R12.2.9 Oracle Advanced Supply Chain Planning Fundamentals

Oracle E-Business Suite

DURATION	MODULES	COURSE CODE
4 Days	**15 Lectures**	**—**

Course Overview

This course teaches students the fundamentals of using Oracle Advanced Supply Chain Planning. This course is for customers implementing E-Business Suite R12.0, R12.1 or R12.2.9.

What You Will Learn

12.2.9 Advanced Supply Chain Planning: Overview

- Objectives
- Agenda
- Demand-Driven Adaptive Planning
- Integrated Oracle Value Chain Planning
- VCP Business Flow: Plan
- VCP Business Flow: Execute
- VCP Business Flow: Compare Performance to Targets
- VCP Business Flow: Corrective Action
- Oracle Value Chain Planning Solution
- Value Chain Planning
- Adaptable: Segment the Problem As Needed
- Value Chain Planning: Planners Collaborate On A Single Plan
- Integrated Manufacturing Planning and Production Scheduling
- Oracle Advanced Supply Chain Planning
- Oracle Advanced Supply Chain Planning Features
- Summary

Modeling the Supply Chain

- Objectives
- Overview of Setup Data
- Operating Units
- Organizations

- Organization Security
- Setting Up Organizations
- Subinventories and Locators
- Organizations and Subinventories
- Organizations
- Quiz
- Items
- Item Attributes
- Item Attributes for Planning
- Item Attributes Supported for All ASCP Plans
- Plan Type and Planning Method Attribute
- Organization Items
- Order Modifiers
- Critical Components
- Lead Times
- Lead Time Offset
- Lead Times in Requirements Explosion
- Cumulative Lead Time
- Time Fences
- Quiz
- Safety Stock: Inventory
- Safety Lead Time
- Safety Stock: Planning
- Safety Stock: Inventory Optimization
- Quiz
- Organization Items
- Independent Demand
- Dependent Demand
- External and Internal Demand
- Plan to Request/Schedule/Promise Dates
- Sales Order Entry Process
- Processing Cycle
- Demand Priority
- Quiz
- Forecasts: Demand Planning
- Forecasts: Transaction Data
- Forecast Bucket Types
- Forecast Consumption Overview
- Consumption Days
- Days
- Weeks
- Periods
- Multiple Bucket Types
- Forecast Consumption Flow Options
- Forecast Bucket Consumption
- Demand Classes

- Forecast Items
- Quiz
- On Hand
- Scheduled Receipts
- Purchase Requisitions
- Purchase Orders
- Scheduled Receipts for Make Items
- Quiz
- Bills of Material
- Indented Bills of Material
- Alternate Bills of Material
- Requirements Explosion Items
- Requirements Explosion Quantities
- Phantom Items
- Shrinkage and Yield
- Quiz
- Engineering Change Orders
- Use – Up Effectivity
- Quiz
- Organization Bills of Material
- Workday Calendar, Work Patterns, and Shifts
- Defining Work Hours for a Work Shift
- Organization Calendar
- Departments and Resources
- Routings
- Modeling Resource Constraints
- Resource Requirements
- Required Hours
- Efficiency and Utilization
- Non-critical Path Resources
- Quiz
- Sequential Resources
- Overlapping Resources
- Simultaneous Resources
- Alternate Resources
- Scheduling Time Window Width for Alternate Resource
- Resource Selection Dependency
- Multiple Resource Scheduling
- Batch Resources
- Minimum Transfer Quantity
- Modeling Production Resource Capacity
- Multi-Resource Scheduling
- Backward Scheduling
- Order Dates: Make Supply and Buy Supply
- Order Dates: Transfer Supply: (Unconstrained Plan)
- Order Dates: Transfer Supply: (Constrained Plan)

- Quiz
- Organization Routings
- Modeling the Supply Chain
- Suppliers
- Approved Supplier List
- Approved Supplier List Function
- Enhanced Sourcing
- Supplier Sourcing Setup
- Supplier-Item Attributes
- Supplier Capacity
- Quiz
- Approved Supplier List
- Reservations
- Virtual Enterprise Structure
- Organization Items
- Modeling Shipments Between Organizations
- Modeling Shipments Between Organizations and External Sites
- Supply Chain Links
- Sourcing Rules
- Allocating Demand to Suppliers
- Sourcing Splits: Applicable to a Single Organization
- Sourcing Splits: Applicable to all Organizations
- Allocation Rules
- Shipping Methods
- Transit Times
- Zones and Regions
- Quiz
- Sourcing Rules
- Bills of Distribution
- Assignment Sets
- Assignment Set
- Sourcing Assignment Hierarchy
- Summary

Collections

- Objectives
- Agenda
- Instances
- Collections Process
- Scheduling and Frequency
- Collection Methods
- Standard and Continuous Collections Types
- Collections Processing
- Collections Parameters
- Collections Workbench

- Quiz
- Topic Overview: Collection Exceptions
- Collection Exceptions
- Audit Exceptions Report
- Summary

Unconstrained Plans Using the Planner Workbench

- Objectives
- Data Quality
- Plan Types
- Plan Type Classes
- Unconstrained
- Plan Class Example: Unconstrained
- Scenario: Overview
- Scenario: Unconstrained
- Owning Organization
- Plan Names
- Unconstrained Plan Options: Main Tab
- Material Scheduling Method
- Overwrite and Append Options
- Planned Order Sourcing
- Unconstrained Plan Options – Aggregation Tab
- Aggregation into Time Periods
- Aggregation of Items, Resources, and Routings
- Unconstrained Plan Options – Organizations Tab
- Unconstrained Plan Options – Reporting Tab
- Quiz
- Launching Plans
- Quiz
- Implementation Strategy
- Implementation Strategy: Unconstrained
- ASCP Business Flow
- Planning Data Flow
- Planner Workbench
- Navigator Window
- Navigator Window: Plans Tabbed Region
- Navigator Window: View By
- Navigator Window: Queries Tabbed Region
- Analysis Window: Plan Context Windows
- Analysis Window: Organization Context Windows
- Analysis Window: Category Code Context Windows
- Analysis Window: Item Context Windows
- Navigation Tips
- Preferences and Folders
- Context Windows

- Context Windows: Horizontal Plan
- Context Windows
- Context Windows: Resources
- Resource Requirements
- Context Windows
- Quiz
- Summary

Analyzing Unconstrained Plans

- Objectives
- Agenda
- Exceptions Messages and Plan Class
- Exception Groups
- Exception Management Controls
- Exception Context Windows
- Exception Management
- Exception Sets
- Comparing Exception Messages
- Quiz
- Topic Overview: Unconstrained Exception Messages
- Items with a Shortage Exception Message
- Orders With Compression Days Exception Message
- Resource Overloaded Exception Message
- Supplier Capacity Overloaded Exception Message
- Quiz
- Topic Overview: Reports
- Oracle Supply Chain Planning Detail Report
- OPM MPS Enhanced Material Activity Report
- OPM MPS Enhanced Bucketed Material Report
- Oracle Inventory Reorder Point Report
- ASCP Planning Detail Report
- Quiz
- Topic Overview: Recommendations
- Recommendations: Introduction
- Reschedules Exception Messages
- Orders To Be Rescheduled Out Exception Message
- Viewing Recommendations
- Make Item
- Buy Item
- Transfer Item
- Firm Planned Orders
- Releasing Recommendations
- Quiz
- Topic Overview: Personal and Public Queries
- Description: Personal and Public Queries

- Benefits: Personal and Public Queries
- Personal / Public Query Example
- Process: Personal and Public Queries
- Managing Personal / Public Queries
- Quiz
- Order Queries: Description
- Benefits of Order Queries
- Order Query Example
- Setting Up an Order Query
- Setup: Creating an Order Query
- Setup: Auto Execution of Order Query
- Process for Order Query
- Quiz
- Summary

Constrained Plans: Overview

- Constrained
- Optimized
- Plan Type Example: Capacity Constrained
- Plan Type Example: Optimized with Maximum On-Time Delivery
- Plan Type Example: Optimized with Minimize Inventory Carrying Costs
- Scenario: Overview
- Scenario: Constrained – Enforce Demand Due Dates
- Scenario: Constrained – Enforce Capacity Constraints
- Scenario: Optimized
- Implementation Strategy
- Implementation Strategy: Constrained
- Implementation Strategy: Decision Rules
- Implementation Strategy: Optimized
- Benefits of Implementing in Phases
- Objectives
- Agenda
- Enforce Capacity Constraints
- Enforce Demand Due Dates
- Decision Rules
- Plan Type Comparison
- Constrained Planning
- Material
- Labor
- Enforced and Non-enforced Constraints
- Enforced and Non-enforced Constraints Example
- Enforced Constraints Example
- Non-enforced Constraints Example
- Enforced and Non-enforced Constraints Example Summary
- Profile Option Examples

- Quiz
- Demand Priority
- Demand Priority Rules
- Constrained Planning Rules
- Quiz
- Requirement Integer Quantities
- Shared Supplies
- Partial Demand Satisfaction
- Computational Burden
- Coproducts
- By-Products
- Quiz
- Shipping / Receiving / Supplier / Carrier Calendars
- Quiz
- Summary

Enforcing Capacity Constraints

- Objectives
- Agenda
- Exceptions
- Constrained Exceptions
- Constraint Exceptions Calculation
- Exceptions from Capacity Constrained Plans
- Exceptions from Demand Constrained Plans
- Other Exceptions
- Late Replenishment for Sales Order Exception Message
- Late Replenishment for Forecast Exception Message
- Sales Order/Forecast At Risk Exception Message
- Analyzing Late Supplies
- Related Exceptions
- Constraint Exception Messages
- Material Constraint Exception Message
- Resource Constraint Exception Message
- Order Lead Time Constraint Exception Message
- Requirement Lead Time Constraint Exception Message
- Quiz
- Scheduling Process
- Dates
- Critical Activities
- Item Lead Time Constraints
- Planning Time Fence Constraints
- Gantt Chart Layout
- Five Gantt Chart Views
- Accessing the Gantt Chart Views
- Orders View

- Gantt Chart Orders View Preferences
- Gantt Chart Resource Activities View Preferences
- Resource Activities View
- Resource Hours View
- Resource Units View
- Supplier Capacity View
- Gantt Chart Interactions Between Two Views
- Other Capabilities
- Gantt Chart Summary
- Planning Detail Report
- Plan Comparison Report
- Workflow Notifications
- Quiz
- Summary

Additional Topics

- Objectives
- Agenda
- Bottleneck Resources
- Flexible Shift Times: Day Bucket
- Flexible Shift Times: Hour Bucket
- Flexible Shift Times: Minute Bucket
- Firm Work Orders
- Quiz
- Pegging
- Pegging Modes
- Standard Pegging
- Standard Pegging: First Pass
- Standard Pegging: Second Pass
- Standard Pegging Example
- Standard Pegging Example: Item A101
- Standard Pegging Example: Item A102
- Priority Pegging
- Priority Pegging: First Pass
- Priority Pegging: Second Pass
- Priority Pegging: Third Pass
- Priority Pegging: Firm Supply Allocation Window
- Priority Pegging: Sizing Demand and Supply Windows
- Priority Pegging Example
- Priority Pegging Example: Item A101 First Pass
- Priority Pegging Example: Item A101 Second Pass
- FIFO and Priority/FIFO Pegging Modes
- Quiz
- Summary

Enforcing Capacity Constraints with Decision Rules

- Objectives
- Agenda
- Day Level Planning Mode
- Quiz
- Decision Rules Tabbed Region
- Types of Decision Rules
- End-Item Substitution
- User-Defined Alternate Decision Rules
- User-Defined Alternate Decision Rules: Alternate Resources
- User-Defined Alternate Decision Rules: Substitute Components
- User-Defined Alternate Decision Rules: Alternate BOM’s/Routings
- User-Defined Alternate Decision Rules: Alternate Sources
- Decision Rule Hierarchy
- Quiz
- Summary

Constrained Plans: Enforcing Demand Due Dates

- Objectives
- Agenda
- Enforcing Demand Due Date Scheduling
- Sales Order/Forecast At Risk Exception Message
- Related Exceptions
- Requirement Causes Resource Overload Exception Message
- Order Causes Supplier Capacity Overload Exception Message
- Order with Insufficient Lead Time Exception Message
- Quiz
- Summary

Planning Strategies

- Objectives
- Simulation
- Simulation Modes
- Plan Scenarios
- Comparing Alternative Plans
- Exception Groups
- Worksheets
- Implementing Plan Changes
- Net Change Simulation Process
- Changes for Net Change Simulation
- Online Demand Changes
- Online Supply Changes
- Online Supplier Capacity Changes
- Online Resource Changes

- Running Online Net Change
- Batch Net Change
- Undo Summary Window
- Full Re-plan Simulation Process
- Changes for Full Re-plan Simulation
- Quiz
- Plan Comparison Reports
- Planning Strategies
- Plan Types
- Planning Method Item Attribute
- Multiple Organization Planning
- Holistic Plans
- Pitfalls of Subset Planning
- Existing Plans as Demand Schedules
- Existing Plans as Supply Schedules
- Quiz
- Item Attribute Mass Maintenance
- Item Attribute Mass Maintenance: Simulation Set
- Item Attribute Mass Maintenance
- Item Attribute Mass Maintenance: Queries
- Item Attribute Mass Maintenance: Benefits
- Item Attribute Mass Maintenance: Setup and Process
- Summary

Cost-Based Optimized Plans

- Objectives
- Agenda
- Optimization Tabbed Region
- What Is Optimization?
- Plan Type Comparison
- Optimized Plans Consider Cost
- Profile Option: MSO: Enable Cost Rollup for Optimization
- Comparing Constrained and Optimized Plans
- Contrasting Constrained and Optimized Plans
- Quiz
- Plan Objectives
- Planning Objectives
- Penalty Factors and Penalty Costs
- Default Penalty Factors
- Setting Penalty Factors
- Optimization and Plan Profit
- Quiz
- Key Indicators
- Inventory Turns
- Planned Utilization

- Margin Percentage
- On-Time Delivery
- Making Improvements Based on KPIs
- Quiz
- Summary

Global Forecasting

- Objectives
- Agenda
- Introduction to Global Forecasting
- Receiving Forecasts
- Forecast Spreading
- Forecast Spreading for Gregorian Calendars
- Consumption
- Planning Process
- Sourcing Sales Orders
- Selection of Source Organization
- Selection of Ship Method
- Viewing Results
- Distribution
- Recommending Sales Order Changes
- Publishing Sales Order Changes
- Quiz
- Summary

Integrating with Oracle Applications

- Objectives
- Agenda
- Overview of Mixed Mode Manufacturing Planning
- Mixed Mode Manufacturing
- Integration with Oracle Project Manufacturing
- Integration with Oracle Flow Manufacturing
- Integration with Oracle Process Manufacturing
- Integration with Demantra Demand Management
- EBS-Demantra DM Integration
- Advanced Planning Command Center: Context Drill-Downs for
- Problem-Solving
- Topic Overview: Integration with Production Scheduling
- Overview of Production Scheduling
- Logical Information Flow
- Process Flow
- Comparing ASCP and Production Scheduling
- Process: Running Production Scheduling without ASCP
- Process: Running Production Scheduling with ASCP
- Overview: Integration with Strategic Network Optimization

- Overview: Integration Architecture and Business Process
- Summary

Exception Messages

- Late sales orders and forecasts
- Late Sales Orders and Forecasts Exception Group
- Sales Order/Forecast at Risk
- Past Due Sales Orders
- Past Due Forecast
- Late Replenishment for Sales Order
- Late Replenishment for Forecast
- Early Replenishment for Sales Order
- Early Replenishment for Forecast
- Late Replenishment for MPP/MPS Demands
- Supply Problems Late Sales Orders and Forecasts
- Supply Problems for Late Sales Orders and Forecasts Exception Group I
- Supply Problems for Late Sales Orders and Forecasts Exception II
- Sales Order/Forecast at Risk Due to Resource Shortage
- Sales Order/Forecast at Risk Due to Material Shortage
- Requirement Causes Resource Overload
- Order Causes Supplier Capacity Overload
- Order Causes Transportation Weight Capacity Overload
- Order Causes Transportation Volume Capacity Overload
- Order with Insufficient Lead Time
- Requirement with Insufficient Lead Time
- Order Lead Time Constraint
- Requirement Lead Time Constraint
- Demand Quantity Not Satisfied
- Late Supply Pegged to Forecast
- Late Supply Pegged to Sales Order
- Order Violates a Business Calendar
- Material and Resource Constraint
- Material and Resource Constraint Exception Group
- Material Constraint
- Resource Constraint
- Resource Overloaded
- Supplier Capacity Overloaded
- Resource Underloaded
- Batch Was Started with Less Than Minimum Capacity
- Batch Was Started with More Than Maximum Capacity
- Transportation and Distribution
- Transportation and Distribution Exception Group
- Transportation Weight Constraint
- Transportation Volume Constraint
- Transportation Resource’s Weight Overloaded
- Transportation Resource’s Volume Overloaded

- Shortages and Excess
- Shortages and Excess Exception Group
- Items with a Shortage
- Items Below Safety Stock
- Items with Excess Inventory
- Reschedules
- Reschedules Exception Group I
- Reschedules Exception Group II
- Past Due Orders
- Orders to be Rescheduled Out
- Orders to be Canceled
- Orders to be Rescheduled In
- Orders with Compression Days
- Orders Scheduled to Next Inventory Point
- Order Is Firmed Late
- Requirement Is Firmed Late
- Order Is Firmed Early
- Shared Supply Scheduled Late
- Substitutes and Alternates Used
- Substitutes and Alternates used Exception Group
- Planned order uses alternate BOM/routing
- Planned Order Uses Substitute Components
- Planned Order Uses Alternate Resources
- Order Sourced from Alternate Facility
- Order Sourced from Alternate Supplier
- Demand Satisfied Using End Item Substitution
- Projects/Tasks
- Projects/Tasks Exception Group
- Items with a Shortage in a Project/Task
- Items Allocated Across Projects/Tasks
- Items with Excess Inventory in a Project/Task
- Item Exceptions
- Item Exceptions Exception Group
- Items with Negative Starting On Hand
- Items with Expired Lot
- Items with No Activity
- Sourcing Split Percentage Violated
- Items with Forecast Over Consumptions
- End Item Supply Shelf Life Violation
- Recommendations
- Recommendations Exceptions Group