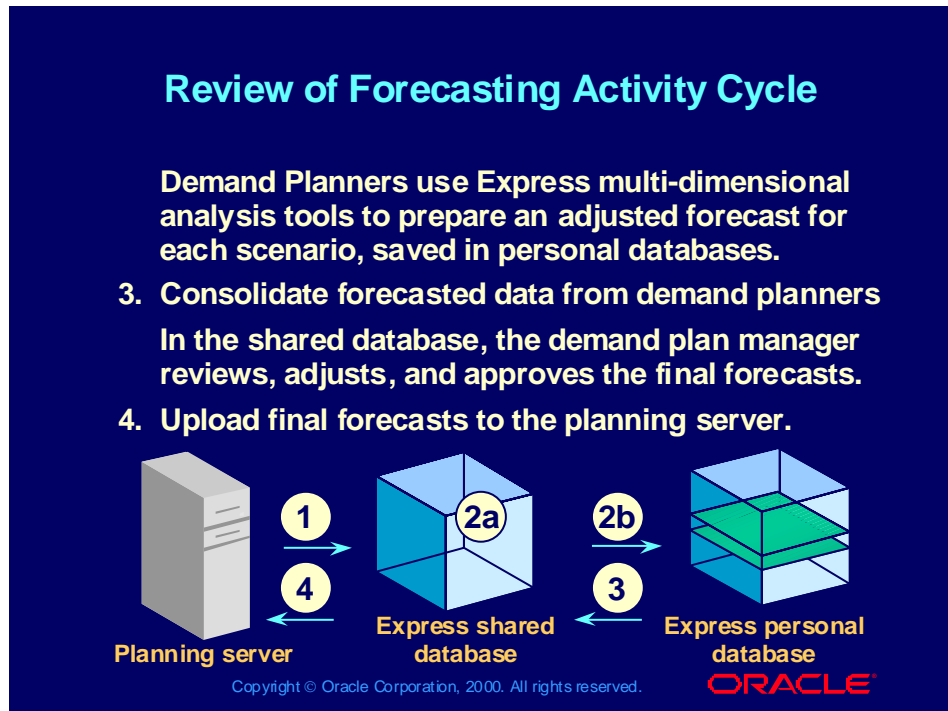
This transaction source information is collected into a staging table, then moved to the fact table, which are both located on the destination demand planning server. An Oracle Express shared database is built for each named demand plan, with hierarchies, dimensions, and scenarios as defined by forms on the demand planning server. The Oracle Express engine is used to calculate a baseline forecast. Then multi-dimensional slices or cubes of the baseline forecast, along with the relevant demand history data are distributed to demand planners according to their assignments. Demand planners use Express tools to analyze and adjust forecasts, then submit them to the Express shared database. At that time the Demand Plan manager has the option of making further adjustments to the forecasts before the consolidated forecasts are written back to the fact table on the demand planning server. Finally, the forecast can be published back to the source instances.

Review of Forecasting Activity Cycle



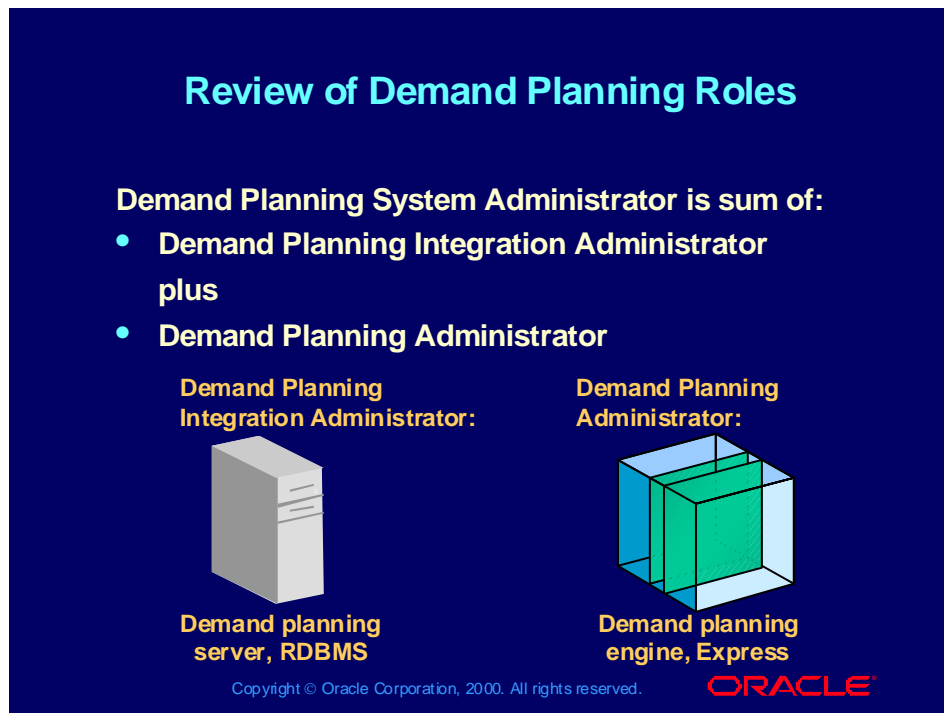
Reference: “Description of planning cycle activities” Section 1, *Oracle Demand Planning User’s Guide*

Review of Forecasting Activity Cycle



Reference: “Description of planning cycle activities” Section 1, *Oracle Demand Planning User’s Guide*

Review of Demand Planning Roles



Reference:

Oracle Demand Planning User's Guide, Chapter 1, "Demand Planning User Roles"

Demand Planning Roles

Persons who sign on with the Demand Planning System Administrator responsibility will have access to the functions of the Demand Planning Integration Administrator in addition to the functions of the Demand Planning Administrator. For the Demand Planning System Administrator sign-on responsibility two selections are possible: Integration and Planning. This was done to accommodate situations where one person manages both RDBMS and Express. Depending on how you structure your workforce, you could have different persons performing the Demand Planning Integration Administrator and Demand Planning Administrator roles. To serve that organization structure, separate responsibilities have been defined that divide the responsibilities between these two roles. Generally, the Demand Planning Integration Administrator works with the Demand Planning Server and its relational database, while the Demand Planning Administrator works with the Demand Planning Engine and its Express databases.

Review of Demand Planning Roles

Review of Demand Planning Roles

- **Demand Planning Administrator**
 - Generate baseline forecast
 - Assign data responsibilities to demand planners
 - Consolidate forecasts
 - Submit final forecasts to planning server
- **Demand Planner**
 - Analyze demand forecasts
 - Prepare adjusted forecast for each scenario
- **Demand Plan Manager**
 - Perform managerial review, adjust, and approve final forecasts



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Reference:

Oracle Demand Planning User's Guide, Chapter 1, "Demand Planning User Roles"


This slide summarizes the activities of these roles that are relevant to this course module (Generating Forecasts). Other activities are explained in the following two modules:

- Administering Oracle Demand Planning
- Analyzing and Managing Demand Plans

Previously, in Administering ODP...

Previously, in Administering ODP...

- Setting up instances, requests, and profiles
- Setting up demand plans
- Setting up and running data collection from transaction systems to the demand planning server staging table
- Cleansing and pulling data from staging table to fact table
- Generating Express databases



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References:

- *Oracle Advanced Supply Chain Planning and Oracle Global ATP Server Implementation Manual*, Chapter 7, Implementing Oracle Demand Planning
- *Oracle Demand Planning User's Guide*, Chapter 2, Administering Demand Planning



Online Help Reference:


Oracle Manufacturing Applications > Oracle Demand Planning > Setting Up a Demand Plan

Scope of Generating Forecasts

Scope of Generating Forecasts

- **Demand Planning Administrator:**
 - Generating a baseline forecast
- **Demand Planner:**
 - Adjusting demand forecasts
 - Adjusting history and re-forecasting
 - Submitting forecast to shared database
- **Demand Plan Manager:**
 - Performing managerial review, adjusting or approving forecasts



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Scope of this Course Component

This course component is designed to follow the Administering Oracle Demand Planning component. Setup issues are covered in the Administering ODP module. This course component focuses on the demand planner user environment and on using worksheets for forecasting. The advanced topic of using Express analysis tools to discover and analyze trends and patterns along multiple dimensions is covered in a subsequent course component titled; Analyzing and Managing Forecasts.

Review Question

Which of these demand planning roles is responsible for generating the baseline forecast?

- 1. Demand plan manager**
- 2. Demand planner**
- 3. Demand planning administrator**
- 4. Demand planning integration administrator**

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Review Question Solution

Which of these demand planning roles is responsible for generating the baseline forecast?

1. Demand plan manager
2. Demand planner
- 3. Demand planning administrator**
4. Demand planning integration administrator

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Review Question

Setting up database instances is covered in which of the following Oracle Demand Planning courses?

- 1. Overview to ODP**
- 2. Administering ODP**
- 3. Generating Forecasts**
- 4. Analyzing and Managing Forecasts**

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Review Question Solution

Setting up database instances is covered in which of the following Oracle Demand Planning courses?

1. Overview to ODP
- 2. Administering ODP**
3. Generating Forecasts
4. Analyzing and Managing Forecasts

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Summary

In this lesson, you should have learned how to:

- **Use common demand planning vocabulary to describe the demand planning structure, roles, and processes**
- **List the topics covered in this and in other ODP course components**

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Generating a Baseline Forecast

Generating Forecasts

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Objectives

After this lesson, you should be able to:

- **Log in to the Administrator page**
- **View the status of demand plans and run demand planning activities**
- **Choose a statistical forecasting method appropriate for a given demand history pattern**
- **Choose hierarchy levels for forecast aggregation**
- **Specify the allocation rule**
- **Generate a baseline forecast**

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Agenda

Agenda

- Log in to the Demand Planning Administrator page
- View the status of demand plans and run demand planning activities
- Define three general categories of forecasting methods
- Describe common patterns observed in historical sales data
- List available statistical forecasting methods
- Match forecasting methods to patterns in historical sales data

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Agenda

Agenda

- **Define scenario properties**
 - Method
 - Levels
 - Allocation rule
- **Demonstration**
- **Practice**

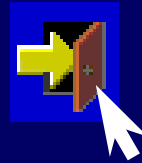
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Logging On and Exiting Demand Planning

Logging On and Exiting Demand Planning

- Log in responsibilities:
 - Demand Planning Administrator
 - Demand Planner
 - Demand Plan Manager
- Closing the session





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Reference

Oracle Demand Planning User's Guide, Section 2, "Using Administrator Functions"

Online Help

- Help button located on the page banner 
- Help button located on the toolbar 
- Each dialog box or page includes a Help button

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Displaying Help

Each page or dialog box includes a Help button.

Viewing Forecast Activity Status

- **Log in responsibility: Demand Planning Administrator**
- **Select demand plan name from Navigation list**
- **Four stages:**
 - **Download data from planning server**
 - **Forecast data and distribute to planners**
 - **Collect forecast data from planners**
 - **Upload forecasts to planning server**
- **Three statuses:**
 - **INCOMPLETE**
 - **RUNNING**
 - **COMPLETE**



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Demand Planning Administrator Page

Demand Planning Administrator Page

Demand Plan

- + Database Inf.
- + Output Scenarios

Stage	Status
<input type="radio"/> Download data	Complete
<input checked="" type="radio"/> Forecast and distribute	Incomplete
<input type="radio"/> Collect forecasted data	Incomplete
<input type="radio"/> Upload forecasts	Incomplete

Apply

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Demand Planning Administrator Functions

You use the Demand Planning Administrator page to perform several functions. The functions that are covered in the Generating Forecasts course module are the second and third stages listed in the figure.

Reference:

Oracle Demand Planning User's Guide, Section 2, "Summary of Demand Planning Administrator Functions"

Running Forecast Activities

Stage:	Status:
<input type="radio"/> Download data from planning server	COMPLETE
<input checked="" type="radio"/> Forecast data and distribute to planners	INCOMPLETE
<input type="radio"/> Collect forecasted data from planners	INCOMPLETE
<input type="radio"/> Upload forecasts to planning server	INCOMPLETE

Apply

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Generating a Baseline Forecast

The figure shows that demand history data has been downloaded from the demand planning server to the Express master database. The radio button next to the Forecast data and distribute to planners activity has been selected. Click the Apply button to cause the demand planning engine to generate a baseline forecast and distribute the history and baseline forecast to the demand planners' personal Express databases according to their data assignments. Refer to the course module: Administering Oracle Demand Planning, or the topic titled "Setting Data Assignments for Planners", Section 2, in the *Oracle Demand Planning User's Guide*.

The other activities shown on this page are launched in a similar manner.

Note: Previous activities must have Status: COMPLETE before you can run the next activity on the list.

Note exception: For many items the baseline statistical forecast will be sufficient, and there is no interest in sending history and forecast data to demand planners for further analysis and adjustment. In those cases, no data assignment is made. When assignments are absent, the system will generate a baseline forecast, but will not distribute the information to planners. The baseline forecast is immediately available to upload to the demand planning server from the Express master database.

Available Exponential Smoothing Forecasting Methods

Available Exponential Smoothing Forecasting Methods

- **Single**
 - level of demand
 - smoothing constant; alpha
- **Double**
 - level of demand adjusted for linear trend
 - constants; alpha and beta
- **Holt-Winters**
 - level of demand adjusted for trend and for seasonal cycle
 - constants; alpha, beta, and gamma

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Reference:

Oracle Demand Planning User's Guide, Appendix A

Online Help Reference:

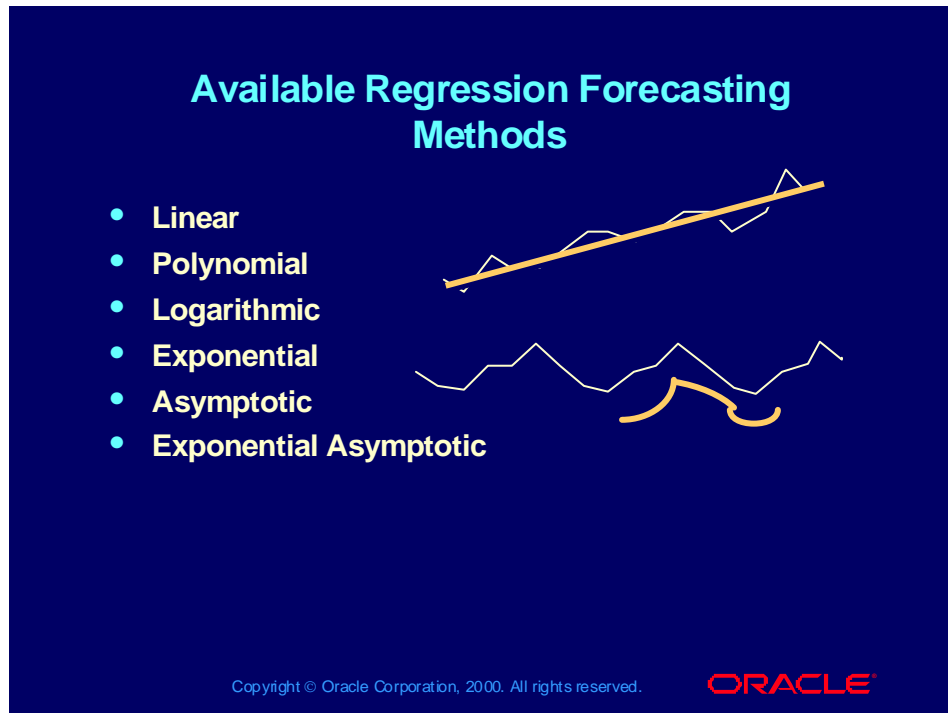
Oracle Manufacturing Applications > Oracle Demand Planning > Glossary

Matching Forecasting Methods to Component Characteristics

By analyzing trends and patterns that exist in historical data, it is possible to predict which types of forecasting methods would be successful. For example, single exponential smoothing works well to find the general level of demand when the demand history data is stationary. For items with demand history that exhibits a strong linear trend single exponential smoothing produces biased results, and should not be used. On the other hand, double exponential smoothing would work quite well, because it includes a parameter to account for the linear trend.

Seasonal cycles usually repeat annually. For items that exhibit this pattern, the Holt-Winters method includes a third parameter which acts as a seasonal index.

Available Regression Forecasting Methods



Fitting Equations

The methods listed in the figure fit equations describing lines or curves that fit the patterns and trends exhibited by the historical data. The resulting equation is then used to extend a projection of the demand patterns and trends into the future.

One business cycle usually covers several years. When the available history is large enough for the cyclical component to be identified, Oracle Demand Planning uses a cyclical decay parameter with its linear and nonlinear regression forecasting methods to estimate the effect of the business cycle.

Reference:

Oracle Demand Planning User's Guide, Appendix A

Online Help Reference:

Oracle Manufacturing Applications > Oracle Demand Planning > Glossary

Scenario Properties — Forecasting Method

Scenario Properties — Forecasting Method

Specify the forecasting method for a scenario on the Scenario Properties window, Forecast Method tab:

- **Automatic:**
or
- **Manual:** Select a forecasting method from the drop down menu list of values
- **Automatic is the recommended approach in the absence of evidence that a particular method with specified parameters regularly produces better accuracy.**

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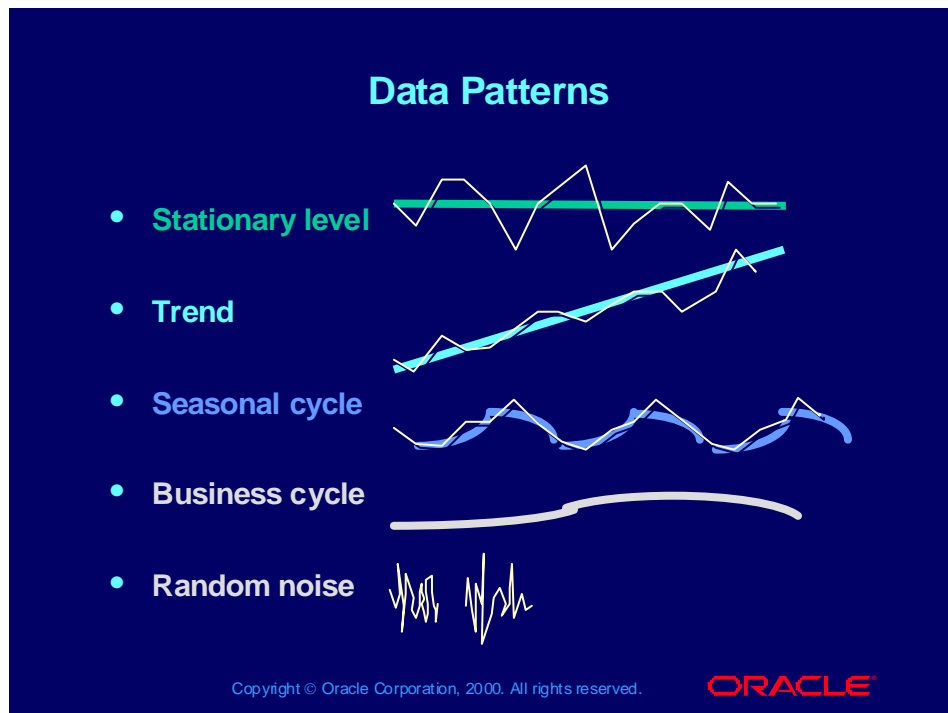
Selecting a Forecasting Method

(N) Output Scenarios > (B) Properties (T) Forecast Method

References:

- *Oracle Demand Planning User's Guide*, Section 2, "Setting Scenario Properties"
- *Oracle Demand Planning User's Guide*, Appendix A, "Selecting Forecast Method"
- *Oracle Demand Planning Implementation Guide*, Section 7, Implementing Oracle Demand Planning, "Demand Planning Administrator Responsibilities/Choosing the Statistical Forecasting Model"

Data Patterns



Matching Forecasting Methods to Data Patterns

Single exponential smoothing is appropriate when the data is stationary, in other words, no trend or seasonal components exist in the demand history. Double exponential smoothing can handle trends, but does not account for the seasonal component of demand. Holt-Winters exponential smoothing combines three terms to identify the level, trend, and seasonal components of demand. Linear regression fits a straight line to historical data.

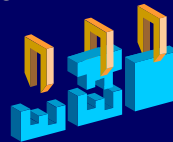
No forecasting method can provide any help in predicting the next number in a truly random series. In order for a series to be defined as random, no repeatable trends or patterns can exist in the data.

Scenario Properties — Levels of Aggregation

Scenario Properties — Levels of Aggregation

Scenario Properties window, Forecast Levels tab:

- Specify the hierarchy level at which to calculate the forecast for each dimension in the scenario
- Aggregated forecasts are usually more accurate
 - Compensating errors
 - Larger base of information



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(N) Output Scenarios > (B) Properties (T) Forecast Levels

Example of Product Aggregation

Doughnuts

- Cake
 - Powdered sugar
 - Frosted
- Raised
 - Glazed
 - Chocolate frosting

The principle of compensating errors states that the demand forecast for the product family will be more accurate than the forecasts for individual members of the family. For example, say that the demand forecast for chocolate frosted, raised doughnuts is too high. There is a chance that the forecast for one of the other types of doughnuts will be too low. Then the errors will somewhat cancel each other when they are aggregated to the product family level, producing a more accurate forecast at that level.

One approach is to generate the forecast at the product family level, then use managed allocation factors to allocate the forecast down to the individual item level. It is also possible to start at the lowest level and roll up the forecasts for individual items to aggregate levels in a hierarchy.

Time Granularity

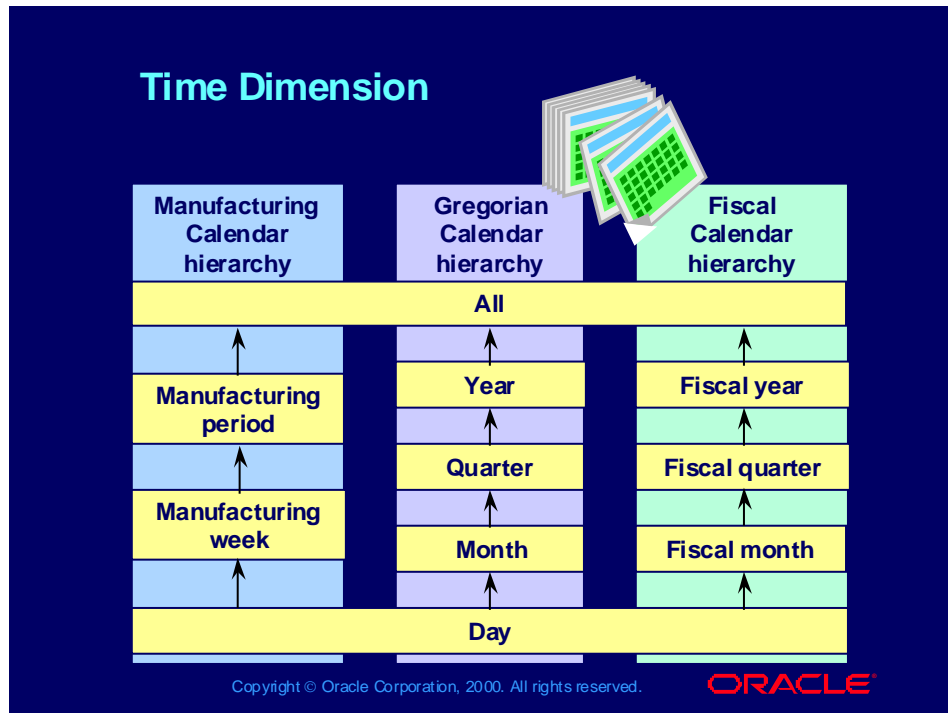
- Time Dimension
- Seeded Hierarchies
 - Fiscal
 - Gregorian
 - Manufacturing
- Consistent calendar across demand plan
- Common unit across calendars (days)



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Time Dimension



Hierarchies

The Time dimension has three hierarchies: Manufacturing Calendar, Gregorian Calendar, and Fiscal Calendar.

Notes:

- If a demand plan uses the manufacturing calendar hierarchy, all of the scenarios within that demand plan must be consistent with the manufacturing calendar.
- It is not necessary to define time hierarchies in ODP because the relationship between time periods is derived from the applicable calendar.

Scenario Properties — Allocation Rule

- Use the **Scenario Properties** window, **Allocation Rule** tab to choose algorithm used to distribute data through hierarchies as forecasts are adjusted or combined.
- **Available allocation rules:**
 - Base on forecast weights aggregated from lowest level
 - Base on a forecast at each level
 - Base on historical weights for a user-specified number of time periods

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Scenario Properties—Allocation Rule

(N) Output Scenarios > (B) Properties (T) Allocation Rule

References:

- *Oracle Demand Planning User's Guide*, Section 2, "Setting Scenario Properties"
- *Oracle Demand Planning User's Guide*, Appendix A, "Specifying an Allocation Rule"

Demonstration

In Oracle Demand Planning we will demonstrate how to:

- Log in to the Demand Planning Administrator Page
- Define scenario properties
- Generate a baseline forecast



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Summary

In this lesson, you should have learned how to:

- **Log in to the Administrator page**
- **View the status of demand plans and run demand planning activities**
- **Choose a statistical forecasting method appropriate for a given demand history pattern**
- **Choose hierarchy levels for forecast aggregation**
- **Specify the allocation rule**
- **Generate a baseline forecast**

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Review Question

Review Question

The functions described in this lesson are available with which of the following responsibilities?

1. Demand Planning Administrator
2. Planner
3. Plan Manager

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Review Question Solution

The functions described in this lesson are available with which of the following responsibilities?

- 1. Demand Planning Administrator**
2. Planner
3. Plan Manager

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Review Question

Which of the following is a prerequisite to generating a baseline forecast?

- 1. Download data from planning server stage is at status: COMPLETE**
- 2. Forecast data and distribute to planners stage is at status: COMPLETE**
- 3. Collect forecasted data from planners stage is at status: COMPLETE**
- 4. Upload forecasts to planning server stage is at status: COMPLETE**
- 5. All of the above**

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Review Question Solution

Which of the following is a prerequisite to generating a baseline forecast?

- 1. Download data from planning server stage is at status: COMPLETE**
2. Forecast data and distribute to planners stage is at status: COMPLETE
3. Collect forecasted data from planners stage is at status: COMPLETE
4. Upload forecasts to planning server stage is at status: COMPLETE
5. All of the above

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A prerequisite to running an activity is that the previous activity must be at the COMPLETE status.

Review Question

Which of the following forecasting methods would be appropriate when the existing demand history data includes both trend and seasonal components?

- 1. Single exponential smoothing**
- 2. Double exponential smoothing**
- 3. Holt-Winters exponential smoothing**
- 4. Linear regression**
- 5. None of the above**

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Review Question Solution

Which of the following forecasting methods would be appropriate when the existing demand history data includes both trend and seasonal components?

1. Single exponential smoothing
2. Double exponential smoothing
- 3. Holt-Winters exponential smoothing**
4. Linear regression
5. None of the above

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Single exponential smoothing is appropriate when the data is stationary, in other words, no trend or seasonal components exist in the demand history. Double exponential smoothing can handle trends, but does not account for the seasonal component of demand. Holt-Winters exponential smoothing combines three terms to identify the level, trend, and seasonal components of demand. Linear regression fits a straight line to historical data. An extension of the regression line would project the trend into the future with a slope to indicate trend, but the forecast would provide no information regarding seasonal fluctuation in demand. Enhancements to the basic linear regression forecasting method are required in order to adjust the linear trend to account for seasonal patterns.

Review Question

Time granularity is most closely related to which of the following?

- 1. Forecast allocation rule**
- 2. Forecast history data date range**
- 3. Forecast level**
- 4. Forecast method**
- 5. None of the above**

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Review Question Solution

Time granularity is most closely related to which of the following?

1. Forecast allocation rule
2. Forecast history data date range
- 3. Forecast level**
4. Forecast method
5. None of the above

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Time is one of the dimensions. The time dimension is set up with three hierarchies; Gregorian calendar, Fiscal calendar, and Manufacturing calendar. These calendars naturally have *levels of aggregation* within them, such as days grouped into weeks, weeks into months, and so on. When you define time granularity, you are doing an activity that is similar to setting the forecast hierarchy level for a dimension.

Practice

Practice

Reviewing setup for an existing demand plan

1. Log in to the Planning Administrator page
2. Review demand plan output scenario properties:
 - a. Forecasting method
 - b. Hierarchy levels for each dimension
 - c. Allocation rule

Using the Demand Planning Administrator page

3. Run the activity to create a baseline forecast

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Instructions

Defining demand plans is covered in the Administering Demand Planning course component. This practice begins with a review of the seeded data demand plan, then takes the process through creating a baseline forecast.

Reviewing the Setup for an Existing Demand Plan

1. Log in to the Oracle Demand Planning Application. Your instructor will provide the appropriate web address, user name, and password for the Demand Planning Server.

Select responsibility: Demand Planning System Administrator

2. Navigate to the Demand Plans window

(N) Integration > Demand Plan Definitions > Demand Plans

In the instance:organization stated by your instructor __:__, select the demand plan name stated by your instructor _____.

3. List the *User* Dimensions for this demand plan:

4. Which of the dimensions have been consolidated into the Geography dimension?

5. Navigate to the Demand Plan Hierarchies window. List the hierarchy levels for the Product dimension:

6. Return to the Demand Plans window. Navigate to the Demand Plan Scenarios window. List the scenarios for this plan:

7. For the first scenario, list the following information

Output period type _____

Planning horizon start and end dates _____

Type of history data forecast is based on _____

8. Navigate to the Scenario Output Levels window. At what hierarchy level within the Product dimension will this forecast be published?

9. Return to the Demand Plans window. Navigate to the Demand Plan Parameters window, Input Parameters tab. What is the type of the input data, and what date range of history is input?

Name _____

Start date _____

End date _____

Select the Output Parameters tab. What is the name of the scenario that will be published back to the transaction system?

Name _____

What is the history date range that will be used for calculating the forecast?

History start date _____

History end date _____

View the Demand Plan Administrator Page

10. Switch responsibilities to: Demand Plan Administrator, OR within the Demand Planning System Administrator Responsibility, navigate to the Demand Planning Administrator page.
(N) Planning >
11. The Demand Planning Administrator web page will open.
In the Navigation list, select the same demand plan name you used for step 2 of this practice _____
Choose the assignment given by your instructor: _____
What is the current activity stage of this demand plan? _____
12. Which forecasting method is used? _____
(N) Output Scenarios > (B) Properties
13. Compare the output scenario properties for the scenario named by your instructor _____ to the corresponding information defined on the ODP planning server:

Scenario Output Property	ODP Server Setup Value
<u>Dimensions</u>	<u>Levels</u>
<u>(Compare to steps 3, 5, & 8)</u>	

Demand Planning Users' Environment

Generating Forecasts

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Objectives

After this lesson, you should be able to:

- **Explain the functions and features available from the demand planning page**
- **Create forecast worksheets, populate worksheets with data, and export data to an electronic spreadsheet**
- **Modify forecasts to account for promotional events, new product introductions, and product replacement**
- **Perform what-if forecast simulations**
- **Submit forecast to Express shared database**

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Agenda

Agenda

- Demand planning page overview
- Using worksheets

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Demand Planning Page Layout

The screenshot displays the 'Demand Planning Page Layout' interface. It features a dark blue background with a central white content area. The title 'Demand Planning Page Layout' is centered at the top in a light blue font. The interface is divided into four main sections: a left-hand navigation pane, a top-right section for 'Reports and Graphs', a bottom-left section for 'Notifications', and a bottom-right section for a 'Worksheet'. The navigation pane includes a 'Navigate' button with a diamond icon, followed by a list of items: 'Document' (selected with a dark blue background), 'Custom Meas', 'Alerts', 'Forecasts' (with a pink folder icon), and 'Histories' (with a pink folder icon). The 'Reports and Graphs' section has a title in orange, followed by 'Product' and 'Ship from Location' labels, each with a corresponding input field containing 'All' and 'US' respectively. The 'Notifications' section has a title with a warning icon, followed by an 'Out of Range' message with a folder icon. The 'Worksheet' section has a title in orange, followed by 'Product' and 'Ship from Location' labels, and a table with 4 columns and 4 rows. The footer contains the copyright text 'Copyright © Oracle Corporation, 2000. All rights reserved.' and the 'ORACLE' logo in red.

Demand Planning Page Layout

Navigate

- Document**
- Custom Meas
- Alerts
- Forecasts
- Histories

Reports and Graphs

Product: All Ship from Location: US

Notifications

Out of Range

Worksheet

Product Ship from Location

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Navigation List

The Navigation list is an object explorer utility that enables you to work with objects such as documents, document folders, forecasts, histories, custom measures, custom aggregates, and alerts.

Navigation List

Navigation List

The navigation list displays:

- Objects you have created and saved
- System folders and predefined reports created by the demand planning administrator
- Forecasts and histories from the baseline



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Navigation List

The Navigation list displays documents and other objects that you have created and saved. It also displays forecasts and histories from the baseline forecast as well as system folders and predefined reports that have been set up by the Demand Planning administrator.

Note: If you open or create another document of the same type without making a change in the current document, the new document *replaces* the current document in the workspace. If you open or create another document of the same type after making a change, you will be asked if you want to save the current document.

Reference “Using the Navigation List”, Section 3 *Oracle Demand Planning User’s Guide*

Notifications

- Viewing a notification
- Deleting a notification
- Examples:
 - Baseline forecast is ready for review
 - User defined exception conditions



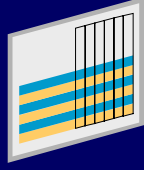

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Demand Planning Workspaces

Demand Planning Workspaces

- **Report and graph workspace**
 - Ad hoc reports and graphs
 - Predefined reports
- **Worksheet workspace**
 - Document toolbar
 - View, modify, and submit demand forecasts



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Report and Graph Workspace

The report and graph workspace displays an open report or graph.

The document toolbar at the top of the workspace enables you to perform tasks that are specific to the type of document that you are viewing.

Worksheet Workspace

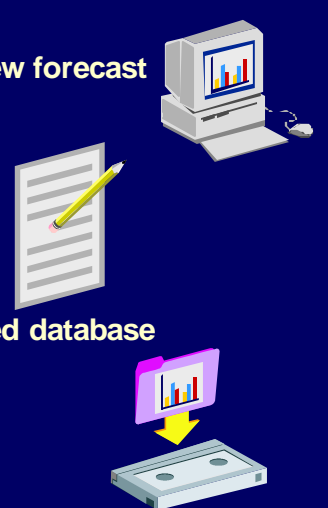
The worksheet workspace displays an open worksheet. Worksheets are documents that enable you to view, modify, calculate, and submit demand forecasts.

The document toolbar at the top of the workspace enables you to perform tasks that are specific to forecast worksheets.

Relationships Between Reports, Graphs and Worksheets

Relationships Between Reports, Graphs and Worksheets

- Use reports and graphs to view forecast and history data
- Use worksheets to:
 - Adjust forecasts
 - Modify history data
 - Save
 - Submit forecasts to shared database



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Opening Documents and Workspaces

When you open a document or create a new document, it is displayed in the appropriate workspace; a report or graph appears in the report and graph workspace; a worksheet appears in the worksheet workspace. The report and graph workspace is read only. All changes are written in the worksheet workspace.

Agenda


Agenda

- Demand planning page overview
- **Using worksheets**

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Working with Forecasts

- **Creating forecasts and histories**
 - View
 - Edit
 - Rename
 - Delete 
 - List properties
- **Submitting final forecasts to the shared database**
- **Using the forecast activity log**



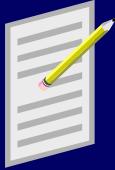

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Creating a Revised History

Creating a Revised History

- New
- New history dialog
- Select an existing history on which to base the revised history
- Name the revised history
- Modify cells
- Save as



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Procedure: Creating a New History

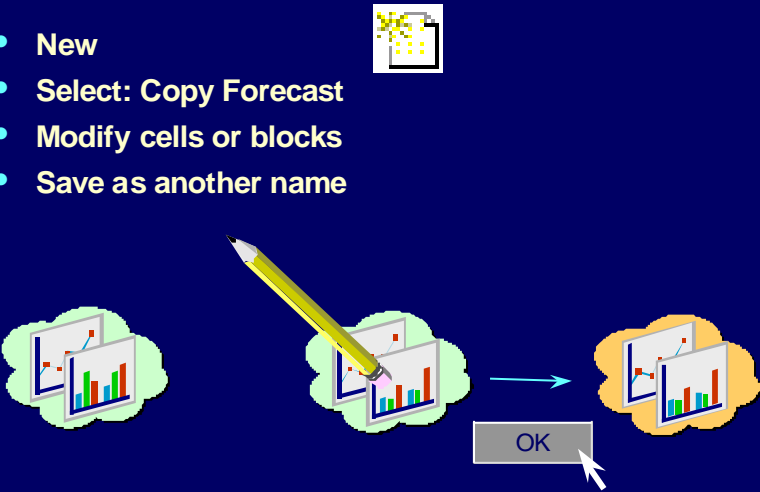
Choose OK to create the new history. As you create new personal histories, they are displayed in the Histories Folder in the Navigation list.

Reference “Creating Forecasts and Histories” Section 4, *Oracle Demand Planning User’s Guide*

Copying Forecasts

Copying Forecasts

- New
- Select: Copy Forecast
- Modify cells or blocks
- Save as another name




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Reference “Creating Forecasts and Histories” Section 4, *Oracle Demand Planning User’s Guide*

Reference “Procedure: Copying a Forecast” Section 4, *Oracle Demand Planning User’s Guide*

New Forecasts

New Forecasts

- New
- Select: Create Forecast 
- Specify forecast properties
 - Name
 - Associate the new forecast with an existing scenario
 - Select a named history to use in calculations
 - Specify start date and end date for forecast horizon
- Specify the following scenario properties:
 - Forecast method
 - Forecast level
 - Allocation rule

OK 

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Reference “Procedure: Creating a New Forecast” Section 4, *Oracle Demand Planning User’s Guide*



Note: For information about forecast methods and parameters, forecast levels, and allocation rules, refer to “Forecast Options” Appendix A, *Oracle Demand Planning User’s Guide*

Choose OK on any tab to create the new forecast. As you create new personal forecasts, they are displayed in the Forecasts Folder in the Navigation list.

Creating Worksheets

Creating Worksheets

- Display or adjust forecast or history data
- Base a worksheet on the default worksheet or on any saved document
- New
- Select: New Worksheet
 - Use default
 - Based on
- Arrange dimensions on the page

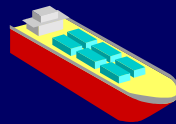
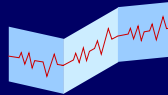


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Reference: “Creating Worksheets” Section 4, *Oracle Demand Planning User’s Guide*

Working with Worksheets

- Creating new worksheets
- Populating worksheets with data
- Arranging and viewing data
- Adjusting data
- Formatting worksheets
- Saving worksheets
- Using saved worksheets
- Printing
- Exporting data



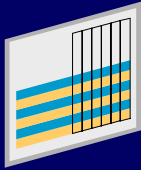
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Populating Worksheets with Data

Populating Worksheets with Data

- **Specify data elements to include**
 - **Select measures**
 - **Select dimension values**



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Measures

A measure is a placeholder for storing data values along a dimension. You can select from:

- baseline forecast and history measures
- personal forecast and history measures
- custom measures

Dimension Values

A dimension organizes and indexes the data. Dimension values are the elements that make up a dimension.

For example: the time dimension is made up of dimension values, days, weeks, and months.

Arranging Data in Worksheets













- Drag and drop row, column, and page selectors to arrange the dimensions on the page
- View a more detailed or higher level of data
- Adjust the size of rows and columns

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Using Worksheet Tools

Using Worksheet Tools


	Modify a block of cells		Recalculate data
	Copy data		Reforecast data
	Paste data		Export to spreadsheet
	Save data		Submit data
	Reset data		Document adjustments
	Lock and unlock data		Access activity log

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Reference: “Using worksheets tools” Section 4, *Oracle Demand Planning User’s Guide*


Submitting Forecasts

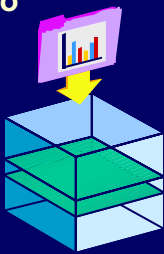
Submitting Forecasts


Save Forecast icon

Demand planner:

- Saving data saves in personal database
- Submitting copies to the shared database
- Must submit a forecast for each scenario in the demand plan
- All data values for all dimensions in the forecast are submitted


Submit Forecast icon


Express personal database
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Collecting Forecasts

Demand Planning Administrator:

- Stage 3: Collect forecasted data

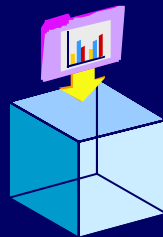


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Reviewing Forecasts

Demand plan manager:

- Access the shared database directly
- Review and optionally adjust forecast data
- Saving worksheet data saves to shared database



Express shared
database

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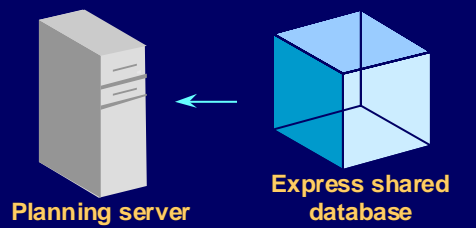
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Uploading Forecasts to Planning Server

Uploading Forecasts to Planning Server

Demand Planning Administrator:

- Stage 4: Upload final forecast to planning server



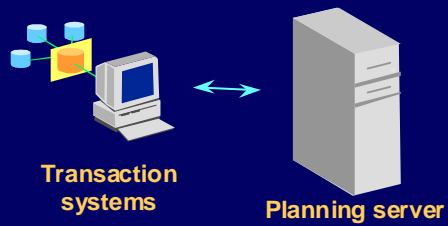
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Publishing Forecasts

Demand Planning Integration Administrator:

- Publish forecast scenarios to transaction systems
- Forecast consumption calculation occurs in transaction systems
- Load MDS to ASCP planning server

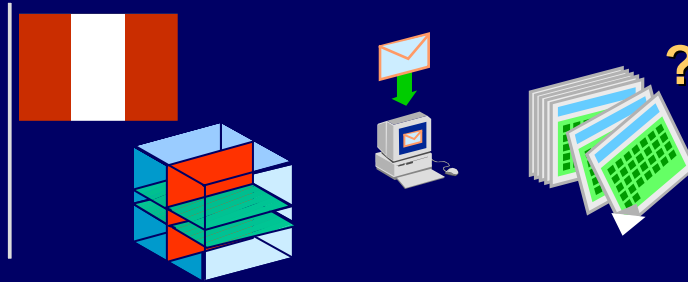


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Planning Collaboratively at Multiple Levels

- Flag warns of overlapping responsibilities
- Workflow messages coordinate collection
- Baseline forecast is default when there is no response from a demand planner



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Demonstration

In Oracle Demand Planning we will demonstrate how to:

- Review history report
- Display and compare history and forecast graphs
- Modify forecast
- Recalculate forecast
- Submit forecast to shared database
- Create a new forecast
- Export data to electronic spreadsheet
- Set up an alert



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Summary

In this lesson, you should have learned how to:

- **Explain the functions and features available from the demand planning page**
- **Create forecast worksheets, populate worksheets with data, and export data to an electronic spreadsheet**
- **Modify forecasts to account for experience and judgment, product replacement, and new product introductions**
- **Perform what-if forecast simulations**
- **Submit forecast to Express shared database**

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Practice

Practice

Using the Demand Planning page:

- View an alert and associated history and forecast
- Work with pivot tables

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Instructions

This practice begins with a review of the baseline forecast and history. It demonstrates some of the functionality of pivot tables.

Logging in to the Demand Planning Page

1. Change responsibilities to Demand Planner, then access the Demand Planning Page.

Select the user assignment given by your instructor: _____

Viewing a Notification

2. Open the Vision Sales Alert message that appears in the Notifications window. This alert has been defined to notify when sales are below 1000 units. Defining alerts is covered in the Analyzing and Managing Forecasts course module. In the next steps we will analyze why sales have dropped dramatically so as to trigger this alert. Use the *small* exit icon located on the document to close the vision sales alert document. *Do not* use the similar but larger exit icon located at the top of the Demand Planning page, because that will close the session and then you would need to log on again.

Viewing History Documents

3. In the Navigation tree, open the Documents Folder, then open the Demo Folder, then open the history graph. This is the history that was used to calculate the baseline forecast. There is a dramatic drop in sales quantity for the most recent time period. (FEB 2000). Close the graph.

4. Within the Demo Folder, open the History Report. This shows the same information in tabular form.

Working with Pivot Tables

5. The demand history for all products, FEB 2000 appears to be very low in comparison to the other months displayed in this report. At the top of the workspace are these dimensions and values:

<u>Dimension</u>	<u>Dimension value</u>
Product	All Products
Geography	Vision Sales
Ship From Location	Vision Operations US

- As the page opens, the Time dimension is displayed in the first column of the pivot table. Shipping History quantities are in the second column, and Shipping History amounts are in the third column. For the time period: JAN 2000, drill down from the monthly to the weekly data. (Hint: Click the small triangle located next to JAN 2000. The triangle will turn, pointing downward, then the weeks within JAN 2000 will display.) For Week 163, drill down to the daily data. Collapse this data back to the monthly level.
- Drill down to the weekly data for FEB 2000. As compared to the January data, what is different about the February data?

Do not collapse the FEB 2000 data back to the monthly level.

6. To view the demand history for just the one item number 01 PC, select it from the pull down menu in the Product dimension.
- Drag the dotted rectangle located next to the Product dimension downward and drop it in the area of the time column in the pivot table. In effect, this action exchanges the product dimension with the time dimension to obtain a different view of the pivot table.
- In JAN 1999, which of the products produced most of the sales?

Note: With regard to the other dimensions, you should still be looking at Geography: Vision Sales, and Ship from Location: Vision Operations US.

- In FEB 2000, which of the products produced no sales? Hint: change the time period in the Time dimension to FEB 2000.

-
- Why do the week numbers, 164 through 168 appear in the pull down menu for the time dimension? (Hint: see last instruction in step 5.)
-

7. Move the Geography dimension to the top left of the page so that it exchanges position with the time dimension. Note that the data within the pivot table does not change.
 - Switch Time in the header with Products in the pivot table.
 - Now move the Geography dimension down to the area between the first column (time) and the second column (Shipping history quantity).
 - Which geography sold all of product 01PC in JAN 2000? Hint: Select the appropriate item the Product dimension. Scroll down to near the bottom of the pivot table.

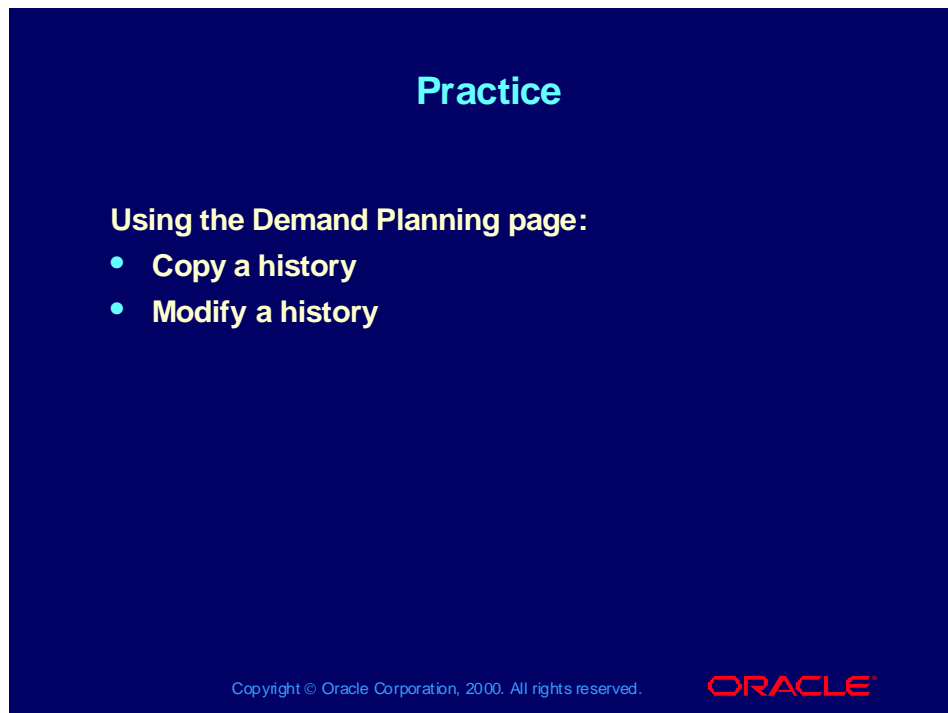
- Move the geography dimension to the area in the pivot table that is to the right of the quantities and amounts.
8. Which products were sold by the National Sales region in JAN 2000?
 - ---
 - Hint: Switch the time dimension with the product dimension. Time and Ship from Location dimensions should now be in the page header. The first column in the pivot table should be the Products dimension. Geographies are to the right in the pivot table. In the header, change the time dimension to JAN 2000. Now you can find the answer in the pivot table.
9. Within the geography dimension there are sales persons names. That seems odd. Why would a sales person be rolled up within the Geography dimension?

10. Click on the selector icon at the top left of the workspace. It looks like a green cube with a piece of the cube missing. A drop down menu will appear. Select Geography. A Choose Values from List dialog window will open.
 - When the demand plan was defined, which dimensions were rolled into the Geography dimension?

- If you wanted to remove Ms. Pierson from the report, what would you do?

11. Use the *small* exit icon to close the history report. Do not save your changes to this document.

Practice



Practice

Using the Demand Planning page:

- **Copy a history**
- **Modify a history**

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Instructions

This practice takes the forecasting process through copying and modifying a shipment history.

Copying a History

1. In the Navigation tree, close the Demo folder.
2. At the left of the Navigation toolbar, select the “New” icon. From the drop down menu, select: New History. A New History dialog box will open.
3. Enter a name for the revised history in the Name field. Select Training History from the list of values in the Select a history to copy from field. Click the Ok button.
4. In a few moments, after the process completes the Demand Planning Alert window will automatically close. Open the Histories folder. Your new history name will appear there. Double click your new history name to view its properties. Close the View Properties window.

Editing a History

5. At the left of the Navigation toolbar, select the “New” icon. From the drop down menu, select: New Worksheet. A New Worksheet dialog box will open. Click the Based On radio button, then select History Report from the list of values. Click the Ok button.
6. A worksheet will open at the bottom of the page with the name: Document 1. Drag the screen divider upward so that you can see the entire worksheet. In the Product dimension, select item number 01 PC. There is no entry for FEB 2000. Change the Product dimension back to All Products.

7. In the toolbar for the worksheet, click the icon at the far left (Choose Values from List). A drop down menu will appear. Select Measure from the menu. The Choose Values from List window will open. In the left column, select the name of the new history that you created in the Copying a History portion of this practice. Click the > button to move that document to the right column. Click the Ok button.
8. In the worksheet, three columns will appear. The two on the left are shaded gray, indicating that those cells are locked. The process you used in the previous step created a third column that is not shaded. In that column change the quantity for FEB-2000 to 27,000.
9. Drill down into the FEB-2000 time period to expose the weekly information. Enter a weekly quantity for 28,000. Now the weekly quantity exceeds the monthly quantity. Which icon should you use to update the quantity for FEB-2000? _____
10. In the toolbar for the worksheet, click the icon at the far left (Choose Values from List). A drop down menu will appear. Select Measure from the menu. The Choose Values from List window will open. In the right column, select the row representing the shipment history: date shipped quantity. Click the < button to move that data to the left column. Click the Ok button. The shipment history: date shipped amount and your modified history quantity column will remain in the pivot table.
11. Click the Save Document As icon. A Save As window will open. Enter a name for your revised history and save the document in the Training folder. Use the Exit icon to close the adjusted history worksheet. Open the training folder to verify that your new worksheet is located there.

Practice

Practice

Using the Demand Planning page:

- View a baseline forecast
- Copy a forecast
- Modify a forecast
- Reforecast based on modified history
- Submit forecast to shared database

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Instructions

This practice takes the forecasting process through viewing a baseline forecast, copying and modifying forecasts, reforecasting, creating new forecasts, and submitting forecasts to the shared Express database.

View a Baseline Forecast

1. In the Navigation window, open the Forecasts folder. Open the document for the baseline forecast. A View Forecast window will open. Look up the following properties:

Scenario name: _____

History type and name of history used: _____:

Forecast method used for baseline: _____

Forecast level for the Product dimension: _____

2. Which allocation rule is used?

___ Allocate based on forecast weights aggregated from the lowest level

___ Allocate based on a forecast at each level

___ Allocate based on historical weights

Copying a Forecast

3. Click the New icon. Select New Forecast from the drop down menu. A New Forecast window will open. Select the Copy Forecast button.
4. Enter a new name for the copy of the baseline forecast. Click the OK button.

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5. In a few moments, after the process completes the Demand Planning Alert window will automatically close. Open the Forecasts folder. Your new forecast name will appear there. Double click your new forecast name to view its properties. Close the View Properties window.

Adjusting a Forecast

6. At the left of the Navigation toolbar, select the “New” icon. From the drop down menu, select: New Forecast. A New Forecast window will open. Select the Create Forecast button.
7. A Create Forecast window will open. Enter a name for your adjusted forecast. In the History field, select the name of the adjusted history document that you created previously in this practice. On the Forecast Method tab, change the forecast method from Automatic to Linear Regression. click the Ok Button. In a few moments the Create Forecasts window will close. Open the Forecasts folder to verify that your new forecast document is stored in that location.
8. Click the New icon. From the drop down menu, select: New Worksheet. A New Worksheet dialog box will open. Click the Based On radio button, then select Forecast Worksheet from the list of values. Click the Ok button.
9. A worksheet will open at the bottom of the page with the name: Document 2. Increase the width of the columns so that you can see the complete column headings.
10. In the Product dimension, select item number 01 PC. Change the forecast quantity for MAR-2000 to 33333. With the field highlighted, click the comment icon. In the New Comment field, enter a comment. Click the Add button. Click the Ok button. What text format is used to indicate that a forecast has been changed? _____ Right click on the changed cell. Select Comment to view the comment that you just entered.
11. Right click again on the changed cell. Select Reforecast. Change the forecast method to Linear Regression. Click the Ok button. What happened to the Quantity and Amount columns? _____
12. Save your adjusted forecast into the Training document folder.

Submitting a Forecast

13. Since the data assignments overlap, the instructor will demonstrate the procedure for submitting a forecast to the Express shared database.

Managing Forecasts

Change to the Planning Manager responsibility. Select the same demand plan we have been using and the assignment for the demand plan manager.

The information on this page references the shared database that includes data submitted from all assignments. The procedures for viewing and adjusting data from the demand plan manager page are the same as those from the demand planner page. Ordinarily only one person would hold management responsibility for the forecast scenarios within one demand plan.



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Analyzing and Managing Forecasts

Chapter 4

Introduction

Analyzing and Managing Forecasts

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Objectives

After this course, you should be able to:

- **Describe some of the key features of Oracle Demand Planning**
- **Know how to work with Ad-hoc Reports and Graphs**
- **Know how to work with Predefined Reports and Graphs**
- **Create Alerts to notify you whenever there are exceptions**

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Agenda

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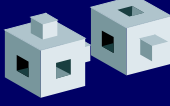
- **Key Features**
- Working with Ad-Hoc Reports and Graphs
- Managing Predefined Reports
- Collaboration at Multiple Levels

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Key Features

Key Features



- Internet collaboration
- View and work with data that is relevant to individual responsibilities
- Integrate demand forecasts into Advanced Supply Chain Planning
- Unlimited forecast scenarios
- Multidimensional analysis
- Multiple statistical methods
- Automatic selection of best-fit model
- Exception reporting and feedback

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ODP Key Features

Oracle Demand Planning supports Internet collaboration, incorporating information from sales, marketing, operations, and customers.

Each demand planner can view and work with data that is relevant to their responsibility.

ODP also provides the tools and techniques for building a forecast of demand, which in turn will be used to drive the supply chain planning process.

The online analytical process supports ad hoc creation of an unlimited number of scenarios that can be analyzed within the system.

It also supports multi-dimensional analysis for ad hoc reporting and graph generation.

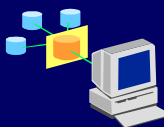
You can select from several pre-seeded statistical forecasting methods.

You can direct the system to make an automatic selection of the statistical model based on best fit to a range of recent actual demand history data.

Other key features include performance measures, alert notification, and predefined exception reports.

Information Visibility

- Deploy information using the World-Wide Web
- Information visibility across the supply chain
- Internal and external collaboration with secured access to detailed plans
- Workflow gets the right information to the right place quickly



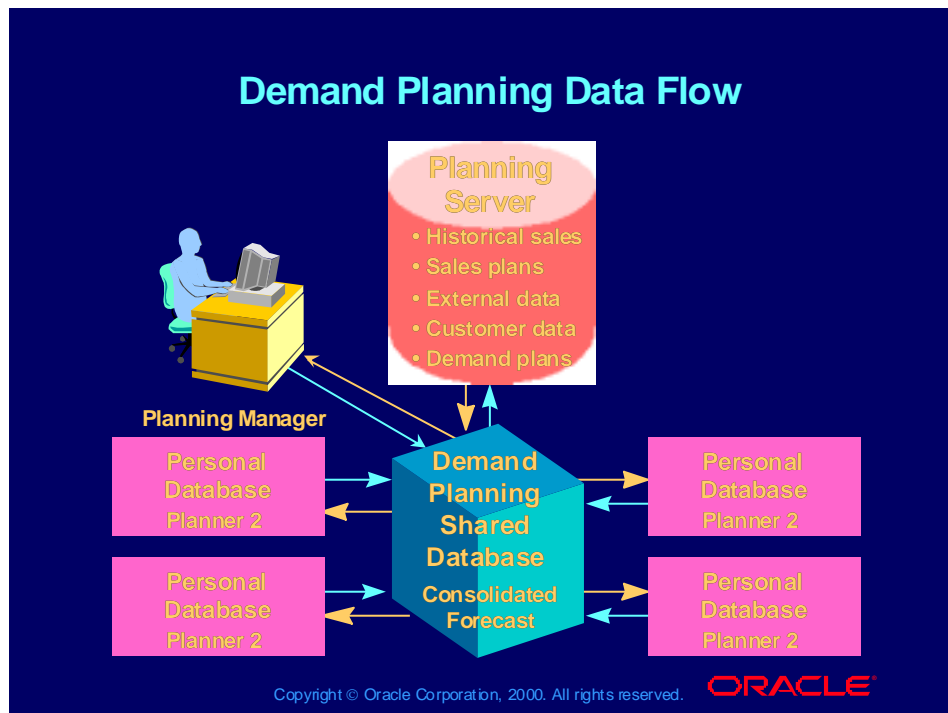
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Sharing Information with Alliance Partners

Virtual enterprises organize alliance partner core competencies into a supply chain to meet customer requirements. The emergence of virtual enterprises requires complete end-to-end visibility across the supply chain from the suppliers' suppliers to the customers' customers. In addition, the need to coordinate production activities across a global supply chain necessitates increased collaboration between every supply chain participant.

Oracle Demand Planning extends the collaborative features of Oracle Applications. It is built on Oracle's Internet computing architecture, which enables all of the applications to be deployed over the Internet or your corporate intranet. ODP is also completely integrated with Oracle's Self-Service Web Applications.

Demand Planning Data Flow



Demand Planning Data Flow

As the planning cycle starts, data moves from the Planning Server to the shared Express database. Moved data includes:

- Historical sales
- Sales plans
- External data
- Customer data
- Demand plans

Based upon predefined assignments, data is next distributed to each planner's personal Express data base. Planners review the baseline forecasts and make adjustments as necessary.

As the planning cycle concludes, data is moved from the planners' personal databases back to the shared database. The planning manager reviews the initial consolidation of forecasts and adjusts planners' final forecast values in the shared database. The final, consolidated forecast is then moved back into the Planning Server.

Planning Cycle Activities

The Demand Planning Cycle includes these activities:

1. Downloading data from the Planning Server
2. Generating baseline forecasts
3. Adjusting forecasts
4. Submitting forecasts
5. Reviewing forecasts
6. Uploading data to the Planning Server
7. Publishing forecasts to the source instance
8. Getting feedback

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Reference:

- *Oracle Demand Planning User's Guide*, Chapter 1, Overview

Demand Planning Roles

Four roles are supported by Oracle Demand Planning:

- Demand Planning System Administrator
- Demand Planning Integration Administrator
- Demand Planning Manager
- Demand Planner

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Summary

In this lesson, you should have learned about:

- **Oracle Demand Planning key features**
- **Demand Planning data flow**
- **Planning cycle activities**
- **Demand Planning roles**

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Working with Ad-hoc Reports and Graphs

Analyzing and Managing Forecasts

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Agenda

Agenda

- Key Features
- Working with Ad-Hoc Reports and Graphs
- Managing Predefined Reports
- Collaboration at Multiple Levels

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Working with Ad-hoc Reports and Graphs

In this section, you will learn how to:

- Create ad-hoc reports and graphs
- Select data for ad-hoc reports and graphs
- Arrange and view data
- Save and print ad-hoc reports and graphs
- Export data from ad-hoc reports and graphs
- Work with saved ad-hoc reports and graphs

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Reference:

- *Oracle Demand Planning User's Guide*, Chapter 5, Using Ad Hoc Reports and Graphs

Selecting Data

You can select the segment of data that you want to include in an ad-hoc report or graph. A data segment is defined by one or more measures and a set of dimension values.

Selection options include:

- Searching for a value by name
- Scrolling through a list and selecting one or values

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Reference:

- *Oracle Demand Planning User's Guide*, Chapter 7, Selecting Data

Arranging and Viewing Data

Once you have selected data values, you can:

- Arrange the dimensions on the page according to how you want to view the data
- View a more detailed or higher level of data
- Change the document type
- Page through data
- Adjust the size of rows and columns on a report

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Reference:

- *Oracle Demand Planning User's Guide*, Chapter 5, Using Ad-hoc Reports and Graphs.

Saving and Printing

You can save an ad-hoc report or graph by either:

- Saving the document. It appears as an object in the Documents folder in the Navigator tree.
- Saving the document in a folder you have specified. The document appears in the folder in the Documents folder in the Navigator tree.
- You can print a saved report or graph and specify various print options.

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Reference:

- *Oracle Demand Planning User's Guide*, Chapter 5, Using Ad-hoc Reports and Graphs

Exporting Data

- To export data from an ad-hoc report or graph, click the **Export to Spreadsheet** button in the Document toolbar.
- A dialog box is opened where you can specify the pages to export and the format to use.

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Reference:

- *Oracle Demand Planning User's Guide*, Chapter 5, Using Ad-hoc Reports and Graphs

Working with Saved Reports and Graphs

- To open a saved report or graph, double click the document name in the Navigation list.
- To specify the print order for reports, select one of:
 - Across then down
 - Down then across
- Click on the **Print** button in the Document toolbar.

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Reference:

- *Oracle Demand Planning User's Guide*, Chapter 5, Using Ad-hoc Reports and Graphs

Agenda

Agenda

- Key Features
- Working with Ad-Hoc Reports and Graphs
- **Using Predefined Reports**
- Collaboration at Multiple Levels

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Using Predefined Reports

In this section, you will learn about the types of predefined reports available and how to:

- Work with predefined reports
- Modify settings in predefined reports
- View data in predefined reports
- Print predefined reports
- Export data from predefined reports

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Reference:

- *Oracle Demand Planning User's Guide*, Chapter 6, Using Predefined Reports

About Predefined Reports

About Predefined Reports

Predefined reports:

- Enable you to conduct defined business analyses
- Enable you to evaluate the accuracy of your forecasts
- Are selected and set up by the Demand Planning Administrator
- Are grouped into folders that appear in the Navigator tree below any folders you have defined for your own documents

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Reference:

- *Oracle Demand Planning User's Guide*, Chapter 6, Using Predefined Reports

Types of Predefined Reports

Types of Predefined Reports

Oracle Demand Planning contains these report types:

- Comparison
- Distribution
- Exception
- Forecast
- Growth
- Quota
- Ranking
- Review
- Trend

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Reference:

- *Oracle Demand Planning User's Guide*, Chapter 6, Using Predefined Reports

Working with Predefined Reports

- Opening a predefined report displays the data specified in the current settings for the document.
- You can:
 - Change the settings
 - Page through the document
 - Drill on aggregate values
 - Print the document
 - Export the data

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Reference:

- *Oracle Demand Planning User's Guide*, Chapter 6, Using Predefined Reports

Modifying Settings

- Data displayed when a report is opened is determined by the current values in the document's settings script.
- The settings script is a complete sentence that describes the analysis performed.
- Settings that can be changed are displayed in colored hypertext.

To view the settings:

- Click on **Settings** in the title bar of the document.

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Reference:

- *Oracle Demand Planning User's Guide*, Chapter 6, Using Predefined Reports

Viewing Data

- A predefined report can be displayed as a graph.
- A report that is displayed as a graph can be changed back to a report.
- The viewing option is selected with the Settings tool.

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Reference:

- *Oracle Demand Planning User's Guide*, Chapter 6, Using Predefined Reports

Printing

The following print selections are available:

- Standard printer properties
- Selection of pages to print
- The print order for report displays
- A scaling factor for graph displays
- Specifications for headers, footers, and margins
- Specification of row, columns, and page labels for every page
- Document print preview

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Reference:

- *Oracle Demand Planning User's Guide*, Chapter 6, Using Predefined Reports

Exporting Data

From predefined reports you can export:

- Dimension labels and data values
- All pages of data or just the current page

To export data:

- Click on the **Export to Spreadsheet** button in the Document toolbar.

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Reference:

- *Oracle Demand Planning User's Guide*, Chapter 6, Using Predefined Reports

Summary

In this lesson, you should have learned how to:

- **Create and save ad-hoc Reports**
- **Select, arrange, format, and view data in ad-hoc Reports**
- **Work with saved ad-hoc reports and graphs**
- **Export data from ad-hoc reports and graphs**
- **Work with and print predefined reports**
- **Modify settings for predefined reports**
- **View data in predefined reports**
- **Export data from predefined reports**

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Collaboration at Multiple Levels

Analyzing and Managing Forecasts

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Agenda

Agenda

- Key Features
- Working with Ad-Hoc Reports and Graphs
- Managing Predefined Reports
- **Collaboration at Multiple Levels**

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Collaboration at Multiple Levels

In this lesson, you will learn how to:

- Use Alerts in Demand Planning
 - Define Alerts
 - Work with saved Alerts
- Perform Demand Plan Manager tasks
 - Consolidate forecasts
 - Submit final forecast to the shared Express database

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References:

- *Oracle Demand Planning User's Guide*, Chapter 4, Using Worksheets for Forecasting
- *Oracle Demand Planning User's Guide*, Chapter 10, Using Alerts

Collaboration at Multiple Levels (cont'd)

- **Use custom measures and custom aggregates**
 - **Define custom measures and custom aggregate**
 - **View custom measures and custom aggregates**
- **Work with saved custom measures and custom aggregates**

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Reference:

- *Oracle Demand Planning User's Guide*, Chapter 8, Using Custom Measures and Custom Aggregates

Using Alerts

- Planners might create an alert to notify themselves when a group of products in a dimension has unacceptable margins for a specified time period.
- Planning Managers might use an alert to notify themselves and other planners when a baseline forecast consistently over- or under-predicts actuals.

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Reference:

- *Oracle Demand Planning User's Guide*, Chapter 10, Using Alerts

Using Alerts

Exception criteria for alerts include:

- **Value - Setting up comparison between a measure and a numeric value or range of values**
- **Measure - Setting up a comparison between two measures**

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Demand Planning Manager Tasks

Demand Planning Manager Tasks

Demand Planning Managers:

- Consolidate forecasts
- Review and adjust forecast data
- Save their work directly to the shared Express database

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Reference:

- *Oracle Demand Planning User's Guide*, Chapter 4, Using Worksheets for Forecasting

Custom Measures and Custom Aggregates

Custom Measures and Custom Aggregates

- A custom measure is a formula based on one or more existing measures. Any measure can be used to create a custom measure.
- Custom measures can be useful for:
 - Defining exception conditions for an ad-hoc report or an alert
 - Creating “what-if” scenarios

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Reference:

- *Oracle Demand Planning User's Guide*, Chapter 8, Using Custom Measures and Custom Aggregates

Custom Measures

Custom measures are based upon Express variables.

Some of these are:

- Change
- Fiscal Year-to-Date
- Lag
- Lead
- Moving Average
- Moving Maximum
- Moving Minimum

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Reference:

- *Oracle Demand Planning User's Guide*, Chapter 8, Using Custom Measures and Custom Aggregates

Custom Aggregates

Custom Aggregates

- A custom aggregate is a single value that combines multiple values from a dimension into a single value.
- Custom aggregates can be used to view and manipulate values as an entity.
- Some custom aggregates you might define include:
 - Key accounts in a geographic region
 - High-end products
 - A non-standard time period

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Reference:

- *Oracle Demand Planning User's Guide*, Chapter 8, Using Custom Measures and Custom Aggregates

Working with Saved Custom Measures and Custom Aggregates

Working with Saved Custom Measures and Custom Aggregates

Custom Measures and Aggregates can be:

- Opened to view or modify the definition
- Deleted
- Renamed
- Viewed to display properties

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Reference:

- *Oracle Demand Planning User's Guide*, Chapter 8, Using Custom Measures and Custom Aggregates

Summary

In this lesson, you should have learned how to:

- **Define and use Alerts in Demand Planning**
- **Save forecast scenarios to the shared server**
- **Consolidate forecasts and reconcile adjustments**
- **Submit the final forecast to the share database**
- **Define, save, and use custom measures and custom aggregates**

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